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# High Country Farming in New Zealand: Exploration of the pathways to sustainability revealed through responses to external and internal drivers derived from the ARGOS retrospective interviews

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## Chapter 1 Introduction: Background, Objectives and Outline

High Country farmer: “I think you'd become quite a good farmer if you could live about 300 years. You'd just about get the hang of it.”

### 1.1 Background

Though the overall aim of the Agriculture Research Group on Sustainability (ARGOS<sup>i</sup>) is to investigate and compare the environmental, social and economic effects of different farming systems (Organic, Integrated and Conventional) in the sheep/beef, kiwifruit and dairy sectors, it also has a mandate to study farming in the High Country of the South Island. Eight High Country farms have been selected for study alongside 36 farms from the sheep/beef sector (12 in each panel—organic, integrated and conventional), 36 orchards from the kiwifruit sector (12 in each panel—Kiwi Green Hayward, Kiwi Green Hort 16A and Organic Hayward) and 24 farms from the dairy sector (12 in each panel—conventional and organic). ARGOS was established in October 2003 and is now in the second stage of the project (ARGOS2) of what is intended to be a longitudinal panel study.

### 1.2 Research aim and objectives

In the first six year research period of ARGOS1, a range of factors that can impact on the sustainability of farming systems were identified, largely focusing on contemporary farm conditions. Different audit systems were studied as pathways to sustainability, at the economic, social and environmental levels. The research also identified distinct responses to different types of pressures and shocks that appeared to be related to the sector, farm management system and farm type. Results and findings from ARGOS1 were presented to relevant stakeholders in each sector, who advocated a closer investigation of the impact of key shocks and pressures, including pathways to sustainability, in future research plans. To facilitate planning and a more effective response to future shocks and change, ARGOS2 aims to provide an understanding of the impacts of different types of shock, including pathways to sustainability on farming systems. Moreover, it seeks to clarify the types of responses and the extent to which these are explained by the farm sector, regions and other segmentations identified in ARGOS research to date. As High Country farming has been impacted on considerably by government and local body policies and regulations, public works and extreme weather events, it is now relevant to include it in our research from social and economic perspectives in addition to the environmental study already in progress.<sup>ii</sup> This report aims to provide a first step, using semi-structured retrospective interviews from ARGOS2, in understanding the different drivers of change and their impact on farm management decisions for High Country farmers.

This report presents a descriptive driver-and-response-based perspective at the family farm level, of the impacts of and the response to external and internal stress factors over the last 40 years, drawing on interviews with High Country farming families participating in ARGOS. A historic narrative framework of a timeline (collaboratively designed by ARGOS researchers) was used to provide an overview of farmers' response and the context in which this should be seen. The overall goal of this report is to explore key drivers of change in farm management and responses to that change among High Country farmers identified as a response to events and shocks, which therefore act as illustrations of pathways to sustainability. This was done following the main objectives listed below:

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<sup>i</sup> See [www.argos.org.nz](http://www.argos.org.nz) for a full description.

<sup>ii</sup> To date all of the High Country research within ARGOS has been environmental, under the leadership of David Norton.

- To identify key drivers of change mentioned by farmers over a time period between 1970 and 2010
- To identify farm management adjustments in response to identified key drivers over the same time period
- To present an overview of drivers and responses useful in identifying change mechanisms and likely responses. These could then be identified as pathways to sustainability.

That some of these shocks were related to Government efforts (or pathways) to promote sustainability, often in the wider society or environment of New Zealand rather than the farming community, is a valuable point to take account of in this report as it is related to another ARGOS goal, that of studying alternative<sup>iii</sup> pathways to sustainability.

### 1.3 Key concepts used

The driver-and-response perspective used in this report is further highlighted briefly in this subsection.

*Drivers of change* in the context of agriculture can be defined as ‘any natural - or human-induced factor that directly or indirectly brings about change in an agricultural production system’ (Hazell and Wood, 2008). Examples of drivers to be considered include environmental change, policy changes, economic and social changes. Four scales of drivers can be identified to understand the forces driving change in farming systems and farmers’ response: global, national, regional and local (Table 1). Global drivers can influence a large group of farmers, whereas local drivers will only affect a smaller group of farmers living in a same geographical area.

**Table 1.1: Overview of different scales of drivers (after Hazell and Wood, 2008)**

Scale of driver	Description
Global	Affecting all agriculture around the world (to varying degrees) including trade expansion, climate change and agricultural support through, for example, the Organisation for Economic Co-Operation and Development (OECD) and the World Trade Organization (WTO).
Country	Affecting all agriculture within a country through governmental policies and regulations (such as the removal of SMPs).
Regional	Affecting agriculture within a specific region through local governments such as the Resource Management Act (1991).
Local	Specific to each local geographical area (e.g. climate and soil fertility), agricultural production system and community characteristics.

*Adjustment* can be defined as a means to reallocate resources as an adaptation to change; it is a *response* to any type of change induced by a driver. The term *adaptation* finds its origin in natural sciences and particularly that of evolutionary biology (Smit and Wandel, 2006). *Perseverance*, on the other hand, can be thought of as the opposite of adjustment: a steady and continued action or belief, usually over a long period and maintained despite difficulties or setbacks.

Based on the timing of the response relative to the stimulus or the driver of change, adaptations can be grouped as *reactive* (after), *concurrent* (during) or *pro-active* (anticipatory). Based on the temporal scope, adaptations can be tactical (short-term) or strategic (long-term) (Smit et al., 1996).

<sup>iii</sup> That is, pathways other than the audit systems studied in ARGOS1.

As stated by Holling (2001) *resilience* is the characteristic that allows a system to absorb and utilise change: it is the adaptive capacity that can be used as a measure of its vulnerability to unexpected and unpredictable shocks.

It is understood that no linear relationship exists between a driver of change and the response by the farming family. As stated by Hopkins et al. (2004), the farm household structure is a complex system of inter-relationships between and amongst a variety of endogenous and exogenous variables. To gain insight to this nonlinear relationship, it is necessary to point out the key drivers affecting agriculture, how they are perceived by farmers and how those perceptions are translated into agricultural or household decisions.

#### **1.4 Outline of report**

Chapter 2 briefly outlines the research design and its considerations. Chapter 3 concentrates on the main events or the type of events affecting farming that happened in the High Country from around the 1970s through to the present day. It provides an historical narrative of those events and a breakdown of participants' opinions, responses and attitudes. Chapter 4 presents an overview of this report's results and summarises general points of discussion. Chapter 5 presents conclusions and suggestions for future research in light of the findings and limitations of this study.



## Chapter 2 Methods

### 2.1 The farmers and the farms

#### 2.1.1 *The selection of the farmers and the farms*

The eight High Country farming couples in the ARGOS sample were chosen because:

1. We wanted a spread of farms throughout the South Island – i.e., regional representation
2. We wanted farmers who would positively engage
3. We wanted farmers of an economic scale.

Those selected represented the many different structural arrangements that High Country farmers can be in. Five of them could be called ‘traditional’ High Country farmers – that is the male partner was probably the third or fourth generation to farm this particular piece of land, though this could be a smaller piece than the original land for a variety of reasons – succession and splitting the original farm between other members of the family, tenure review (see later), or a larger block through purchase of other properties. One farmer was a manager for the owners – children whose father would have fitted into the ‘traditional’ category. One farmer was a lessee of overseas owners. Another farmer could be called a ‘townie’ who decided to farm the property owned/leased by his father, which his father had never farmed himself, but had employed a manager.

One farm had already gone through the tenure review process and one completed the process just after the interview. Some had never been government owned in the first instance – for example, one had been part-owned by a university and was bought entirely by the present owner. Another had been owned by an organisation which sold it to the government and is now under government leasehold but because the lease was one of the last made, it does not come up for tenure review for quite a while.

#### 2.1.2 *The status according to ownership of land*

In other words there were four basic groupings in the eight ARGOS High Country farmers interviewed:

- Those who own the land – they have been through tenure review or already owned it and have never been a high country lease.
- Those who have a high country lease arrangement with the government are limited in what they can do on the leased land. They may be going through tenure review.
- Those who lease off the private owners or off the government lessee.
- Those who manage the station for the owner.

### 2.2 Structuring of the timeline

The initial step in preparing for the interviews with ARGOS participants involved the construction of a timeline to help structure discussions. ARGOS research team members collaboratively designed the timeline, identifying important events, shocks and stresses in the sheep, beef and wool sectors as they related to High Country farming from 1970-2010. These were specifically chosen events, such as droughts, changes in legislation and oil crises, thought likely to have provoked a response from farmers. After listing the events according to the year in which they occurred, we characterised specific time-intervals (e.g. 1976-1980) in respect to the most important driver in that period such as environmental, economic or political (see Appendix I). The selected periods and their most

important driver were used in the coding (see Chapter 2.3) and formed the outline for the historic narrative in Chapter 3.

### **2.3 Interviews**

Six interviews of high country farmers – couples or individuals – were carried out in August 2010, one in January 2011 and one in April 2011.<sup>iv</sup> In addition, one of the farming couples had also been interviewed in 2005 and this interview has been incorporated into the analysis. The interviews lasted for 60 to 90 minutes. Interviews were recorded and transcribed for further analysis and coding.

Qualitative data was collected from interviews using face-to-face interaction because it allowed the participants greater freedom to express themselves and articulate important shocks and responses. The semi-structured interview was set up with the goal of investigating the social dimensions of past and present shocks experienced by ARGOS farmers. To accomplish this, the timeline prepared by the research team was used to guide the interview by asking farmers to recall the occurrence of the listed event and the effect it had on their farming system (Appendix I).

The interviews followed similar semi-structured formats used in previous ARGOS projects, providing the opportunity for researchers to pursue particular topics in more depth (Rosin et al. 2007). An example as such is given below:

Interviewer: So, thinking about the timeline? Where do you remember? You won't go back to carless days?

This approach plays an important part in the researchers' understanding of the complexity and nuances of the decision-making process and the actions pursued by the participants. In this method design, key issues not anticipated by the research team could be detected. Farmers were invited to add events to the list if, in their opinion, the timeline seemed to be incomplete.

### **2.4 Coding of interview transcripts**

Coding was conducted with NVivo software, specifically designed for qualitative data. It allows for the collection of changing and growing records, built up from observations, interviews and document analysis (Richards 1999). More specifically, NVivo allows for coding of selections of text found important in a careful reading of the interviews. Subsequently these selections of text were grouped according to themes called nodes. These nodes could then be organised into hierarchical 'trees' and linked to memos carrying further explanation or researchers' comments and reflections. The timeline used in the interviews provided an important structure for coding and was developed as a tree node prior to the rest of the coding.

The remaining nodes were developed during the process of coding as they appeared in the interviews, aimed at identifying drivers of change and farmers' response to these drivers. Drivers were grouped in subcategories with the same characteristics and formed the five main drivers on which this report focuses: economic, governmental, environmental, household & personal and societal (Table 2).

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<sup>iv</sup> These interviews were interspersed by the major earthquakes that hit Canterbury in September 2010 and February 2011.

**Table 2.1: Grouping of different drivers and examples**

Driver	Examples
Economic	Price fluctuations, access to capital, debts and mortgages
Government	Policies and regulations
Environment	Droughts, snow, floods, access to water, pests and diseases
Household and personal	Succession, personal vision and orientation, farm style, life cycle
Society	“Dirty dairying” media, public opinion, networking (advice from others)

## 2.5 Analysis

It was decided to analyse this report on the High Country retrospective interviews slightly differently from the reports for the sheep/beef and kiwifruit sectors. The focus here is on events rather than the time line because what has happened in the High Country is around several dominant themes that have often come to interact over time and draw together the five different drivers mentioned above. Existing literature was consulted to write a historic narrative around these dominant themes to form a context for farmer’s responses to drivers of change and this was supplemented by the farmers’ responses.

## Chapter 3 Responses to historic events

### 3.1 Historic narrative

This chapter uses a historic narrative derived from literature to form the context in which farmers' responses to drivers (as expressed in the retrospective interviews) should be seen. Each subchapter represents a pre-defined event which fits into the time-line used in the interview (Appendix I). Farmers' responses to events are listed per given period in a table and cover the driver, the years of occurrence and farmers' responses. All quotes referenced by superscript numbers in the text can be found in Appendix II. Footnotes are represented by lower case Roman numerals.

Because the participating farmers started farming at different times throughout the time span on which this report focuses, there are a low number of farmers' responses at earlier periods in time. The majority of the farmers started farming or gained ownership of the farm in the early 1980s. However, they often had memories of some of these events.

#### 3.1.1 What is 'the High Country'?

It is important for this report to provide a brief history of the High Country of the South Island of New Zealand because it plays such an important part in the national identity of New Zealanders and has its own mystique (e.g., see PCE, 2009: 3; High Country Accord, n.d.3; Dominy, 2001; Morris, 2005). As such, what happens there stirs the emotions of the population far beyond those of the people who actually live and work there.

It is important too, to tell this story because the history of this 'space' is still very alive in the minds of many of the high country farmers interviewed and reported on here, as the following quotes indicate, and as such can be seen as a driver for both 'not changing' and 'change'.

[One part of station] ... the lease was bought by my great grandfather in 1892 and uh, [other part of station], which is probably the more recognized property in terms of brand, if you like or whatever, my grandfather and his brother purchased it in 1908 (male).

When you look back, I know, I mean we haven't always owned land for our family, but it goes back in New Zealand probably to 1860 and owning land not until about 1891, but prior to that we can trace back to about 1300s and they've always been farmers. So that's quite a few generations really isn't it? (male)

But the big changes came, dad got a little tractor - I think 1936 - the first tractor. Up until then it was all horseback, and there were cars and things you could get access up here and a few trucks available but the big changes came after the war because aircraft were - one you put out aerial bait poisons [and two] you could put out fertiliser, so it was early fifties when all that started happening. Four wheel drives became, you know, available in probably about 1956-58. At that time it was when they were pushing tracks around with bulldozers so that access thing was what dad said made a huge difference on the property .... And that was the big change ... (male).

If you're having a grumble about how tough things are, these stories come out [from Dad]. "You young ones have nothing compared to - " You know, we do, we sit around, and he tells stories of times gone by, and also from old neighbours too. Family friends. And, yeah, we still get stories from them. Just, you know, of the hardship experienced (female).

The past also had its bitter memories. Two farmers spoke of how their fathers were disappointed because they did not get to the war – they had to stay and look after the farm while their brothers went.<sup>1</sup>

Multi-generational farmers have a tradition and heritage to maintain and part of this may be 'not changing' but keeping things the same (Morris, 2004), but another part is that in New Zealand the High Country has been exceptionally well researched and it is part of the heritage of this place to

seek the support of academic researchers to make change (e.g., Kevin O'Connor, Lance McCaskill, David Scott, Graeme White).<sup>2</sup>

The High Country consists of the mountainous backbone of the South Island stretching from Southland to Marlborough. It contains many glacial lakes, the sources of the main rivers which flow out to the sea on the east coast. The damming of these lakes in the twentieth century for the production of hydro electricity for the whole of New Zealand has had an impact on land use in these regions.<sup>v</sup> Not only is this country farmed<sup>vi</sup> but it plays an important role as a tourist destination and many people tramp, fish, hunt and holiday there.

From early in New Zealand's history of European settlement this country was explored and seen to have potential for sheep runs. By the late 1850s 21 sheep stations were established in the McKenzie country, five in the Omarama district, and ten in the mid Waitaki (O'Connor, 1978). Walter Peak Station on the shores of Lake Wakatipu, was founded in 1860. Life on the stations was very hard and often owners did not live there but installed managers. Good shepherds were needed too, because of the lack of boundary fences and many immigrated from the Highlands of Scotland to do this work and their strong work ethic and the character of their sheep dogs persists to this day (O'Connor, 1978). The myths of life in the High Country were fostered by the stories and ballads of musterers, shepherds and shearers (O'Connor, 1978) and are continued on today, particularly in the way the High Country is represented in photography (Morris, 2005). Typical examples of this are portrayed on the web pages of the High Country Accord group ([www.highcountryaccord.co.nz](http://www.highcountryaccord.co.nz)).

From early on, the High Country runs produced fine wool from Merino sheep which seemed to be suited to the high altitude environment. Two of these sheep were brought to New Zealand by Captain James Cook (from South Africa) on his second voyage in 1773 but they were poisoned by native plants. Rev. Samuel Marsden introduced more from his run in Australia in 1814 and by 1835 was exporting wool. The first register of Merino studs came out in 1895 and the number of Merinos reached a peak of 14 million around the turn of the twentieth century (about four times as many as today).<sup>vii</sup>

### **3.2 Prior to the 1970s**

Though most farmers in the interviews did not start farming prior to 1970 as they were still too young or overseas, events prior to that were part of their family stories, which often spanned several generations. Also, it is the nature of the High Country for books to have been written about High Country station life or history and many produced copies of books or photographs of this nature for the interviewer to look at.<sup>3</sup>

From the 1920s an early phase of farm intensification in New Zealand was facilitated by the application of new soil science, synthetic fertilizers and improvements in plant and animal breeding. As stated by Molloy (1980), the area of sown pasture remained fairly stable between 1920 and 1970 but the number of stock units increased by 150%. Over this period of early intensification, oriented to service the United Kingdom (UK) meat market, national meat and dairy productivity doubled and wool supply tripled (Langer 1990; PCE 2004). New Zealand (NZ) was given preferential agreements (e.g. the Ottawa agreement in 1933) followed by bulk purchase agreements where the UK agreed to take all NZ agricultural exports during and immediately after the Second World War (WWII). This led to 90% of exports from NZ going to the UK (PCE 2004). After WWII preferential access was maintained during the late 1950s and 1960s despite threats from other competitors on the market.

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<sup>v</sup> In the late 1970s the then National Government started what became known as 'think big' projects which included the development of hydro-electric dams (Britton, Le Heron and Pawson, 1992; Gouin, 2006).

<sup>vi</sup> New Zealand's land mass is 27m ha, 6m of which is in the High Country and 2.5m of that is farmed. ([www.Highcountryaccord.co.nz/index.php?page=8](http://www.Highcountryaccord.co.nz/index.php?page=8). Downloaded 12<sup>th</sup> May 2011.)

<sup>vii</sup> Information sourced from [http://www.merinoinc.co.nz/Factsheets/Merino\\_FAQ.pdf](http://www.merinoinc.co.nz/Factsheets/Merino_FAQ.pdf).

The 1960s were the start of a period of providing incentives to farmers to increase production. These were mainly in the form of fertiliser subsidies and tax deductions. In the late 1960s New Zealand farmers suffered a number of setbacks and it was feared that the prospects for farming were not good, and hence there was a concern about the possible drop in export earnings from agriculture. It was already becoming clear that NZ trade would be seriously affected by the UK's plans to enter the European Economic Community (EEC<sup>viii</sup>). Foreseeing a drop in export demand, NZ started to diversify agricultural production (Le Heron 1989a, PCE 2004).

### **3.3 'Think big': 1970s to 1985**

#### **3.3.1 Hydro development**

One of the setbacks to farmers also affected the rest of the population. In 1972 there was an oil crisis and the price of importing oil plus the impact of loss of markets overseas saw the New Zealand economy slowing down.<sup>ix</sup> The Muldoon government, being concerned about the price of oil and aware of New Zealand's natural gas reserves, decided to construct major energy projects which came to be known as 'think big'. A second oil crisis occurred in 1979 and the policy response included carless days introduced by the Government. It was an unsuccessful attempt to retain car users from using their car for one day (Vowles, 1995). To balance the effect of increased oil costs, the Government began to borrow money overseas and to fund the 'think big' projects, causing inflation to rise. For High Country farmers, the main impact of 'think big' was due to the development of hydro electricity generation using the mountain lakes of the South Island. In particular there was the development of the Waitaki and Clutha river catchments. The Waitaki river had been the first to be dammed in 1935 followed by two other power stations in the 1960s. Lake Tekapo was also raised in 1955. Further canals and dams were built throughout the Mackenzie country as part of the 'think big' project from the mid 1970s to the mid 1980s, developing the upper catchment of the Waitaki. The construction of the Clyde dam on the Clutha river between Cromwell and Alexandra was also part of 'think big' and its construction started in the early 1980s. (Lake Hawea was raised in the mid 1960s to increase water storage for dams on the Clutha river.)

#### **3.3.2 Farmer's memories of the impact of the hydro developments**

Four of the eight high country farms in the ARGOS programme have been affected by hydro development and three of those have been affected and continue to be affected by the 'think big' developments in the catchment of the Waitaki river. The development of the use of water in this catchment in particular has had incredible impacts on high country farms. The Mackenzie country is talked about as if it is an unmodified landscape, but it is forgotten how much it has been modified in our lifetime. The raising of lakes, the damming of rivers and the development of a network of canals to better make use of the water from these lakes, often changed the whole nature of a property – its physical characteristics and, as a result, the way it had to be farmed. The local climate and landscape/environment was affected for several reasons: the presence of larger expanses of water; the removal of a hill to use for canal lining – affecting both the visual landscape and the effect of wind; division of the property by canals – affecting access and therefore farm management, subterranean water flows and hence pasture growth; and the encroachment of different pests – possums and porina.<sup>4</sup>

Land that had been watered by springs, or fertilised in a complex interaction between animals and water ways, turned into arid country and lost tussock.<sup>5</sup> These things may have happened over a long period so for quite some time it may not have been apparent why they occurred. The following quotes illustrate these impacts:

From a climate point of view I probably haven't got the knowledge to say really. I suspect the sea breeze that comes off the valley most summer's days is probably higher because of the

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<sup>viii</sup> Now the European Community (EC).

<sup>ix</sup> <http://www.techhistory.co.nz/ThinkBig/ThinkBig.htm>

larger flatter expanse of the lakes behind us. (female)

And there was a big hill that used to come round and shelter the homestead from the nor'west and of course that hill was used as a fill to line the canals, so we now get the full blast of the nor'west, and it's just things like that. Um, we [crosstalk] terrible wind in here now, whereas [in-laws] said is used to be a very sheltered... (female)

Just another thing about the canal that we went through is they only put one bridge in for us to move stock from one side of the farm to the other - we've got to bring them all the way up the road, so our mustering's become a lot [more difficult]. (female)

Male farmer: Probably the long term things that it affected, when I look back, is that it did cut all the springs, and so blocks that had water suddenly didn't have water ...

Female farmer: Certainly waterways had a lot of impact at the bottom side of the farm.

Male farmer: We didn't actually find that for quite some time because you, you just, at the time when it's all happening there was a few dry years in those seventies as you well remember, and you sort of think 'yeah that's just a drought' but it wasn't ...

With the lifting of lake levels sometimes the family home and small communities disappeared beneath the water.<sup>6</sup> Mention is made by one farmer of the loss of Maori cave drawings at Lake Ohau.<sup>7</sup> Also, farms lost land to the lakes and to the towns built to house the workers on the dam and canal construction<sup>8</sup> and this land was usually the 'flats' – the land used for wintering of stock and more intensive production. These towns have now become places where people have holiday homes and this in turn has brought urban people into closer contact with the rural life of the high country station. (For a full consideration of this see the later section on urban/rural relationships).

### 3.3.3 Farmers' responses

There were very few responses related to how farmers managed the impact of the changes wrought by the electricity development projects (See Table 3.1).

**Table 3.1: The impact of hydro development**

Effect	Impact on farmer and farm	Number
Social	Loss of homestead and community	2
Social	Impact of new towns built for workers	2
Environmental	Change in local climate	2
Economic and environmental	Loss of underground springs, water ways etc.	1
Economic	Access to property	1
Economic and environmental	Loss of land	4
Economic and environmental	Invasion by pests	1

This lack of response is probably summed up by one farmer who said, "So it was disruption while it was being built but it, you know, you learn to work around these times" (male). In other words, farmers did the usual thing, adapted and got on with farming. The impact has however been ongoing for two of the farmers as they are adjacent to townships developed during these times, which have now turned into holiday centres and their response is summarised by the farmer who said, "... it reflects opportunity" (male). In fact one of these farmers, through tenure review has been able to sell subdivided sections from their property. Another is hoping that further development of the Waitaki river will mean that he has access to more irrigation.

### 3.4 1970s to 1984: Subsidisation to encourage agricultural production

With the entry in 1973 of the UK into the EEC, NZ's proportion of total exports directed to the UK dropped from 90% after WWII to under 40%.<sup>x</sup> This change in the export market coincided with the first oil crisis since the 1870s. To compensate for the loss in markets, the Government of NZ sought a special arrangement with the European Commission to allow special access into Britain at negotiated prices for the NZ exports of butter, cheese and sheep meat (Protocol 18). It also set about instituting policies that were aimed at increasing the contribution of the livestock industries to foreign exchange earnings (Le Heron, 1989b; Campbell, 1994; Gouin, 2006). Various stock retention incentive schemes culminated in 1978 with the Supplementary Minimum Prices scheme (SMPs) for sheep, beef and dairy farmers, introduced as a form of deficiency payment. The SMPs followed other measures to support farm productivity such as incentives for land development, concessionary livestock valuation schemes, preferential credit for farm purchase, tax concessions and fertilizer subsidies. Land Development Encouragement Loans (LDELs) were set up by the Muldoon Government through the Rural Bank to encourage further development of land for pastoral use (MAF, 2010/1999), mainly aimed at encouraging hill country farmers to increase the carrying capacity of their land (Le Heron, 1989a).

This government support of farmers started showing cracks as export earnings for meat were not making enough to cover the subsidy (Gouin, 2006: 12). In 1984 the then National government decided that the Rural Bank had to raise its loans on the open market, which resulted in increasing interest rates<sup>xi</sup>, and the end of SMPs was announced. Le Heron (1989b) asserts that though these policies did raise livestock numbers they did not substantially increase export earnings and in fact misled farmers about the potential of agricultural products and inhibited technological and organisational change.

#### 3.4.1 *Farmer's memories of and responses to the period of subsidisation (1970-1984)*

All of the farmers that were interviewed were not farming through the 70s but some started farming in the early 1980s and were at the tail end of the period when their fathers had taken out an LDEL loan. These development loans were identified by farmers as important economic drivers in this timeframe. One farmer had argued with his father to get the support to take out one of these loans:

He [father] made economic decisions in my formative years, where it had to be done with his blessing. Then he [produced] this expansion model that I had visions of doing. It had to be run past him and had to be approved by him, so from my point of view that was good as gold in that it made me put a good business plan in front of him and others, because most of the original capital came from the LDL program, as it was in those days. It was the second-biggest loan to come to [region], so it was significant. It was over \$200,000 in whatever year that was. I think it finished about '81 or '82, so it was pretty early on. Convincing dad to borrow money was quite difficult. (male)

One or two had memories of this time as a child:

I remember growing up in those days. Everyone was rushing around, and there was a lot of things happening with farms back then. There were truckloads of bloody posts ... (male)

I often think of those times and think 'golly you know that is a pretty special time' because subsidies had come in, so therefore people were subdividing, putting fertiliser out and they're trying to get clovers established ... (male)

<sup>x</sup> Exports to U.K. were 31% of total NZ exports in 1972 but five years later they were 20% of the total. By 1991 they were 6.5% of the total. The U.K. imported 73% of NZ's butter and 80% of NZ's lamb in 1972. By 1991 these had decreased to 40% and 31% respectively (Gouin, 2006: 3).

<sup>xi</sup> According to Lattimore and Wallace (1987) the Rural bank held over 30% of rural debt (p.6-3) and then changes in government policy meant that in 1984 the bank had to borrow capital on the open market rather than it coming from the government's taxation receipts. This increased the cost of loans. Some doubled while there was an average 50% increase and farm loans were so large this impacted even more (p.6-5).



It seems that the farmers who did use these loans used them for subdividing the farm by fencing, and this enabled them to better manage their stock and the fertility of the soil with the use of fertilisers. The one who was the most involved was able to give the actual figures of how getting an LDEL improved most parts of his business to this day:

Anyway, by the time that I took over, we had some good data as to what would grow and what ways to put it on there, and what sort of fertiliser, capital and maintenance was required to keep it going ... and then we got the idea in the 80's, and we developed what we call our "Ewe Country" now. Over three years, we did a third of it per year ... Anyway, the program was - in conjunction with the over sowing - we started fencing. We put up at least 100 miles of commercial sheep fence to subdivide these ewe blocks into more realistic paddocks. And we did that ... in conjunction with the development ... We had the subdivision coming in behind it to better utilise it. Um, wool weight and lambing increased dramatically as a consequence of animals being fed. And then we started trying to fine-tune the genetics ... That genetics one is one that will always be ongoing. In simpler terms, we started in 1980 with a Merino ewe flock at 23.9 microns, cutting five kilos of wool. And now our bloody ewe flock is about 19.8 microns, cutting six and a half kilos of wool. And [we're] still working on improving that. And we've gone from the lambing in good years without storms to on average - we should expect 115% lambing. 170% or 180% of what we were doing. As well, we've gone from - I can't remember exactly - I know that when we bought the place, there was something like 20 or 50 cows on it, 1965, through to around 1800 cattle now. (male)

The following quote shows how the same farmer is also able to compare the parts of the farm that were developed with a part that is still undeveloped today. This farmer also illustrates that this subsidisation gave some farmers the support they needed to really get into farming and to establish their future direction.<sup>xii</sup>

Farmer: And then you get through to my time with LDL. Um, they were very instrumental in doing a huge amount of development. That was in the '80's, I guess ... So, I suppose that's sort of the important things that I guess directed it - gave us the direction we would have taken ... I don't think there's any doubt without development - if we hadn't enacted a development programme, we would be subsistence farming now. Between the aggression of hieracium - we've got a small block between here and middle-Haast that we left that hasn't been developed. If that was where we would be now, without development, we would be struggling. We would be subsistence farming. That's not an exaggeration. I suppose, looking back on it, the development programme ... because the income derived from LDL - although it bit us in the ass later on 'cause we just kept spending it - we were having good years ... and what started as an LDL programme of \$200,000 probably expanded to a million/two million dollars on development. And without it - we've even done some developing in the summer country. We've done weed spraying. We got our broom problem under control. Um, all done our own income. So, without the development programme to kick-start activity, we wouldn't have been able to do any of it.

Interviewer: So it started the habit, in a way?

Farmer: Yeah, yeah. It became self-perpetuating. Conversely, it could have easily gone the other way. We could have been in a downward spiral. (male)

For others, high country farming was viewed as having low inputs anyway, so they saw no use for the fertiliser subsidies.<sup>9</sup> It appeared to be a time of high activity and even excitement on high country farms as farmers were able to action their visions for improving productivity.<sup>10</sup>

The government were quite strict about how the loans were to be used for development with the aim of increasing productivity, not of buying more land.<sup>11</sup> The impact and responses to subsidies during this period are summarised in Table 3.2.

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<sup>xii</sup> Perhaps this acted as a reinforcement of an emphasis on productivity that still exists today.

**Table 3.2: Impact and responses to subsidies in pre-1984 period**

Effect	Response of farmer	Number
	Father didn't participate	1
Economic	Used for development	3
	Only a memory	2
	Too young and not HC farming	2

### 3.5 The introduction of market-led government policies: 1984 onwards

Around 30 different production subsidies and export incentives were abolished in the 1984 budget by the National Government, including those for fertiliser and its transportation and for the eradication of noxious weeds. Other subsidies, for example, for irrigation and water, were significantly lowered. In 12 months, more than 25% of farm subsidies, were removed from sheep meat (Smith and Montgomery 2003). Farmers' profitability dropped by over 50% in one year (Deloitte, 2011: 36). Later in 1984, the Labour Party ousted Muldoon's National Party government, and in 1985 adopted a floating exchange rate to reduce the impact of inflation, which resulted in a rise in the exchange rate for the New Zealand dollar. However, this impacted negatively on farmers' incomes by reducing the return on their exports. Tax reform was also introduced in 1985 which reduced the ability of farmers to write off their land development, capital expenditure and farm improvements (Campbell, 1994).

The introduction of SMPs had radically increased governmental expenditures on agricultural support. Some criticised these subsidies, claiming that they severed the connection between traditional farming systems and the changing market conditions (PCE 2004). For the new Labour Government of 1984, market conditions should be drivers for more efficient outcomes for the economy which implied a vastly reduced role of the Government. Accordingly, the support of the government for agriculture was removed and the domestic economy was opened to the 'free market'. This neo-liberal policy orientation and a looming financial crisis formed the incentive to rapidly dismantle centralised schemes of support which left farmers more exposed to market prices. In a short period of time, NZ removed all financial controls, floated its exchange rate, undertook major privatisation of state enterprises, relaxed labour market controls and removed most import tariffs and regulations (Johnsen 2003; Campbell, 1992). Part of this was the adoption of a "user pays" concept with the intention to make governmental operations more accountable, efficient and contestable. Prices of inputs rose further from 1987 as a result of exchange rate-induced increases (associated with the stock market crash) and taxes on these products (PCE 2004). High interest rates in 1987 aggravated the debt problems of many farmers while land prices collapsed by 50% to 70% (Smith and Montgomery, 2003). Interest rates rose from 14% of total farm expenditure in 1981 to 25% of total expenditure in 1987 (Fairweather, 1989). All non-essential repairs and maintenance ceased and development of new land stopped (Smith and Montgomery, 2003). The shift to chilled cuts from frozen carcasses in 1988 resulted in lowered farm gate prices. Lamb prices started to recover again in the 1989s because of a combination of higher world prices, depreciation of the dollar against the pound, removal of EC's 10% levy on sheep meat imports, increased carcass weights and a 12% reduction in national lamb numbers because of the drought of 1988 (Chatterjee, 1996). There was a 41% decline in commercial sheep and beef farms between 1984-5 and 2008-9 (22,000 to 12,880) while the average farm size rose from 3,424 to 4,031 stock units. Productivity gains were made through increasing the lambing percentages and finishing lambs to a heavier weight, which has meant that the sectors' production has not declined significantly (Deloitte, 2011: 21). Wilson (1994) has noted that there was an increase in deer farming, dairying, farm forestry and horticulture (and a decline in sheep farming) after the economic deregulation.

By 1995 Agriculture New Zealand was sold signalling the end of all government funded extension activity in agriculture (MAF 1999). The role of MAF was redefined in line with the perceived needs of

the changing farm economy and in line with the Government's commitment to state sector reform. The aim was to make extension services more market led. All scientific and research activities were transferred to the new Crown Research Institutes (Rhodes, Willis, and Smith 2000). Farmers and growers from then onwards would have to pay for advice from farm consultants. A lot of resources were committed to research on farming in the High Country till the 1990s, but as the reforms reflected on the practical realities of the financial aspects of farming, the High Country lost favour and very few resources are allocated now in this area except what is done through Merino NZ.

### **3.5.1 Farmers' reflections on economic restructuring- the lifting of subsidies - 1984 on**

The policy change put into place to improve farm production efficiency was used to imply that those farmers who had lost their farms lacked the skills or capability to respond effectively (Smith and Montgomery 2003). Several key factors have been identified over the years to explain why some farmers survived the restructuring and others did not. According to Smith and Saunders (1995) the level of indebtedness had a big influence on farm survival. Thomassin and Cloutier (2000) state that young farmers, in particular, were prone to failure because of lack of access to family funds.

One farmer gave a great summary of the period and what he learnt from it that would be useful for present day politicians.

If you go back to sort of the Muldoon era where he actually realised New Zealand needed to earn more money ... his answer was subsidies, you know, subsidised production, basic ... you know, the option we all know was very distorted right across the economy and um like most politicians, their hearts are often in the right place but just their methodology is so wrong ... Rogernomics was, you know, the other swing of the pendulum, and that was done for the right reasons but not necessarily done the right way and you know, it's really taken probably till, you know, just the last six years I think, for those shock waves to actually, to settle down ... you know the policies that they promulgated at the time, you know, the subsidising sheep so everyone would produce more sheep 'cos we needed to produce more lamb for export, but, whether we were producing the right lamb we didn't know because all meat companies had to sell onto all markets, so that you know, they had no real ability to market properly and control what they were doing. And it really it was ironic seeing a graph of sheep production probably in the late 90s with um, the value of lamb well, sheep numbers sort of went like that and value of lamb went like that, to the point that we [have] ... probably about half the number of sheep that there were - sort of peaked in somewhere in the 90s didn't it? We're actually exporting more kilograms of lamb now than we were, were then, because there's probably more of the right incentives are out there to actually grow the meat and provide the type of meat that markets are asking for, you know. When you get a political sort of directive to take the economy in a direction ... sort of the wrong drivers are there and people do the wrong or right things for often the wrong reason and um. I can see that the type of information you might, garner out of this, could be used for those policy makers to actually, be a bit more sensible in where they focus their direction. It also gives the farmers a bit more information, if they're offered some of these choices, by the government they can actually say well, get a life or get a grip ... \*laughter\* yeah, no that's a good idea, you know. You know we're actually in a much more important position to make better choices because I think you know, agriculture and probably New Zealand as a whole, it's a sort of bloody erratic time, because there's been some, you know, stupid policies really, you know. And a party gets, you know, without trying to be political, we've got a not very farmer orientated government in power at the moment, but um the country relies on agriculture so, you know to be fair to those people, we've actually gotta be giving good advice so they can try and make sensible policies, and you know, vice versa, because ah you know, governments are going to change and fluctuate, policies are going to change but given, given good information, you know at the end the game's fairly similar, whoever's running the country. (male)

Others also reflected on this period and indicated that though they supported the market-led policies they were also flawed like the ones of the past because of the short-term nature of the political vision:

And then about the year we got married it all changed. Because the Rogernomic government came in and [crosstalk] lifted the subsidies - we all thought - we were all in support of it, but we just didn't realise the rest of the world weren't going to come on [board]. (female)

But it is a bit sad in a way that the government programmes that operated in the 70s and early 80s had done a great job and were just never able to keep up on it. I'm not saying the government should be coming in and putting money into those things again, but their own investment - the changes that went on. I think, it's a bit hard when you say the government because it's a continually changing organisation, but I think they probably lost a lot of ground over the years because they didn't actually follow up on what we started probably at a pretty high cost in dollar terms, and that was just stopped. Been a lot of initially quite good forward thinking policies - very short term policies, and that's happening all the time I think. ... I suppose short term policies have more impact, get recorded by the media, so there's more sort of feedback and the government seems to be very responsive to that sort of pressure ... I think in our sort of political environment it's almost impossible to take long term views on things and stick to them through good and bad. I think long term it's not actually doing the country much good and I'd give all political parties credit for making that mistake, I'm not going to cite any particular one. (male)

I think the Merino business was really not greatly affected by that, 'cause it was pretty much when wool prices went through the roof ... But I have got an opinion on it. I think it's the best thing that ever happened to New Zealand farming. It was a wonderful thing, despite what everyone says. (male)

But it was also a tough time, as this farmer remembers:

We didn't have a huge amount of money borrowed then, but I remember the first year I farmed on my own account - would have been 1983/84, a reasonable year ... But, um, in 1985, it all went pear-shaped. We had Corriedales. If we had Merinos, we would have been pretty sweet. But we didn't. And the wool prices and the meat prices, everything just died. They were pretty tough years for a few years. We just sort of picked up the tail-end of that, and that was one of my worst years. You chase the market, you're probably going to be pretty lucky to catch it ... been running Merinos ever since, and there's been one or two ups in the wool price. . (male)

For another farmer the impetus of the development going on, on the farm from the previous era's LDEL loans, carried them through the difficult times:

I mean, we were going through a development phase then, but anything negative that was happening was countered by the positive things that were happening here. Um, at the time there was a real enthusiasm in getting things done. (male)

### **3.5.2 Changes made on farm as a result of the removal of subsidies**

A lot of the changes that farmers introduced that follow later in this report had their first impetus from this time, and the possibility of tenure review has continued these changes. The farmer in the quote that follows, switched sheep breed to move to the production of finer wool and ironically, in view of the collapse of the wool market, away from meat production. This was quite a big move because his grandfather had been involved in the development of the breed they had always used:

... in 1986 we switched from Corriedales<sup>xiii</sup> to Merinos. I suppose learning the system that suited the farm. I think the biggest challenge – and I think my brother too, he also had to learn a new system ... My grandfather was involved in the first breeding of Corriedales, and my father actually had his start in Corriedale flocks. Up until the final boom of the 1980's, Corriedales levelled with Merinos, 'cause more meat, but less wool. So that was the plan since the 1980's,

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<sup>xiii</sup> Corriedales are one of the oldest crossbred sheep (from merinos and Lincoln or Leicester sheep) developed in the 1800s in Australia and New Zealand to produce both meat and wool. The breed was officially recognised in New Zealand in 1911.

and I suppose we did the change 'cause of Rogernomics. People really had to sort of move to either wool or meat. And the dual-purpose sheep sort of went. People right through the high country, there was a lot of properties that ran half-breeds. Since wool prices increased in the early 90's, there was a lot of people that were without Merinos, instead of going back to half-breeds, they went into things like Corriedales ... And Merino is actually coming back. It's being seen as a dual-purpose sheep. Doesn't matter how much things change, some things stay the same. (male)

Another farmer remembers introducing deer farming:

Ah, we've made a few [mistakes]. We went into deer farming in the early '80's, early-to mid-80's. And that, in retrospect, is something I wish I'd never done. But the impediment to that was TB. And we developed the deer farm as a hind breeding unit for surplus female sales. And as soon as we got TB, we couldn't sell to any of the works. And it's cold, hard, sour country and trying to finish young stock for slaughter was absolutely hopeless. I mean, you get finished, but we were always at the end of the cycle, and that became very frustrating. Then we changed tactics to doe production. And that's not something that happens overnight. By the time you get genetics and breed them up to four or five years of age before they start producing. They didn't have the guts for that market as well. But looking back on it, the worst thing about deer farming was the impact ... on the environment. From that point of view, I'll never go back to it again. (male)

**Table 3.3: Impact and responses of lifting of subsidies after 1984**

Response of farmer	Number
Best thing that ever happened	4
Change in sheep breed	1
OK because had Merinos	1
Started deer farming	1
Subsidies helped set up pattern for future	2

### 3.6 1998 to present: Tenure Review

By far the largest and most controversial feature in the lives of the majority of High Country farmers in recent years has been tenure review. Like many of the more recent impacts of government on farmers this policy came out of the market-led philosophy of the reforms of the late 1980s, with the principle that “the state should not be involved in production that can be undertaken by the private sector” (PCE, 2009: 3). For over one hundred years high country land in the South Island has been leased. Pastoral leaseholders, who hold 33 year leases with a perpetual right of renewal, can graze the land for pastoral farming but are restricted in other uses. The Crown Pastoral Lands Act of 1998 placed 303 Crown Pastoral Leases up for review during which land will be reallocated, through a voluntary negotiation process, passing to either freehold ownership or conservation and recreation (public ownership via the Department of Conservation (DoC)) (Greer, 2004; LINZ, 2011; PCE, 2009). Before this Act came into force 32 Crown pastoral leases were completed under the Land Act of 1948. At present (July, 2011) 77 properties have completed the review, 5 have been completely purchased by the Crown while 101 are not in tenure review yet. The rest are at different stages in the process.<sup>xiv</sup>

The process involves firstly, the application to Land Information New Zealand (LINZ) by the leaseholder indicating their wish to undertake tenure review, secondly, consultation, and finally the preparation of a final proposal by LINZ. The consultation is with the leaseholder on how the ownership could be assigned, and with DoC, Fish and Game New Zealand, iwi and the general public.

<sup>xiv</sup> [www.linz.govt.nz/crown-property/pastoral-land-tenure-review/tenure-review/progress-report-activity-report](http://www.linz.govt.nz/crown-property/pastoral-land-tenure-review/tenure-review/progress-report-activity-report). Downloaded on 19/07/ 2011.

At all stages the process is public and the associated documents for each negotiation are available on the LINZ website.

Crown Perpetual leases were only introduced in 1948. Up till then no bank would give High Country farmers loans to develop their farms and as a result the country had become depleted and eroded.<sup>xv</sup> However, these leases still restricted the use of the land to pastoral farming and other business ventures, including applying fertiliser, sowing grass and cultivation were only allowed with Crown permission and this was seen as very limiting, hence the need for the flexibility that would come with free-holding the land which it was thought was the only way to restore the High Country productively and environmentally. But the process developed for this was regarded by some parties, such as the High Country Accord, as a chance for the Government to increase the conservation estate (High Country Accord, n.d.2). The LINZ newsletter quotes the LINZ Manager, Crown Property Management as saying, "Leasehold farmers get freehold ownership of part of the land, the conservation estate gains more land, and the public get access to land on the 15<sup>xvi</sup> properties they have never had formal access to before" (LINZ, 2003: 6). The same newsletter said the tenure review process was linked to wider government objectives that spanned environmental, social and economic spheres:

- to ensure that the conservation outcomes are consistent with New Zealand's biodiversity strategy.
- to progressively establish a network of high country parks and reserves.
- to foster sustainability of communities, infrastructure, and the contribution of the high country to the New Zealand economy.
- to obtain fair financial return to the Crown on its high country land assets (LINZ, 2003: 7).

According to the Parliamentary Commissioner for the Environment (PCE, 2009: 4-5) public concerns have focused on three issues:

- loss of lower altitude ecosystems
- impact on landscapes
- public access.

The land under negotiation to go to DoC in the present tenure review process is mainly middle altitude land that has been modified since Maori and European settlement to short tussock grasslands and with the use of fertilisers and pasture development at lower altitudes this land has not been developed economically but provides summer feed, especially in dry conditions (High Country Accord, n.d.1). The public is concerned that there is only a small proportion of lower altitude land becoming conservation land and the rest will be likely to disappear as high country farming is intensified. Landscapes will be impacted on because as leasehold land goes into private ownership it can be subdivided with lake frontages blocking lake views in particular. Then there is the visual impact of the 'greenness' of intensive production placed in contrast to the 'brownness' of conservation land. However, the PCE is concerned about water quality and the spread of weeds (broom, gorse, briar, lupins, conifers).

In contrast, groups like the High Country Accord<sup>xvii</sup> are worried about the following issues:

- land has to be purchased at great cost to the taxpayer.

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<sup>xv</sup> In a way the Rabbit Land Management Programme (RLMP) (see later) led the way to tenure review. One of the findings of the RLMP Task Force was that "the constraints of pastoralism forced lessees into low-intensity farming which produced prime rabbit habitat". It "concluded that intensification and diversification of land use would mitigate the rabbit problem in two ways: 1) by changing the habitat to a more fertile, productive landscape in which rabbits do not compete as well; 2) by increasing the return on the land and hence allowing more capital to flow into rabbit and pest control" (Brower, 2006: 35).

<sup>xvi</sup> 15 properties were nearly at the end of the process in 2003.

<sup>xvii</sup> The High Country Accord is a lobby group representing the interests of High Country farmers.

- land has to be maintained – managed for weeds and pests. Such work is currently carried out by the farmer but in light of how DoC is struggling for funding, the fear is that this will not be done.
- land that is currently used for economic activities will be locked out of use forever.
- the Merino industry will be severely impacted and may become uneconomic (High Country Accord, n.d. 3.). Thirty per cent of the Merino flock may be lost (Greer, 2004).

The process of tenure review has gone through many fits and starts. Things seemed to falter after the initial process starting in 1998. In 2002 it was given some impulse when the then Labour Government decided it wanted to acquire about 60 per cent of the land then in pastoral leases. Between 2002 and 2008 the Government had added 229,909 ha to the conservation estate (10.5 per cent). In situations where land under negotiation had either total conservation or economic value the process worked well. However, where it had both values it was hard for the leaseholder and the Crown to agree. Farmers felt that their practices were already ‘ecologically sustainable’ and protected the land the Crown wished to acquire. This meant that by the end of March 2008, nearly 100 of the 169 properties that had entered the process had not progressed past the Draft Preliminary Proposal stage. There was also concern that rather than be a voluntary process the Government was putting financial pressure on leaseholders and this was amplified in 2007 with what were considered to be unaffordable rental increases to ‘market rates’. In connection with this it was also decided that 65 properties within five kilometres of any of the big high country lakes were ineligible to enter tenure review. Some leaseholders who were well advanced in their negotiations had them terminated. The High Country Accord felt this was very unsettling for farmers that needed the “security of tenure and sound, consistently applied government policy in order to have the confidence to plan and invest in the sustainable management of high country land”. This organisation also felt that the situation showed a “lack of respect for the people of the high country” (High Country Accord, n.d. 4).

It is argued by the High Country Accord group (High Country Accord, n.d. 4) that this disruption occurred when Ann Brower became involved in a campaign which alleged that the Crown was selling off valuable Crown owned land cheaply to private interests and that the people behind those private interests would then sell off their land making huge profits from it or use it for more productive and highly profitable enterprises (after going through the RMA process). Brower published a report to this end in February 2006 (Brower, 2006) and later a book, titled ‘Who owns the high country?’ (Brower, 2008). Basically Brower argued that through getting its agents (e.g., LINZ) to act in a neutral capacity, the Government (i.e., taxpayers) was paying pastoral leaseholders to become landowners of the most valuable parts of the high country estate while the Government, in exchange, became owners of the less valuable parts (Brower, 2008: 14).

In 2005 an enquiry was set up to assess whether rents and tenure review settlements were fair and it found that settlements had been fair and that in fact some rentals were set too high. Rentals should not take account of the ‘improvements’ made by the lessees such as in pasture. However, the Government took no notice of this report and based rental increases on the assumption that they should also take account of the ‘amenity values’ of the property, thus making properties close to lakes and therefore with ‘mountain views’ more valuable. It was agreed that legislation to this effect would not be introduced until a suitable test case on the way the Crown sets all pastoral lease rents, came before the court (High Country Accord, n.d. 4). The Court case chosen was that of the Minaret station, which had a 25km frontage on Lake Wanaka (Wallace, 2008a). In 2009 the Otago Land Valuation Tribunal reaffirmed the property rights of High Country pastoral lease holders, and that value had to be based on the unimproved value of the land for pastoral farming (Federated Farmers, 2009; Ludemann, 2011). Improvements were regarded as the property of the landholder (Ludemann, 2011). “The overriding principle is that without the property right of security of tenure, they would have no incentive to invest to improve the land” (Farmers Weekly, 2009). Since that

decision, the leaseholders who were excluded in 2007 were able to re-enter the land tenure process and some of them have settled.

### **3.6.1 Viewpoints of farmers: Factors to be considered in making tenure review decisions**

The important aspects of the decision making process for farmers on whether go into the tenure review process and whether to accept the negotiated settlement were related to:

1. the rental for the pastoral lease should they continue with a pastoral lease
2. the way the former pastoral leased land was to be split between the conservation estate and freeholded to the incumbent farmer
3. the dollar value of the exchange for the land taken and the land to be freeholded.<sup>12</sup>

Farmers knew that the rentals were likely to increase considerably, therefore they had to consider this increased cost and the benefit of continuing to have the 'tops' against the benefits of being freehold but without the 'tops'. Losing the 'tops' meant incorporating big changes into their farming practice and diversifying their product range – in a sense, as one farmer said, becoming more like a traditional sheep/beef farm rather than a High Country station. In other words, they would farm less for fine wools, and more for meat and aim to finish stock on their property rather than send them elsewhere. Farming for meat meant changing the way sheep were bred and possibly increasing the beef cattle. To finish stock on the property meant growing more grass and crops at lower altitude so that stock were fed during the summer as well as the winter. To do this usually meant increasing the irrigated area of the farm and alongside this, increased intensification. Some farmers were also producing stud Merino breeds that more fitted this vision of an animal that produced fine wool and good marketable sheep meat. (Merino meat is believed to have a more distinctive 'gamey' flavour than other sheep meat.)

Farmers hoped that the State would pay more for the land moving into the conservation estate than they would have to pay for the land to be freeholded hence providing them with some cash which could be used to develop their properties to support the changes they would need to make. (Although land moving into the conservation estate was much lower in value than the land to be freeholded, the amount of this kind of land was so vast it balanced out or exceeded the value of the land being freeholded.) The cost of irrigation was one of the main expenses they envisaged<sup>13</sup> and for some, the purchase of more land at a lower altitude which could also be more intensively used to finish stock or to increase the land available for summer grazing.

Another hope was that the increased cash available would allow farmers to invest in their properties and off-farm to reduce the uncertainty and risk of future volatility and to enable them to make succession plans such as an equitable distribution for family members and retirement for themselves.<sup>14</sup> Farmers' decisions also related to whether irrigation would be available and zoning requirements of local government.

Three farmers expressed the feeling that in future negotiations there might be some accommodation by DoC to allow farmers to continue to graze the 'tops' as part of weed control<sup>15</sup>, and make arrangements to use the land just for a certain time of year.<sup>16</sup>

Having a DoC owned area on a farm's boundary may prove to be a problem in the long run because of the weed problem that might occur through DoC not having the resources to carry out effective weed control, especially that formerly done by the summer grazing of sheep<sup>17</sup>. Overall, there is a hope that the tenure review settlements will be flexible enough to adapt to the different properties under review, as expressed by this farmer: "... there's a number of different ways to skin a cat" (male).



### **3.6.2 Viewpoints of farmers: Preparing for completion of the process**

Farmers entering tenure review planned that the process would take a certain amount of time and with that in mind they started adjusting their farming practices accordingly. Because they were losing the ‘tops’ of their farms, they were losing the country on which they grazed sheep over the summer, particularly the wethers – the sheep used for producing wool only – not breeding sheep. As the payment received for fine wools has had a long period of low prices this was often seen as a good way of restructuring the farm to change the mix of products produced, so farmers started reducing their wether stock by not replacing them or selling them if the price was right. In return they expected, through having ownership of their farms, that they would be able to develop more intensive grazing on the lower levels of the farm, particularly with the aid of irrigation. This would enable them to have more beef cattle and to change the breed of their sheep to ones more suited to being both meat and wool producing. With the help of the extra pasture they would be able to finish more stock on their properties rather than sell them off for others to finish. Some were able to start this development in anticipation of the completion of the tenure review process. So some invested in irrigation and some bought extra land near their property that provided the opportunity for more intensive development. However, they went into debt to do this development anticipating that through exchanging their tops in tenure review the balance of the tenure review payment would be in their favour and they would be able to pay off their loans. However, when the tenure review process failed to be completed in the expected time some farmers were left with massive debts and by the time the process was completed the cash received was not sufficient to compensate for both the interest payments they had to make in the meantime and the capital involved.

### **3.6.3 Viewpoints of farmers: Experiences of the actual process**

Well, we entered into tenure review, and ... we had DoC visit, and got to that point, and then ... you know how they threw out the lakeside properties? We got thrown out then. And then we chose not to re-enter on their terms. And now, since that’s been thrown out, we re-entered, and we’ve got our draft coming into proposal – it’s just about finalised. We’re still working on that one, which is pretty much DoC’s wish list, which really surprised us, but apparently that’s the way the process goes. which, from a negotiation point of view, you wonder how fair that possibly can be, because it seems like we are the ones who are having to pull every inch back, whereas DoC aren’t having to pull anything back. You know, anything they give up is a choice, where we have to fight for everything. But that’s where we are ... at the moment, we’ve also got a valuer to come, to evaluate the property. And then our negotiations start. Um, it’s really going slow. So, that’s where we are there. It’s a long battle. We’re probably – we’re realistic. It’s probably not going to achieve our goal, and our goal is to continue farming here as we’ve farmed. Um, so we may end up remaining as a lease property. Because they just want too much in the property. It’s just not sustainable. Even for the best case scenario you’d still only be farming a couple of thousand stock units here, and that’s not viable. Um, so yeah, that’s probably where it’s going, but we’re going to give it our best nudge, and we’re going to try and work through – probably have the use of QE2 covenants, too, to try and say, “let’s keep farming the whole property, but let’s look after what needs to be looked after.” And the crown – the crown should jump at that. ‘Cause it’s not going to cost them a cent to have this land looked after well. But, as you know, that’s common sense. (female)

In the following description the farmer explains the process and how it looked promising to him when interviewed in 2005. We have given the full quote here because it is such a complete description of the tenure review process, and it is important to remember as it is being read that for this farmer, in spite of him being ready to sign in 2005, it was all put on hold and not resolved for another 4-5 years.

Well technically we applied for tenure review - I'm talking about my case, ‘cause the whole thing's so politicised now with so many different factions, but by the book you invite the commissioner of crown lands as the landlord to initiate a tenure review, and basically the next step is the Department of Conservation, they come and they do an assessment of the property,

identify what they see as, should go into the conservation estate on behalf of the New Zealand public and what should be retained as farmland to be delivered freehold to the farming family. Ngai Tahu, in this case it's Ngai Tahu, the Maori interest, they, under the Treaty of Waitangi mechanisms they come in, it's their opportunity to identify anything that's of significance to them. DOC will, I think at that stage they sort of have an open consultation - they're called stakeholders, which I take exception to that term, but I won't get into that, but organisations, the NGOs like Forest and Bird, Fish and Game, tramping clubs, everyone comes under that umbrella. They can have an input at that stage, and the agents work with LINZ, they draw up what's called a draft preliminary proposal, so that's really their first bid and they'll come to you and say, well look, 'the Department of Conservation ... '. [People] at that stage tend to throw their hands up in horror and, you know ... because there's so little [land to be freeholded] at that stage. I think you've got to take a deep breath and sit down and say, look that's only the opening shot ... it can be a very intimidating process 'cause you can feel like little old you is fronting up to the might of every NGO and government department, they're against you, but the companies [chosen] by the crown to facilitate the process really are reasonably neutral, they're not actually backing for you and they're not backing for DOC, but they are the go between ... so then it's truly beholden on you to put yourself I think emotionally and practically at the same level as say DOC or the other people, so you feel like you're equal and then you've just got to get into the negotiation process and I think it's at about that stage that you've really got to get your own head around, well, ... what exactly is it that you want out of this process and where do you want it to lead you, where do you want it to take you. Is it good for you and your family, cause at the end of the day you can walk away from the process at any stage. There's obviously potentially some political [implications] down the way too - at the end of the day the government doesn't want to be involved in pastoral leases. It's an administrative nightmare for them. What I'm explaining is sort of the process and how it works. It could've been done some other ways, probably far better, for the benefit of New Zealand as a whole. I think the way it's gone at the moment, in our case it's actually very good for us, I don't really see it as a particularly good deal for the taxpayer, but I don't say that too loud.<sup>xviii</sup> I think the process has got a bit, not subverted, but I'm not sure common sense always prevails, but anyway ... you've got to negotiate and try and argue for what you want ... the land act '98 ... you could freehold land if it had an economic use so ... probably if you wanted to mount the argument and you said well that, that bit of high stuff up there, there's an economic use there for hunting, or some tourism activity, you know, you might have had a case for freeholding that. ... that first proposal went nowhere ... so they presented us with a draft preliminary proposal. The financial settlement that they proposed, they'd actually worked the numbers out wrong anyway, and that was laughable, it was so poor and ah [wife] was sort of, hair was standing on end when she got this number, but they had already looked and said, "Well look, keep your feet on the ground". I said, "This is so ridiculous, it's going nowhere you know. It'll only go anywhere if we can improve it", so then, they admitted they'd made a mistake so we sort of started on this process of um working on what a fair value, the right value was. ... But we actually had a deal on the table about two and a half years ago. It took quite a lot of you know, a lot of arguments, sort of getting, working values out and, and that, that was fine and then ... I said, "What's happening?", he said, "Oh, LINZ have got some problems they're gonna have to sort through" ... So they, took a year for us to end up having a sort of a two hour meeting which we actually sorted the issues, and the young woman who worked in there and was obviously sort of thinking she'd try and make her mark, drew up a little legal document that we would agree, agree to relinquish that land out of the top title regardless of tenure review, and I said, "No, I'm not gonna sign that." I said it'll go with the tenure review but I'm not going to sign anything sort of separating it. And so we had a bit of a stalemate there, and then I used that farm consultant - he's been helping us work through the negotiating process - and he said, "Well, what about we have an agreement that when we agree to tenure review that land goes with it. It was just, it was an amazing bit of footwork - it just turned it around and left this poor girl, and her boss, ... But anyway, so ... now land values have changed in this year or two years and we've ended up with a better settlement now so um, yeah LINZ we're probably a third better off so ah, that's their stuff up \*laughter\* So anyway ... and then the valuer that was working for the crown he, I'm not quite sure what planet he was on, but

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<sup>xviii</sup> Note, this was in 2005, before Ann Brower came on the scene.

he just, he kept coming up with totally sort of unrealistic valuations and I had a valuer do a valuation for me so we could argue with the valuer's inputs. In the end the um, the valuer working for Opus - the company working for the crown - he actually lifted his valuation considerably. The guy that was ... doing our one was actually a real estate agent and a valuer so he was probably a lot more in touch with where the market actually is. We ended up work.., um in very simple terms, having agreed to where the lines were gonna be um, the first draft we got you know there were some lines draw on a map and we had that first meeting and I didn't even react to them which I think they were a bit disappointed about, these sort of people always react to these maps and so I assume I'm not going to be like them so there's not much point going to the back of the document to look at them straight away. The guy from Opus and the guy from DOC um you know, they both came out and we just went around the place and looked at those lines, quite amicably shifted a number of them, just you know to the point of practicality, but, which um, in most tenure reviews I think that's the hardest thing for people to come to agreement on is, you know, what goes where. Once I accepted that ... there's either a wether flock or not, it then became quite easy as far as that side of it went, having agreed to that, it really was just this process of negotiating the values and probably at the end of the day, having a process they have adopted ... If they buy the pastoral lease, buy the whole pastoral lease from me for a sum, I then buy back freehold the bit that I'm going to keep for a sum, the difference is what they pay me or I pay them, that's how we finally worked it out, 'cos we started arguing it from more the value of the income, you know the capitalised value of the income from the wethers ... whereas in a lot of cases they might just purely work on a per hectare value, but ah the way we did it I think, gave us, probably, the better outcome than the per hectare thing ... So anyway, that's sort of how we've got to where we've got to. (male)

... the crown employed them [OPUS] to basically negotiate the tenure review on behalf of – the department that would manage the land on behalf of the crown. So I suppose, yeah, they'd look at LINZ as being the land owner. DoC was really – had an advocacy role in that they will inherit the management of the land that we'd give to the crown. And I think DoC got more and more power and that suited the then Prime Minister and Minister. I think that caused a hell of a lot of angst. I think in Otago more than Canterbury. I think that DoC in Otago's a lot more bloody-minded (?) than DoC in Canterbury. DoC seem to get more authority than they deserve. I think that if you had a hierarchical tree, DoC ... were probably about even in stakes and LINZ was above them. But DoC sort of went out getting preferential treatment. In a lot of cases, I think DoC was asking for more than they justifiably should have been asking for, which actually made it near impossible for everyone else. (male)

#### **3.6.4 Responses to the tenure review process**

One farmer did say, "... now that we're holding freehold title we don't feel as if much has changed," (female). However, for the others the tenure review process has been a difficult stressful time with some unexpected consequences. Some have found that they have to be political and fight for their right to farm the high country. For some of the ARGOS farmers the result has been loss of confidence in government because they have felt they have not been respected and treated reasonably. The media interest in stirring up the controversies surrounding who are the rightful owners of high country land has led to a further erosion of the understanding between urban and rural people about how they live their lives. Others lament the losses they have experienced to their status and identity as high country runholders. For some the losses have also been material as the tenure review process has taken so long their preparation for it turned into mortgage costs.

#### **Politicisation**

One of the major results of the tenure review process has been that farmers have become politicized. They have learnt that for their way of life to survive they have to take a stand and fight for it. This young farming woman expresses it like this:

... you've got to be strategic to survive, and everything is just changing at such a rapid pace, as you know. And it's scary. And we're just wondering where it's all going to end. And some days, - and because also you'd be well aware of the political side of living in the high country. When

you've got these big issues bearing over you, like tenure review and like irrigation, and your rent – the rent hikes that are going to happen – and all the other worries cause stress. And they're big issues. And some days you just want to put your head down and go hide ... And think, why can't we just get off the farm? 'Cause I grew up down country, on a down country farm. And there's no political pressure whatsoever on a small, freehold sheep farm. You can just get on and farm. And so, you stop at the farm gate and live quite a peaceful existence. That was the biggest change for me – was the political world. And right at the top level – right up – you know the Prime Minister visiting at times, and right up high to the crown. And in Wellington, DoC and everything else. And so it is at the highest national level, you're actually in these battles just to, um, carry on with your daily life. Yeah ... You know, financially it costs. Emotionally it costs. The stress levels go up at times. Yeah, and then it sort of dies away, and you carry on. Then the next tenure review comes along, and the stress levels go up again. Especially because of where we live. Especially under the Clark administration ... The original request was for 90% of the property, and so that- and [husband] is fourth generation on the property, so you've also got an emotional attachment to the place. And that – that's a huge stress. (unclear). You'd be packing up and going. And everything you've been building for hopefully the next generation to take on will go (female).

### ***Loss of trust in government and bureaucracy***

Socially the losses have been many dimensional. There has been a major loss of faith in government. Farmers believed they had a social contract with government and that governments would negotiate with them in good faith. Instead they feel they have not been treated with care or respect. They have felt that bureaucrats just did not care about them as people and were able to distance themselves from the impact of what they were doing on farmers. A result of this has been that farmers have seen how little people know about their way of life and the decisions they have to make, and it has made them lose trust in 'outsiders' whether they are in government or just live in 'cities'. The following farmer talks about the decisions made about restricting stocking numbers on pastoral leases:

And I've got cynical about the bureaucracy, I suppose. In some ways, I'm my own worst enemy, because I don't believe in - now, I don't believe what other people - I don't believe there's any expertise out there now, as there used to be, to tell me what I should be and what I shouldn't be doing (male)

### ***Stress of the process: planning for a future which took too long to happen***

The main response to the experience of going through the tenure review process was one of how stressful it was for the participants. The losses farmers have experienced due to the lengthy duration of the process have been of a multifaceted nature – financial and social. Financially, owing to the time it has taken various opportunities have come and gone and decisions that were made in preparation for the completion of the process have ended up costing some farmers hundreds of thousands of dollars.<sup>18</sup>

Male farmer: I think, well, it's put a stake in the ground, there's that point of view, but in a lot of ways the things that have held us up I think, the tenure review process itself was longwinded, took seven years to get through the process, so some of the opportunities that were there came and went.

Female farmer: We call it the "ten year" review.

Male farmer: Yeah, that's what we used to call it. Um, and it's a timeframe thing...

Female farmer: ... because farmers have to do these things to survive, so it's desperation stage. They don't want to just decide to change, evolve into a different farming practice because it'll be interesting to do, they need to do it for financial viability. I guess tenure review has been a bit of a waiting game for us, and by the time we held title we felt like quite a lot of missed opportunities had come and gone and now debt had mounted and mounted whereas if we had money from the sale of [property named] when we started to really accumulate interest on interest - we were standing in a bucket trying to lift it for a few of those years - we wouldn't be in the situation we're in, so it's a bit bittersweet. It's nice to have that security of tenure although since then we feel like so many more people actually have a stake in [named

station] now.

And we bought the farm down the road, thinking we were doing the right thing, and it actually, no, it wasn't the right thing. Got us in heaps of debt ... (male)

***Challenging identity as High Country farmers: ownership and rural/urban tensions***

Socially, tenure review has been very stressful owing to the uncertainty it has created, the costs lost due to the time it has taken and the challenge to people's identity created by the challenges to the identity of High Country farmers that have arisen through politicisation of the land ownership issue and the publicity surrounding it. Urban New Zealanders have felt they had rights to land that rural New Zealanders felt was not theirs to have (the belief that the government is selling ownership of land that belongs to all New Zealanders). High Country leaseholders claim that they have always erred on the side of generosity with their land rights even in spite of the many negative things that have happened to them as a result of non-farming people coming onto their properties.<sup>xix</sup> Tenure review and the controversies surrounding it have had an impact on the New Zealand public and their changing perceptions of High Country farmers (and farmers in general) and intensified the divide between urban and rural people. High Country farmers have perceived it as urban people attacking their identity and integrity as it has challenged the way in which they think of themselves and their position in a society which used to hold them in high regard.<sup>19</sup>

For High Country farmers, their identity is very tied to the land they farm. Even though it has been 'leased' they are at one with the land in a consubstantial relationship (Gray, 1998) that covers several generations. Hence, any challenge to the land ownership is a challenge to their identity.

It's funny, you know, probably until 10 years ago, we were very proud of what we did. We probably still are, but if people ask us what we do, we're more likely to say we're farmers at and not say we are runholders. And if they ask how big, we say, "Ah, it's quite a big place." We would never ever say the size. And I think it is sad, 'cause I think what we've done is - we have a fantastic heritage, and I'm proud of having taken over from dad who took over from his dad, and we've looked after this property for 100 years. And yet it's sad that we can't say that ... We both agree that we just don't talk about it anymore. (male)

Who does the High Country 'belong to'? Some New Zealanders claim that it belongs to all New Zealanders – it is 'ours'. This couple indicate how they see this debate and bring up their claims to the land through their family's story of association with it over time:

Female farmer: It is interesting that in this meeting people kept saying several times - and that is what you hear - "Our land." ... and the issues around the property rights ... The city people liked it. It's "our land" that you're sitting on. And she [Ann Brower] never understood ...

Male farmer: The story about Mum's book was so important because that puts it in perspective. You know, the heritage, the story that goes behind the families that have run these places. Thank goodness for that. That is much more important than [what a] Johnny-come-lately [says]. I guess in the end, we'll put it right. But we'll be long gone. It's not until you start talking about it that you realize how much has happened and the changes that have taken place.

One woman got unexpected understanding of her situation when she was talking to a woman from Zimbabwe<sup>20</sup>.

There has been a clash between different views on what it means to 'care' for the environment. DoC and Forest and Bird, are perceived to want a landscape devoid of people, except for transitory people – hikers, hunters, trampers and buses full of tourists. For them this environment is stable and unchanging (see Setten, 2004). On the other hand, high country farmers see themselves as conservationists, caring for and protecting an environment on which their livelihood depends.<sup>21</sup> They live through the droughts and the snow, the good seasons and the bad – the changeable and

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<sup>xix</sup> 'Urban' appears to be represented by the views of DoC, Forest and Bird, Fish and Game NZ etc.

extreme nature of their environment. They can tell of how they work hard to keep on top of weeds, and put special places aside in QEII reserves. The quote that follows to illustrate this has already been used earlier but is given in full here.

Am I allowed to get political on this? Um, yeah. Uh, probably the biggest feeling, as far as that goes, is a pure frustration, um, of these so-called "greenies," who do sit in the cities, and who do lay claim to your property rights. And, um, and also say that you do not have a right to be there. In this symposium they had, they said the Mackenzie should be cleared out of all humans, basically. And it should be left for the tourists to drive through. And let hieracium and (unclear) take over. Which – it's frustrating, and it's maddening, but they're not going away, and it really does – it just comes down to an education - for us to see their point of view. Because I've seen – I very much see us as conservationists as well. We very much couldn't farm if we weren't, if we didn't look after this environment – I mean, we are responsible for 50,000 acres of the country, and if we didn't look after it, we just wouldn't have a future here. So, um, we're very active in cutting down any tree that would be a seed source for wilding trees. We've just done a huge programme right up the valley, you know, because every one of the musterers' huts was surrounded by trees, and they were spreading like mad. So, it was a sad day, but we had to go up, and we had to cut a whole lot down. That also takes a lot of men hours and expense as well. But all that – you know – any weed, you know – we can say that our leasehold has no gorse or broom on it, either. We're really vigilant as far as that goes. So, I think it does come down to an education. Because even that symposium, there were all these groups – Forest & Bird and Fish & Game ... The return on our investment, if we're lucky, is 1%. And they were gobsmacked about that. Absolutely gobsmacked. And Nick Smith [Member of Parliament] stood up and verified that as well, which was fantastic. And there seems to be this perception of farmers in the high country as just getting fat and rich and happy, and that's not the reality of it at all. I can see their point of view, but I think it does come back to that basic thing that we are conservationists as well. And we're working very closely with David Norton<sup>xx</sup> - you know David - with our sustainability projects and things, and fencing off areas that are susceptible. We've got a QE2 covenant of 1000 hectares which is all the tarns and all of the precious ecosystems around those tarns that we dearly want to protect. (female)

Another couple talked about a family that through tenure review might 'lose' their farm. They emphasised that these are good people, they care for visitors who go onto their land and get into trouble, just as they care for the land itself.<sup>22</sup> The implication is that High Country farmers are 'bad' people. This couple (following quote) want to challenge that perception. They want everyone to know that 'We are good people!' 'We share our land with others.' Also, there is the inference that the people who actually live on the land don't know anything about it – that knowledge is reserved for the experts<sup>23</sup> and people who are from overseas.

Female farmer: It's really sad ... you know the community were blown away when we said that we were selling. Um, and through our tenure review we have given a lot of access here for the community.

Male farmer: I would like to think that we're pretty well thought of, 'cause we - there's a lot of people - there's a lot of guide-y type people in the area, and they love walking in the hills. And they're always asking ... If we say "no," it's for a very good reason. In the winter, we prefer people not to go out there, because it can be dangerous -that sort of thing. I think we're very good. And I'd like to think that people do - I mean, you don't do it because you want them to think highly of you ... Although we went to the Environmental Society meeting one night, and this guy come up and he said, "This is the [name], which you're not allowed to go on." That's what he told them. And we were at this meeting, and everyone there knows that the [name] always never ever say "no." And it was a bit of an uproar, really. People like that are giving us such a bad name with no substance behind it.

Female farmer: .... But Ann Brower has absolutely destroyed the public perception of high country farmers. And you know, when our tenure goes through and our sale, blah, blah, blah, we'll be crucified by the public too - by Ann Brower. ... I mean, it really - it really got our goat to think we – [husband]'s family has worked so hard as high country people, and a woman

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<sup>xx</sup> An ARGOS environmental researcher.

like that can come along and through the media destroy our lives. . Yeah, but average Joe Blog doesn't understand that ... With New Zealand valuing overseas people more than ourselves - that they must be experts, and they're not ... you know, someone from overseas is perceived as if they know so much more than us – wrongly...

For this couple too, there is the problem that when they sell their farm after they have been through tenure review, this too will be misunderstood. They are selling because the tenure review process and the accompanying press coverage has so destroyed their sons inclination to farm the property<sup>24</sup> that has been farmed by many generations of the family. For a start, the thought of selling was unthinkable to them.<sup>25</sup> They are not selling so they can make a lot of money which is the presumption of 'outsiders' (see elsewhere). These people are seeing themselves as victims and – feeling that there was no way of sticking up for themselves, especially through the press.<sup>26</sup> Another farmer feels that because of tenure review the development of an 'us' versus 'them' mentality has destroyed the community occasions high country farmers used to have.<sup>27</sup>

Part of the High Country identity is the traditional autumn muster when the sheep are brought down from the high country – 'tops' to winter over on the lower part of the farm. If this farmer lost his 'tops' in tenure review he would no longer have a wether flock to muster and he sees this as a cultural loss: "Losing the wether flock is more emotional than actual - the loss of an iconic time of the year" (male).

#### ***Improvements on the process***

One farmer felt that the tenure review process would be better if there was an 'in-between' category of land use:

... if there's any failure in the tenure review thing is there was always supposed to be a third category and people advocated for it initially, but there should, there was land that could become farmland and there's land that is, has only got a conservation value, but there's land in between that has both, and to me it should've been still inextricably tied to the farm but with covenants and things, and that would've been the smart way to go about it. And not only that, but you had a partnership because you've got two, you sit around the table... (male)

#### ***Before and after tenure review: one farmer's journey***

As mentioned earlier, an ARGOS researcher was in the privileged position to have interviewed a farmer in 2005 as a practice run for interviewing all the High Country farmers, which never eventuated through a lack of funding. The interview with this farmer again in 2011 provides an interesting and sad commentary on the tenure review process. Whatever can be said about the justice of tenure review, whether high country farmers are 'rapers' of the land or true conservationists, and how their treatment has compared with the treatment of Maori, they had legal rights to this land approved of and maintained by governments over a long period of New Zealand's European history, and the rightful treatment of them as human beings and New Zealand subjects by government could be assumed. In 2005 this farmer was very excited about tenure review and what he was going to do with the cash left over after the agreement was reached. He felt it would make his whole farm operation more sustainable. This cash was going to pay for his irrigation system and other debts and provide an off-farm investment that would enable him to retire and plan for succession. In 2011 after settlement, the female farmer said she had feared for her husband's wellbeing. He had felt totally let down by the process and its outcome. The full quote can be found in Appendix II.<sup>28</sup>

### **3.7 The urban/rural divide**

In 1991, a rising level of environmental awareness (including declining water quality and biodiversity associated with agriculture) was brought into the legislative context and caused a shift of policy mandate from central to local governments through the Resource Management Act (RMA). As part of this there has been a change in attitude to farming which is now seen in a more negative light.

Some farmers explain this by saying that New Zealand is now managed and governed by people who live in cities and these people see the country-side in a different way from previous generations. As is apparent in the earlier section on tenure review many High Country farmers feel that there a negative attitude has developed towards High Country farmers in particular and this has resulted in them feeling that their identity has been challenged. There seems to be a lack of understanding and of knowledge about each other on each side of the debate.<sup>29</sup>

We enjoy - we really enjoy interacting with people that have no experience on this environment and what goes on. I get highly irritated by people that come in here and look at everything and say, "Ah, how marvellous it must be to live here. How marvellous it must be, and how idyllic." And it is on that day, and I wouldn't be here if I didn't enjoy it, but nevertheless, a hell of a lot goes on in farming high country than goes on in the average [farm]. And the effort and commitment - and I think this is the absolute key - I mean I've been here 40-odd years now. The sense of responsibility and commitment to making sure that it doesn't slip, making sure that nothing gets neglected, making sure that from an animal welfare point of view, everything is as well as it possibly can be. Those responsibilities don't wait. (female)

This divide can even occur in families as this quote illustrates:

Yeah ... rural/urban segregation really is there. Because one of my sisters is an urbanite – she lives in Wellington, and has for a long time, and it's quite funny seeing her coming down here. And I really can't see the world through her eyes, and she really can't see the world through my eyes, when we both grew up as country kids. Yeah, I was – I can't see how people exist in cities anymore. Well, I never have, but, yeah. (female)

For some High Country people this is a chance to be pro-active and the main opportunity presented to them is in the area of recreation and so urban people (and tourists) can be seen in terms of a market opportunity, and urban people can be positively recast as people who are curious about the rural way of life and want to learn more about it.<sup>30</sup> A farmer talks about how he enjoys making provision for such activities:

Um, well it's an education process for both sides. But it's exciting. It's just great to be part of putting tracks in, and people saying, "Ah, isn't that great?" And then you go along that track, and there are people from one end to the other, and people are raving about it. You know, it's exciting to be part of something like that. (male)

For some it has always been part of what they do – letting people on to their property for recreation. It is part of their business.<sup>31</sup> But through that they have had some experiences which just confirm their opinion of 'townies' as people who do not understand rural life.

Interviewer: How about the people who come onto your property? Do they treat everything okay, or –

Female farmer: I would probably say 99% do. There's the odd one that doesn't. There's the odd ones that won't ask permission. You just stumble across them, and they say it's their right to be there. They didn't need to ask your permission. You have some funny experiences when we're renting out the shearers quarters ... [Some] can't cope. They simply cannot cope. They're wearing their high heels. One day I had a lady over here in tears, absolutely shaking and bawling her eyes out. And I said, "What on earth is the matter?" And she said, "The children aren't fenced in." I said, "Pardon?" She said, "The children, they can just jump over the fence and run. They can just go!" I said, "Yes, isn't that why you brought them to the farm? Surely?" She was horrified. She thought the building should have a deer fence around it, and that the children weren't – she calls it "coping very well." These children were allowed to run. And of course the children were in heaven. And, you know that was just a real eye-opener for me. I couldn't believe it. She took a bit of pacifying, but other than that – I thought, "She won't be back." I like the laid back attitude of rural people, versus the urban ... Ah, yeah, we've had a few of those issues, too. "I'm sure one [mouse] ran over my bed in the night!" "I'm sure you had a dozen run over your bed in the night." Ah. I've got a good friend, [name], down in the [name], and they do a lot of accommodation. And, um, she said, "You've come to stay in the country. What do you expect?" ... It's amazing how many people come to the door and just want to chat, thinking we've



got nothing more to do. Or they've lost their way. They're on their way to [name], and they've got lost. Constantly. And then you set them on the right path ...

For some these experiences have been even more negative and distressing because people's lack of understanding of how a farm works. There are particular problems at lambing time if people come onto the property without approval:

... we never say no to people unless it's lambing, and now we'd like to close up the block the lambing but no one adheres to it, everyone has the pleasant naivety, 'oh we didn't know', so we, if we lamb up there [places where they do not let outsiders go] we get 50 percent more, or 40 percent more and we've come across cast ewes, which we never used to have, so they've obviously been suddenly disturbed on the track ... so we now don't lamb half our property because of that. And then gates left open, we lost an oat crop one year, the hoggets got into it ... (female)

Last year we lost 120 sheep from a dog ... The dog's still at large. But there seems to be a common [theme]. What we noticed, in the long weekends was when we had most of our sheep worried, so they think it is probably someone coming up to use their holiday house and a city dog and they're just letting it run wild. It's the most powerless feeling to know we're losing these beautiful sheep. We ... had to destroy 30, some were dead already, some had to be destroyed, but our lambing - we not only lost ewes, we lost lambs and then of course their capability to lamb in future generations. (female)

Many visitors are very appreciative:

... you know we want to share that the area with our local [particular group] and they do sort of feel like they own it and feel part of it, and we've always had a great relationship - they phone us, or bring a bottle of wine at Christmas to thank us and they do a lot of their training up there, and if we want to close up the block we just put a notice in the ... update or remind them about lambing, and because they're probably half the number that uses it at the moment, they kind of felt very honour bound to us, they'd always phone us if there was a dead sheep somewhere. That doesn't happen anymore sadly. (female)

You do. I mean, we have trampers and things, but now that land tenure has gone through, they've got free access. And hunting. A lot of hunters still ring up and ask, 'cause it's actually conservation land. They always ask. And they're very appreciative, all of them. I mean, I get lots of venison and pork and what have you that they drop off. And, um, or they swap a fish or something. But, yeah, no, it actually hasn't been a problem. It's just the shooters ... just town people that come out ... and go up and down the road shooting. That's pretty dangerous. (female)

Farmers would like visitors to their properties to follow some basic rules such as, "Leave it as you found it - it's actually not a bad rule." Other rules are:

... when I was growing up, so I had a basic understanding of how to drive into a mob of sheep on the road or understanding about salt licks ... Or just noting that the gate was open when you came through so you should keep that one open but the last one was shut. Yeah, or if it's ajar it means it's not really supposed to be closed and I'll take the benefit of it the doubt and close it. (female)

Some farmers are coming to see that the relationship with the public needs to be two-way. One man was on a cycle track committee, which to him was a way of bridging the divide – a committee that has been brought together to do something unrelated on the surface to the question of identity but through having a mix of people of different backgrounds on it, some crucial and sensitive issues are raised and people learn to listen to each other. However, this also highlights the importance of the attitudes people hold already and how open they are to listen to other people. This man is prepared to do this and be open to other points of view.

We've got to be - us as farmers - have got to be more understanding. Now that I've become a cyclist, I'm much more wary of the other side of it. And I've got involved with the local tracks trust, so I'm very much involved in trying to get people to work together. You know, it's generally my job to go and actually talk to farmers and persuade them that they should have a track going

through their place ... One of the things I've been advocating is, "Well, why don't you just see if - be pro-active and say, 'I know there has to be access, but it doesn't have to be there. Let's try and look for somewhere else.' " It's just - and the mandate is to put tracks where they can. And a lot of people take that to mean they just want to put tracks everywhere. And I'm there saying, "Well, we're not going to put tracks everywhere. We'll put them where it's reasonable." ... I think the farmers are probably coming towards a more understanding part. DoC is more understanding than the public. Public doesn't understand stock. They don't understand the influence of dogs on stock, and it's ... been quite difficult ... I think eventually it'll work out ... it's just so many different types of people on both sides ... I mean the farmers are equally as bad as the townies in their attitudes to what should be happening. And, you know this tracks trust is made up of reasonably sort of, what I'd call "greenie"-type people. And I'm the only one with a farm up there. And they - you know you can see them changing. Starting to understand, now that I'm there and explaining our side of it. They're starting to understand. It's a long, slow process, though. (male)

### 3.8 The future

Farmers had different feelings and plans for the future.<sup>32</sup> One felt that he was "always the optimist" and he hoped that prices for Merino lambs would continue to rise.<sup>33</sup> One was worried about whether future possible leaders would actually continue farming<sup>34</sup>. A third felt that the present government was realising the importance of agriculture to the economy by the amount of money that was being invested in Merino research through the Primary Growth Partnership scheme and how some Ministers were listening to High Country farmers' fears about the rabbit problem.<sup>35</sup>

Once a property is freeholded through tenure review, to develop their properties farmers then confront other regulations such as those set up by local bodies of the RMA, and often they find themselves going through another process just like tenure review. One farming couple talked about how they knew part of their land was to be zoned residential and so when their property became freeholded they would not be able to farm this land and would have to sell it, so they bought other land to make up for it before the tenure review process was complete, and then as outlined earlier, this process became so spun out that they had to pay a mortgage for a longer period than anticipated. For another couple, to try to combat the spread of wilding pines from other people's property they wished to plant trees on a particular area of their land and the process they have gone through to get permission to do this has been so costly they now have no money to plant the trees. Another farmer talked of how there was permission for his property to take a certain amount of water for irrigation and this had not been achieved yet and he had to get a move on installing more central pivot irrigators to use up this water!

This chapter has examined the impact of and responses to government policy and legislation on High Country farmers in the ARGOS programme at various important periods within the memory of these farmers. The next chapter goes on to consider their responses to other ongoing issues not so necessarily associated with a particular period in the history of the High Country.

## Chapter 4 Responses to the uncertainties of the physical environment

Not all farmers made a response to a specific event in the timeline; rather they made general statements about their response to a specific type of driver. This chapter takes into account general opinions, responses and attitudes towards external drivers of change mentioned by the farmers in the interviews. Because governmental drivers have been mentioned in relation to specific periods of time (Chapter 3), they will not be discussed further in this chapter. Remaining drivers to be discussed in this chapter are mainly related to environmental issues that are ongoing.

In this research and in the context of High Country farmers several environmental drivers were identified. Grouped under environmental drivers are climatic conditions (droughts, winds and snow), pest & diseases and soil fertility are listed having been mentioned by farmers, though the latter pales in comparison with the other two and is only referred to in other contexts here.

### 4.1 Attitude and response to climatic conditions

#### 4.1.1 *The climate in general*

And particularly the climate puts a huge pressure on things. Particularly the winter. It's a stressful, long winter. You're worried about feed shortages the whole way through. (female)

Not all farmers considered the climate to have an effect on farming as it was a given condition of farming in their opinion. Climatic conditions in general were seen as part of a yearly cycle and the geographical place of a high country station, rather than seen as particular events. For example, this woman talks of the whole year on her station:

Female Farmer: ... technically it's the highest point between Christchurch and Queenstown ... We've got the home paddocks here, and we've got another set of paddocks further up the valley, which are some of the highest paddocks in the country. So, definitely high country. And our climate and altitude. Everything points toward high country living. Very short summer. Very short growth ... Our spring would be even six weeks behind Omarama. So we are definitely –

Interviewer: And so what sort of ways do you farm to cope with that?

Female farmer: Uh, a huge harvest in the summer. 'Cause it's a short growing season, but still a very explosive growing season. So you still can grow a lot. But the summer is really about harvesting. Because you're looking at feeding your sheep for 120 days plus. And that's everything. You feed everything ... Yeah, we're very much into the harvesting and making hay. And that's how we cope with it the best. Because further down the basin, you know they just winter their stock out in the hills, which is very low cost, but here we can't. So, we're on that tractor every morning, to survive. 'Cause last – just an example – 'cause last winter we only had two weeks from May through to August without snow on the lawn. So, yeah. But that's the nature of the beast, and the animals aren't getting any other feed. That would be the biggest difference, our high cost winter, and the absolute necessity of harvesting in the summer. Yeah.

The winter weather in particular affects the wool production. One of the farming couples interviewed talked about their fine wool operation where they had kept a flock of Merinos in a shed letting them outside but keeping them uniformly fed and dry, so there would be no breaks in their wool and it would be very fine. One farmer talked about missing out on the premium 'because the wool starts falling off in October' – so he is saying that a farmer has to be careful over the winter to make sure there is not a break in the wool because the sheep have been hungry, and maintaining their feed improves the lambing as well. In other words the breaks in the wool are to do with nutrition and therefore can be weather related.

Farming life can be very complex. One of the farmers made it quite clear that it is not just a drought for example, that causes an issue, but that the drought might be compounded with other things in

the lives of High Country farming families – such as tenure review, low prices etc. and in the background all the time there was the education of their children. When these come together they can create a kind of resonance effect. This farmer often used the expression, “it was a perfect storm”, when two or more things came together to make it even worse.

Many mentioned that they thought that weather patterns had changed in their part of the High Country. For one couple the change has been to more southerlies and not as many nor-westers but they wondered if this was part of a 12 yearly pattern. They also wondered if their grandparents knew about it because of where the shelter belt was positioned to protect the house.

#### **4.1.2 Droughts**

The occurrence and impact of droughts varied.<sup>36</sup> The farmers’ recall of drought events confirms the need to account for the spatial clustering of farms when observing environmental factors. One farmer saw it like this:

... drought has more of an impact on how we run than anything else. And our stock numbers go up and down. For 2011, we'll be back to about 20,500. And at the moment, we're at about 18,500, and we're still recovering from three years ago. And so you farm according to your seasons. Under normal, whatever normal is, because seasons become quite volatile, um, whatever is now the norm, we should be able to get back to that ... I have a reasonably high percentage of trading stock - we've also got a finishing unit down country that gives us some flexibility, although it's not irrigated, so they can have droughts as well. But by having a high percentage of trading stock, it means that you can sell ... Of the 1,800 cattle we've got, 700 are breeding cows, and the rest are for intensive farming. We've got rotation here, so at the end of the day ... they're trading stock as well. Um, but our cows got back to 500 three years ago, and that was because of drought ... Droughts come and go. Snows come and go. I've got no - I suppose it comes back to what I said before. There's no doubt that we farm conservatively. We think we push the envelope on productivity per animal, and probably because of that we always have a safety valve as far as herd reserves or lateral thinking in droughts. Areas that that we graze that we don't normally graze, and that sort of thing. So, the trading stock aspects of it are there to pretty much utilize straight away ... The drought three years ago, and when I say "the drought," it was ... the other side of the saddle didn't get affected at all. In fact, even last summer, we had a drought from here to [name of neighbouring station] in summer country, then from here to middle-[name]. There they get twice as much rain. Every time it rains there, you get twice as much rain. And we've sort of had a few years of that. And it got to about 500 [cows] around three or four years ago. We were probably down to the lowest stock units on an annual basis we'd had since the '90's, I think. But, we don't sit there dwelling on what's happened. (male)

In his response to drought, this farmer pushes the productivity per animal – not the numbers of stock he runs, and so in a drought this gives him some backup. He also does not normally graze all the land and this gives him some reserves in times of drought and his property is mixed in terms of rainfall areas, so this also gives him flexibility. If there is drought in one place another area will be alright. This is about ‘knowing’ his land. He also has a high percentage of trading stock and a run-off block which means he can transfer stock to that or reduce the stock numbers immediately whenever the land is stressed by drought. For another farm the response is to grow lucerne and plan for more irrigation, while for others it is about using the ‘summer’ country – the high country – for grazing:

Female farmer: ... Um, ‘cause at the moment, as I said before, the seasons have been becoming drier and drier and drier. Um, we often find ourselves working in a drought strategy. And we’re looking at doing quite a big, dry land lucerne development because the lucerne guarantees that something will grow, even when it’s dry, ‘cause it’s so deep-rooted. We’re also involved in this [name] irrigation hearing that’s just finished this year, and waiting to hear back. [We’re] looking to put in two quite sizable pivots in the coming twelve months. Again, just to be that buffer against the seasons, and to guarantee we can grow feed.

Interviewer: And will they be on the paddocks around here?

Female farmer: I don't know if you saw when you came up, but we've currently got border-dyke irrigation, but it is 35 years-old, and it is past its best before date, um, and rather than go and renew those that aren't known to be incredibly efficient, we'll go with the pivots. So that's all in the – you know it's easy to rattle off a lot of what you're doing as far as drought-proofing your property, but, um, the money that goes with it, and the stress and the strain as well ...

Interviewer: So you how do you manage for drought?

Male farmer: Um, I think that's where the traditional comes up again I guess, but when I say traditional I mean we're extensive and we utilise a system... the property itself runs from 1000 odd feet above sea level to 6000 feet and it's all graze-able, certainly the stock cover it all, and droughts obviously occur in the summer-times or whatever ... and in that summer period the traditional method is to use that high country for summer grazing and there is large amounts of it. I spoke before about some of the country was subdivided off the property and it would be winter country. In some ways our property's really a bit lopsided in that there's a lot of summer country compared to winter country now so you've got a lot of expanse or range or whatever. The only thing that really suffers with us in a drought is the lower land. That's where you lose the property further down the valley to drought- push against that. Traditionally those are the droughts ... whether it's a result of climate change or whatever, the droughts tend to be a bit more extensive, be total east coast as opposed to before where if it was dry at [place name] then further down the valley would be okay.

... in the case of supplementary feed make it for a rainy day, or in the case of the hill country blocks or whatever they've been able to graze them in such a way as to help seed settle ... (male)

#### **4.1.3 Remembering 'big snows' and managing snow**

The 'big snows' were events that were remembered and talked about.<sup>37</sup>

I can point to '02 and '06 and say, "We had big snows" and things like that, but there's a lot of that timeline that I can't shed any light on. And he [father-in-law] had snows where he lost all his ewes. You know, huge. And that was in November. Foot after foot after foot of it, and there wasn't an animal left standing ... If you're having a grumble about how tough things are, these stories come out. "You young ones have nothing compared to – ". You know, we do, we sit around, and he tells stories of times gone by, and also from old neighbours too. Family friends. And, yeah, we still get stories from them. Just, you know, of the hardship experienced. (female)

This woman remembers her first 'big snow':

Female farmer: ... the major snow in '02, um, that was my first experience. And the whole community shut – everything was shut. We had local pilots out snow raking. Anyone in town. A few climbing guides and things. They all turned up. And we just had to – get those sheep down as quick as you can. And, a huge day – I remember ringing my sister, who was working for [name] at the time, and she dropped tools and got up here. We got up on tractors to pick up these people to come and help us, 'cause the road was impassable to vehicles. Huge pressure to get the job done, but such a sense of achievement – to get those stock down to the flat. At the end of the day, you know you've done – it's just very honest work, snow raking. But, yeah, that was probably – yeah, that was the biggest experience. And that snow stayed all winter, so – it froze solid. It was a June snow as well. Sixth of June, I think it was.

Interviewer: So, what do you do as a result of those things? How do you change your practices to accommodate those possibilities?

Female farmer: ... because it's always been a threat, I don't think it's changed, as such. I just think that's always been a way of life. I think living here, you just have that acceptance that things will be white all winter. Um, there's the odd winter that it's not, but that's just a bonus. That's not the normal. The norm is that it's white, so the snowplough is a piece of equipment that a lot of properties would own. Um, and it probably just goes back to that same thing – harvesting – as much as you can in the summer. As much hay and silage in the barns.

Interviewer: ... Weather forecasting has changed, too. Is that helpful to you , or –

Female farmer: Hugely, yeah. Not so much the television, as you well know. Very much, net view – probably not a day will go by that [husband]’s not on the computer looking at the 14-day forecast, and using that as his primary planning tool. As you know, farming, you’re completely dictated to by the weather. And the old days didn’t have any of that sort of [backup] – it’s not always 100%, but we’ve just found that [useful for] planning – He was baling hay until 11:00pm last night, because he knew it was going to rain today. In the old days, we would have just had wet hay. That’s what would have happened. Yeah ... that’s a huge change. That’s probably quite a major change, the weather forecasting. Certainly. Yeah. But – I think snow, living more in snow. Yeah. ‘Cause we’ve probably experienced nothing compared to what they had in the past, as far as snow goes. As I mentioned before, that snow that [parents-in-law] had. And for us these days to even comprehend losing all our stock ... You know, not to say in those days if he did have the snowplough, and he did have the tractors, and he did have the feed that maybe ... there would have been a better survival rate. That’s the modern times, isn’t it? But I wouldn’t know where to start, especially when you’ve had a stud for 35 years - all those bloodlines gone.

Harsh weather conditions impact severely on stock as these farmers related:

Interviewer: ...[female farmer] was talking about the snow and ... [crosstalk]

Male farmer: Having too many old older ewes, um, you know, um um the age groups within our flock were too weighted towards the older ewes, we needed to get more young stock around us.

Interviewer: Do the older ewes not lamb as well or?

Male farmer: Just too many deaths, too many deaths...

Snow can be [an unexpected event]. Nowadays with mechanization and helicopters and good, healthy, robust sheep - we lost 100 wethers in avalanches three winters ago. That was the only time in my career here that I've ever seen avalanches clean sheep up like that. It was a unique snow. It was a unique snow on top of one that was already there. We didn't lose any through being stuck or starving. And that comes back to these [named] sheep being relatively robust and quite big-framed. Major snow events that we've had over the years that I've been here, invariably we've gone around to help other people. In fact the most particular major snow we had was about 19 days from fall to when we first got the last of it. But we were totally snowed in, and the idea is that we had areas above 5,000 feet where there'd be a little wind blowing the ridge tops clear, and the snow was raked onto these ridges. And we fed out a little bit of hay with the helicopter. And that's all we could do for them. I think it was 19 days before we had enough thaw to get them down, and - I think we might have lost a handful of them, but - I mean, they were lighter, but there was no wool break - not a major thing. (male)

**Table 4.1: Responses to weather extremes**

Driver	Uncertainty	Response of farmer	Number
Environmental	Drought and snow	Produce and store plenty of feed	8
		Irrigation	5
		Sheep – breeding, age of flock	8
		Make sure have right machinery (e.g., snow plough)	1

#### 4.2 The problems of pests: Rabbits

Rabbits were introduced into New Zealand in the 1830s and quickly became a problem affecting both agricultural production and natural ecosystems (Lough, 2009). Mustelids (such as ferrets and weasels) and cats were brought in as form of control but did not make much difference. By 1867 the first Rabbit Nuisance Act was passed. The 1881 Act established a system of rabbit inspectors (Te Ara Encyclopedia of New Zealand). Rabbit control was one of the major functions of the Department of Agriculture from when it was set up in 1892, taking up a quarter of its budget in 1895. Trapping, poisoning and shooting were tried but effective control was not achieved until all the 100 rabbit boards were required to adopt a ‘killer’ policy in 1947, “almost regardless of cost” (Lough, 2009;

Peden, 2009). Rabbits numbers were further reduced rapidly with the use of monofluoroacetate (1080) in aerial applications from 1953, alongside extensive land development. This encouraged the belief that rabbit eradication “was possible” (Lough, 2009: 1). Night shooting was used for a period aiming towards this goal.

#### **4.2.1 Rabbits on South Island sheep stations: The Rabbit Land Management Programme**

From an early time in New Zealand’s European farming history, rabbits have caused a major impact on the productivity of sheep stations by eating the available feed, leaving little for the sheep. For example, in 1884 rabbiters at Kawarau Station in Otago, produced 244,000 rabbit skins, and 283,000 in 1885. The lambing percentage fell from 70% before the plague to 45% in 1885; the death rate rose from 3.5% to 10.5% and the wool cut dropped by 0.56 kilos per sheep. Between 1877 and 1884, 75 runs in Otago were abandoned because of rabbits (Peden, 2009). After the First World War similar things happened in Canterbury.

By the 1960s the practicability of eradication was being challenged, especially over the whole of New Zealand. In the semi-arid areas in the South Island, even with the government financial assistance of up to 80 per cent of the costs, it was a heavy financial burden for landowners and in 1981 the dollar-for-dollar subsidy was replaced with a block grant and from 1984 the Labour government favoured a user-pays policy, to be phased in over a ten year period. In the meantime the regular use of 1080 poison meant that rabbits were developing bait avoidance. When farmers lost their case to use myxomatosis<sup>xxi</sup> again in 1985, the government acknowledged that rabbits were still a serious problem in some drought prone areas so a Rabbit and Land Management Taskforce was formed in 1988 to develop an integrated land management strategy. It came up with the Rabbit and Land Management Programme (RLMP) with the overall aim of improving the long-term sustainability of land resources and rural communities in rabbit prone areas in the dry tussock grasslands. It was hoped that rabbit numbers would be reduced sufficiently for properties to have the financial resources to continue the control work at the end of the programme. The funding programme was to be started in 1989 through the newly formed regional councils (Lough, 2009: 2-3). It was to consist of:

- “a grant (for rabbit control, fencing and habitat modification);
- a property planning programme, managed by regional councils; and
- a research, monitoring and facilitation/information exchange programme, managed by MAF” (Lough, 2009: 2).

Funding came from central government, local authorities and participating landholders. Overall it was worth \$28m and ran from 1989 to 1995.

The participating landholders came from 115 properties: 53 from Otago, 37 from Canterbury and the remainder from Marlborough. The programme covered 275, 000 ha (Lough 2009: 3). However, at the end of it some properties still had high numbers of rabbits and the rabbit numbers continued to increase with landowners carrying on poisoning as much as they could afford (Peden, 2009; Lough, 2009). Rabbit proof fences were a substantial help (Lough, 2009).

According to Morgan Williams, the RLMP director, the farms involved in the programme now had rabbit control and land management plans and were monitoring rabbit numbers, climate, vegetation cover and soil health. Thirty seven land care groups had been established and there was enthusiasm for computer-based decision support systems (RSNZ, 1995).

However, by even 1991, the Parliamentary Commissioner for the Environment (PCE) stated that “the Rabbit and Land Management Programme has highlighted the long-term unaffordability of

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<sup>xxi</sup> Myxomatosis is a virus that kills rabbits. It was used widely in Australia but on its one trial in New Zealand it was not successful. Farmers pushed for it to be introduced again.

conventional control ... and has more fully documented the extent of the problems of bait and poison shy rabbits” (PCE, 1991: 14). In the first year of the programme there was not sufficient time to draw up property management plans and money was spent killing rabbits without plans being completed. The PCE stated the importance in her eyes that the property management plans must be completed and signed (as an agreement between a landowner and the regional council) before any public money was spent, because it was only with such plans that it would be possible “to determine whether sustainable management plans have been achieved or public money effectively spent” (PCE, 1991: 24). The PCE also comments that the community and landholders do not seem to agree about the need for land management change and instead seem to want effective rabbit control so that they can continue farming as usual. She points out that even if myxomatosis was used there would be a continuing need for rabbit control and some properties may need to be restructured along their boundaries to allow for a better balance between ‘summer’ and ‘winter’ country. She further suggests that there will need to be some collaboration between neighbours as at present there is an individual landholder focus, when managing rabbits actually crosses property boundaries (PCE, 1991: 25).

The PCE also pointed out how much this pest control had cost the new regional councils. For example, Canterbury had required five aeroplanes, a helicopter, 250 truck and trailer loads of carrots and 494 tonnes of oats to poison 133,566 ha (PCE, 1991: 26). The regional councils also developed more equitable classification systems for rating properties according to how prone they were to pests, using information on vegetation cover, proximity to rivers and the history of rabbit control over the past 6 to 8 years (PCE, 1991: 26). The PCE points out that this could not have been done nationally as it required local knowledge and expertise (PCE, 1991: 27).

The Rabbit and Land Management Programme was also able to provide data on just how much rabbit control cost and the implications for land holders and regional councils. Detailed analysis of the financial situation of farmers in the Mackenzie basin showed that about 65 per cent would not be able to afford the total cost of their individual RLMP over the five years (PCE, 1991: 27). One third of Otago’s regional council budget was for agricultural pest management. Taken together, the implication was that without government support and a reduction in pest control costs, the programme would not be affordable by local government or landholders (PCE, 1991: 28).

#### **4.2.2 The introduction of RHD/RCD/RHD**

Australia and New Zealand had a joint research programme considering the use of rabbit calicivirus disease (RCD/RCV) as a biocontrol of rabbits. (Later this name was changed to the internationally recognised one of rabbit haemorrhagic disease (RHD).) A group formed from some regional council representatives, the Commissioner of Crown Land and Federated Farmers applied to the Director General of Agriculture to import this virus but the application was rejected. There was a major outcry against this decision with even the Prime minister calling it into question, and it was “probably an inevitable consequence” (Ohara, 2006, cited in Lough, 2009: 5) that it was introduced illegally into New Zealand in 1997.

It is now a famous part of High Country lore how in spite of the warning of harsh penalties for anyone in possession of the virus, farmers shared the virus by collecting dead rabbits and pureeing their lungs, livers and hearts and spraying it onto bait and spreading it onto their properties. They ran the risk of inoculating the rabbits rather than killing them. There was a huge decrease in rabbit numbers. However, since the mid 2000s there is evidence that some rabbits exposed to the virus survived and some rabbits are now resistant to RHD (Lough, 2009: 5).

#### **4.2.3 Farmers’ memories of issues with rabbits**

The issue in this section is rabbits – the threat they are to production in the High Country. Rather than being a shock, they are an ongoing problem and have always been so since the beginning of farming in this region. Most farmers remember stories about rabbits and some would say they are



the most important problem the High Country faces – both economically because of the limit they place on production – and environmentally because of the damage they do through stripping the environment of vegetation and therefore making it prone to erosion. There have been various responses from government over this period, as outlined above, and some ARGOS farmers remember and/or participated in the RLMP. Farmers' tales about rabbits also include the arrival of RCD and their involvement in spreading it through their property or passing it on to neighbours. This action was a response both to the increasing and unsustainable cost of rabbit control, and to the Government's refusal to import it, so in a sense it was an act of resistance against government.

As a result of the interaction with the issue of rabbits over their life experience, many of the farmers interviewed have come to have an extensive knowledge of the life cycle of rabbits and have learned how to live with them by controlling them in manageable numbers, such that the risk of a major outbreak is limited. There is extensive information on such rabbit management in the quotes that follow. One farmer's worry is that this knowledge is not common among the next generation of farmers and he has taken up this concern in political action to make sure the problem is known about in the halls of power. He feels the threat of rabbits to the high country environment as a whole should not be borne by farmers alone.

The problem of rabbits is a complex one, not just to do with rabbits alone, because rabbits are part of a web of interactions with other pests and environmental factors, as one farmer points out. Above we have mentioned their impact not only on farm production, but also on the environment. Also, high country farmers usually farm beef cattle and some farm deer as well as sheep, and these animals are threatened by bovine TB. Some of the vectors of TB such as ferrets, weasels and stoats are predators of rabbits, so when the Animal Health Board virtually eliminated these mustelids, rabbits were able to return in even greater numbers.

#### **4.2.4 Importance and size of the rabbit problem to farmers**

One farmer learnt from the days of the rabbit boards and now successfully manages the rabbit problem. His property was divided between two rabbit boards and while one was successful at controlling rabbits the other was not. Since then he has until recently employed a full time person to kill rabbits. He thinks that the larger your property the easier it is to manage the rabbits because there are fewer problems at boundaries.<sup>38</sup> Another couple remember a station they knew of which employed 16 rabbiters at one time. For them the debt incurred through participating in the RLMP and earlier is a problem for them to this day:

Female farmer: In [father-in-law's] era ... a lot of their farming was rabbit control of course ... Well [station name] used to employ 16 rabbiters ... When that land rabbit, land management, rabbit land management scheme came in, that was at that time when we did those big poisons that created some debt ... Under the rabbit land management programme we were paying about 80 to 90 thousand dollars a year in pest destruction, but we also got benefits out of it, we got fencing and, what else...

Farmer: But it was actually a poison just prior to that, that actually knocked us, that really got the debt into a high level.

Female farmer: Sent us into debt really.

Farmer: And that was I think that was pretty general for a lot of people really.

Interviewer: What was that, what happened then?

Farmer: The big poisoning, the cost, it was just the cost of it.

Female farmer: They were forced on us, and under the Rabbit Land Management Programme we paid for half our fencing as well which was beneficial for our big blocks over the other side but it really wasn't a cost that we could really carry.

Farmer: At that time we had to spend, in order to do that, even though at the time we didn't have the cashflow, so that was -

Female farmer: And some of our neighbours actually went off the land during that time, at [station name], they walked and, so really that's where we started to accumulate that debt that, and then of course all those not good years.

Another farmer remembered how his father had been so successful at controlling rabbits that as a child he had not been able to tell the difference between a rabbit and a hare!<sup>39</sup>

After the Rabbit Boards were disbanded and the regional councils took over the control of rabbits, farmers were charged for it - \$12,000 to \$30,000 every few years according to one farmer, who tells of how the farmers in his area put their money together annually and controlled the rabbits as part of a Landcare Group.<sup>40</sup> Another remembers that it was costing \$100,000 annually on his property until the arrival of RCD.<sup>41</sup>

#### **4.2.5 RCD/RCV/RHD: farmers' perspective and knowledge of rabbit management**

It is notable that in their conversation farmers marked time as either before or after the arrival of RCD. A farmer remembers that time:

It was quite an exciting time in some ways, because there was a network. A very hush, hush network of people involved regionally to [spread RCV] - with no knowledge whatsoever as to how to do it. And we couldn't talk to them on the phone about it. Anyway, so it was that RCV was released and it absolutely wiped the population. As I said, we'd spent \$100,000 already that winter. It was released in August into the areas where the rabbits were that bad - it looked like the Mackenzie Basin prior to it being released there. And to go back there and see the rabbits - it was like the First World War in some ways. The trenches were retreating up the gullies by 200-300 meters a week. And there were just dead rabbits, then you'd come to the wall of live rabbits where the grass had got to. It was almost that graphic. And the stench of all these dead rabbits and to see a totally unaffordable problem disappearing in front of your eyes like that was - it was exciting. (male)

One couple talked of that time and how they participated in the spread of RCD. They also tell of how they have learnt to manage its continuing presence to maximise its impact:

Female farmer: We used the Anatoth container ... I remember it looked like raspberry jam, like their jam product - the infamous kitchen whizzes that we all had to give up. I did get a much smarter one I have to say ... We were poisoning [at the time], so we'd already flown out our first bait, non-poison bait, so they have two non-toxic baits and then the 1080 goes out.

Male farmer: No, the first bait had gone out and there as 36 tonnes ready to go out for the second bait and it was about two days, the same day the decision came out where they said well they can't do anything legally about it, so we thought, 'this is ridiculous.' ...

Female farmer: We have no idea who introduced it into the country but we should probably have a monument somewhere - probably have it at dog kennel corner...

Male farmer: They were dying all around [crosstalk] and it was just so instant ... we actually flew GPS every kilometre with the aircraft. We got all of the [locals], there was only one family that didn't turn up and we all sat there and put it all out, and um...

Female farmer: And anyone who did that, who had a blanket top dressed spread of the RCD ... we don't have those hot spots that they're getting in Central Otago. We still have, even our real hot spots where they start to build in the spring, you'll go back a month later and as soon as they're built up and populated the burrows ... they will just infect each other.

Male farmer: I remember talking about it and there was that scientist from Australia, and he said if you have any biological control you've got to build up the numbers of animals before it kicks in.

Female farmer: That's when they socialise with each other and...

Male farmer: ... he maintained that to string it out you need build up [numbers] and if you go and shoot you should only shoot after RCD's been through because those are the real crucial ones, the ones that actually are resistant. So we've maintained that right through the whole thing, vigilantly. In fact I don't like shooting ... When you actually shoot in the area you always, most of the time, you're taking most of the males out, and as soon as you shoot the males off you actually create a whole new breeding season because they jostle for supremacy again and away it goes. So I've been pretty anti-shooting except after the RCDs been through. It always goes through in the spring ... and you can see it, it's a visual, and that's what we've done. Now the interesting thing is that we, in the whole area here, haven't really got the kind of problems they have in the rest of the block. The rest of the properties

are shooting, shooting, shooting and shooting and I think they've got it wrong because they haven't let, you must let that actual breeding get to the stage where they are breeding again – getting the population large enough to carry it again ... they just hate rabbits so they have a crack. I think ... you've got to manage what we've got there because it's -

Female farmer: But that was our breathing space. RCD just gave us a huge - gave us a few good years, but unfortunately, well not good years but years we weren't having to supplement pest destruction on top of everything else ...

Another farmer said, even though they were managing their rabbit problem well the arrival of RCD has still been good for them:

... we were certainly happy to see it [RCD] come, but in actual fact we were on top of things anyway. And it certainly helped, I wouldn't doubt that at all and we expect less problems with rabbits because of it being there but it's been a whole lot more effective. The numbers may well have been lower but also because we're doing that secondary work keeping the immunity levels down as well, so working in tandem I think those two elements of the strategy work very well. I guess the hard thing is being able to find people with the skills or whatever to go up and do the secondary work. I'm very fortunate that I've had a guy who started off as a young bloke for twenty years and he's still doing the loop on the property but instead of doing it full time now he does it on contract. I think that's, as I said before, probably the most important thing we do. (male)

However, for some the rabbits have returned:

And we had a wonderful hiatus of 11 years of control, and with that came naiveté, and being blasé, et cetera. We didn't completely take it for granted that ... it was going to be like this forever, because between us and [neighbour], we decided to employ our own Rabbiter and to some work to minimize the risk of re-explosion, if you like. Never-the-less they did. They re-exploded in the area of most historic progress on this property to the extent that it took us \$400,000 of our own money to bring them back under control. And that pales into insignificance as to what was being spent prior, except that \$400,000 now, and it wasn't all in one year, but \$400,000 is not the equivalent to \$100,000 in years prior. But it did happen at a time when wasn't very affordable. And if ... we didn't have a reasonable commercial model, I suppose, we wouldn't have got out of it. Full stop. (male)

One farmer (male) felt that the government should have helped with the spread of RCD and should continue to do so: "I think the government should have gone in there and helped [with RCD]. I mean it's here, so let's make the most of it. It's a cheap way of getting rid of it - cheaper than poisoning. We'll never get rid of it, but ... "

#### **4.2.6 *Inter-relationship between rabbits and other issues***

Rabbits are part of an area's ecology and the management of them can lead to something else in the environment changing. For example, the predators of rabbits then have nothing to feed on and can turn their attention to native animals. Possums and ferrets can be carriers of TB and when they are targeted by the Animal Health Board or are killed as a by-product of the poison drops used to kill rabbits they disappear meaning that when the rabbits return they have no predators and their populations can explode very quickly.<sup>42</sup> By eating so much of the plant cover rabbits have severely affected the physical environment causing a lot of erosion and this in turn can affect the waterways. As one farmer said, "... but it is definitely a soil and water problem" (male).

#### **4.2.7 *Rabbits in the present time***

Some of the quotes above mentioned how rabbits are a continuing problem and how farmers manage them today. Talk is now about controlling rabbits or managing them, but never eradication. For some the RCD is still working<sup>43</sup> and others have learnt to control their 'hot spots' – the areas where the rabbit population explodes at certain times of the year. Some farmers are part of a group that pays a company to control the rabbits on all their properties and others manage it by themselves.<sup>44</sup> This can be done by shooting or by using 1080 poison.

#### 4.2.8 *Managing rabbits in the future*

One farmer was particularly concerned about the future because he felt the institutional knowledge about how to manage rabbits has been lost with the passing of the last generation and in the introduction of RCD which is now becoming ineffective in some areas.<sup>45</sup> He has got together a group of farmers and made representations to members of parliament about his concerns.<sup>46</sup>

It's still knocking around. So I see that as a very real threat to the future. We've been to Wellington and talked to ministers. With this government, we've got a receptive ear, but we certainly didn't with the previous one. And it just depends on what the political flavour of the time is ... And we need to keep hammering away for people to realize that it is an integral problem that actually - whether it's a South Island problem, or a national problem, or whatever, but it is definitely a soil and water problem. And it that has to be recognized, rather than grumpy old cockies saying, "I can't afford to kill my rabbits, please help." (male)

**Table 4.2: Impact and responses to the problem of rabbits**

Driver	Response of farmer	No.
Economic	Part of RLMP	2
Economic	Spreading RCD	3
Economic	Putting learning about rabbits into action as rabbit management	6
Economic	Employ rabbiters	1
Economic	Have rabbit fences	2
Social and economic	Political action	1
Environmental and economic	Manage problem so well rabbits no longer have big impact	6

#### 4.3 **The problem of pests: Invasion of plant pest Hieracium/hawkweed**

Rabbits have had a very negative impact on the high country environment by reducing the vegetation cover allowing increased erosion and a greater influx of other forms of vegetation apart from the tussock grasses. (There is debate about how much of this was caused by rabbits and/or by over grazing.) The main issue, apart from rabbits, was the encroachment of hawkweed (PCE, 1991: 28). In 1990 the Minister for the Environment asked the New Zealand Mountain Lands Institute to assess the extent of this problem on tussock grasslands and to develop a management strategy. Thus, the broad issue of sustainable land management in the dry tussock grasslands became well established on the research and government agenda and is still present to this day. The concern now is about the impact of tenure review on the high country environment – particularly the ‘tops’ – the high altitude country being removed from pastoral leases by the government and being placed in the conservation estate in exchange for freeholding the lower altitude country (see later). Recent work (Day and Buckley, 2009) demonstrated that three species of hieracium are most dominant in the High Country. Day and Buckley (2009: 3) found that all species had “expanded their range and increased locally in the eastern South Island since the 1980s” particularly where short-tussock was more abundant, while two were also more likely to colonise tall-tussock areas. One species, *H. pilosella*, increased in abundance and percent cover at a greater rate in conservation tenure compared to pastoral tenure (Day and Buckley, 2009: 15).

One of the farmers, who did not know of the research above, thinks that the intensification of his property since tenure review has reduced the hieracium problem, while increasing it in the land now managed by the Department of Conservation (DoC).

It's [hieracium] – in a lot of the country that we've surrendered [to DoC through tenure review], it's becoming pretty prevalent. So, yeah, we really don't have fertilizer, so, it's an issue. I suppose in a way, this farm's become a bit more of a big hill country farm in the high country, rather than an extensive high country run. So, I suppose we're a bit more intensive, and the hieracium probably gets dealt to a wee bit. (male)

Similarly, another farmer feels that hieracium would be a far bigger problem for him now if he had not developed his land, but he wishes he had done his development in a different way by harnessing hieracium for use as a seed bed.<sup>47</sup>

I don't think there's any doubt that without development - if we hadn't enacted a development programme, we would be subsistence farming now. Between the aggression of hieracium - we've got a small block between here and middle-Haast that we left that hasn't been developed. If that was where we would be now, without development, we would be struggling. We would be subsistence farming. That's not an exaggeration. (male).

#### **4.4 A pest from the 1980s to the present: wilding conifers**

Woody species have always done very well in New Zealand's environment. With the loss of most of the forest cover through the development of pastoral farming, frequent fires and grazing animals have kept woody vegetation in check. However, because the use of burning as a management tool has been reduced through the intervention of local authorities, pastoral stock numbers have declined and there is better control of animal pests (such as rabbits), a regeneration of woody species, often known as 'wildings', has occurred. Wildings are introduced trees, usually conifers, grown from seed blown by wind, and they are usually scattered across the landscape (Ledgard, 2004: 1).

In the High Country in particular, the interaction of different farmer and government inspired strategies on the environment is very apparent. As the number of rabbits has decreased the seedlings of weed trees have not been grazed as intensively as in previous eras, hence pest weeds like wilding pines (particularly the contorta species) have had a dramatic impact on the landscape (PCE, 2009). Wilding pines threaten landscape values, conservation values, existing pastoral uses, future land use options and existing hydrology. They are seen as changing a landscape formerly devoid of trees; changing the patterns of indigenous flora and fauna; shading out pasture; making the conversion of land covered in wildings to other uses expensive; and reducing water availability (Ledgard, 2004). This problem has only been recognised in quite recent times, coming to the attention of the public first in the 1960s in the Central Plateau of the North Island where contorta pines were declared a noxious weed in 1983. In the 1990s the Canterbury Regional Council tried to get a fix on how much land was affected by wildings and of what species, and develop strategies for their control and management, and most regional and district plans now mention this problem (Ledgard, 2004: 2).

Cutting them down is a very costly, labour intensive exercise and four farmers interviewed described how they managed this problem.<sup>48</sup> One is reported below:

So, um, we're very active in cutting down any tree that would be a seed source for wilding trees. We've just done a huge programme right up the valley, you know, because every one of the musterer's huts was surrounded by trees, and they were spreading like mad. So, it was a sad day, but we had to go up, and we had to cut a whole lot down. That also takes a lot of men hours and expense as well. But all that - you know - any weed, you know - we can say that our leasehold has no gorse or broom on it, either. We're really vigilant as far as that goes. (female)

Another couple wanted to deal creatively with this problem on a block of their land and described the costly process they had to go through because they had to present their plan to plant a plantation at an Environment Canterbury (ECAN) hearing. They wanted to stop the spread of wilding pines by planting a different non-seeding species at a place on their property which was bordering on a lake and a main road and therefore regarded as scenic. They felt that their plan would be doing something about the wilding pines in a constructive way that would provide them and the environment with a win-win situation. It proved difficult because of the way the local bodies have to run the district plan process. The hearing cost so much money that it has prevented them from going ahead with their plan even though they now have permission to do it. Those who were

against the plan changed their minds about it and felt embarrassed when farming couple took them to the site and the objectors saw the problem for themselves. The story of their experiences is told in the endnotes to this report.<sup>49</sup>

#### 4.5 The problem of TB: possums and stoats, weasels, ferrets and cats

Bovine tuberculosis (TB) is a contagious disease that is a serious threat to the cattle and deer farming industries. The first cattle to arrive in New Zealand carried TB. It was only in the 1960s that it was realised that possums carried TB and that cattle which came into contact with dead possums that had come out into the open when they were unwell, had become infected themselves. The Animal Health Board (AHB) is responsible for trying to control TB, mostly by poisoning possums and then by trapping, and the control of possums is shared between AHB, DoC, regional councils and private individuals. The cost to the economy is considerable – in 2006 government agencies spent \$111m on possum control, \$60m of that was on controlling TB and \$27m was spent on research, herd testing and compensation. Possums also eat pasture and therefore cause a fall in farm production (Hutching, 2009a, 2009b).

As rabbits became an increasing problem in the mid to later 1800s, there was talk of controlling them by introducing predators such as ferrets, weasels and stoats. The only natural predators were the hawk and the weka. Large numbers of these animals were imported in the 1880s but this proved difficult and so the government and private individuals set up breeding stations and released stoats, weasels and cats but by the early 1900s it was realised that these animals were not very successful as rabbit predators but were causing great damage to native animals. However, by then they had spread throughout the South Island (Peden, 2009).

Ferrets have since become part of another problem affecting High Country farmers. They have recently been shown to be carriers of TB and transmit it to cattle. However, they are 'spillover' hosts in that they only carry the disease when there are other hosts such as possums in the same area.<sup>xxii</sup>

TB control is based on three key actions:

- testing cattle and deer for TB
- classifying the status of herds
- controlling the movement of herds<sup>xxiii</sup>.

Most cattle and deer herds are tested for TB or it will be picked up when the animals are slaughtered. Certain areas are deemed to have a higher risk of TB than others and when cattle are moved from these areas they are expected to be tested for TB before being moved. When an animal is identified with TB it is sent to be slaughtered. If the animal is a cattle beast then the AHB arranges for transport and slaughter and pays a compensation of 65% of the market value. If the animal is a deer, then the farmer must make their own arrangements for transport and slaughter and will not be compensated.<sup>xxiv</sup> These farmers talked of their experiences with TB and possums<sup>50</sup>:

Ah, we've made a few [mistakes] - we went into deer farming in the early '80's, early- to mid-80's. And that, in retrospect, is something I wish I'd never done. But the impediment to that was TB. And we developed the deer farm as a hind breeding unit for surplus female sales. And as soon as we got TB, we couldn't sell to any of the works. (male)

Male farmer: We've just got TB after 10 years. We had it, and we'd been clear for almost 12 years. And a lamb in the middle of the winter came back positive. And we had our first test the other day and there was a calf positive as well.

Female farmer: Were they home-bred? The two stock that -

Male farmer: Well, the bull wasn't, but he'd been on this place for three or four years, so he'd

<sup>xxii</sup> [www.landcareresearch.co.nz/research/wildlifecol/ferrets/ferretecolgy.asp](http://www.landcareresearch.co.nz/research/wildlifecol/ferrets/ferretecolgy.asp). Downloaded 26/07/2011.

<sup>xxiii</sup> [www.ahb.org.nz/Default.aspx?tabid=121](http://www.ahb.org.nz/Default.aspx?tabid=121). Downloaded on 26/07/2011.

<sup>xxiv</sup> [www.ahb.org.nz/Default.aspx?tabid=152](http://www.ahb.org.nz/Default.aspx?tabid=152). Downloaded on 26/07/2011.

recently - likely that it happened here - got a positive just last week ... And funnily enough, we've had some wonderful possum control around the place ... 'cause we're on the border of a no TB and an epidemic area, so they do annual test of it. But it's - and the whole property has been done two or three times, but not for a couple of years. And there's been a build-up.

Interviewer: Has there been any notice of where it came from?

Male farmer: We had - we're reasonably sure it came out of this valley or the next to the south of here. It's quite good from that point of view. Recently imported. But we're about to bring the cows in next week, and they've got to be tested. So possums and - I fear it's just as bad, the other ones that have been shifted along. So yeah, having said that, 'cause we can fatten everything, it's not as big a problem as if you're [selling stores], and that's what we were when we first got it. But for us now, it's - we used to sell to the feed lot. So that's the only thing that's changed. So, yeah.

Possums were often controlled incidentally through the control of rabbits by using poison and some of the farmers are faced with a choice of controlling TB or controlling rabbits, as this farmer described:

... and the other exacerbating aspect of that was the fact that conjointly, or during that hiatus, we had - with RCV working so efficiently - the Animal Health Board, in conjunction with ourselves had got onto the bovine TB problem and eradicated possums from the [name] and had done a huge amount of trapping and control work on ferrets and to a lesser degree stoats. Cats were bycatches of that ... and I see it as a real antagonistic aspect between the work that the Animal Health Board has done to get rid of TB, which we are now coming around to being free of, after being infected since 1986. And, um, if it really came down to a hard-nosed choice to keeping up with TB or keeping up with rabbits, we'd have to say that we can live with TB, but we can't live with rabbits. So, it's got to the stage now where I've stopped - where it's been targeted, the predators, and we don't shoot wild cats now. (male)

#### **4.6 More diseases and pests: Footrot, flystrike and others**

One of the controversial aspects of farming practice with Merinos has been the use of mulesing to protect sheep against the devastation of fly strike. This has become an animal welfare issue for the marketing of fine wool. However, this does not seem to have been a problem for ARGOS farmers and the New Zealand companies which sell fine wool have forbidden the practice, though some farmers still wish they could use it<sup>51</sup>.

Foot rot is an issue which has been well researched to the extent that there is now a gene marker test to determine which animals are more susceptible to enable this trait to be bred out of a flock (Greer, 2005; Biotechnology Learning Hub, 2007). These two issues, footrot and flystrike, are grouped together because the farmers quoted below grouped them together.

Male farmer: Flystrike has never been a huge issue for us just because the climate is really dry. Sometimes we get those upriver breezes we don't get a lot of high humidity or fog or whatever so it's never really been a huge issue for us, which is, which has been good. Likewise underfoot conditions in terms of footrot or whatever are not an issue either. That's a couple of things that we take out of the [breeding] equation or certainly put lower down the list of priorities ...

Interviewer: And mulesing, is that a...?

Male farmer: Um, we never mulesed traditionally, and then we did for a while, not too sure why really, we were sort of playing at putting more wool on sheep, obviously it allowed us to do that, when the issue or whatever came out the Merino Company was probably one of the first ones to drop it again.

Male farmer: Fly strike. The two jobs I hate doing are fly strike and foot rot. I'm not sure which is worse than the other. Now, foot rot is - it just kills you. We're really lucky. We haven't got foot rot to any degree, but I worked at a place that has it. And it just takes up so much time.

Interviewer: So, how do you manage it ...?

Male farmer: Well prevention is the cure. I suppose a bit of breeding comes into it. And you'd hope the stud brands are trying to keep an eye on it. We're always questioning the stud breeder. We hope they're telling you on that side of things. And, um, so that's foot rot. Yeah. Now, when we get foot rot – prevention coming- quite now is hard. Merinos have got sore feet. You can't trust them ... But yeah, prevention is the best way. Keep their feet dry.

Interviewer: And how do you manage them ...?

Male farmer: This year was – we fattened all of our surplus Merinos. And we thought, ah, we'll be putting this feed through winter. 'Cause last couple of years we've sort of missed out on the premium money. 'Cause it starts dropping off when we get to the end of October. Try and get wool, you know, before it drops off. So, we thought we'd feed them better, which meant bringing them down on the grass ... It rained lots and was just wet. And Merinos don't like being wet. So that's what ended up happening. It got to the stage where it just wasn't working, so we had to get them some rocks to sit on. Some dry space. But, you know, another year it might have worked. This year it didn't. ... At the end of the day, we had our lambs a bit bigger at lambing time.

These two quotes show that farmers are able to manage both these issues, particularly if they are in the enviable position of having a climate which is low humidity and wintering land which does not get too wet. Another farmer mentioned some other pests that are becoming an issue as they intensify their practices to include growing brassica crops for winter feed, and he goes on to talk about weeds and the costs of managing them. He also laments the short-term nature of government policies.<sup>52</sup>

Male farmer: Your grass grubs are always an issue - we dry them off. The irrigation on the paddocks - what we are finding is, probably with, especially growing winter brassica feeds, things like diamond back moth and aphids and white butterflies, they seem to be on the increase, not just here, but generally in Canterbury I think, there seems to be an increase in those things. I'm not sure what the cause of that is, whether there's more crops of these types grow which actually encourage more of those pests to come with it, or the cultivars that we grow are more susceptible. There seems to be a trade-off, a lot of the new cultivars are potentially more animal friendly and productive, but at the same time they're more susceptible to pests. Weeds are a big, are a major issue for us here.

Interviewer: Big weeds?

Male farmer: And small weeds. Nasella tussock's probably the most insidious of all the weeds we've got. We spend eight or ten thousand dollars a year controlling that, and then gorse and broom and thistles. I suppose, between, we spend about twenty thousand dollars a year on weeds and pests - probably 5% of the farm income. It's a considerable issue and it's not going to go away. The gorse seems to be endemic through the river. I've got a policy of getting rid of the scattered stuff and working around the fringes of the thick stuff and as far as in the riverbed goes, if it's likely to be flooded by the river or, it'd be a pretty poor investment to try to take it out so I just try and keep it to those zones and I don't really see that changing too much. Actually the land underneath is not worthy of the cost of clearance anyway. But it is a bit sad in a way that the government programmes that operated in the 70s and early 80s had done a great job and were just never able to keep up on it.

This chapter has examined the response of farmers to shocks associated with the physical environment – the problems of living off practices that are closely associated with the extremes of weather be it droughts or heavy snows (Table 4.1), incursions of animals and plants that have come to be seen as pests, in competition with agricultural animals for food, and diseases that affect the welfare of agricultural animals (Tables 4.2 and 4.3). Where possible farmers manage their practices to make sure that they have sufficient pasture and supplements for feed whatever the weather, and try to enlist government help to deal with pests and diseases or remain steadfastly independent managing by themselves if at all possible. In the next chapter we will consider the responses to economic uncertainty.



**Table 4.3: Responses to pests and weeds**

Driver	Pest/weed	Response of farmer	Number
Economic	Hieracium	Intensify/develop	3
		Leave it to AHB	3
	TB/possums/stoats	Go easy on weasels, stoats etc. because predators of rabbits	1
		Emphasis on breeding stock not stores	2
Environmental/ Economic	Wilding pines	Plant buffer trees	1
Economic	Footrot	Remove	3
Economic	Footrot	Breeding	2
		Provide with dry land	1
Economic/animal welfare	Flystrike	No mulesing	2
Economic	Weeds – gorse, broom, thistles	Control except in riverbeds and other unproductive places	2
Economic	Nasella tussock	Try to eradicate	1

## Chapter 5 Responses to the uncertainties of the economic environment

“... it’s sort of bloody erratic time” (male).

“But I’d have to say - I don’t remember a year when everyone wasn’t saying ‘oh it’s going to be interesting to see what happens’ ” (female).

The above comments of farmers encapsulate their recent experiences. One of the major responses of High Country farmers to their economic situation has been to examine the profitability of their major product – fine wool. As a result various tactics have been tried in terms of breeding sheep for fine wool and now for meat as well. The next sections provide a brief recent history of the wool industry and the breeding of sheep to match the market.

### 5.1 The story of fine wool

#### 5.1.1 *The highs and lows of the history of wool*

One of the things that got high country farmers through the period after the removal of subsidies was the Merino boom which happened in the late 1980s.<sup>53</sup> Changing market demands and consumer preferences regarding animal fat encouraged lamb producers to start weighing lambs and check back fat around 1990, the year Southland reached record lambing numbers. Wool prices started dropping as the world’s largest wool importers (China and the former Soviet Union) cut back on purchases. This led to a suspension of the price support scheme in February 1991 by the New Zealand Wool Board as the cost of 650,000 bales of surplus wool had resulted in its liabilities exceeding its reserves. The reaction of the New Zealand Wool Board came only days after the Australian Wool Corporation had suspended its price support scheme after accumulating a 4.7 million bale stockpile (Haszler et al., 1996). This change has encouraged the growth of the use of Merinos for meat production because they then became a multipurpose animal and have particularly lean meat. One farmer describes it this way:

Well, through the 90s, the Australian wool stockpile, um, really put the brake on us. It must have been about 1990 that the Australian wool support scheme crashed. And I think our support scheme could’ve went with it, but didn’t. They, Australia can build up an inventory of about 4 million bales of wool, which right through the 90s acted like a great warehouse for cheap wool. It was about 1999/2000 when they cleared that stockpile, that fine wool prices started to move quite substantially. The Americans, who were the biggest buyers of high-quality suits and a lot of finished wool products ... wouldn’t get on planes and fly to the trade shows around the world. It snowballed right through. Um, lamb prices were quite good about then, but wool, fine wool, really only started to recover in the last couple of years. It’s been really pretty ho-hum right through the last 10 years. At the moment, or in the last 6 months, we’ve seen sheep/beef prices pick up. Wool prices, right across the board have picked up ... This is the first time I’ve seen all the planets sort of align. There’s some out there who say there’s no way they can align again. I just think because the market fundamentals are a bit different this time, and we’re actually seeing these reasonable prices in spite of the high dollar, and not because of the high dollar. (male)

Overall, farmers have made the point in many quotes, that they and their forebears have lived with having a few ‘good’ years and then a long period of ‘bad’ years, when fine wool prices plunged, for most of the last century. During the ‘good’ times the profits they made enabled them to plough back money into the farm and then they survived through the next long period, always in the hope of the good times returning.

### **5.1.2 Merino wool industry organisations in New Zealand from 1995 onwards**

High country people have learnt how to be politically active and feel that has been a survival strategy. One way that this has happened is through the formation of Merino NZ. In 1995, Merino growers decided to influence their own future by forming an Incorporated Society, Merino New Zealand, which had the role of facilitating industry programmes for research and development and marketing for the sustained profitability of all growers. It represents all Merino growers and is an incorporated society, funded by the wool levies paid by Merino growers to the NZ Wool Board. About 65% of the levies collected from Merino growers were allocated by NZ Wool Board to Merino Inc. to manage Merino specific research projects. All expenditure was approved by the NZ Wool Board.

The key focus of Merino New Zealand was to lift New Zealand Merino fibre out of the "commodity bucket", to differentiate the fibre from its competitors, to develop a unique 'New Zealand Merino' brand aimed at specialist market niches, and to develop research and development technology transfer programmes. Merino New Zealand assumed the marketing, promotional and research and development activities for fine wool previously undertaken by the Wool Board.

The McKinsey Report was commissioned in 1999 because of New Zealand wool grower dissatisfaction with the existing industry strategies and structures and increasing concern with the declining profitability of wool growing. It delivered a series of recommendations through which the New Zealand wool industry could successfully position itself for the future and was adopted by the majority of growers in 2000. The McKinsey Report made a number of recommendations that had a direct impact on the Merino sector. As a result the commercial arm and the research and development aspects were separated into two organisations which became the Merino New Zealand Company and Merino New Zealand Incorporated respectively, the latter being the owner of the New Zealand Merino brand. All R&D activities for the meat and wool sector were funded by a 1% levy on all meat and wool sold. The McKinsey report suggested that Merino growers had unique concerns and as such should receive 75% of the levy collected from them for research related to them. Merino New Zealand Inc. was originally conceived as being the parent body of the Regional Merino Associations. However the Regional Associations are all independent Incorporated Societies in their own right but have a close liaison with Merino Inc. The Merino New Zealand Company is 65% owned by Merino Grower Investments Limited (MGIL) and 35% by Wrightson Ltd. Merino Grower Investments holds shares in the name of all Merino Growers. The NZ Merino Company Ltd is a wool broking and marketing company dedicated to the promotion and marketing of NZ Merino fibre for its clients. It aims to make a profit for its shareholders. Clients pay a marketing fee, which is a commercial arrangement. The role of MGIL is to monitor the performance of the Merino Co and act as a sounding board and guardians of Merino grower interests in the Merino Co., including the power to appoint four directors.

On the disestablishment of the Wool Board in 2003 remaining levy funds that had been allocated to Merino Inc, but unspent, were passed over to Merino Inc. The use of these funds is limited by an agreement signed between the parties at that time. In 2004 Meat and Wool NZ became the new collection organization for the meat and wool levy monies. Merino Inc applied on an annual basis for funds from Meat and Wool NZ to fund research, development, education and costs associated with administration of Merino Inc. Since April 2010, the wool levy has not been collected. Merino Inc. is now able to spend the levy reserves that are still held for any future R&D. <sup>xxv</sup>

### **5.1.3 How the farmers see the wool industry**

High Country farmers often look back, positioning themselves within the history of the High Country, One farmer illustrates this when he remembers his father and his grandfather's innovative selling of

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<sup>xxv</sup> Material in this section was obtained from <http://www.merinoinc.co.nz/about.html#background> , <http://www.nzmerino.co.nz/home.asp> and <http://www.discoverzque.com/>.

wool in the U.K. through wool brokers.<sup>54</sup> When brokers ceased to exist they found they no longer mattered to the buyer and seller of the time, the Wool Board, so this farmer's response was to get politically involved himself:

I guess one of the things that [affected us] the most was that we were a reasonably large producer of wool and it was obviously a core business but the wool board didn't even really know you. You paid your levy and they had no idea how much you paid and or who you were or whatever and it ... disappeared pretty generically really. I personally didn't have any problem with shifting away from that and getting more control of your destiny but then I guess I ended up being involved in the politics of that time - a director on that board since its inception, so I've always had a keen interest in those things that affect your business most and the best way is to get involved and perhaps that's more a commercial way to look at it rather than the Presbyterian way to look at it as being a service. (male)

Another farmer remembers the role of the stud breeder and how it has changed:

Merino's encountered this environment for more than 160 years, and as there should have been, there's been a lot of and education and learning that's happened over that period of time. If you go back to the formation of the Merino association, that was the first time, circa 1980 that that there was any formal Merino organisations, ever. And Merino high country farmers being very individualistic, and often isolated ... the only god that we ever had was our stud breeder. I say that tongue and cheek, but he was the one that we lived in awe of, 'cause he had all the knowledge. Well, that was absolute bullshit. And we're still living in his shadow ... which is totally wrong. The Merino association is a collective Merino organisation now, and the education that has come through - I would have liked those opportunities when I started in 1980 - the sort of semi-formal opportunity to learn about the Merino industry that has been so good. (male)

One farmer reflected on how the Merino company was created to work for farmers and how without it the fine wool industry would have probably disappeared. He also feels it is very important to watch what has happened and is happening in Australia.<sup>55</sup> He went on to talk about the importance of having contracts for your wool:

But the Merino industry, and the relationships and the contracts that the Merino company provide is the foundation for farming fibre, and we are as strong a contract model as there is. And we've been in contract since day one, and I'd say 80% of our wool is on contract, maybe more. And I don't want to see it change. There's still critics of it around, but they cannot be commercial. Because the bankability of having contracts and knowing how much income you're getting - how much income you'll get three to five years out for your main income stream is a very sound business practice to have. (male)

One couple were concerned that the expertise is no longer available in NZ to measure ultra fine Merino wool.

#### **5.1.4 The beginnings of Zque**

Recently an audit system label for NZ Merino wool has been established called Zque. It guarantees the economic, social and environmental sustainability of the wool product using the label, that the product is traceable and meets animal welfare requirements, such as there is no mulesing of the sheep that produce wool under this label (Wallace, 2008b). As one farmer explained:

I'm involved in some audit processes because I actually think it, it's a good marketing tool and it also gives you some benchmarks to, to actually set your sights on ... it's a marketing tool too that the retailer can hang on to and say that you know that, this garment, this product is backed by this package, you know, really from on the farm through the manufacturing process ... 'cos at the end of the day the people that they're probably marketing those garments to, are the, oh I suppose they're only young, young, middle aged, young at heart people, they're quite expensive garments so they're gonna be the, you know, definitely the middle, you know, the middle professions, well not really - it's ah, I don't like using the word middle class, but it's um, yes it's the upper, upper market, and they generally are the people with a bit more money in their pockets and a bit more aware, bit more choosy ... We've got the Merino New Zealand brand,

we've got some nice pictures of the high country where a lot of this wool comes from and we've got more pictures, but we actually need something a bit more tangible ... (male)

### **5.1.5 Breeding High Country sheep**

Merino NZ has emphasised improvements in the breeding of Merinos. Many farmers breed their own and cannot explain how they do this, as this farmer explains:

... farmers will come along to your property and ask 'how do you make those decisions?' and I think to myself, 'I'm not too sure.' It's something where there's experience there that tells you right or wrong and how stock should look and a lot of it's very intuitive. (male)

### **Fitting the stock to the market and to the land**

When High Country farmers talked about their breeding of sheep there was a strong element in their talk of consubstantiation. Their sheep were closely linked to the 'place' or landscape in which they lived. Breeding stock that 'belong', or 'look right', was mentioned by quite a few farmers. One couple even spoke of how they themselves as well as their stock, had to learn how to 'live' in the High Country environment. It seems rather obvious that this notion of being part of the environment in which you live and identifying with it, could also be extended to include the economic environment in which present government policy pays homage to the needs and leadership of the market. The next quote tells of how the infrastructure of the farm was well developed when this farmer arrived, so he turned his attention to the stock – he wanted stock that "looked like they belonged on the property". This is followed by a quote from a farmer who was looking for sheep that 'suited the farm".

Male farmer: Well when I took it over, ... it had been sort of developed in the 80s, well fenced nicely and fertiliser and all that ... [when I] went in there - it was running all right, but the stock weren't performing, so ... I went in there and changed the breeding around, and basically got the lambing percentage up and running, and some stock that looked like they belonged on the property ... the sheep that were there beforehand, they'd chased like the wool market with halfbreds and when the Merino was going good they'd chuck the Merino out and when the fat lamb was good they'd chuck the Romney stock out, but the sheep were all over the show, so we just wanted to get something in there that looked uniform and everything – mainly to myself but so staff as well, liked what they were working with.

Interviewer: I was interested when you said you wanted sheep that looked as if they belonged there.

Male farmer: Yeah.

Interviewer: What does that mean?

Male farmer: Well it means, I mean, when you look at a mob of sheep they all look sort of similar, so you haven't got one that can't see for the wool all over its face and one that's got no wool. Just a uniform mob of, you know ... I mean, when you go to shear, you haven't got wool that's fine and wool that's strong ... 'cos at the same time we went into Corriedales - we wanted to have on-farm sales - basically so you could put up a line of stock that people could go home with and weren't looking at a mob of sheep that are all over the show. So that's basically what I was wanting to do. We didn't go out and do any major development because, the fencing side of it had been already done, or the bulk of it. It was now just getting the stock performance, yeah. So yeah, that's what we did.

In the latter quote a need for stability was also expressed – the feeling that a farmer cannot chop and change according to what the market wants too much, though one thing the market wants is uniformity. For another farmer the change was also from one breed to another. He saw this as a big change because the management of Merinos was so different from the Corriedales his family had bred formerly but also because it was stepping out of line from a family tradition.<sup>56</sup> It is ironic, as this farmer realised, that he (and his father primarily) had farmed Corriedales up to 1985 to get wool and meat, and then changed to Merinos to get a fine wool product, and now they are farming Merinos for wool and meat, though the wool is finer.

One farmer talked of the admiration she had for Merinos because of the terrain they live on. She talks of the satisfaction of the autumn muster when they bring 'the girls' home. She also talked of how devastating it was when her father-in-law lost all his stud sheep in one snowstorm. Another talked of how farming will change under tenure review – telling how he is now saying to the sheep, “see you next week” rather than “see you in x months”! One farming couple talked about how they had to bring new stock onto the place and because the fences were so bad the stock (sheep and beef cattle) always ended up back at the house because they did not know the property. They said that ewes need to lamb on a property before they feel at home on it.

Female farmer: It's just all open, getting [sheep] to know the place like we know the place and what you can and can't do. You know, to come in somewhere like here completely cold turkey it takes time...

Male farmer: ... And the unfortunate thing too is that we had to bring new stock on the property, 'cause there was no stock here so we weren't in a situation where we could buy the existing ewes which knew the property and we had to train the cows every time we put the cows out ... because the fencing was so crap they'd all end up back at the end of the lane here, you know, we spent two days getting them out to the back of the property, you'd come over the railway line, walk all the way home and they'd be back here again, you know? That's the reason - "Where's my nice paddock back in [place where they used to live]?", um so and now we are getting the cows to the stage now where they'll be happy on blocks and they'll actually work the blocks. They'll see you and won't come and stand at the gate wanting to go home ... Same with the ewes to an extent. You know ewes are used to a property - they'll go round and round and round and round and it takes them until the first lambing before they actually settle down so um that was a learning curve [crosstalk].

Female farmer: All that kind of thing I just put it down to experience. And also I think knowing our limitations, when we first came here we tended to carry on like we still lived in [name].

One of the stations does not have footrot or flystrike, issues in animal health, because it does not have wet places, and the weather is not humid. The next conversation is with this farmer. He breeds mainly for his own use so will be breeding stock particularly suited to his own property. He and his wife are responsible for this and it keeps the secrets within the family.

Male farmer: ... for the last 25 years we've bred our own, had our own stud, and bred our own rams that sort of thing to control the genetics in the flock, once again, just taking ownership, taking control of the ingredients really. And controlling your destiny. I think you get out what you put in really.

Interviewer: And how have you, which path have you followed, or have you used to help guide you in terms of what genetics...

Male farmer: I had a lot of respect for my father's ability in his sheep breeding. Albeit he didn't breed his own rams, but he certainly had some really good guideline strategies or whatever as to how to select the traits that he wanted and then on top of that my wife was a, her family have been involved in ram breeding, so I simply picked up some of the finer points from her in terms of how to run a stud business, and then just after that it's really learning as you go, and putting a lot of thought into the direction. Obviously it takes time to change things so you've got to be able to cover your moves or whatever.

Interviewer: So what have you bred for?

Male farmer: In our environment, because it is quite extensive we need structurally correct sheep that are able to cover the country if you like, or whatever so that's probably the most important thing so you've got to have good constitution, good structures, they've got to bring the fleece and wool home and then after that you can then hang on the wool quality and what have you. I've been a member of a discussion group, benchmark group or whatever, and we're mixing with 19 or 20 other properties, and from the stock performance side, obviously as you want to keep up more grass through oversowing or whatever, you pursue your strategies for a better lambing percentage basically. So yeah, it's gone on from there ...

Interviewer: ... Are you mainly breeding for yourself?

Male farmer: Yeah, yes. We're really breeding only for ourselves ... we sell a few but, um yeah, the drive is just to provide our own ... I mean that's some of the skill I guess involved in that, it almost becomes second nature when you cull lambs, you know what does and what

doesn't [work] and when you analyse it - people probably ask 'how do you know that?' and it's really just experience ... those long wool types, freer skins, good outlooks, just sort of pretty basic things really and actually getting a good lambing then you can probably be quite hard on it [culling] but if you're not getting good lambing you haven't got the selection pressure then you've just got to take what - you're really only culling out the really bad ones if you like, but certainly given that percentage you can certainly do a lot more culling pressure. On our country we would find it very hard to run heavy skinned, heavy woolled type sheep which, though we have a great admiration for them and they'd probably make a lot of money, but the simple fact is they won't come home. But likewise, you don't want little fellas that only have a couple of kilos of wool. You can't make a lot of money out of them. So it's a bit like, the dynamics are changing all the time. I guess in some ways we're somewhere in the middle of those two types.

#### **5.1.6 Stud breeding**

Other farmers interviewed were also breeding their own sheep but for stud purposes. Having a stud increases the diversity of farm production because it gives another source of income by selling stud rams and also, of course, provides a use for some of the ram lambs, which in the past would have formed the replacement wether stock. This farmer wants sheep that could outperform those on traditional sheep/beef farms for meat and also produce fine wool (but not ultra fine).<sup>57</sup> He wants to breed for footrot resistance too. His story is a complex combination of farm development, increasing the lambing percentage and the genetics of his flock and managing the ratio of cattle to sheep.

Our sheep were probably a little bit different to the rest of New Zealand. Always have been and probably, hopefully, always will be - because it is inherently strong country. It's inherently - naturally fertile, although very fragile as well. So there's a balancing act between fertilisation and sustainability that must be catered for ... [goes on to describe the kind of country the farm covers and then talks about the development of it.] Anyway, the program was - in conjunction with the over sowing, we started fencing. We put up at least 100 miles of commercial sheep fence to subdivide these ewe blocks into more realistic paddocks. And we did that at the same time as - in conjunction with the development ... We had the subdivision coming in behind it to better utilise it. Um, wool weight and lambing increased dramatically as a consequence of animals being fed. And then we started trying to fine-tune the genetics, and that's been an ongoing thing. That genetics one is one that will always be ongoing. In simpler terms, we started in 1980 with a Merino ewe flock at 23.9 microns, cutting five kilos of wool. And now our bloody ewe flock is about 19.8 microns, cutting six and a half kilos of wool. And we're still working on improving that. And we've gone from the lambing in good years without storms to on average - we should expect 115% lambing. 170% or 180% of what we were doing ... [Then goes on to talk about how he works both sheep and cattle.] And the balance of cattle to sheep ratio associated with development has been absolutely critical. And with that, we've got a high cattle per sheep [ratio]. It's roughly 45-55 in favour of sheep. If we didn't have stock in cattle, we would not be able to utilise or control the quality of the developed pastures as we can with that. And that's key to keeping good pasture quality for the sheep. So the cattle, although there are 1800 cattle here, I actually think they accentuate the opportunity for Merino production. If we cut down cattle numbers, we would probably lose. (male)

Another farmer talks about developing their family's stud by bringing in a new bloodline and how it is part of the diversification aimed at by Merino N.Z.

We've got a stud here that [father-in-law] established in 1976, so that's the Merino stud, which is generally based on Merino bloodlines from Australia. But the last two years, we've started going for a new bloodline, Mega Merino<sup>xxvi</sup> which is from South Africa. And Andrea ... is a man over there - and it works in so much with what - you probably know New Zealand Merino are sort of planning to do with all of their research - [they are saying] let's not look at this Merino as a wool animal, and not even as a meat animal. What we can do with the pelts or all the other products that we can market. Yeah, so knowing that, and knowing what the potential of the

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<sup>xxvi</sup> See <http://www.odt.co.nz/your-town/tarras/49315/s-african-breeder-says-merinos-dual-purpose>

market could possibly be, and knowing that the heydays of wool may well be over, yeah we might still get fair prices for our wool. Looking historically, the wool was 75% of the income. And I've never experienced that. Again, it's just trying to work out a strategy to cope with that. Breeding these sheep that will produce a nice fleece that still fits into a contract. It probably won't be Icebreaker, but more like the SmartWools and things, and also have a meat carcass that's worth something. So, that's what's driving that. (female)

An important part of producing fine wool and meat is selling it and the way this is done is an important part of managing uncertainty as the next section will explain as it considers the issues associated with whether or not to sell on contract.

## **5.2 Managing escalating costs and the exchange rate**

### **5.2.1 The situation**

You do get tired of being a commodity price taker. Taking the price that is sitting at the farm gate for you ... You're putting your sheep into the sale, and you're getting the price that is the price on the day, and you do not have any negotiation in that. That's it. You set your stock up as well as you can on the day, but to have that no negotiation. And not many businesses work like that. Um, you know, a lot of businesses, if their costs increase, they pass their costs up, don't they? Yeah. Whereas farmers are – your costs keep going up, and nothing's falling off the other end. But, um, I think we do it for the love of it. We're not in a get rich quick scheme. We do have a wonderful environment. (female)

Female farmer: Well you gave an example the other day of what income could buy. One bale of wool...

Male farmer: ... I was trying to think what year it was, '61, '61 he said it actually took three and a half bales to buy a new car. And then we were talking about 1971, which was ten years later, it was six and a half, nearly seven bales. We were just talking about it the other day, if we actually had to buy that same vehicle now, it would take 70 bales.

Male farmer: I can't see things changing because one of the biggest problems in New Zealand is that agriculture's become secondary to the cost of money, when you compare it to any other farming anywhere else in the world is so high because we've got high interest rates, and that's not going to change ... we're not production orientated ... the governments are based around Auckland and they're the ones that are going to tell us what to do, and there's no chance of any subsidy system coming into it, and I can never see that dollar coming down because when you actually look at our operation and what we're running, we could run a few more sheep. It's going to cost a little bit more but if you're running with the sheep you've got now, you can struggle to get another dollar a kilo, which really probably at the end of the day's going to be another fifteen thousand dollars a year, but it's not really going to pay another man or do anything, and you're struggling to get that other dollar a year if you look at the Icebreaker contract and things like that, and your costs are coming up anyway, but if the dollar came back from 73 cents to 63 cents, it's a hundred and fifty thousand dollars, so it's completely totally structured around the exchange rate, it's nothing to do with what we're doing on the farm ...

### **5.2.2 What can be done about it?**

The quotes above describe what it is like being a primary producer at the mercy of the exchange rate and rising costs. (More quotes are contained in the end notes<sup>58</sup>.) What can farmers do about it? For this farmer there are two choices – become more efficient by cutting costs or intensify:

What has actually happened is that, yeah, ten dollars a kilo would've been a good price a few years ago, but the actual, we need for that to be sliding up on a scale because all your costs are being squeezed in between so I think that that's been the thing the last few years, we've seen a huge increase in costs. We've pulled back our costs because we're just been trying to be lean and mean so ... you have two options, you either be a low cost operation just as low as possible and get the best you can out of your produce, or the other option of course, is probably getting into irrigation and actually going full, full out and you look at that, that probably is the option for



most of us ... but it is a big decision to make, because once you're in that spiral you're into it and you can't stop ... (male)

For one farmer cutting costs is not necessarily about using less fertiliser but he does more soil tests to make sure he puts the fertiliser on the right places, presumably where it will have the most impact and produce the greater return – and from what he says, it looks as if that will be on the places where he is able to farm more intensively.

I mean, the things that have the biggest impact on you are the things beyond your control. I guess you've got to run your business with that in mind - that is things like climate and exchange rate and, um, it's actually the global scenario of what might be happening, and it's a question of controlling the things you can really and ... that certainly has its challenges, once again, the cost of fertiliser or whatever, you've got to be more strategic with how we do that, and at the moment's we're, up to this stage, we're pretty good with our fertiliser inputs and certainly ... a lot more soil tests, you know - whatever, also perhaps, I guess our biggest bang for buck is being a bit more intensive ... (male)

Another farmer remembered that reducing fertiliser was not a good option as production dropped.<sup>59</sup> This farmer, in the quote that follows, manages a property and apart from scrutinising what he spends on fertiliser, he also considers trying animal health remedies which may be cheaper, for instance. He also has to make a profit for the owners so has to make an argument for choices about spending money.

Male farmer: ... we basically farm to make money. So, and the last two years, we've made a surplus, so that's great. But the bottom side of that is we've had to cut things out. One thing, fertiliser, 'cause that's a cost. As far as animal health goes, you don't cut that. But it is getting to this stage where when you spend a lot on animal health is pre-lambing. We'd cut this year not because it's costing too much but just 'cause a different attitude to it this time.

Interviewer: Would you explain that?

Male farmer: Well, I just think everyone's pushed, for example, capsules. There's a question whether we need to use capsules against drench. A drench now, like an oral drench, or a drench at pre-lambing time. You know, it's going back to the good old days. Going back to basics. I mean, people – whether it's the vets who have pushed it, or the farmers being pushed because of production. I mean coming up to pre-lamb animal health now, I'm just questioning what I'm doing and why I'm doing it. Why do I need to do that? Sometimes it's easier to do it. And the reason I say that is because animal health is one of our biggest expenses. So instead of spending \$3 on a capsule that they may not need, I'm just questioning whether they need it at all. And I assess the stock visibly, the fat. If they're fat, and our stock are always fat, I mean, do they need an expensive drench? So, that's one way. Getting back to having other areas that we – you go, you spend 'X' amount and it'll help you through the season. We spend money. We don't spend all our fencing at once. So we might do a bit – we'll spend a bit now, then we look at it ... I'd love to have more money to spend on fertiliser and around the house, but at some stage if we just farm to make money every year, I'm hoping it'll kick in and we'll get to keep a bit more of it. You carry on farming like you are now, 'cause I've put a lot of fertiliser on for the last two or three years, and that's why we probably make surplus, to a degree. Surplus hasn't been great. It's just been \$10,000-\$20,000 up to \$40,000, but that \$40,000 could have been spent on fertiliser, then we'd break even. You don't know. It's so volatile, the markets and that. You don't know whether you're going to make that line until the last month, sometimes, depending on what stock you're selling. What we're trying to do is spend a bit of money anywhere. And as we make more money, we spend a bit more on those – your fencing and your fertiliser ... Well, we make the decision together [manager and owner's representative]. But I'd like to see more money spent in other areas. They look at the bottom line, and I see the potential by spending \$40,000 on fertilizer. You're not going to see it by better money saved up, but you're going to see it in better stock in wintertime. I keep saying, "It's going to catch up on you, if you don't spend it." 'Cause what will gradually happen is your lambs are this big at wintertime ... I mean, it's taking a lot longer to fatten them, and they're looking much smaller than they used to. Well, it could be because the land is getting less fertiliser.

One farmer had been part of a cooperative set up in his valley which shared machinery. Each farmer put in a certain amount and that entitled them to so much usage. One farmer generated his own electricity from a stream on his property. However, it cost too much for him to link it into the main grid. Basically the High Country farmers interviewed for ARGOS are an innovative group of people.

### **5.2.3 Contracts and off-farm risk management**

The ARGOS High Country farms appeared to gain fifty percent or more of their farm revenue from the sale of their wool clip. The farmers particularly enjoyed the reliability and certainty of the long term contracts they have for their wool<sup>60</sup> – often with Icebreaker, a New Zealand company that sells exceptionally high quality, fine wool garments internationally. As one farmer said, “ ... one of the things that’s is good about contracting to companies like Icebreaker or Design Textiles - that they're actually New Zealand based companies (male).

Icebreaker, as one of the main users of Merino wool, buys on six qualities – fibre diameter, fibre strength, length, coefficient of variation of length, coefficient of variation of diameter and purity. Five Icebreaker garments can be made from one Merino fleece. Icebreaker pay a “forward price” that is “sustainably profitable to growers”. Two farmers describe their contracts:

The dairy one [contract] - that's more volatile than a wool contract - you know, ours is for three to five years, I don't know of any contracts that are like that ... Not one that I know of has ever been broken. Like sheep and beef - you can't say that for the wine industry, either. It's a wonderful model and it means there's something in it for everybody as well. It's a win-win for the industry. We were saying before the interview, we're doing that Icebreaker thing. We've done an Icebreaker conference here most winters ... (male)

... we sell a reasonable amount forward on contract and I guess our strategy at the moment is to do more of that. I think the option's becoming the most reliable in terms of delivering price for quality. There's people in the wool industry that recognize the actual groups of wool subjectively and more and more it relies on objective measurement and at the end once again it comes back to managing the financial side of it. If you sell on contract you know how much you are going to get - obviously you've got to deliver that - deliver the goods or whatever. A lot of certainty to the outcome. Wool is still our core business, so having said that the stock side of things - the surplus stock has become bigger and bigger as prices rise a little, but still in excess of 60 percent on wool. (male)

For many farmers the Icebreaker contract seems to entail personal visits from Icebreaker staff and some of their clients, hence there is a close association between the farmer supplier and the company. One of the farms we visited was preparing for a conference of icebreaker people with a large number of people (30 approximately) staying with them and with their neighbours, and the female farmer was preparing to cater for the lot of them.

It is hoped that such companies are working in the NZ context and know how to manage the risks associated with the fluctuations in the NZ dollar and so on. In terms of these contracts farmers seem to be prepared to accept that some years they will win on these contracts and sometimes they will lose but overall they will do well enough.<sup>61</sup> This contrasts with the meat contracts which are for one year, or else farmers compete at local sales. Even with the contracts some farmers are not yet making a profit on their wool sales and would like to see a sustainable price paid for their wool. One couple went to the extent of trying to cut out all the middlemen involved in the wool industry and set up a business themselves with others.<sup>62</sup>

The diversification taken on by High Country farmers these days is apparent in this quote:

Male farmer: I think more and more, our production is also – tailored is probably not the right word, but it's targeted to a specific user group. Part of our wool is contracted to companies such as Icebreaker and IBS, so we're deliberately producing wool for the active outdoors market. Um, a lot of our beef steers pretty much go to the five-star beef feed lots, so that

market determines the genetics we use. We're in the process of, um, contracting lamb to be marketed by the Merino company in partnership with Silver Fern farm - a new package. So that takes care of the majority of the sheep meat production. The bulk of our production, we eventually hope to actually focus on where the consumer of the product is – and not producing a commodity to dump at the first option. That's a significant change in culture from a production point of view, and I think it's good because it focuses our production without being influenced by fads and fashions ... I think if there's good value attached to all that. Plus, I think it takes a lot of speculation and risk out of it. But then you don't want to get locked in your bad contracts, either.

Interviewer: And how long are your contracts for?

Male farmer: Wool contract is three years, and the meat contract that we're looking at is two years. Next year and the year after. The wool contracts that we've got – that are finishing next season, given the shifts in the market, they might be looking a bit ordinary, but previously it's been quite a good upside, I suppose. Generally, we do come out on the right side. You can't have one side willing to have contracts all the time, and the other side not.

Interviewer: So the assurance of having a contract would compete with what might happen to the changing rates?

Male farmer: Oh, exactly. I think that's something new in the psyche for a lot of farmers - committing themselves to that sort of production.

One farming couple previously lived by trading stock and making quick decisions when the market was high but it did mean they had traded all their breeding stock and had to start from scratch again.<sup>63</sup>

**Table 5.1: Responses to uncertainty**

Driver	Uncertainty	Response of farmer	Number
Economic	Machinery	Pool with neighbours	1
		Contracts for fine wool	6
	Market	Diversify – breed sheep for wool and meat	8
		Diversify – manage sheep and cattle mix	5
		Intensify	8
Income	Diversify - create new business or maintain old one–stud operation, accommodation	6	
Social	Loss of power/identity	Make representations to those in power, get involved in grower organisations etc.	6

This final results chapter has examined the impact of ongoing shocks and events created by economic factors on the life of High Country farmers (see Table 5.1). The next chapter discusses and interprets all the findings from the retrospective interviews.

## Chapter 6 Discussion

The main objective of this report is to provide an overview of the content of the retrospective interviews of the ARGOS High Country farmers. The interviews were designed to elicit a narrative structured by pre-listed important events and to extract the key drivers and responses at specific points in recent history. As a result, the discussion reflects the impact of agricultural restructuring and the adaptive responses to external and internal stress factors over the past 40 years. These responses can be interpreted as the pathways to sustainability chosen by farmers to manage their situation and progress into the future. Ironically, many of the major impacts on High Country farmers in the period under examination in this report, have been produced by Government initiatives which in themselves were expected to be pathways to sustainability for the nation as a whole.

In this research, it is not assumed that all farm adjustments made were a direct response to one particular driver. However, by focusing on key drivers for a given adaptive response it is assumed that general insights can still be made and these will be discussed in more detail below.

### 6.1 'Think big': hydro development

A Government initiative during the 1970s (and earlier), which had the aim of being a pathway to sustainability for the nation, was the 'think big' energy projects. It was designed to both provide employment and help New Zealand meet its own energy requirements. The part of this that impacted on many High Country farms was the development of hydro-electricity plants through the damming of High Country lakes and rivers. High Country farmers were not often beneficiaries of this. The raising of lakes reduced the amount of 'lower' altitude land available for summer cropping and wintering over of stock, canals dissected properties, earth removal and the presence of larger bodies of water changed climate patterns, and the presence of towns created to house workers on these projects not only took land from High Country stations but also brought more people into contact with what before had been isolated farms. Basically these developments were something that the farmers just had to learn to live with, though some still hope to access water from them for irrigation.

### 6.2 Subsidisation of farming

Increasing government support of farmers in the 1970s was mainly to help them through the changing market situation due to the major market for agricultural products, the U.K., being reduced due to it joining the European Economic Community (EEC) in 1973. During this period many of the ARGOS High Country farmers spoke of the activity this support engendered as many farmers used cheap loans to develop their extensive properties by increasing fertiliser application and subdividing with fencing to enable better stock control.

### 6.3 Neoliberalism: Becoming market-led

#### 6.3.1 *Removal of subsidies*

However, as alternative markets were not found for primary products and prices did not recover, the cost of this support became too high and the then National Government took the drastic measure of removing all subsidies for farming in 1984. When the Labour government came into power in late 1984 their policies became more and more focused on the market and user pays. In the long run the farmers in this sample supported this policy, seeing it as a way of making farmers independent. For some the subsidies had set up a pattern of making sure the development of their property was continued and this has happened to this day. Many High Country farmers were helped through this period by a boom in the price received for Merino wool, and this also resulted in some changing their breed of sheep to Merino. Some also started to farm deer.

### **6.3.2 Tenure review**

The major government initiative of reviewing the leasehold structure under which the majority of High Country stations exist came in during 1998. As pastoral leases have come up for review many High Country stations have chosen to move into a process which would end with them purchasing their land and placing some of it into government ownership. Some farmers, having started into the process, decided to be pro-active and prepare themselves for the loss of some of the land they previously farmed by buying more lower altitude land more suited to cropping and providing a place for wintering over stock, and investing in irrigation. Unfortunately for them, the process has faltered and changed over the years as politicians and policies have come and gone and they have found themselves suffering financial losses and living through a period in which their lives were on hold. For those involved this extended period of negotiation has adversely affected their trust in government and government agencies. At the same time through the advent of a greater public interest in the environment and the Resource Management legislation of 1991, publicity has been given to the environmental impact of agriculture and public opinion of farmers is changing. In addition, continuing government rhetoric focused on a 'knowledge' economy has emphasised the role of business and technologically oriented businesses in particular, as the way New Zealand should proceed in the future and farmers are less likely to be seen as the 'backbone' of the nation on which our economy is based. Over New Zealand's history High Country stations have also assumed a role in the national identity – photos of Merino sheep and rugged musterers on horse-back, posed against a backdrop of snow-capped mountains have sold us to the world, and portrayed an image of who we think we are. These images are now under challenge and seen as conferring a privilege which is unwarranted. Pressure is being created on the identity of farmers, and many High Country farmers are finding this very difficult. It has created an 'us-them' culture where 'townies' are seen as dominating government as the rural influence has decreased and farmers no longer enjoy the power and prestige they once took for granted. For some farmers this is not a problem while some others are trying to bridge the gap or educate the public by forming relationships with the 'other' through on-farm recreational businesses or involvement in the construction of public cycle ways, for instance.

### **6.4 The weather**

High Country farmers live in an extreme environment and for them a natural part of this is managing the impacts of snow and drought. They do this by being prepared for all events – both technologically through the equipment they use, the crops and pastures they grow and making use of weather forecasting, and practically, by the production and storage of feed supplements

### **6.5 Pests and diseases**

Due probably to the extreme environment and biological nature of the High Country, farming in these regions has been and continues to be challenged by the invasion of imported pests and diseases. Farmers have learned to live with hieracium, the government control of possums and TB, and are now tackling the issues associated with the spread of wilding trees.

The major and ongoing issue through the history of the High Country has been the management of rabbits. At first eradication was the aim but over time it has come to be seen that rabbits are never going to be eradicated but have to be managed so that they never reach epidemic proportions. Various government initiated schemes have been tried and in a sense they have never been successful as the rabbit problem remains. Some of them have proved very expensive to both governments and farmers and for some farmers the legacy of the loans they had to take out for enforced government schemes remains with them today. The illegal introduction and spread by farmers of RCD/RCV/RHD demonstrates the desperation they have experienced as a result of this issue. Through this though, farmers have learned a lot about rabbit management and many practice the management of hotspots at certain times of the year to keep rabbits under control.

## 6.6 Living with uncertainty

An overall theme of High Country life as revealed in the retrospective interviews was the emphasis farmers place on survival. They live with the uncertainty created by government policy and its impact, the climate, the exchange rate and rising prices. Certain words crop up throughout conversations. Life is about 'survival', it's a 'fight for survival', 'it's a battle' etc. For example, two people used the word 'battle', four used the word 'fight' and two the words 'survival' or 'survive', in connection with the tenure review process. All the adaptations and changes in practices that farmers have made are to increase their chances of survival or making a reasonable living from their farming. In the past farmers said they or their parents survived because of the odd times when the prices of fine wool soared. They only needed this to happen every ten years or so and farmers persevered between these times of surplus by living carefully and following the belt-tightening exercise very familiar to many farmers, as they kept their costs to a minimum. This boom and bust mentality is changing as farmers try to diversify their sources of income to provide greater certainty and reliability. They are now farming for meat and wool, breeding Merinos and other breeds of sheep to be dual purpose. The increase in weight of ewes and other factors are increasing the lambing percentages, a necessary part for an industry that now finishes lambs for the meat market rather than having them on a property for life, as in the past. Some are starting or continuing a stud as part of their business. Many manage cattle alongside sheep. They are taking up contracts for fine wool with Merino NZ, Icebreaker and other companies that are for a period of three years or more. They are investing in irrigation to make the lower and flatter parts of their properties more productive, a necessity if part of their farming is now to finish sheep and cattle for the market. They are starting or increasing their businesses associated with recreation. All in all it could be said that the nature of High Country farming has changed enormously over the period of 40 years under examination in this report.

## 6.7 'Belonging' to the land

One aspect of High Country farming that is probably unchanging is the way in which High Country farmers identify with the 'place' in which they live. Their identities are strong. They see themselves as part of the High Country story from when their land was first farmed. For example, note how in the following quote, the farmer himself is not 98 years old but he thinks in terms of being part of his family's time on this particular bit of land – the land and his family and himself are one and the same.

And in the environment court, he is considered an expert ... we've been on [name] station for 98 years. We're now still not considered an expert. He can come along. He's been operating for 12 years, and he's now considered by the Environment Court, as an expert witness. Right-oh.

In this way they also see the sheep as part of this place. The sheep are bred to 'fit', to look as if they belong. In this way a product made from High Country wool, such as one of Icebreaker's fine wool garments, carries with it a cultural, invisible, unsubstantial element that is marketed as part of its appeal. Their products are the result of fighting for a living, or a battle for survival, not only against the elements of such a harsh and extreme climate, but against the challenges thrown at them politically. Gray (1998) describes this relationship as consubstantiation, where something like a sheep represents a link between the farmer and the land, and carries something of both. A similar concept is that of terroir, in which produce, usually wine, carries with it something of the geography, geology and climate of a particular place. Thus the reputation of High Country stations and farmers has been established over about 150 years and it is seen as an important element to maintain and continue into the future not only for commercial reasons but because it is part of who these people are, how they define themselves. As this identity is being challenged it can be very distressing for people because it is challenging the very person they are and the meaning they ascribe to their life.

In a way this relationship between a product, the land it comes off and the farmer can be compared with the organic kiwifruit growers conviction that their fruit is a product not only of the physical

work on the orchard, but of their beliefs about it and the care they have taken to produce it (Hunt, 2010). An agricultural product is the result of the care lavished on it and the environment in which it is grown. Hence, when it is demonstrated that farmers are taking care of waterways, are not wasting water and energy, are paying for their emissions or compensating for them by planting trees (or building up carbon reserves in soils), are making sure their animals are protected from wind, rain, and hot sun by the provision of shelter for them, are growing nutritious grass, clover and crops to feed them, a higher value market is ensured as these attributes become part of a product's selling point.

### **6.8 The pro-active nature of High Country farmers**

What is very evident from this report is that High Country farmers are very pro-active on their own behalf. They are prepared to get political and stand up for themselves as shown by the farmer who got himself elected to the Wool Board when he became unhappy with the way it was going, and the farmers who have contacted their Member of Parliament or taken their concerns to politicians in Wellington. When farmers recognise that something needs changing on their farm they research who would be the best person to help them and they seek that person out. They banded together to spread RCD throughout their regions. These farmers appear to act rather than think about acting. Where has this confidence come from? It could be that they have the confidence of their strong identity or maybe it is working and living in this landscape that has bred these assertive people who believe that they should have a voice and be heard in policies to do with the way their land is to be governed. These farmers are not passive victims of the changing economic, political, environmental and social climate in which they farm.

Health and lifestyle were mentioned by some farmers as examples of household and personal drivers to which farmers responded. Although not explicitly articulated in the interviews as such by all farmers, personal values, experiences, motivations and beliefs are important social attributes of the decision making process. According to Darnhofer *et al.*, (2009) social issues and trade-offs within the farming family underlie all adaptation. In order to understand and not only describe farmers' responses, the family farm and its household members (or *actors* following Johnsen, 2003) should be placed within the centre of the family farm unit, where it has the ability to develop strategies and act within a certain set of opportunities and constraints.

In previous research values and attitudes towards debt were found influential in how the rural downturn of the mid 1980's affected farmers' perceived impact and response (Wilson, 1994; Johnsen, 2003). Farmers avoided major farm adjustments because they were unwilling to take on extra debt (Johnson, 2003). In this research, based on the qualitative interviews, it is not possible to make statements about debt levels without additional data from the individual farmers.

### **6.9 Resilience ideas**

Many of the descriptions of farmer responses above demonstrate the resilience of High Country farmers. They have tackled the issues confronting them with energy and perseverance.

#### **6.9.1 Contracting**

A particularly strong importance was placed by farmers on the role that long-term contracts play in helping them manage uncertainty. Contracts that lasted for three years or more enabled them to plan ahead, to produce a product of which they were very proud and to have closer relationships with the buyers of their wool. This advocacy of contracts contrasts with the attitudes of sheep/beef farmers on more lowland properties who are concerned about always getting the best prices and not being so prepared to forgo the possible higher price they might have obtained from the current market (van den Dungen *et al.*, 2011). High Country farmers just saw this as the price they had to pay for some stability of financial return, with the realisation that sometimes they would win and sometimes lose, but mainly they would win.

### **6.9.2 Diversity**

At the beginning of this report descriptions were given of the different ownership patterns represented by the farms in the ARGOS study. Just as in lower altitude farms there are many different ways of being able to work on a High Country property. High Country farmers had many options available to them in terms of such things as their sheep breeding, management of their sheep to beef ratio and so on. However, underlying this was the uncertainty under which they live and often the scarcity of money to develop their property in ways that would make it more resilient. In addition to the things mentioned above there were also other aspects of High Country living which indicated the resilience of those who live there.

### **6.9.3 The role of female partners**

The way in which the women of the High Country participate in farming life has been placed in the topic of resilience because it seems as if the younger women of the High Country see themselves as more equal partners with their husbands than the previous generation. In the past, a male High Country farmer often married the local teacher or dental nurse (see Gardner, 1983). These were capable women but with different skills from the more recent incomers. Nowadays, they seem more likely to be business or market oriented though it would still be expected of them to prepare gourmet meals for large numbers of people. They present as extremely articulate and confident. It would also appear that they have on-farm skills as well, with their own dogs and horses, and so are able to work alongside their husbands in a way that was probably unheard of even 20 years ago. This is so important to them they employ nannies and home help to enable it to happen. In this way they keep in touch with the landscape/farm and their husbands.

### **6.9.4 Succession**

Succession is to do with resilience also, because the way in which land is transferred to the next generation plays a role in the wellbeing of the people concerned, the way the land is farmed, and the financial wellbeing of the family over the generations. For example, one woman talked of how her father-in-law taught her to do the GST accounting, how to train her dogs and so on. He made her transition to High Country farmer as smooth as it could possibly be. Her mother-in-law also played a part, offering her practical advice about how to cope with the loneliness and isolation. The uncertainty of living in the High Country plays a part in succession as it limits the planning that people are able to do.

### **6.9.5 Land and resilience**

It was assumed that the land would be resilient if it was 'properly' cared for. Caring for the land included keeping on top of the weeds and fertilising it. One farmer said you would not find gorse or broom on their property. Another indicated that they used GPS for their soil tests so that fertiliser could be placed more accurately where it was needed.

### **6.9.6 Community**

Though High Country farmers were often very isolated they had their own strong community links – often to a far flung group of other High Country farmers which they might have met with annually, with a consultant, over many years. Another indication of the importance of community was how in the event of a 'big snow' the whole community helped with snow raking. One woman mentioned how the local store allows them to use it as a depot for household good which can be left for them to pick up later. Farmers liked to indicate how they were valued by the local community.

## **6.10 Research design: The retrospective interviews**

The retrospective interviews were designed to elicit a narrative of change from the individual farmer's perspective. As a result, the analysis in this report is based on an attempt to develop logical explanations of the current situation on each of the farms. Many quotations from the interviews have been used because it is the opinion of the authors that farmers are better expressing their



situation than we are, and are more likely to be meaningful to other farmers and people who work in the agricultural sector.

Although the retrospective interviews provided valuable insights into farmers' responses to specific events and drivers, the research also had its limitations which have been listed below:

1. Only those 'surviving' the impact of events and shocks and remaining in farming were interviewed in this research and, as a result, it is likely that unsuccessful response or untenable situations at the time of change have not been identified.
2. The narratives relied on the farmers' ability to remember certain events and their response to them. Some farmers were better at recalling periods of time than others. The level of perceived impact and memory intertwined and has most likely coloured the individual farmer's response. As a result, the logic and coherence of the resulting narratives may hide what were largely disjointed and 'off the cuff' responses at the time.
3. Farmers had to perceive the event as something to which they would respond in the form of farm adjustments. The potential for the interviewers to pursue responses was important to establish if 'no effect' was indeed a response to a driver, as opposed to one which better conformed to the mindset of the farmer. As illustrated in Chapter 4, farmers were as likely to consider climatic extremes (for example droughts) to be a given and known condition of farming as they would acknowledge them as a driver for management adjustment.

Such limitations to the research design do not imply that the findings are invalid. Rather they impact on the interpretation of the results. For example, without greater understanding of conditions that led to failure of farms facing similar changes, it is impossible to establish if the persistence of the farmers interviewed is the result of general response trajectories or of specific features or conditions of that response. In other words, failed farmers may have attempted similar response strategies and it is impossible to distinguish between such responses with data derived solely from the ARGOS farms. The second and third limitations both suggest that the generalization of findings to a wider population of farmers should be qualified in regard to the current social, economic and environmental condition of farms and the individual farmer's level of experience with particular types of drivers in the past.

Overall, the retrospective interviews have provided a rich source of information and describe the ongoing reality of the lives of High Country farmers as they work with their land to produce products of which they can be proud. Even though there were only eight farmers interviewed in this part of ARGOS, the articulate nature of these farmers, male and female, has provided a plentiful source of quotations which illustrate in an exemplary fashion their thoughts and actions as they have confronted what it means to farm in a beautiful environment undergoing challenges not only due to the extreme nature of the physical environment but also due to the social, economic and political context in which they find themselves.

## Chapter 7 Conclusion: Responses to shocks and pathways to sustainability

High Country farmers, or at least those in this very small ARGOS sample of eight, have been shown in these retrospective interviews, to be strong willed, articulate, reflective and reflexive thinkers, and a very pro-active group. In the past they have been able to take confidence from their identity as important to both the New Zealand economy and from their role as iconic representatives of the New Zealand national identity and way of life. However, High Country farming is changing.

The sample of High Country farmers chosen to participate in the ARGOS programme illustrated the many different forms of farm ownership available. Farmers can now own or lease land under many different arrangements. One of these options is to purchase their formerly leased land through the tenure review process. In anticipation of this process taking a certain length of time and resulting in a surplus due to the exchange of high altitude land for freehold rights, some farmers planned ahead by buying land, investing in irrigation and decreasing their wether stock. This implementation of strategic planning left them with hundreds of thousands of dollars of unexpected debt because the tenure review process has taken so much longer than expected. In consequence they have lost faith with Government and planning ahead has been presented as a risky pursuit.

During this period the fine wool market has been depressed, and the overall economic climate has become increasingly uncertain, while prices of inputs keep rising. The extremes of weather experienced in the High Country and the prevalence of many pests and disease add together to present High Country farmers with a very challenging environment in which to farm. They are taking a particular pathway to sustainability through:

- Diversification - producing both meat (Merino lambs and beef) and fine wools.
- Developing a niche market for Merino meat.
- Sheep breeding – better genetics, feed.
- Managing to balance sheep and beef production.
- Reducing or eliminating their wether flocks as a result of tenure review.
- Developing irrigation.
- Purchasing more land – sometimes run-off blocks at a lower altitude to finish animals.
- Intensification - finishing stock themselves on irrigated and cultivated land, growing their own supplementary feed crops.
- Making long term contracts of 3- 5 years for fine wool with companies like Icebreaker, with whom farmers develop personal relationships.
- Starting up or maintaining businesses associated with recreation.
- Starting up or maintaining stud businesses, introducing breeding traits to fit sheep more to their environment but to produce both meat and wool of differing qualities.
- Understanding and using their land in different ways from the past as they become aware of its different strengths, e.g., different facing valleys, different soils.
- Managing rabbits better through developing a greater understanding of the rabbit life cycle.
- Reducing wilding tree infestations.
- Perseverance.
- Being pro-active politically - making representations of their situation to people in powerful positions in local and national government, other agencies and industry bodies.

This preliminary research has focused on providing an overview of the qualitative data relevant to key drivers of change and farmers' resulting strategies. This report has shown a common and shared range of responses utilised by farmers who are confronted with an ever-changing environment of external and internal drivers. The key drivers of change identified were the economic restructuring of the mid-1980s, droughts and snow, rising input prices and market price fluctuations.

## References

- Biotechnology Learning Hub. 2007. Impacts of the footrot gene-marker test on New Zealand sheep farming.  
[http://www.biotechlearn.org.nz/themes/future\\_farming/impacts\\_of\\_the\\_footrot\\_gene\\_marker\\_test\\_on\\_new\\_zealand\\_sheep\\_farming](http://www.biotechlearn.org.nz/themes/future_farming/impacts_of_the_footrot_gene_marker_test_on_new_zealand_sheep_farming). Downloaded on 19/07/2011.
- Britton, S., Le Heron, R., and Pawson, E. 1992. *Changing places in New Zealand: a geography of restructuring*. New Zealand Geographical Society: Christchurch.
- Brower, A.L. 2008. *Who owns the high country? The controversial story of tenure review in New Zealand*. Craig Potton Publishing: Nelson, N.Z.
- Brower, A.L. 2006. *Interest groups, vested interests, and the myth of apolitical administration: The politics of land tenure reform on the South Island of New Zealand*. Report submitted to Fulbright New Zealand, February 2006.
- Campbell, H.R. 1994. *Regulation and crisis in New Zealand agriculture: the case of Ashburton Country, 1984-1992*. Unpublished PhD thesis, Charles Sturt University, Australia.
- Chatterjee, Srikanta. 1996. Ten years on: an appraisal of New Zealand's economic restructuring 1984-1994. *International Journal of Social Economics*, 23 (10/11):23-45.
- Deloitte. 2011. *Red Meat sector strategy report*. Produced by Deloitte for Beef + Lamb New Zealand Limited and Meat Industry Association of New Zealand. March 2011.
- Day, N. and Buckley, H.L. 2007. *Two decades of vegetation change across tussock grasslands of New Zealand's South Island*. Bio-Protection and Ecology Division, Lincoln University. [http://www.highcountryaccord.co.nz/downloads/Tussock-Biodiversity\\_study-paper\\_2008-05.pdf](http://www.highcountryaccord.co.nz/downloads/Tussock-Biodiversity_study-paper_2008-05.pdf). Downloaded on 28/08/11.
- Dominy, Michèle D. 2001. *Calling the station home. place and identity in New Zealand's high country*. Rowman & Littlefield Publishers: Lanham, Maryland.
- Fairweather, J. R. 1989. *Some recent changes in rural New Zealand society*. Discussion paper no. 124. Agribusiness and Economics Research Unit, Lincoln University, N.Z.
- Farmers Weekly. 2009. Minaret ruling crowns accord's stand. *Farmers Weekly*, 10<sup>th</sup> August 2009. [www.nzfarmersweekly.co.nz/cgi-bin/article.cgi?cmd-show&article\\_id7860.html](http://www.nzfarmersweekly.co.nz/cgi-bin/article.cgi?cmd-show&article_id7860.html). Downloaded on 19<sup>th</sup> July, 2011.
- Federated Famers. 2009. Minaret Station a victory for property rights. *Scoop*, 3 August 2009. [www.scoop.co.nz/stories/BU0908/minaret-station-a-victory-for-property-rights.htm](http://www.scoop.co.nz/stories/BU0908/minaret-station-a-victory-for-property-rights.htm). Downloaded on 19<sup>th</sup> July 2011.
- Gardner, W.J. and Amuri County. 1983. *The Amuri: A county history*. Culverden: Amuri County Council.
- Gouin, Daniel-M. 2006. *Agricultural sector adjustment following removal of government subsidies in New Zealand*. AERU Research Report no. 284, August 2006, Lincoln University, N.Z.
- Gray, J. 1998. Family farms in the Scottish borders: a practical definition by hill farmers. *Journal of Rural Studies* 14(3): 241-356.
- Greer, Glen. 2004. *The impact of tenure review on the economic putput of crown pastoral lease land*. A confidential report to MAF Policy, AERU, Lincoln University, February 2004.
- Greer, Glen. 2005. *The costs of footrot and the impact of the footrot gene-marker test in New Zealand*. A report to the Sustainable Farming Fund, March 2005. Agribusiness and Economics Research Unit, Lincoln University and the New Zealand Ministry of Agriculture and Fisheries Sustainable Farming Fund. Research report, vol. 274.
- Haszler, H., Edwards, G., Chisholm, A. and Hone, P. 1996. The wool debt, the wool stockpile and the national interest: did the Garnaut Committee get it right? *Economic Record* 72 (218):260-271.
- Hazell, P., and Wood, S. 2008. Drivers of change in global agriculture. *Philosophical transactions of the Royal Society B-Biological sciences* 363 (1491):495-515.

- High Country Accord. (n.d.1). What is the High Country? A spectacular and challenging environment. [www.highcountryaccord.co.nz/index.php?page=8](http://www.highcountryaccord.co.nz/index.php?page=8). Downloaded on 12<sup>th</sup> May 2011.
- High Country Accord. (n.d.2). Who owns the High Country? [www.highcountryaccord.co.nz/index.php?page=18](http://www.highcountryaccord.co.nz/index.php?page=18). Downloaded on 12<sup>th</sup> May 2011.
- High Country Accord. (n.d.3). Why should New Zealanders be concerned? [www.highcountryaccord.co.nz/index.php?page=26](http://www.highcountryaccord.co.nz/index.php?page=26). Downloaded on 12<sup>th</sup> May 2011.
- High Country Accord. (n.d.4). Government bad faith stops tenure review in its tracks. [www.highcountryaccord.co.nz/index.php?page=12](http://www.highcountryaccord.co.nz/index.php?page=12). Downloaded on 10<sup>th</sup> May 2011.
- Holling, C. S. 2001. Understanding the Complexity of Economic, Ecological, and Social Systems. *Ecosystems* 4(5):390-405.
- Hopkins, J., Morehart, M., Johnson, J., Culver, D. and Caldwell, J. 2004. What Affects Farmers' Ability to Adjust: Evidence from the United States and Canada. Paper read at *International Agricultural Trade Research Consortium: Adjusting to Domestic and International Policy Reform in Industrial Countries*, at Philadelphia, PA.
- Hunt, Lesley.** 2010. Interpreting orchardists' talk about their orchards: the good orchardists. *Agriculture and Human Values* 27(4): 415-426.
- Hutching, G. 2009a. Possums in New Zealand. Te Ara - the Encyclopedia of New Zealand. [www.TeAra.govt.nz/en/possums/1](http://www.TeAra.govt.nz/en/possums/1). Downloaded 21/07/2011.
- Hutching, G. 2009b. TB and possum control. Te Ara - the Encyclopedia of New Zealand. [www.TeAra.govt.nz/en/possums/5](http://www.TeAra.govt.nz/en/possums/5). Downloaded 21/07/2011.
- Johnsen, Sarah. 2003. Contingency Revealed: New Zealand Farmers' Experiences of Agricultural Restructuring. *Sociologia Ruralis* 43 (2):128-153.
- Land Information New Zealand (LINZ). 2011. Tenure review background and process. [www.linz.govt.nz/crown-property/pastoral-land-tenure-review/tenure-review/tenure-review-background](http://www.linz.govt.nz/crown-property/pastoral-land-tenure-review/tenure-review/tenure-review-background). Downloaded on 24<sup>th</sup> June, 2011.
- Land Information New Zealand (LINZ). 2003. Tenure review benefits appearing on the landscape. *Landscan: A new update for Land Information New Zealand clients*. Issue 26: 6-7.
- Langer, R.H.M. 1990. *Pastures: Their Ecology and Management*. Auckland: Oxford University Press.
- Lattimore, R.G and Wallace L. T. (eds) 1987. *Rural NZ – what next?* Discussion Paper 109, Agribusiness and Economics Research Unit, Lincoln University.
- Ledgard, N.J. 2004. Wilding conifers - New Zealand history and research background. In Hill, R.I., Zydenbos, S.M. and Bezar, C.M. (eds), *Managing wilding conifers in New Zealand - present and future*. Proceedings of workshop held in conjunction with the annual general meeting of the New Zealand Plant Protection Society in Christchurch on August 11, 2003. Published by NPPS: 1-25.
- Le Heron, R. 1989a. A political economy perspective on the expansion of New Zealand livestock farming, 1960-1984 - Part 1. Agricultural policy. *Journal of Rural Studies* 5(1): 17-32.
- Le Heron, R. 1989b. A political economy perspective on the expansion of New Zealand livestock farming, 1960-1984 - Part 2. Aggregate farmer responses - evidence and policy implications. *Journal of Rural Studies* 5(1): 33-43.
- Lough, R.S. 2009. The current state of rabbit management in New Zealand: issues, options and recommendations for the future. Report written for MAF Biosecurity New Zealand, October 2009. <http://www.biosecurity.govt.nz/files/pests/rabbit/rabbit-management-in-nz.pdf>. Downloaded 22/08/11.
- Ludemann, Ele. 2011. Labour's stance on pastoral leases will force more into freeholding. Homepaddock, February 17, 2011. <https://homepaddock.wordpress.com/tag/minaret-station/>. Downloaded on 19<sup>th</sup> July 2011.
- MAF. 2010. *Our land, our future* 1999 [cited 14-12 2010]. Available from <http://www.maf.govt.nz/mafnet/schools/kits/ourland/timeline/timelin5.htm#E11E5>.

- Molloy, L.F. 1980. Land alone endures. Land use and the role of research. In *D.S.I.R. Discussion Paper*.
- Morris, Carolyn. 2006. Canines, Ovines and the Gendering of High Country Farming. Paper presented at the *Agrifood Network Meeting*, Dunedin.
- Morris, Carolyn. 2005. Farming the Pelennor Fields: Mythologised Landscapes and Farmer Subjectivity in the South Island of New Zealand. Paper presented at the *Agrifood Network Meeting*, Rosslyn Bay, Queensland, Australia.
- Morris, C. 2004. The great depression and the downturn: narrating continuity in the high country. *New Zealand Sociology* 19(2): 281-298.
- O'Connor, K.F. 1978. Evolution of a New Zealand High Country pastoral run. In *Society and Environment - the crisis in the mountains*, D.C. Pitt (ed.), pp.187-224. Working Papers in Comparative Sociology, No. 8, University of Auckland, N.Z.
- Parliamentary Commissioner for the Environment (PCE). 2009. *Change in the high country: environmental stewardship and tenure review*. PCE: Wellington, N.Z., April 2009.
- Parliamentary Commissioner for the Environment (PCE). 2004. *Growing for Good*. Wellington: Office of the Parliamentary Commissioner for the environment. PCE: Wellington, N.Z.
- Parliamentary Commissioner for the Environment (PCE). 1991. *Sustainable land use for the dry tussock grasslands in the South Island*. PCE: Wellington, N.Z., March 1991. <http://pce.parliament.nz/assets/Uploads/Reports/pdf/Pre97-reports/Sustainable-Land-Use-for-the-Dry-Tussock-Grasslands-in-the-South-Island-March-1991.pdf>. Downloaded on 28/08/11.
- Peden, R. 2009. Rabbits - using predators for control. Te Ara - the Encyclopedia of New Zealand. [www.TeAra.govt.nz/en/rabbits](http://www.TeAra.govt.nz/en/rabbits). Downloaded 13/05/2011.
- RSNZ (Royal Society of New Zealand). 1995. Rabbit and land management programme ends. *Science in the News*, 30 June 1995. <http://www.royalsociety.org.nz/1995/06/30/pr-rabbit-and-land-management-programme-ends/>. Downloaded 22/8/2011.
- Rhodes, T., Willis, B. and Smith, W. 2000. *Impediments to Optimizing the Economic and Environmental Performance of Agriculture*. Wellington.
- Richards, L. 1999. Data Alive! The thinking behind NVivo. *Qual Health Res* 9 (412).
- Rosin, C., Hunt, L., Campbell, H. and Fairweather, J. 2007. Becoming the audited: response of New Zealand sheep/beef farmers to the introduction of supermarket initiated audit schemes. In *ARGOS research report*. Christchurch: Agricultural Research Group on Sustainability.
- Setten, G. 2004. The habitus, the rule and the moral landscape. *Cultural Geographies* 11: 389-415.
- Smit, B., McNabb, B. and Smithers, J. 1996. Agricultural adaptation to climatic variation. *Climatic Change* 33 (1):7-29.
- Smit, B. and Wandel, J. 2006. Adaptation, adaptive capacity and vulnerability. *Global Environmental Change* 16 (3):282-292.
- Smith, W. and Montgomery, H. 2003. Revolution or evolution? New Zealand agriculture since 1984. *GeoJournal* 59:107-118.
- Smith, W. and Saunders, L. 1995. Agricultural Policy Reforms and Sustainable Land management: A New Zealand Case Study. *Australian Geographer* 26 (2):112-118.
- Thomassin, P. J. and Cloutier, L.M. 2000. Relative Technical Efficiency: Data Envelope Analysis (DEA) an Joint/Mix Farm Production in New Zealand. In *American Agricultural Economics Association Annual meeting*. Tampa, Florida.
- van den Dungen, S., Rosin, C. and Hunt, L. (2011). Recalling management changes in the New Zealand sheep/beef and wool sectors as response to external and internal drivers: Preliminary analysis of ARGOS retrospective interviews, ARGOS Report 11/01, June 2011.
- Vowles, Jack. 1995. The Politics of Electoral Reform in New Zealand. *International Political Science Review* 16 (1):95-115.
- Wallace, N. 2008a. Crown considers Minaret a test case. *Otago Daily Times*, 14<sup>th</sup> October, 2008. [www.odt.co.nz/print/27154](http://www.odt.co.nz/print/27154). Downloaded on 13<sup>th</sup> July 2011.

- Wallace, N. 2008b. NZ avoids boycott by dropping mulesing. Otago Daily Times, 25<sup>th</sup> April, 2008. [www.odt.co.nz/tags/agriculture/3988/nz-avoids-boycotts-dropping-mulesing](http://www.odt.co.nz/tags/agriculture/3988/nz-avoids-boycotts-dropping-mulesing). Downloaded on 23/08/2011.
- Wilson, Olivia. 1994. "They Changed the Rules": Farm Family Responses to Agricultural Deregulation in Southland, New Zealand. *New Zealand Geographer* 50 (1):3-13.

### Appendix I: Timeline

Most important driver <sup>xxvii</sup>	Year	Sheep	Beef	Wool
	1851	First Merino stud in NZ (Auckland)		
	1860	Walter Peak Station founded		
	1895	First register of Merino studs		
	1970			
Economic	1973	UK enters EEC/EU, oil crisis, commodity boom but wool dip		
Environmental	1975	Big wind in Canterbury		
Economic	1976	High inflation		
	1979	Oil crisis (carless days)		
Environmental	1981	Drought (South Canterbury, North Otago)		
	1982	Drought (South Canterbury, North Otago)		
	1983	Drought (South Canterbury, North Otago)		
Policy/ Economic	1985	SMPs stop, fertiliser subsidies removed, land prices start to fall		
Environmental	1986	Drought?		
Economic	1987	Sheep numbers fall, prices rise to 2002		
	1988	Drought, move to chilled cuts from frozen carcasses, low farm gate prices		
Environmental	1989	Drought, DDT banned		Peak prices
Economic	1990	Land prices start increasing		
	1991	Wool Board pulls support scheme, perceptions about fat (LDL), monitor farm programme starts (MWNZ)		
Environmental	1992	Snow		
Economic	1994	Privatisation of extension services, lamb crash		
	1995	Merino NZ (Inc) formed, Oil crisis	Beef crash	
Policy	1998	Crown Pastoral Lands Act - tenure review process		
Economic?	1999	McKinsey Report - formation of Merino NZ Company		
Policy	2002	Another tenure review round, peak prices		
Economic	2003	peak prices, drought		
Environmental	2004	Snow, drought		
Economic	2005	Lower prices	Price rising	
	2006	Lower prices		
	2007	Government paper - to increase rentals of HC land, drought, lower prices		
	2008	drought, lower prices		
	2009		Peak	Wool levy cut
Economic?	2010	Wool levy no longer collected		

<sup>xxvii</sup> This column is a bit of a problem as most drivers have a social factor as well, and this is often more about the impact of something, not the driver.

## Appendix II: Quotes

<sup>1</sup> Farmer (male):... and he [Dad] was always a bit disappointed cause he'd been in the Canterbury cavalry along with one or two others in the area and he wanted to head off to war like everyone else but he wasn't allowed to cause he was supposed to stay and look after his farm. And he said that was the most difficult time for him, 'cause he felt quite young and should've been there and had to carry on here.

Farmer [female]: And there was no other labour around so he had to shear the sheep, crutch the sheep, [crosstalk] some of the other surrounding farms as well and he built sort of very, he felt, I think he felt quite sad and a bit bitter about it really [crosstalk] the soldiers were glorified when they came home, but they forgot about those people keeping the home fires burning.

Farmer (male): Mum said it was a very difficult time. The shortages of everything ...

There were four boys in the family, and he was third-youngest. And somehow or other, he was the one who didn't go to war. The other boys went to war, which annoyed him. But, he was the chosen one to do the farming, and I guess because of that, he got to take over the property. Um, and obviously a huge amount of debt. And like a lot of them, managed to get rid of a lot of that in the early 50's. That big wool – [Korean War – boom in wool prices] (male).

<sup>2</sup> ... and then of course at that time, DSIR, I remember growing up with that, cause I was born in '54 and I remember around the kitchen table and I was trying to think of all the old icons [crosstalk] and McCaskill - what's his name? - Lance McCaskill, yeah, yeah, that's right. And I remember them all sitting around the table ... they used to talk about all the different issues and I thought more things, more of the science was done around the table than was done anywhere else because they'd come up with a problem and they'd say that could be this or it could be that and then they'd set things alight and I think where DSIR did some huge work ... and I often think of those times and think 'golly, you know, that is pretty special time' because subsidies had come in, so therefore people were subdividing, putting fertiliser out and they're trying to get clovers established and I remember quite vividly sitting around the table ... (male)

... but anyway he [neighbour and publican] used to arrive and this particular day I think he was wanting something and he came down to the woolshed ... and he was talking about clover ... and while he was standing there he said, 'why is that clover doing so well here Jack' and he looked at it and there was this great big bunch of clover and dad said, "Well I don't know". He said, "Well what do you put there?" "Well that's probably where we empty out an old tin of salt that's gone a bit hard", ... and that came up around the table and that was how quickly sulphur super came. They tried it, they did all sorts of things, of course they weren't allowed to put large amounts of sulphur into aeroplanes. But it's just though those trial and errors, but you had the science there with you, so they actually all worked together. And you actually became very close to those guys and should any observation come up that you couldn't understand you quite often talked to them about it, so that's how ... how science happens I think, cause you're actually, all farming is a small scientific experiment then you really just need a bit of expertise to help you along the way. I often think of those times ... (male).

<sup>3</sup> We've got some old photographs in the hallway and one of them was the - remember the five pound note, you might remember that? ... I can just remember it ... There was a photograph there with trees in it, and we've got a photograph of grandfather planting the poplars, and he was maintaining he had a stake in every five pound note. But um, that was the first time the lake came up, and that five pound note island, well it was just a little lake really and it was right above where the bridge was, and it was flooded, and then there was the big island further up, which is still intact even though the lake came up [unclear] and that was called Ram Island because Pukaki Downs used to put all the rams out there and they used to go out on a boat and get all the rams before it was flooded and they were real characters ... I think it was a fair bit of Dutch courage because you had to row out there and actually have a bit of a muster [crosstalk] and tie their feet and put them in the boat and row back. (male)

<sup>4</sup> Female farmer: But also we didn't have possums in the area, [crosstalk] we could control the rivers between the Ohau and the Pukaki river... natural boundaries, but of course once they dried up or the minimum flow, so we started to get possums which, and so we went through a period of being endemic TB area and so all those things. It was about fifteen years ago.

Male farmer: ... should've maintained minimum flows down all these rivers, that would've been the sensible



thing. (HC3)

<sup>5</sup> Male farmer: But I think the most detrimental thing was when they fenced the rivers, I'm talking the Tekapo, Pukaki and the Ohau. What we didn't realise - we had a large block out there, it was four thousand acres, it was semi arid, 19 inch rainfall, well it wasn't semi-arid but it was pretty close to it. The wonderful thing was that, we used to have just on a thousand ewes there, at lambing, but all the fertility was done on river water, and two things, really they had the fertility so it was always nice pickings down there, you'd find them [sheep] down there early in the morning, but they'd rotate that, and they'd take that fertility and they were moving around those blocks, the moment they fenced those off, we put 300 sheep out there and they'd suddenly starve and it completely destroyed that block. ... Graham White [scientist] did quite a bit of work out there, and he was watching the changes, 'cause as the stock came off it the tussock was dying too, you see, and he was watching hundreds of varieties but then it changed and in one year there was a thousand percent increase in porina and he said to me, he said 'I think you're going to end up losing tussock to porina and he was 100 percent right, within 24 months it was gone wasn't it? ... He didn't know what the event was that caused it. Female farmer: Suddenly it was just - and we noticed a lot more porina beetles at night on our windows didn't we about the same time?

<sup>6</sup> I spoke before about some of the country was subdivided off the property and it would be winter country. In some ways our property's really a bit lopsided in that there's a lot of summer country compared to winter country. (male)

Our original homestead here is on the lake, and all right down through the whole place. Yeah, huge impact. And I wasn't around to experience that, but [in-laws] certainly did. (female)

They used to have people at the power station -he used to look after that. He was an ex-Royal navy guy. We used to go down with him sometimes - just like a navy ship. It was all shined up, and his wife ran a wee shop. The school was there of course and the school teacher and then there ...was a road gang - probably about maybe 20 houses there, so there was a whole lot of wee communities plus farms in between so therefore they all disappeared when the big raising came ... (male)

[The in-laws] best friends were at [name] and of course the Ministry of Works bought [name] Station to turn it into the town of [name] so they moved ... and they lost their really best friends who were just down the road and a very close association with each other so, and they were very Victorian [in-laws] so it was a whole culture change for them and they use to talk about the drone all day, for twenty two hours a day there was the drone of the big trucks and machines. The canal's just above them and from four until six in the morning they shut down to maintain the machinery, and that was the only time they used to wake up, 'cause they got so used to the noise and so they'd always find themselves awake at four in the morning. (Female)

<sup>7</sup> Male farmer: I remember going to this huge cavern, I still remember it because it was quite impressive when I was a little fella with all these Maori rock drawings and that was all flooded of course, but that was large ... I've often wonder about that, whether anybody actually studied it before it went under.

Female farmer: Well [husband's] artistic so he remembered bird men

Male farmer: Like a wee bird's on their shoulders [crosstalk]. ... it was a massive cavern and it always fascinated me when I thought about it afterwards. They must've had to put two or three on each other's shoulders to get them high enough to do it, but it was probably nasty weather and they probably camped up in there and had the fire going and had to pass the time 0:25:59.5

Female farmer: It was an incredible project. I'd love to go back in time and have a look because the Ohau River was absolutely beautiful - they still still reminisce about it being the best trout fishing river in the world and it was a very beautiful river and I'd love to go back and see what this whole area looked like prior to that.

<sup>8</sup> The biggest impact was that the land was subdivided off the property [for the township]. (male)

Interviewer: So to have [township] develop the way it has, has that raised any issues for you about people's behaviour?

Male farmer: ... I would suggest it's probably subsided a lot. When there was a town of 5,000 people ... they probably had 1,000 dogs and other things just over the fence, but it's obviously a lot smaller town and the

influx at holiday times ... obviously we have more people walking up our gate at those times but as I say, it does, it reflects opportunity.

<sup>9</sup> ... early 80s in actual fact were quite growth years, more subsidisation under the old system which our property never took advantage [of]. We were probably too busy killing rabbits all the time quite frankly. And so there was all the development that was done on other properties ... through SMPs, and the fertiliser subsidies and that sort of thing - we weren't putting a lot of fertiliser on so in some ways didn't experience those limitations [later]. (male)

<sup>10</sup> So I guess the old wool plans, they were important parts of dad's management. You know the partnership between wool and the subsidies to do some of that fencing. They were very important in some of those early days. And then you get through to my time with LDL. Um, they were very instrumental in doing a huge amount of development. That was in the '80's, I guess ... So, I suppose that's sort of the important things that I guess directed it. Gave us the direction we would have taken (male).

But when we got LDL, we actually got most of our improvement as well. I know that - we may have been told that we could have LDL if we capitalized on improvement. I said "no" because of fertility and the time frame of the slowness of high country development. We needed the scheme up and running and producing before we could increase stock numbers. We got in and out of LDL right at the end. It must have closed right after we signed up, so it must have been right at the very end of the scheme. I know that I had a rather robust debate ... at the time to make my case ... before we could prove that we could actually do something. Past leases have a livestock living on them. We had to apply to get our livestock - our maximum livestock numbers changed, anyway. And it wasn't the issue of getting it done. I think we had something like - in the start of 1980, we must have had about 12,000 stock units. Now we're carrying about 21,000 stock units. (male)

<sup>11</sup> I really struggled to understand them at the time. I think we [he and his brother] did have an LDL – we got a bit of money to subdivide the property. 'Cause I remember we talked about wanting to buy another farm, but I'd worked away from the property for a few years in the late 70s, and about 1980/1981 I was overseas. I came home in 1982. And at that stage, I suppose because of the subsidies, and also the tax breaks with development, and I suppose the LDL money and the, um, other – there's a whole lot of cheap government money being thrown at development and the ability to write off tax values. To buy another property would have been out of the question. I remember going to the Rural Bank, and they said, "If you want to subdivide your property, we'll give you whatever money you want. If you want to go and buy another property, go to someone down the high street." It was the difference between 7.5% interest rates and 18% interest rates. But, you know 20/20 vision is hindsight. ... the amount of money we spent on our two properties, we probably could have bought another 10,000 stock units. So, you know. But in 1983/82, um, it just looked totally unrealistic. (male)

<sup>12</sup> Um, we're not involved in tenure review. We will be, at some stage ... There's probably three things in the mix really. The first is the uncertainty of rental, that's now become clearer as to what the outcome is there, or will be in twelve months time. There's tenure review itself, and up till now the Crown or agencies through the crown have tended to lean towards repossessing, or whatever, that high altitude country which is a very strong part of our present system and the third thing is that if you're going to take that out of the equation then you going to have to maintain the same flexibility to your stocking levels or whatever and we've got to have ourselves some sort of guarantee of feed supply and really the only way to do that is by irrigation and water in the Waitaki Valley's been an issue for ten years and it's stagnating, there's been no movement until just recently where the whole thing's got bogged down and of course there's no real reason for the people involved in those three things to talk to each other ... I've found it extremely frustrating that we can't really move until we, well the water thing is probably the main thing and we have to get that sorted and to be fair it's still far from sorted quite frankly, hopefully 12 months or two years away from having a result there and then we'll be able to consider what tenure review type options are. Under the previous administration I guess you could say one issue was the rental and it was being used as a lever to move me into tenure review and really in our case that, it was quite disastrous really. Fortunately I got one of the last crown pastoral leases of this farm so I am one of the last ones that the new rental would impact on, so that cushioned us a little, which is

fortunate. (male)

<sup>13</sup> We've got about 20 hectares of irrigation which is honestly inconsequential almost compared to a total area of 40,000 hectares, and potentially we have 300 hectares that we could utilize under water and economically that probably reduces down to 200. But that would fill a pretty important piece in the whole strategy of running a property really and we'd utilize that and obviously 200 hectares feed stocking, it's not going to replace thousands of hectares of high altitude country. (male)

<sup>14</sup> Well, when we went into it - going right back to the start, we never really did anything for a long time, and I always said - we always talked about, "Let's do it when our boys are back," cause it'll affect them more than us. So, they'd be part of that process. And when they came home, we went into it, and I guess we went into it because we felt there was a real risk that our rates were going to go way through the roof. So there was a threat there, and we felt that, so that's why we went there. And we saw it as a real opportunity to - like we could see real benefits to us 'cause of what I was talking about with that zoning down there [lakeside residentially zoned area]. That gave us - that would give us the ability to be able to settle our boys. So, that's where we went, and the process was pretty good. The first day we met was absolute hell. 'Cause the fellow sat on the end of the table and gave us a lecture about how we were running our property. We went back and approached the powers that be and said, "If this fellow is going to carry on like that, we have to get someone else." And he was brought to heel, and we worked well with him, and the whole process went pretty well ... But we still wanted to proceed. And we did. And, yeah, so here we are. We have some regrets. There's certainly land they've taken off of us that I would have to question. There's a big block out the back that's - I can't see any point in what they've done. And I'm pretty sure with that new policy that wouldn't have happened. I don't know. Sometimes I wonder whether they should have ever done it. I think the whole pastoral lease thing worked pretty well. (male)

<sup>15</sup> ... I think the fact that the tops aren't quite so attractive for them [DoC] anymore. 'Cause that was always traditionally what's happened, isn't it? They've got the tops, and the farmers only left with the lower country, but I think those days are certainly over. I don't think those tops hold quite the same value for them anymore ... What place was it - up near Hanmer Springs - St. James? And then they [the farmers] got the grazing rights straight back again. (Female)

And the National government is certainly saying that, you know, that as lease holder, you have the property rights, and they shouldn't be either waived or ignored. But then it's not gone down well with the likes of DoC or Forest & Bird. They've still got their agenda. And the government is also saying, well, we've got enough public land. You know we've got more than anyone could ever go and explore. We also have the argument that we've never stopped anyone wanting to go up here or up the [name of place] and go for a walk or a hike (female).

<sup>16</sup> [Wife] and I both see tenure review as potentially good for the property ... an acceptable outcome of tenure review is that we would lose our wether flock and necessarily lose our income from our wether flock. The upside of losing wether flock is you've got all your male lambs to sell. It's not a huge impediment. Losing the wether flock is more emotional than actual. The loss of an iconic time of the year. But, again under this government, I think that is potentially feasible. Under the previous government, I don't think it would have been. That's why we entered it just before the downfall of Labour - not knowing, but pretty sure that we would have a change of government. So far, we know what DoC want. We haven't got to any formal negotiation stages yet, but we'll see if there's some sort of recognition of our requirements. How formal they can be. They have to be formal long-term. There's no way I'd enter a tenure review that will have a finite time line on it. We see it as being very important to safeguard the farming opportunities passed through generations. And there's been a lot of high country places go through tenure review with a finite time limit on it ... But there is a workable solution on this place. And we're lucky that we've got nearly 11,000 hectares anyway which, ironically is some of our most fragile country ... We'll run through it and see what comes out. I've got no preconceived ideas as to - no, if you look at the historical payouts that have been around, there's probably likely opportunity for a payout. We should be swapping a significant area - the area that we want to retain is a relatively small area of the total lease, but we want to absolutely guarantee cattle grazing over it. And cattle grazing would be on a contracted basis for finite periods of the year. And it would be - obviously there'd be a stock limitation on

it as well. Um, we can live with all those aspects. We can't quantify the area, because we can't but a fence around it, so that's a real grey area as to how that's negotiated. But it is key to it working, because if we couldn't graze cattle within what would then be the DoC estate on a guaranteed basis and a guaranteed affordability, it would completely compromise the balance of the property as it is. And that balance ... is of paramount importance. We have to at least stock through the late summer, um, to have - to prepare ourselves for the winter. (male)

<sup>17</sup> Hopefully our direction on the tenure review would be to retain at least grazing to utilise the high altitude country in some form ... And to be fair I think probably the Crown no longer has such a high interest in high altitude country, because it is, it's probably severely overrepresented in the conservation estate really. The flipside of that is that we now have conservation area on a large amount of our boundary (male)

<sup>18</sup> You see, down here there were two paddocks on either side of the creek that was in a more residential [zone] ... the community accepted that that was going to be part of the district. And so we bought this farm down here, thinking, "Well, we know [that this land will go]" - and that was so close to our tenure review starting, and [then] ... no tenure review will be within 5 ks of the lake. Isn't that it? And that has changed things a lot ... We had huge plans for what we could do. (female)

<sup>19</sup> ... and you know, one time [name] and I were in Wanaka - this was when we first got this anti-farmer feeling. It was when they were putting together a subdivision up in Mackenzie, and um, we were in the supermarket queue on Sunday night, and it was really busy. We had about 2 things. And there was this guy and a girl with a basket, and another checkout opened, and [name] said to this girl, do you mind. She said, "No, no you've only got a few things, go ahead." And I turned back, and we looked at this guy who she was [with] and he looked at us, and he said, "You're farmers here, aren't you? You're locals?" And we said, "Yeah." And he said, "How much land have you sold? How much land have you got?" And we were so taken aback. He had these cold eyes scrutinizing us ... he was an Aucklander here on holiday. And ... he was the most awful man that we've ever, ever come across. And he was so resentful because we were farmers. And ... [name] didn't say where we lived. But that was the start of us thinking we were never going to admit we were farmers. Isn't that sad? ... After all the hard work that [name]'s grandfather, father and us and our sons - and we work damn hard here. And to have that attitude from this bloody wanker. You know. It was awful... (Female farmer, HC7)

<sup>20</sup> I was an arts course, must have been coming about two years ago now, and I was with this girl from Zimbabwe who's moved to this area ... [and she] says, "You know, I feel sorry for [name] -all you high country farmers." And I said, "Well, why?" She said, "Well, coming from Zimbabwe, we've been through what you are going through, and that is the resentment of people of where you live, of the land that you have." And I looked at her, and I was totally blown away. And she said, "The people that we mix with down on Hawea Flat, you know how you have that lovely stone entranceway?" And she said, "When that was put up, the people in the community looked at that and said, 'Who do they think they are?'" Seriously. And we were just totally blown away. And this is - there's quite an alternative group of people down on the flat, and also behind the village and down there. And some are really nice people, you know. But they have this resentment because we are on this land. They obviously do. (female)

<sup>21</sup> ... we know that the landscape, totally excluded from sheep, deteriorates. Uh, in saying that, it also can deteriorate through overutilization with sheep. And it's impossible in 38,000 hectares to be able to control grazing through every hectare. It's unrealistic. There are areas that are underutilized and areas that are over-utilized. I mean, it's going to be - philosophically, sheep in the landscape are far better than, for example, [station name] next door. And the cattle only policy on [station] is certainly rehabilitating [station]. There's no doubt about that. And if I look at my lot next door to [station], I can see areas that are - I can see areas that are totally excluded from any grazing whatsoever on [station] that have deteriorated. Those with fences around them and where animals don't go. We've got examples of that on our place, where the cattle grazing is enhancing - it depends on what you call enhancing. From my point of view, producing herbage that animals can eat is enhancing. If it's herbage that is quality, herbage that animals do well on, that's enhancing. If it's bringing in exotic species - exotic species coming into the native environment, I don't see that as a detriment. I mean we've got tall grasses. We're not burning or deforesting or anything like that at all. But the Department of Conservation say that was not enhancing at all because it's destroying the bloody native vegetation as it was

pre-Maori or whatever. I'm a farmer. I'm not a - well I am a conservationist, but I'm not of the - yeah, yeah, I suppose that's a good word [preservationist]. So, in those areas - there are areas where cattle do graze and areas where they don't, and I'm absolutely convinced that the areas that they don't graze are less healthy than the areas that they do graze (male).

<sup>22</sup> Male farmer: ... I know [a farmer] going through the process at the moment and I just [had] an opportunity to have a look at what he had nussed out at the moment, I thought 'why is this going on, they've been great people, those valleys are perfectly pristine and always have been' and to my mind they've almost been the gatekeepers, you know they sit there and people would go up there and get lost and they've got the huts and they go and rescue them across the river.

Female farmer: They're a very conservation minded family. They love that land.

Farmer: And what's going to happen is one valley's going to be lost altogether and some of the country that really needs wethers on it to keep it clear is not going to have wethers on it any longer so it's going to scrub up. And they're advocating putting a fence around, really, it's nonsense, and I just think the whole thing's - they really haven't grappled with that yet.

Female farmer: The probably is the [named] family is that they're actually going to probably lose a viable high country sheep station ... they've got two sons, they've got three children actually who want to go farming, and they don't actually think they're going to have much left - so much has conservation value. But hopefully ... DOC's land managers are understanding that they've got to graze this country.

<sup>23</sup> Female farmer: And he's an expert now.

Male farmer: And in environment court, he is considered an expert ... we've been on [name] station for 98 years. We're now still not considered an expert. He can come along. He's been operating for 12 years, and he's now considered in the Environment Court, as an expert witness. Right-oh.

<sup>24</sup> But when you're on the land they don't want to know your opinion. I mean, farmers' opinions are nothing. This is why our kids do not want to continue farming here. That's one of the reasons. Because the hassle has become so great, hasn't it? They do not want to go through all that. (female)

<sup>25</sup> Male farmer: It was never going to be easy making the decision [to sell], but I think we've been very lucky in that we've had a very good accountant. And he has been a very good mentor for us. And when things don't feel right, we always go to him. And he sowed the seed ... He just said to us ... "What would happen if you - if the economy sort of said you couldn't carry on? What would you do?" And I said - I just looked at [name] and said, "You can answer this one." And he thought about it, and he said, "I guess we'd sell." ... And it was just that seed that gave us that ability to think about it for - I mean, that's probably close to seven or eight years ago.

Female farmer: But we came home, never ever thinking that would happen

Male farmer: Absolutely not.

Female farmer: Until last year.

Male farmer: Well, it's probably a bit longer ago than that. I guess when the government changed the policy on the tenure review, on the lakeside thing. That was really the turning point for us. We had a plan through tenure review that would have kept us going ...

<sup>26</sup> ... I don't think Ann's book had come out when this meeting happened. It was in the winter, wasn't it? At any rate, [name] came along. They went through tenure ... they were just so angry with what has happening with the whole thing. And there to be a speaker at this meeting, and so of course we went along to this meeting to see what this woman looked like, and try and get her to see our way of thinking. But at any rate, [name] got up, and [name] is American, and a very, very down to earth, quiet-spoken, very nice person. He doesn't get up and speak without thinking about what he's going to say. Anyway, [name] got up and he asked Ann Brower if she had any idea what she was doing to the high country community. And she said, "No. No, I have no idea." But she had made no attempt to talk with any of us. Anyhow, she'd been approached by various people to come and meet with them ... she's an American come into this country and supplying the media with stories that are not right. And it's just shocking that they get so much coverage. And people say to me, "Why don't you get up there and defend yourselves?" But we know that if we did, [husband] got a phone call once about "Would you be on TV3," but they would crucify him. They would make the story go the Ann Brower way. The media are the worst people. (female)

<sup>27</sup> [The biggest change] would have to be tenure review, 'cause that's instrumental in - I'm talking about the old high country field days we used to have, with proper planning and things. They were great days, and that was a social occasion, and you talked about things impacting production. You have something like that now, you're watching over your shoulder, and you're watching your back. You're fighting the greensies, you know, the whole thing has changed (male).

<sup>28</sup> Farmer: Well we're actually in the tenure review process and um we're more or less got an agreement on the table which I think over the next say between now and this time in two years we should, barring any glitches, the whole thing should be settled, which will change the way we farm part of this farm. But the benefit probably is that we'll get a net payment from that which enables us to put our house in order. I think that probably is the most major thing that is going to happen for us, it's actually going to secure our future.

Interviewer: When you say put your house in order what does that mean?

Male farmer: Sort out debts and um

Female farmer: Perhaps plan for the next generation, what's going to happen then, whether we sell or...

Male farmer: We have a reasonably high debt load at the moment. That coupled with school fees, it's a bit like paying two mortgages so we can at least knock one of them down, makes it easier to deal with the other one ... provided we sort our tenure review out and keep that that progressing, I think we've actually probably solved one of the major problems ... The cash that we realised out of that whole deal will enable us, put us in the position to have a lot more choices and to act on those choices in the future. Um, but probably the biggest issue, going to the next step is, how you settle everyone up in the farm succession, cos ... I think you know the attitudes have changed in this generation probably to my generation but, it wouldn't be equitable to have one on the farm and the others getting very little, because the one who comes onto the farm doesn't want to be saddled with huge debt and the responsibility of funding the parents retirement ... and we've been in the tenure review process for quite a while and haven't really gone anywhere and ... you know, we thought it through, and if you started seriously doing some numbers and um the wether flock that we've got goes because of the tenure review ... when you actually run the numbers and get some risk analysis scenarios on that, we're actually better off without the wethers and running some more ewes, which actually, you know, lifts our productivity and we're in the process of making that change, as well as being able to, you know get a financial settlement which sorts, sorts out the debt issue. Um I suppose that's a cause for huge optimism ... I suppose you could almost say it's a windfall opportunity because it's not something we ever designed but it, given what's happening around us, it is an opportunity which has presented itself, so that's probably given me - well it has given me the confidence to say, well this is where we are going ... we can actually say, no, we are going to stay here, we don't have to sell. If we do sell its because we want to sell ... We do have some real options to explore, I think ... let's get this whole tenure review deal sorted before we actually really seriously think about the next options, but they're presenting themselves. So yeah, we will be going to a large breeding operation, we'll increase the ewes from about 2800 ewes to somewhere around 4000 ewes plus some increases in the cattle and we're also going from ... being a straight out store producing farmer, if we sell all the offspring, pretty much at weaning, we're now in a position to either finish them or sell them ... when we can, you know, best opportunity in the market, you know? It's because of the irrigation, so I think if um, that also strengthens the burden too, because it's just um, became a much more self contained unit. We're not so vulnerable to the vagaries of the market ... pretty much every year unless something diabolical happens, in the ... commodity market place um, we're in control of you know, when and where we sell ... Wool, you know, was 70% of our income. It's probably been the most volatile of all the commodities. So that can actually become relegated - I think this year it was supposed to be about 50%, but you know, ideally it'll become even less ...we're not as vulnerable to the swings in that commodity, and also just we'll get the ability to um contract to companies, we'll ah, Icebreaker is one of the companies that we are contracted to, you know they are very optimistic about the future. But let's be realistic. You know, something could happen there too but at least if wool's proportionately less of our income ... The sheep meat and beef markets ... you know they're two distinct commodities ... At least we've got an income spread over three principal commodities and um I'd like to think that you know within 30 or 40% that you know they're all reasonably closely proportioned with each other. So I suppose, the vision for the next say five years, would be to [make] that into a reality. Um the vision for the next ten years is probably just to build on it. Um who knows ... we should be in a position to you know, well even before then to maybe invest in some off-farm

investments. If we've got 100% equity in this place then we're in pretty good position to lever ourselves back... I don't think, neither of us are interested in high risk investments but, and they probably come to fruition long term, they become a key strategy in the whole farm succession thing you know, I think. It's up to us to ensure that we have an adequate income to retire on, you know, that's probably the fifteen year vision ... Maybe buy ... a small farm to go and retire on or, could be something that complements this place, we could just grow some other business ... I think ... everything's got to be flexible to accommodate all those options ...

Interviewer: So will it involve changes in the farming practice as well, or I mean having more ewes and?

Male farmer: Yeah that will. Well at the moment we've actually been, we've been phasing out the wethers over the last three years since we actually, very seriously worked out where the tenure review was going, it's sort of dragged on and on really. Two, two and a half years ago we thought we had a deal on the table and little hiccups in the process and ah, we're now there again which has probably enabled us actually to do a better deal, which is another story in itself. But um, in that time I actually stopped replacing the wether flock. Which actually has sort of been burning the candle at both ends a bit and actually hoping that all the other ducks lined up before it burnt out ... we've been selling the hoggets rather than keeping the replacements ... it's been an opportunity as well as getting the income from the wethers so we've been double dipping a bit, knowing that that's only a finite thing. So now that, now we're actually actively increasing the ewe flock and um with the tenure review there's gonna be new fences going in. We're going to add to those, and actually maybe develop some more country but it'll be the sunniest wether country that we are retaining will become ewe country. That's not a particularly hard thing to do, I mean we just increase the ewes by buying some more ewes in and whatever to fill the gap. And ah since I've had the irrigation ah for the last three seasons we've bought in lambs to finish and trade. So that [has] been an intermediary step in the process of developing the irrigation ... But I see us running easily 4, 4000 ewes and 150 to 200 cows and pretty much finishing all and selling ... all the progeny from those. Before we did the irrigation we were carrying about 7000 stock units and that was sort of made up of 2500 wethers, 2800 ewes and the hoggets, 120 cows and a few replacement cattle. Um, I can see us being more like 4000 ewes, 150-200 cows and replacement progeny and carrying all the calves through to the next season ... The whole tenure review period, I suppose that's been quite stressful. It's been quite a dominating thing, 'cause much of where I want to go and what I want to achieve and actually maintaining what we've got has depended on the outcome of that, so given where we are debt-wise, as well as the cost of educating our children, really another mortgage on top of that and you know we've been operating on a pretty fine line for the last few years, probably in the expectation that this is all going to come to fruition, so we have to be pretty patient, it's been fairly frustrating at times and I often think well there's some other things I probably should be concentrating on, putting my energy into as it's actually very hard for some time to focus on [and have the] willingness to sit down and do a lot of sort of mundane office type work, financial planning work that I should be doing because of trying to sort this other [crosstalk] I think anything that's a... it is a very bureaucratic process ... one of the principal people we've dealt with for the last few years is actually quite a pragmatic person and I think he's actually, even though it's been slow he's actually been a very good person to have in that position, and but anything like that, dealing with an issue like that, our livelihood depends on what happens, the person at the other end, it's their job, so you know, they don't have the same emotional attachment to what's happening and I think that's, that's how bureaucracy works, there's almost sort of a detached, there's a personal detachment, with okay, their job might be on the line if they don't deliver, but the outcome doesn't affect their life, but it's absolutely pivotal on our life. Hopefully we're just on the home stretch of that one ... I sort of look around the high country community and how people are reacting. Some people'll say, well this has got to be a good opportunity for us, we can either see our way to freeholding most of the property and it gives us a whole lot more security and we can do some other stuff on it, viticulture, forestry, whatever, or we might relinquish quite a bit chunk of land but there's a cash settlement in that so we're realising a heap of capital liquidity and opportunity to ... facilitate some other developments or investments. And I think you know a lot of people are taking a very reactionary response to it. I know one person in North Otago who initially was very against the idea of tenure review but really looked into it actually I think he said he got a very good deal which secured a good lifestyle and future for his family. And I think you've got to look at it, every property's different, everyone's circumstances are different, there's sort of the argument that smaller properties won't be left as economic units, you might have to ask the question were they really economic units in the first place. And is this not an opportunity where you might actually amalgamate some uneconomic units, some people can actually get out, get some cash in their hand or whatever and actually make some money. There's a whole heap of options that can

come out of all this ... so um, yeah hopefully from here on in the future's a bit brighter because um, you know the developments we've done. You know, we'd be able you know, to lift a wee bit, the productivity of the place, that's why I think for us personally, it's been quite a good deal. Um, I'm not going to go around shouting from the rooftops what the settlement is for some people who are going to say well perhaps you could've done a lot better than that and other people are going to say well hell, you know, gosh what are you going to do with all that money ... it's got to be a deal that we're comfortable with, because in five or ten years time it's going to be sort of immaterial ... we're comfortable with it at the moment so we've just got to move on to the next steps now.

After the tenure review process was completed this couple felt like this:

Male farmer: ... nothing much happened through the 90's. At about the beginning of 2001, we really started working on the tenure review, and I'd say 'round about 2004/2003, we actually had an agreement reached with the crown. The government put a little bit of pressure, put the brakes on – I just lost 5 years of my life, 'cause in 5 years we were sort of left hanging, 'cause we'd sort of made the commitment to change the farm... We actually went into a period of low prices, lower production, so the debt continued to go up, and in real terms it cost us between half a million and \$700,000, which I don't think I can ever forgive the government for that, 'cause it was purely political. And I don't think the government has ever been held to account for it. No one has ever acknowledged the hardships that it caused for a lot of people.

Interviewer: Do you think that they even knew? You know, you sort of get the feeling that they're so totally removed.

Male farmer: Oh, I think they knew about it. I just don't think they really cared ... And I don't know that the National government are any [better] – 'Cause, you know, I've spoke to politicians, to try and find out what's going on. And they just "Ah well, too bad." I just don't think they're really comprehending the hardship that they're imposing for a lot of people. Which, given that it was one of their programs, and in our case, all the agreements were reached, and nothing ever changed, even after the reviews of the process. Um, the solicitor said to me, "If you're dealing with someone in the private sector, you'd have them in court." But, it's a bit different with the government ... I suppose it coincided with (unclear) our kids away at boarding school ... I think most people sort of try to work through life, and the time of educating your kids, however you educate them, is always going to be an expensive part of your life. So, we sort of got caught up in that for a few years. Because we were so sort of financially constrained, we were never really in the position to invest in other things or development. We were struggling to maintain the property. Yeah, just learning to live in the bed that we had, which wasn't too substantial because of tenure review, and obviously it didn't come through, obviously impacted. We ended up paying a lot of interest that we otherwise wouldn't have had to pay. The final couple of years before we got tenure review through, we had about \$10,000 of interest a month that we otherwise wouldn't have. That's pretty substantial. But, uh, I still just get very uncomfortable with the government, the way they handled that. Because they actually – no one ever from the government-side came and sort of talked to us and said, "Given where we are at, how is this actually affecting you?" There was always some little obstacle that seemed to be holding it up. It wasn't actually until I rang the minister's office that I actually started getting some traction. There was one or two access issues, where all it would have taken was someone from his office, or someone to come and have a look at the farm and have a talk about the issues that the ministry was concerned about. But there was this sort of, I don't know, sort of bureaucratic snobbery, or the farmers concerned didn't seem important ... They just seem to forget that there's a – And we had hold-ups on the way too, over one or two issues. We had done a land improvement agreement with the catchment board in the late 80s, but then in 1990, when the regional governments took over the roles of the catchment boards, that whole process got put on hold, and the land that was supposed to be surrendered in our agreement had never actually been signed off. We were farming the place as if it had, but it was just one of those details that had never been ticked off. And the accountability of tenure review, and the amount of land we were about to surrender ... we probably realized, "hang-on" if we get compensated for all the land in tenure review, then we never actually separated the two. The tenure negotiations never actually included the stuff that was agreed to. But that took maybe a year and a half to convince LINZ that that's how it was. You get on the phone, you talk to them. A half-hour meeting, and we actually sorted the whole issue. But that was another year lost ... Stuff happened. So, it's amazing that there's no accountability by the bureaucrats getting the job done. We set out a timeline – I could probably give you a



lot of letters to and from the government that I wrote on the issue. I actually have a great timeline. And it worked out to nothing.

Interviewer: And you rang up the minister and that, did that take an immense amount of courage?

Male farmer: No. It was frustrating. 'Cause I'd written to him beforehand. I actually got – David Parker was the minister. [name] was one of his aides ... I suppose he would have been the person in Parker's office who was handling tenure review issues on a day-to-day basis. And he was actually very affable when I talked to him. But I think he possibly got things going again. I wouldn't exonerate him of all accusations, because I think he might have also been the person who was causing the blockage. There's a lot of comments that I heard, but to his credit, when I actually talked to him, we managed to get things going again. It doesn't really say much for the bureaucrats handling the process, if we've got to go to the minister to get things going ... Well, the person I know well who is actually active as a consultant advisor for a lot of tenure reviews, I said to him, "How are you getting on?" I said, "What's the stress like?" He said, it's inordinate. He said, "Between you and me, I wouldn't be surprised if some people committed suicide, the stress levels are so high." I think that's appalling. It's all because, purely because of the politics of the issue. And, um, I can't say strongly enough that the government and parties responsible need to be held to account. I don't think it'll ever happen now, 'cause it's all water under the bridge, but unfortunately all these [things] happened. There's seldom an audit done to see how well this process was handled ... I think because of those sort of roadblocks that were happening, the good people who were working in those departments also got frustrated with them. It actually exacerbates the problem. I think departments like LINZ don't have any institutional knowledge about high country pastoral lands ... 'cause in the past, there's been some very capable people working with departments that played a very facilitatory role, getting things to happen. But it's an absolute disgrace the way they processed and handled me through that period.

Interviewer: What has been the agreement? How much have you given up and taken up?

Male farmer: Um, we had about 600 hectares of freehold, anyway. We now have 1983 hectares/2,000 hectares of freehold. Um, but have relinquished about 7,500 hectares. 4,500 hectares of that was with the improvement agreement back in the 80s. And that was just the Class A tops. But with the tenure review, the area surrendered was what carried the wethers. 2,000 wethers. But from a production point of view, it wasn't that big. That would have been 1992. There's about 87 hectares of irrigation. That area probably grows as much or more grass than all [that lost in tenure review] – 'cause we're still carrying the same amount of stock as we've always carried. So the mix has changed. And without the irrigation development, we couldn't have done the tenure review. The money that I borrowed to put in the irrigation, that was going to be offset from the proceeds from the tenure review. ... Um, yeah, no, it's just the perfect storm, really. It went horribly pear-shaped for a couple of years ... Uh, funnily enough I've always got on quite well with DoC. And probably through the tenure review process – 'cause I never had any major conflicts with DoC. They were probably one of our better allies. And it was probably through one or two people in DoC that I learned what was going on the background. So, um, I'm not saying DoC is perfect, but there were some people in DoC that were actually helpful, rather than unhelpful. So, I should give credit there. And, I'm not saying everyone in LINZ was less than good, but just the process was wrong ... And I felt we honoured our side of the bargain, and when you go into a process like that, you can't just keep farming as you were up until the 30<sup>th</sup> of June that year, and say, "Right. The deal is done. We now have that, and you have that." And we'll just have to start farming differently. Planning the process over several years, I suppose one of the things I did was phasing out the wethers. Um, for about three years, I never replaced any of the wethers. 'Cause the wethers were valuable to sell, so from that point – once we started doing that, we committed ourselves. The wethers were our sunset journey. And on the last year that I sold the last of the wethers, I was actually going to use the proceeds from them to buy some more ewes, and that just happened to coincide with one of the worst droughts we'd ever had, crash in product prices. The tenure review didn't come through. It was a perfect storm, really. But, um, took us a long time to sort of get back. So now, we got settled 18 months ago, finally. We're now farming, pretty much, not sort of as good as we would be. Still paying interest that we wouldn't be paying. But, um, we have- we've probably managed to increase productivity, rather than decrease productivity. That's probably not [so for] a lot of tenure reviews ... 'cause people don't have an alternative to the summer country that they lose. But having gotten rid of the wethers, they used to run in the same country that they bloody always did run on. So, from that angle, tenure review is definitely not a one size fits all. But I just, um, the process became so overly bureaucratic that – I feel the government abrogated some of its responsibilities. You've got one school of thought who say that the farmers get far too much out of tenure review, and the settlements that

they were getting were – I’m sure you’ve heard all of those arguments. But, I still think the government have a duty to at least ask the questions as to the sustainability of what was left. And I think it’s a bit irresponsible of the government to be wanting to get land into the [conservation] estate, but not be aware of the consequences of what’s left behind. I think that sort of counter-productive- duty a government should have to its citizens. I don’t think that any of us have even considered that ... ‘Cause they always told us, “You know, you did this voluntarily, and it’s up to you.” And that’s quite true. “You can walk away from it at any time. We can walk away from it at any time.” To me that’s a very glib attitude to take. I think if you’d been really cynical, um, you could say that the Clark government – well, Helen Clark more than anyone, wanted to create these parks ... but I think they were using tenure review as a lever to push people’s arms into doing that. And I think that’s an underhand sort of way of going about things. In our case, our pastoral lease was up for renewal at the beginning of 2009, it would have been. So, I knew that our rent was going to go up substantially, just based on the value of everything without any major policy changes. If you go back to 2001. Quite a long time until 2009. From our point of view, it’s probably a good bit of risk management, to get rid of the pastoral lease ... time ticks by, and time ticks by. We were paying \$7000 a year based on a valuation done in 1997 ... Based on the valuation and based on the formula that the government was going to apply, our rent was going to go from \$7000 to \$44,000 a year. Whereas given the land values, the rent probably should have gone from about \$7000 to \$31,000. I couldn’t, that wouldn’t really be arguable, but – all that just made getting the tenure review done that much more important ... LINZ sent us a bill for the new lease to the date of the tenure review through. ... and as the final irony, I think we got a \$400 refund, rather than an extra \$15,000 bill, which I thought to pay that was going to be an absolute insult. I suppose ... you try and negotiate. But at the end of the day, they are people too ... When we actually come to (unclear), we’ve been able to work through it. We haven’t managed to totally offside them. You get people that are just continually haranguing them. If I was a bureaucrat and I was being continually harangued, I’d probably dig my toes in too.

Interviewer: How’s it been for you [female farmer], living through this tenure review time?

Female farmer: HUUUUH. That’s why I dye my hair. Too many grey hairs. Because it was such an unsettling time. Because they’d say “Yes, it would be done by this time,” but it just went on and on and on. I think we started when [daughter] was a baby, and then finished when she was seventeen! Seventeen years is a long time.

Male farmer: Like I said, the way that the government handled it was less than perfect.

Female farmer: If it had been a private department, they would be out of business ‘cause they’d have been sued. But because it was the government, you can’t do that, so they had the upper hand.

Farmer: I mean, you know, we’re in our early fifties. I don’t think I’d like to go somewhere else and start again, so we’ll keep doing what we’re doing. I think once you look at the rest in hindsight, we probably would have sold in 2004/2005 would have been the time to do it.

Female farmer: We made a choice that we would stay here, and we would go through tenure review.

Farmer: And knowing what the next years would entail, we might have thought differently.

Female farmer: We didn’t know what was going to happen. You never know what’s going to happen.

Male farmer: Yeah. In some years, especially, the mid-2000s, when prices dropped. When we had some issues with tenure review, we backed off a bit on our fertiliser, but to our detriment. Some of the reduction in productivity was noticeable.

<sup>29</sup> ... lots of tramping clubs come out, lots of walking groups and different groups come and wander along the place. I think that’s fabulous, it’s never a problem. The only time it becomes a problem is if people don’t respect that. [One] chap who is a friend of a friend and how everyone’s a friend of a friend, people know someone and that’s why they ring you, and he’d come up hunting, and that was fine, and then he rang to go hunting again, and we said no because there was already people out where he wanted to go and it was [dangerous] and he sent this email back saying, ‘It’s no wonder you farmers have your gates left open and your property destroyed when you’re as ignorant as you are re: access. Not that I would ever poach but I don’t blame people for poaching.’ And it’s like that kind of attitude is truly [upsetting] ... I don’t think city people would understand the logistics of not having one lot of hunters shooting the other lot ... at the end of the day I don’t care how many pigs are out there, it’s not about that ... Yeah well, then you’ve got the DOC blocks, and they just let everyone go. So I don’t think it’ll ever be an OSH issue because DOC do it all the time, DOC give people permits to go to high country, they’ll give as many as people that want to go ... It’s just about general understanding, and there’s this whole concept that the land is ours and we all get access ... [there’s] a lot of DOC land that people need to be able to walk on and climb on and look on, but there needs to be information

going out to these people [about] why access is limited on [certain areas] and why it's not. I think that what has been portrayed is landowners saying, 'Oh you're not getting on my land,' but ... the reasons need to be explained, you know? Like the rocks, we don't let people go in there when we're lambing, because [unclear] we had some journalists who were writing an article for one of website things for the lodge, and they went in there and came out with a lamb ... they would've disrupted the ewe ... they thought they were helping out, but that's not helping out, you know? People need to understand that and they need to understand that if you're moving a mob of sheep and you're doing shearing and all the rest, you actually can't walk down the lane in the middle of them. It's not because we're miserable and don't want you on our land, it's that ... and people need to understand that, they really do, and they need [to know] the reason that we have stock, we make money out of them and make money because they're well looked after and well fed and where there's livestock there's dead stock and it's a big property, there are going to be dead sheep, and you learn differently, and you don't go out when they're lambing, and it's not [major issue to] drive around and see the odd dead sheep and all the rest - it's not because we're terrible farmers, it's because of the nature of the beast. People don't get that, and it's just lack of information and ignorance, which I think needs to be addressed. (female)

<sup>30</sup> I think there's probably more a growing feeling I guess you could say ... of being, not ostracised or whatever ... but [lacking] a first-hand understanding of the issues, that's what we've got to deal with. There will be more of it, not less. Once again it's a case of being able to take advantage as well. The population is generally more upwardly mobile ... so it gives opportunities for recreation ... and we've got to be proactive ... I mean if there's an opportunity there, an opportunity to take advantage of, and yeah, we've got to be responsive to our markets don't we? That is the global market, not just New Zealand. We've got to be able to [make a] market out of our products. Yeah, I think there's a genuine interest from most people who come in the front gate ... to know about your operation and how it runs ... because they don't have the knowledge of it ... in the last 18 months really, last 12 months in particular we've moved towards making recreation an enterprise on the property and it's purely because there's more people asking for it, if you like, so it's an opportunity. We have more control over it ... and maybe in the future that may well help us in our tenure review negotiations as well because if we're providing that sort of activity, that's got to be one of the crown's concerns ... our intention is for walkers, mountain-bikers, horse-riding, what have you, and perhaps limiting the amount of four wheel drive hunting types to perhaps certain times of the year and keeping that summer period for those other sorts of low impact [activities] matching with day-to-day farm management. So, that's a work in progress ... we were surprised at how many people come and knock on the door when you start [publicising the business]. (male)

<sup>31</sup> Um, well, we'd probably in general terms just refer to it as a high country sheep and beef, probably ... And then we also have people going up the valley to enjoy it recreationally, but also to do some hunting. And that's another area - we also have a building that we rent out for not so much tourism, but little domestic people wanting to come. People who want to come and enjoy the place. You know, like mountain bikers and trampers come in. (female)

<sup>32</sup> And the National government is certainly saying that, you know, that as lease holder, you have the property rights, and they shouldn't be either waived or ignored. But then it's not gone down through the likes of DoC or Forest & Bird. They've still got their agenda. And the government is also saying, well, we've got enough public land. You know we've got more than anyone could ever go and explore. We also have the argument that we've never stopped anyone wanting to go up here or up the [name] and go for a walk or a hike. So, um, yeah. It's very interesting though. It's exciting that we won - that (unclear) was won. That was a real plus. And there being a lift in wool prices. They're a lot fairer. New Zealand Merino, what all their research points to - a very positive future. My point of view, having lived here for 11 years, it's certainly probably the most positive environment to be in, yeah, over the last while.

<sup>33</sup> We're always you know we're always the optimist, its, our costs are going through the roof as you know, um but wool, sheep and wool are heading in the right direction, very much so, you know, so, in the last two seasons its only gone one way and ah but we have seen a lot of fluctuations haven't we? ... in the 12 or so years, a lot of fluctuations and they can be seasonal fluctuations but ... seeing small farmers in the last year sort of you know happy with sort of getting \$35 for those little Merino lambs and last year getting \$50 and being over the moon about it you know ... And then this year you know they might be 60, 70, 80 you know and that's fantastic you know, as long as we can make the margin of value. So yeah I'm pretty optimistic about the next few years. We've done a lot of development here. We've put a lot of seed and a lot of super on ... I've

always been funded through [company name] as well a lot um because it's been deemed as capital expenditure. (male)

<sup>34</sup> Female farmer: ... they all feel the same as we do. It isn't just us.

Male farmer: Having to deal with a lot of the young people through my job on Merino Inc., and I'm talking to a lot of the leaders in the Merino, and guys like [name], who's a really good farmer, and I would have thought probably one of the most successful farmers around, and he's questioning it. He and his wife are questioning it. You know, that really worries me.

Female farmer: 'Cause he's such an enthusiastic guy

Male farmer: He is. He's really good at what he does. He's potentially a really good leader in the Merino wool.

Female farmer: That is actually what your biggest worry is. That there aren't many farmers coming through.

Male farmer: .... it really concerns me that you get these potentially really good farmers, and they are - a lot of them are good - and they're potentially future leaders, having doubts about where we're going.

<sup>35</sup> As far as the government's concerned, bureaucracy has, or is having, or has had - under Helen Clark, high country farming with her policies and her drive for national parks and recreation areas was perpetually cutting the high country. And I honestly think with the negative bureaucracy leadership governments that we were under in that era, we would have ultimately become extinct. Fortunately we've had a change, and fortunately now farming's being seen now by central government as it probably has since Duncan Macintyre was in, back in the late '70's/early 80's. I applaud this government for its recognition of agriculture. I'm not saying that with any ego whatsoever. We're back into - it's recognized as being important to the New Zealand economy. The government is putting some money where its mouth is in the new ... primary grown partnership of which the Merino company has got 78 million to do a project with expanding Merino as we talked about before. I think they're outstanding initiatives. They, orally, anyway, have listened to our fears about the rabbits. There's a delegation that went to Wellington and met with three of the ministers there. Our risks, our feelings, and highlight the risks as we saw them as to what the rabbits might, if re-emerged, would do. Nothing has come out of that to date. Nothing practical or concrete has come out of that, but we were shown open doors, and we were listened to, and we were taken seriously. So, I think there is opportunity, particularly within the long term, and it's likely that they will get back in. Government is more pragmatic than it has been for a long time. (male).

<sup>36</sup> Male farmer: I remember coming home from a year and a half away, and coming home into this drought, and it was quite significant. And I was particularly blindsided. When I started farming in 83/84, we had one good year. In 1985/86, I can think of in the last 28 years, 3, maybe 4 potentially dry spells. That was the first of them, really.

Interviewer: And did that affect your farming? What would you do? How did you change as a result?

Male farmer: I didn't actually change much. I just sort of lumbered through. Um, in about 1991, we had another, and I suppose we had enough extensive country that we could sort of push stock out along the river. And then the last really tough drought, we had in about 2006.

<sup>37</sup> Male farmer: That was when I was at [name]. In that '92 snow, I was actually - I started a new job, and, um, there was a big snow. I drove out, back into those (unclear) there and couldn't get out. Couldn't get the car to turn around. So I just sort of run the dogs. Got so far with my car, and it stopped. It seemed like a big drama at the time. Basically my first day on the job.

Interviewer: And was that experience had an impact on what you've done since?

Male farmer: Oh, not really. I've never farmed in a way - do this or do that - you know? I mean, we've got snow country here that we seem to be getting away with pushing the boundaries every year. It takes a snow like that just to bring everyone back into line ... It's only been recently we brought all our cows down. If we got a snow like that one in '92 we could well be in [trouble].

Interviewer: Where are you farming to now? What height?

Male farmer: Uh, 3,500-ish.

Interviewer: So the snow line is, what, 700-800, traditionally?

Male farmer: Yeah, around that - maybe a bit higher.

Interviewer: And so, are you able to do that because of the better forecasts we are having now?

Male farmer: Yeah, I think the seasons have changed. I certainly take note of the weather. Whether there's big snow warnings and that. It's not very often they forecast major snows. I mean they just happen. Today

you will get snow down to 200 metres, but tomorrow it will be fine - sort of thing. But, no it hasn't really changed.

<sup>38</sup> Rabbits were quite an issue. It was right at that late 80s period when there was probably a peak in rabbit numbers. One of the limitations of the two properties was that [one part of property] was in one pest board and [the other part] was in another. And one was successful and one wasn't basically. So you can look at the two strategies from the successful one and work it on the other and I think one of the major steps forward for me was when pest boards and things devolved down to the user-pays scenario. It's a scenario that I think the larger your property, the more it suits you because you don't have empty station problems on the boundaries and what have you and you can be a lot more integrated with the way you work your control and we went through that rabbit management phase and got everything pretty neat, put in a lot of netting fences and since then, touch wood, we haven't even had to poison. Don't do a lot of secondary control, employed a full-time unit over that time up to 12 months ago and it really improved. Rabbits are the biggest threat to us, to our production, so if nothing else you've just got to keep on top of them. Be hard to just quantify what rabbits cost really 'cause there's the obviously cost of controlling them but then there's what ... I think probably over the last 20 years is probably the lowest consistently lowest number of rabbits that the property has had since rabbits were first spotted on the scene really and that's been a huge help when it comes to oversowing and what have you. So I guess that's probably the major thing that I can put my finger on really, it's what's made the most difference in that time. (male)

<sup>39</sup> ... rabbits ... have been a major problem in the past, and, I remember my father saying to me that, in the 1950s and 40s, you could take sheep down on a lot of those flats around the rivers and things and they wouldn't even stop to look at the ground 'cause it was totally denuded, so, he sort of broke his gut to get rid of, get them under control and I can remember as a little kid in the 1960s, that it was actually something to see a rabbit. I was probably nine or ten before I could tell the difference between a rabbit and a hare, so that was probably a measure of how successful they were. I think he got rabbits to the stage where, in the late 1950s, early 1960s he was offering a ten shilling bounty on anyone who could get a rabbit. He was pretty adamant about getting rid of them. And from then until now, you know, there's been a lot of regular poisoning but they've never actually become a major problem. A lot of money spent on them over the years, and they're still [there]. (male)

<sup>40</sup> Rabbit management programme. We weren't even part of that. That was pretty much in the Mackenzie country, Central Otago. But, yeah, rabbits can be, you know, a huge pest here. I think my father said in the 1940s/50s, the dry country was decimated by them. I've found rabbit tracks up to 5,000 feet on the hill. He was probably instrumental when the (unclear) boards were formed, but there was a rabbit board that was pretty much just this valley from where you turn to back up the road right to the lake here. And then in time, they got taken over by the Ashburton pest board, which covered the whole of Canterbury. And then, I suppose about 1991, round about then, the Canterbury regional council took over the role of the rabbit boards. We were looking at direct user pays charges, which, for most of us were going to be put every sort of third or fourth year. Most people here were going to get a big bill. And when I say a "big bill," I mean somewhere between \$12,000-\$30,000. What we actually did was, um, formed an unofficial rabbit board through a LandCare group. And I happened to get the job of chairing it for a few years. We called ourselves a de facto rabbit board, in that we had all the stats from the rabbit boards' day. The rates – what was collected on each property, what was spent on each property. And we actually had an agreement between all the farmers that we would all contribute on that job based on that same percentage. So, instead of having to stump up \$20,000-\$30,000 one year, then nothing for two or three years, we will contribute something every year. There was about \$30,000 or \$40,000 being spent in that region, but we were all contributing our percentage to that. So, it was a bit like paying a rabbit board. And that was – we sort of set our own rate, rather than the autocratically-decreed rates. Until RCD was introduced. So in about 1996/97. So, for about five or six years, that sort of agreement within the community worked really well. Then RCD came in, and we never had any of those big poison jobs again. (male)

<sup>41</sup> I gave a presentation to a conference in [name of town] about a month ago on pests in the high country from a farmer point of view. And when I came in, I said 1) I've got no idea how much money has been spent annually on rabbits, but they're a huge part of our operations. There's hundreds and hundreds of tonnes of carrot between us and [station name] coming up every spring or late winter. And I've got figures of 400 tonne

for here and 800 tonne for [station] as being sort of tonnages that were being brought on a regular basis for rabbit control. But in those days it was funded 50/50 with regional government ... That was in the mid-eighties as well, I suppose. ... So, the pest boards - the one case, which was circa 1990 - yeah, it was the early 90's, 'cause Calci (RCD) came in '97, I think. We were spending \$100,000 on killing rabbits, pre-Calci virus being released. And we went - we were losing ground. But in those days, \$100,000 was a lot of money... I mean Calci came because rabbit costs became unaffordable. (male)

<sup>42</sup> ... and the other exacerbating aspect of that was the fact that conjointly, or during that hiatus, we had - with RCV working so efficiently - the Animal Health Board, in conjunction with ourselves had got onto the bovine TB problem and eradicated possums from the [named area] and had done a huge amount of trapping and control work on ferrets and to a lesser degree stoats. Cats were bycatches of that. So, when the rabbit population re-exploded, there was no natural predation ... I mean the ferret numbers here were unbelievably high. When they first started getting hungry, and they'd come into the buildings, and we'd have ferrets in the house, and there was 17 on a bottle of milk at the back door - to give you an idea. And we don't even see a ferret now. I mean, the chooks don't even get locked up - in the past, that was the prime risk ... between the rabbit population almost disappearing and the physical targetting of ferrets through the animal health board ... the predators were almost wiped out. So when the rabbits did resurface and explode, there was absolutely no predation to catch up with them. And I see it as a real antagonistic aspect between the work that the Animal Health Board has done to get rid of TB, which we are now coming around to being free of, after being infected since 1986. And, um, if it really came down to a hard-nosed choice to keeping up with TB or keeping up with rabbits, we'd have to say that we can live with TB, but we can't live with rabbits. So, it's got to the stage now where I've stopped [targeting] the predators, and we don't shoot wild cats now ... (male)

<sup>43</sup> Then RCD came in, and we never had any of those big poison jobs again. That's all pretty much gone by the bye now, and any bits of pest control, people just do individually. It's a summary issue, and in parts of the country, rabbits are starting to become quite significant again, and there's an immunity to RCD, but it's still working here. We just need to follow up with patch control, really. Just right at the moment, the pest control side of things is not too bad, but it hasn't gone away. (male)

Well, rabbits ... in my time have never been a serious threat the way they have been further down in Central Otago. Not to say they're not. They were - they did cost quite a bit of money to us when we came in. We basically haven't spent a dollar since. And the RCD is actually working quite well for us still. But I can see it changing. And not far from here, places have literally blown-up. RCD isn't working anymore. It will become a problem again. Particularly if you're not allowed to use 1080 anymore. That seems to be quite a serious threat. (male)

<sup>44</sup> ... but here we've got a pretty good management group. We all put the money in every year, and a company employs a couple of people to keep everyone's numbers down. Um, you don't need poison here ... here we just don't have a rabbit problem. We just - he comes and does about three or four night shoots a year. He comes here for a couple of days and shoots the hot spots. And the rabbits haven't increased at all since I've been here. They're not getting rid of them, but they're keeping them at a level, essentially. (male)

<sup>45</sup> ... there's a huge amount to this re-explosion of rabbits that into the future could be very difficult to deal with. Firstly, we've got no support. Secondly, generational turnover to a degree has meant that there is now land owners with no experience of the importance of killing rabbits first. It's discretionary expenditure, not essential expenditure, and there is also now no experience of working in with neighbours to make a geographic poison operation, rather than a fence operation. And we've only got one tool in the toolbox. Um, as we know the 1080 and carrot pre-RCD, we'd lost the efficacy of that as a control measure. Now with a brand new population of rabbits 11 years plus on - not everything is back, but we've got to be very careful how we manage the population we've got. And we need to keep hammering away for people to realize that it is an integral problem that actually - whether it's a South Island problem, or a national problem, or whatever, but it is definitely a soil and water problem. And it that has to be recognized, rather than grumpy old cockies saying, "I can't afford to kill my rabbits, please help." Ultimately, it's happened twice - it happened in the 1880's when the farmers moved off their land, and essentially it happened then to the Crown. And in 1939 they walked off for a variety of things, but the rabbits were right up there. So, there are two historical episodes where that's happened, and it could easily happen again. (male)

<sup>46</sup> Male Farmer: They [Government ministers], orally, anyway, have listened to our fears about the rabbits. There's a delegation that went to Wellington and met with three of the ministers there. Our risks, our feelings, and highlight the risks as we saw them as to what the rabbits might, if re-emerged, would do. Nothing has come out of that to date. Nothing practical or concrete has come out of that, but we were shown open doors, and we were listened to, and we were taken seriously. So, I think there is opportunity, particularly within the long term, and it's likely that they will get back in. Government is more pragmatic than it has been for a long time ...

Interviewer: And so those four of you, how did you get together? What were you presenting?

Male farmer: Well, we started by representing ourselves, then it got taken on by high country federated farmers. I'm a bit cynical about bureaucracy - and it got railroaded to a degree, but we wanted to go full-circle and go right back to forming pest boards. Because we saw the risk that I highlighted before about generational change, lack of experience, lack of knowledge of the toxins available nowadays, and the utilization and prioritization of rabbits. I saw them as all aspects of - and the whole service delivery of the pest industry as it was before had disappeared. And I saw it being absolutely critical that something was being done to re-establish a formal - and not only re-establish a formal control authority - because at the moment, the district council - the regional council - is the authority that serves notices of compliance. Present levels. But that's all they do. They get the cane out, if you like, to beat us into shape, but there's no leadership, and there's no expertise to - the expertise for control has more or less disappeared. And that's the first thing that has to be recognized. And secondly, I mean I'm advocating for a partnership, not a subsidy, a partnership with central government - that is channelled through regional government and district councils so that it can be audited to go back to a sharing of the control ... we haven't got the time as individuals to keep going on about it. So the fact that that meeting in Wellington was conducive to the process - and there has been a rabbit advisory council formed, but it's been formed by bureaucrats, rather than by - the disciplinary aspect of it gets taken over by bureaucrats. And practical people, affected people don't seek to get a seat on there. I suppose there is federated farmers representation on there, but I'm not keen on federated farmers, either. Not from a provincial point of view. I've got no time for them whatsoever. From a high country point of view, I have. Um, of all the high country-aligned organizations, I think the one - High Country Accord, I think that is the most pro-active, on our behalf for those of us being focused on by tenure review and rates and that sort of thing. I've done some scouting work. So I suppose that summarizes bureaucracy from my point of view.

<sup>47</sup> But the exacerbating factor, I think, which will probably come through more than any other thing is - from the early 1970's until now - is the impact that hieracium has had ... Hieracium was first diagnosed here, and we were starting to have a threat around 1965, and - sorry, 1975 - and it got to a stage where the manager at the time decided to chop it up and see what would happen, but all it did was make it worse. But, um, so I was actually chomping at the bit to get a program going - to try and counter the threat of this hieracium invasion and - it was MAF in those days, set up to do some trial work. They set the trial work up when [name] - the manager was still here, but it was my keenness and - anyway, by the time that I took over, we had some good data as to what would grow and what ways to put it on there, and what sort of fertilizer, capital and maintenance was required to keep it going. And then we got the idea in the 80's, and we developed what we call our "Ewe Country" now. Over three years, we did a third of it per year for three years. In retrospect, I would have done it the other way around. As we started it - the heracium started invading at the east end of the property, so we started developing the west. In retrospect, we should have started the other way around. We should have followed the heracium, rather than counter it. Because the way it takes over, so intensely, it is also a very good seed bed to get introduced pieces to grow in. (male)

<sup>48</sup> I mean they're pretty much invisible on our place, but it's just surprising how many there are. We made a point a couple of winters ago - three winters ago of going around - not that we fly a lot but to see where they are, I'd have said there might be 20 to 30 pines on the place probably. I think we cut down 40 within sight of the main road before we even got over the hill, so that was most of them but, so now we're pretty on hold. They will be a real threat I guess when - talk about the conservation park next door for example, with a limited amount of grazing, the forest to the southwest of us there's a literal large source of seeds which will put pressure on that sort of country and will get a bit closer, but we are certainly at the stage at the moment that when we see them we just knock them over. (male)

Then, this explosion of contorta, everywhere, because we didn't actually realise until we, at least stopped rabbits actually, but the contortas have got away, and also sheep, the early, really, really, sweet picking, they will browse them, they will actually keep them down. (male)

<sup>49</sup> Male farmer: Everything's process driven rather than outcome driven and that's probably where it's failed. I think, there's so much process in everything we try to do now days ... a typical example is that under the new district plan which is operating, we have got an area which has got wilding pines and we've got another guy who wants to get involved with us. We said let's get rid of all the wilding pines out there, but we can't stop the pines from coming in [crosstalk] so we thought, why not cut all those out, plant it in a species that has a forest value, so that we'd have an ETS forest. It'll be there in the future, and it'll act hopefully as a buffer for a lot of the seed pines.

Female farmer: As a barrier to the seed spread.

Male farmer: And it seemed like a pretty straightforward thing to do, but it was by the main road and we thought well maybe we could ... set it back a few hundred meters ... I didn't realise it was going to go to public submission so we put a small application in and then of course the district council said under the new district plan it could be a vista and a whole lot of things so it had to go to public submission. That was fine, we went to the public submission, and then all the submitters that put their name to it and wrote into it.

Female farmer: We had twelve opposing submissions...

Male farmer: Sixteen it was...

Female farmer: Sixteen opposing submissions and one in favour of us.

Male farmer: ... Meridian [electricity company] agreed to it, they just didn't want trees too close to the canal - that's fair enough, I mean that's fine, so we went through the process and actually it went quite well on the day ...

Female farmer: It was more like a forum really, what are we going to do to stop the spread of trees? Is there a place for exotic conifers in the [name of area]? - which [husband's name] and I probably aren't that in favour of really because anything can spread into these valleys and gulleys, we do know that, but we were being really responsible. We'd had a report from Scion [Crown Forestry Research Institute] into the type of species that weren't rapid coners, spreading coners, so we were just doing it, we had nothing to lose and everything to gain by trying to stop this sea of seed raining down from [name], but we just had, so we had to go to a hearing, had to have a formal hearing, which turned out to be a forum really because the opposing submitters came along and could see the depth of our problem. We took them out to the site - we said we wouldn't have a hearing unless we could do that, but they stood there and they shook their heads and they said we don't know what you're going to do. We got a letter a month ago to say yes we could plant a forest there but it had to be one specific radiata pine, and the whole thing ... the hearing was half a morning, cost us four thousand dollars, and that was the four thousand dollars that we would've used to have got rid of the [wilding pines], it would've only been a small drop in the ocean to get rid of the contorta so we could plant a forest. It's pretty marginal land anyway so ... we're taking a risk with it ... But we actually don't think we can do it now because we've now paid four thousand dollars for a hearing.

Male farmer: [unclear] It brought home to me that under the new district plan anybody who wants to do anything will have to go through a stage like that. The enormity of that, it's going to stop people doing it anyway, but worse than that is that I think that ... how this whole system works with submitters ... how did they break it down? ... part of the cost is writing up and doing the reports and everything else and it's going to be, I've still got one more account to come in, it's going to be about five and a half thousand dollars, ... and there were sixteen submitters, I accept that, I don't mind people coming and submitting, that's great, but what I think they're going to have to do is actually submitters should be a base cost because ... it's going to the district so that's going to be book-work anyway, and ... if you actually put in a submission, there should be a base cost of a hundred dollars [crosstalk] ... there's a lot of submitters who didn't come to the actual hearing, but they have weight in the system, but they're not prepared to stick behind it, and in my mind if everybody had to pay a hundred dollars, you won't pay a hundred dollars unless you really feel strongly about something ... and you'll probably turn up on the day.

Female farmer: ... some of the letters, they... had a real commonality about them, you know, the template letters from Forest and Bird...

Male farmer: And that would've been sixteen hundred dollars towards that cost.



Female farmer: Retired people who are interested. They've never been to the area, they don't know anything about it, and we were really busy during this time, and we probably weren't as prepared as we could've been, but we didn't have that time, we were trying to run a farm, whereas you had all these delightful retirees turn up ... imposing solutions to everything that was going on in the high country [crosstalk]. It's the same ones submitting to everything [crosstalk].

Male farmer: So actually it brought it home to me, really, you just tear your hair out. Some of these submitters came along, they were nice people, there's nothing wrong with them, it's just that you end up carrying the whole weight of the whole cost and to me that's a bit unfair.

Female farmer: And on the day a lot of them apologised that they were even there [unclear]. Their argument in the end was, well at least you're going to try to do something, and ... nobody is going to spend six thousand dollars a year to try to, to cut out wilding pines without something in return. We just can't...

Male farmer: Well that block, basically we've put five thousand dollars a year on that for about the last five - six years so we just think that'd be better put [to some use].

Male farmer: ... But I think that really brought it home to me just how that's changed our lives a bit, because it doesn't matter what we're going to do, we're going to have to go through that process and it's a big cost and you've got to be pretty sure that what you're doing is right...

Female farmer: Once upon a time it might have been fine, but none of us, no one can sustain [unclear].

Male farmer: But I just think that maybe just a base cost or something like that, I mean if I feel strongly about something I'd be happy to pay a hundred dollars and write a submission, even supporting my neighbour I would do that.

Female farmer: What about getting your hundred dollars back if you win?

Male farmer: No, no, that gets complicated ...

Female farmer: Actually we're going to write a letter though aren't we? [crosstalk] We'll pay it ... We're inside with the district council, they like us and we like them, but we just want to give them an example of how really, you know, that this is, it's... unenabling really [crosstalk].

Male farmer: This costs, eighteen months, five thousand dollars, and we still haven't planted a tree yet. [crosstalk]

Female farmer: Causing huge despondency and so sons and daughters are growing up looking at mum and dad's total despondency and they're thinking bugger this, I don't want a [bar of it], so that succession problem ...

<sup>50</sup> Yeah, there's a certain number of possums, and sadly since rabbit poisoning's subsided the possum numbers have grown and presently the animal health board handle all that side of things. There's been quite a large programme through the property and I guess it's one of the things we do get advantage from without having a lot of input in because that's funded through AHB and being a store stock enterprise and a breeding enterprise we don't kill a lot of stock. We are an important part in the buffer. For two or three years in particular there's been quite a lot of possum work done and they've certainly got a lot. (male)

We've got a lot of possums, you'd be surprised how many possums, and they're actually, since RCD's been around, we haven't had the ... aerial poison drops that we used to have, possum numbers have, I don't want to say exploded, because they were a byproduct of the rabbit kills. This bit of hill country behind us, whenever that was poisoned for rabbits, it'd be about two years before you'd see possums back around here. Whereas these oak trees in the drive had acorns on them, it wasn't uncommon to come in the drive at night and see eight to twelve possums shoot up trees. So you know they're a potential threat, you know with the whole TB issue ... and there's a number of ferrets and stoats around here and on the one hand I'm happy to see a few of them because they help keep the rabbits in check, and wild cats, at the same time they're bloody hard on the native fauna. (male)

<sup>51</sup> Male farmer: The bulk of our wool goes through them (Merino NZ).

Interviewer: And so, are there things you have to do to maintain that contract?

Male farmer: Yeah, there's a downside. We'd love to be able to mulse, but we can't mulse. If we want to mulse we've got to get rid of our contract. The contract is probably a good backstop ... [so] we flag the mulseing.

Interviewer: And so does that mean you have a different way of managing [flystrike]?

Male farmer: Regardless, it means you probably have to crutch more. Sort of extra work.

Interviewer: So, you haven't used breeding to –

Male farmer: No, when – No, truthfully. I'm just starting to, actually. I mean, you buy – when you're buying rams and culling sheep. We get rid of the crinkly ones that attract shit and the flies. We probably try to open them up a bit. You're looking for particular wool types - the ones that are more prone [to flystrike].

<sup>52</sup> I'm not saying the government should be coming in and putting money into those things again, but their own investment got, the changes that went on, I think, it's a bit hard when you say the government because it's continually changing organisation, but I think they probably lost a lot of ground over the years because they didn't actually follow up on what they started probably at a pretty high cost in dollar terms, and that was just stopped. Been a lot of initially quite good forward thinking policies and then some very short term policies, and that's happening all the time I think. Anything the government seems to attack the, I suppose short term policies have more impact, get recorded by the media, so there's more sort of feedback and the government seems to be very responsive to that sort of pressure and it's pretty, I think in our sort of political environment it's almost impossible to take long term views on things and stick to them through good and bad. I think long term it's not actually doing the country much good and I'd give all political parties credit for making that mistake, I'm not going to cite any particular one. (male farmer, HC5)

<sup>53</sup> Um, and I suppose one of the big things that happened when I was in partnership with one of my brothers was that Merino boom too. I guess came not long after those LDL - so that really, I mean that allowed us to buy freehold land down on the flat. (male)

<sup>54</sup> It's certainly evolved I guess, though my time in management. I suppose as far as the company, Merino company, and both my father and grandfather were probably a little bit innovative toward the industry from the second world war on. They marketed a lot of wool in the UK through the wool brokers and early 60s they sold the whole cut forward to Alliance textiles. There was no real, they were reasonably open to different avenues or whatever, and that was even the case, I mean really, even when I left school and came home it was still marketed in Great Britain, the UK, and it was really just the removal of the wool board's participation in the market that wool brokers ceased to exist in the New Zealand operation really. So it was marketed through Elders, mainly because of personalities, some of the wool brokers, wool staff and what have you were taken up by Elders and it's gone on from there really. (male)

<sup>55</sup> I think it is - it's that important to us that we have to make it [Merino New Zealand] work to the best of our advantage. ... the Merino company was created by the formation of regional Merino associations, of which my one was the first, and then collectively those four associations got together, in conjunction with what else was happening within the Merino industry, to form Merino New Zealand, Incorporated. And then they became a commercial company from there on ... the Merino company was formed by the original formation of the regional associations for the improvement and betterment of local Merino - breeding, farming, genetics, that sort of thing. Um, anyway, without the Merino company, the in New Zealand would be probably - would have just disappeared like the rest of them. Like the wool industry in New Zealand has. Look at Australia and what's happening over there. There's a lot to be learnt from what happens in Australia too, I guess. Their industry has gone through absolute crisis. They won't recognize the issues, et cetera, et cetera. But there is - now, suddenly, there is a resurgence in Merino and sheep over there that's been created by a number of things, not least the seasons and the unsustainability of their cropping. And they've had some very good harvests over there over the last few years, to where the price has gone right down to the cost of putting it there in the ground. And so there's now a resurgence, and a recognition that sheep is worthwhile. And that's happening in the prices that they're getting for meat over there that just leave us for dead. (male)

<sup>56</sup> At that time, we were running Corriedales, so, um, in 1986 we switched from Corriedales to Merinos, I suppose learning the system that suited the farm. I think the biggest challenge – and I think my brother too, he also had to learn a new system ... My grandfather was involved in the first breeding of Corriedales, and my father actually had his start in Corriedale flocks. Up until the final boom of the 1980's, Corriedales levelled with Merinos, 'cause more meat, but less wool. So that was the plan since the 1980's, and I suppose we did the change 'cause of Rogernomics. People really had to sort of move to either wool or meat. And the dual-purpose sheep sort of went. People right through the high country, there was a lot of properties that ran half-breeds. Since wool prices increased in the early 90's, there were a lot of people that were without Merinos, instead of going back to half-breeds, they went into things like Corriedales ... And Merino is actually coming back. It's being seen as a dual-purpose sheep. Doesn't matter how much things change, some things stay the same (male).

<sup>57</sup> Yeah, actually, our Merinos have always been renowned South Island-wide for being bigger, more robust and stronger wool. Definitely. And genetically they are different than a lot of them. The majority of Merinos in New Zealand are based on Peppin bloodlines [from Australia]. The ones up here aren't. They're based on Merryville - South Australian bloodlines. Um, whereas other parts would get back into the ultra and super-fines. But, it's a country that has historically suited big, robust, heavy-cutting wools, I suppose. And I think that can be, um, rather than fall into line with everyone else, nowadays it's actually working in our favour. Because the Merino is - to be commercially viable, like other things, it has to evolve. The evolving is in dual-purpose sheep, which we have been advocating. Ours have been for the last 30 years. Um, we've got to enhance those three areas of income. There's obviously wool, and there's obviously meat, and there's also stock sales. The focus in New Zealand has been very singularly, um, focused on wool only. Historically. And, through micron madness in the 1980's created the New Zealand Merino flock to gain similar traits to almost focus entirely on microns. And that's all changed, and it won't ever come back like it was then. But what that did was it hindered development of the Merino flock. And the farther you go, the less fertility you've got. Obviously your wool weights go down and so you've only got the one income stream coming from wool. You've got fewer numbers to sell, because your lambing's so low, and you've got no meat. And the meat you have got is only a carcass. So, if we can - there's any amount of examples around now. In these types of sheep we derive, the meat income from them replaced the wool cheque. The wool cheque may - I don't think there'd be many flocks in New Zealand that per sheep stock unit out-produce the individuals and the super-fines and that. But, commercially, I would suspect that at the moment, there would be very few flocks outperforming price times care load as sheep do relative to - they won't be getting as much per kilo with their wool weights. But you've got that, so on a per stock head base, my income is comparable. Then the meat income would be half as much, or even more than the average. And that's where the real - then you've got super stock sales as well. And it all comes back to the commercial aspects of fertility, kilos of wool cut, and then obviously price per kilo, and carcass weight, obviously going to slaughter. And the potential for carcass weight on there is bigger sheep for sheep, but it's again under the same regime, they might be 3 or 4 kilos carcass weight under the mean. Again, focusing on commerciality, we think we've got a mix that is probably - it might sound incredibly arrogant - but it's almost competing with dry land dairy farming. There's not many other sheep farmers that can say that at the moment. So, it goes back to - I think we're on the cusp of something quite exciting. And we've started our own stud - we bought rams in Australia - to try and optimize what we think the future of the Merino industry may want. And that commercial model that I was talking about before, we're covering the bases. And there will be others that do it slightly different to us, but the end result may be very similar ... We haven't been chasing the [fertility] gene or anything. Merino as we know are a really fertile breed, and invariably fertility comes with bloody size, so the bigger you've got, the more fertile they are. But there are even varieties other than that - and the ones we brought over from Australia - the difference in fertility of those two sizes was unbelievable. Um, and we're not quite sure how much to use it because you've got to be very careful. If you want to chase single flock selection of fertility alone, then ... his progeny scanned 169% and the other ram's progeny scanned 137%, so they're 32% points different. So extrapolated from those two into the mixed age flock, the fertility in the mixed ewes, their fertility's continued, but if you're looking at meat production, which is where the opportunity for additional income really is going to come from, that commercial aspect of breeding something for the future has got to be very much in focus. Um, just as an aside, the more fertile ram cuts more wool, and his progeny will cut more wool as well. Those are actual figures, not estimates ... Yeah, we are [breeding to reduce the incidence of footrot]. Historically it hasn't been a problem here, although we had a major outbreak four years ago for the first time. Touch wood, we got rid of it, but we're very aware that - just going back to the stud. We started this stud purely for our own interest, but um, people have seen the sheep and have become interested. We sold 40 rams last year in a shrinking market, which again is quite remarkable. And I suspect this coming season we'll sell quite a few more rams than that. So, it's now developed what was a hobby for ourselves - we're wondering just how far we might take it commercially. We have the numbers to - we started from a ewe-based farm, and were quite unique. We didn't buy stud ewes. We thought that the genetics we had here were superior to the country, and we wanted to - we had the dispensation from the Merino pedigree to start off a stud. Because in New Zealand you couldn't do it. In Australia you can. So we had to apply for dispensation to breed up from our own ewe base. And they've allowed us to do that to the stage where we've reached, and basically a full stud now. So that's been the natural thinking. It's been the triumph of my farming career. Relative to high country, I think from a practical leadership point of view, obviously that is a case. Developing this stud and developing a type - I was going to use the word "Modern Merino" - but that's used too much. I think there's real opportunity to develop a Merino that has got more commercial opportunity than just high country. If we get the feed right

and make sure we keep the wool right for higher rainfall or more humidity or whatever else, I think we've got a sheep model that can compete with dry land dairy farming ... Ah yeah, yeah. I don't what we're doing with the genetics is - we're not - I am strongly of the view that the commercial [elements] that are important have to be adhered to, and you can't - if you're getting 7 kilos of wool instead of 5 kilos of wool, you're getting it basically for nothing. The fertility one really doesn't come into it because his model of sheep breeding would enhance fertility as well, and it would enhance carcass type. He's just looking at rare breeds ... but the wool side of it is where the historic majority of income has come from, from Merinos, and I don't think we should lose sight of that. I think we should still keep that part of the commercial mix as best we can. A lot of people say that the more weight you put on, the more you risk your fertility. At this stage, we're not seeing that. When it comes back to fertility in Merinos, these sheep are as fertile as any in the country. They're performing well outside of irrigation and intensive management. From that point of view, as I said before, there's some tension to breed a sheep type that has positive commercial implications for the sheep industry outside of the high country. (male).

<sup>58</sup> Female farmer: If we're selling a bale of wool on a day where the New Zealand dollar goes up one cent, we lose fifteen thousand dollars just bang [crosstalk] ... Not a bale of wool, but you know, a clip.

Male farmer: That's where it comes back to. New Zealand economics are based around overseas investment and high interest rates, so it's nothing to do with what we're doing on the ground and never will be. I can't see it ... I still think in New Zealand we really are caught with that high dollar and that makes it harder for people to, it doesn't matter what you're doing, it doesn't have to be farming, it's when you have to borrow money at such a high rate to do anything, it's always going to be quite difficult ... It ends up corporates can only do it because they're the only ones who've the timeframe and the actual collateral initially, but they've got enough money to actually make it happen. So I think you're going to see large tracts of land probably bought up by corporate.

I suppose the New Zealand economy in many ways probably needs to isolate itself, independence from any one other currency for those very reasons. You know, you saw that with Argentina when it was aligned to the American dollar, the American dollar went through the roof and Argentina went through the floor as a consequence. I get really nervous when people say we should be aligned to, directly aligned to a major currency, because they all have their ups and downs ... I'm not quite sure why wool is so aligned with the American dollar because very little of it actually goes to America in the first instance. Obviously that's the currency of trade. So far those things that are out of our control, I think we sort of, we get to try and focus on the things that we have an influence over and then we can bitch about the things that we don't because we're not confronted when we do our bitching (male).

<sup>59</sup> Actually, the rising fuel costs are probably one of the biggest threats facing our - I suppose our economy, but in the agricultural problems. 'Cause that impacts on fertilisers and transport, in general. And, um, it just costs - especially over the last for years has been just substantial ... In some years, especially, the mid-2000s, when prices dropped, when we had some issues with tenure review, we backed off a bit on our fertilizer, but to our detriment. Some of the reduction in productivity was noticeable. (male)

<sup>60</sup> We can't afford to do that [stockpile wool and wait till the price improves] ... really, where is our expertise to gauge where the market might be in 12 months? Interest and all those aspects that come into it as well. And the volatility of it as well. The changing tax position year-to-year too, which you have to predict. You have to be able to work within 10% or 20% of it. That's one thing - that's why I really like contracts. Because they give you - if you look at the graph for our wool for the last seven or eight years, you know there is just no blips on it. On a slightly increasing basis, over that period of time. And bankability of it. If we want to go and borrow money for expansion or something else, there is - we can go to the bank and say, "Look, listen, this is the chart and this is the guarantee of the future." It makes it far more bankable than if 70% of your income comes from wool. What are you going to get next year? We can say. People who aren't on contract can't. (male)

<sup>61</sup> Probably, as far as fluctuating prices - we don't contract any of our sheep. Most of our Merino lambs are sold at the local sale, which is probably the strongest sale in the country. But, as far as our wool goes, probably 50% of our income, we're very much enjoy selling to contracts these days. Right now we're two years into a three-year Icebreaker contract. And they come and they take - they don't take our hogget wool, but they take everything out of the shed. It goes straight from the barn and straight to Icebreaker. And we won last year ...

This year we were a bit below, and who knows what's going to happen next year, when we may lose. When you take the average, the last fourteen years, I suppose we have been above the auction price. So, that's how we hedge a bit, as far as the wool goes. That's the only contract we use. (female)

<sup>62</sup> There's some good ones [contracts] for beef. Like the five-star contracts. I think they are pretty much for a year. And there are even some more contracts for five years and things. For smaller amounts, but they are out there. And that's just fantastic. It just gives you that certainty. I mean, we've been bitten both ways. But I think that's life, and I think that's business. When we've signed, we've been bitten, and when we haven't signed, we've been bitten. You've just got to take it. If that's – I mean farming Merino wool is still not sustainable. We're not producing per kg what it's costing us. 'Cause we've done the figures – [consultant] has worked through that with us. 'Cause we've said we want to know what it's costing us to produce the kg of wool. We're still not breaking even. So, it's still not a sustainable enterprise, which is a terrible thing to say when it's the biggest part of your business, and it is being subsidised by the rest of the farm, but we can only hope that the prices – and we're not asking for the 1980's heydays to come back, but we are – all we're asking for is sustainable prices. I mean, everyone's got to make their dollar out of it, don't they? By the time that's actually been sold to the public, there's a fair few hands it passes through. Especially the way the wool is so international now. It pops over to that country to get washed, and that one to get spun and that one to get dyed, then back here to get sold. And New Zealand is only absorbing 10% of what Icebreaker are producing now. 90% of it's going offshore, which is incredible for a little country, but that just shows you what is happening. And we did look at – another way we were trying to hedge ourselves was, um, going right through and producing our own Merino garments, right from wool to go. And I don't know if you've heard of it, but it was – there was five farms involved, and two pulled out, which was us, and three continued, and the launch was Mihi Merino. They've got a shop in Fairlie actually. [Station name] are involved, and a couple of properties from Marlborough. We pulled out purely because of the stage we were at ... and it was just too much of a gamble to take at this stage of our lives, but good luck to them, and I hope it does work. But we were just trying to take the middle-men out, yeah. Push it right though. But to push it right through to retail is actually quite an undertaking, a huge undertaking. And we did send a container of wool away for their first lot. It went off to Thailand to get produced. So all the garments hanging in the stores now do have some of our wool in them, which is quite nice to know, but yeah. With the economy, it probably is not fantastic timing, but I hope – I really, really do wish them well and hope it works.

<sup>63</sup> ... we started out with capital stock, we brought out a line of capital stock we used at the first place we leased, then we leased another place and it had some lambs on it, which we carried on and we traded and they were Merino fine wool lambs, and we looked at our books at the end of the year and went gee, we could do well out of those lambs, so from that point we thought right, let's get more trading stock and then stock prices went through the roof on capital stock so we thought let's capitalise on that so we sold all our ewes - we averaged about 110 dollars or whatever it was for all those ewes and so we were pretty well 100 percent trading plus um our cash-flow from [a business we sold] ... We sort of made the most of when the market went mad and thought well we don't own the land, so capital stock - which can devalue quickly - so we sold the lot and then just went to trading and now we've got back into the capital [stock] again. Whether we'd do it again I don't know. (female).