

The impact of neoliberalism on New Zealand farmers: changing what it means to be a 'good farmer'

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Abstract. A recent part of the transdisciplinary study of New Zealand farming carried out by social scientists from the Agriculture Research Group on Sustainability (ARGOS) was a retrospective interview of all ARGOS sheep/beef, dairy and high country farmers and kiwifruit orchardists. In this interview their responses to 'shocks' over the past forty years was explored in order to examine farmer resilience and pathways to sustainability. What was apparent was how the 'good farming' model followed by New Zealand farmers and orchardists had expanded to include the notion that it was culturally acceptable to think of farming as a business. This change, which could be attributed to the influence of the environment of neoliberalism in the policies of the New Zealand government since the 1980s, allowed farmers and orchardists to think of themselves and their role in new ways that provided unexpected and exciting possibilities for the resilience and sustainability of the agricultural and horticultural sectors in New Zealand. This paper describes some of the unexpected consequences of Government policy, showing how long it can take for policy to result in identity change and how closely identity is linked to practice.

Keywords: good farming, good farmer, neoliberalism, business, sustainability, resilience.

Introduction

... 30 years ago in my father's time ... there'd be no doubt about what a good farmer was ... a good farmer's someone who ... had good stock ... and if you drive past you don't see the stock starving and all this sort of stuff ... And now ... a lot of the farming comments and opinion [comes] from people that say that they're in Federated Farmers ... or so-called farming ... they're big operators ... it almost insults them to call them farmers ... they're always talking about 'my business'... (sheep/beef farmer).

I would argue that we've probably got some of the most business savvy minded farmers in the world at the moment. We're not relying on the government for subsidies and that. It's sharpened up (kiwifruit orchardist).

The farmer in the first quote above gets to the heart of this paper. He is resistant to the idea of farmers as business people but confirms that it is happening and farmers who talk as business people have gained a certain status and acceptability. Though he does not regard them as 'good' farmers (see Burton 2004), others do. In the second quote an orchardist indicates how the change came about. (From now on in this paper the words 'farm' and 'farmer' are used to also stand for 'orchard' and 'orchardist'.)

We are interested in how government policy influences 'ordinary' citizens' sense of identity and the implications of that. Larner's (1998) development of neoliberalism as governmentality (Foucault 1991) is a very useful way of moving away from the examination of neoliberalism as 'a set of policy prescriptions or as an ideology' (Nairn and Higgins 2007, p. 262) to focus on the impact of neoliberalism on 'the formation of subjectivities'. In other words, rather than examining neoliberalism as a particular philosophy with related government policies ascribed to this philosophy, we are going to study the way in which it has changed people's identity and actions. Many others have attempted to explain how individuals are influenced by wider culture. Bourdieu (1977) uses the word 'doxa' for what is taken for granted in any particular society. According to Webb et al. (2002, p. 119), 'doxa works to distinguish the thinkable from the unthinkable, so that certain courses of action, those that literally challenge established social relations, become literally unthinkable – or at least in articulable'.

The impact of the recent neoliberal era in New Zealand's history on the personal orientations of farmers is investigated here. By taking into account the context of actions, some understanding and explanation of how farmers' identities and actions can be affected by governments can be provided. This paper links qualitative and quantitative data derived from interviews; measurements of attitudes gained from surveys; and environmental, financial, farm management and social data obtained from ARGOS, a transdisciplinary study of farming, to provide richness and unexpected insights into farmers' actions. We assert that as the government has moved since 1985 to an all pervasive neoliberal philosophy it has influenced some farmers to see themselves as business people rather than as farmers. This change has made possible innovative, environmentally responsible, and financially successful changes in farming practices.

The first part of this paper describes the political context of New Zealand farming since the reforms of the mid-1980s and the theoretical background. We then describe the ARGOS research programme and explain how this paper came about. The evidence for the transition of some farmers into business people is presented so that a list can be produced of what farmers mean when they talk about a business and how that has changed not only their orientation or identity but their practices. We outline how these changing practices have resulted in unexpected possibilities for farming that is more environmentally friendly. Finally, the conclusion draws together these findings to discuss their implications for farming in the future.

Agricultural reform

Part of the doxa of neoliberalism is that the world is a place of free choice and entrepreneurial spirit (Nairn and Higgins 2007), whereas, as Larner (2003, p. 511) suggests, 'people act within a particular discourse'. In the discourse of neoliberalism, people are encouraged to conform to the norms of the market. For agriculture this has both personal and structural components.

In New Zealand's recent past, agricultural primary products were acknowledged as the source of the country's wealth and security (Brooking 1996) and those associated with agriculture played an important part in New Zealand society. To be 'helping' agriculture was to be 'helping' the nation. It was part of the New Zealand identity to see farmers as the 'backbone of the country'. This all changed in the 1970s when New Zealand experienced several crises which meant that the balance of payments deteriorated and finally led to the Government reducing spending on the farm sector, dropping it from more than one billion (NZ\$) in 1984/85 to NZ\$ 200 million in 1992/93 (Gouin 2006). At this time New Zealand started on what has become known as 'The New Zealand Experiment' (Kelsey 1995), which has seen New Zealand change from one of the most highly regulated and socially integrated democratic systems in the world, to one of the most highly de-regulated and market-led (Boston et al. 1991). Agriculture was no longer central to Government thinking. The future of New Zealand's economic health was seen to lie in the 'knowledge society/economy' and agriculture was not promoted as an important part of this (Hodgson 2000). This has continued to the present. In this paper, the emphasis will be on investigating whether there has been a change by farmers to a market-led business orientation with an emphasis on financial returns/profit and efficiency.

Audit systems for the dairy and kiwifruit industries in New Zealand have developed within 'a policy environment privileging neoliberal rationalization of exchange' (Rosin 2008, p. 46). This context, which Rosin argues has the potential to change the 'spirit of farming', is the context of this paper. Rosin (2008) suggests that farmers are showing signs of moving away from past and present productivist orientations toward a social acceptance and valuing by farmers of adherence and compliance with market-oriented audit systems. According to Lowe et al. (1993, p. 221), productivism is 'a commitment to an intensive, industrially driven and expansionist agriculture with state support based primarily on output and increased productivity'. Burton and Wilson (2006) argue that both 'agricultural producer' and 'agribusiness' farmers can be classified as productivist. Therefore, we would like to draw the distinction in this paper as being between 'agricultural producer' and 'agribusiness' farmers' not between productivists and business people. Hence, an agricultural producer is a 'conservative productivist farmer who maintains cultural notions of stewardship', whereas an agribusiness person is 'a farmer who concentrates agricultural production to the extent that the profit motive dominates and stewardship concerns are lessened' (Burton and Wilson 2006, p. 101). The word 'stewardship' refers to the belief of farmers that 'farming nurtures the land' (Burton 2004b, p. 210) and that by doing so they are looking after the land so that it can be passed on to the next generation in as good a condition or better than it was before. Both orientations to farming may support farmers in their adoption of new technologies and their inclinations to change but they will do so for different reasons.

The ARGOS social science team (Campbell et al. 2012) suggests that the comparison of different audit systems in the sheep/beef and kiwifruit sectors in New Zealand has revealed many differences in the social dynamics of farming households. It is argued that such differences are 'being co-produced by four dynamics: subjectivity/identity, audit disciplines, industry cultures/structure and time' (Campbell et al. 2012, p. 129). We suggest that overarching and impacting on these four components is the context of neoliberalism.

The good farming approach

Recently some academics have taken a 'cultural turn' by exploring what it means to be a 'good' farmer in a farming community, and focusing on 'language, meaning, representation, identity and difference' (Burton 2004a, p. 360), using qualitative research to study farmers to understand why farmers do what they do. The concept of the 'good' farmer has arisen as

'production-oriented roles came to symbolise, both to farmers and the country, the notion of good farming practice that enabled farmers to claim a high social position as caretakers of the nation's food supply' (Burton 2004b, p. 195). This status is now being contested by concerns about the environmental impact of intensive, production-oriented farming (Silvasti 2003; Setten 2004).

To explain farmers' proclivities to undertake certain actions some researchers have used Bourdieu's theory of practice (Bourdieu 1990; 1998) to inform the 'good farmer' approach. How do people come to see the unthinkable not only as thinkable, but do-able and transformed into action? Bourdieu's theory is based on three elements – habitus, field and capital – habitus being of most relevance to this paper. Habitus, described as a 'disposition to act', is not necessarily conscious or articulated but has become embodied in people through practice (Adams 2006, p. 514-516). These dispositions have been influenced by family practices over the generations, community and national cultures, and educational systems and continue to grow and change over a person's lifetime. Habitus describes the taken-for-granted world, like a 'fish in water' (Bourdieu and Wacquant 1992, p. 127), enabling a 'feel for the game' (Bourdieu 1990, p. 66-68), and knowledge of what is the 'right thing to do' (Bourdieu 1998, p. 8).

Habitus is acted out in fields structured around types of capital, such as economic, social, cultural and symbolic. Fields are the arenas of action or practice and are structured by 'rules' which may be written in the form of laws, regulations or policies or unwritten, perhaps not even articulated, social norms or ways of behaving in that particular context. Hence fields define what is thinkable and unthinkable. Obeying these rules brings rewards with it in the nature of increased 'capital'. Capital may be entirely symbolic giving a person status in that field, a sense of belonging, and/or a reinforcement of identity, or, it may come in another form. People use or exchange their capital in order to negotiate their way in a field and increase their capital. Economic capital in the form of money or other possessions such as a land resource may be a reward for working in a field or it may be used to produce more capital. Social capital, in the form of social networks can be used to negotiate in a field, to find knowledge about how to do something and so on, and may in itself be a reward. Cultural capital or 'know-how' gained from education, or from being able to interpret the symbolic nature of capital in a field can be used to operate in a field and to gain the rewards a person needs for their wellbeing. Other forms of capital are also possible. Hence, farmers' actions may be interpreted as using their 'know-how' or habitus, social networks and cultural capital such as knowledge about business, to increase their financial capital and symbolic capital or status and wellbeing (Bourdieu 1998, p. 32).

Description of ARGOS as empirical basis for arguments

The findings reported in this article are taken from data gathered in the Agriculture Research Group on Sustainability (ARGOS – see www.argos.org.nz for further information) research project (2003 to present). The objective of ARGOS is to advance understanding of sustainable agriculture through the transdisciplinary comparison of different management systems (conventional, integrated and organic) in three main sectors of New Zealand agriculture (sheep/beef, dairy and horticulture). Each farmer in the project has been interviewed at least twice (Hunt et al. 2005, 2006; Rosin et al. 2007a, b) and has provided values for many economic, social and farm management variables. Farms have also been assessed ecologically. The most recent interviews were of a retrospective nature. Farmers were presented with a timeline of the major events impacting on farming since the 1950s and asked how these shocks had impacted on their farming practices (van den Dungen et al. 2011a, b; Hunt et al. 2012). The interviews with sheep/beef farmers and kiwifruit orchardists form the primary base for this article.

Research methods

Research encapsulated in the book title '*Children of Rogernomics: A neoliberal generation leaves school*' (Nairn et al. 2012) on the impact of neoliberalism in New Zealand on young people now entering the workforce, inspired us to think about the impact of neoliberalism on farmers. Using qualitative research techniques (e.g. Tolich and Davidson 1999) on the transcriptions of interviews carried out in ARGOS, we were able to reflect on what ARGOS farmers said about business and how this had impacted on their farming and financial practices. It is difficult to find the ways in which they maintain and reinforce their identities as good farmers because, as Bourdieu suggests, these are hidden in the 'taken-for-granted' world. They are not likely to be discovered by asking farmers directly and therefore there is a need to search between the lines of what they say to understand what meaning they gave to their lives. To do this we found all the references made to business and then grouped these excerpts according to emergent themes (Lofland and Lofland 1995; Becker 1998), as will be apparent in this section. We then considered what actions were associated with farmers' changing orientations towards business.

It was also important for us as interviewers and researchers to:

abandon all previous judgments about what is objective, factual, natural or scientific, against what is subjective, historical, cultural or religious in order to monitor the specific construction of these borders by each farmer ... to conceptualize the view ... held by each farmer, not only as spoken in words, but also as interpreted in daily practice (*Kaltoft 1999, p. 41*).

In this way we were able to establish the rules of the field of farming and then how some ARGOS farmers 'play the game' in this field, incorporating these values into their habitus (Bourdieu 1990, 1998).

Evidence from ARGOS for farming as a business

Gathering evidence from what farmers said

Now we consider what farmers said about business and how it applied to them. First we consider the past and how things changed when all subsidies were removed. For some, this means comparing themselves with their fathers, as in the following quote:

Interviewer: You used that word 'business'. How long have you thought like that? Is it different from your father?

Farmer: Yeah, it probably is a little different. I think they were probably a little more romantic about their farms. I mean, it's definitely a business (*sheep/beef farmer*).

One farmer argued that his father was a businessman, even in the days of subsidies and cheap loans. The difference he felt was that today more formal accounting procedures are required.

Male farmer: ... farmers ran a business before that [1984 when subsidies were removed] ...

Female farmer: You had to become more astute though, I think farming has changed – well, I'm just comparing you to Dad.

Male farmer: Well no, he did the same thing, only mine's probably more structured, like I do cash flows and balance sheets, he did them on the back of his cigarette packet (*sheep/beef farmers*).

This farmer reflects on how the removal of subsidies made farmers more business-like because they could not just farm by 'instinct' any longer.

I guess [the loss of subsidies in 1984] - made you more aware of that - to run it as a business rather than, just, you know - a lot of farms - and the odd one probably still ... that are just farmed by instinct, because that's all you needed (*sheep/beef farmer*).

Next we hear what some farmers said about how they operated their farms. From the tone of voice used, as in the quote above, it was apparent they felt the need to assert that their farms were businesses, implying that this was open to challenge. It was clear from many statements that a business is very serious. It is all about making money: 'My vision is to make money. Well, we're not here for fun' (kiwifruit grower). A business has to be grown both in terms of profitability and production and the asset has to be maintained, '... because we have an overall business plan of increasing our business, our gross margin by 10% a year. And we do that by reinvesting ... Because, unless you're moving up, you're actually moving down aren't you?' (kiwifruit grower). All in all a business has to be looked after, reinvested in and '... all decisions are based on finances' (sheep/beef farmer). To grow, a business needs to have a strategy, a plan, a target.

One farmer suggested that when the Goods and Services Tax (GST) came in farmers were forced to become more business focused because they had to attend to their book work and spend some time working in the office. Such an action was regarded as associated with being business-like and part of a drive by government to be more business-like. It is well documented in ARGOS reports how many farmers disliked spending time in the office because it went against their identity as farmers who 'should' be working outside. Others had adjusted to it as part of running a farm as a business these days (Hunt et al. 2006; Rosin et al. 2007a, b; Rosin 2008). Part of having formal accounting procedures enables farmers to be efficient by lowering costs and keeping track of finances. While some aim to keep their costs down by not doing anything new (Hunt 2011), others have invested in changing technology such as direct drilling, using a reversible plough to reduce fuel costs, or doing more soil tests to use fertiliser more efficiently. This farmer describes his use of direct drilling and how it reduces his top soil loss:

And we farmed it normally ... so it was always plough the paddock and work the paddock and spend weeks on the tractor and when I took over direct drilling came in ... which has reduced the cost of doing it, and plus we're on rolling country which means as soon as you work around it, it works it [soil] off and works it into the valley and the valley gets five feet of topsoil and the tops don't. So yeah, so direct drilling's been ... high risk at the start because you're very green at doing it, changing your whole farming practice to spraying, minimal spraying but yeah timing and it's as much skill ... as we used to be with a full cultivation. But we went to that which means yeah, we're less hours on the tractor and less costs (*sheep/beef farmer*).

For another farmer it is all about cost saving:

And like in any businessmen, there are good ones and there are fairly ordinary ones and there are ones that are bloody hopeless and that's true in any business, so you'll see a lot of farmers are very successful and it's purely because they've kept control of their finances which is running a good business (*sheep/beef farmer*).

When the Government removed all subsidies the ability of farmers to take out bank loans was put on a commercial basis and farmers were required to produce farm budgets and management plans before they were allowed to have a loan. The irony is that though a business should make a financial return on capital, in farming it is very difficult to do this because the land asset is of such high value. 'I often wonder why the hell I do it – the amount of capital tied in. You really don't get the reward' (*sheep/beef farmer*). In this sense farming does not fit the common assumption that the main emphasis of business is 'short-term profit maximisation' (World Economic Forum 2012). Most farmers farm in spite of this.

It is acknowledged that business is risky and entrepreneurial. Sheep/beef farmers describe farming as having its ups and downs compared with kiwifruit where some kiwifruit growers treat their land more as a commodity (see Hunt 2010). Two quotes illustrate these contrasting attitudes. A sheep/beef farmer said, 'Well, when things are going well it's good. It they're not it's obviously not too bloody good (laughing), but farming is like that. It has its ups and downs.' Whereas, a kiwifruit orchardist said, 'My vision for the orchard is ... it does well. For us [the goal is]... to fix up the structures and move off and go and do something else'. A business person has to take up opportunities as they occur.

One of the foremost drivers 'to be a business' has been the desire to continue farming, which is indirectly related to the removal of subsidies, the advent of neoliberalism and export price (and currency) fluctuation. When the feeling is that the government is no longer 'on your side' then people take responsibility for their own survival.

... 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 (*High Country farmer*).

Adding to the farm size by buying or leasing more land has been another survival strategy and way of managing risk, which also helps farmers to be more independent and drought proofed. Farmers choose whether to have a breeding and finishing operation or just to finish lambs for the market. The decision of whether to grow crops for animal feed is part of the strategy to make a farm more independent of what else might be going on. Diversification, beyond just producing meat from lambs and cattle born on a property, has become part of surviving and of entrepreneurship. Income can now come from many different sources rather than just the meat companies. The picture drawn by farmers is of a balancing act – a farmer diversifies enough so that if something does not go well then something else does. This may involve a change of identity as farmers start to farm things they had not done before.

Each year ... I've tried to save 10% of the land use into something out of season, like dairy cows in the winter or cropping in the spring. So each year I try and chase a different rainbow that's got money involved with it. Like wintering dairying cows was pretty good two years ago, cash crop barley, feed barley was good two summers ago. So that's the reason the crop area changes. If there's money to be made, I'll change (*sheep/beef farmer*).

Evidence from ARGOS of changing orientations and practices

We have outlined what farmers have said about business and practices that are necessary if one runs a business or is a business person. In this section we consider how this can be interpreted to indicate how farmers' subjectivities may be changing as they are in the process of becoming neoliberal subjects. What are the 'signs' of a neoliberal subject? According to Lewis (2004, p. 151) the neoliberal reforms in New Zealand 'promoted self-interested, entrepreneurial and responsibilised subjects', the latter having the meaning that 'responsibility for provision and regulation has been dispersed to responsibilised subjects ... via the market'. Included within this has been a focus on efficiency.

It is obviously becoming acceptable for a farmer to call himself or herself a business person. One couple were even able to articulate when they became business people. Their identity was forged through a crisis.

... it was around the time ... when [we lost a lot of money] we aggressively then looked at our business much more as a business. And that's [why] we call this now a business ... and the business is farming. Now, initially we would say we are a farm ... and we run a farming business. And ... to us that's quite ... [a] key difference ... (*sheep/beef farmer*).

In the previous section we have indicated how rules and values have emerged about what it means to have a business and be business-like:

- A business is about making money.
- A business should make a financial return on capital.
- A business should be efficient by lowering costs and keeping track of finances.
- A business should always be growing.
- A business is risky, entrepreneurial. A business must take up opportunities when they are there.
- A business goes through stages and needs to have a plan/strategy.
- Having a business means that you have to have more formal business practices.
- A business is something that has to be looked after.
- A business is serious.
- As a business person you are a professional.
- A business should be concerned about the quality of the products it produces.

From all the things that farmers have said, it is clear that not only have they defined what it means to be a business, but also they practice 'business'. They aim, not to produce more, but to produce in ways that make more profit. It has become part of who they are – their habitus – and for them is the 'right thing to do'. They have become neoliberalised subjects. Their interest in their business is expressed in terms of self-interest. They are certainly entrepreneurial and feel responsible for any risks they undertake on behalf of their business as they manage this risk in various ways. Contradictorily perhaps, becoming a neoliberal subject means they have become much more confined by bureaucracy – spending more time in the office, on the computer, keeping and maintaining records and having plans.

While it was apparent that status based on the importance of farming was still very prevalent among farmers themselves, some were mourning its passing and experiencing a loss of identity (Hunt et al. 2012), which has pushed some farmers to develop alternative ways of acquiring status. In a national environment/context of neoliberalism in which it is assumed that making money is the most important attribute a person can have, it is obvious that some will focus on a business orientation in which the farm as a money-making venture takes priority. The lowering of the status of farmers through the government's emphasis on 'knowledge' and the emphasis on business appears to have opened up farmers' horizons, as the next section explains.

Unexpected possibilities for business-focused farming

Farmers have been able to achieve environmental care incidentally through acts of efficiency. One couple was prepared to stand against the tide of local opinion – for them farming was not about making money at all costs as they felt their neighbours thought they should be doing. They were concerned about the impact of a popular practice – grazing dry dairy cows through the winter season. However, not doing this was also to their financial benefit. Being environmentally sensitive may also be good business practice long term.

And also ... about that same time as well...we started looking at having a business plan and saying this is what we want to do and not necessarily chasing the trend or the dollar ... But it was becoming very popular to graze dairy cows ... and the pugging and the damage that was doing to the soil ... we quickly realised that it was actually affecting our [cropping] yields ... But you got quite a bit of flack for not taking on dairy stock. And, yeah ... it actually is not worth it for us, because of all the extra cultivation needed ... to get rid of the pugging ... (*sheep/beef farmer*).

For some farmers it was no longer regarded as efficient to farm parts of the landscape where the effort required did not balance out the returns to be made. Thus these areas could become regarded as providing ecosystem services for the rest of the farm.

Quite large groups of farmers in ARGOS have been able to become sufficiently efficient for them to maintain themselves in farming, while others put their farms and their livelihoods at risk through lack of control of their spending in relation to their gross farm revenue (Hunt 2011). A resilient system needs to have those within it who will continue to reliably produce their products, thereby maintaining New Zealand's place in a market even through bad times.

Some farmers have been able to increase efficiency through the uptake of new technology which has also allowed them to be more environmentally friendly. Examples are the use of the reverse plough, direct drilling, technologies associated with lambing such as increasing the number of lambs born per ewe and scanning of pregnant ewes, and the use of new grasses and crops that have a higher carbohydrate production and the better storage of feed as baleage, enabling finished lambs to be sold early in the season before the dry summer/autumn period. The latter technologies have enabled farmers to manage flocks better by putting less stress on land resources at times of drought or through the winter. Kiwifruit orchardists have developed pruning technologies to cope with the shortage of labour and to increase the production of high dry matter fruit, and more efficient fertiliser and spray practices.

Elsewhere, there is evidence that New Zealand farmers have adjusted to the removal of subsidies and the neoliberal reforms of governments since then, and that these adjustments have had a positive environmental impact (Harris and Rae 2004; Vitalis 2008). This paper argues that as neoliberal government policies have changed the 'doxa' or 'spirit of the age' and it has become more acceptable in popular culture to be a business person and to be focused on money, farmers have been enabled to act as business people and therefore to achieve these adjustments cited above. Some farmers have found greater freedom to think of themselves and their activities differently. They have looked for other opportunities to increase or vary their sources of income in order to manage their risk and incidentally increase their resilience to survive through extreme weather events, changing markets and exchange rate fluctuations. They have bought extra land, sometimes a distance away from their home farms, to reduce the environmental impact and increase their resilience in times of drought. The growth in dairying has been turned to their advantage by the provision of winter feed for cows, dairy beef, or female calves grown as herd replacements.

Conclusion

There was a period in New Zealand history when it would have been unthinkable for farmers to describe themselves as involved in business, but through different governments' ongoing rhetorical support and promotion of neoliberalism, we suggest this form of identity has become acceptable in farming circles. In other words, New Zealand governments have acted as a mediator to make the unthinkable thinkable and therefore possible. It has given permission to farmers to practice their farming as a business rather than a lifestyle. With this comes belief in and attempted adherence to the 'rules' of business – that it should grow, increasing profit every year, be entrepreneurial and risky, financially efficient and decisions should be made using financial reasoning first and foremost. It is not just in New Zealand this is happening; the notion of 'farming as a business' has become a more widespread theme in the national agricultural strategies of several African countries' (Foresight 2011).

However, the change in farming and farmers also contradicts the neoliberal model. Given the value of farming land in New Zealand it is actually very difficult for sheep/beef farmers in particular, to make a return on the capital value of the land, so though some (very few) may be able to increase their business, if they considered the return they are making on their capital, they would be able to make higher returns doing something else with their investment. Most farmers interviewed wanted to continue farming, so the possibility of maximising their returns is sacrificed to their need to maintain their identities as farmers.

The emphasis on efficiency has produced some possibly unexpected environmental benefits. For example, some farmers now use reversible ploughs which require less fuel. Even less fuel is required and less disturbance to soil and erosion results if farmers direct drill. Similarly, developments in technology associated with lambing have led to lower stocking rates at times when the landscape may be at risk from erosion. It is beginning to be seen to be inefficient to work precipitous hillsides to grow grass for stock and perhaps better to leave them or plant trees. Some make decisions aware that if they look after their farm environmentally rather than chasing the quick return, that will be more beneficial to their business in the long run. We are sure there are many more examples which are now a 'taken-for-granted' part of contemporary farming in New Zealand.

From our recent interviews, it is apparent that farmers are influenced by government policies which encourage a culture of market-led enterprises. It is clear that some of them have changed as a result, seeing themselves more as business people than as farmers. As a result of this change, and perhaps unintentionally, some farmers are making decisions that help their farms to be more resilient and able to withstand environmental, economic and social shocks and militate against risks, demonstrating that an emphasis on making money has a potential to have some positive impacts which will enhance the future of farming. It also demonstrates the

continuing adaptability of many farmers to work within the context in which they find themselves.

Acknowledgements

This paper was first presented at the 10th European International Farm Systems Association (IFSA) Symposium 'Producing and Reproducing Farming Systems: New modes of organisation for sustainable food systems of tomorrow', 1-4 July 2012, Aarhus University, Aarhus, Denmark. Thanks to the referees for their suggestions for improving this paper. Thanks to Paul Dalziel for providing references supporting the changes neoliberalism as invoked in farming in New Zealand. The ARGOS research programme has been funded by the Foundation for Research, Science and Technology (FRST), then the Ministry of Science and Innovation (MSI) and now the Ministry of Business, Innovation and Employment (MBIE), with other financial assistance from the Certified Organic Kiwifruit Producers Association, Merino New Zealand, a meat packing company, Te Runanga o Ngai Tahu, and the ZESPRI Innovation Company.

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