Will farm leasing change rural communities?: Farming practices and community sustainability implications in an Australian dairy region

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Abstract

Some actors in the Australian dairy industry see farm leasing as one way of meeting the current challenges of intergenerational transfer of farm businesses, but such a change in business models can be expected to change aspects of farmers' practices that impact on local communities, economies and environments. Previous research has found that farmers who do not intend to hand their farm over to their children are less likely to adopt practices aimed at long-term sustainable use of natural resources (Barr & Cary, 2000), but the impact of leasehold tenure on farmers' contributions to the economies and social life of local communities has not been studied. The broader literature on the social construction of farm practices suggests that they emerge from the complex interplay of many personal, social and structural factors, which are related also to the particular nature of the production system itself. How do these factors change with a move to leasehold tenure? Here we begin an exploration of this question by examining data from focus group discussions carried out with dairy farmers in the Alpine Valleys region of north-east Victoria, Australia. A key finding is that there are many opportunities for various actors to influence the practices of leasehold farmers, and thus to influence the changes to local communities, economies and environments that might be associated with an increased incidence of farm leasing.

Introduction

The average age of farmers is increasing in many OECD countries (AFI, 2005), including in Australia (Barr, 2004). Resulting both from reduced recruitment of young people, and delayed retirement of older farmers, this trend is interpreted as evidence of challenges to the intergenerational renewal of farm businesses, a challenge that has been noted also in the Australian dairy industry (Dairy Australia, 2011a). Dairying is Australia's third largest agricultural industry in terms of product value, with approximately 8,000 farms producing around 9 billion litres of milk annually (Dairy Australia, 2011a). In recent years around 45% of this production has been exported, making Australia the world's third largest dairy exporter, contributing 10% of the world's traded dairy products (Dairy Australia, 2012a). The industry is currently in a growth phase (Dairy Australia, 2011b), and so retention and renewal of farm businesses is an important issue.

Some industry actors are suggesting that farm leasing may be a useful innovation in this context (Dairy Australia, 2012b). Long-term leases of state-owned land are a common form of tenure in the extensive pastoral regions of northern Australia, however leasing of privately-owned farms to a tenant farmer, while common in many other countries, is uncommon in Australia, including in the case of dairy farms. It has been suggested that leasing might better meet the needs of older farmers who wish to retire and lack a family member to take over (but who wish to retain owner-

ship of the farm), and also the needs of younger farmers who lack the necessary capital to own a farm (or who do not see land ownership as a priority) (Ashby & Ashby, 2011). What kind of *changes might an increased incidence of farm leasing bring about in Australian dairy communi-*ties? Here we explore changes under three headings, corresponding to the elements of a "three pillars" conceptualization of sustainability (Franklin & Blyton, 2011): changes related to local economies, changes related to the social life of communities and changes related to the local natural environment and management of natural resources.

Previous research examining the influence of land tenure on farming practices has tended to focus on environmental aspects, and in particular on evidence that short term tenures (and the absence of a family heir) undermine the ethic of land stewardship, and reduce adoption of practices directed at long-term sustainable use of natural resources (Barr & Cary, 2000; Cocklin, 2005). However, a range of factors that influence the adoption of environmentally sustainable practices on leasehold farms have been identified including the time span (term) of a lease, the longevity and quality of the relationship between lessor and lessee and the way that risk is shared between the parties (Carolan, 2005). Conversely Campbell et al. (2012) found that the differing culture, institutional structure and audit requirements of different agricultural industries exert a stronger influence on environmentally relevant practices than do differing ownership structures within industries. None of this research has examined how practices relevant to local social and economic sustainability might change with a shift to leasing, but it can be assumed that the same range of factors identified above will be relevant.

Here we explore the changes that might be associated with a shift to leasing by first examining in a particular local context the range of mechanisms that inform dairy farmers' environmentally, socially and economically relevant practices. We then discuss whether and how these mechanisms are likely to change with a shift to leasing. Such an analysis also allows us to identify what interventions, by which actors, might be warranted in order to steer impacts in desired directions.

The Alpine Valleys Dairy Pathways project

The Alpine Valleys region is located in Australia's temperate-climate south-east corner (see Figure 1). The region is bounded to the south by the peaks of the Victorian Alps, which reach above 1,600m elevation and receive winter snow, and to the north by the upper reaches of the Murray River, a tributary of Australia's largest river system. The region covers approximately two million hectares, of which approximately 600,000 hectares is used for agriculture. It includes two regional cities with populations of greater than 25,000 people, as well as a number of smaller towns. There are currently around 190 dairy farms in the region, all run as family businesses, occupying approximately ten percent of the agricultural land located along the relatively flat and fertile valley bottoms of the lower reaches of the region's four major rivers and their tributaries. The average size of dairy herds is 240, and is increasing. Cows graze outdoors throughout the year on a mixture of irrigated and rain-fed pastures. Outside of the two regional cities, agriculture is the region's largest employment sector, but employs only 15% of the labour force. Dairying is the second largest agricultural industry (after beef and sheep grazing) both in terms of people employed and farm-gate value of production. The number of dairy farms has declined by about a third over the last ten years, and local dairy factory field officers estimate that up to a third of current farms may cease farming over the next five years. In more than half these cases this is due to the absence of a family member wanting to take over the farm¹. Community members are concerned

¹ Except where otherwise indicated all data in this paragraph are from Santhanam-Martin (2011).

that this decline in the number of dairy farms will have wider negative consequences for communities through reducing employment opportunities, reducing cash flow through local businesses and reducing the long-term viability of community services such as schools.

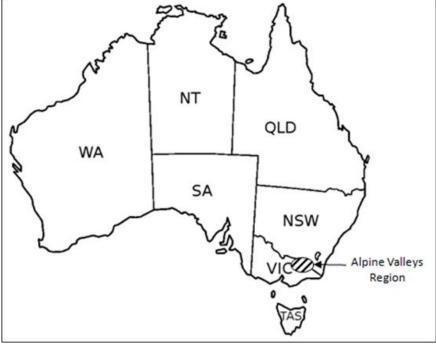


Figure 1: Locality map of the Alpine Valleys region

Dairy farmers, community members, a milk processing company and other industry and government stakeholders are currently working on a collaborative project called the Alpine Valleys Dairy Pathways Project which is aiming to reverse the observed decline in dairy farm numbers. Addressing barriers to the intergenerational renewal of farm businesses is one of the major focuses of the project, and farm leasing is thought to be one possible mechanism for achieving this. The most recent available census data show 49% of dairy farm owner-managers in the region as being aged 50 years or over². Many of these older farmers are looking towards retirement, and some lack a family member wanting to take over the farm business, yet they may not want to sell the farm. Ceasing dairy farming while retaining ownership of the land and moving to grazing beef cattle, a far less labour-intensive activity, has emerged as a form of semi-retirement land use, but is seen by some community members as less desirable than maintaining land in dairy farming because beef grazing generates less employment and local economic activity. A pool of young families who want to own dairy farm businesses, but with insufficient capital to purchase farming land (and no opportunity to inherit land), also exists. Could leasing the farm to a non-family member be another option for older farmers wanting to retire? The Alpine Valleys Dairy Pathways project thus presents as a suitable case study for exploring what the implications of a greater incidence of leasing might be. Here we examine data from a series of focus group discussions held with dairy farmers in the region in November 2011.

² 2006 Australian Bureau of Statistics census data processed by Dairy Australia's *The People in Dairy* program.

Methods

Social life in the Alpine Valleys region is organised to some extent according to social catchments that align with the physical catchments of the four major river systems, hence it was appropriate to hold four separate focus groups, one in each valley. Participants were recruited by personal invitation, with the invitation list aimed at generating a diversity of views, including dairy farmers at different life stages, with different sized operations, and performing different roles (owner-operators, sharefarmers and employees). Couples were invited to participate as couples. A small number of agricultural land owners who are not currently dairy farming were also invited. Identification of invitees and recruitment were carried out by field officers from Murray Goulburn Cooperative Company, a large farmer cooperative to which the vast majority of the regions' dairy farmers supply their milk (and also a central actor in the Alpine Valleys Dairy Pathways project), with assistance from local dairy farmers who are members of the project steering committee. Fifty people were invited to participate across the four focus groups and the final attendance was 33 people consisting of ten women and 23 men. There are currently six leased dairy farms in the Alpine Valleys, however none of these farmers participated in the focus groups.

The groups ran for two hours and were audio recorded and transcribed. For our purpose here, we analysed any instance where participants spoke about practices that impact on their local community, economy or environment, and sought to identify what mechanisms were implicated as bringing about or informing these practices. Participants are referred to here by pseudonyms. For practices relevant to the local community and economy much of the data arose in response to a particular question: *what role do you think the dairy industry plays in the local economy and in your local community and how is it changing*? We didn't ask an equivalent question about dairy farms' interactions with the natural environment, and so the data in this area is rather limited, arising mostly from a question about the impacts of government regulation. The second stage of analysis was then to examine how the various influences and mechanisms identified by focus group participants might be affected by a shift to leasehold tenure.

Results

Practices relevant to local economies

Dairy farmers identify the wages they pay their employees and their spending in local businesses (both for farm and household purposes) as constituting their contribution to local economies. One of the most common tasks employees perform on dairy farms is to assist with milking, which takes place twice a day, in the early morning and late afternoon or evening. Both employers and employees commented that this requires employees to be local residents (within fifteen or twenty minutes driving distance):

From the way I see it, each individual farm really only has a radius of available people, the people that are living in that particular area that are able to, I mean if you get somebody keen enough they will travel further but I don't think it's going to go on for too long. (Bob).

Farmers observed that there is a trend towards fewer, larger farms, and this is resulting in a growing demand for employees. Employers commented that suitably skilled employees are in short supply and highly valued, and thus that employment relationships can last many years.

Participants described a range of mechanisms that influence their purchasing practices for goods and services. While they value and support local businesses for minor everyday purchases such

as fuel, bread and milk, they go further afield to access a greater range of products for major purchases such as farm machinery:

Well because if the brand that we are after is not in [the nearest regional city] we go away, we spend our money away. You know I see that sometimes as a shame (Shane).

Another participant commented that during a recent major drought the need to purchase fodder from afar was seen as a major drain on the local economy:

I can remember standing at the local mechanics in 2006 when there was massive amounts of feed being brought into the district because spring had failed. He looked up as a semi load of hay went past and he said 'every time one of those goes past it's \$5,000 going out of the district' (Frank).

Both of these comments indicate a level of awareness about the implications of spending decisions.

Participants emphasized the central importance of agricultural markets, reflected in the price they receive for their milk:

If you consider the price hike in 2008 it would have been a God send to the industry because had that not happened you would have seen these numbers a hell of a lot less than they are now. There'd be a lot less dairy farmers in this area now, without that one year of it, I'm sure. People were... there was a general feeling of discontent with the whole industry and a single commodity price event happened... and I believe that drives the whole thing (Geoff).

However others noted that while farmers may not be able to influence the milk price they do exercise control over their production costs:

But even within some of our discussion groups and the dairy business networks there's a massive difference just on farm between production costs. You can be \$2.60 compared to - we were on a farm yesterday, it's \$3.50. A dollar a kilo makes all the difference between several farms (Ted).

The reference to discussion groups (of which dairy business networks are one variety) also highlights that there are particular programs and networks that dairy farmers participate in that inform their practices.

Practices relevant to the social life of local communities

Participants consistently commented on the high level of involvement in local community activities and organizations that is typical for dairy farmers:

I think we're a constant because we are always here, the only ones in the fire truck, we are always at the [football] club, we are always at the school (Paul).

In one area which has seen a recent influx of non-farming "rural lifestyle" residents, participants commented that these new residents were choosing not to become involved in the local community to the same extent:

Our population density is becoming greater but our sporting clubs and our communities are actually becoming sparser for some reason. They cart their kids for heaven's sake from [the local small towns to the regional centre]. Why? (Simon).

The point was also made that the on-going viability of community organizations requires a continuous process of social renewal that operates over a long-term (generational) temporal scale:

When this generation passes through I don't know where the kids are going to come from to play [football], is that right? You know, [football] clubs revolve around generations of kids coming through together, you know, and they're not happening, are they (Simon).

The majority of the focus group participants were long-term residents of their communities and often members of families that had been dairy farming in the same local area for two or three generations, however the focus groups did not explore in any detail how such long-term local relationships contribute to local social life.

Participants in one group saw population renewal through increased employment opportunities on dairy farms, through succession processes on farms and potentially through industry growth as being valuable because it increases the pool of residents (particularly young families) available to contribute to community activities:

That's what I think the community would see it as, oh yeah, more population. See kids around the streets - to see more families in the schools. (Trish) More people to help with community things. I think I've been hit up for ten committees. Well our local [annual community festival] nearly folded because the same people were on the committee for 30 years but then some young people said "we'll come on" (Donna).

This group, which included a new resident of two years standing, felt that their community was welcoming and supportive of new residents, in part because it could see that population renewal was in its own interests.

Practices relevant to the local natural environment

Participants identified a number of aspects of the regulatory system that inform environmentally relevant aspects of their practices. The role that milk companies and the broader dairy industry play in assisting farmers to comply with regulation was discussed:

The company - the dairy industry - has provided a folder that you go through and tick things off and rather than saying - rather than the Government coming to you and saying, do you meet any of these [Environment Protection Agency] guidelines, you've got then, this is my environmental management book (Susan).

The industry was identified as taking a proactive stance in relation to environmental issues:

They've certainly done a lot to maintain the respect in the community, haven't they, the dairy industry and try and keep ahead of problems with the environment, animal welfare, food safety, all those sorts of things (Geoff).

Other participant identified a lack of clarity and consistency on the part of local government³ regulators:

From what I have heard the local council is pretty inconsistent. We've had a couple of things. I built a dairy and I didn't even need a permit... I went and seen them and they never had a set of rules whether I needed a permit or I didn't... You would think that you could walk into the council office and ask if you needed a permit to build a dairy, it would be useful to know (Peter).

Participants in this discussion were surprised that there appeared to be no clear guidance on how dairy shed effluent was to be managed. Participants in another group also commented that technical guidance on design of effluent management systems was not readily available. Some individuals had had contact with a particular skilled advisor within the state government's agricultural agency, but others were unsure where such advice was available:

I've rubbed shoulders with him, I knew he was involved in effluent... I knew that, I mean I just knew that - I don't know how many other people knew that (Chris).

Water use for irrigation was identified as a further example of where farmers' practices are subject to regulatory control. The focus groups did not generate data related to other environmentally relevant practices such as management of biodiversity, energy usage or greenhouse gas emissions.

Discussion

The focus group discussions identified a range of processes and mechanisms that impact on economically, socially and environmentally relevant aspects of dairy farmers' practices. What changes to these mechanisms might be associated with an increased incidence of farm leasing?

Economic aspects

Most of the factors that influence employment practices are common to both traditional freehold and leased farms, and thus the employment-related economic contribution of dairy farms is unlikely to change if leasing becomes more prevalent. Leasing is likely to increase the frequency of turnover of operators on a particular land parcel, and this might interrupt the longevity of employment relationships.

The growing size of farms, increasing use of more sophisticated technology, improved transport networks (and widespread participation in off-farm employment by members of farm families) and increased ability to transact purchases remotely are all likely to dilute local economic linkages – a dynamic that has been labeled "uncoupling" (Stayner & Reeve, 1990). Conversely there is evidence from recent research in another Australian State that farmers value local businesses and prefer to support them: the "local – if possible" principle (Pritchard et al., 2011). We found evidence of both dynamics in our data, and nothing that directly suggests how these practices might change on leased farms. The nature of the dairy production system requires farms to have an on-going relationship with the milk company and factory to which they supply their milk, a relationship that is mediated by company field officers. The role that company field officers play as advisors and network brokers for new dairy farmers was mentioned by a number of participants, and forms part of the locally embedded character of dairy production (Dibden & Cocklin, 2010). Dairy farming has also been identified as an industry with a strong culture of cooperation (Paine &

³ Under Australia's three-tier system of government it is local governments, also referred to as councils, that have responsibility for approving many kinds of development, including construction.

Nettle, 2008). There would appear to be scope for local networks (field officers and other farmers) to influence the practices of new leasehold farmers.

Social aspects

The quality and importance of "social capital" in rural communities has long been a mainstay of sociological accounts of rural communities internationally and in Australia. Social capital is often defined in terms of the density and quality of community networks, including qualities of trust and reciprocity in interpersonal relationships, which are found both in formal networks such as sporting clubs, country women's associations and Landcare groups, as well as in informal community ties such as between neighbours (McIntosh et al., 2008). Rural social capital is often described as being under threat due to the shrinking and aging of rural populations, and the increasing expectations and responsibilities placed on communities as part of the community self-help approach associated with "advanced liberal" rural governance (Cheshire, 2006). Again we found evidence of this, and again how this changes under leasing depends on how lessees are integrated into local communities. There could be distinct benefits in terms of population renewal, but there could also be a dilution of local communities' ties of trust and reciprocity of long duration.

Environmental aspects

Environmental damage caused by agriculture such as loss of native vegetation, degradation of soil and pollution and overexploitation of water resources is well documented (see for example Cocklin, 2005), and as a result farmers' natural resource management practices have been coming under greater public scrutiny. Farmers comment that they get undeservedly attacked by urban-based interest groups with little understanding of what farmers actually do (Cocklin et al., 2006), while scholars have observed that the policy context for farmers is contradictory: farmers are told they must be productive and competitive, while at the same time they are encouraged to adopt improved natural resource stewardship, often implying sacrificing productivity (Bjørkhaug & Richards, 2008). Further removal of native vegetation is tightly regulated, but many other environmentally relevant aspects of farm practices such as water use efficiency, fertiliser application rates, and dairy shed effluent management are not. Improvements are sought instead through various outreach programs run by both government and industry bodies, where generally participation is voluntary, or through market mechanisms such as price signals. Most of these mechanisms are equally applicable to lessees, providing they can be inducted into the appropriate networks, a task that once again dairy company field officers are well placed to perform.

None of this negates the possibility that leasehold farmers with a connection to a particular piece of land measured in years will have a lesser motivation towards long-term stewardship of natural resources than will owner operators with a connection measured in generations (Barr & Cary, 2000), however existing dairy farm leases in the Alpine Valleys region have multi-year (five or ten year) terms, as distinct from the year to year arrangements which are common on the cropping industry in the mid-west United States, and which are particularly problematic for the promotion of sustainable natural resource management (Carolan, 2005).

In a leasehold situation the landowner, who is no longer the farm operator, may be less constrained by production and profitability pressures and thus more able to prioritise long-term natural resource management for environmental sustainability (Ashby & Ashby, 2011). This could be reflected in lease conditions concerning, for example, allowable fertilizer application rates, as well as by excluding from the leased area environmental assets such as streams and remnant vegetation which could then be managed directly by the land owner. There are therefore opportunities for land owners of leased farms to enact a land stewardship ethic if they desire.

Conclusion

Focus group discussions with Alpine Valleys dairy farmers concur with previous research findings that the influences on farmer practices of relevance to local sustainability are multiple and complex and many of them operate independent of land tenure, thus reducing the likelihood of changed outcomes as a result of a shift to farm leasing. The critical change involved in a move to leasing is time. It involves a shift from long-term occupation to short term, and this has important implications for things like social capital, involvement in networks and motivations towards long-term management of natural resources. Conversely if a shift to leasing facilitates successful intergenerational renewal of farm businesses it may have substantial benefits for the social and economic sustainability of dairy communities through bringing about population renewal.

This analysis suggests a range of mechanisms that can be used to achieve desired outcomes from farm leasing. It is important that land owners continue to take responsibility for long term aspects of natural resource management, which they can do through stipulating particular lease conditions, and by undertaking their own management activities. There is also clear evidence in the literature that longer-term lease arrangements are more conducive to good land management practices on the part of lessees. The dairy farm advisory system, which includes factory field officers and public and private sector extension agents also has a role to play in ensuring that leasehold farmers are enrolled in appropriate learning networks and advisory schemes directed at practice improvement. Additionally local communities, including local networks of dairy farmers, have the opportunity to be proactive about the way they engage with new arrivals, thereby seeking to influence the way that they participate in local social life and the local economy. An approach to the promotion of farm leasing that aims to maximize community sustainability outcomes will need to encompass all these elements.

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