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The Changing Nature of Dairying: Ownership, Management And Succession

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Summary

DairyNZ funded a two-year study on dairy farm ownership and management structures (June 2005 to May 2007), followed by a study on dairy farm succession in 2007/08. Farm business structures affect wealth creation and distribution, and determine who the dairy industry participants are and will be, and the roles they will have. Succession determines the next generation of farm owners. The research included literature reviews, farmer focus groups, a survey, case studies and industry interviews. This paper will present an overview of the key issues identified and discuss what these might mean for the future.

Key words: Dairy farming, business structures, ownership, management, succession

Introduction

AgResearch, Massey University and AgInvest were funded by Dairy NZ to conduct a two-year study on dairy farm ownership and management structures in 2005/06 and 2006/07. AgResearch conducted a follow on study on dairy farm succession in 2007/08.

Changes currently occurring in ownership and management in the New Zealand dairy industry will influence farm businesses in the future. While factors beyond the farm gate such as the price of milk, land, shares and cows, and increasing complexity and regulation influence industry changes, the people in the industry also have considerable influence on its structure and direction. Their various roles, aspirations and goals, their ability to acquire or pass on assets and accumulate wealth, their skills and knowledge, and their participation in, and influence on, decision making will help shape the future direction of the industry. There is a move away from the traditional owner-operator and sharemilking paths, to larger farms, equity partnerships, and farming businesses owning a number of farms (family or otherwise). While still important to many people, family succession is becoming more difficult to achieve. Expectations of succession are also changing.

Dairy farm ownership, management and succession changes affect the direction and future requirements of the dairy industry. To help guide the thinking of researchers, policy makers, educators and industry planners, we need to understand the changes, what is driving them and their impact on future industry needs. This paper will present a general overview of the research, identifying the key issues and their implications for the future. The main focus will be on the author's interpretations of what the key findings mean for the dairy industry.

The underlying two research projects were conducted by a team of ten people across three organisations. Table 1 lists those involved and the projects to which they contributed. Reports are available from DairyNZ.

Table 1: Work Completed On These Projects And Those Involved.

Work	People Involved
Dairy Farm Ownership and Management	
Literature review	N. Shadbolt, J. Gardner and L. Reekers (all MU)
Farmer focus groups	T. Payne (AgR), E. Dooley (AgR), N. Shadbolt (MU), D. Smeaton (AgR)
Famer survey	E. Dooley (AgR), T. Payne (AgR), D. Smeaton (AgR), N. Shadbolt (MU)
Equity partnerships – structure and establishment	G. Rowan (AGInvest)
Equity partnerships – drivers of success (case studies)	L. Reekers (MU), N. Shadbolt (MU), E. Dooley (AgR), D. Bewsell (AgR)
Leasing case studies	E. Dooley, T. White (both AgR)
Multiple farm ownership case studies	E. Dooley, T. White (both AgR)
Dairy Farm Succession	
Literature review	J. Owen, E. Dooley (both AgR)
Rural professional interviews	E. Dooley, T. Payne (both AgR)
Farmer focus groups	E. Dooley, D. Smeaton, M. Brown (all AgR)

MU = Massey University
AgR = AgResearch

Key Findings

An overview of dairy farm ownership and management, and succession distilled from the project findings is presented.

Overview Of Ownership And Management Structures

The majority of dairy farm businesses are owner-operator or family businesses (86% in the North Island (NI), and 70% in the South Island (SI)) with about half managed by the owner (60% in the NI, 44% in the SI) (Dooley et al., 2006). A quarter of the farms were managed by a 50% (45% to 55%) sharemilker and 13% by a lower order sharemilker. A small proportion of farms was managed by contract milkers or managers (7% in the NI, 12% in the SI) (Dooley et al., 2006). Very few dairy farms were leased (2%). Only 27% of those surveyed saw themselves as owner-operators in 10 years time. A high percentage (38%) of retired farmers retained an interest in their farm and a similar number intended to be doing so in ten years time.

Those surveyed expected sharemilking to decline in the future with opportunities on larger farm jobs becoming more difficult to find. While the percentage of sharemilked herds remains similar (36%), fewer herds are now sharemilked (Dooley et al, 2007). Ownership is becoming more difficult to achieve via sharemilking as the cow value to land value ratio increases (10 cows per ha from 1997 to 2002, 20 cows per ha, doubling to 20 cows per ha in 2003/04; Shadbolt et al. 2007). Sharemilkers, managers and equity managers are using other means to build capital e.g. by investing off-farm (e.g. housing) as a means to build capital, or by having a number of sharemilking jobs.

Sharemilking, contract milking, management and cash leasing can be careers in themselves. These alternatives could become more common in the future as increases in farm size and land price drive up the capital required. Recent generations (X and Y) going farming tend to be more materialistic than their predecessors, making it more difficult for them to save the capital required to achieve farm ownership. These alternatives can provide a good income along with a farming lifestyle which may be more achievable for the next generation of farmers.

Cash leasing is an option that provides benefits for both lessee and lessor (Dooley and White, 2007a). The lessor receives an income with no risk, and can retain the land and any continued capital gain. Lessees receive returns similar to sharemilking with greater autonomy. Leasing to a neighbour can be a good option for smaller farms allowing sharing and more efficient use of equipment and labour. Conflict in family (and non-family) situations can be reduced by leasing rather than sharemilking. Lease to own is also an option to help facilitate farm succession. Currently dairy farms for lease are difficult to find. There is also competition from other enterprises e.g. maize, run-offs. As farmers age and young people find it more difficult to buy farms leasing may well increase. For example, leasing could suit those farmers retiring from day to day farming who may not yet wish to sell (e.g. may still be waiting to see what family want to do). It was suggested that those wanting to lease may need to be proactive in suggesting this to land owners as an alternative.

Equity partnerships are becoming more common as land prices and farm size increase. Equity partnerships can provide farmers with capital to expand their business, investment opportunities for outside investors including other farmers (largely for capital gain); and opportunities for people entering the industry to attain farm ownership as equity managers. Six percent of NI farms were classified as equity partnerships (some family), and 18% of SI farms, although equity partnership numbers were similar in both islands (Dooley et al., 2006). Two-thirds were managed by an equity manager, and most had 2 to 4 owners. Twenty-six percent were conversions done within the last 10 years (62% in the SI). Equity partnerships can take considerable time (months) and cost (up to $100,000) to establish. There are ongoing administration costs which can be about $30,000 per year (Rowan, 2006). Such business structures need to be managed efficiently enough to absorb these costs. The range of people involved in an equity partnership, often with different skills, roles and goals, means people-related factors are critical to the success of equity partnerships (Reekers et al., 2007). The equity managers surveyed saw themselves as having little control over farm decision making.

Some farms are owned by corporate business structures. Landcorp and Maori corporations are well-known examples and have been in existence for some time. A number of corporate farming companies have been established (and some disestablished) in New Zealand over the last ten to twenty years. More recently there has been increasing numbers of shareholding companies, private companies, and individuals or families (company structure) acquiring multiple farms. About 40% of dairy farm owners indicated they had interests in more than one dairy farm (Dooley et al., 2007).

Three farming couples who had achieved multiple farm ownership were interviewed (Dooley and White, 2007b). Factors that contributed to their success were: their positive attitude and strong motivation to continue driving the business; their willingness to take calculated risks and carry high debt levels; and their willingness to work hard and make sacrifices. They maintained close control over their business (or had clearly defined systems with regular monitoring), putting a strong emphasis on pasture utilisation, and treating employees well to ensure access to good labour. They all believed farm ownership (and multiple farm ownership) was still attainable today, although they acknowledged land prices made this difficult. Those aspiring to farm ownership, including multiple farm ownership, may need to think innovatively to find ways to achieve their goal.

Consultants were more likely to be involved with equity partnerships or properties not managed by their owners i.e. 20% to 30% of properties without owner-operators compared with 5% to 10% of owner-operators (Dooley et al., 2007). Some farm consultancy firms and banks are specialising in the establishment and/or management of equity partnerships. There may be a greater role for farm supervisors or consultants in future with increasing numbers of non owner-operated farms (e.g. farming companies, managed farms, equity partnerships). Some larger farming companies prefer to employ their own supervisors rather than consultants.

Although women had less influence in farm decisions than their male counterparts, they still had a significant part to play in farm decision making, especially financial decision making for those in owner-operator and 50:50 sharemilker roles.

Factors Driving Change And Influencing Peoples' Decision To Farm

Key factors driving industry change identified in the literature review (Shadbolt et al. 2007) are shown below. The first three factors affect the affordability of farm ownership.

- Milk price and volatility. Milksolids price to 2004/05 averaged $4.33/kg MS (inflation adjusted to 2004/05 prices) since 1985/86. This has risen to record levels more recently but is expected to drop back.
- Land values and share price. Land values are cyclical but increasing over recent years (over $30/kgMS in 2004/05). Values are confounded by share values. Smaller farms are more likely to be sold. Herds are getting fewer and larger increasing the cost of farm ownership e.g. 14,741 to 11,883 herds, and 208 to 322 cows per herd average over 10 years to 2004/05. Fonterra share price has been increased at a rate of about 12% per year between 2002 and 2005. There is uncertainty about future share prices and requirements.
- Cow price (as previously mentioned)
- Lifestyle expectations.

The survey (Dooley et al, 2007) identified financial factors (land price, milk price, ability to service debt, share price, capital required and access to capital) as the main factors affecting change in the industry. Complexity and the demands of dairy farming, and environmental legislation were also identified as key factors influencing change. People issues were identified by the focus groups as the biggest challenge facing the industry, particularly labour shortages (Payne et al., 2006).

Land ownership, a desire to go farming, lifestyle and income were identified as factors influencing peoples' participation in the industry (Dooley et al., 2007). Half the respondents also indicated attachment to, or involvement with, a family farm. Succession was important to over 60% of respondents, although it was perceived that this was more difficult to achieve than in the past. Despite the importance of farm ownership, most agreed that "people did not need to own their own land to be successful". Management, sharemilking and equity management were seen as being possible careers. However, given the importance of ownership to most people surveyed, this appeared to be an option for others!

Family Farm Succession

This project examined the factors influencing succession management and implications for the future. This work comprised: (1) a literature review (Owen and Dooley, 2008); (2) interviews with 12 rural professionals (Dooley and Payne, 2008); and (3) three farmer focus groups (Northland, Waikato, Southland) (Dooley et al., 2008). This work is summarised below.

Family succession is still important to many people but is more difficult to achieve than in the past, where one child often succeeded the farm which could be fully gifted or purchased over a few years. Many of today's parents are self-made and accept that the farm could be sold, but inherited land is viewed differently – they want to pass it on. Increasing land prices and farm sizes (affordability to the successor), parents' retirement needs and their intent to retire comfortably, and the

desire to pass assets on in an equitable manner while recognising the successor's input contribute to making family succession more difficult. Many parents wanted to retain some long term involvement in the farm although they were more likely to retire off-farm than in the past. There are also concerns regarding the potential impact of the relationships and matrimonial property acts. Many parents put succession in the "too hard basket" or are unwilling to raise the issue because of the potential for family conflict.

Rural professionals observed that parents often incorrectly identify their children's views and wants. Young peoples' expectations have also changed. Children from farming families have often been encouraged to travel and pursue careers outside farming. Many do not want to farm and sometimes there is no apparent successor. Young people often return to farming in their late 20s and 30s, some with few assets behind them. Consequently, parents can be in their 50s or older before they know if their children are interested in farming. Many successors are more interested in the business side of the farming, only planning to milk cows for a few years. It should be noted that the successor does not need to be a family member but can be a promising young farmer to whom the farm owners relate.

Family farming businesses are adopting ownership models such as equity partnerships and farming companies (i.e. trusts, companies or a combination). These provide a means to more easily pass on assets (i.e. as shares); can allow separation of the land from the business, and are a means of protecting assets. However, parents are likely to need to leave capital in the farm for considerable time to enable succession. This can be as a loan to be forgiven on death with the successor possibly paying interest, or by retaining farming company shares which the successor purchases over time freeing up capital for the parents. Generally, the farm needs to be large enough to support two families. Off-farm investments are recommended as a way to build up assets which can later be used for parents' retirement or to pass on to non-farming children. Selling a smaller family farm and using equity to buy a larger farm, or using equity to help a child into sharemilking or another farm is another way to facilitate succession.

Rural professionals, particularly the accountant or the consultant who see the farmer regularly, have considerable influence in getting people to address the succession issue. Banks are also taking a greater interest in promoting succession. The best succession plans are reported to be those where a team, preferably including the accountant, consultant, lawyer, banker, and possibly a family friend or uninvolved family member has been involved in establishment and implementation. Someone assumes the role of facilitator, running family meetings or talking to family separately. Every case is different and needs to be treated as such.

Most thought that many farmers are leaving succession planning too late (50s and 60s). This can impact on the likelihood of farms being passed on to a successor: the later this is left, the more difficult succession is to implement. People varied in the consideration given to succession and the age at which they do implement this. Generally the advice is to start as soon as possible (i.e. as soon as assets are owned). "Plan your exit when you enter farming". This may be as simple as getting the best structure in place at the start, with succession planning revisited on a regular basis as part of strategic planning.

Implications For The Future

Trends identified in the research and discussed in the previous section, along with predicted trends are listed here. The list forms the basis of the following discussion. on what these mean for decision making, on people in the industry, farm succession, and financial aspects, together with some wider industry implications.

Trends

- New entrants to the industry will find it harder to buy farms, particularly through the traditional sharemilking career path.
- Family farm succession will be harder to achieve than in the past.
- The balance of business structures will change. Owner-operated farms will decrease.
- Equity partnerships and corporate farming structures (including family businesses) will become more prevalent.
- 50:50 sharemilking (outside family) opportunities are likely to may decline . They may become a career path in their own right.
- There will be increasing demand for managers and lower order sharemilkers and these roles . These will become careers in their own right.
- More farm businesses will involve consultants or supervisors. Their roles may differ from previously e.g. more business establishment and administration roles.

- Farming businesses will become larger and have more people involved.
- People will be involved in the industry for different reasons and motives.
- Industry participants will come from different backgrounds. The range of skills and knowledge within a business will be wider than in the past.
- People will be involved in the business in a wider range of specific roles.
- There will be less variation within roles (duties and skills required).
- Attracting people for manual roles will be difficult.
- Businesses will become more complex not just because of internal factors but changing external factors and demands.

- The distribution of wealth and returns between industry participants will become more variable. This affects exposure to risk and likelihood of survival, asset and debt levels and ability to participate.
- Higher milk price volatility and increasing land prices will affect some more than others.
- Labour and management costs will have greater impact than in the past.
- The flow of investment to, and from, outside the dairy industry will be greater
- Future farm structures (non-owner-operator) will be less flexible in their ability to deal with complexity and volatility.
- Reporting and accountability will become increasingly important.

- Fewer people in the dairy industry will have control or influence over significant parcels of assets than in the past.
- There will be greater fragmentation of the industry with the growth of alternative processing companies and cooperatives.
- Some businesses will own their supply chain (production, processing and marketing).

- Changes occurring in other land-based industries as well as the dairy industry will affect asset distribution and the requirement for people in the dairy industry.

Decision Making In Farm Businesses

Owner-operators or those in small farm businesses with few people involved usually have a good overview and intuitive understanding of the whole business. Hence they are in a position to make more immediate, less consultative decisions e.g. particularly as circumstances or information available change. This is not possible with larger, more complex businesses (e.g. companies, equity partnerships) employing people in a range of roles. Decision making in these larger, more complex businesses may be slower and more difficult: individuals will have less influence over decisions and possibly limited understanding of the broad issue. More consensus is required and there is potential for conflict or undue influence by some people.

Larger, more complex businesses need to put in place systems to ensure clear understanding of expectations and ensure that people have the information required to participate in decision making and implementation as required. Such systems will include:

- Defined business structures and processes for governance and management.
- Clearly defined and understood agreement on business goals and timeframes for meeting these. These will need to be reviewed at a frequency which reflects possible changes in situations.
- Clarity as to peoples' roles and accountability.
- Monitoring and control of business performance (production and financial aspects) to assist with decision making and accountability. Tools and procedures will be required for this.
- A clear business case and formal analysis of any proposed changes.
- Pre-defined methods for fast-tracking decision making, especially where there are layers of management levels and abilities e.g. clearly defined tactical management strategies.
- Clear and accessible documentation of systems the above, accessible to all those involved.
- Effective communication systems in place to relay decisions.
- Conflict management procedures.

The above points also impact on implementation. Clear plans will be needed. People will need to understand is required. Someone will need to take responsibility for planning and ensuring it happens. As in large non-farming organisations, there may need to be actions to ensure buy-in to decisions at all levels for effective implementation to occur. Some input into decisions from management and workers (who may not be owners) may increase buy in and contribute to practical aspects being better considered.

Equity partnerships and farming companies usually have such systems in place. As businesses become more complex, even smaller farm businesses will need to pay greater attention to having more formal management systems.

Supervisors and consultants will have a greater role in some of the above aspects of farm businesses in future. Individuals or businesses offering monitoring and/or advisory services are already involved in this capacity with some of the larger farm businesses (e.g. Landcorp) and some large farming companies employing supervisors. A number of consultancy firms provide these services to Trusts, farming companies and equity partnerships.

The people in diverse farming businesses will bring a range of skills and knowledge to bear which will impact on their decision making having a largely positive effect when combined with other perspectives. It also means decision making roles will need to be clear with responsibility and accountability for decisions accorded to those in particular roles.

Farming businesses also face information overload and information from both internal and external sources will need to be more targeted to the various roles. Those making and implementing decisions (strategic versus tactical / operational decisions) will need different information to assist with their level of decision making e.g. potential benefits of new technologies to owners, how to best use these to managers and farm staff.

The people involved in multiple-owned farm businesses (companies, equity partnerships) may have a diverse range of personal and business goals. Hence expectations and goals for the farming business, and each individual's influence on these, need to be clear from the start (e.g. dividend versus reinvestment and capital gain). These can change over time as circumstances change so need to be revisited and agreed on regularly. Having like-minded people in the business with similar goals will help avoid potential conflict. These businesses may not survive in their current form long term, as shareholders' goals and circumstances change and partners exit either deliberately (for capital gain) or unintentionally (due to conflict). While the business may not be sold, shareholdings can and do change.

Business goals and timeframes established to achieve these will influence decision making and management systems. Equity partnerships and companies may differ in their goals and timeframes compared to family businesses. Investors may want returns sooner rather than later so such structures may be more business-focussed and productivity-driven in their goals than family farms.

Owner-operators may be in a better position to manage more difficult properties where flexibility and prompt decisions may be required. Larger, managed enterprises may be better suited to more manageable properties with simple, clearly defined systems in place, pre-defined strategies to manage situations and targets understood by all parties..

Participants' Roles And Human Resource Issues

Increasing farm size, the growth of farming companies and equity partnerships, and the number of owners with multiple farm interests, suggests that in the future there will be more of a variety of dairy farm structures and roles in the industry than there have been in the past. People need to give thought to their career aspirations early on and be aware of what is achievable and what is required to get there. Career guidance

may need to focus more on the different roles and where these could lead than on career paths. For example, the next step up from management is not necessarily contract milking or lower order sharemilking. It could equally be a higher level of management or a supervisory role. One path may lead to ownership eventually but require more sacrifice and higher risk; the other may offer a good income and lifestyle but will not result in ownership. The skills and expectations required for these contrasting roles will also differ.

Readily accessible information is needed on lesser known opportunities such as leasing and equity partnerships. It appears information (e.g. on equity partnerships) may be available if people actively seek it (largely from private enterprise and banks), but otherwise alternative options are not as widely understood as sharemilking. Sharemilking agreements are also more diverse and those entering sharemilking need to be more aware of the effect particular conditions may have on production, returns and risk. The industry may have a greater role to play in disseminating this information.

People involved in diverse farming businesses will require skills and knowledge targeted to their roles in the business and future ambitions. Hence, training and extension activities will need to be more targeted than in the past to cater for the more specialised range of tasks performed by the people in the different roles. This includes targeting people with different decision making responsibilities or those who require specific knowledge and skills for their roles. Business and people skills are becoming increasingly important for higher management roles. Some equity partners or investors who have never been actively involved in farming may require understanding of strategic farm business issues and basic farm systems.

Difficulties attracting people to farming will continue. Previously, many in the industry came from farming backgrounds. Children from farming families currently seem less likely to go farming although the upturn in farming and more business-like approach means farmers' children may be reconsidering farming as an option. It has also been suggested farmers are more likely to encourage their children to farm than previously (in the 1980's when farming was in a downturn). In the future, children from farming backgrounds may be more likely to have parents working in farm management or as farm workers. Good salaries, working conditions and lifestyle for their parents may result in their children eventually considering farming as a career choice. There is also a recognised need to attract people from outside the industry to consider farming as a career and DairyNZ has been targeting these people.

There will be a greater industry need for career managers or sharemilkers who will need to be enticed by attractive packages, including remuneration and lifestyle considerations. Some of these people might be less focussed on driving the business than owners or those who are single-minded about eventually achieving ownership. Career opportunities in management or sharemilking may be more attainable than ownership for those emphasising lifestyle ahead of wealth creation.

It is expected that the occurrence of people exiting from equity partnerships will increase. This has been achieved successfully in some businesses, but less so in others. If equity partnerships are to maintain a positive profile in the business community clear and effective processes to manage entry and exit need to be in

place. Poor exit transitions can have negative impacts on the running of the business and the people involved. This includes the exiting person who could be left with a negative perception of prospects in the industry (noting that the exit of some people may not always be negative in the long run). It is important that these businesses have the "right people". Some equity partnerships are leaning towards employing managers or sharemilkers to avoid difficulties with equity-managers (better selection of people, better control, easier to terminate). Non-farming companies often employ HR people (internal or external) to deal with recruitment and exit. Contract specialist skills to assist dairy farm businesses with this may increase in future. Industry information to assist large farm businesses with recruitment and exit – including equity partner selection – would be useful

The negative perception of equity partner managers having a small stake in the business simply to retain them rather than providing them with a wealth creation opportunity to grow may discourage people from this career path. If good equity managers are to be retained they need to be provided with the opportunity to grow in the equity partnership and contribute to management decision-making. Equity owner managers have their capital tied up in an investment with others. This can affect their ability to access further capital to progress further. This can be a constraint to progression via equity partnerships.

One of the challenges facing the industry is people seeking a career in the industry often aspire to "get out of the shed" as they become more skilled. This will enhance the problems finding good quality staff prepared to work in entry level jobs. Yet it is in the shed that many of the aspects that affect productivity, including herd well being, milk quality and reproductive performance are monitored and managed. Therefore, some staff working in the shed need skills in these areas. Training for milk harvesters in these essential areas is required if more experienced people plan to move out. Eventually, greater automation and technologies that monitor these aspects may reduce the need for skilled staff in the shed.

Other types of industry participation may become more common in future. More women are seeking employed managers' positions as automation and technologies reduce the heavy tasks. There are opportunities for women, retirees and part-time employees to work as milk harvesters. Flexibility of milking time to fit in with other commitments is already being offered to milk harvesters. The difficulties in attracting farm labour means New Zealand is beginning to rely more and more on immigrant workers who are little more than "*milk harvesters"* . While immigrants will help resolve the labour issue for this generation, problems could arise again in subsequent generations.

Consultants and supervisors will have a greater role to play in future. Some companies prefer to employ their own supervisors to monitor farms and oversee managers. Other multi-owner or multi-enterprise structures choose to employ consultants to assist with this. Career pathways for people in these roles need consideration e.g. fast track to supervisor through on-farm work after university (which may need to be short term or relatively well paid to compete), or career path from farm worker to farm supervisor.

DairyNZ's efforts in this area are endorsed by this research project. Their strategy notes the need to compare the advantages of different roles. This information is key for people considering a future in the industry. They will want to know the role that best suits them and how to best progress toward that role. The HR strategy needs to be offering innovative ideas in terms of possible career opportunities. Work needs to focus on roles rather than "career paths" because the end points that people aim for will be more varied, and ways to achieve these may be more diverse than in the past. While advising on off-farm activities and investment may be outside their brief, the role these can play in helping people progress needs to be recognised.

Succession (Who Will Be The Next Farm Owners?)

Succession planning for families will need to happen earlier in the farming lifecycle in order to be effectively achieved. Not having planned soon enough may result in the family farm having to be sold. Others may sell the family farm because they believe family succession will be too difficult to achieve. Ways to facilitate succession have previously been discussed. Rural professionals advising farmers are becoming increasingly specialised and in general may be less familiar or interested in farm succession than previously and less likely to raise this issue with clients (i.e. accountants, lawyers, bankers). This loss of expertise may make succession more difficult to facilitate and is something the industry may need to address.

As previously discussed, children from farming families may be less interested in taking over the family farm, although some are now returning home in their late 20's and 30's. However, it is speculated that attitudes generally are changing and today's young people are developing a greater affinity with the land which is promising for the future. Encouraging young people to be involved in the farming business from a young age and helping them develop good savings habits is advocated if they are to view farming as a positive and achievable career choice later on.

Family trust or other company structures (e.g. equity partnerships) as a means to retain the family farm could result in non-farming family members retaining shares in a family property because of the difficulty of the farming successor fully paying out parents and later, siblings. This may cause friction where others would like their stake out, if the farming successor wants to sell the "family" farm, or if there are differences in opinions on management, or tensions re capital investment versus dividends. This could lead to the eventual sale of the family farm. Within a couple of generations affinity to a "family farm" could be lost and non-farming owners may want to sell their shares to invest elsewhere. Family farms could eventually be sold for these reasons.

Farm ownership has never been easy to attain: only a few had the required ability and a willingness to make sacrifices to achieve ownership. The characteristics and requirements to attain farm ownership are probably similar to what they have always been. People can still attain ownership if they have the right attitude, farm well, look for opportunities and are prepared to make sacrifices. There are opportunities in farming if people are prepared to save and work hard.

There is a need to make farming an attractive option for young people to counter the general perception of farming as long hours and hard, dirty work. Business, self-

employment and career opportunity aspects need to be better emphasised. Farmers' children returning to the farm are often more interested in these aspects, and do not plan to milk cows long term. Skilled, non-farming people are now being attracted to dairy farming, often from trades backgrounds. These people will be aspiring to management and possibly eventually ownership. In the past, the autonomy of having their own farm business has been, and still is, a key driver for many entering the industry. People may be less attracted to the industry as farm ownership seems more difficult to achieve.

The changing nature of farming could see a different type of person being attracted to farming. Today's successful farmers have strong business and people management skills which are as important as practical skills in managing a farming business. In the past, people with strong practical skills rather than people and business skills were often attracted to farming. These practical people may now find it even more difficult to achieve ownership. While these skills are still very important, particularly in operational roles, some of these more independent people may be less attracted to working in business structures where a cooperative approach is required and may choose instead to exit farming. While ownership of smaller farms could appeal to these people (varied work, less labour management) it is difficult to envisage how transfer or purchase of smaller farms can be achieved, although it has been suggested there could be a move back to smaller owner-operated farms in future to alleviate some of the labour issues the industry faces..

Farm sizes in some areas are now reaching an optimum with current systems (management and labour issues, cow walking distances). Six to eight hundred cow farms are seen as optimal in terms of manageability and economies of scale. Future farm expansion in some areas may be by purchasing other farms, rather than amalgamation of neighbouring farms. This would result in an increase in the number of people with multiple farms, with more farms managed by someone other than the owner.

Companies or families owning multiple farms will increase. These could be unrelated people (listed or unlisted companies) or family companies. Company ownership may change hands either as shares are sold, or farms will eventually be sold as companies are disbanded. Disaggregation of these farms could create opportunities for others in the future.

Farms, or shares in farms, held by non-family companies in particular (e.g. equity partnerships and similar structures) may come up for sale on a more frequent basis than they have done in the past. Equity partnership shareholdings are already reported to change hands more frequently than is obvious because the parent company still exists when shareholders change. Interest in investing in these will be dependent on land prices, farm returns and farm availability. Over the next 30 years it will be interesting to note the frequency with which these come up for sale, how these are sold (farm or shares), who is buying and why, and the impact on farm prices (e.g. if milk returns drop and people want to exit, or anticipated lower capital gains). Clear exit strategies for these structures are required. Processes or structures to readily facilitate trading will be needed. Banks (e.g. National Bank) and some consultancy firms are already performing these roles.

Family companies (compared to non-family) may be more like to survive over generations, although these may eventually be managed by non-family managers or boards. These are likely to be managed relatively efficiently by the current generation (i.e. the people growing these companies have a strong interest in farming). The efficiency of future management may depend on a number of factors. They farms may face similar issues to Maori land in terms of governance, management and accountability. This land could be locked up (i.e. not available for sale in future) and purchase of farms by these companies may be on-going as they will have the assets to borrow against.

The farming population is aging. People appear to be retaining their interest in the farm for longer (including post-retirement). This means either they are farming for longer or others are managing these properties. If their objective is lifestyle, they may be less concerned with farm performance or consider converting land to other uses such as sheep and cattle for easier management as they age, especially those with smaller farms in more traditional areas. This land is being lost to dairying for now.

Given the time required to facilitate succession planning, perhaps we should be asking if it too soon to be thinking about the succession challenges that might be facing the industry in 20 years time e.g. family owned equity partnerships, non-farming owners. The structures may be such that transfer will be easier e.g. shares. Who will be able to afford the farms? What is the long term future of equity partnerships and farming companies (especially family companies)?

Financial Aspects

This section discusses financial aspects in relation to management but also touches on some general implications for the future.

The continuing state of flux of the dairy industry makes it difficult to predict if/when and how the industry will stabilise in terms of wealth distribution and the eventual balance of farm structures and people involved. In the past, farms have increased in size as land prices rose and smaller farms became uneconomic. While the balance of farm structures has remained much the same in the past, wealth distribution and the flow of cash, land, cows and shares between participants within the dairy industry is changing, as is the exchange of cash (investments) and land (conversions) to and from dairying. These changes are influenced by both internal and external drivers.

People within the industry are competing with each other for opportunities. The combination of high land prices and increasing farm size has contributed to difficulties in achieving individual ownership of dairy farms. Factors affecting other land-based sectors or investment opportunities have an impact on conversions and outside investment. An understanding of the likely impacts of the key drivers (e.g. land, milk, cow and share price, labour costs), and the influence of industry and policy could help with planning and decisions. For example, if milk price remains high there will be more investment from outside the industry (e.g. equity owners and farming companies, conversions). It is uncertain how far dairy land price could be pushed relative to returns from farming. If milk price (and dividends) decline, outside investors and those with high debt or low equity may want to exit, resulting

in a loss of capital to the industry. There could be difficulties finding buyers, possible reductions in land prices, and reduced capital gains as well as lower cash returns. This in turn, will create opportunities for others to participate e.g. better opportunities for those wanting their own farm.

There will be differences in farm productivity, returns and risk between ownership and management structures, and between the businesses of the people within these structures. People within an enterprise will have their own business(es) e.g. performance for a farm with a sharemilker could be measured on the overall business, the sharemilker's business and the owner's business. Farm businesses can be viewed as having a farming business (use of farm resources, operation returns or losses) and a property business (land, capital gains). Some people are investing in one (e.g. sharemilkers) or both businesses (e.g. owners, equity partners). The level of investment between the farming and property businesses and emphasis on performance will differ between people and structures.

Economic measures vary in their ability to take each of these businesses into account. Different measures are needed to account for performance in farm productivity, returns and risk for the different business types. This information will be needed to help people evaluate and benchmark their business performance, and possibly make choices regarding their future investment in dairying. DairyBase differentiates between structures and peoples' roles and will be able to help provide comparisons once it contains more data.

The greater importance of monitoring and control has been discussed under decision making. There is a range of financial measures that can be used. Some guidance as to which of these may be most applicable to the different businesses could be helpful. Some interpretation of these measures to help identify problems, and actions which could be taken to improve these (if any) could be suggested. This information could be useful for those recording their business on DairyBase seeking improvement.

Capital gain and exposure to risk can influence equitable sharing of returns between those involved in a business. Financial measures to evaluate the most equitable division of returns may need further consideration e.g. return on assets is usually used but may not be the best measure: owners look to realise capital gains over time while sharemikers do not.

Many people in the industry rely on returns from capital gain rather than from production. They may be planning to invest short term and eventually realise their gains by selling their investment. Some may have sufficient equity that they anticipate that cash returns will be sufficient to service debt and meet their requirements. In time, as debt is reduced they will receive increasing returns as well as a high value asset. However, the high cost of land relative to returns could mean those purchasing land are more exposed to risk from debt than in the past.

The ability of people to survive a drop in returns is often strongly influenced by their liquidity. In good years cash reserves can be invested back into farming (capital purchase) or set aside to be drawn on when returns are poor. Some businesses generate higher cash returns (e.g. sharemilking compared to land ownership) which may later be invested in cows or savings towards farm ownership. Others will have

larger cash reserves because of their situation e.g. established farmers with low debt. However, more recent investors in land are likely to have high debt and may have little or no liquidity. Returns will need to be sufficient to fund debt in a downturn if further borrowing is to be avoided. These businesses may be more vulnerable (greater risk from volatility) than others. It is unclear where people are investing returns when there are surpluses and how liquid these investments are (i.e. in low-returning years what resources do they have to draw on?). Some of the equity in the industry has been coming from outside investment. This is likely to decline in a downturn and some may want their investment out. This exposes these businesses to further risk

Farms operated by an owner may be better able to survive a downturn because the have the flexibility of accepting a lower return to management. Farms employing labour need to continue to meet labour costs to keep the business going and retain good staff in order to maintain productivity. Cost structures differ for larger farms. They will have higher labour costs and may incur administration costs to manage their systems. Thus, companies and equity partnerships may need to respond to downturns by reducing dividends, taking on more debt or asking shareholders to invest further for an uncertain term.

The above issues all relate to debt levels and exposure to risk. Those with different roles or stages in their career life cycle will be affected differently. The changing structures, increasing size of the businesses and high relative land prices mean the industry situation is different from the past. It is probable that an industry downturn will have a greater impact than it would have in the past, although the extent of this is unclear. Certainly this raises questions about the debt levels and risk to which different participants are exposed. What equity is required to keep their business risk at a manageable level? How do debt levels affect the progress of those in the industry?

The outcome of the current review of Fonterra's share structure will have implications for many in the industry. This is likely to change from the current structure and will have implications for wealth distribution (ownership of shares) and returns (milk versus share dividends) for people in different roles. This will need to be included in comparisons once the repercussions are understood.

Maori businesses will become more significant players in the dairy industry in future. Maori in some regions own considerable land and cash from Treaty settlements. Their land is largely non-dairying with the exception of Taranaki where much of their land is already in dairying under a Maori-lease system unique to this area. Maori are becoming much more business-oriented in the management of their assets. They have a very long term perspective: much of the land will never be sold. Hence the economic value of the land to them is reflected in returns – capital gain is irrelevant. The relative returns from dairying and the fact that they are diversifying their business portfolios has contributed to recent conversions of Maori land to dairying and this trend is likely to continue. Productivity on Maori farms is also a priority and this will improve further in the future. Maori businesses face many of the same governance and management issues as multiple-owned and company (multiple-farm) businesses.

A range of asset growth strategies may be needed by those working towards farm ownership, including multiple farming jobs, off-farm investments. Off-farm investments (which may include another farm) should also be considered by owners planning for retirement and succession. There will be greater flow of capital in and out of the industry in future than there has been in the past.

Farm business decision makers need good financial information about new or changing farm systems and technologies to assist with their decisions and support their choice to change. Evaluation of the returns and risks needs to be rigorous and readily understood by farm business decision makers. Time and transitional impacts need to be incorporated into the analysis. New technologies may increase the value of production but could also reduce production levels. The impacts of these trade-offs on productivity need to be understood. For some technologies, risks and returns may need to be shared differently by people in the business (e.g. the supply of specialist milk may not be suitable for an enterprise with a sharemilker, or returns may need to be shared differently). Processors may need to share some of the risk or distribute returns differently (e.g. conversion premiums paid for organic milk).

Water rights and irrigation have a major impact on the value of dairy farm businesses in some areas (e.g. Canterbury) where dairy is expanding. Irrigation and water issues are likely to extend to other regions in future. Capital investment and running costs for irrigation systems are high. These systems can result in higher returns, reduced risk or both (note: risk is reduced, but returns may not be higher given the cost of investment). The risk impact associated with a reduction in access to water is high. This could reduce the capital value of the property by far more than the cost of irrigation, with the decrease in land values reflecting the reduction in income from farming in that area. Dairying may no longer be viable. Water issues can be a source of political contention and risks associated with water access and availability are likely to be more widespread in the future. Those investing in dairying on irrigated farms need to understand all these implications. Private consultants will be assisting investors with evaluating these dairying opportunities. However, given the extent of expansion in these drier areas and the impact of climate change, there is a role for industry to ensure people contemplating investment are aware of the effects on risk and returns.

Peoples' responses to changes (e.g. milk price) are often driven by immediate changes in drivers e.g. land sales rise if milk price increases. Long term trends, possible consequences and risk associated with these may be given inadequate consideration. For example, conversions had declined and people were being more discerning about investing in equity partnership opportunities until the increased milk price has triggered a surge in dairy conversions. Good returns will be required for some time to justify the investment. There is a role for industry in helping people understand and evaluate the risks and returns before investing in land or conversions.

Market and financial risk is not the only risk people face. Other risks can include labour, job security, relationship, regulatory. Farm businesses work in an increasingly regulated environment. Regulations impose constraints on the business that may well result in increased costs and reduced production. Returns are unlikely to compensate for this. Some business structures may be better able to withstand these changes than others. Monitoring and control of the systems will become

increasingly important. An understanding of how future business constraints (e.g. environmental policies) impact on businesses, which businesses are better able to withstand these and how they respond to interventions could help guide policy. Similarly, the increasing reliance on labour will affect the industry. This will differ for different farm systems, farm sizes and farm business structures.

Industry

Representatives from some farming families/individuals, companies and consultancies may have a disproportional influence on industry direction than many others (through boards, industry bodies etc). These people are likely to be very business-focussed and drive productivity. However, their perspective and interests may differ from other stakeholders in the industry.

Changes or proposed changes affecting fragmentation in the industry, growth of non-cooperatives, and supply chain integration and ownership will all affect the industry, including farmer suppliers to these businesses. There is a need for clear, understandable information on business types regarding vertical integration competition and cooperatives e.g. sharing of risks and returns, impact on production versus asset growth. These changes will also affect entry and exit, returns and capital gain, and opportunities available e.g. reduces cost of entry (and returns) if no share purchase required, integrated businesses will require managers but reduce opportunities for individual ownership.

Dairying can be affected by what is happening in other land-based sectors (agriculture, forestry, horticulture, urban sprawl and lifestyle blocks) and their relativity to the dairy industry e.g. low lamb prices have had a noticeable impact on dairy conversions. A better understanding of these interactions, the likely size of the impacts these industries have on each other, and the timing of these changes could be useful to help understand possible future trends.

Conclusions

Ownership and management structures in the dairy industry are changing markedly, driven in part by increasing complexity and farm values. The dairy industry of the future and the roles of those in it are likely to be very different from the past. Individual farm ownership will be more difficult to achieve. Farm businesses will be larger and fewer, and will require a team of people in different roles working together effectively to be successful. Business and people skills are becoming increasingly important in managing a farming business. This has implications for the type of people who can progress in the industry. While ownership may be a remote goal, the range of alternative roles will be greater. Such alternatives include investors seeking capital gain, mangers seeking lifestyle and a good income, through to sharemilkers and equity partnership managers willing to own some of the asset and associated risk (as a career, investment or a step to ownership). Like many other professions, the skills required will be more specialised. Those providing information and training need to respond by identifying these needs and targeting them more specifically.

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