THE FACTORS WHICH HAVE RESULTED IN MIGRANT WORKERS BEING 'ESSENTIAL' WORKERS ON NEW ZEALAND DAIRY FARMS

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Abstract

Over the past decade, the dairy industry has grown in land area, number of cows, milk production and dairy exports to the point where it is New Zealand's premier exporter. Growth has been accompanied by significant structural changes to the industry. In particular, many small, family owned and managed farms, that were characterised by high levels of self-employment, have been replaced by large-scale 'factory' style, irrigated farms that depend on non-family, often casualized and seasonal workers, who work very long hours. Staffing these farms has been problematic and recruitment and retention have been regularly highlighted issues. Such issues have cast doubt on the social sustainability of the dairy industry.

The future of the dairy industry to a large degree depends on its people. Many of these people are now migrants, who have become 'essential' because traditional sources of labour are inadequate. Does a dependence on migrant workers jeopardise the future stability and sustainability of dairy production? Can all stakeholders in the industry benefit from migratory staff in such a way that all parties achieve a winning outcome, as for the horticultural Recognised Seasonal Employer Scheme. A profound change in the dairy industry may be necessary to ensure that stakeholders make the effort necessary to negotiate such a multi-win outcome, which might provide a lasting rather than a temporary solution. The paper reviews the changes in the dairy farm labour force from Census data, Linked employee-employer data (LEED) and information from the Department of Labour on temporary work permits. The risks associated with dependence on a migratory labour force are considered.

Key words: Dairying, dairy farming, migrants, labour, social responsibility, sustainability.

Introduction

The dairy industry is a significant contributor to the New Zealand economy. Dairy farmers produce about 16 billion litres of milk per annum; 2% of total world production (DairyNZ, 2010). To 31 March 2009, annual product export value was $NZ 11,323 million. Exports are projected to increase to $NZ 11,905 million in 2013 as a result of higher volumes and prices (MAF, 2009). Dairying is in expansion mode, however concerns as to its environmental and social sustainability are gaining traction. These threaten to undermine its viability (Trafford, 2010).

Increasingly, less profitable land uses have been converted into dairy farms, predominantly in the non-traditional dairying areas of Canterbury, North Otago, Southland and the West Coast (Trafford, 2010). The new conversions are typically corporate farms, big in size and milking more cows than those in the traditional dairy areas of the Waikato and Taranaki. Unlike the smaller farms which have historically used family labour augmented with hired labour at peak times, the newer conversions are highly dependent on large numbers of hired staff (Career Services Rapuara, 2010).

Despite high national levels of youth and general unemployment at 17.2% and 6.05% respectively (Department of Labour, 2010), dairy farmers cannot find an adequate supply of suitably skilled farm workers to meet current and projected labour needs. Federated Farmers and recruitment agencies estimate there is a shortage of at least 2,000 skilled dairy

workers (Career Services Rapuara, 2010). With the industry in expansion mode, labour shortages are likely to compound, especially for the large herds in the South Island where expansion has been concentrated. Possibly 12,000 more are needed (Human Rights Commission, 2009:59 cited in Williams, 2009).

Trends in dairy worker employment

The section explores trends in dairy worker employment. Two datasets are used in this analysis, the five yearly Census of population and dwellings and data from LEED. Each has its strength and weaknesses. The census is self completed and this has the potential to generate a number of errors including people not filling in particular questions. In addition there needs to be some caution with census data as it is usually resident data. As such it is a count of all people who usually live in a given area, and are present in New Zealand, on a given census night (early March). This usually resident population count of New Zealand excludes visitors from overseas who live in New Zealand for less than twelve months. It is therefore possible that these data exclude many temporary workers.

LEED is a longitudinal database that has been developed by Statistics New Zealand. It is based on the integration of monthly data on employee earnings (derived from Employer Monthly Schedules filed by employers) with data on employers and firms (derived from the Business Frame). The LEED dataset covers all individuals ('employees') who receive income from which tax is deducted at source.[1] The key basis of the LEED quarterly measure is 'jobs'. A job is defined as a unique employer-employee pair in the reference quarter. Unlike the census LEED data provide an on-going measure of employment as the data is continuously being collected. However, there are also major limitations to the data. For example there is no information on ethnicity or country of birth

Beginning with census data, Wilson and Tipples (2008) used data from 1991 to 2006 to track the evolution of the dairy farm labour force. These data combine ANSCO codes 'Dairy cattle farmer' and Dairy cattle farm worker'[2]. The data show a decline in numbers from 28,134 in 1991 to 24,992 by 2006. However, there was some geographic variation in this change with, at a broad level, decline in the North Island from 25,326 to 18,780 while in the South Island growth from 2,808 to 6,012. These changes correspond to the decline in traditional North Island family farming with little employed labour and the growth of large herd dairy farming in the South Island, often of a corporate nature. Correspondingly there has been a large growth in the number of employees (Table 1).

Table 1: Dairy farming population proportions (%) by Status in Employment (Censuses of Population 1991, 1996, 2001, 2006)

Status (% of status group)	*1991*	*1996*	*2001*	*2006*
Paid employee	18	21	24	37
Employer	25	26	32	29
Self-employed and without employees	52	41	38	27
Unpaid family worker	4	10	5	6
Not stated	1	2	1	1
Total	100	100	100	100

Source: Wilson and Tipples, 2008

Farmer and worker demographics

Callister and Tipples, (2010) identified other patterns from the Census data. These include:

- Most dairy farmers and workers were born in New Zealand (over 90%) whereas, depending on age group, a quarter to a fifth of other workers were born overseas.
- A very small proportion of dairy farmers were born in Asia (0.8% overall) with a slightly higher proportion of dairy workers born in that region (1.7%). This is in contrast to over 6% of all other New Zealand workers being born in Asia and just under 8% of those under 30.
- Relatively few people working in dairying were born in the Pacific.
- As with other occupations, if born overseas the most likely area to have been born in was the UK.
- Regarding country of birth, as of 2006, there were few workers from the Philippines, 24 (data rounded to nearest 3).
- Regarding ethnicity, in all age groups and for both dairy farmers and workers, European ethnicity is the most common response. In the older age groups, the next most common response is "other ethnicity' which will be primarily a "New Zealander' type response. In the younger age groups Maori is the second most common response and this is of a similar magnitude to the rest of the population. They noted the relative under-representation of Asians and Pacific people in this area of work.
- With regard to educational levels of both New Zealand born and overseas born dairy farmers and

[1] LEED data include social assistance payments such as paid parental leave, student allowances, benefits, pensions and ACC payments.
[2] 121313 and 841512

workers overall, the overseas born, working on dairy farms, are better qualified than the local workforce. This fits with Outcome 2 from the *Strategy for New Zealand Dairy Farming 2009/2020*: 'Talented and skilled people are attracted to, and retained by the industry'. Perhaps they are also using dairy farming as a route to gain 'residence' to practise their preferred occupation, but that does not fit readily with the Immediate Skill Shortage List on which they were granted their visas. Wilson and Tipples (2008) had already illustrated that those with either no formal qualifications or school qualifications made up the majority of the dairy farming workforce.

Growth in employee numbers, worker turnover and incomes

The following figures are also drawn from the LEED dataset. The data presented focuses on growth in employee numbers, worker turnover and incomes.

Figure 1 shows the numbers employed in dairy farming. It indicates a growth in the number of dairy farm workers. The growth (between 2001 and 2006) is in contrast with the census which shows a decline. It also shows some relatively strong seasonality in employment in dairying with dairying peaking each year is in the fourth quarter. The second quarter, effectively winter, is always the low point in employment. This phenomenon may be explained by the practice of 'Gypsy Day', which happens on 31st May/1st June each year. It is the period when share tenancies come to an end and new ones begin, and similarly for employment contracts. New staff are then supposed to be ready for calving in the third quarter, full production in the fourth, and the commencement of a new dairy farming year. When employment growth is converted to an index and compared with overall employment growth across the whole economy, the strong growth in dairy employment shows up in contrast to the shrinkage in the census based data (Figure 2).

Worker turnover

Callister and Tipples (2010) found that turnover rates always peak in the third quarter for dairying that is the spring quarter. The third quarter would correspond to calving, the highest workload period and the most stressful time in the dairy farming year. It is when new employment relationships from Gypsy Day are most tested and tend to fall apart, resulting in turnover (Figure 3).

Figure 1: Dairy farming numbers, 1999-2008 data.

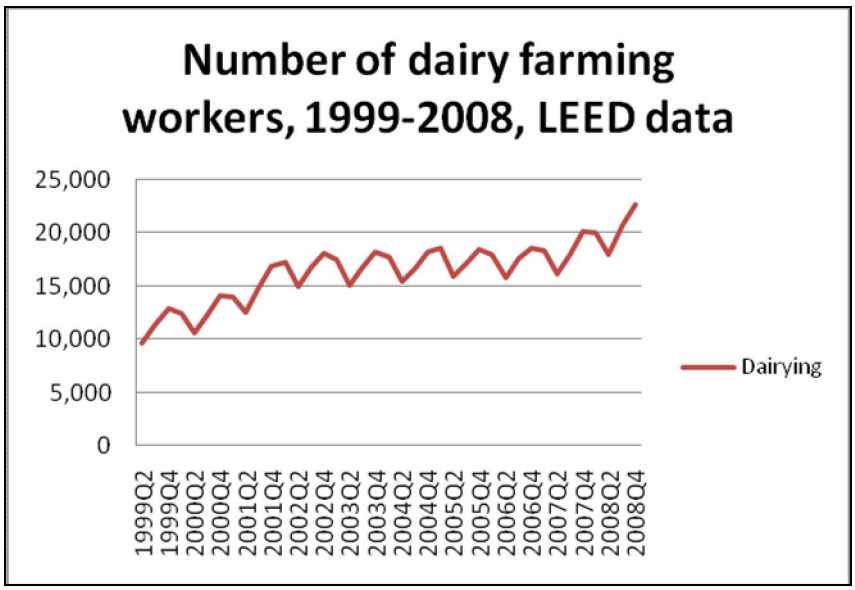


Figure 2: Comparison of dairy worker numbers compared to general population.

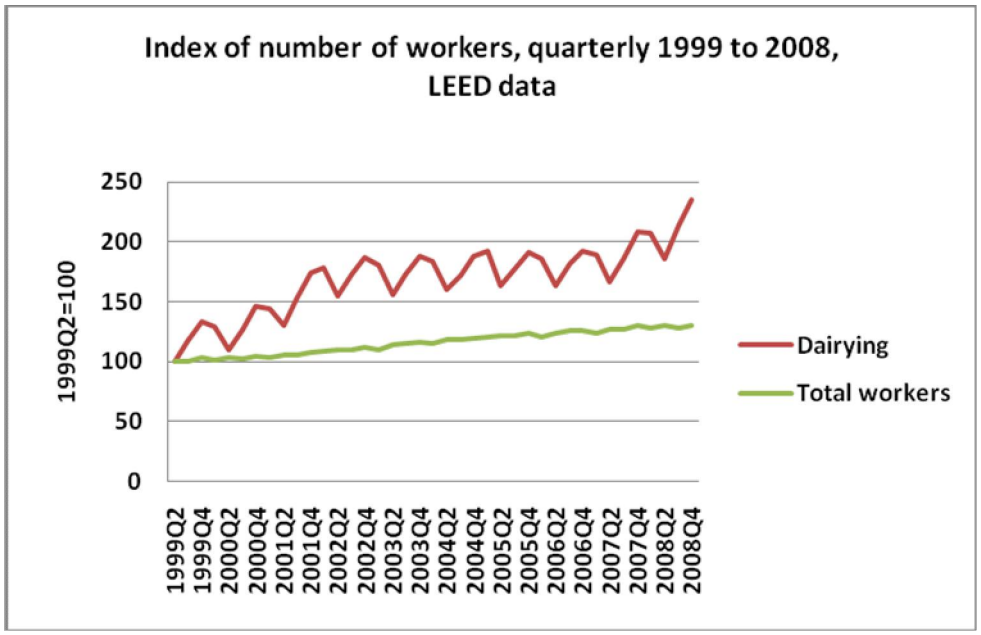
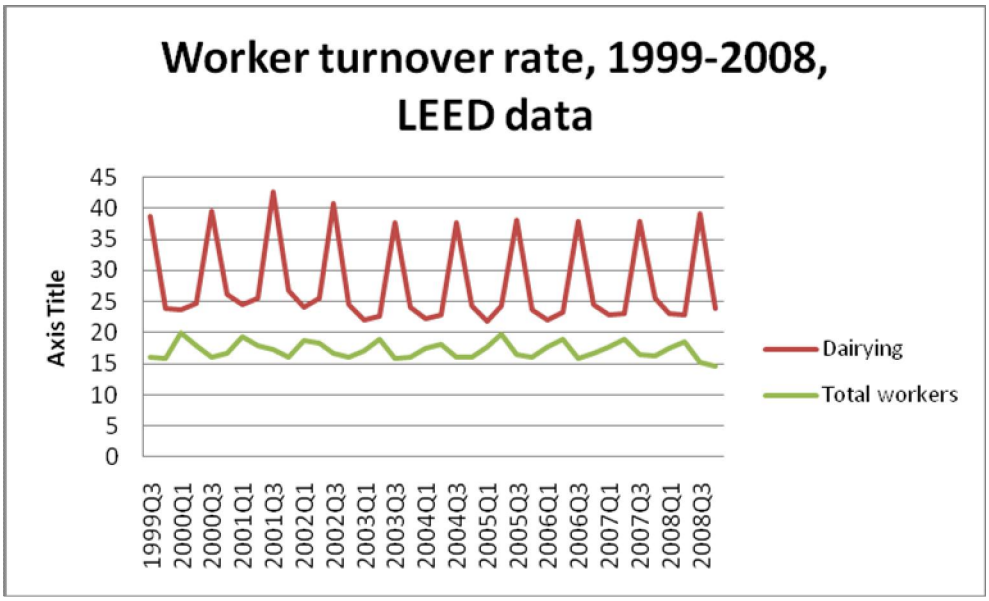


Figure 3: Worker turnover rate

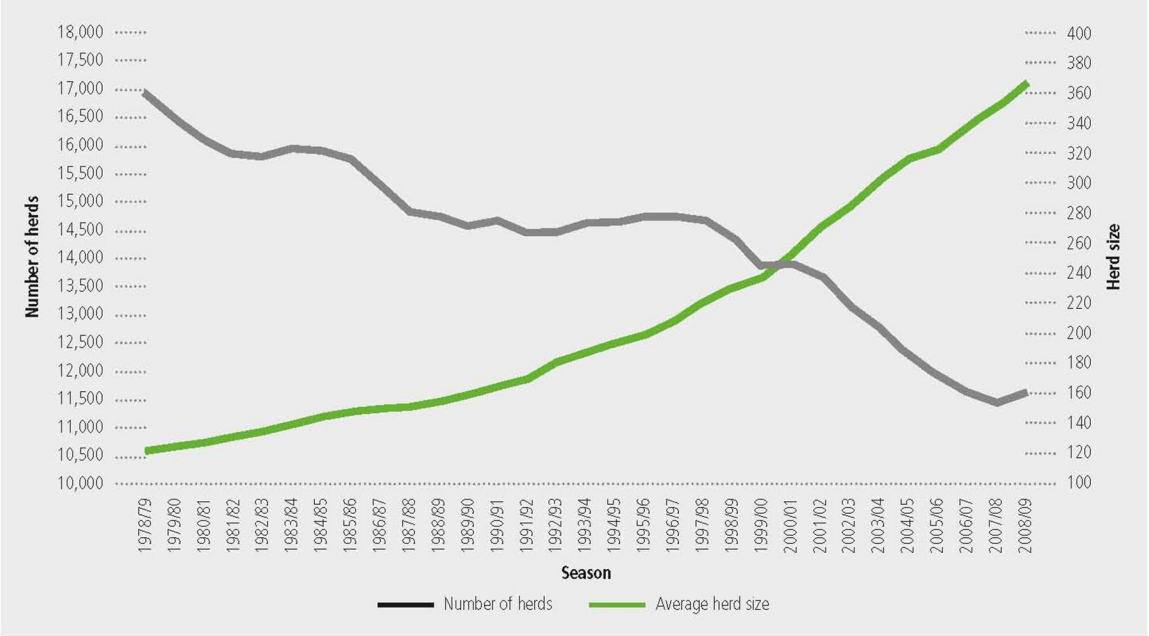


Structural changes and changes in employment patterns

The industry neither adequately attracts new employees nor retains enough of them (Searle, 2003 and Nolan, 2003). Why? Factors include changing age demographics, structural changes to the industry, changing employment patterns and the inability of the industry to project itself a career option of choice (Trafford, 2010). An increasing dependence on hired labour has led to a need for more workers as farms are bigger, needing more cows to be milked, predominantly in areas remote from traditional labour supply. Dairy farming has had an unprecedented expansion over the last five years; characterised by an increase in farm size, with larger farms milking larger herds (Figure 4). Since the 2005-06 season, the number of cows and heifers in milk has increased by about 10%. In 2008/09, 11,618 dairy herds carried 4.25 million in-milk dairy cows and heifers. MAF forecasts that in 2014 there will be 5.02 million cows in milk (MAF, 2010). As most farms operate with 1 labour unit to 150 – 200 cows (Woodford et al, 2003), at least 33, 467 workers will be needed- 10,000 more than currently in the industry with the bulk of them needed in the South Island. Figure 4 illustrates how while the

number of herds are dropping, the number of cows is increasing.

Figure 4: Comparison of number of herds to herd size (Source: Dairy Statistics 2008-9, LIC)



From 2008 to 2009, South Island cow numbers grew 13 percent to 2.1 million. They produced over 32% of total New Zealand milk solids production. This was from 22.6 percent of NZ's farms and over 33.7 percent of NZ's cows (Statistics New Zealand, 2010). South Island dairying is characterised by larger herd sizes (2620 herds milking 1,431,558 cows with an average herd size of 546 cows.), higher production yield per cow and per hectare.

Traditionally, New Zealand farms have been small, primarily family enterprises using little or no employed labour. This is still largely the situation in the North Island however, as dairying's profitability has increased, farm conversions in the South Island have increased in farm size enabling more cows to be farmed. That requires greater numbers of hired employees to get the job done. These large farms tend to be owned by corporations/equity partnerships and therefore cannot rely on traditional family labour supply sources. They are typically dependent upon mainly casualised, and somewhat seasonal labour (Tipples & Callister, *op. cit.*). While in 1997, 29% of staff employed on dairy farms worked for wages, by 2009, 50% did (DairyNZ, 2009).

There is a significant dairy labour shortfall of at least 2,000 vacancies for skilled dairy staff (Career Services, 2010) and this is set to increase dramatically with the predicted doubling of the national herd within the next 5-7 years (MAF Caring Dairying project, 2010). It has been suggested that understaffing on farms, especially larger units of 600 cows or more that require more staff than smaller units is compromising the sustainability of the New Zealand dairy industry (Kyte, 2008). New Zealanders mainly live in urban centres. New dairy regions like Southland, Westland, Canterbury and North Otago do not have access to large population centres to recruit new staff from and tend to use utilise labour that traditionally have been employed elsewhere-the North Island or increasingly overseas. (Wilson & Tipples, February 2008).

Retention and recruitment issues

Dairying (and agriculture in general) has a poor image and the negative perceptions certainly hamper recruitment (Searle, 2003, Nolan, 2003). Prejudice against it often results from an ignorance of farming within the wider community (Casinader, 2010). However, the industry's image is that it neither looks after its workers nor, more importantly, cares about the people it employs (Bodeker, 2000). Young New Zealand workers, the traditional labour source, do not find it an attractive career option despite some in the industry believing its remuneration to be a serious attractant (Bodeker, 2000). Bodeker asserts that:

> "These people with non-university qualifications are making good money compared with the rest of the population". For most dairy farm workers the salary also includes accommodation. This adds at least $6000 to the equivalent salary where the employees have to pay for their own accommodation. Compare this with the average hourly rate of a semiskilled

> worker in town on a flat 40 hours a week earning as a minimum wage of $15,700 and who then must, after tax, pay for accommodation. Many farm workers and certainly farmers as a whole are paid well so why don't they want to join the industry?"

Callister and Tipples (2010) assert that while rates do improve quite quickly on advancement up the dairy career structure, so do the hours of work (Federated Farmers/Rabobank, 2010, cited in Callister and Tipples, 2010). They believe that when the long hours worked by dairy workers are taken into consideration, rates are very low at an average level. Only 39.4 percent of farmers record staff hours, leaving considerable scope for paying an hourly rate of pay below the minimum hourly rate of pay set for a normal 40 hour week (Minimum Wages Act 1983). Dairy farm advertising promotes free housing as part of their employees' rewards,). While three quarters of farm workers are provided with accommodation, some pay rent (15 percent). Some are taxed on the notional value of the accommodation (63 percent), and for 19 percent, it is part of their total remuneration package (Federated Farmers/Rabobank, 2010- cited in Callister and Tipples, 2010). In addition, the quality of housing varies considerably (Trafford, 2010

Dairy farming is often seen by young people as hard, dirty work with long, unsociable hours. Wilson & Tipples found the dairy farmers/dairy farm worker population worked longer hours than the New Zealand working population; 40 percent of employees, 45 percent of employers and 49 percent of those self-employed without employees worked over 60 hours per week compared to 10 percent of the total New Zealand working population working more than 60 hours per week. (Wilson & Tipples, 2008). Certainly, long working hours are an issue. Managers describe working days of 12-16 hours (Trafford, 2010). While this may meet the nature of daily milking routines and be needed to get the job done, it has implications for worker's social interactions, quality of life and health and welfare (Johnston, 2010). In addition to the long working days, rosters are typically long. They are routinely 11 days on and 3 days off or 12 on and four off (Pangborn, 2010). These factors led a Caring Dairying project brief (2010) to suggest that many large dairy farms are not farming in a socially responsible way. Their 2009 survey of large herd practice revealed poor standards of management, high staff turnover, poor staff training, poor worker understanding of the basics of farming and low animal care status. It concluded that the image of large herd farming especially is making it difficult to attract and retain staff.

For the convenience of dairy farming routines, employers generally require workers to live on farm (Pangborn, 2010). This can isolate workers from social activities although tiredness and unsociable hours often result in dairy workers having little energy and time to socialise anyway (Trafford, 2010). These factors impact on worker participation in rural community organisations and at community events. For example, volunteer fire brigade recruitment and retention is depressed in areas of high intensity dairying in Canterbury (Trafford, 2010). This may be the case for community fundraising and support for schools as well.

Dairying is perceived as dirty and dangerous and it is. Hours can be very long; workers get tired especially at peak periods of calving, breeding and pregnancy testing. Tiredness breeds mistakes and accidents result (Trafford, G., 2010). Dairying's accident rate is third worst in terms of injuries per person employed, with 25-50 percent of workplace deaths occurring 'on farm' (Dairy InSight, 2007, pp.2-3 cited in Wilson & Tipples, 2008). New Zealand's Accident Compensation Corporation (ACC) which collects levies from employers to fund the costs of accidents uses one agricultural premium class for levying employers for accepted claims (Class 1300). Their claims data for all claims for dairy farming with an estimated inter-censal dairy farming population of 34,275 or 48.6 percent of the farming population, revealed that dairy farming cost ACC and dairy farmers nearly $NZ 23.6 million in 2009-10. The average ACC cost of claim was $2,193 while the equivalent estimated figure for sheep and beef farming had an average ACC cost of claim of $1,713 (Lillee, 2010, cited in Callister and Tipples, 2010). High levels of lower back pain, mental health and alcohol problems have been identified in farmers and workers (James, (2002).

The impact of changing demographics

Changing demographics compound the issues outlined above. New Zealand's population is aging. There will be reducing numbers of young people available to enter the workforce (Searle, 2003). The labour force is expected to peak at 2.39 million in the mid-2020s, before declining slightly to 2.38 million in 2051. Half the New Zealand labour force will be older than 42 years in 2012, compared with a median age of 39 years in 2001 and 36 years in 1991. The 18-24 year segment of the labour force is expected to make up only 12 percent of the labour force in 2051, compared with 16 percent in 1996 (Statistics New Zealand, 2005). With youth recruitment and retention already a problem, the attrition in younger age groups, suggests a a serious capacity risk for the industry. Conversely, an ageing of the traditional dairy workforce in the North Island, implies a serious productivity risk (Strack, Baier & Fahlander, 2008).

Options to overcome labour recruitment and retention challenges

In general terms, labour is an expensive cost component, accounting for between 20% and 40% of total dairy farm costs (Kingston & Claycomb, 2005). The prevailing culture of the industry has been one of

cost saving, particularly of labour (Tipples, 1995). Farmers have been motivated by cost to reduce their dependency on labour. Some have adopted the Once-a-Day milking system (OAD) which provides more opportunity than the usual twice daily milking routines for labour saving and to build some lifestyle into the working day. Rakaia Island Dairies, a large family business operating on a corporate scale in Mid Canterbury successfully utilise this system suggesting it has great potential, however its widespread adoption has been slow because it potentially reduces milk yield and therefore profitability (Trafford, G, 2010). Rotary milking parlours, robotic milk harvesting and automatic cup removal have saved time but have not overcome the need for quality staff (Ibid).

The industry recognises recruitment and retention challenges have the potential to constrain productivity and damage dairying's image. It has developed several long term strategies to overcome these issues. DairyNZ's new *Strategy for New Zealand Dairy farming 2009*-2020 focuses on five outcomes that are essentially interdependent:

1. Increasing farm profitability
2. Talented and skilled people are attracted to, and retained by the industry
3. An internationally competitive milk supply maximises returns to farmers
4. Industry reputation is enhanced locally and globally
5. Achievement of shared goals through genuine partnership between industry and government and the wider community (DairyNZ, 2009).

Callister and Tipples (2010) believe Outcomes 1, 3 and 5 are dependent on Outcomes 2 and 4. Recruitment and retention of talented and skilled people will not occur if the industry has a bad reputation. Nor will these objectives be achieved in isolation from a significant part of the labour force. Outcome 5 refers to genuine partnership with the wider community as well as government, which should perhaps specifically include dairy farm employees. Outcome 2 remains critical to the industry's future success because without staff to look after and milk the cows, the industry's future is under threat.

Temporary migrants

The Government has acknowledged the need for migrant workers and skilled dairy farming positions have being listed on the Department of Labour's Immediate Skill Shortage List *(*ISSL*)*. The list that came into effect on 13th September 2010 indicates four categories of key dairying skills shortage. If a migrant worker produces an offer of employment in an category that is included on the current ISSL, visa and immigration officers will accept that no suitably qualified New Zealand citizens or residents are available. Employment is temporary and can last for longer than a season but does not give rights to obtain permanent residency (Immigration New Zealand, 2010).

Staff turnover especially at middle and senior management level, is expensive. In 2009, when the industry became concerned that assistant herd manager and assistant farm manager categories on the Immediate Skill Shortage List (ISSL) would be dropped, Southland farmer Edward von Randow indicated that access to skilled migrant workers is essential to his (a 2300 cow business) in terms of productivity and profitability. "I know it costs me around 40, 000kg milk solids (MS) in a season when we have to replace someone at the assistant farm manager level and around 15,00 kg if it is an assistant herd manager" For his operation, the loss in milk income alone would be $630,000 at $4.50/kg MS payout. He employs eight migrant workers, five of them on temporary work visas allocated through the ISSL (New Zealand Dairy Exporter, 2009).

The shortage of dairy farm labour has eased with the current economic recession and so just over 1200 work permits were issued for migrant dairy workers in the ten months to April, 2010 compared to 1600 for the previous year (Cropp, 2010). Over the six previous seasons, (Table 5), the number of temporary work permits has been increasing (Callister and Tipples, 2010)

Table 5: Number of temporary work permits issued for dairy farm workers

	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Permits	516	650	641	880	1741	1957

Table 6: Nationalities of dairy workers issued with temporary work permits.

Nationality	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Philippines	16	40	74	278	806	896
South Africa	75	114	100	89	139	166
Fiji	1	3	18	22	75	130
Brazil	3	7	41	45	105	128
Chile	7	21	15	24	45	100
Great Britain	126	111	97	74	111	96
India	16	21	28	42	70	72
Sri Lanka	7	20	21	21	30	43
Uruguay	12	25	23	31	47	42
Nepal	7	7	2	8	13	33
Argentina	20	12	13	21	31	26
Ireland	39	26	28	24	16	26
Germany	8	9	10	14	27	20

Source: Callister and Tipples)

Table 6 shows the number of permit applicants according to nationality. While permit holders come from a wide range of countries, there has been notable increase in the number of permits issued to Filipino workers. 898 of them were employed on dairy farms in the 2008/09 season. 322 permits were issued to those of South American origin, predominantly Brazilians and Chileans (Callister and Tipples, 2010).

Temporary workers tended to be male. Of 896 permits issued to Filipino workers in 2008/09, 831 were issued to men. This is in stark contrast to other streams of Filipino migration, for example, nurses and caregivers, who are overwhelmingly dominated by women. (Badkar, Callister and Didham, 2009).

Migrant experiences

Former migrant recruiter Greener Horizons Workplace Limited (2010) indicated there was no lack of ready dairy workers. Although limited qualitative research exists on migrant staff, it appears that the motivations to migrate differ between migrant groups (Trafford, S., 2010). Unpublished research indicates that the Asian (predominantly Filipino) workers are economic migrants, motivated by the prospect of a better income from dairying than they could obtain in their home countries. Wages can be a 1/3 to 1/10th more than those in their home country (McFarlane et al., 2008). Subsidised accommodation can reduce their living expenses and allow them to save money for the future and/or to send remittances back to their families. However, Rennie (2010) found that many dairy migrants have unrealistic expectations about how much money they will be able to make and save while in New Zealand because costs are often higher than they expect. Obtaining skills and experience to take back home is also important but less so (Trafford, 2010).

Trafford, S. (2010) recently interviewed workers about their motivations to stay on New Zealand farms, often longer than they initially intended. Filipino workers said they had financial goals. They constrained their social lives to meet financial goals and family responsibilities (Trafford, S., 2010). Workers from South American countries tend to place less emphasis on the financial rewards and more on the opportunity to learn new skills and gain experience to take home with them. While a generalisation, the South Americans tend to have come from more financially secure backgrounds, have higher education levels and so are less tolerant of poor working conditions than the Filipino workers (Johnston, 2010, Trafford, 2010). Migrants all found dairy farm working conditions very hard, especially on arrival. Long days, an endless stream of jobs to be completed with little free time, complex farm systems and machinery, and unpleasant working conditions (snow) were often very foreign to them (Trafford, 2010). Interviewees chose New Zealand to work in, because they had contacts, the dairy industry was successful and well regarded, and they could learn skills that would benefit themselves and their communities. High health and safety standards were important (Ibid). New Zealander's tolerance to racial differences (Rennie, 2010), lifestyle benefits, good quality education for a relatively low price, a good health system and good future prospects for children have also been identified as strong attractants for migrant workers (McFarlane et al., 2008).

Trafford and Johnston also interviewed some mid-Canterbury dairy farmers who employed migrant

Graphic 1-Migrants in the news

Source ; (Tipples, 2009)

workers. Overall, they found migrant workers stable, hardworking, reliable with a good work ethic and generally tolerant of conditions that domestic workers would have balked at. They tended to be resourceful, cheerful and loyal. Their management challenges involved language difficulties, low skill sets and experience (Stillwell, 2009, Trafford, 2010)

There has been media interest in the migrant experience. Graphic 1 shows articles pointing to problems in the areas of recruitment, social integration, unfulfilled expectations and poor employment practices. Conversely, articles herald the value of migrant to farms and communities (Stilwell, 2009) and outline the support government and community groups are willing to give migrant workers (Rennie, 2010).
A June 2010 article entitled *Muddy Waters* by Amanda Cropp, explored Canterbury dairy migrant issues. It highlighted that the migrant experience is not always positive. She frames the article as "Filipino, Romanian and South American faces have become as common as muck in our cowsheds - and that's exactly how some of them have been treated". She reveals that migrant workers are particularly vulnerable to exploitation from cowboy recruitment agencies even before they enter the country. She cites a North Otago recruiter who advertised in newspapers and on television that the migrant staff he hires would "receive a warm welcome, at least two weeks orientation and continued support from his agency" (Cropp, p. 14). After paying substantial fees for placements, workers found themselves expecting to work for one farmer only to find they were working for another on a new contract paying less than the one they had signed in the Philippines. He falsified documents and was successfully prosecuted. This situation and others have lead to calls for the registration of recruitment agents. Historical and sustained opposition to representative farm worker organizations has left dairy workers without representation (Callister and Tipples, 2010). The Filipino Dairy Workers in New Zealand Inc operates in Ashburton. It has 300 members and acts as a support and advocacy group for Filipino farm staff working in Canterbury (Cropp, 2010:14). In mid-Canterbury at least, Filipino solidarity has filled this void.

The government funded Settlement Support Service (SSNZ), and rural women's organizations offer support and advocacy to migrant dairy workers (Rennie, 2010). However, because migrant labour seems to have grown in an 'ad hoc' way without adequate regulation, they and others have called for more structure and accountability. Structures similar to those of the Regional Seasonable Employment Scheme are suggested to ensure all parties are aware of their roles, responsibilities and accountabilities (Cropp, 2010: p16).

Future research

Are migrant workers essential to the New Zealand dairy industry? The answer is yes. The industry needs workers and migrant workers seem keen to oblige. However, as in Future *Dairy Farm Employment* Tipples et al. (2004) stated:

> "We know more about individual dairy cows than about individual farm staff, yet they are the key to the future success of dairy farming in New Zealand." (p.2)

Research on the following issues is suggested:

1. The impact of migrants on farm systems and their management

2. The health and welfare and support needs of migrant workers and their families

3. The training and support needs of senior dairy farm staff to facilitate the management of an ethnically diverse workforce

4. The factors that impact on the receptivity of and integration into host communities

5. The impact of an increasingly ethnically diverse migrant workforce on traditionally homogenous farming communities

6. Ways to ensure strong migrant worker-employer psychological contracts are created that strengthen legal contacts and build trust: and

7. Migrant worker experience in the dairy industry; from their recruitment to their return to their sending community.

Internationally, the use of migrant labour in dairying is commonplace. Intensive American dairying areas, (Vermont, Wisconsin and Ohio are dependent on it (Valentine, 2005). However, their use is not unproblematic and so the challenges of their productive integration have been well studied there (Valentine, 2005, Mugera, 2004, Maloney, 1999). Three major themes are evident to enhance effective and sustainable migrant use: 1) the recruitment of capable and skilled employees (Valentine, 2005), 2) the need for farm management to be sensitive to, understand and resolve cross-cultural and relationship issues (Ibid) and 3) workplace and community acceptance and support of migrants and their ability to integrate into community life (Wilber, Hadley and Miller, 2005, Valentine, 2005). The latter theme indicates that quality employer initiatives like the Amuri Dairy Employers Group based around Culverden are critical for the sustainable employment of migrants (Edkins, 2003, Hannan, 2009 and Tipples and Bewsell, 2010)

In conclusion

In both the shorter and the longer terms, migrant involvement in the dairy farm labour force is essential, especially in the South Island where worker demand exceeds supply and the domestic workforce has yet to engage in a viable way. The challenge will be to create a win: win: win: win relationship for employers, employees, communities and ultimately consumers who buy a product expecting it to be sustainably produced. International competition for workers in other industries and other countries may tighten migrant worker supply, however the chance of this is lessened if the industry works at creating a reputation as a caring and socially responsible industry. It is a challenge to overcome the negative aspects of current dairy employment practice, and to value and develop its workforce, migrant and domestic equally, and so provide New Zealand farm businesses with the human capacity to achieve their short and long term goals.

Bibliography

Bodeker P. (2000). Change Our Attitudes or We are out of Farming SIDE conference paper. Online resource downloaded on 12 March 2010 from *http://www.side.org.nz/Papers*

Callister, P & Tipples, R. (2010). *"Essential" workers in the dairy industry.* Institute of Policy Studies Working Paper, 10/08.

Career Services Rapuara (2010). *Dairy Farmer: Job outlook.* Online resource downloaded 6th July 2010 from *www2.careers.govt.nz/home_page.html*

Casinader, J. (2010) Milk and muck. *Your Weekend: The Press,* May 22, pp 8-11.

Cropp, A. (2010). Muddy Waters. *Your Weekend: The Press*, June 19, pp 13-17.

DairyNZ (2009). Strategy for New Zealand Dairy Farming 2009/2020.

Dairy NZ (2010). *New Zealand Dairy Statistics 2008-09*. Downloaded on 25th June 2010 from *http://www.dairynz.co.nz*

DairyNZ: Press Release (2009c). Prime Minister Launches Dairy Industry Strategy. Online resource, downloaded 16 November 2010 from www.scoop.co.nz/stories/BU0905/S00147.htm

Department of Labour (2008). *Workforce 2020: Forces for change in the Future Labour Market of New Zealand.* Wellington: Department of Labour.

Department of Labour (2010). Immediate Skill Shortage List. Link: *http://www.immigration.govt.nz/NR/rdonlyres/89185A40-27D3-41F4-84BE-30129920411D/0/ISSL.pdf*

Edkins, J. (2009). *CRT Magazine*, December.

Edkins, R. (2003) Dairying and employment in the Amuri District, North Canterbury: 1983-2002. M.Com(Ag) thesis. Lincoln University.

Global Dairy Alliance (nd). New Zealand-Dairy Sector. Downloaded 21 June 2010 from *www.globaldairyalliance.org*

Greener Horizons Workplace Limited (2010). Online resource downloaded 5 July 2010 from

http://www.greenerhorizons.co.nz/dairy/farm-jobs/faqs.php

Guimaraes, F.B & Woodford, K. (2005). *Searching for productivity gains though 'Once-a-Day' milking on New Zealand's pastoral dairy farms*. IFMA paper, Brazil, August 2005.

Hannah, C. (2009). Amuri Dairy Employers Group, research, findings and recommendations 2009. Report prepared by Enterprise North Canterbury.

Human Rights Commission (2008). *Brain gain: migrant workers in New Zealand.* New Zealand, Auckland: Department of Labour.

Hurunui News (2010). Plans for more gatherings for Amuri's dairy workers. April 29, p. 17.

International Personnel Solutions (2008, Jan 24). Farmers recruit Foreigners on Farms. Downloaded on 16 April 2010 from *http://tvnz.co.nz/view/page/1556446*

James, M. (2002). *Sustainability*. SIDE conference paper

Johnston, L. (2010). MGT642 migrant dairy worker project. Lincoln University.

Keating, N. (2009). Filipino family thrive in dairy, *Rural News Ltd.*, 3 August.

Kingston, C. and Claycomb, R. (2005) An analysis of the economic advantages to New Zealand Farmers of extensive electronic monitoring of dairy cows. December. Downloaded 16 June 2010 from *http://www.rezare.co.nz/ifms/SituationAnalysis/NZTE5470114*

Kyte, R. (2008). *A Different Approach to Staffing in The Dairy Industry*. *SIDE*, Discussion Paper

Maloney, T.R. (1999). *Management of Hispanic Employees on New York Dairy Farms: A Survey of Farm managers.* Cornell University, New York: Ithaca.

McFarlane, P., Ramos, B. & Von Randow, E. (2008). *Making Overseas Immigration work in the South Island Dairy Industry*. *SIDE*, conference paper.

Mental Health Foundation of New Zealand (2004/05). *WRAP-Supporting the mental Wellbeing of migrants and refugees in the Auckland Area.* Issue 2.

Ministry of Agriculture and Fisheries (2010a). Sustainable Farming Fund Caring Dairying project summary. Downloaded on 2 June 2010, from *http://www.maf.govt.nz/sff/about-projects/search/09-021/index.htm*

Ministry of Agriculture and Fisheries (2010b). Situation and Outlook for New Zealand Agriculture

Labour, Employment and Work Conference 2010

and Forestry. New_Zealand_Dairy_Statistics_2008-09 (2010). Downloaded 8 July 2010 from *http://www.dairynz.co.nz/page/pageid/2145842610/*

Mugera, A.W. (2004). Managing Human Resources on six dairy farms in Michigan: A resource based perspective. Online resource, downloaded on 4 June 2010 from Scientific Commons Database, *http://purl.umn.edu/11237*

Nolan, I. (2003). *Making Dairy Farming the career of choice*. *SIDE*, conference paper.

Dairy Exporter (2009). Rule change could hit farm income. 1 July. Online resource downloaded 14 July 2010 from *http://www.dairyexporter.co.nz/cgi-bin/article.cgi?cmd=show&article_id=34937&vie*

Otago Daily Times (2009). Timaru Multi-Ethnic Council claims migrant abuse still exists. 17 August . Online resource downloaded on 28 June 2010 from *www.odt.co.nz*

Pangborn, M. (2010). Personal communication

Rennie, R. (2010). Welcome hand for migrant workers. *The New Zealand Farmer's Weekly*, January 25, page 1.

Searle, G. (2003). Where are future farm staff are coming from? *SIDE*, Conference paper.

Sharplin, R. & Deverson, M. (2008). The concept of a quality employers group. *SIDE* Conference paper . Online resource, downloaded 2th November 2010 from *http://www.dairynz.co.nz/file/fileid/28222*

SIDDC (2010) South Island Dairying within the NZ Dairy Industry. Online resource downloaded on 12 November from *www.siddc.org.nz/.../SI%20Dairying%20within%20NZ%20Dairy%20Industry%202010.pdf*

Stilwell, G. (2009). Timaru Multi Ethnic Council claims migrant abuse still exists. Downloaded from *Otago Daily Times Online*, on 28 June 2010 from odt.co.nz/news/farming/70146

Strack, R. Baier, J. and Fahlander, A. (2008). Managing Demographic Risk. *Harvard Business Review.* Retrieved 22 November 2010 from Business Source Database: <hbr.org>.

Tipples, R. (2010). Seeking OSH solutions to precarious working in the growth of New Zealand dairy farming- a research agenda. Paper presented to the *Health and Safety and Vulnerable Workers in a Changing World of Work Conference*. Middlesex University, 8 July.

Tipples, R. and Lucock, D. (2004). Foreign Workers and Dairy Farming. *Primary Industry Management* , December, vol. 7, 4, pp. 42-44.

The New Zealand Farmers Weekly (2010). Dairy drives positive outlook. 20 November. Online resource, downloaded 15 November 2011 from *http://www.nzfarmersweekly.co.nz/article/8321.html*

Trafford, G. (2010). Personal Communication.

Trafford, S. (2010a). Management 642 research exercise, Lincoln University.

Trafford, S. (2010b). Is the use of migrant labour a viable resolution to New Zealand dairy labour challenges? Unpublished postgraduate research proposal, Lincoln University.

Wilson, J. and Tipples, R. (February 2008). *Employment Trends in Dairy Farming in New Zealand 1991 – 2006.* Lincoln University: Agriculture and Life Sciences Division. Research Report no. 2.

Valentino. B. E. (2005). *Uniting Two Cultures: Latino Immigrants in the Wisconsin Dairy Industry.* The Centre for Comparative Immigration Studies, University of California, San Diego. Working Paper 121.

Wilber, N, Gregg, H. and Miller, Z. (2005). *Producer Perception: Diverse Workforce Acceptance on Wisconsin Dairy Farms and Farming Communities-Outgamie County*. Centre for Dairy Profitability.

Williams, J. (July 2009). *Low skill temporary migration in New Zealand: labour market and human rights law as a framework for managing future migration*. Institute of Policy Studies Working Paper 09/09.

Woodford, K., Greer, J. & Phillips, A. (2003). *Searching for Productivity and Competitive. Advantage on New Zealand Dairy Farms,* Proceedings of the 14th International Farm Management Association. 14th Congress, Perth, Western Australia, August 10-15, 2003.