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# Retention of skilled migrants in the New Zealand Dairy Industry

JANET SAYERS\* and CATHERINE POULTER\*\*

## Abstract

The retention of skilled migrants is a key issue facing many industries. This study focusses on factors that enable and hinder retention of skilled migrants in the New Zealand dairy industry. A model was developed from existing literature containing four contexts for migrant experience and five key migrant experience process stages. From this model, a self-completion questionnaire was developed and then distributed via four dairy organisations to those migrants workers who were retained. Findings discuss the six most important retention factors identified: pride in the industry; opportunities for career advancement; skill and knowledge enhancement; commitment to the industry; enjoyment of the job; and good work relationships. Analysis of qualitative data showed where industry improvements could be made: work practices and pay; a coordinated communication strategy from the industry; more efficient government immigration processes, and coordinated policy around cultural and social integration. Two contributions – practical and theoretical – are provided.

**Key Words:** dairy farming; migrant workers; dairy workers, cattle workers, farm workers

## Introduction

The New Zealand (NZ) dairy industry is NZ's largest exporter, earning some NZ\$14,576 billion in export revenue in 2012 and contributing approximately 3 percent to NZ's gross domestic product, according to the Ministry of Primary Industries (MPI) (2014). Over the past decade, there have been significant structural changes to the industry due to an increase in corporate ownership of farms, conversion of commercial forests and sheep and beef farmland to dairying, increased herd sizes and technological advancements in production, animal health and genetics. There are now approximately 4.78 million cows in NZ in 11,891 herds, and approximately 26,577 people work in dairy farming (LIC, 2014). In NZ, there are approximately 11,798 dairy herds with the average herd size of 402. Over the last two decades, national production has increased by 77 percent (MPI, 2014). Inside these facts and figures about NZ dairy farming is a human element: the increasing reliance NZ dairy farm managers have on skilled migrant labour to sustain these levels of productivity.

Dairy farming has long been considered a challenging and dangerous occupation, with high employee turnover. An industry report in 2008 determined that a human resource crisis existed in dairy farming (Wilson & Tipples, 2008) and since then the industry has undergone a demographic transformation: skilled migrant labour is now essential to the sustainability

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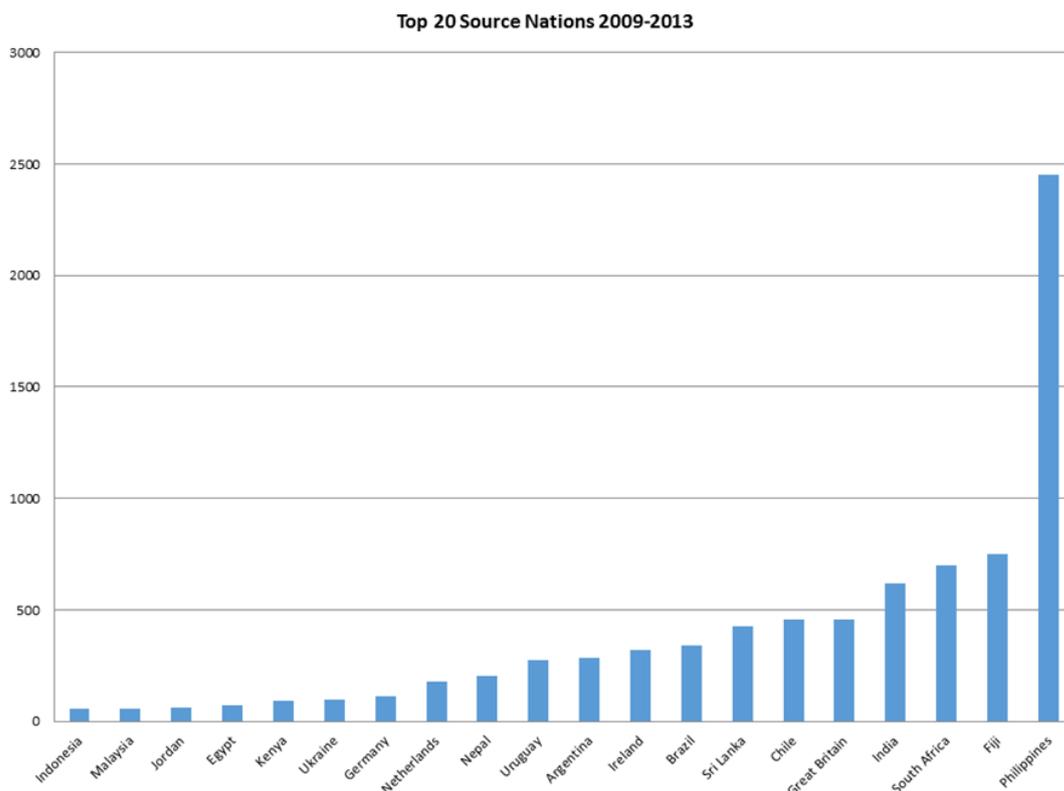
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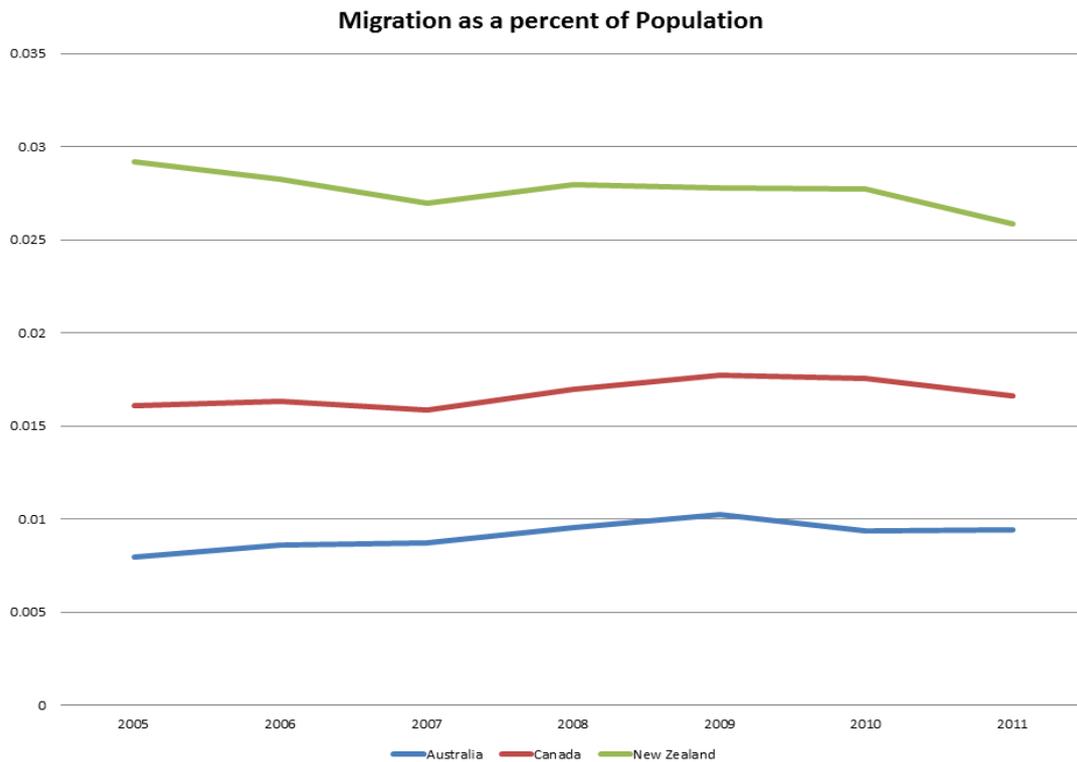
and global competitiveness of the industry (Trafford & Tipples, 2012; Strack, Baier & Fahlander, 2008). This is reflected in the Dairy Industry Strategy for Sustainable Dairy Farming 2013-2020 which states the following as one of its strategic objectives: “Talented People: Attract, develop and retain highly skilled and motivated people throughout the industry” (DairyNZ, 2013).

Migrant workers have always been essential to the NZ dairy industry (Rawlinson, Tipples, Greenhalgh & Trafford, 2012). Migrants have flowed into the industry throughout its development, most notably with the influx of Dutch migrants in the 1950s. However, over the past decade this reliance has accelerated, and over the past decade migrant workers have originated from some 62 two source countries (INZ 2014a). Between 2009 and 2013, these migrants predominantly came from the Philippines, Fiji, South Africa, India and Great Britain (INZ, 2014b). Over the past five years, an average of 1900 temporary work visas have been approved annually to migrant workers for employment on dairy farms (INZ, 2014b). A number of these visas are re-issued to migrants currently working on farms in NZ due to the ongoing need to renew visas upon expiration of the initial temporary work visa. DairyNZ has estimated that 4,600 non-New Zealand born staff work on NZ dairy farms (Trafford & Tipples, 2012). This number is not an indication of the total number of Skilled Migrant Dairy Workers (SMDW) employed on farms at any one time as temporary work visas are issued for periods of up to three years.

NZ dairy farmers are competing globally in a number of areas; efficiency, product quality, and increasingly, over the past decade, for skilled migrant labour. Migrant labour is an increasing component of the labour markets of many economies (Preibisch, 2010) and global competition for migrant skilled labour has intensified (Benson-Rea & Rawlinson, 2003; Bürgelt, Morgan & Pernice, 2008, Khoo, McDonald, Voigt-Graf & Hugo, 2007). Around the globe, workforces have become increasingly diverse, more educated and more mobile and retaining human resources is one of the most pressing challenges of businesses. Considering the global nature of dairying, the decline in relative numbers of migrants compared to host nation alternatives, such as Australia and Canada, should be of concern – see Figure 2 below.

**Figure 1: Visas approved for Dairy Farming Occupations 2009 – 2013, Top 20 nationalities**



**Figure 2: Comparison of Rates of Migration with Alternative Host Nations for SMDWs**

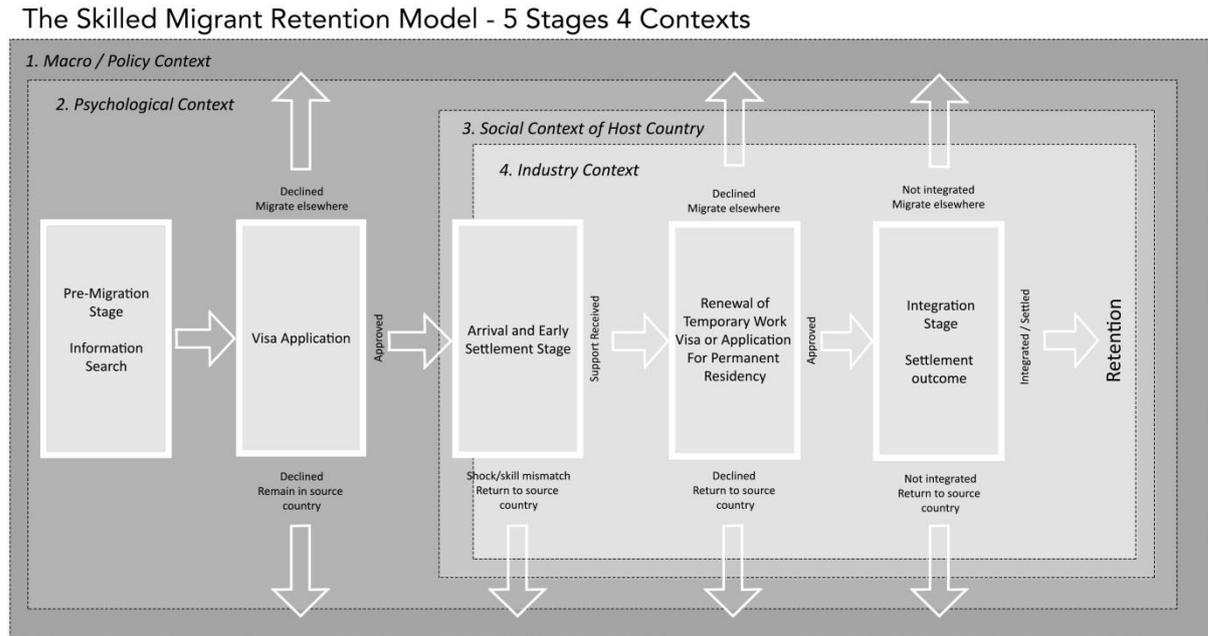
As the competition for skilled migrant labour intensifies, human resource management (HRM) practices within the NZ dairy industry will need to ensure they are of the highest standard (Khoo et al., 2007). Attraction to the industry will not continue if HRM practices are less attractive than those in alternative host nations. The dairy industry needs to retain skilled and motivated people and because of the lack of NZ originating skilled dairy workers, and competition from other nations for skilled labour. The research questions are thus:

1. What are the challenges and opportunities encountered by skilled migrants who have relocated internationally to work in the NZ dairy industry?
2. What are the most important factors in enabling migrant integration, settlement and retention in the industry?

This paper is structured as follows. First, existing literature is reviewed and a comprehensive model is presented. The model discusses factors that impact on retention of migrants and illustrates four distinct but interrelated contexts and five experiential processes. Methods, findings, and contributions to practice and theory are then discussed.

## **Migrant retention model**

This section draws upon existing research to propose a comprehensive model of migrant retention used as a basis for the development of the questionnaire used in this research. Figure 3 below shows the model developed with four contexts and five key process stages:

**Figure 3: Retention of Skilled Migrants Model: Four contexts and Five Stages**

This model is adapted from the Migration Process Stages Model formulated by Benson-Rea and Rawlinson (2003). They investigated and analysed the migration process at five stages; the pre-migration stage, the information search and migration decision stage, the migration and arrival stage, the post arrival and early settlement stage and the settlement outcome stage. Using a process stage model enables researchers to focus on migrant experience from the perspective of migrants themselves. Understanding the process in a holistic way as a process of retention means that the key points of tension and discomfort with cultural, social, psychological, employment and key institutions can be identified and analysed. This framework for understanding migrant experience considers migrants as valued employees of both the state and dairy industry. In Figure 3 above, two key stages have been added to the original model: two interactions with Immigration New Zealand (INZ), initially through a visa processing branch associated with the home nation and following that, at least one, and sometimes multiple encounters, with INZ in the host nation. These stages are critical in the process towards settlement and retention.

Figure 3 above shows contextual factors impacting upon migrant experience. The first context – the macro policy context – includes the external economic environment, policy and legislative environment. This context includes the economic and lifestyle relativity of the source nation and the host nation, and that of alternative destination nations as well as immigration policy. Factors specific to the NZ dairy industry include macro-economic factors, such as global dairy prices and farming income, exchange rates, the domestic unemployment rate, aging populations and structural changes in the industry. Employing migrant labour as a response to skill and labour shortages is an alternative to increasing wages to compete for scarce domestic labour. Migrant skilled labour is attracted to a location through two interrelated mechanisms; the view of labour being matched with economic opportunity and, more recently, the view of labour being attracted to a location that provides a range of lifestyle amenities (Gottlieb, 1995).

The second interrelated, contextual factor is the psychological context of the migrant prior to arrival and during settlement. To enhance the likelihood of migrants staying, it is essential to gain an understanding of the social and psychological factors that contribute to enabling them to stay (Bürgelt et al., 2008; Carr, 2004). Carr (2004) suggests that people are motivated to relocate to work in another country because of five key reasons: 1. Economic factors – including the promise of better economic opportunities; 2. political factors – including dissatisfaction with the political environment in the home nation; 3. career factors – including career development opportunities; 4. cultural factors – including migrating to countries that are culturally similar, or conversely, migrating to countries that provide opportunities for encountering diversity; and 5. family factors – including opportunities for family members. However, the literature also suggests that the majority of self-initiated skilled migrants are most concerned with accumulation of transferable skills which are valuable on the global labour market (Stahl, Miller & Tung, 2002). Skilled migrants to rural NZ, who have entered since the onset of the skills and qualifications-based immigration policies, have in general higher levels of education than their host country counterparts. This has also been found to be the case with migrants in rural Australia (Massey & Parr, 2012).

As well as accumulating human capital, skilled migrants are concerned, of course, with their own psychological wellbeing and that of their families. Mähönen, Leinone and Jasinskaja-Lahti (2013) use three indicators of psychological well-being in migrants; satisfaction with life, general well-being and general mood. They suggest that in the pre-migration phase information offered to voluntary migrants should create realistic expectations. If expectations are too positive they will lead to disappointment when expectations are not met. Host countries need to live up to the image they portray to attract migrants.

The third interrelated context is social and cultural context of the host country. Long term acculturation requires both psychological and sociological adaptation (Ward, Fox, Wilson, Stuart & Kurs, 2010; Berry, Phinney, Sam & Vedder, 2006). Psychological adaptation affects a person's sense of well-being and sense of life satisfaction within a new culture (Ward et al., 2010). Social adaptation involves a person's ability to successfully participate in cross-cultural encounters (Ward et al., 2010). In order for that brain gain to be retained, there needs to be a fit between the level of talent and the surrounding social and cultural environment (Jackson et al., 2005). Non-alignment between these two factors can cause mental health problems in the migrant worker (Pernice, Trlin, Henderson, North & Skinner, 2009). There can also be negative social and economic consequences to not utilising talent because of locally held prejudices or parochialisms (Coates & Carr, 2005). Bürgelt, Morgan and Pernice (2008) determined that migrants need resource structures before they embark on their self-initiated relocation. Resources structures can include: realistic expectations of the host nation, language competency, knowledge of the migration process, cultural awareness, and adaptation strategies. Individual skilled migrants select their destination location and firm based on these and other conditions (Weng & McElroy, 2010). These resource structures enable migrants to mitigate the social/cultural challenges they will inevitably encounter in their host country. Migrants can experience significant challenges relating to changes in their socioeconomic status when they first migrate (Pumariega, Rothe & Pumariega, 2005). They often experience dips in their standards of living, especially relating to relationships with supervisors, co-workers and the community. Community infrastructure to support migrants is critically important. Khoo et al. (2007) found that social networks were particularly important for those migrants planning residency.

From migrant workers' perspectives integration (not assimilation) is the ideal aim; workers should feel 'at home' in their host country but they should be able to express their own cultural rituals and relate to people with similar cultural values. From the host country's perspective, diversity brings many benefits (Berry, 1997; D'Netto & Sohal, 1999), as it has positive economic implications (Florida, 2002), access to different knowledge bases and knowledge networks (Collings, Doherty, Luethy & Osborn, 2011) and diversity enhances society's adaptability (Berry, 1997). New Zealanders are generally strongly supportive of diversity with a positive attitude towards migrants and multi-culturalism (Ward & Masgoret, 2008; Zimmermann, Bauer & Lofstrom, 2000). However, qualitative research tells us that the NZ rural community is not so accepting of migrants (Rawlinson et al., 2012). Employers play a vital role in the integration and thus retention processes (Chen, Ward & Coulon, 2013).

The fourth contextual factor, of most direct significance in the current research, is industry contexts, which includes issues around about employment and employers as well as the industry more generally. The macro policy context, psychological and social/cultural contexts are all still relevant but the focus is more on direct consequences arising from the employment relationship itself. Hausknecht, Rodda and Howard (2009) derived a set of 12 factors regarding employees' reasons for staying within an employment setting. Job satisfaction – the degree to which employees liked their job – was the primary retention factor. People enjoy the intrinsic attributes of their work and thus are more likely to be retained by their employer, a factor borne out in other NZ-based research (Boxall, Macky & Rasmussen, 2003). Following job satisfaction, extrinsic rewards such as pay and benefits, was the secondary retention factor (Hausknecht et al., 2009). Organisational prestige or the degree to which an organisation was perceived to be well regarded and reputable also affected an individual's desire to stay. Having good relationships with supervisors and co-workers is also an important factor in retention, a factor which is also found relevant to NZ employees (Boxall et al., 2003).

In the case of migrant dairy workers, the most relevant research on job satisfaction conducted in the United States measured four dimensions; feedback, autonomy, variety and task identity (Fogleman, Milligan, Maloney, Knoblauch 1999). Poor feedback from employers had the greatest impact on job satisfaction. This is especially relevant because feedback is something employers can control. Dairy farm workers are usually aware of the requirements of demanding dairy farm work: there are often high workloads, time pressures, long hours and seasonal fluctuations. Good employer communication and feedback helps employees remain motivated throughout the challenging circumstances of the work. These contextual factors impact on migrants seriously considering returning to their source nation; episodic desires to return are interspersed often through the first five years of settlement and peaks occur at about one and two years (Hartog & Winkelmann, 2003).

Employers have a direct impact on the experience of employment; but the industry also needs to set standards in a responsible way. For instance, there should be opportunities to acquire and enhance skills. The primary reasons Australian employees stayed with their dairy farm employers included opportunities to increase skills and knowledge and good working conditions (Nettle, Semmelroth, Ford & Zheng, 2011). Also, a sense of ownership, which is important to work's meaningfulness, can be fostered. Most importantly, conditions of work and pay need to be monitored and managed. Another factor relevant to the industry as a whole is the importance of the industry reputation. Reputation depends on word-of-mouth from migrants which emerge from general feelings migrant workers have about their work,

how valued their contributions are, and the extent to which they feel the industry cares about their well-being (Boxall et al., 2003; Hausknecht et al., 2009). Other factors included extrinsic rewards, feedback received for a job well done, and the availability of a mentor.

Employers can have a significant role in the retention and settlement of migrants (Chen et al., 2013). Examples of employer initiated support include inductions, cultural and diversity awareness for domestic staff, settlement support, language support programmes, mentorship schemes and ongoing training (Chen et al., 2013). However, Wuffl, Carter, Vineberg and Ward (2008) contend that long-term retention of migrants to rural communities depends as much on non-work related factors as job related factors. Rural communities needing to retain skilled migrants need well-planned and developed social support infrastructure to enable migrants to build social connections to the community. Such infrastructure can provide opportunities for individuals to participate in learning activities, join sports and religious organisations, socialise and develop trust with neighbours. It is through these activities that skilled migrants can be integrated with their communities and retained for the long term. Wulff and Dharmalingam (2008) also found that the settlement assistance migrants received from their employers had an effect on their retention. Such assistance can include settlement counselling, accommodation, information about the area, putting the migrant in contact with community groups and general assistance with integration, not assimilation (Chen et al., 2013; Pernice et al., 2009). In NZ, Tipples, Rawlinson and Greenhalgh (2012)) have discussed how the Filipino Dairy Workers New Zealand (Inc.) have responded to this need to facilitate social integration in their community.

Favourable HRM environments for talent growth lead to increased attractiveness of a region. The key to attracting and retaining self-selected migrant talent is based on providing and sustaining a conducive HRM environment. The HRM environment can be influenced at the national government level, by local government, by industry associations and/or the firm level. An attractive HRM environment is essential to ensuring the retention of globally mobile skilled labour (Weng & McElroy, 2010) .

## **Research design**

The purpose of this research was to identify the factors that enable integration and retention of skilled migrants who have moved to NZ to work in the dairy industry. A literature review revealed the most likely factors impacting on integration and retention of SMDW, and these factors are represented in Figure 3. The survey was designed to gather information across a broad range of possible factors that impact on migrant dairy workers' experiences. Textual fields were added to the survey to gain information from participants about their experiences with migration and integration at key process stages. Collecting both quantitative and qualitative information enabled a comprehensive picture to be gained about the overall experiences of retained migrants, as well as more specific information about where improvements could be made.

The sample of skilled migrants was obtained from foreign born individuals who had been working in the NZ dairy industry for more than three years. Beine, Docquier and Rapoport (2007) define skilled migrants as foreign-born workers with university or post-secondary training. For the purposes of this research, retained skilled migrants were defined as foreign born workers who migrated to NZ to work in the dairy industry, who hold a relevant

qualification or who had undertaken two years of work experience in a related job prior to coming to NZ, and who had spent three years or more working on dairy farms in NZ. This research did not identify migrant source countries and so cultural differences were not investigated. This is a possible area for further research.

Migrant dairy workers are a diverse and geographically distributed population. There is currently no unified professional body representing their interests. Consequently, the questionnaire was delivered through social networks most likely to reach the target population. The self-completion questionnaire was distributed through the following four supportive organisations:

1. Federated Farmers of New Zealand via a direct email to members
2. The Primary Industry Training Organisation (ITO) via a link within their online newsletter
3. The Filipino Dairy Workers of NZ incorporated society via Facebook
4. Settlement Services, a division of INZ, via a survey link within their online newsletter.

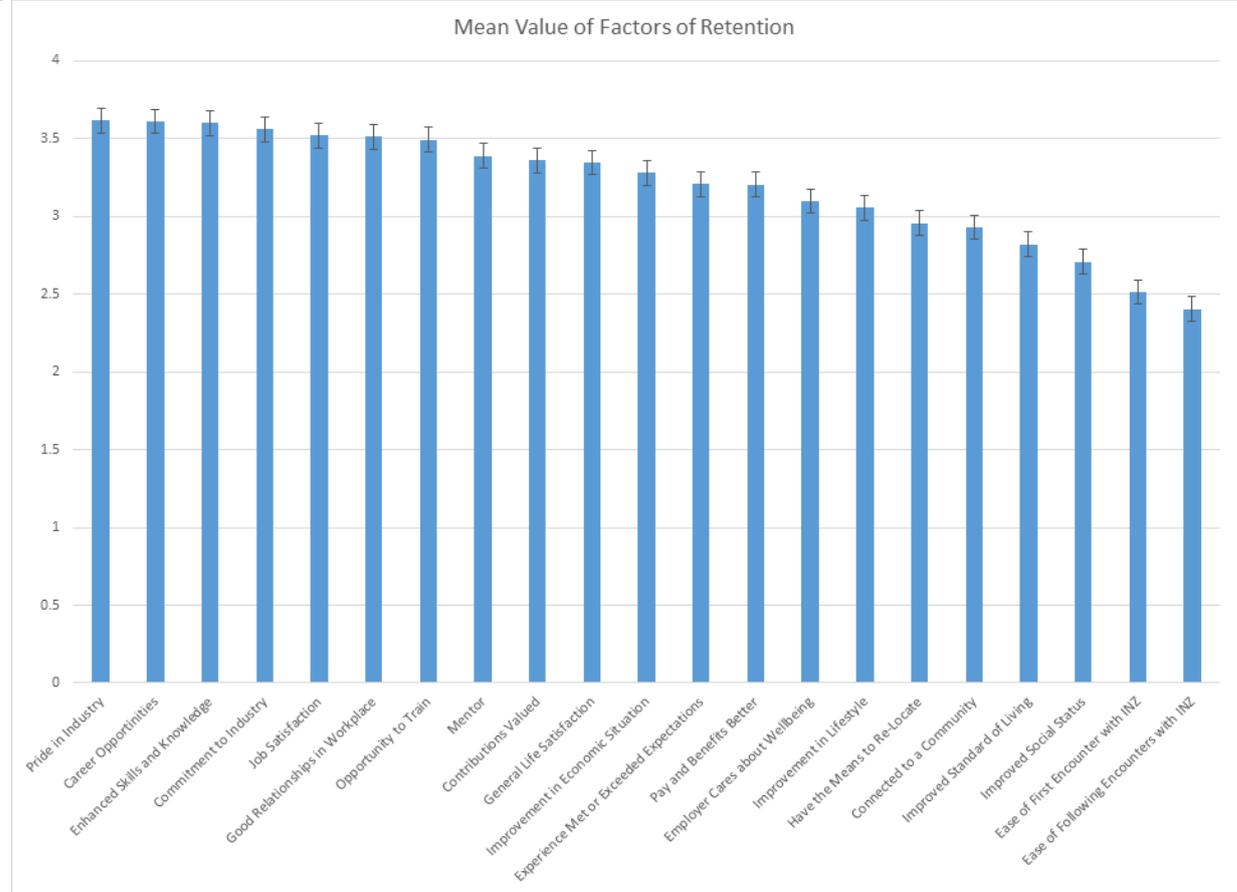
Participants were asked to forward the survey if they knew of migrant dairy workers who might be interested in participating in the research. The survey was distributed in February 2014. In total, 98 responses were collected over three weeks. Seventy-three fit the criteria of retained skilled migrant workers. The number of responses received enabled the data to be significant;  $F(20, 1495) = 12.72, p < 0.01$ .

The questionnaire comprised of 27 questions relating to integration and retention of SMDW. Questions 1 and 2 determined the participants met the criteria of retained SMDW. Question 3 asked about motivation for migrating to NZ. Questions 4 to 26 related to the four contexts. The final question 27 asked about season of arrival as previous research suggests this might affect retention success at the arrival stage. The greatest demand for labour on NZ dairy farms is during the months of July, August and September when work hours are longest and stress levels are highest amongst employers and employees. The majority of the questions on the survey, questions 5-25 were answered on a Likert scale.

Qualitative data was thematically analysed in relation to five key process stages. In the following discussion, we confine discussion to the six most important factors that impact on retention revealed by the study. We use comments from the qualitative data to illustrate dairy workers' opinions about these factors. We then discuss suggestions for improvements using comments where migrants note dissatisfaction or mixed feelings about their experiences.

## **Results and Discussion**

Figure 4 below combines all 21 factors of retention identified from the literature and asked about in the survey. The most important factor has the highest value mean and the least important factor the lowest value mean.

**Figure 4: Mean Value of Factors of Retention for Retained SMDWs**

The results identify that the six most important factors to SMDW in the NZ dairy industry are, in order of importance:

1. Having pride in the industry
2. Having career advancement opportunities
3. Having the opportunity to enhance skills and knowledge
4. Having commitment to the industry
5. Enjoyment of the job
6. Having good relationships with supervisors and co-workers.

Migrant farm workers in NZ indicate that the strongest factor impacting on their retention is the pride that they feel as part of the NZ dairy industry. Ninety six percent of retained migrants strongly agreed or agreed that they were proud to be working in the dairy industry. The degree to which an industry is perceived to be well regarded and reputable is a significant factor in retention (Hausknecht et al., 2009).

The second most important factor, which is also related to the third factor, is opportunities for advancement. Eighty two percent strongly agreed or agreed that their economic status had improved compared to that in their source country. Many respondents commented on the economic opportunities they had realised working in the dairy industry, progressing from waged migrants to farm ownership.

*I came [...] to NZ in 2002. Worked myself from the bottom up as farm worker up to 2005, being farm manager. Now I am farm owner in NZ and permanent residence since 2005. We think it is very hard work here (with working in the early hours and growing numbers of cows) but very rewarding.*

*I have started at the bottom of the chain and worked myself up to become a land owner which would have been hard in the country I was born.*

*Huge opportunity to manage/control/supervise/involvement in NZ dairy farming.*

*I am lucky enough to find nice employers in my 5 years farming in Canterbury. I am currently a 2IC [second in charge] and I would say I have fair opportunity to up-skill and advance on the farm.*

The third factor is opportunities to enhance skills and knowledge. This factor is closely related to the second factor of opportunities for advancement. Ninety six percent of all respondents strongly agreed or agreed that they had the opportunity to undertake training. Respondents commented;

*... going to the ITO, helps to meet people on our industry plus making friends. I just finished Ag ITO course level 3 supplied by my employer and he is permanently training me. I am being paid very well.*

*New Zealand dairy industry help me to improve my career and other related organisation help me by their helpful training.*

*Wonderful opportunities. Have already undertaken Level 3 ITO and am now doing level 4.*

An industry which promotes growth and enhancement of skills and knowledge will in turn attract further talent (Weng & McElroy, 2010) and workers are more productive when they are working with others who possess a high level of skill (ibid).

The fourth factor is commitment to the industry. The level of commitment to the NZ dairy industry as an important factor in retention indicates that the high level of intrinsic motivation that migrants bring to the dairy industry and the need for similar commitment from the dairy industry to the migrants. Comments that indicate this commitment include:

*Employees effective, efficient and with a serious work commitment seems to be a surprise for kiwi employers.*

*I really enjoyed working on a farm here in NZ although DAIRY FARMING is a hard work that requires dedication but there's a lot of rewards. At the end of a long day, we take great pride, we are happy knowing the worked we DO matters to so many families. This dairy farm experiences are the key to follow our dreams, to survive and to succeed in LIFE.*

A more ambivalent comment about commitment was:

*My employers have been supportive to me but they still trust local kiwi as managers which unfortunately have always been unreliable and disappointed them.*

The fifth ranked factor was job satisfaction. Even though job satisfaction was ranked fifth, it was still at the 90 percent level. Shea (2009) argues that a dairy business' successes are directly related to their HRM practices. Personal relationships within the business, intrinsic and extrinsic rewards, training and camaraderie all result in retention. Comments included:

*I am very satisfied with my job experience with my employer here in NZ. They are very supportive to us and very sensitive with our well-being, we are very grateful for them.*

*Dairy farming in NZ is much more advanced than in my home country, more focused, and very particular to health and safety which actually is very good. I have learned a lot and I am still willing to learn more.*

The sixth ranked factor was having good relationships with supervisors and co-workers. Positive relationships create support which leads to commitment and retention. Mentoring programmes and "buddies" significantly enhance the likelihood of success (Collings et al., 2011; Nettle et al., 2011; Chen et al., 2013). Relationships with employers are very important to dairy workers because the employer acts as the primary gate keeper (Wulff et al., 2008). In addition, the employee is often living on and in the employer's property. Isolation also intensifies the importance of the employer and co-workers. Many comments were made regarding the assistance received from employers, and dairy workers were grateful and touched by the efforts made by individual dairy managers to make them feel 'at home'.

*I am very satisfied with my job experience with my employer here in NZ. They are very supportive to us and very sensitive with our well-being, we are very grateful for them.*

*Our employer provided us a fully furnished home.*

*Awesome and great employment experience.*

This initial positive experience on arrival significantly increases the likelihood of retention of skilled migrants.

Other factors of significance to our discussion include the issue of lifestyle. Studies investigating migrant motivations for migrating to NZ have showed lifestyle as the primary motivator (Malinen & Johnston, 2011). Our results indicate that although lifestyle is still a factor for general immigration to NZ, for dairy workers other factors like career opportunities are more important.

Another issue relates to extrinsic rewards. Hausknecht et al. (2009) determined that the second most important determinant for employees staying in their job was extrinsic rewards, such as pay and benefits. However, the retained respondents of this study indicate that pay and benefits was the 13<sup>th</sup> highest determinant for retention. Comments that express how the

benefits of pay and compensation were weighed up against the benefits of advancement and lifestyle include:

*Even if I can relocate internationally, I'd rather not think about it. I am very satisfied with my job, my compensation, my family and life in NZ.*

*When we left [...] in 2002 it wasn't a very popular occupation to be a farmer. In the meantime it has changed quite dramatically and now we see the opposite. Still we like to stay in NZ.*

Despite this seeming satisfaction, only 80 percent strongly agreed or agreed that their pay and benefits received were better than in their home country. This does not necessarily mean that respondents were happy with their pay and conditions as they were currently experiencing them. When looking at the actual comments there was considerable dissatisfaction and ambivalence evident about working conditions in the dairy industry.

*I am not that satisfied with my career opportunity at the moment and if a better opportunity comes along even outside NZ, I will grab it.*

*I heard that Australia and Canada are stricter about their labour hours.*

*They need to look into dairy [...] workers future here because at the moment residency visa is quite hard to have It's not long from now when majority of us decide move to Australia or Canada for a much more chance having security for their family having residency.*

These comments indicate that although the experience of SMDW in the dairy industry is largely positive in terms of comparison with their country of origin, there is some mixed feelings and dissatisfaction evident amongst this population. Considering the competitive nature of skilled migrant labour and the choices available to skilled dairy workers, these comments require further analysis in order to provide guidance for the NZ dairy industry as to what they can do to improve their labour force's experiences.

## **Areas for improvement**

In this section, we discuss five areas of improvement suggested by our results. The first area to which attention should be given is working conditions and pay. Rural migrant workers sometimes exist in poverty despite being skilled, for example in the USA (Jensen, 2006). In NZ, only 54 percent of retained respondents strongly agreed or agreed that their social status had improved through migrating to NZ. Migrants often experience an initial decrease in social status upon migration, but they should recover from this. Comments were made about the long hours worked, poor working conditions and pay rates.

*I think my employer treat us like machines, and just change it when it is broken.*

*We worked about 16 to 17 hours a day, and sometimes more hours if there was a problem on the cows (this always happens during calving time). We thought that it was normal working time in dairy farming. Then we had found out that the other*

*farms had lesser hours. NZ dairy industry has no strict monitoring on their labour hours.*

*We have had experience of the best and the worst of boss' [sic] but we have always taken the positive lessons from these experiences and learnt from them.*

*Though the pay is certainly better in dairy industry but when compared to what the farmer/sharemilker/manager earns its relatively modest.*

*Long working hours (14-15), long roster days, less staff numbers, safety issues, weather conditions does not justify the salary. I have worked in an urban distribution workplace in New Zealand and right now working on a dairy farm and can compare and say that working conditions are way better/safer/fair/ in urban centres than on a dairy farm.*

*There should be more staff employed as the work involved is too much plus better roster applied.*

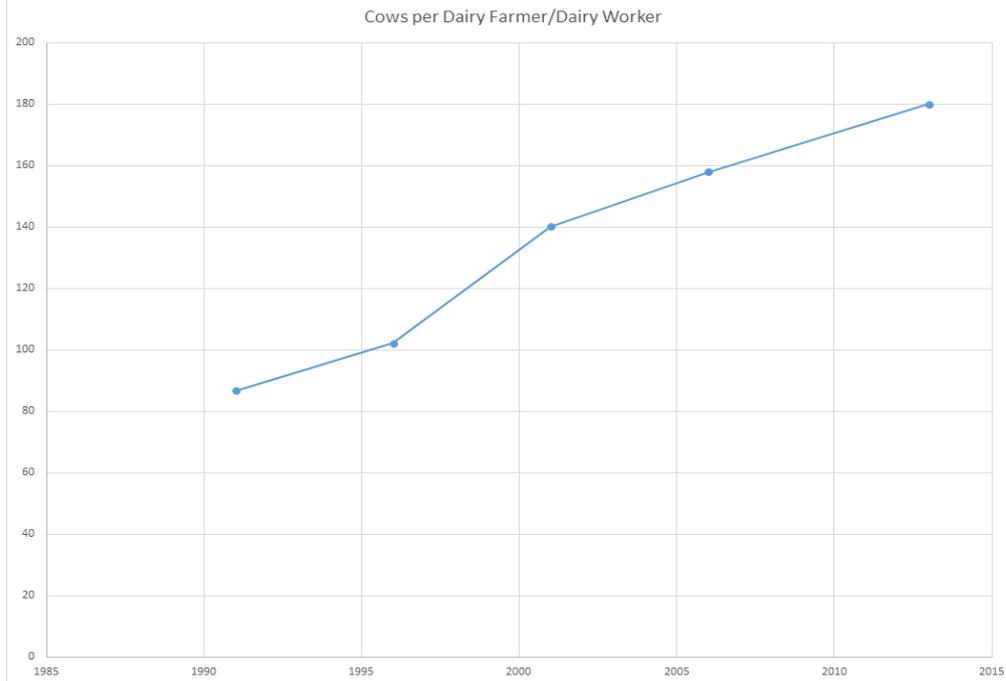
*The working roster or hours in a day and number of staff (very less) on a farm in the dairy industry needs desperate attention.*

*One has to wake up at 3.30 am for milking then breakfast for 30 mins at 8.30 am then lunch at 12 noon for 1 hour then again milking and end the day at 6 pm. It's a lot of physical work and should be treated/compensated fairly in accordance. Wages need to raise.*

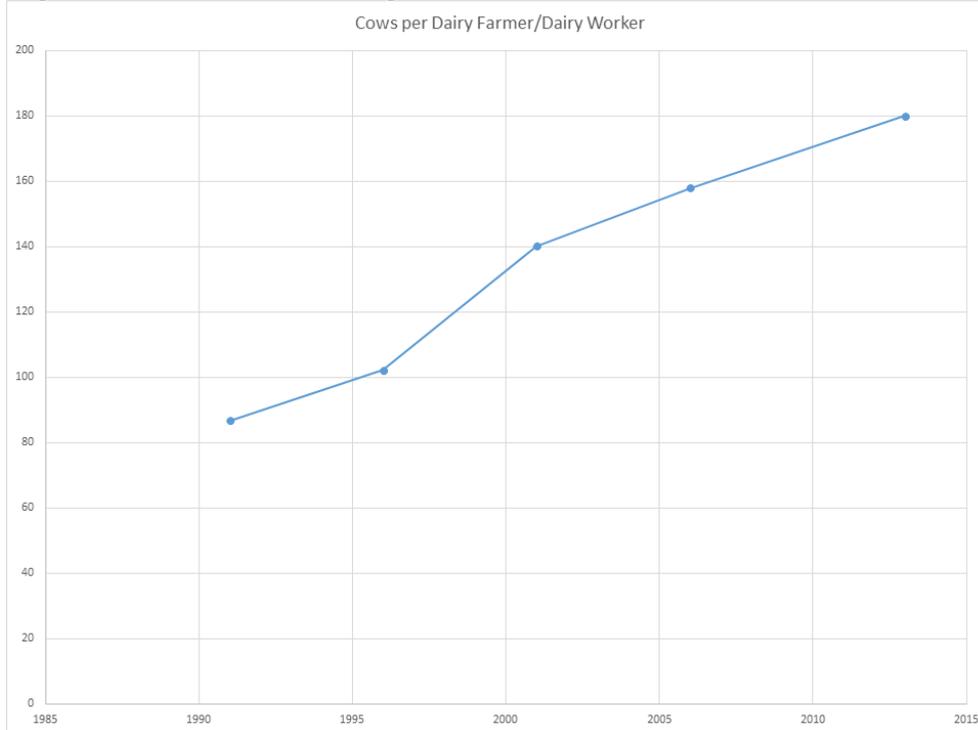
*My first job was terrible. I was treated in an unfair way in a lot of aspects. I was yelled, hosed, psychologically stressed out etc. I used to be in a professional environment as a teacher in my country. Then I started farming there for a while. Now I am in a good place. The relationship with my supervisor and workmates is good.*

Evidence that employment conditions on dairy farms are becoming tougher is brought into stark light when looking at recent dairying practices (Morrison, 2013). Technological improvements mean increased efficiency due to introduction of automated drafting systems, automated washers and cup removers, and other technological advancements. These efficiencies have enabled an increase in the number of cows per dairy person working on dairy farms between 1991 and 2013. Herd size increase accompanied by more staff should improve rosters and work environments according to DairyNZ, but evidence for this is anecdotal. Work intensification is usually accompanied by decreases in employee well-being. Figure 5 gives an indication of the trajectory of the cow to dairy farmer/worker ratio and Figure 6 demonstrates the increasing number of herds since 2008 in conjunction with the increasing average number of cows per herd.

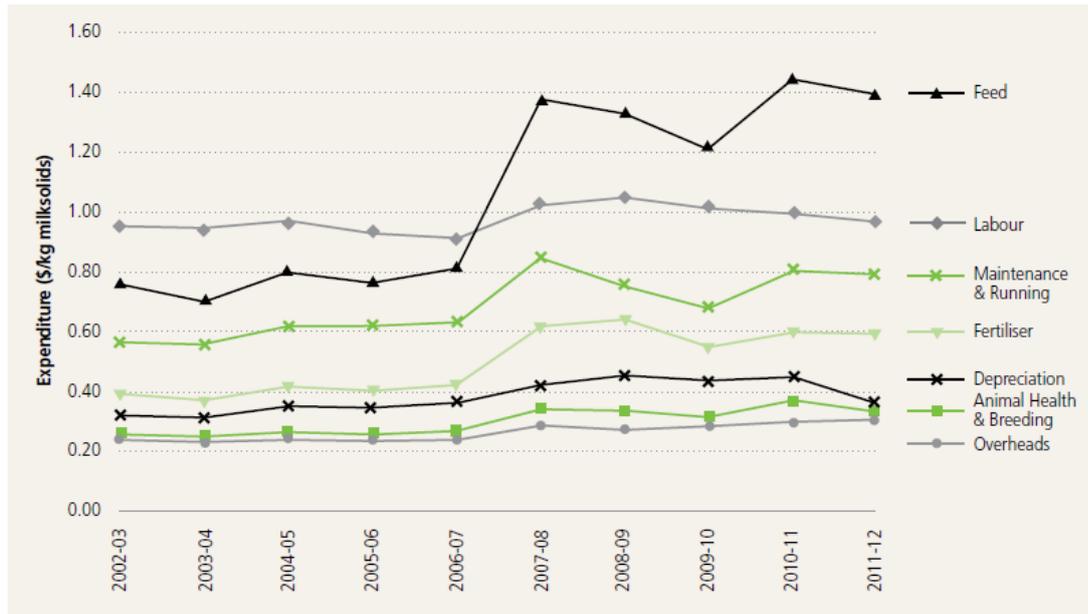
**Figure 5: Increase in Number of Cows per Dairy Farmer/Worker**



**Figure 6: Increase in Average Herd Size and Herd Numbers since 2008**



Another indication of a problem is that, over the past decade, labour expenditure per kilogram of milk solids (unit of output) has not increased in the dairy industry. Labour expenditure was at its highest in 2008 when the crisis in HRM was first identified by Wilson and Tipples (2008) and since then it has declined (DairyNZ, 2013) in relation to other ‘expenses’ such as fertiliser and feed (ibid). These figures are represented in Figure 7 below.

**Figure 7: Operating Expenses per Kilogram of Milk-solids (Unit of Output)**

The price per milk solid received over that same period has increased by 75 percent in nominal, and 38 percent in real terms (LIC, 2014). These figures indicate the HRM crisis identified in 2008 (Wilson & Tipples, 2008) has not yet been addressed. Industry data suggests dairy farm employees are getting progressively less of the benefits from the dairy industry, a point also noticed by DairyNZ (Morrison, 2013). It is important that the effects of the HRM crisis described by Wilson and Tipples in 2008 – isolation, burnout and low remuneration for hours worked – are not merely transferred to the migrant dairy population.

The second related area where this research suggests practice improvements could be made relates to the pride that dairy workers have in the industry as well as their strong motivations to advance themselves. Dairy worker migrants are clearly highly motivated to do well in NZ and very proud of their affiliation with the dairy industry. Sharing this pride would assist the industry to communicate and share its best practices, but this strategy needs to be authentic. Issues of work conditions and rewards need to be addressed at the same time. Migrants are highly motivated to achieve (Pfeffer & Veiga, 1999), but the industry and employers need to be careful not to take advantage of higher motivation. As has already been discussed, it is well-known that the hours of work in dairy farming are challenging (Wilson & Tipples, 2008; Rawlinson et al., 2012; Tipples, Trafford & Callister, 2010; Trafford & Tipples, 2012). Hours worked on the job have implications for both the employee's well-being and economic outcomes. It directly effects the remuneration from the job and a number of respondents commented on this.

A third area for improvement relates to key stages in the migration settlement process which is the INZ stages, which occur prior to arrival, but also at significant points during the employment relationship. Some very positive responses were received in relation to dealings with INZ.

*Immigration NZ is very supportive and understanding. Their decisions, so far, for my family with regards to processing our living here as well as to the granting of visitor to my eldest son were for me just and fair. They also process applications quickly.*

*I had a good experience during renewal of my visa. 3 days to 2 weeks, my visa was approved.*

However, 38 percent of the retained migrants in the survey did not experience a smooth process in their first encounter with INZ and 49 percent did not encounter a smooth process with their following encounters. Migrant employees and migrants that had become employers commented that INZ needs to make the immigration process more straightforward. Respondents commented on the insecurity they felt through the process.

*It was a horrible experience with lots of mistakes being made, (they even lost my passport) changed officers all the time...*

*In my particular case, as the years tick along, when you get more experience at work, more knowledge and more integrated with the society while receiving a very positive feedback not only from employers but also from the community, it seems to be harder to deal with immigration when I would have thought it would get more simple.*

*There is lack of clarity about the roles, positions and what an applicant needs to have. There is confusion among employers as well as employees. Frankly speaking there's real pressure dealing with immigration and justifying our position and status.*

In general, SMCW initially receive temporary work visas. Those with farm management experience can apply for residency in conjunction with their visa application. Assistant Herd Manager is a job title listed on the INZ Immediate Skills Shortage List (ISSL). A position listed on the ISSL is deemed to be experiencing severe skill shortages, enabling the work visa issuance process to be simplified. There are four dairy farming job titles currently listed on the ISSL. These are the positions of Assistant Herd Manager, Assistant Farm Manager, Dairy Herd Manager and Dairy Farm Manager. Most migrant dairy workers entering NZ for the first time using the ISSL enter under the title Assistant Herd Manger. This is because they need to adapt their skills to the NZ dairying system before they can progress to higher positions of responsibility. In 2012/13, only some 26 percent of migrants entering to work in the industry received visas as Dairy Farm Cattle Workers (INZ, 2014a).

Poor experiences with INZ have also been indicated in previous research; difficulties with immigration processing have been an ongoing theme (Wilson & Tipples, 2008; Rawlinson et al., 2012; Trafford & Tipples, 2012). There does seem to be some evidence that dairy workers may not be being equally treated: 10 percent of all visa applications for migrant dairy workers are declined (INZ, 2014a) whereas six percent of visa applications for the role of *Chef* were declined, 0.2 percent for the role of *Tour Operator*, and seven percent of applications for the role of *Café/Restaurant Manager* were declined. *Dairy Cattle Farmer* is the fourth largest occupation to be issued visas.

A fourth suggestion for improvement involves the implementation of communication strategies to inform potential migrant dairy farmers, while still in their home country, of the challenges and rewards of working in the NZ dairy industry. Ninety percent of the retained

migrants in the present study strongly agreed or agreed that their experience had met or exceeded their expectation. Although this figure appears high, host countries should always seek to continuously improve skilled migrants' experiences. Understanding migrant's expectations is an important determinant in enabling retention (Malinen & Johnston, 2011) and in ensuring that employers create conditions where both employer and employee expectations are met (Trafford & Tipples, 2012). Migrants need resource structures such as realistic information about the host nation prior to migrating (Bürgelt et al., 2008; Watts & Trlin, 2000). This is also related to issues with INZ. Several respondents commented on their lack of success in terms of their progression towards residency. Defining the pathway to residency through dairying, and making it more accessible to the migrant in the pre-migration phase, would be beneficial to both migrant workers and employers. In this way, realistic expectations can be set, which will improve the experiences of migrants and, therefore, the reputation of the NZ dairy industry.

A fifth and final suggestion for improvement includes developing industry-coordinated social integration assistance. Creating support networks and having access to support structures is crucial in the settlement process. Only 27 percent of retained migrants migrated to NZ with their families. Consequently, policy development needs to be cognisant of both migrants with families and those without. It is common practice for the primary migrant to come alone, establish themselves in the job and then bring their family to NZ. Being accompanied by children positively impacts on the socialisation process:

*My family are warmly welcomed in NZ, my kids are doing well in school and they love it very much here.*

*Kids have a great time. I lack time to get involved in community due to work time schedule. Being on rosters and milking times it's hard to commit to club activities.*

Respondents find NZ quieter than their home countries and commented on how they integrated and the challenges they had with integration.

*I became active with the Filipino community in the last 2 years where I have an opportunity to work with my community and the local government agency that helps migrant. We adjusted our activity time and make it farmer friendly so everyone can come after work.*

*Every day off I joined the Filipino society for social gatherings. People in New Zealand are very friendly that's why I've got a lot friends.*

*Getting connected to the local community is really important joining a Young Farmers Club and going to the ITO, helps to meet people on our industry plus making friends.*

*Social life is harder to build up as where we are it is very transient. But church life helps us to connect. Being in the same area and winning [dairy] prizes several times helped us to gain recognition.*

A number of respondents commented on the inability to become involved in community activities due to the lack of available time, or energy.

*Long working hours, fatigue and geographic isolation makes really difficult to build a social life.*

*Working in the dairy and living on the farm house is not good from improving social life point of view [ ...] being so tired on the farm after the job it is also very hard to think about social activities itself, especially if you live far from towns.*

*There are more career advancement/training on a dairy farm but the lack of time for enjoying life socially with family and friends sometimes demotivates of remaining in the dairy long term.*

A community with a limited sense of social cohesion will struggle to retain a workforce (McKenzie, 2011). As many migrants come from more densely populated source nations than NZ particular attention needs to be paid to the social structures available to SMDWs. A number of respondents referred to churches and community groups as a source of social integration and support. Although employers can help to an extent, the nature and extent of the problem indicates that a coordinated strategy from the dairy industry would assist integration and, therefore, retention.

## **Contributions and Conclusions**

The present study is the first to investigate retention of skilled migrant workers in the NZ dairy farming industry. There are too few studies on the HRM factors on farms and thus the present research provides an important study in this area. Two areas for future research are indicated. The first is to find out why migrants not retained leave. The results of the present research indicate areas of concern, but as we surveyed only retained migrants, our research is limited to migrants with more positive outcomes. Migrants that arrive, experience the dairy industry and then leave again are obviously less likely to have such positive experiences. A second area of research would be to investigate cultural differences that arise from country of origin vis-à-vis working experiences on farms.

Tarique and Schuler (2010) suggest that an industry should develop a unique migrant value proposition. They suggest implementing HRM practices and talent management policies that facilitate the industry becoming an “employer of global choice”. This is particularly important for the NZ dairy industry with the forthcoming abolishment of European milk production quotas in 2015 which will result in additional competition for globally mobile dairy labour. With the increasing global need for a migrant labour force, there is a need for increased employer accountability and monitoring of employment practices in dairying. Sub-standard employers are not only hurting migrants and their own reputations as dairy farmers but they are also a serious threat to the reputation and subsequently competitiveness of the industry. Boxall et al. (2003) suggests that regular measurement of employee attitudes towards employment practices and policies and towards an organisation can be highly beneficial to employers. NZ Dairy should routinely measure employee attitudes as part of their health and safety concerns as good employers and to minimise potential reputational damage due to poor word-of-mouth stories.

In an increasingly competitive global environment, an industry's success is dependent on its ability to attract and retain talent. This research has investigated the experiences of migrant dairy workers in the NZ dairy industry and the factors leading to their retention. It was determined that 'pride' in the industry is the primary retention factor. Other factors were career advancement opportunities, opportunity to enhance skills and knowledge, commitment to the industry, job satisfaction and good relationships within the industry. The importance and uniqueness of these factors indicates that the dairy industry could develop concerted and tailored policies and practices to affirm and develop these positive associations. The key 'take-away' from this research, however, is that communication messages will need to be authentic and simultaneously developed alongside policies to assist farmers to ensure they are doing their best to facilitate integration, fair pay, and safe working practices.

The majority of the respondents offered highly complementary data about their migration experience, especially in relation to individual employers' assistance and support with the settling process. However, we have argued complacency should not be an outcome of the present research. Through discussing migrant experiences that are less than optimal we aim to help the NZ dairy industry work on developing better quality relationships with SMDWs that are now so intrinsic and important to an industry of iconic importance to all New Zealanders. Best practice is currently largely practised in an ad-hoc way within the industry with the development of good-will and reputation of the industry left largely to individual dairy farm managers. However, issues facing the industry need to be addressed at the industry level and these include: attempting to mitigate negative immigration process experiences, having a communications strategy for the whole industry vis-à-vis migrant employment, overcoming isolation and facilitating integration and social life; and finally and most importantly addressing issues to do with safety and migrant well-being because of practices such as extraordinary long hours of work.

As well as directly contributing to practice in terms of assisting the development of HRM practice on dairy farms the present study also makes a theoretical contribution. This article has developed a theoretical framework which can be adapted to other contexts to investigate migrant experiences of farms, and in other countries. Considering recent events in NZ regarding collapsing dairy prices and the general vulnerability of the national economy to dairy practices, NZ needs to extend best practice in dairy management to include the people that work on the farms.

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