

‘Dairy exporting and employment – a possible role for OAD milking

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*Funded by dairy farmers through Dairy InSight and
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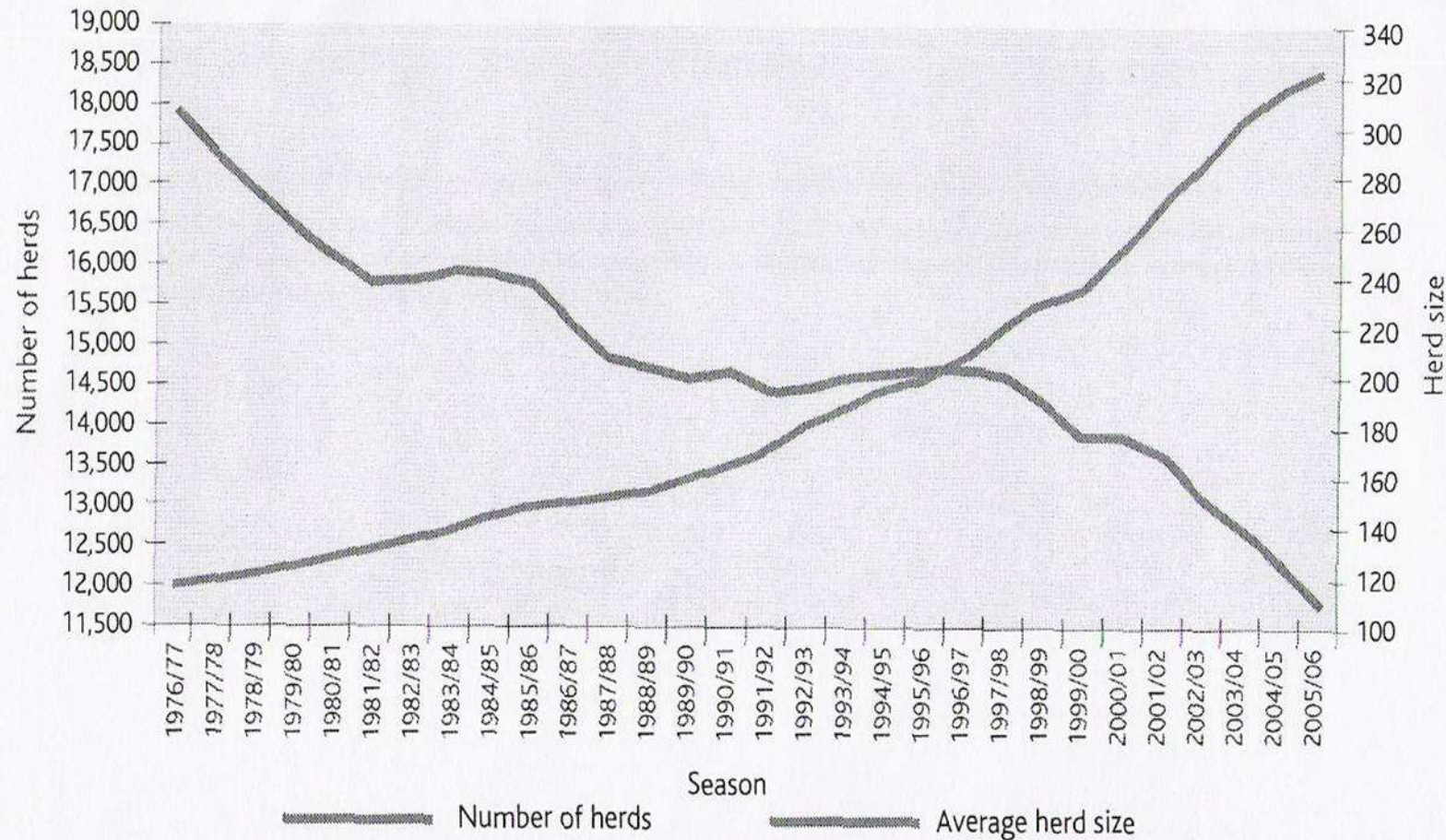
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Canterbury.**

Dairy farming in New Zealand

- **Dairy exports 31 March 2008 = \$ 10.48 billion
(MAF, 2008) = 20.7% (tme).**
- **Projected to be by 2012 = \$11.89 billion**
- **Dairy Industry Labour force = 33,513**
- **Major Occupation Dairy Farming = 24,795
(Census 2006)**
- **Produced by 3.9 million cows, in 11,630 herds**
- **Sustaining NZ milk production/ productivity
is vital for the NZ economy**

Less herds, more cows

Graph 2.1 Trend in the number of herds and average herd size for the last 30 seasons



NZ Dairy farming history

- **Butter and cheese became major exports in 1880s**
- **Primarily family businesses**
- **Vehemently opposed to organized labour**
- **1913 Wharf strike – Massey's Cossacks**
- **1936 Agricultural Workers Act – agreeing to statutory orders only for price guarantees**
- **Dairy farmer employers kill Farm Workers Assn. in 1980s by refusing any kind of membership rules**
- **Now no farm worker reps to help resolve farm labour crisis, only Young Farmers Assn.**

Strategic Framework for Dairy Farming's Future, 2005

- **NZ Vision: 'World's best in dairying'.**
- **Purpose: 'To enhance the sustainable competitive advantage of New Zealand dairy farming'.**
- **Social sustainability only by implication: 'Be an attractive career prospect for current and potential farmers'.**
- **Family succession rates in dairy farming perhaps as low as 6 percent? Sustainable?**
- **Currently there is a farm employment crisis and very low unemployment**

...but not meeting expectations (self diagnosis)!

- **Not attractive compared to other industries**
- **Hours are long**
- **Staff turnover high**
- **Accident rate third worst in terms of injuries per person employed; 25-50 percent of workplace deaths occur on farms**
- **Required to live on-farm => social isolation**
- **Lack of rural support networks**

(Dairy InSight, 2007)

Current occupational structure of dairy farming (Censuses of Population and Dwellings 1991- 2006)

- **Census is only useful labour time series**
- **Key trends, capped by Census 2006 data**
- **Main occupation dairy farmers/ workers:**

1991	28,134
1996	29,976
2001	26,328
2006	24,795

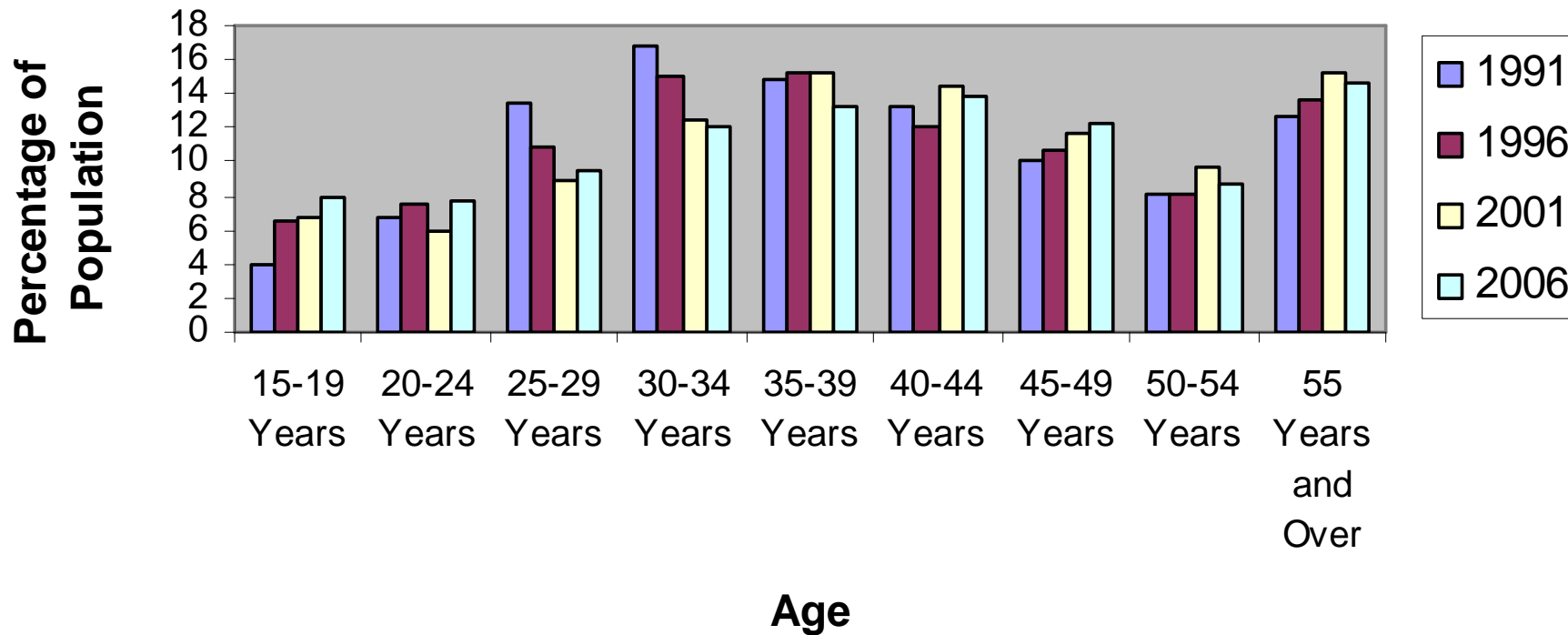
Dairy staff by Status in employment

Status in Employment by percentage Dairy farmer/dairy farm worker population



Dairy staff age distribution

Age Distribution Dairy farmers/dairy farm workers
(1991, 1996, 2001, 2006)



Hours of work

- **Nothing new! Doig reported 65% dairy farmers working an average of 70 hours p.w. in busy periods (1937-8), permanent employees 65 p.w.**
- **With 2006 increase in proportion of employees, there has been only a slight reduction in hours worked**
- **% working >70 hours p.w. increased 1991, 1996, 2001 to reach 32%, but then fell to 27% in 2006**
- **Industrial norm 40 hours p.w.**

Hours worked by Status in Employment 2006

Hours Worked by Status in Employment 2006

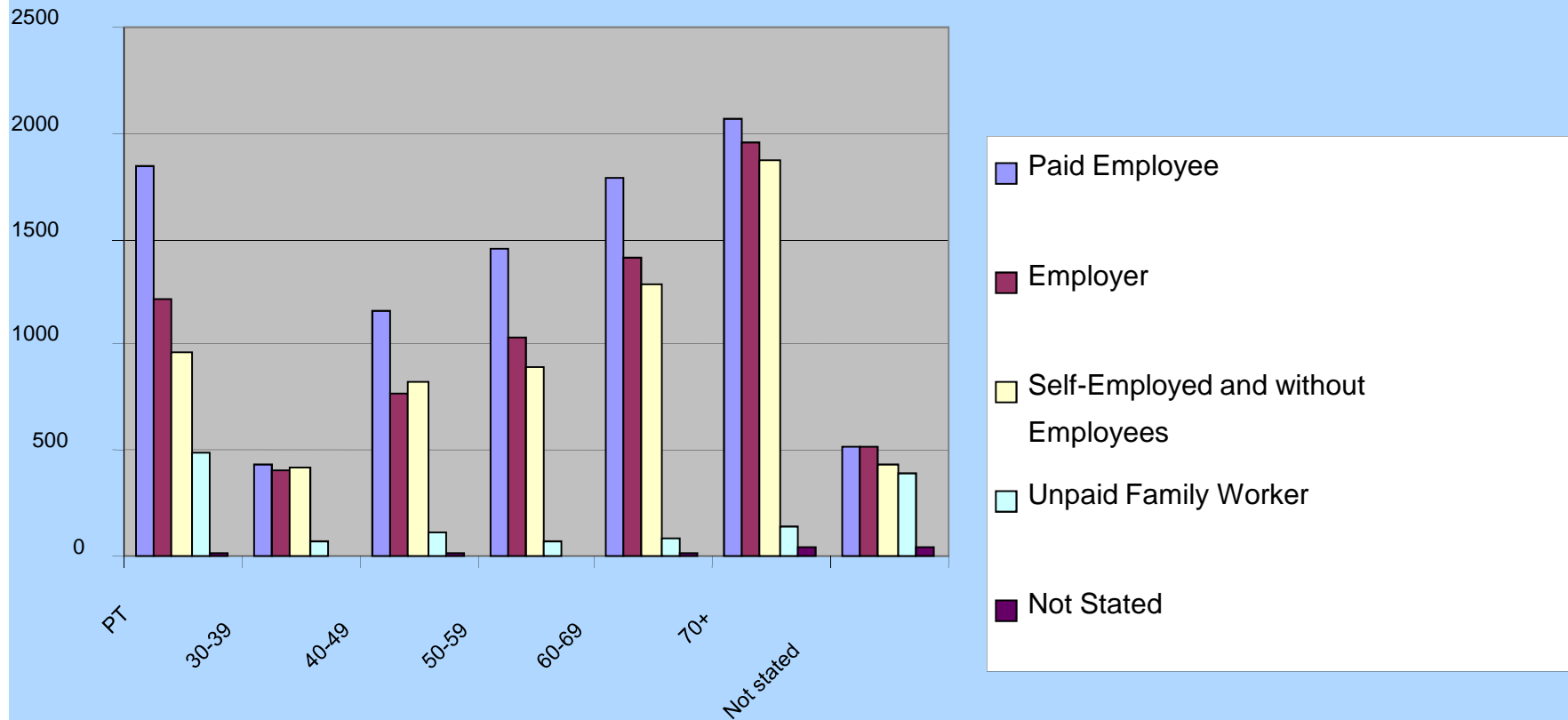


Figure 1 Hours Worked in Main Job

Overcoming staffing problems

- **Apparent since late 1990s**
- **Personal involvement since 1998**
- **‘Psychological contracts in dairy farming’ 1999**
- **‘People make the difference’ (MAF, 2001)**
- **‘Future dairy farm employment’ (IERA, Ballarat, 2004; *Dairy InSight*, 2004)**
- **‘Social impact of OAD milking’ (PERA, Yeppoon, 2005; LU, 2005)**

- **‘The Human Face of OAD Milking’ (*Dairy InSight*, LIC, LURF, 2007)**

The Research Questions

- **What changes happen when a dairy farmer converts from ‘Twice-a-Day’ (TAD) milking to ‘Once-a-Day’ milking?**
- **“Why did the farmers in the study change from Twice-a-Day to Once-a-Day milking?**
- **Were their expectations concerning the impact of the change on their personal lives, their families, their staff and the staff’s families met?**
- **How did staff management practices on-farm change after conversion?” (Verwoerd and Tipples, 2007, p.22)**

Research Approach

- **Descriptive level**
- **Focus on on individual dairy farmers and their families; their staff and their families, on farms that had converted from TAD milking to OAD milking**
- **Sought a deep understanding of unique individuals and their own personal experiences**
- **Each farm was a case study unit (Yin, 1994)**
- **Interviews were recorded and notes taken**

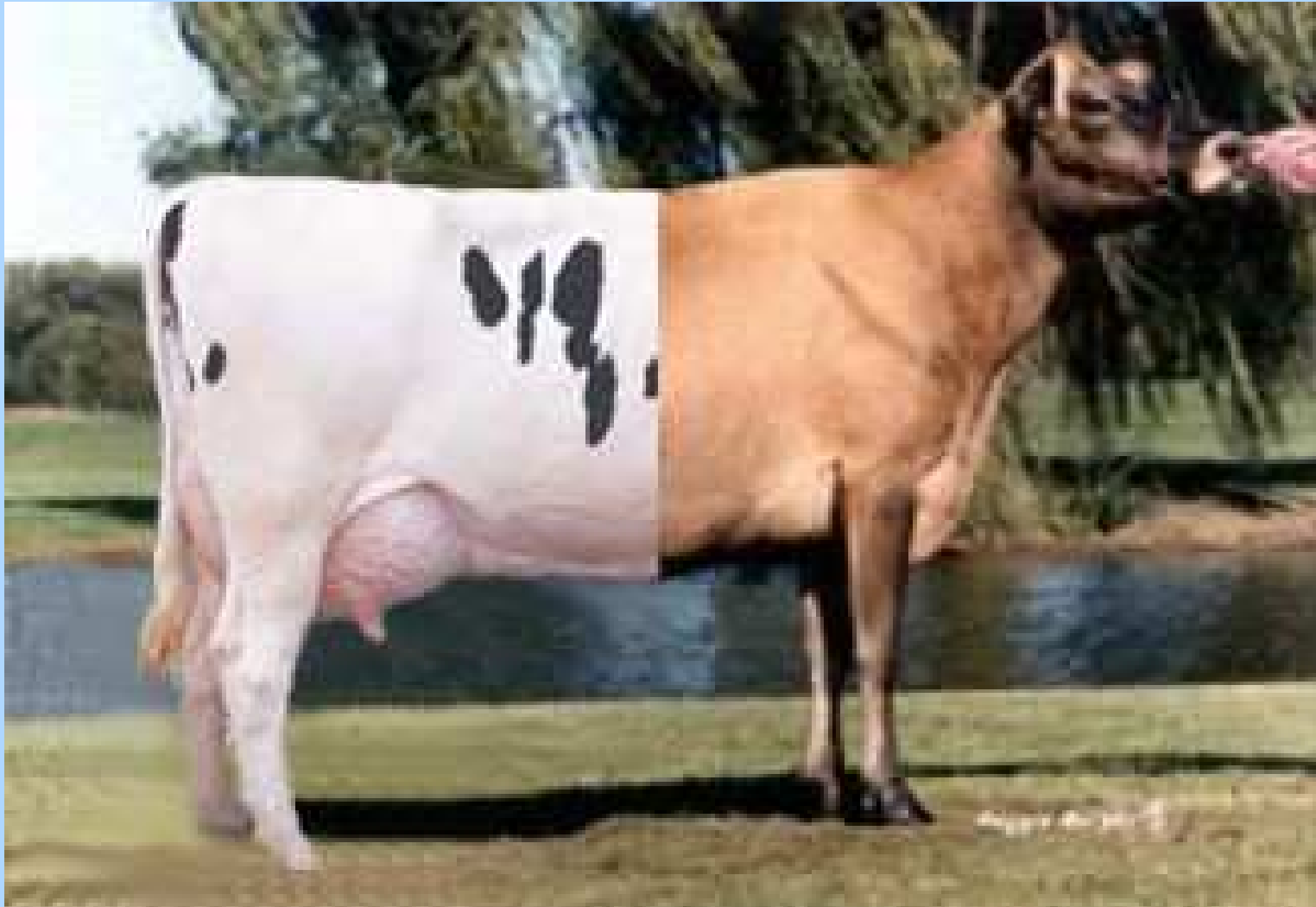
Farms studied

- **From *LIC* database of all NZ dairy farms**
- **Had indicated willingness to be involved in further research**
- **67 farms available (59 NI, 8 SI)**
- **Studied 6 in South Island, 6 in Northland and 8 in Waikato**
- **Some sound problems with recordings**

Research results

- **Farms small to average size
62-363 hectares, mean = 175
120-750 cows, mean 336**
- **Similar to results of national survey of OAD farms: 40-1650 cows, mean = 239) (Gatley, 2007)**
- **Oldest settled in 1919; most recent bought 2004**
- **All owner occupiers, various legal forms**
- **None were chosen or designed for OAD milking**
- **Cows mainly Jersey/Friesian crossbreds
Purebred herds: 3 Jersey, 1 Friesian and 1 Shorthorn**

'Crossbred' OAD cow



Why the change to OAD milking?

- **OAD farmers led by 3 key values: health of their animals, sustainability/balance, people welfare – underpinned by a need for profitability**
- **Not totally money driven, but very thoughtful with a large ‘...emotional and practical investment into farming practices that were fair and sustainable.’ (p.47, V & T)**

Change

- **A change of thinking ‘...there’s got to be a better way’ – animal health issues, empty rates, distances to dairy shed, staff concerns, just not running optimally**
- **The ‘burning platform’ – impending burnout was the accelerant here, not just hard work: “During the season, every day is harvest day and the routine can be unrelenting.”**
- **Balance between work, family life, play, and meeting personal needs, was recognised to have been enhanced by OAD milking by the majority**
- **Improvements most associated with TIME**

Time, stress and distress

More time gave:

- **“More sleep, feeling more rested and able to work**
- **Less rush, less stress**
- **More flexibility when and how to do things equals more logical organisation and method**
- **Bigger blocks of time available, therefore jobs get completed, more job satisfaction, better quality farming, a safer farm environment**
- **Better quality family life, better relationships**
- **Opportunity for sport, hobbies, community involvement.” (Verwoerd and Tipples, 2007, p.48).**

Time, stress and distress cont.

- **More time helped making better choices**
- **Routines were remarkably similar**
- **Discretionary time was now available**
- **With choice, drudgery became useful work again**
- **Elements of control, spontaneity, and executive thinking returned**
- **Stress levels went down when OAD milking was introduced**

Staffing issues

- **Stress on dairy farms both affects staff and can be caused by them.**
- **Only four farmers employed more than one staff member**
- **Dairy farmer with most staff in the study changed to OAD for reasons of staff welfare:**
“...they wanted to give staff a better working environment, better quality of life, and encourage them to be better parents.” (Verwoerd and Tipples, 2007, p. 51)
- **Most unexpected finding - most of the dairy farmers studied did not want to be employers at all.**
- **Changing to OAD milking made it possible to manage without staff.**

Reasons for not wanting to be an employer

- **“Dislike of having staff live with the family, with resultant lack of family time and privacy**
- **Specific instances of having been let down by staff at crucial times during the season**
- **Unacceptable legal requirements regarding employment of staff**
- **A sense of personal inability to be an employer and exercise authority**
- **Financial reasons, citing significant savings (both obvious and hidden savings) in not having to employ staff**
- **A sense of freedom and independence, of control regained, by working alone or just with the help of family.” (Verwoerd and Tipples, 2007, p. 52)**

Disadvantages of OAD milking for staff

- **Takes more time per milking – more boring?**
- **Poorer concentration?**
- **No employment restricts growth potential except for extended family**
- **Possible problems going back to TAD milking, but current staff shortages are unlikely to constrain them**
- **Should still be able to migrate every ‘Gypsy day’**

Conclusions: answering the research questions - Farmers

- The farmers studied changed “...because they were looking for a better way to farm”, “...better health for their animals, more sustainable use of the land, more production for less input, and above all, a better and more satisfying life for themselves and their families on the land.”

“Dairy farmers are tired. Not because of hard work, but because of too much pressure”

“OAD offers a way to farm better and longer and even, possibly, to make more money. It offers a way for farming families to survive as families; it adds up to better quality of living. (Verwoerd and Tipples, 2007, p. 54)

- From the farmers point of view OAD enhanced the social sustainability of dairy farming.

Conclusions: Employees

- **For farm employees, the response from the small number in the study was positive (reinforced 2005 data).**
- **Unexpected change was the reduction in the use of employees in favour of family.**
- **Managing staff was stressful and only family helpers entailed less formal staff management procedures**

The Future (a)

- **The future of OAD milking for enhancing dairy industry social sustainability is not clear; signs are positive**
- **Has a lot to offer family farming within the scale family can manage**
- **Appeal to corporate farming less clear**
- **Rakaia Island Dairies' experiences suggest great potential, with further selection and breeding for OAD characteristics**
- **Perhaps that is why *Livestock Improvement* helped fund the research!**

The Future (b): 'Time' issues

- **2008 study (Kyte, 2008) reports increasing use of wage labour to reduce fatigue and increase efficiency**
- **600 cow unit, cost \$50,000**
- **To reduce hours worked by all staff**
- **To free the sharemilker to train others**
- **To introduce new farming systems**
- **To free time for other things**
- **To put family first**
- **Promising outcomes for this daring business strategy**
- **“To introduce more labour into the system you must be able to capture increased productivity...”**

The Future (b): 'Time' issues cont.

- **Further exploration of 'time' issues is essential in dairy farming and other SMEs (de Bruin Judge, 2007):**
- **Dairy farms might be considered as 'greedy organizations' – '...demanding exclusive and undivided loyalty' (Coser, 1974)**
- **Reducing reliance on 'Time', a non-renewable resource. It should be budgeted on opportunity cost principles. An explanation for compliance problems in SMEs?**
- **Time worked and fatigue – relation to farm accidents/deaths/injuries. As OAD reduces work time/fatigue, it could it be key to reducing accidents in dairy farming?**

- **My vision for the future:**
- **‘A significant growth in OAD milking in New Zealand, producing A2 milk’**
- **THE END**