

**Project Discussion Paper
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A DIFFERENT APPROACH TO STAFFING IN THE DAIRY INDUSTRY

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INTRODUCTION

I believe the New Zealand dairy industry is being compromised by understaffing on farms, especially larger units of 600 cows or more. This has become a significantly greater problem in the last 10 years and specifically in the South Island with larger farm sizes and cow numbers rapidly increasing.

With this increase has come a greater demand for staff. Coupled with low unemployment the pressure on the supply of available staff is high. Recently the industry has come to the realization that sustainability is being challenged by the inability of dairying to attract and retain new people to the industry.

As the dairy industry grows to maintain this growth it must attract and retain people within the industry. To do this the dairy industry must compete with other industries for people available and must become an industry of choice (acirrt 2004)

Several reports have been written and some are still in progress on this subject, not only in the NZ Dairy Industry. Long hours worked are a common thread running through them all. The Australian dairy industry is facing similar problems, (acirrt) 2004. Solutions that have been put forward (Jago,Taylor 2007) include using modern technology, innovation and organizing work systems.

NewCo Dexcel, (Tim Mackle pers.com) has highlighted that a major problem in lifting on farm productivity is the reluctance of average farmers to uptake new and already available science and technology. I believe that a major reason for this is that your average farmer has not got the time available to look at and implement these systems.

This discussion paper looks at a course of action not readily taken up by the industry. That is, increasing staffing levels.

DEMOGRAPHICS

Looking at demographics and levels of unemployment at 3.6%, a consensus of opinion is being put forward that dairying is going to have to adapt through ideas such as new technology, working smarter and working with fewer staff. Projections are that by 2012, 50% of the working population will be over the age of 42, (Statistics New Zealand -National Labour force Projections 2005). As our work force ages and younger people become harder to source the industry will have to look to more mature people to fill the gap, (Sheehan SIDE 2006). To enable the industry to do this, conditions must be in line with the expectations of older employees and these conditions will need to be sustainable.

DAIRY INDUSTRY EMPLOYMENT CULTURE

Traditionally, the dairy industry has been one of long working hours to some degree offset by the ability to rapidly progress a career right through to farm ownership. The dairy industry was built up, until the last ten years, on smaller farms with people sharemilking numbers of cows 250-400 with farm ownership achievable from this level.

As an input into the system, the difference between two and three labour units made a huge difference on the bottom line and being able to keep the staffing level as low as possible was a major focus and driver of profitability. However, this focus has carried over in the industry as farm and herd sizes have grown. The main questions now are, is this good for the industry and are staff a cost or a resource.

Annualization of hours has been put forward as an answer to long hours. Long hours worked in the spring balanced out by shorter hours worked during the rest of the year. A 2600 hour year would average out at a 50 hour week. This argument does not solve the problem.

50+ hours per week could be seen by those outside the industry as an unreasonably high average. The research points to the highest turn over of dairy staff being in October which is straight after the period of long working hours.

There is also an argument within the industry that success is based on people putting in the hard yards and that by reducing the hours worked by employees and sharemilkers/managers the ability to succeed and progress through the dairy industry will be made more difficult.

In the recent report on once a day milking (Tipples & Ver 2007, The Human Face of Once-a-day milking) one of the benefits identified was that employers did not have to work with staff and this attitude is echoed throughout the industry. To change this mindset a whole new focus will be required in the industry.

HOURS

The subject of long hours worked has been around in the dairy industry for many years with very little hard data on the actual number of hours worked. Hours worked has consistently been identified as a problem in the dairy industry. (Tipples, Hoogeveen and Gould 2000), (Serle 2002). Of the limited data that is available, 2600-2700 appears to be the average hours worked per year, as compared to a 40-45 hour week at 2080-2300.

(Tipples et al 2004), survey indicated 64% of dairy farm employees work more than 50 hours per week throughout the year. This has to be set against only 17% working these hours for the general population (Department of Labour, June 2006). Long hours especially in the spring are the norm in the dairy industry. Up to 60+ hours per week in the spring is acceptable to most employers. Although remuneration may be seen as good, this alone is not the main driver, (Searle, G 2003).

At SIDE 2006, Peter Sheehan a Generation Y specialist, made the comment that if the dairy industry thought 12 and 2 was a good roster it needed to get real as 5 and 2 was the bench mark. This comment was made by an outside professional who was extremely surprised at the dairy workers accepting this standard. If 5 and 2 is the bench mark then a 40-45 hour week is also where we have to look as an industry. The drive to reduce hours to date has been mainly from professionals looking in at the industry not from the farmers themselves.

MEASURING PRODUCTIVITY

When looking at productivity in the industry the base has always been one of long working hours. The difficulty in measuring labour productivity in the dairy industry is well recognized. In his 2003 SIDE paper John Penno looked at this issue and came up with one measure of efficiency. i.e. 75 000 Kg MS = 1 Full Time Equivalent. It must also be noted that John recognized the difficulty in coming up with an accurate measure.

The difficulty of this measure is that if a farm is underperforming the pressure will be on to reduce staff numbers. In the larger herds of 600+ cows this would put more pressure on the remaining staff.

Other measures suggested have been, (Gaul and Jago 2006)

- Cows per person
- Kg/ms per person
- Hours worked / Kgms
- EFS/Total hours worked

The answer lies somewhere in between which is made harder to answer due to the difficulty in measuring the productivity of staff. It has been recognized that the measurement of labour productivity in the dairy industry is very poor, (Dairy Insight People capability report). This area is being addressed.

JOB VS CAREER

The dairy industry has always justified the long hours worked by employees by reasoning that the payback is the ability to work through the industry and achieve farm ownership or equity partnership.

The reality is that a vast majority of employees are not going to achieve this outcome. The industry has to realize that first we have to provide a platform for people to advance from. In any industry there are people who will rise from the ranks to management, or ownership of a business. However the vast majority simply want a good job with good pay and conditions. The dairy industry is of a size where both options have to be available.

Given that 50% of the working population will be over the age of 42 by the year 2012, the industry must give these people the hours and conditions to suit them otherwise it is in effect ruling out 50% of the available work force.

THE CASE FOR INCREASING STAFFING LEVELS

Technology is touted as the answer to staffing problems and in the future that may well be the case. ACR's are a prime example of a labour saving device being taken up by the industry. The risk is that they are used to reduce staff levels but not the hours worked by people individually. So the productivity of the staff remains the same or in some cases is reduced. ACR's only do one job, they fail to be productive once the last cow has left

the cowshed. As the technology becomes available to do more tasks the ability to gain the productivity becomes compromised if those operating it are stressed and over worked, the first priority with new technology should be to reduce hours worked.

To achieve working smarter and using new technology to reduce hours, we must look at increasing numbers of staff employed.

Take an average 200 Ha Southland farm producing 230 000kgMS or 1150kgMS/Ha. The average farm would milk 600 cows through a 50 bail rotary. This could be and is often achieved with a staff of 3 FTE + relievers. However the two staff as well as the employer must continually work 60+ hours each week. Working on 75 000 Kg MS per FTE, would suggest that these three people were about right.

However to increase efficiency would require reducing 3 FTEs from the 60 hours per week they currently work to 50 hours per week, an extra 30 hours to be made up. Employing a relief labour unit to bring the hours down would cover the 30 hours only, with no additional work being done. Efficiency to cover the cost of an extra 30 hours would have to come from a lift in productivity due to lack of fatigue. With the hourly rates of relief workers being higher than FTEs the increase per head would be higher and would free up no more time to manage the farm.

Hence, increasing staffing by a full FTE @ \$40 000 (Dairy farm assistant/Herd Manager)

If 30 hours a week are required to reduce hours from 60 to 50 this leaves 20 hours a week to work on the business plus less fatigue which lifts the productivity of the 200 hours.

To cover the cost of the full time equivalent would require an increase in production of 8900 Kg MS (based on a \$4.50/kgMS payout). A 50/50 sharemilker would require a 17800 Kg MS increase as they carry the total cost of labour. (If increased labour equates to increased profitability the case could be argued for higher staffing sharemilkers receiving a higher % than low staffing high hours Sharemilkers)

SUSTAINABILITY

With large herds, Sharemilking/Management of 600 cows +, the time taken to get to farm ownership or into an equity partnership of a reasonable size has become longer due to the rise in land prices. Even if the time to achieving farm ownership remains the same, the physical demands of milking 600+ cows for that time is far greater. Sharemilkers and Managers in these size jobs are far more likely to burn out unless they are able to step back. Increasing their staffing levels allows the sharemilker or manager to get themselves out of the day to day routine and concentrate on the management and long term strategy of their businesses.

The majority of sharemilkers/Managers milk 6-7 hours then have to manage their business. They can earn \$20 per hour putting cups on vs \$100 per hour managing or \$1000 per hour on strategies that will generate profit within their business and grow their business.

OUR OWN CASE STUDY

On our own 600 cow sharemilking job we have put in the extra labour and relief staff @ a cost of \$50 000 and we used the extra time/hours available on

1. Reducing hours worked by all staff.
2. Freeing myself up to spend quality time training our staff.
3. Introducing new systems (Pasture plus)
4. Having time to do other things and put our family first.

On taking our 50/50 job we were repeatedly asked to drop our wages budget before the Bank would take us on, as our debt level was so high. We refused to do this so the bank took a punt.

Results

It is our belief that these results are attributed to increasing the level of staffing, as reducing the hours each staff member works reduces the fatigue and increases efficiency.

1. More budget cows sold

Our budget required us to sell 60 cows out of the herd each year as budgets, which is something we have achieved for the last 5 years. More staff to look after the cows has led to more budget cows and less culls.

60 Budget cows @ \$850 = \$51 000
 Vs 20 Budget cows @ \$850 = \$17 000
 + 40 Cull cows @ \$350 = \$14 000
 \$31 000

Therefore there is a \$20 000 surplus in the first equation, or \$100 000 over 5 years.

2. Reduction in Lameness Issues

Training on lame cow treatment and prevention has led us to only lose 2 cows per year now rather than the 8 in our first season to lameness. Cows are treated immediately as the staff are fresh and not fatigued. Hence the drop out from wintered numbers to in milk numbers is less.

6 cows @ \$1250 (2006 prices) = \$7500
 420Kg MS x \$4.50 x 6 cows 75% production = \$8505
 Increase in profit \$16 005

3. Reduction in mastitis

When we purchased the herd it had an average cell count of 250 000. It is now an average of 140 000. This is due to increased staffing and the available time to train staff how to find mastitis and treat it.

4. Lower death rate

Preventable deaths from metabolics/Bloat/Calving =<1%
 By reducing this 1% is significant = 6 cows @ \$1250 = \$7500
 Production 6 x 420 MS x \$4.50KGMS x 75% of production as most metabolics occur during spring = \$ 8505. Adding a total of \$16 005.
 We always have someone available to treat calving problems/downer cows without disrupting the spring routine.

5. Increased Pasture Utilisation

On implementing the pasture plus plate metering system into our business which we could achieve with the extra hours we raised production from 254 000 KgMS to 274 000 KgMS on lower inputs. A lift of 20 000 KgMS.

20 000 KgMS @ \$4.50 = \$90 000
 254 000 KgMS 1270 Ha 180 units nitrogen
 274 000 KgMS 1370 Ha 140 units
 40 units of urea = 17 tonne of N @ \$500 per tonne = \$8500 saving

Summary of Efficiency Lift

Measures	\$Owner/Operator	\$ Sharemilker
Solids 20 000	90 000	45 000
Budget Cows	20 000	20 000
Reduced Nitrogen	8 500	4 250
Lower losses of animals feet & Production	16 005	11 752
Lower losses of animals metabolics	<u>16 005</u>	<u>11 752</u>
	150 510	92 754

Our wages were \$130 000

ONE, FTE @ \$50000 TWO, FTEs@ \$35000 + \$10000 relief +employer
Lift in outputs \$91 000 – Increase labour cost \$50 000 = \$41 000 which is
80% return on our investment of wages.

ASB Bank figures put average sharemilker wages at \$80 000 for 600 cows during the 2005/06 season, so this lifts average returns by 50%.

RETENTION

Our staff turn over is 2.5 seasons with our longest serving employee on their 4TH Season as well as having staff return to take up positions higher up the career ladder. When a member of staff does move on our system is able to take the additional pressure while we look for a suitable replacement. (Tipples, Verwoerd 2007), identified the problem, of staff not wanting to move back from the conditions of Once a day to the conditions of twice a day. We hear the same sentiments from our staff, wary about moving on.

TRAINING

More staff has made it easier for us to take on junior employees, give them training and not put too much pressure on them. With a lower staff turn over training lifts to another level. Better systems are able to be implemented, fewer mistakes are made and time is freed up.

A high staff turnover means a lot of time and effort has to be put into training new employees on your basic farm systems .As new staff come onto our farm the stability of our existing staff means they are able to do a lot of the initial training.

If staff are over worked and tired any training that does take place will have limited uptake and have to be repeated in some cases.

WAGES

Although our over all wages package is higher than the norm we have been able to keep it pretty stable with staff keen to stay under our conditions rather than move on for the money.

HAS IT WORKED?

Our hours worked are sitting at around 2400 per year so we still have a way to go, however we are still some way from using all the systems/technology available so I believe there are still considerable productivity gains to be made. At a \$3.85 forecast payout we looked at cutting costs. I proposed we looked at staff; it was the bank manager who said “No!”

HOW MANY STAFF?

Budgeting is standard practice in our businesses with cash. It also needs to be done with hours worked by employees, the amount of hours required on tasks in the business and working on the business

A number of factors have to be looked at when working out the number of staff required. Shed size to herd numbers and set up of the farm can have an enormous impact on staff numbers required. The mix of staff experience must be looked at to produce a balanced team.

The benefits of the 45-50 hour week are fresh staff performing consistently and an ability to introduce and use new systems/ technology, not just as a labour saving device but also as a labor enhancing productivity lift tool.

RISK

The figures I have provided are on a \$4.50 payout. I have deliberately done this as reducing hours has to be achievable at a lower payout and cow prices.

An efficiency lift at a \$6 payout and cow prices at \$1800 would result in,

	\$Owner/Operator	\$ Sharemilker
Production 20 000 KgMS at \$6	120 000	60 000
6 Budget cows @ \$1200 + production	34 000	34 000
Reduced N @ \$600/Tonne	10 200	5 100
Lower losses due to cow feet @ \$1800	22 140	16 470
Lower losses due to metabolics + prod	<u>22 140</u>	<u>16 470</u>
	208 480	126 940

To introduce more labour into the system you must be able to capture increased productivity so, yourself or someone on the team must be skilled in the area of staff management. Time must be put into training and the implementation of new and existing systems/science/technology.

Up skilling yourself/manager is essential and some hours could also be used on professionals in your business to help introduce new systems/skills.

The results will not be instant and a lead time is required as new systems are put in place and training starts to pay off. This has a cost attached to it which the business has to be able to absorb so the ideal time to introduce more hours/staff into your business is during a period of higher returns. At the same time it is crucial that the process is monitored so that the benefits are captured and can be maintained.

CONCLUSION

Increasing the number of staff on dairy farms, compared to current industry standards, is an approach that runs contrary to current thinking as well as contrary to demographic and economic trends.

However if the industry did this the reduced hours and improved conditions means the pool of people available to the industry would become larger as it became more competitive with other industries. It would lead to more people making the Dairy industry their career of choice. Employers who improved the hours and conditions they provided for their staff would put pressure upon those who didn't, as they are competing for the same staff.

The reduction in hours must be directly linked with increased and improved training. One cannot be properly achieved without the other.

The Dairy Industry has along way to go to reduce hours to the national average but until it can do this it will continue to struggle to attract and retain staff. If a reduction in hours to nationally acceptable levels cannot be achieved without compromising the farm business, the sustainability of the business should be called into question.

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