The vision
The dairy farming industry has a vision of being the ‘World’s best in dairying’ and its purpose is: “To enhance the sustainable competitive advantage of New Zealand dairy farming”. Sustainability is expressed in an imperative to: “Increase the efficient use of resources, reduce reliance on non-renewable resources, and minimize negative impacts on the environment”. Social sustainability is not mentioned expressly but it appears by implication in another imperative: “Be an attractive career prospect for current and potential farmers” (Strategic Framework for Dairy Farming’s Future, 2005). However, whether the industry will continue to be socially sustainable is an open question. As an area of traditional family business it is disturbing to find that while only 30 percent of family businesses in general survive to a second generation, some studies report succession rates as low as six percent for dairy farming (Lockhart and Reid, 2005) – perhaps an indication of an increasingly unacceptable lifestyle.

The dairy farm labour crisis
Staff shortages have dominated dairy farming news since the late 1990s, with particularly acute problems in relatively ‘new’ dairy farming areas such as the irrigated parts of Canterbury, Otago and Southland. Dairy farming has been proactive in promoting itself as both a career and a lifestyle (e.g. Windows to Dairying, Let’s talk Dairying), but it has failed to recognize that it has some major problems. In the past the sector has been renowned for bad employment relations and low pay. These difficulties have not been recognized by the industry, which has tended to veer away from any employees’ perspective on the employment issues of the sector. Tipples, Hoogeveen and Gould (2000) began to explore this issue in a limited way from 1997 in studies of psychological contracts of dairy farming employers and employees. They concluded that the two most important areas of difficulty were in the ‘Time environment’ and the ‘General work environment’. Employers should be concerned particularly about the hours worked and the time-off given. These were the greatest areas of concern, yet the Census the following year showed that the hours of work were actually increasing (Tipples, Wilson, Edkins and Sun, 2004)!

Ironically the system change which could alleviate these problems may have already been used by some farmers for several years: ‘Once-a-Day’ milking (OAD). OAD milking has been known as an expedient for periods of feed shortage, but innovative farmers had used OAD for their whole herd at least since 1986/87. Virtually all published OAD research has dealt with financial effects, with only passing reference to supposed personal benefits, and very little has been done or said about the possible effects of OAD milking on the lives of dairy farmers and their staff, and the families concerned. One student study considered changes to work organization, farm management, family and lifestyle (Robert, 2003),
before AgResearch were contracted by Dexcel to investigate the barriers to dairy farmers taking up OAD milking (Bewsell, 2005).

In 2002 there were fewer than ten farmers milking OAD all season on a long term basis. In 2003 there were less than 30, but by 2004 that had increased to 130 farmers and by 2005 to 351 farmers (Bayly, 2002; Bewsell, 2005). With less than 5 percent of farms milking OAD at present, the impact of the change to OAD is not yet very clear.

Finding good staff is an ongoing problem for dairy farmers. Any initiative that may create an attractive incentive to accept employment, or impact on employment relations, is therefore of interest.

**The Research**

We undertook an exploratory investigation into the social implications of OAD milking. Formal and informal interviews on OAD milking were conducted with 6 farmers who employed staff. Of these, two were milking once a day; two were milking twice a day, in the traditional manner, but were considering change and still weighing up the benefits and drawbacks; and two were milking twice a day and had no intention of changing. Also, 8 workers on dairy farms were interviewed, and several wives and partners of men involved in dairy farming. Interviews took place in September and October 2005.

**Managing change**

All human beings are at least partially resistant to change. Change management theory suggests that two sets of factors need to be present for change to take place: a change of attitude and/or thinking, and a *burning platform* (Kotter, 1995).

*A change of attitude or thinking*

New ideas represent risk. The more complex the system to be affected, the higher the risk the farmer takes. It is therefore appropriate for a farmer to be careful and conservative when considering new ideas such as OAD. However, as a new idea gets thought about, talked about, and worked through in the minds of decision-makers, the advantages and disadvantages of a new scheme also become clear.

*The burning platform*

For many farmers, the burning platform (i.e. that urgent factor that forces one to jump) has been, and is, the growing shortage of suitable labour. In order to be seen as an attractive employment option, many farmers are considering OAD milking simply to attract staff. It is clear that simply escalating wages no longer suffices to attract good staff. It is felt that the prospect of a more balanced lifestyle might entice good, keen workers into dairy farming.

**Some factors impinging on OAD milking from the point of view of the employer**

*Number and level of staff needed*

One of the claims made for OAD milking is based on the perception that lower levels of staffing are required. The logic behind this statement is not clear. If the length of the
working day is reduced, but the total length of time spent on milking stays about the same (taking into account larger numbers of cows to compensate for the loss of production), and the rest of the farm work still has to be dealt with, how then can fewer staff be needed?

This question was raised during interviews with employers.

- Farmers who have taken a decision not to go for OAD milking felt that no worthwhile saving of staff time could be expected. They pointed out that a working day on TAD is not really so long, and that it simply represents a shift in working patterns.

- Several employers pointed out that OAD milking requires a higher overall level of staff competence. The rationale for this is that they have only half as much time to observe the stock while milking. Also, they have to manage the moving of feed brakes more carefully as they have only one opportunity per day.

- Farmers who had not yet taken a decision made it clear that the employment question was just one of very many variables to be considered.

- Farmers who are already milking OAD came up with some really interesting information. One very large employer admitted that pressure from staff was instrumental in the decision to change over from TAD to OAD milking. The working day was made shorter, wages and staffing levels were left unchanged. During the first year of OAD Milking profit was down by 7%, mainly because the 20% increase in cow numbers needed to sustain production came from maiden cows, which are less productive. However, staff turnover went down to zero. Absenteeism, sick leave and accidents dropped dramatically. On this farm, which is known to be an attractive place to work, morale and productivity had always been high, but the employer pointed out that simply because the staff were wide awake after having had a good night’s sleep made a dramatic and money-saving impact. Another farmer mentioned that he had noticed many hidden savings on OAD milking, more than he had expected. Morale was high and this translated into a "work smart" attitude. Staff worked faster, took more responsibility and combined jobs in effective ways. Training was also mentioned. Almost every employer has good intentions around training staff, but in practice there seldom is time for planned, structured training of staff. Now, however, with OAD milking and a shorter working day, this farmer found he had time to actually get the staff together for an hour or two each week for training.

_Tapping into new sources of labour_

When transferring from TAD to OAD milking, simply using the same staff in the same way may not generate any significant benefits. However, OAD milking does present an opportunity for restructuring and using new strategies. One such possibility was reported, where the employer actually separated his staff into two groups. The one group (by preference all women) were used as specialist milkers, and came on-farm only to do milking and were paid contract wages. The view was that women were very good milkers: they took their time, were gentle with the cows, gave slow milkers time to empty themselves, and had an instinct for cleaning up as they went. Some even sang as they worked and the cows seemed to like it. The other group, which was gender non-specific,
performed the other farm jobs. It was suggested that many farm workers did not really enjoy milking. They really preferred the variety and stimulus of general farming jobs. This strategy worked for this farm because it tapped into a pool of local women who were willing to work, while their children were at school. In general terms, OAD milking may produce access to a new source of labour not previously available or utilized.

Extending the working life of farmers
Some respondents mentioned that local farmers, who would normally have been starting to think about retirement, had switched to OAD milking and reduced their herds, as an intermediate stage between full employment and full retirement. This left them with a home, a familiar and structured lifestyle, status and goals, but also gave them a good few hours of free time each day and made the working load much lighter (see Bewsell, 2005). In one case an older farmer was enabled by the introduction of OAD to both play golf and milk as required, which had not been possible previously. If such a pattern were to become a general trend, the New Zealand dairy industry might greatly benefit from the experience and production afforded by such farmers, who would otherwise have been lost to the industry.

Some factors impinging on OAD milking from the point of view of the employee or farm worker

Entering the dairying labour market
During the last few years the industry has made strenuous efforts to publicise the advantages of dairy farming as a career. This had to be done to offset the bad image that a career in dairy farming had as one which was a dirty, sleep-depriving, thankless and dead-end (Kuriger, 2001).

If OAD milking is offered, the work environment changes dramatically. Shorter or more acceptable working hours, enhancement of family life, and the prospect of a more balanced lifestyle, may offset a possible drop in income. Every farm worker interviewed showed a strong interest in this aspect of OAD milking. One such farm worker expressed this in two coloured drawings that she made in response to the interviewer’s request. That for TAD had a black moon showing getting up in the dark, oppressive employment relations and alienation from friends and family. That for OAD has a bright sun, more cheerful faces, restored relations and support from friends and family, and the chance to go out and ‘party’, but also the associated risk of oversleeping! This worker clearly believed that OAD could help her ‘…to get a life’, as the expression is! However, the notion of OAD milking does not seem to have entered the consciousness of school-leavers yet, and efforts to probe their possible preferences in this regard met with blank looks.

Choosing between OAD and TAD milking
Interviews with farm workers showed that OAD milking is a very topical subject and is being hotly debated. Some cynicism was voiced about the prospect of OAD milking ever taking off, but every worker consulted said that they would love to have a more balanced lifestyle. When asked whether they would take a drop in income in return for shorter working hours there was some hesitation, but several workers pointed out that many of
their friends had left the dairy industry and gone elsewhere to work for lower wages in return for “normal” working hours.

The possibility of a more balanced lifestyle
At present, the hours worked on dairy farms vary from employer to employer and sometimes changes from summer to winter. During calving very long hours and a general lack of sleep are norms. It is not unusual for farm workers to start their day at 4 a.m. and to work, with a break after lunch, till 7 p.m. This means that workers only see their families in daylight hours during weekends off, usually every second week or so. Lack of sleep; loss of concentration; exposure to accidents; relationship and family problems; and a serious lack of balance in personal lives are the inevitable result. Many young workers use drugs, and one of the reasons they give for this is to help them cope with the demands of the job. There is some evidence that depression is a serious problem in the industry. Bills (2003) noted a range of health concerns specific to the dairy industry such as hours of work, issues of hygiene, stress, working in cold conditions, farm safety, sexual health, and others. These were exhibited in such symptoms as impaired memory, slowed reaction time, impaired decision making, susceptibility to illness, low motivation, increased sensitivity to pain, increased accident rates and depression.

However, workers and their wives/partners report a huge improvement in their lives with a change to OAD. They talk about taking part in sport (particularly after daylight saving starts), reading the occasional newspaper, and having time to socialize. Family relationships are improved, children respond well to having two available parents, and one worker mentioned the appreciation of his aging parents who see him much more often, perhaps a significant point in our rapidly aging society.

Future research
OAD milking is hardly likely to resolve all the employment, recruitment and retention problems facing a modern dairy farmer. However, the very real and significant benefits of OAD milking, reported by farmers who have actually taken the plunge and their employees, indicate a potential benefit to the industry that merits investment in further research to confirm these initial findings.

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