Large Herd Management Labour, Technology, and Freestall Barns: are they environmentally and economically sustainable.

A report for

By Paul Zuidema

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Foreword

The question that intrigued me to do this study was, how do other countries employ and maintain employees, and what impact does technology have on it. Also, in a limited form, freestall barns and whether they are environmentally and economically sustainable.

This led the study focussing on:-

- How do we attract the right people to move our dairy business forward
- Do we need to identify clearer career pathways within our dairy industry
- Freestall barns, are they an option for Australian farmers
- Technology and labour play a very important role together

Attributes of good labour

Of all the farmers I have met across the globe, they said "communication and attitude" were very important. But as I found out with talking to owners and employees, there are quite a few traits and qualities, which I believe are equally important.

- Education and certain skills
- Honesty
- Motivation
- Communication skills
- Attitude
- Patience
- Confidence
- Emotional and financial stability

Education

Some farmers were viewing good education and skills as a means to progress your career further up the management line.

Honesty

Successful employees are honest with themselves and others. They have respect for other staff members and ultimately, their employer, and know their limitations.

Motivation

This is where a clearly defined career pathway comes in. I saw this strongly in NZ. Opportunity creates strong motivation to gain job satisfaction.

Communication skills

The big one! Lack of communication has destroyed many good labour teams. This of course is more important for people in management positions.

Attitude

Staff with attitude, are usually positive people and want the job done efficiently, and have a can do attitude.

Patience

Patience is a must, in particular when working with animals or people.

Confidence

Don't be afraid to make mistakes, (we are only human), the difference between confidence and humiliation is "how you deal with it".

Emotional and Financial stability

This one, you, as an employer, cannot control, but is essential. For instance:

- If you only employ young people, in most cases, they are only doing it for the money.
- Married people with children are less likely to leave, particularly when the added benefits are good, such as: housing/food/milk and steady income.

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A special word must go to my wife, Kerry, and our 3 children, Tristan, Ebony and Tessa, for their encouragement, patience and support for without it I could not have completed my study.

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UNITED KINGDOM

Charles Harrison	Farmer
Owen Yeatman	N.Sch
David Harper	N.Sch
David Byrd	N.Sch
Mr Barnes	Farmer
Alun Owen	N.Sch
Harry Wilson	Contractor
Eddie Cowpe	Farmer/Ice-cream producer
Bryn Evans	Genetics marketer L.I.C
David Finch	Farmer
Peter Barrett	Manager
John Alvis	N.Sch
Bert Johnston	Farmer
Andrew Addison	N.Sch
Rebecca Morley	N.Sch

Dairy Force UK – Michael Day

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The organisers of the Nuffield Dairy Tour, during which I met some fantastic people.

IRELAND

Pat Quirk	N.Sch
Seamus Quigley	N.Sch

NETHERLANDS

Adrie Zwanenberg	Rabobank
Bram Prins	Farmer – Member of Dutch Dairy Board
Eite v/d Veen	Sales Representative
g. Aanstout	Manager senior milking machines – Holland

NEW ZEALAND

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Brian Cook	Farmer
Joe Horner	Dairy Extension officer
John Morris	Maratho County Extension
Alton D Block	Agri Management Group
Diego Lopez	H.R. manager – specialising in Hispanic Labour
Jil Stahler	President – The Global Cow

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Executive Summary

Every industry needs an influx of young people who have the motivation, enthusiasm and necessary skills to drive the farm business forward.

The lack of capable people going into farming is a worry to me, which led me to apply for a Nuffield Scholarship, with a focus on labour management in a large herd management, and also to a lesser extent, free stall barns and technology. With this in mind, I draw my conclusions and recommendations, which I hope, are applicable in Australia.

The one country that stood out for me was New Zealand. There is a very structured way of getting into farming:

- Apprentice
- Farm Manager
- Share Milker
- 50/50 Share Contract Milker
- Equity Partnerships
- Ownership

In the Northern Hemisphere, this structure is not available to young people, mainly farming businesses handed down to the next generation through family connections. Education, on the other hand, is very good, but ironically, the necessary skills are very good but the opportunities. Which begs the question, "what can we do in Australia to reverse this trend"?

FREE STALL BARNS

I do not see a future in free stall barns in Gippsland due to variable feed costs which come into play when moving towards that sort of system. It will probably work in the drier areas where you are closer to the grain and hay growing areas, and 'rainfall' is less of an issue with regards to effluent management.

I strongly believe that a free stall barn system depends very much in which area you farm. High rainfall will remain very much pasture/grazing systems with grain feeding in the dairy. In the drier areas of Australia, there might be a future for Free Stall Barns.

I base this on the following observations:

* High capital outlay in machinery, buildings & effluent equipment
* More control over milk production due to more control of feeding input
* Easier to manage labour
* Too many variables creep in like, feed costs, cow losses
* More control over nutrients leaving the farm

TECHNOLOGY

Technology is an interesting subject as it depends on the farmer to make it work because he or she is the only one who can press the enter button to activate the system. There are 2 components to technology – one for labour management and one to increase production. In Australia we have most to gain from labour saving devices – such as:

- Automatic (robotic) calf feeders
- Auto drafting units
- On farm mastitis testing
- Robotic milking systems

Introduction

I was raised on a dairy farm in Holland, when it became clear to my family that there was no option for us to continue farming there, we immigrated to Australia in 1987, purchased a farm of 480 acres and 240 cows, so maybe my view on intensive and freestall barns is a bit clouded, because of my background. We milked 120 cows, had 70 young stock and 25 beef bulls on 130 acres. In this current year, we are milking 750 cows, have 400 young stock, and are fully self sufficient in all our forage needs, except for the grain. All this is achieved off 1240 acres, with 3 labour units and a part time milker.

I am in partnership with my 2 younger brothers (and their wives), am married to Kerry, and have 3 children, (1 of whom is a son), so I am now looking at incorporating the next generation into the farm.

Background

As the herd size has grown dramatically in Australia, so has the demand for good quality labour. In real terms, the rate at which the herd size has grown, labour employment techniques has not kept up, we are competing with a lot of other industries to attract people and the public's expectations are also higher now. There is a lot we can do about it. We have all heard of production bonuses and quality incentives, but in farming there are too many variables to have a wage based on that, and particularly in a large team, it can create problems in the team dynamics. In the 20th century, the focus is on automation and simpler systems to get the work done. Now the danger is when the jobs are gone, the people are gone and will not come back in a hurry, so it will, and has probably already in some cases, changed the social fabric of communities.

United Kingdom

The UK milk production system is divided into three groups:

1) High cost production
2) Farms with flexibility, can go either way (low cost or high cost)
3) Pasture based. NZ style.

This is a reaction to the lower milk price they are getting influenced by Brussels of course, it has a direct flow-on effect on the labour.

Cost has got to come down, and the first area they look at is labour cost, particularly when you see that milk in 2005 hovers around 45.6 cents per litre. It becomes ever more concerning that when you see the average farmer in the UK milks 156 cows and takes around $70,000 a year, that is a whopping 5c per litre for the farmer, so there is not a lot left over for labour. The focus in recent years in the UK has been to expand the dairy herd in order to create more income or alternately, to move into value adding eg: -

- Cheese production
- Ice cream production
- Farm shops

The irony of value adding is that you probably need more labour to do it. You need some strong management and strong organisational skills to succeed, and it is very capital hungry, so you may need some resources away from your main enterprise.

Overseas – Imported labour

This is a trend I saw wherever I went. Speciality labour businesses are popping up in the UK, each dealing with their own country. The main reason is language. You can do this yourself, employing them, but in the most successful cases I saw, it is better to go through an agency as they do everything from organising all the paperwork, to looking after the interview/orientation process. Again, they require housing on farm. Another good outcome, is the fact most of them are good learners; they do exactly what is asked of them and usually are good at picking any health related problems.

As a consultant from the Dairy group said, we are visiting the farmer with the translator and if there are any problems, it can be sorted out quickly, particularly the milking procedures, for instance, a translator can explain in 30 seconds why spraying teats need to be done effectively (because milk quality is vital in any dairy business).

Another interesting concept I saw in the UK, was a company which is a national relief agency that was deploying staff all over the UK. If there is an emergency you would just ring them up and a suitably qualified herdsman or milker would be on their way. The farmer would not pay the relief worker directly, but would pay the company. All staff had at least 3 years practical experience in dairying, and all were capable of managing a farm on their own or work with the owner.

Now the benefits of such a system is: -

- The relief will only stay as long as you want them to
- No training required
- No permanent housing required
- No redundancy costs
- No holiday entitlements

All this comes at a cost and it is different for each farmer. The way this works is that at the end of the relief booking the farmer signs all the time sheets and invoices, and pays the relief company. This method certainly takes the hassle out of employing people. It is a good idea for farmers who are not good in dealing with people or don't want the paperwork.

CASE STUDY 1

One farmer I met was a Mr Barnes. Mr Barnes was milking 1400 cows on a freestall system, was milking 3 times a day using a 50 unit rotary shed.

Rotary Dairy in Wales

- Employed all South African people
- Worked approx 75-80 hours a week
- Employed 12 people
- Worked 11 months straight with 1 month to go back to South Africa
- All housing supplied – mobile homes
- Earning between $60,000 – $70,000 a year
- Simple system, once trained they knew what to do.

CONCLUSION 1

I certainly thought that this is not a sustainable situation, and the farmer admitted this, he also would much rather employ local people but they are not interested.

CASE STUDY 2

A much smaller farm with 150 cows: -

- 2 employees and the farmer himself
- Staff employed for 2 reasons – lifestyle
  – work
- Pay was in the range of $80,000 per annum
- He included his labour in major decision making, he said “it creates a sense of belonging”

CONCLUSION 2

Two totally different mindsets (and debt levels I suspect). The smaller the farm, the more efficient you become, by that I mean efficiency through doing all the little things right.

Hispanic Labour in California - USA

New Zealand

New Zealand is a very interesting country if you look at how they cope with labour. New Zealand is very similar to our system with a few differences e.g: rainfall & soil type, compared to Australia.

It is solely focussed on grass production and utilisation by manipulating stocking rates and calving patterns, combined with a long growing season, and a not too warm climate. New Zealand dairy industry is expanding rapidly, herd size is on average about 280 cows now while the number of dairies has increased by about 1100 in the last 3 years.

On the milk processing side, there is one large Co-op who controls 94% of New Zealand milk. Although there are a few Co-ops left, and more farmers are looking at manufacturing their own milk, the thing that strikes me is how innovative and motivated most farmers and their workers are. Their workers have real structures in place, if they want to progress up the managerial ladder or even own their own farms.

Let me outline:

- Apprentice
- Qualified farm worker
- Farm manager/herdsman-woman
- Ownership or equity partnership

Apprentice

Same as in Australia. Young people leave school to become a farm apprentice/dairy traineeship. Combining school with work is not a real option for labour on a dairy. Too young for responsibility, you have to spend too much time with them.

Qualified Farm worker

More of a mature employee, usually one with a bit of experience and most likely one who wants to own his or her own farm.

Farm Manager

Usually they are the one's who are in control of the following:

- Dairy
- Mating
- Milk quality
- Grazing
- Labour issues
- And over all management

Ownership/Equity Partnership

The last step. A few young farmers are opting to go into Equity Partnership. This way they get the economies of scale while receiving a salary for managing the farm, and a healthy return on capital. The average has been around 13% per annum, but Equity Partnerships are not for everyone.

There are a few criteria for it to work properly:

- Trust
- Partners
- Roles
- Financial management
- Exit policy

Trust

Because there are other people to consider and it is vital you trust and have the trust of your partners.

Partners

All partners should have a common goal and each partner skill should compliment each other. It is important that each partner states exactly what he or she requires from the partnership.

Role

Each partner's role should be clearly defined.

Financial management

It needs a well-planned budget to be put into place and regular meetings with partners.

Exit policy

Needs to be well planned as circumstances change, therefore it should be clearly defined at the beginning of the Partnership

These are the pathways available for farm workers so you can choose yourself how far you want to go. The New Zealand dairy industry is very aware of the shortage of labour on farm and is doing a lot of work to combat that. One such tool found to be quite different, is the Dexcel Human Resources toolkit which is quite unique in that, it deals with every aspect from advertising to defining your own role on the farm. Because it is not only the employee who needs to adapt, it is usually the owner who has got to adapt the most. His role goes from hands on to a more managerial role. Now the question is: are you prepared to delegate some jobs?

Office & Amenities complex in New Zealand

I found on some farms, that they were adjusting their system to accommodate labour. On one farm I went to, it was:

- Once a day milking
- Changing irrigations system from a K-line to large pivot irrigation
- Contract all machinery work from cropping to feeding out

But the most astounding figure was almost 5000 cows, in 12 herds, and 1550 ha. All the milking was done through 3 rotaries – 2 x 50 units and 1 x 60 unit. They employed 21 staff, with an interesting strong social aspect, but more on this later. Running such a large farm requires organisation and systems rosters.

Morning milking starts around 6am on all 3 farms, and continues until 11:30 approx, they then continue till about 5pm with other duties. Staff have an hour off for breakfast and duties are split by getting the cows to avoid boredom. The thing that was quite different here, was, that there was a strong sense of a social aspect towards working for the company. They had a well equipped staff room including sky television and a barbeque area, monthly meetings were held with all staff. Consultants would come in and consult with management and the employees separately for much better results.

I asked them "why they did it this way", the answer was, this is one of the ways of creating the right culture and attitude in the business and they found that all labour was pulling their weight equally. In the busy periods, there was a cook coming over to cook dinner for every worker, every night. All people had housing on the farm, homes for married couples and dormitory style for single people, own bedrooms, but communal kitchen and living room.

On the wages, they said:

- Between $35,000 to $40,000 for workers
- Around $50,000 to $60,000 for managers

Again, some farmers are achieving efficiency through simple systems. They call it "Global Systems", which is applicable on a range of farms in different countries providing the same soil, rainfall etc. Other farms I saw were going the opposite way, feeding on feed pads, T.M.R (Total Mixed Ration), but they used one unique tool, an automated gate releaser. You set the time on the timer and they come home.

On the farms that used them, it saved them a labour unit. But again it re-enforced my belief that as an owner, your job changes the most because, as one farmer said, “not feeling guilty when you are not doing the physical farm work is a hard skill to learn”.

Well contented cows in New Zealand

United States

Farms in the U.S. range in size from big farms in California, Texas, Kansas, and anywhere there is an abundance of feed supply, good water, and a secure way of disposing of manure. Up in the North of the U.S, the dairies are smaller, but that is changing slowly, particularly in Wisconsin where the family farm can't compete with the larger corporate farms.

In Wisconsin where I spent most of my time while in the U.S, I came to question myself, "how do you define a large farm"? Is it one family milking 100-120 cows or a farm with 500 cows with 4.5 Mexicans working for them? Is it cows per labour unit, or cows per farm when we are talking large herd management? From what I have seen, the problems are the same; just the lifestyle is a bit different. What is interesting is that I found not a lot of information on labour issues. There is a very strong focus on farmers becoming people managers, and there were many programs available to help farmers.

One such company I had a meeting with was Agri Management Groups, Principal, Alton Block. He said "the main reason was it was being viewed as dirty, low paying work, and on the larger dairies – no variety in their work. People always milked the cows, or fed the cows, there was no pathway to progress to ownership. No American wanted to do farm work anymore, which paved the way for Hispanic labour to come through. The focus in the U.S. really is to train the farm owner to handle labour, and set up systems and protocols to deal with it. The one interesting aspect I found was, that some dairies were publicising a S.O.P (Standard Operating Procedure) in both English and Spanish so if they encountered a problem, everyone would deal with it in the same manner.

But he also told me "that while you are developing a S.O.P, you also must develop a way of monitoring and measuring the S.O.P, so it becomes a handy tool for larger dairies with a lot of labour. But it would even have a place on the smaller dairies so that everyone knows what to do.

Hispanic Labour Accommodation

Another thing that U.S. farmers had to contend with is Alien workers. Mr Block said "About 10% of illegal workers are employed in the dairy industry, but that is enough for the government to look at ways of tightening up laws, especially after 9/11. The Government understands this, but the public does not".

It is much easier to chase a busload of illegal farm workers than to raid a Las Vegas hotel for undocumented cleaners. He said "In reality, a lot of the illegals keep the wages down, but the pressure is on to keep them, because there are other better paid jobs out there for them". There is competition in the landscaping and construction business, which is paying around $9.00 to $12.00 per hour. Farmers are claiming to pay similar when you take into account:

- Housing
- Retirement benefits
- Health benefits

Again, a lot of farmers go with labour management businesses to look after that part, mainly for language problems. Again when you ask a farmer about labour issues, they are not always forthcoming with details; they would rather talk about how much their cows are producing.

Here is some interesting data though. About communication, 46% of newly hired employees fail within 18 months, only 19% achieve success. It is not the technical skills, it is the interpersonal skills. The lack of technical skills is just over 11%. It goes to show, COMMUNICATION is the key. *Figures are from Agri Management Group*

The key conclusion really is, in order to employ Mexican labour, you have to learn to really delegate and have good systems and protocols in place because language is the barrier. While in New York I spoke to a H.R. Manager specialising in finding workers, in particular, Hispanic employees. On the wages side of things, the average wage is $6.80, but it is important to note that does not include additional benefits like housing, satellite TV, telephone, transportation to and from town, bonuses and incentives. So here you see the average wage is a bit higher than what I expected. Most Hispanic farm workers in New York are from Mexico or Guatemala, and it is also widely known that they want to work as many hours as possible. The average working week is 66 hours average, range is 40 – 130 hours a week. They would also look for other employment, if they don't work for more than 50 hours a week.

As the H.R. Manager explained, what they can make in one hour here, takes them a full day in their home country, they also said that 97% of workers send money back to their families. The H.R. Manager was telling me that close to 35 billion U.S Dollars was sent back home to their families.

Another thing I found interesting was non wage compensation:

- On average 90% don't pay for housing

- Job advancement opportunities, eg: all course costs and travelling costs paid for
- Pay for retirement and health cost, as that is a big issue in the U.S
- All part of their wage as it ties them down to your operation, but the choice was their own.

The key for farm owners here is to identify the non-financial needs of the people they employ and be certain these extras are included in their total wage package.

20 a side Herringbone dairy in Wisconsin – USA Milking 500 cows

5000 head Free Stall Barn – California - USA

Free stall barns

My question is: are they environmentally sustainable?

I travelled around and had a look at quite a few designs, to the ratio of cows milked.

It came down to a few things:

- Slurry handling
- Animal welfare
- Capital outlay
- Noise and air pollution
- Community concerns

One dairy I visited in Wisconsin milked 500 cows on 40 acres; it took him 12 months to get all the appropriate permits, etc, he had to have contracts in place as to how his manure was disposed of. The farmer he bought the feed off had to take the manure back. He had to have nutrient balance programs so there was no overloading. This is a problem with large dairies, as most of them don't have enough land.

One such dairy got fined a substantial amount of money for spreading out too much slurry during winter, and when the snow melted the run off went into the creeks and rivers. Now that is what I see as a bad neighbour. Also, the average cost of slurry handling and disposing is high. That can only get higher with rising fuel costs and more stringent compliance costs.

Animal Welfare

The key here is that a well designed barn can solve a lot of problems. I found more animal welfare problems in the U.K than in the U.S. That is probably explained by more modern facilities and larger herds, which forces you to look at solutions. From what I saw, animals were really well looked after and kept in good condition.

Capital outlay

The cost of building a free stall barn is very expensive, and not appropriate in Australia under it's current milk pricing system.

Air pollution

The amount of trouble people experienced getting their permits, I found incredible. Again this depends on the state in which you want to farm. For instance, if you want to farm in North Dakota, there is a program called Pollution Control Cost Sharing, whereby the Government pays 60% of the approved slurry handling expenses and the farmer pays the remaining 40%. But then in some states, I found it was virtually impossible to obtain permits and licenses, and it was always about the smell and the slurry handling.

Community concerns

I didn't find this to be a big concern as long as the slurry handling was good. One farm I went to had a cheese making facility, I suspect this was only done to create goodwill out there, as this farmer had some major setbacks to gaining his permits. It gave the business a face so people recognised it, so hopefully if they expanded, they don't have to endure too much community backlash, after all a good farm business creates jobs and jobs create a strong and vibrant community.

My main conclusion here is, I don't think there is a future for Free Stall Barns in Australia. First of all, the capital outlay is too great, eg: shed & slurry handling equipment, etc. Farmers lock themselves into an unsustainable system with our current milk pricing, our unreliable feed source, both in feed availability and price, too many highs and lows. We are having a huge natural advantage that not many other countries have bar New Zealand, and they are using it to the fullest - a simple system.

Technology on farms

An interesting subject, because every farmer I spoke to had his or her own ideas about it. Some didn't want it; others couldn't get enough of it. Interestingly enough, in the U.S, it is mainly used to increase production, hence efficiency per cow. The most common way of technology was milk meters and auto drafting. Labour in the U.S. is not a real problem unlike here.

Therefore, I decided to split it up into 2 areas:

- Technology for increased production/quality
- Technology for less labour

Technology to increase production/efficiency has been around for a long time, eg:

- Milk meters
- Drafting units
- Milk robots
- Automated feeding systems
- Automated calf feeders

Technology to decrease the labour component has been slow to develop, again most of it I saw in my own backyard and New Zealand. I saw some interesting labour saving devices in the U.K, but that is not really technology. I believe the best bit of gear a dairy farmer should invest in, is automatic cup removers and a drafting unit. The cost of this equipment is not high in Australian dollars, they average around $800 each. This takes one labour unit away or this can be a cost saving of $35,000 per year. Drafting units are technology which may have a big future in Australia. The cost is not too high, around $15,000 - $17,000, the problem here is you have to have a very good herd identification system otherwise it won't work.

In the U.S, they were moving towards an ear responder, while we in Australia are moving towards ear tag responders, and N.L.I.S (National Livestock Identification Scheme) ear tags. I have not seen a lot of technology on farms that is not already available in Australia.

The most practical forms of technology I have seen, was in the U.K. That is an industry, which has, and is still in turmoil after de-regulation in the nineties. Milk prices are dropping, so farmers are looking to decrease their cost, which brings about some interesting technology:

- Self feeding out of silage pits
- Innovative slurry handling equipment
- Farm shops

Self feeding

No machinery needed as cows walked to the pits to get feed themselves, no headlock capitol, cost a lot lower, can milk 500 cows with 2 labour units, herdsman and milkers.

Innovative slurry handling

All this was done through a manure pump and piping, fairly expensive to set up, but inexpensive to run and maintain, and it created a good image. No one wants to see tractors with slurry tankers dirtying the road. It sends out the wrong signal.

Farm shops

One of the most interesting techniques to increase turnover. I saw a lot of these in the U.K. I came to the conclusion, if that's what you want to do, ask yourself first: am I a people person or a cow person? I don't think you can do both. The biggest problem here is a large capital outlay in the shop infrastructure. But isn't it ironic that more labour is required to run the shop? But of all the farm shops I visited, most of them were relying on it to increase turnover. One I went to in Preston, United Kingdom, 10 years ago he milked 140 cows, decided to make ice-cream, now only milks 70 cows to supply the milk to make the ice-cream. He developed a retail centre around it with farming being pushed to the background. I think this was successful as he is more of a people person than a cow man. While sitting with him having a coffee, I asked him how people came to be in his shop, was it through advertising, position of complex, word of mouth or product itself? He leant back in his chair to the

customers behind him, excused himself then asked them “how they came to be there that day”, they replied “a friend told them to come and see and try it”. I then asked him was it profitable, his reply was “why else do I only milk 70 cows, which is enough for my ice cream business. When the dairy industry started to go down hill around 6 years ago, I had to look at different ways to remain profitable. This has allowed me the opportunity to bring a new product to the public, but I am also setting up within the complex an education centre, so children can learn about Agriculture as a whole, for example, how ground is prepared for sowing crops, chemicals applied, and why, how the crop is harvested, what happens after it has been harvested, and all the way through the process to end up on your plate, it would also show how cows get milked and what happens to the milk, as children, unless they are raised on a farm, think milk just comes in a container from the shops”.

Two of the most interesting pieces of technology were found in Denmark.

- A stand alone mastitis indicator
- A milk meter that measures
  - Milk volume
  - Butterfat and protein
  - Mastitis alert

The stand-alone mastitis indicator has a great future for farmers who want to partially invest in technology. The cost is around $700. I think this is a serious problem in technology. It is all about selling systems instead of supplying the farmer with technology to help him or her with their particular problem or need.

In the U.S. I came across a milk meter that does butterfat and protein testing as well as milk flow and mastitis alert. The cost was just unbelievable, $3,400 U.S per unit, but cost aside, the concept will have big implications for farmers and herd improvement organisations across the globe. It is adaptable to every milking plant.

But with technology, it needs to be a conscious decision, and every farmers needs or wants are different, that’s why with technology, some farmers are trying to buy a dream, and dreams don’t always come true.

Main Conclusions and Recommendations

The status quo is no longer an option. We must take action now if we want young people to enter the dairy industry. There are a few ways of achieving this:

- Set out clearer career pathways for labour or at least give them the opportunity to progress
- Create a better image
- Better schooling and training facilities
- Bring young children on farm/factories etc to show them the benefits of working on or owning a farm

I believe the best option is for Dairy Australia to promote dairying as a viable career option.

This can be achieved through the schooling process.

At primary level by:

- Visiting farms
- Specifically designed curriculum

At secondary level by:

- Career options in the dairy industry
- Make them aware of environmental programs and issues
- Explain career pathways in the dairy industry

Conclusions

Dairy farming must give people a healthy return on assets, if that does not happen; then dairying will struggle to attract labour.

Given the continuous:
- capital outlay to high
- too many variables coming into play, feed and labour costs
- effluent management everyday year round
- higher cow losses due to cows standing on concrete in particular feet problems

Diary Australia needs to play a vital role in moving the industry forward, but some radical thinking is required for this to happen, it will take courage and foresight by farm and industry leaders. A strategy must be developed where we see the industry moving to in 10 years time.

On a farm level, we must have a clearer career pathway in place, which gives young people an interest in responsible farming, so in turn they can build a future for themselves.

Free Stall Barns

I believe there is no future in high rainfall areas for Free Stall Barns. The capital cost is too high, as is the high labour requirements, and not enough capital growth in your business.

On the other end:

- Better pasture utilisation
- Better large herd movement
- More cows
- More production per cow

With a system like this you lock yourself into a high cost - low margin, which I don't think is sustainable in the future.

Technology

This is all farmer driven, it depends very much on what you want. I find it difficult to draw a conclusion here. I have not seen technology as having a direct influence on labour. In most cases, they do not reduce labour, which I found interesting, most farmers retain labour, but just milk a few cows more.

Recommendations

My recommendation would be to have 3 key structures implemented.

They are:

- Education
- Research
- Career pathways

Education

A specialised dairy college to be set up, which provides the practical, and business skills necessary to grow a dairy business. This college should demonstrate simple systems with emphasis on profit and labour efficiencies on larger scaled farms. Strategic planning must be a central part of their study; this in turn will motivate and focus your farmers on their goals in farming,

Research

More research into labour saving technology, particularly in the milking shed as most of the time savings can be made there. Research and Development funding needs to be redirected to, maybe, overseas labour, and its advantages or disadvantages.

Career Pathway

As the number of farmers are declining, but herd size growing, this coupled with labour shortages in other areas of the economy, will make it necessary for young people with a non farming background to enter farming. Farm managers are not prepared to work long hours with less time off, compared to workers in other fields of the economy, unless there is an opportunity for them to build equity in the herd or land.

Maybe this is an area where we should improve as an industry!