



Keeping it Lean

Words by: **Anne Lee**

Ruwan Wijayasena and Niranjala Gamalath are Lean management champions – it's embedded in their farming psyche and has become a natural part of the culture within the 1900-cow business they run.

The couple contract milk two neighbouring Theland farms, formerly Synlait Farms, at Te Pirita and credit the Lean approach for the high level of engagement they have with their 10 staff.

Turnover is low and most of their senior people have been with them for three to five years with one on board for seven years now.

This year they won the People Performance Award for the Theland farming group as testament to the couple's engaging management style and the positive effects their implementation of Lean has had on the team.

"The processes we use and the systems we have make sure we're getting our work done efficiently, everyone knows what they have to do and they have what they need when they need it," Ruwan says.

"That means everyone gets home by 5.30 at night, even through calving. Our people don't have to work overtime and

that makes a big difference to them," Niranjala says.

Both Ruwan and Niranjala helped develop the tailored Lean management system when Synlait farms first brought it in under its then chief executive Juliet Maclean.

The programme was dubbed InSynC and Ruwan ran one of the pilot farms providing practical onfarm input.

Niranjala worked closely with the senior management team as the continuous improvement manager, helping to develop and implement the programmes.

"It was used in other businesses but it was a new way of thinking for farming back then so we spent a lot of time looking at how things like 6S, waste identification, value stream mapping and root cause analysis would work onfarm," she says.

Initially the focus was on learning to identify waste.

The theory identifies eight wastes common in a manufacturing sense but they can be adapted to a farming situation too.

Eight wastes:

- Searching
- Motion
- Defects
- Over production

- Inventory
- Waiting
- Transport
- Under-utilising people

"There can be wasted time and effort looking for the right tools, waste having broken equipment, waste waiting around because staff don't know what job they should be doing next, running out of detergent for the shed cleaning or having the motor bike run out of petrol in the paddock.

"It takes a bit of practice but it's a good way to introduce people to Lean and once they get the hang of it, they start seeing waste in lots of situations.

"They like it because when you take out the waste you take out a lot of the frustration.

"It becomes part of that continuous improvement cycle – it's second nature," Niranjala says.

Kanban – the Japanese term for scheduling to create a "just-in-time" approach has also been adapted onfarm particularly for managing consumable products such as cleaners, chemicals and vet drugs.

"You can set a minimum and a maximum so you know when to order more.



'It was used in other businesses but it was a new way of thinking for farming back then so we spent a lot of time looking at how things like 6S, waste identification, value stream mapping and root cause analysis would work onfarm.'



Top Left: InSynC - from left 2IC Kalinga Warnakula, unit manager Dhanushka Busnayaka, Ruwan Wijayasena, farm assistant Juan Aguero and herd manager Malinda Gamage.

Top Right: Ruwan and Niranjala - helped develop the tailored Lean management approach that's become embedded in their farming business culture.

Left: Ruwan and calf rearer Abey Wardhana - standard operating procedures for all processes including calf rearing part of 6S.

"Things like pulling an intake hose quarter way up the drum rather than having it at the bottom," Ruwan says.

It's a backup because there's going to be enough time to order more.

The 6S programme is: sort, set, shine, standardise and sustain - all with safety in mind.

Niranjala says 6S is carried out on numerous areas from the calf sheds to the dairy or even just a cupboard.

"The first step is to get rid of all the rubbish or things that shouldn't be in that area.

"Then all the things that are needed are neatly put back in a logical way," she says.

In some areas that means putting up a shadow board for tools or having a set place for reels and standards with hooks or rails so they have a place to hang neatly.

The shine part is about cleaning and inspecting so you can see if something is missing or broken, she says.

Standardise means coming up with standardised operating procedures (SOPs) with the farm teams involved in the process.

"It's important that SOPs are written for your own farm because each farm will have different set ups.

"But for some SOPs you just have to follow a set procedure - like the amount of chemical used in vat wash. That comes down to manufacturer's instructions," Ruwan says.

Labelling equipment and putting laminated SOPs, which include photographs and diagrams, at the point they're used where applicable means there's no confusion over how a process is carried out.

"That's good for new people and the pictures help people who don't have English as a first language," Ruwan says.

Sustaining the practices is all about developing the culture, he says.

That happens right back at the recruitment and interview stage.

"We make sure people know how we operate here, what's expected, what things are non-negotiable, that we treat each other with respect and health and safety's a priority," Ruwan says.

Value stream mapping

"Value stream mapping is the master tool," Ruwan says.

It brings together a number of the other tools and is a technique where the team identifies how something's done now, how they want it to





Ruwan and unit manager Dhanushka Busnayaka – everyone knows what they have to do when and they have the tools to do it.

part-time staff to senior team leaders feeling comfortable in putting forward their ideas and then seeing the practical difference it makes.

"It's become part of who we are here now," Ruwan says.

be done and how they're going to move from one to the other.

"Through the process you identify wastes and opportunities for improvement (OFIs)," Niranjala says.

Over the years they've carried out value stream maps for most activities onfarm and for some, such as calving, it's an annual process.

"We get the whole team together and we look at what has to happen using the busiest day of calving as our example day.

"Every year they (team members) say they want to be able to get home at 5.30 so we work through the non-negotiables – what has to be done no matter what," Ruwan says.

They set up the process knowing the likely number of calves born that day, the number of springers, number of colostrum cows, number still wintering and build in the fact it's likely to be a cold, wet day.

They look at their current process, how it was done last season and look at any wastes to see how they could do things better.

Niranjala says it's important all the team members already understand some other Lean tools such as how to identify wastes.

The process is detailed, drilling into every aspect of the day's work – who is going to do what when and what they'll need to do it, so it takes time to do it well.

"But you find people learn a lot about the processes, why we do them and why each step is so important," she says.

They also build in contingency plans.

Root cause analysis

Even with the best processes though, problems can crop up.

A quick fix can mean issues repeat and

even escalate.

Niranjala says a way to look differently at problem solving initially is to ask the "five whys".

"You keep drilling down until you get to the real reason behind the problem and not just blame the person or the first issue you come to.

A root cause analysis takes an even harder look at an issue and incorporates the five whys too.

Ruwan says getting to the root cause can be a game changer and well worth the effort.

A full analysis will first state the problem, called the defect, and then drill down further by looking at the four Ms – method, materials, machine and man to see what problems lie under each heading.

"I always leave "the man" till the end because otherwise it's too easy for people to just blame someone else."

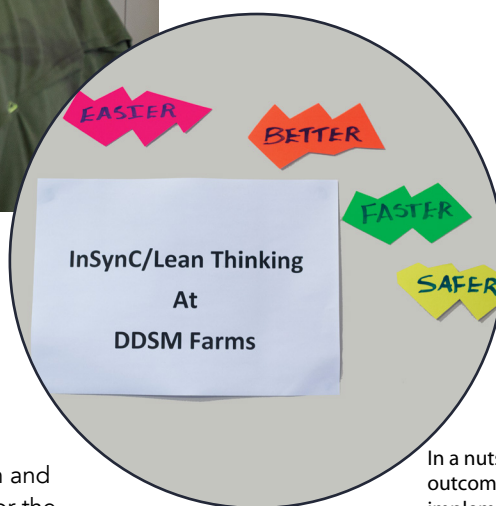
In recent weeks he's helped another farm carry out an analysis on problems with milking taking too long when some groups were rostered on.

"It would have been very easy there just to blame "the man" but in the end we found the root cause was no milking SOP.

"Some were using the top gate, some weren't, some had the radio up loud, some didn't. There was so much variation and cows don't like that," he says.

The couple say there are both tangible and intangible benefits to the InSynC – Lean approach with the farm teams motivated and happy in their work.

They come up with great innovative ideas to reduce wastes and get a huge sense of empowerment in everyone from



Four key outcomes

Easier, better, faster, safer: They're the four key outcomes of successfully implementing a Lean management approach and what Ruwan Wijayasena and Niranjala Gamalath and their farm teams are striving for every day.

The couple were this year's Canterbury/ North Otago Dairy Industry Awards Sharefarmer of the Year winners and credit the InSynC – Lean approach to their ability to run a successful farming business.

They don't own cows due to their Buddhist beliefs so haven't been able to follow a traditional sharemilking progression pathway.

But Lean has allowed them to leverage their skills so they can contract milk at scale.

They've also found the processes involved in the Dairy Industry Awards have built on their skills and heightened their enthusiasm to continue to grow their business.

They're urging other farmers – from those new to the industry to equity managers to get involved and enter now.

"We can't speak highly enough of the benefits in entering. It opens your mind to so many ideas," they say.