# MILK VALUE MONITOR

# Kinloch Farm

# **CASE STUDY**



# Farm background – the people

Kinloch Farm is a 141ha irrigated dairy farm located in Mt Shank in South Australia (15km from Mt Gambier). It is owned by an equity partnership which includes dairy consultant Angus Drummond. The business employs three full-time workers who manage the day-to-day farming operation and Angus provides consulting advice on a regular basis.

Angus started milking cows as a part-time job when he was at Agricultural College in 1989 when he lived in South Africa. After his studies were complete, he went on to manage a 300 cow dairy farm. He then managed a potato farm before becoming a dairy share farmer. After working as the manager of a beef and cropping property for seven years, Angus then worked as an agronomist for a further seven years where he started working with discussion groups. From this role he then started his own dairy consulting business. In 2006 he joined the company Intelact who sponsored him to come to Australia in 2007. He has stayed with Intelact since this time (as a franchisee).

Angus became involved with Kinloch farm in 2010, when an equity partnership engaged him as their consultant and he was tasked with helping to set up the business farm system.

Three years ago Angus also become an equity partner and director of the dairy business. He has kept his role as the dairy consultant for the business.

Angus visits the farm regularly to undertake a farm walk with the farm manager. He also provides support and advice to the manager as well as analysis and reporting to the other owners.

# Farm description – at a glance

Farm details	Farm system	Farm performance (\$)
People: Equity partnership with 3 full-time employees. Angus Drummond is an equity partner and consultant for the business	Herd type: 100% Friesian	EBIT average \$1.43 per kg MS with a range of \$0.62–\$2.62 over the past 4 years
Milking area: 141ha	Herd number: 415 peak	ROTA average 5.7% range of
Support blocks: 26ha	Split calving pattern between February and August	2.3–10.9% over the past 4 years
Average rainfall: 745mm	Stocking rate: 2.9 cows/ha	
	Concentrate feeding: 2.0 t DM/cow/year (2.0-2.2)	
	Proportion of homegrown feed in the diet 53% (44–59)	
Irrigation: 100ha of milking platform –	591kg Milk solids/cow (566–617)	
680ML average use	Production % liveweight 107 (103–112)	





#### **KEY TAKE HOME MESSAGES**

Think about your dairy career path! Be patient and realise that when you start out that you don't know everything. Don't take on too much debt or try to grow too quickly and try not to take short cuts to farm ownership. Experience is important as it ensures that you learn how to walk before you need to run!

Get the system right for your farm and when you have it, stick to it and focus on doing it well.

Establish good relationships with your workers/ staff and your key suppliers. Pay your bills on time and keep communicating with them and this will ensure they are there for you when you need them. Keeping things simple will help to make things easier on you and your staff.

# The story

# Farm system

The farm system was deliberately set up when the farm was purchased. The system was based on a split calving pattern of 50% in autumn and 50% in spring. This was based on the slower pasture growth rates in June/July and in December/January. It is too wet in winter to carry the whole milking herd with a 100% autumn herd and low growth rates from ryegrass pastures in the peak of summer (January/February) would put pressure on the farm if it was a 100% spring calving herd.

Access to 100 ha of irrigated milking platform means that the herd can be split calved and this also has the added benefit of increasing the shoulder milk production which attracts a higher milk price. However, the main determinant for the farming system is to match pasture growth rates to herd feed demands and a stocking rate (total herd numbers) that does not result in an over reliance on bought in feed. The milk price benefit of increased shoulder milk production is more of a bonus rather than a driver of the system.

"I wouldn't change the calving pattern to suit the milk factory, but I would change the milk factory to suit the calving pattern (and the farm)."

Angus acknowledges that a single calving farming system may have cheaper cost of production, but he believes the production would be lower resulting in a lower total profit. Access to reliable irrigation water provides some certainty to the home-grown feed base and they are comfortable with the system they have employed.

Although there have been no major changes in the farm system in recent years, a purchase of a support block six years ago allowed them to move dry stock off the main farm. While this effectively increased useable area, the size of the milking herd was not increased thus reducing the level and exposure to bought in feed. The support block also had an added bonus of a house that has improved the offering for a farm employee.

#### **Farm location**



# **Decision making**

Tactical decisions are made using a variety of methods. They have focused on having a simple system that that gives the owners the confidence to empower the farm manager to make many of the day-to-day decisions.

Soil samples are taken regularly to determine what the fertiliser input requirements across both the milking platform and support blocks.

The amount of feed required is determined using the program 'UDDER' with modelling done at the start of each season. UDDER software is a powerful modelling tool which can help to inform practical strategies to increase dairy farm performance.

Supplementary feed purchases are secured using grain contracts (for a portion of yearly requirements) and will occasionally look at grain futures. Hay requirements are determined early in the season and supply is secured early. Once determined, hay required for the next 12 months is ordered, delivered and paid for – reducing the risk associated with supply and price.

The grain fed to the milking herd will change through the year with fresh cows receiving 7kg grain per day with 10% canola. Stale cows will get 6kg per day of straight wheat. On average the cows receive 6.5kg per day. Minerals are added to ensure deficiencies specific to the Mt Gambier region are managed.

Angus is a very astute operator who has years of experience working with and advising dairy businesses. As a result of this he is able to effectively analyse the various aspects of the farm system to ensure that key decisions are well informed, discussed, analysed and communicated.

#### Risks

Risks in the business are clearly identified and are either minimised or removed depending on the season and other factors at the time.

Seasonal risk is associated with a short dry spring that results in a reduction in the amount of silage harvested. The farm is located in an area where usually this shortfall

can be purchased from neighbouring cropping farms. Access to reliable irrigation water (groundwater) provides a high degree of insurance against poor seasons as the home-grown feed base is reasonably consistent

The farm operation started with relatively low equity levels which was a risk to the business. A focus has been to direct a proportion of the farm profits to debt reduction to reduce the financial risk to the business. The current owners are comfortable at the current equity level. While debt reduction will continue to be a goal, there is more scope to reinvest in the farm operation or distribute more of the profit to the owners.

The percentage of bought in feed is also seen as a risk to the business, however historical performance has proven that this level has been profitable for the business.

Although irrigation helps to reduce the risk to the business (as mentioned above) there are also risks associated with this type of system. An episode occurred where the irrigation infrastructure was damaged during a storm and it cost a month of production to get it up and going again. Since this time a new irrigation system has been put in place, including automated water level monitoring (tensiometers. This has resulted in improvements in water-use efficiency which has resulted in water being carried over.

As the farm is owned by equity partners and not owner operated, the reliance on farm labour is high and is a risk to the business. This has been mitigated and managed by keeping the farm system as simple as possible and empowering staff by involving them in key decisions. Farm production and financial performance is monitored monthly so any divergence to budget is quickly picked up and response actions implemented. The purchase of the support block with a house allowing accommodation to be part of the employment package. The team trust each other, which has helped to create a good workplace culture.

# Management tools and systems to manage cost of production

Decision making on the farm is well informed and based on having access to information and historical records.

**UDDER** – a computer modelling program to helps calculate the feed requirements and likely milk production. It is used to support some of the planning decisions relating to feed requirements of the herd.

**Figured** – (add on to Xero) is updated every month – this gives accountability to shareholders and can also be accessed by the account.

**DairyBase** – used annually to update the farm performance and report back to shareholders on key performance measures for the operation.

**Accountant** – an accountant that understands dairy has been engaged by the business. They are used to provide tax advice and manage tax compliance.

**Budgets** – these are developed on an annual basis at the start of each season. The farm manager has input into the budget. The budget figures are then put into Xero so that income and costs can be monitored monthly against budget.

Other more general systems and tools that are used to ensure the effective management of production and costs are as follows:

- Production regularly monitored through daily pick ups and milk production data
- Cow health condition scored every month. Cow breeding data is recorded and analysed to ensure in calf rates are matching targets
- Pasture cover visual observations made on a daily basis and farm walks as required to ensure there is enough feed ahead for future requirements
- Water requirements for irrigation moisture probes are used with phone apps.

# Strengths of the business

Angus believes there are many strengths to Kinloch farms. However, he has identified the following as being key to their success:

- Good staff and farm manager they trust each other and keep the farm in good working order (neat and tidy)
- Irrigation which ensures they can grow grass all year round
- Good relationships with lots of suppliers always pay bills on the 21st of the month which helps ensure the relationships stay strong and that contractors/ suppliers are there when you need them
- Simple system that they are not looking to change.
  Although they still allow for some flexibility in the system.

## What's next?

Initially the investment in this dairy business was to only be for five years, however it has now extended beyond that to over 10 years. During this time different partners have sold out and others have bought in or increased their share. The plan is that eventually the shareholders will sell the property, however the timeframe for this is not set. Currently there are no cash dividends paid to owners as the profit is being directed to reduce debt and reinvest in the farm. Shareholders equity has grown through reduction business debt and appreciation of the farm assets.

### ADVICE TO NEW ENTRANTS/ KEYS TO BUSINESS SUCCESS

Make sure you learn how to walk before you can run. You should not take shortcuts to dairy farm ownership.

Angus has seen many farmers go into farm ownership with too much debt (not enough equity) and they are continually struggling. It is important to realise that by having so much money leave the farm in interest payments, it makes it very hard to ensure there is enough left to pay the farm running expenses and to have some buffer for the tough seasons that are inevitable.

'Get the system right for your farm. Stick to it and do it well. If you are doing a good job, then keep on doing it'

# The numbers behind the story

### Farm details

	2016/17	2017/18	2018/19	2019/20
Milking Cow Numbers	400	400	406	415
Total useable area (ha)	141	141	141	141
Rainfall (mm)	961	798	735	735
Irrigation (ML)	725	725	635	635

# **Primary indicators**

	2016/17	2017/18	2018/19	2019/20
Business Efficiency				
EBIT per kg Milk Solids (\$)	0.62	1.28	1.20	2.62
Return on Total Assets managed (%)	2.3	4.9	4.7	10.9
Return on Equity (%)	0.8	5.3	5.5	16.8

# **Secondary Indicators**

	2016/17	2017/18	2018/19	2019/20
Milk price (\$/kg MS)	5.02	5.86	6.69	7.87
Total Variable Costs (\$/kg MS)	3.28	3.47	4.35	4.42
Total Feed Costs (\$/kg MS)	2.78	2.81	3.75	3.78
Homegrown Feed Costs (\$/t DM)	153	144	141	150
Total Labour Costs (paid plus imputed) (\$/kg MS)	0.87	0.85	0.90	0.84
Cost of Production (including inventory changes) (\$/kg MS)	5.01	5.00	5.97	5.82

# **Tertiary indicators**

	2016/17	2017/18	2018/19	2019/20
Milk solids as a % of Cow liveweight	103	107	108	112
Proportion of homegrown feed in the diet (%)	44	56	53	59
Homegrown feed consumed (t DM) per 100mm rainfall	0.59	0.80	0.87	1.01
Homegrown feed consumed (t DM/ml)	1.88	2.26	2.53	2.95
Homegrown feed consumed (t DM/ha)	7.92	10.59	10.58	12.47
Milk solids per Labour Unit	75,528	78,271	80,213	85,351