

CASE STUDY

TAKING ADVANTAGE OF OPPORTUNITIES WHEN THEY ARISE

Plan2Farm irrigation business planning

Background

Farm:	Darren and Tania Sutherland
Area:	1200hectares (ha)
Location:	Boort, Victoria
Enterprise:	Mixed farming sheep and crops
Irrigation:	1000ML Goulburn water
Infrastructure:	Surface irrigation, 20ha of drip

Darren is the fifth generation to farm the Sutherland farms in Boort. The Sutherlands have been farming since 1877. They take a long-term approach to farming, implementing changes that will ensure a viable farm for the next generation. Working with a consultant through the Plan2Farm Irrigation Farm Business Plan Workbook has helped in the development of a farm business plan which generates new ideas for discussion with the family and helps set the future direction of the farm.

How have you changed irrigation infrastructure on your farm?

What started out as a soldier settlement block with the obligatory crops and grazing land, eventually specialised in sheep and wool, with a sheep stud being established by Darren's great grandfather. The farm has been sub-divided amongst family throughout the years and now Darren and Tania run a mixed farming enterprise.

The sheep enterprise is complimented with 600ha of irrigation to grow feed and grain crops. Their rotation consists of faba beans, wheat, barley and occasionally canola as a break crop. The faba bean stubbles have proven to be an excellent stock feed for the sheep as well as a great way to increase nitrogen and look after the soils.

Each season they take full advantage of the water situation. In wet years they grow as much feed as possible or buy water to carry over for the next season. They also trade water when the opportunity arises.

The original flood irrigation system was set up for pastures to water once in the autumn and once in spring. When Darren took over the farm in 2006 the bays were smaller (20m wide with 6 inch pipes outlets). Since then, the Sutherlands have been improving the irrigation system to allow for increased speed and volume of water applied, resulting in reduced labour and increased productivity for water used.

When the channels were enlarged and the irrigation wheels removed Darren restructured his irrigation to take maximum advantage of the new outlets. He lasered the ground to improve his surface irrigation system and drainage. These changes meant that Darren can now efficiently water 60m wide bays, using big Padman stops, with 18 inch slide risers. So instead of putting out 5 ML over several bays he now has the control to pump a faster flow of 12 -15ML over one bay which is much easier to manage. In addition to labour saving, this has reduced waterlogging, improved water use efficiency and optimised crop productivity.

The upgraded system allows efficient irrigation of pasture and crops (faba beans, wheat, barley, vetch, canola) in autumn and spring and enhances the ability to have a flexible system to respond to changing seasons and water markets.

How has climate variability changed the way you use water in your farm business?

Like many of today's farmers, Darren is on the lookout for improving water and on-farm efficiency. After looking over the fence and admiring his neighbours' crops under a drip system, Darren trialled a small plot with a corn crop through funding from an on-farm water efficiency project.

Twenty hectares of the irrigation is now on a drip system. Crops grown on this system respond well to the flexibility that a drip system provides and can produce higher yields. This year it is vetch, next year it might be canola or wheat depending on market prices. There is also an opportunity to grow a summer crop of corn or sorghum

Darren decided to retain surface irrigation for the majority of his watering, whilst he can see the advantages of the drip system it requires a larger workforce, requires higher maintenance and requires high value crops to make it worthwhile. He always remains open to processes that will improve his farm efficiency and bottom line.

Upgrading the infrastructure also allowed the Sutherlands to develop an on farm irrigation re-use system. This ensures that any excess water is not wasted, but pumped back into the on-farm storage and delivery channel for re-use.

“Efficient use of water is integral to maintaining a profitable farm business”



What impact did the changes have in ensuring your business is more resilient in the future?

During the millennium drought Darren went from a regular 200% allocation to 32%. He's had to learn to be more efficient in his water usage. They have developed a business plan, improved their farm layout and irrigation system, make informed decisions about crop rotations and diversify with their sheep and cropping enterprises to manage risk.

"Our high reliability water allocation is integral to making the most of our other farm resources, if we have an excess, we might sell water to increase cash flow. In wet year's we buy in extra water to push yields and take full advantage of the growing conditions". The Sutherlands use carryover strategically when it's deemed economically viable and low risk.

They plan to conduct a detailed analysis of the physical and financial performance of the operation and develop an understanding of how well the business is utilising its water resources to help make decisions in the future.

If you could make one recommendation about how to successfully navigate changing water markets and variable climate what would it be?

"Be mindful of your reserves". Darren considers himself to be a fairly conservative farmer, so his advice is to have enough reserves and resources to be able to survive if the conditions downturn.

"After the millennium drought, and in particular 2006 which was a 'biting' year, we didn't have enough hay – now we keep several thousand round bales on hand. We would most probably de-stock earlier, when the livestock condition is still good for markets, and just keep the breeding stock and good young ewes."

Further Information

[Plan2Farm – Irrigated Cropping Council](#)
[Agriculture | North Central Catchment Management Authority](#)
nccma.vic.gov.au



“Play the game, take advantage of any opportunities the season brings”