

The 10% Challenge

Linden Masters and Naomi Scholz

SARDI, Minnipa Agricultural Centre

RESEARCH

Early in 2010, local 'think tanks' were set up to support the three focus sites at Minnipa, Wharminda and Mudamuckla as part of the GRDC funded Eyre Peninsula Farming Systems 3 (EPFS 3) project. The think tanks, or discussion groups, consisted of 10 farmers, a consultant and local retail agronomists. Many of the farmers involved were considered to be successful in their area. The groups were posed the following questions;

- How do you increase your crop water use efficiency?
- How do you maximise profit?
- How can you find more leisure time?

The groups were also challenged to identify things that they could change in order to increase water use efficiency, profit and leisure time by 10%, which we referred to overall as the '10% Challenge'.

The aim of the 10% Challenge was to identify the important drivers in local farming operations and from this information to find rules of thumb that would help others to implement and maintain a robust flexible farming system. These discussion groups also have input into the management of the focus sites, so that the research remains relevant, moves from white peg trials to paddock demonstrations, then on to a farm scale and adoption across the district.

Increasing water use efficiency by 10%

In a nutshell, water use efficiency is about increasing production from the amount of rain we get. The following list describes what the think tank members considered important drivers for increasing water use efficiency (WUE):

- Timing of all operations. Timing

and timeliness including the efficiency of the program; matching capacity, quality of gear, labour.

- Strategic planning and decision making are essential, but need to be adaptive. Have plans A, B and C as the season develops.
- Good agronomic understanding and knowledge of the farming system allows; appropriate sequence of crops and pastures, adapted crop/variety choice, timing of nutrition (including N and management of foliar and root diseases), understanding of soil type variability.
- Having a good base nutrition for all seasons – general good fertility.
- Weed control including grass free medics, removing summer weeds (allowing some water and nutrition conservation) and consequently improved timeliness of sowing.
- WUE is improved by press wheels, stubble retention, minimum/zero tillage.
- Access to capital dictates ability to use 'best practice', thus WUE is constrained by capital.
- Need flexibility for different; soil types, seed burdens, constraints.
- Match areas on the farm, e.g. high risk areas with low risk strategies, matching risks to constraints; soil type, weeds, rainfall patterns.

Increasing profit by 10%

Profit can be described as the portion of income remaining after all costs are accounted for. Increasing profit can be achieved by reducing costs, or maintaining

costs while increasing income, or a combination of both. The following list describes what the think tank members thought were important factors in increasing the profitability of farming:

- Work smarter, not harder, put a value on your time.
- Be organised so you are not pressured to make a quick decision.
- Knowing where your skills/strengths are e.g. grain marketing is a new skill required – keep it simple if it is not a strength.
- Outsourcing expertise where possible e.g. mechanics, grain marketing, crutching.
- Keep the system manageable so you have capacity to achieve.
- Going back to basics – wheat and medic and conservative machinery decisions (labour vs. capital).
- Don't chase fads, have a very stable, basic system.
- Actively chasing chemical/fertiliser, 8 – 10 months pre-season.
- Quarterly wheat payments to spread income and improve cashflow.
- Changed over to air seeders – wider rows, less rates, put out liquid trace elements; crops looked more even.
- Fenced off hills and revegetated. Made land a lot more usable and increased grazing days. Mobile electric fencing transformed grazing package and enabled increase in stock numbers.
- Other things happening in the district: delving, spreading sand on poor/magnesia patches. Deep banding trace elements and P under seed (especially grey soils).

- Know and understand your cost of production (or have good intuition).
- Seize opportunities (have the capital backing to be able to take opportunities as they arise).
- Sowing cereals dry (depending on soil type and paddocks set up).
- Sow early for grazing with a grain option if not needed for feed.
- Having different blocks (geographically) and soil types to spread risk.
- Gut feel and luck. Avoid making the 'clanger' decisions, learn from mistakes. Confidence.
- Efficient sheep yards (saves time and labour).
- More land, another worker, frees up time.
- Too much emphasis on livestock being risk reducers – the livestock enterprise must be profitable to reduce risk.
- Make change a process, not an event.
- Know when to stop spending.

Increasing leisure time by 10%

Many laughed at the suggestion of increasing leisure time, but after some thought, there was concern

amongst the groups regarding the lack of time farmers have for family, community or oneself. It is an important issue that is often overlooked in our discussions about new practices. The following comments are things people did or aspired to:

- Buy a new sprayer (bigger, better, more efficient).
- Get a working man "A Nitro (self-propelled boom spray) can't fix a gate".
- Good planning, preparation and coordination, work towards a goal.
- Plan a proper holiday every 2 years or have shorter breaks more often (gives the whole family something to look forward to and plan as a family).
- Management and monitoring of new farming systems takes more time (e.g. break crops) so take this into consideration when planning the year ahead.
- Putting trace elements down the tube and soil applied herbicides by seeder.
- Insurance/planning ahead for contingencies e.g. treat some seed so you don't have to spray all areas at the same time.
- Sowing one variety only.
- Block farming.

- New sheep yards, get a good dog, laneways, breed easy care sheep, jet before there's a problem, be timely with livestock operations.
- Auto steer (stress saver) good for night spraying, opens spraying window.

From the 10% challenge came a feast of ideas, usually with one or two key focus points considered valuable to the farming operation, with farmers agreeing with or discussing other ideas as they were shared within the groups. The information arising from these sessions has been presented at farmer meetings for local groups to discuss in relation to their own farming systems. Further development and extension of this work and 'rules of thumb' will be investigated with the discussion groups and delivered at local farmer meetings.

Planning and understanding their farming system and business situation were high on the farmers' lists. The three areas covered are not exclusive to each other but all need to be in balance. Production, finance and people resources all need addressing for a long term sustainable farming business.