

Fact sheet

Profitable integration of cropping and livestock



What is effective integration?

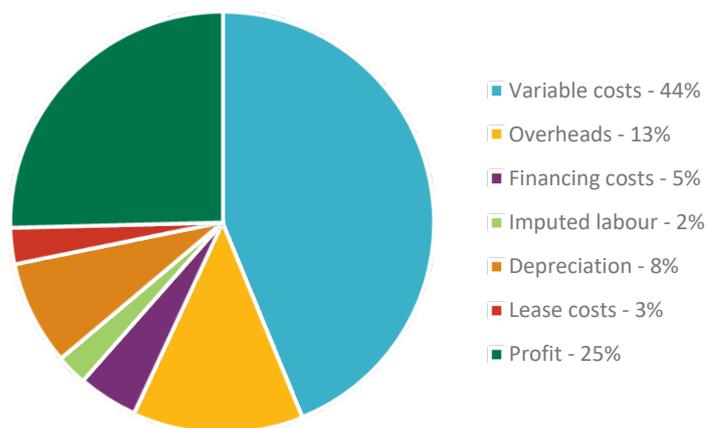
The ability to integrate two or more enterprises in a synergistic manner, which eliminates enterprise conflict and drives profitability.

What are the indicators of profitable integration?

- >6% return on equity
- >6% return on assets managed
- 30% of turnover retained as net profit
- >\$600,000 turnover/FTE
- finance coverage ratio of >4:1
- >80% equity (long-term).



SA medium top 20% by return on equity



The top 20% of mixed enterprise producers are:

- consistently able to generate operational returns on capital that are greater than 6%
- retaining 30% of income as net profit before tax.

These businesses represent a vibrant and motivating sector of agriculture. It is empowering that decisions and actions that are within the control of management will allow replication of the top 20% performance.

Successful implementation of the four primary profit drivers, in both cropping and livestock enterprises, results in well integrated and profitable mixed farming businesses.

Gross margin optimisation

Gross margin optimisation is influenced by income generation and disciplined variable cost control. Producers aim to optimise crop yield and livestock income in a cost-effective manner.

Top 20% producers generate more income per hectare in both their cropping and livestock enterprises, with lower variable costs as a percentage of income.

The top 20% producers also earn more income from their livestock enterprise by optimising individual animal performance, shown by the higher EBIT per DSE in the low cost business model table.

Cropping

Table 1: SA Mallee and Upper Eyre Peninsula cropping gross margin performance

Benchmark indicator	Top 20%	Remaining 80%
Cropping income (\$/ha)	\$428	\$376
Cropping variable costs (\$/ha)	\$194	\$208
Cropping gross margin	\$233	\$167
Variable costs as a % of income	45%*	59%

*This number is higher than it should be for long-term top 20% performance. Variable costs should be <40%

Livestock

Table 2: SA Mallee and Upper Eyre Peninsula livestock gross margin performance

Benchmark indicator	Top 20%	Remaining 80%
Livestock income (\$/ha)	\$151	\$171
Livestock variable costs (\$/ha)	\$50	\$69
Livestock gross margin	\$101	\$102
Variable costs as a % of income	39%	46%
Stocking rate (DSEs/ha/100mm)	0.88	1.00

On farm actions

- benchmark your business annually to build a long-term dataset, and monitor trends in enterprise performance
- calculate cropping and livestock gross margins/ha on an annual basis
- aim to have all pasture and/or fodder crops sown at least two weeks before you need to start your main seeding, to avoid the risk of these overlapping into the peak window for sowing grain crops
- target ewes to be in condition score 3 at joining and lambing
- scan ewes for singles versus multiples and manage ewes separately.

Low cost business model

The low cost business model is influenced by a business's structural efficiency and reflects its overhead cost structure.

The two largest overhead costs in a mixed farming business are machinery (depreciation and interest) and labour (whether family or non-family). The way in which these overhead costs are utilised drives the low cost business model and business profitability.

Table 3: SA Mallee and Upper Eyre Peninsula low cost business model performance

Benchmark indicator	Top 20%	Remaining 80%
TPML as a % of income	31%	45%
Machinery investment to income ratio	0.8:1	1:1
Turnover per full-time equivalent (FTE)	\$683,628	\$374,177
Net profit per FTE	\$173,645	\$41,693
EBIT per DSE	\$20	\$8

On farm actions

- develop an annual operations plan focusing on consistently achieving operational timeliness for critical events
- review your production systems and work patterns for efficiency and effectiveness, and focus on the benefits of simplicity
- calculate your total plant machinery and labour costs (TPML) as a percentage of income.

People and management

The choices we make as managers will significantly influence the profit outcome of our business. The three key principles:

- strive for continual improvement in implementation
- develop adaptable, well-thought-out operational plans
- seek to maximise team performance.

On farm actions

- recognise and accept the challenge that, as a manager, you have ultimate control of long-term business profitability
- focus on making good operational decisions rather than unrealistically pressuring yourself into making right operational decisions
- develop and maintain a strong safety culture
- commit 1% of business turnover to training and professional development.

Risk management

A resilient business is one which can incur a production shock yet maintain suitable levels of financial performance. It is an example of low-risk, high-margin agriculture.

Effective risk management primarily involves eliminating internal management risk, through development of simple, effective and efficient work systems.

On farm actions

- invest energy into adding additional profit margin to your business
- let go of the belief that only high risk creates high return and embrace the exciting reality that low risk, high margin agriculture is possible.

What does successful integration look like?

Effective integration

Effective integration involves managing enterprise tensions to optimise the win-win outcomes, and minimise the impact of unavoidable win-lose, lose-lose scenarios.

Table 4: Potential integration scenarios in mixed enterprise

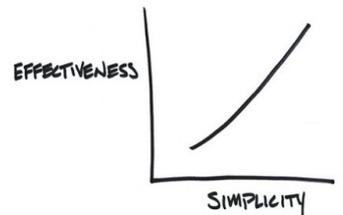
Crop	Livestock	
	Win	Lose
Win	<ul style="list-style-type: none"> • finishing lambs on legume stubbles • using a pasture phase to build organic carbon. 	<ul style="list-style-type: none"> • large paddock sizes are great for cropping, but not for grazing.
Lose	<ul style="list-style-type: none"> • shearing in April • cereal or grassy based pastures in the crop rotation. 	<ul style="list-style-type: none"> • sowing fodder crops in late April, May or June • operational timeliness in both enterprise being compromised.

Simplicity pays

Strive to develop scalable farming systems and avoid unnecessary complexity.

Simplicity facilitates:

- greater focus
- less enterprise conflict
- better labour productivity
- better utilisation of equipment and infrastructure
- enhanced mindset and wellbeing.



The business case for mixed enterprise

It is a healthy process to challenge whether running a mixed enterprise results in a better business outcome than specialising in either cropping or livestock alone.

Taking a big-picture view, it is important to ensure that the business case for mixed enterprise over single enterprise is strong. Specialised businesses are generally more profitable than more diversified businesses over the long term.

Business case for adding livestock to a cropping dominant business

- livestock helps to optimise gross margins on farms with high frost risk
- livestock assists with rye-grass and stubble management
- lamb finishing on bean and other legume stubbles is profitable use of a by-product
- a pasture phase is the most profitable legume available to the crop rotation.

Business case for adding cropping to a livestock dominant business

- a cropping phase assists weed management and soil fertility in longer-term pastures
- aeration from tillage assists longer-term pastures to overcome compaction and water infiltration issues
- crop grazing provides feed when there is a deficit (early winter) with the added bonus of grain revenue later
- crop stubbles provide a good maintenance diet for breeding stock.

Glossary

FTE – full-time equivalent labour unit based on hours worked by family member and paid employees

ROAM – return on assets managed

ROE – return on equity

TPML – total plant, machinery and labour, including all costs associated with these items

Useful resources

- Pasture Principles (available in SA through Rural Directions Pty Ltd)
- MLA's Southern Business EDGE (available in SA through Rural Directions Pty Ltd or visit www.mla.com.au/events to find a workshop near you).
- MLA's Making More from Sheep and More Beef from Pastures manuals (makingmorefromsheep.com.au and mbfp.mla.com.au)

References

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- MLA Southern Business EDGE – workshop content
- Rural Directions Pty Ltd (2016) Management guideline, produced as a part of the GRDC project, 'The integration of technical data and profit drivers for more informed decisions'
- BehaviorGap, 2018. <https://behaviorgap.com>

More information

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