



2022

Farm Gross Margin and Enterprise Planning Guide

A gross margin template for crop and livestock enterprises





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Farm Gross Margin and Enterprise Planning Guide 2022

A gross margin template for crop and livestock enterprises

- Provides representative gross margins for all major extensive crop and livestock enterprises across South Australia
- Compares the sensitivity of profit of enterprises to a change in production and price
- Includes a comprehensive list of major cropping and livestock input costs

A PIRSA publication

Sponsored by SAGIT and Livestock SA

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Published February 2022

Farm Gross Margin and Enterprise Planning Guide 2022

The South Australian Grain Industry Trust (SAGIT), Livestock SA, the Department of Primary Industries and Regions (PIRSA) and the Grains Research and Development Corporation (GRDC), are pleased to produce and distribute this annual publication on expected gross margins for broadacre cropping and livestock enterprises in South Australia.

The guide incorporates the latest information on input and output pricing to give estimates of the relative profitability of different farm enterprises, as an aid to decision making in enterprise selection.

Each year farmers are confronted with an array of challenges brought on by the vagaries of weather, seasonal constraints, input costs and market dynamics.

With the large increase in fertiliser and some chemical prices, combined with limited availability of some products, it will be critical to assess the potential profitability of alternatives when making enterprise selection decisions for 2022. With the potential limited availability of nitrogen fertiliser, legume break crops could play a larger role in rotations. While this remains an area for individual decision making for each farm business, it is also clear that tightening margins are driving the need for a more robust examination of the risks and rewards of the various alternatives.

We believe that a healthy examination of gross margins of alternative enterprises is an effective tool in assisting with the process. To this end, we are pleased to be involved in the evolution of the Excel-based version of the Farm Gross Margin Guide. This tool has all the normal practices for enterprises pre-loaded into an editable version which can be quickly and easily adjusted to represent individual farmer circumstance. This allows the incorporation of an individual's own beliefs and judgements in producing their relevant numbers to aid decision making.

This guide is one of few publications that provide gross margins for both crops and livestock enterprises across the range of SA rainfall zones.

To be factored into decision making for 2022 will be the conditions and outcomes from the previous season.

In 2021, below average summer rainfall in the eastern part of the agricultural districts limited the opportunity to conserve soil moisture, and patchy and late opening rains limited early crop growth, particularly in the Mallee districts.

Growing season rainfall in 2021 was average to below average across the agricultural districts. Dry conditions in April and May resulted in a high percentage of the crop sown dry with delayed germination. Farmers who waited for adequate rain before sowing did not complete sowing until well into June.

Above average June and July rainfall in most districts bolstered yield prospects, however, dry conditions in August and September again reduced yield potential in most districts. Severe frost in some areas, particularly the Upper South-East (?) significantly reduced grain yields, with only the worst affected areas cut for hay due to low hay prices. Thunderstorms produced strong winds and hail in late October and early November, causing severe crop damage to isolated strips in a number of districts which affected both yield and grain quality.

Cattle and sheep meat prices have increased and wool prices have slowly recovered, with a substantial premium for fine wools. The late break to the season and cold winter slowed pasture growth and most livestock producers continued to feed grain and hay to livestock into late June and July. Dry conditions in August and September limited pasture growth, and the rain in October and November was too late for annual pasture in the medium and lower rainfall districts but benefited perennial pastures.

The continued profitability of some break crops has underpinned an increase in the area sown to these crops in the medium to higher rainfall districts, however, their high cost of production and variable yields resulted in the area sown fluctuating from season to season in lower rainfall districts. Recently we have seen the emergence of the concept of wheat as a break crop to more valuable alternatives. Examples of this are canola on Lower Eyre Peninsula and lentils on Yorke Peninsula. Integral to this evolution has been the adoption of new and/or cheaper technologies such as herbicide tolerant varieties and cheaper fungicides.

The recent run of dry springs has tested the profitability of these 'break crops', particularly in the lower rainfall areas, with an increasing number of farmers reverting back to lower risk cereal crops and pastures.

The lifting of the moratorium on genetically modified organisms in SA will allow producers to grow GM crops, particularly Roundup Ready® canola. The economics of this will vary, however, it will provide another weed management tool for growers.

In farm business management, the focus is on getting the most from existing land and assets. The partners in this publication have important roles to play in this process. For example, SAGIT provides local solutions to local problems, investing more than \$2 million each year in supporting SA-centric grains research.

SAGIT, PIRSA, Livestock SA and the GRDC hope this guide acts as a valuable aid in your decision making for the coming season and beyond.



Max Young

Chair

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and Regions



IMPORTANT NOTE: An editable Excel version of this guide has been produced which allows easy adjustments of these Gross Margins to individual circumstances. Please visit the SAGIT, GRDC or PIRSA websites to download the Excel version.



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Introduction

"The key task of farm management is making choices between alternatives. Farm management analysis is about analysing those choices (and) encompasses considering alternative actions under risky and uncertain circumstances."

MALCOLM, B., MAKEHAM, J. AND WRIGHT, V. 2005, 'THE FARMING GAME', CAMBRIDGE UNIVERSITY PRESS.

The choice of enterprises within a farm system remains a complex decision with a range of possible scenarios. There is generally no best bet system - differences in climate, soil type, market access, labour and management all contribute to the need for land managers to negotiate a system which fits their individual needs. A general outcome being sort from the farming system is profit maximisation at an acceptable level of risk.

The gross margin for a farm enterprise is one measure of profitability that is a useful aid to enterprise planning. The calculation of Gross Margins can be the starting point for construction of cash flow budgets and assessment of whole farm profitability. They can also be used to assist in assessing the opportunity to develop new farm enterprises.

What are Gross Margins?

Gross margin profit is the difference between the annual gross income for that enterprise and the variable costs directly associated with the enterprise.

In constructing gross margins, fixed (overhead) costs are ignored, as it is considered that they will be incurred regardless of the level of the enterprise undertaken.

The gross margin of different enterprises should not be compared if they have different overhead costs.

The direct comparison of Gross Margins is most useful when the various alternatives fit into the same part of the rotation e.g. the cereal or legume phase. The Gross Margins in this booklet have been grouped on this basis.

The base gross margins included in this book should be adjusted as required for commodity prices, yield, input costs and input items. These items vary considerably between different locations and different farm businesses.

Treatment of machinery - It is assumed that most machinery items (tractors, seeders, sprayers, harvesters etc.) are owned by the farm business. In each gross margin in this guide, the operating costs (fuel and repairs) have been included based on the number of machinery passes specified. *No allowance is included in the gross margin for machinery ownership costs such as depreciation or opportunity cost of capital.* When calculating enterprise profitability, these ownership costs need to be included. An alternative is to include all machinery costs at full contract rates.

- **Compare the relative profitability** of current farm enterprises, paddocks or rotations
- **Estimate changes** in enterprise profit caused by changes in price, cost or yields
- **Pinpoint high cost or low income** areas in the existing farm plan
- **Evaluate the profitability** of a re-organisation of the farm enterprise mix

Limitations of Gross Margins

The gross margins prepared within this publication have been designed to represent 'average case scenarios' within the respective rainfall zones of South Australia. They should be treated strictly as a **base guide only** and adapted by users for their particular situations.

Gross margins are best used to compare enterprises that make use of the same resources on the property. They cannot be used where varying capital input is needed for an enterprise. Cropping and livestock gross margins can only be compared if all capital resources are already on the property.

Estimates of inputs and production can vary from what actually occurs. Although a crop might have the highest gross margin, it might be the most sensitive to variation. Commodity prices, seasonal conditions, pests and disease can significantly affect the eventual gross margin. Risk can be assessed by comparing gross margins calculated with varying values for an input.

Sensitivity analysis tables are included in the guide to help determine the impact on the gross margin of significant changes in yield and price. These tables assume input costs remain the same, however generally these will vary with changes in yield.

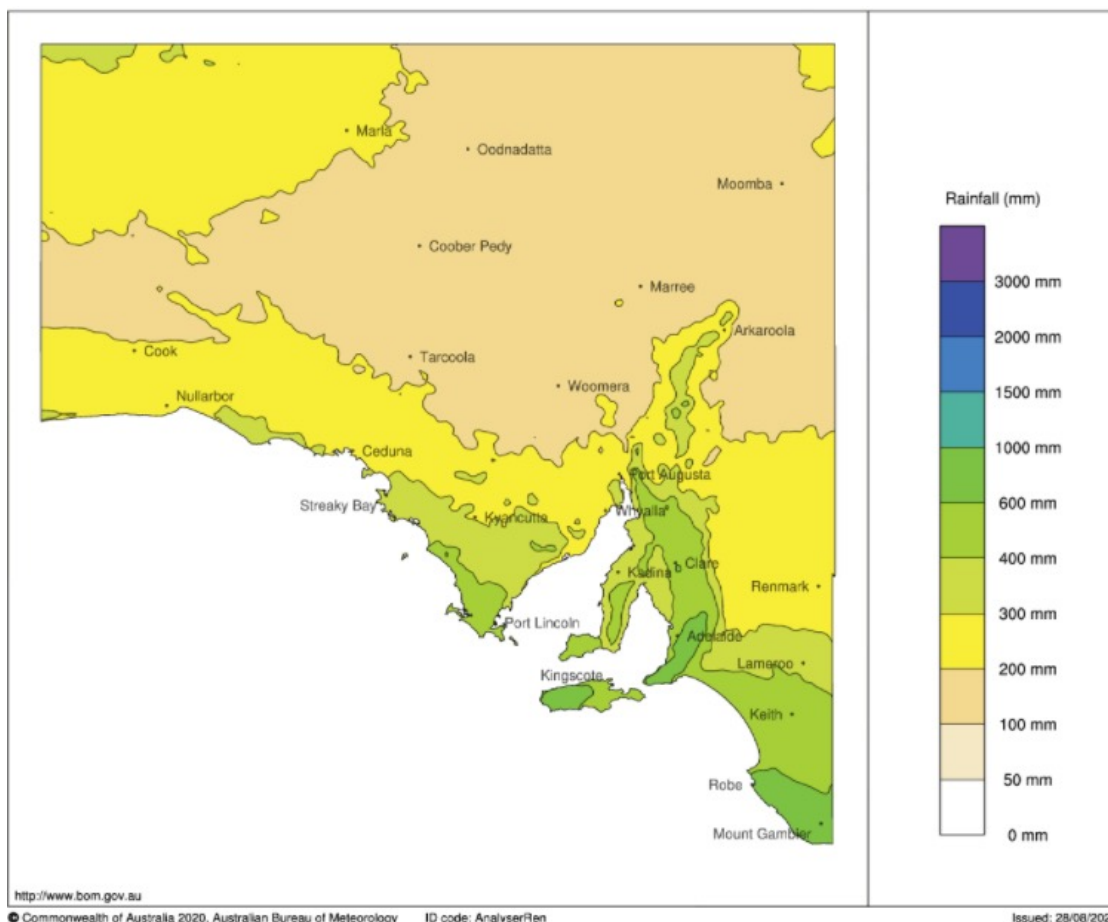
Agronomic information including chemical rates are provided as a guide only and exact agronomic recommendations will vary with location, soil type and a number of other factors.

Gross margins have been broadly delineated into production zones based on rainfall. Average annual rainfall zones have been classified as 'Low Rainfall' (<350 mm), 'Medium Rainfall' (350–400mm) and 'High Rainfall' (>400mm).

KEY POINT
Make your own adjustments to the gross margins in this book using the Excel editable version

Average annual rainfall

30 year climatology (1981 to 2010)



Using Gross Margins for Farm Planning

Gross margins are just one component of a whole range of factors which go into enterprise selection for paddocks and zones on a farming property. There are other core characteristics of farming systems which potentially contribute to success over time. These include:

1. Appropriate level of income diversification

Virtually all cropping systems in South Australia involve some level of diversification. The traditional approach has been to include livestock although most farm systems in more favoured cropping locations have reduced or even removed livestock from the system. These areas tend to have a more diversified range of crop options than lower rainfall systems.

2. Adoption of right rotations, along with attention to detail

“Right rotations pay- they don’t cost”. This catch cry from the Right Rotations initiative in the 1980’s continues to be relevant. Appropriate crop sequencing involves decisions around weed, disease and nutrition implications along with other considerations such as herbicide residues, carry-over of water from previous crops etc. There is also no substitute for good agronomy and/or livestock husbandry.

3. Understanding and acknowledging comparative advantage

This applies both to the business location and the technical and personal characteristics of business managers. Some crops are just not suitable to be grown in certain areas, and some people just should not run livestock! Understanding and working with variations in land capability across farms is important.

4. Meeting market requirements

Our mixed farming systems in SA have traditionally produced grain and livestock products which generally have had good demand and acceptance on world markets. The caveat here is that even though market acceptance is good, difficulties can arise when supply and demand get out of balance resulting in poor prices which test farm business profitability.

Gross Margins on their own do not make the decision on enterprise selection across the property. Each activity undertaken on a farming property will have an impact on other activities:

- Some may be complimentary such as cropping enterprises which provide a feed base to livestock through crop residues
- Crops planted in one year will have a rotational effect on subsequent crops (both positive (eg cereals on legumes) and negative (eg canola on canola))

For more information on the use of gross margin analysis, refer to the following GRDC publications:

Farm Financial Tool- Crop Gross Margin Budget

www.grdc.com.au/GRDC-FS-FFT-CropGrossMarginBudget

Farm Financial Tool- Livestock Gross Margin Budget

www.grdc.com.au/GRDC-FS-FFT-LivestockGrossMarginBudget

Calculating Your Own Gross Margins

The gross margins in this guide are designed to provide a template only, for users to adapt to their own situation, and should not be relied upon as representative of any one particular situation.

The gross margins shown in this publication are designed to represent a fair estimate of returns available from cropping and livestock enterprises across the cropping regions of South Australia using good management practices. However, clearly, expected outputs along with inputs (eg rates and types of fertiliser and weed control treatments) will vary depending on individual circumstances.

An Excel based editable version of the gross margins shown in this guide is available for download from the following websites:

www.pir.sa.gov.au/consultancy/farm_gross_margins_and_enterprise_planning_guide

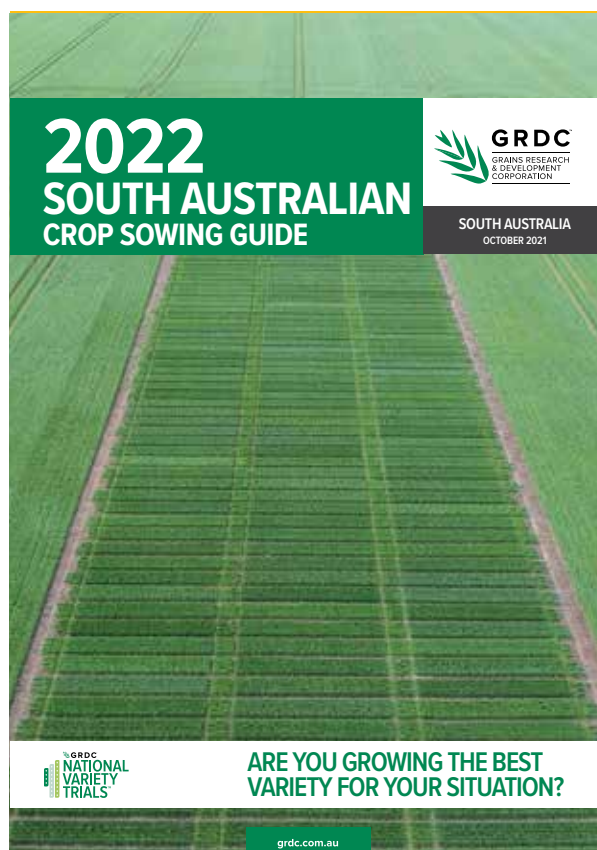
www.sagit.com.au/publications/

Using the Excel version allows for easy adjustments of the pre-loaded information. Remember that these calculations are not meant to be an exact science - **roughly right is better than precisely wrong!** Use your own estimates when the values vary significantly from those included in the example.

Calculating the break-even yield needed to cover variable costs will give some indication of the riskiness or exposure of the particular enterprise. Remember, of course, that there are many other costs (in addition to the variable costs) which need to be covered before a profit is made. Such costs include overhead costs, depreciation, interest and labour and management. Reference to the sensitivity tables will provide further information on how the returns from the enterprise are expected to respond to a range of prices and yields.

2022 South Australian Crop Variety Sowing Guide

This guide, compiled by officers from SARDI and sponsored by SAGIT, PIRSA and GRDC provides information on appropriate varietal selection to maximise production and profitability from broadacre cropping and should be read in conjunction with this Farm Gross Margin Guide.



Strategies for Maximising Returns from Individual Enterprises

This Gross Margins Guide aims to cover all broadacre cropping and grazing areas in South Australia. Circumstances obviously vary significantly across different regions. However, there are some rules of thumb and other resources which can provide guidance on decision making to aid in maximising returns from individual enterprises.

A national benchmarking study found that the superior profitability achieved by the Top 20% of producers is a function of four primary profit drivers:

1. gross margin optimisation,
2. developing a low cost business model,
3. people and management and
4. risk management

It is the interaction of these that results in very different profit outcomes and if one of these is overlooked it will compromise long term profit potential at some point.

Key cropping enterprise profit drivers

1. Operational timeliness
 - Across the full calendar year for all operations
 - This will leverages 10% to 15% more yield
2. Agronomy
 - Robust crop rotation and crop management
 - A disciplined approach to variable costs (less than 40% of turnover)
3. Machinery utilisation
 - 0.7 : 1 Machinery Investment : Income ratio or lower
4. Labour utilisation
 - Greater than \$600,000 turnover per full time equivalent (FTE)

Storage of Out of Season Soil Water

Provides the opportunity to significantly improve Water Use Efficiency and hence crop performance. The key to effective storage of soil moisture over the summer period is to get the soil water deep in the soil profile, below the zone subject to evaporation and then retain soil moisture through to seeding by control of summer weeds. Below average spring and/or summer rainfall will limit the opportunity to store soil moisture.

Lighter Mallee type soils

- Rainfall events above 40mm in December/January should result in some stored moisture with summer weed control
- Less than 40mm rainfall events may still warrant summer weed control for ease of seeding operations and nutrient retention (mainly N)
- There is a strong case to apply zero tolerance summer weed control policy on light soils with no sub-soil limitations

Heavier soils

- May require larger rainfall events (up to 100mm) in December/January to store soil moisture if soils are already very dry
- Smaller rainfall events from February onwards will warrant control of germinated weeds
- Control of summer weeds earlier than February may also be dependent on other considerations e.g. improved ease of sowing, low cost of control, nutrient retention

Maximising Time of Sowing Benefits

Early seeding generally provides the most reliable yield outcome, particularly in low rainfall situations. However, frost prone areas have special considerations which need to be taken into account.

Sowing Opportunity with Early Break

Frost Risk	Start Sowing
Low	After mid April
Medium	After 25th April
High	After early May

- Sow at the optimum time, even in high frost risk areas. Use appropriate varieties to manage flowering time
- The yield loss from moisture and temperature stress during spring will usually be far greater than the damage caused by frost
- The most severe and damaging frosts are those associated with dry conditions in mid to late spring (black frosts), which can be devastating even to crops that have completed flowering

Ensuring Efficient Fertiliser Practices

For more information on Better Fertiliser Decisions refer to the following GRDC factsheet, www.grdc.com.au/GRDC-FS-BFDCN

Aim to maintain soil nutrient status at appropriate levels to maximise sustainable and profitable production.

Phosphorous Replacement Levels

Crop	Removal	Removal plus losses #
Cereal grain	3 kg/t	4 kg/t
Pulses	4 kg/t	5 kg/t
Canola	7 kg/t	8 kg/t
Cereal hay	2 kg/t	2.5 kg/t

higher rates may be required on calcareous / ironstone soils or those with moderate to low available P.

Reduce P application on soils with sub soil constrains when:

- Moderate to low stored soil moisture
- And crop sown more than 3 weeks after the optimum sowing date.

N Fertiliser

Wide range of soil types, rotational histories and climatic conditions means that Nitrogen requirements of crops will vary considerably. Assess opening N supply (e.g. by using deep soil sampling) and then monitor yield and N requirements through models such as [Yield Prophet®](#) or the CSIRO developed [Yield and N Calculator](#).

Refer www.yieldprophet.com.au

Micronutrients and trace elements

Micronutrient deficiencies can be tricky to diagnose and treat. By knowing your soil type, considering crop requirements and the season, and supporting this knowledge with diagnostic tools and strategies, effective management is possible.

Refer www.grdc.com.au/GRDC-FS-CropNutrition-Micronutrients

PestFacts

PestFacts is a FREE electronic newsletter service, produced by SARDI, designed to keep growers and advisers informed about invertebrate pest-related issues and solutions as they emerge during the growing season. PestFacts issues warnings (or reminders) for a range of invertebrate pests of all broad-acre crops including pulses, oilseeds, cereals and fodder crops.

Refer http://www.pir.sa.gov.au/research/services/reports_and_newsletters/pestfacts_newsletter

Livestock

The following indicators are useful to measure the productivity and efficiency of your livestock enterprises over time or against similar businesses.

Key Livestock profit drivers

1. Sheep productivity benchmarks
 - > 7kg clean wool/ha/100mm rainfall = strong
 - kg lamb dwt/ha/100mm rainfall
 - Low < 15kg
 - Average 15 to 20 kg
 - High > 20 kg
2. Cost of production
 - \$ per kg clean wool
 - \$ per kg lamb dwt
 - \$ per kg beef dwt
3. Stocking rate
 - In areas with more than 350mm rainfall the use of improved pasture species and fertilisation
 - > 1.5 DSE's/ha/100mm rainfall = strong for wool
 - > 2 DSE's/ha/100mm rainfall = strong for prime lambs
4. Fertility and lamb/calf survival (weaning percentage)
5. Labour productivity (DSE/labour unit)

Extensive Grazing Systems

With the current high returns for livestock, it is important to focus more on production per head and not so much on Cost of Production.

Increase production through:

- genetic improvement
- good nutrition, particularly in late pregnancy and lactation
- good animal health practices and
- retaining the most productive animals in poor seasons



Family and Business Mentors

South Australian farmers, their families and businesses impacted by adverse events such as bushfire and drought, can access help through the Family and Business Support Program.

Family and Business (FaB) Mentors

FaB Mentors are experienced individuals that will listen and help you find ways to manage your situation. Mentors liaise with government and non-government service providers and can help provide connections to services including:

- funding and support measures available to primary producers
- financial counselling
- local health networks
- emotional wellbeing and counselling services
- government and non-government assistance
- community organisations and assistance.

Talking to a FaB Mentor is free and confidential. They provide an informal, independent and understanding platform for farmers, their families or businesses affected by drought, bushfire or other adverse events.

If you or someone you know needs help, connect with a FaB Mentor for a free, confidential chat.

Contact the team

Adelaide Hills

- Colleen White: 0409 388 649

Kangaroo Island

- Ros Willson: 0427 531 200
- Tracie Heinrich: 0427 596 107
- Albert Singh: 0400 443 108

Eyre Peninsula

- Steve Whillas: 0458 852 268

Murray Mallee and Riverland

- Robyn Cain: 0411 633 085
- John Chase: 0419 848 672
- Brent Fletcher: 0439 409 430

Northern Agricultural Areas

- Anthony North: 0409 398 435
- Emma Scharkie: 0407 600 038
- Judy Wilkinson: 0401 122 049
- John White (also Pastoral) : 0447 787 436

Pastoral

- Anne Collins: 0427 486 115

This program is funded by the South Australian Government, and coordinated by Department of Primary Industries and Regions.

PIRSA Recovery Hotline: 1800 931 314
pir.sa.gov.au/fabs



Government of South Australia
Department of Primary Industries
and Regions

2022 Gross Margin Estimates

The tables below summarise the anticipated gross margins for all crops and livestock for 2022.

CROPPING			
Commodity \$/ha	Low	Medium	High
APW Wheat	330	516	746
Durum	376	818	1,331
Malt Barley	140	297	473
Feed Barley	107	241	389
Milling Oats	99	285	406
Triticale	43	158	278
Oaten Hay	333	584	623
Grain Vetch	137	389	643
Lupins	66	216	378
Lentils	273	723	1,165
Lentils- Imi Tolerant	199	589	966
Field Peas	114	346	567
Faba Beans	86	376	898
Chickpeas (Kabuli)	171	387	661
Canola- Conv	105	384	714
Canola-TT	17	241	586
Canola-Clear	57	294	625
Canola- Roundup Ready	114	294	595
Sown Pasture	96	253	508
Self Regen Pasture	161	314	567
Lucerne Pasture		165	519
Phalaris sub clover Pasture			551

LIVESTOCK			
Enterprise \$/dse	Pastoral Zone	Cereal Zone	High R/F Zone
Prime Lambs	78	86	86
Merino breeders	48	65	75
Merino wethers	13	25	34
Cleanskin	64	82	
Beef Cattle	48	56	59
Beef Trading			8
Beef Feed Lot \$/hd		81	

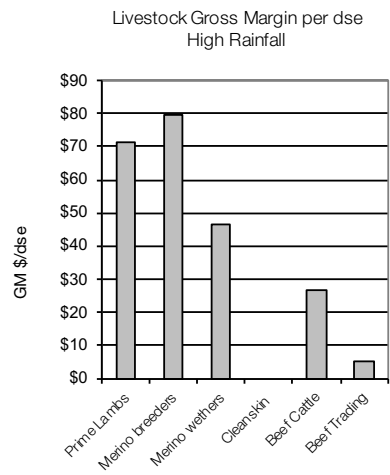
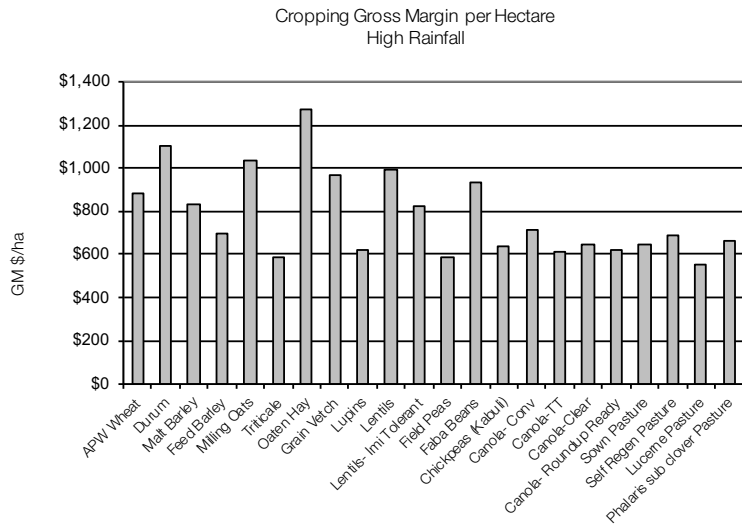
Commodity Prices Historical Data

Historical commodity price data and trends can be used as a guide in assessing average returns over time and also the variability of those returns for any given commodity.

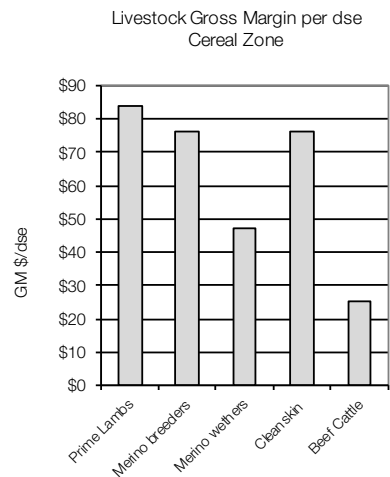
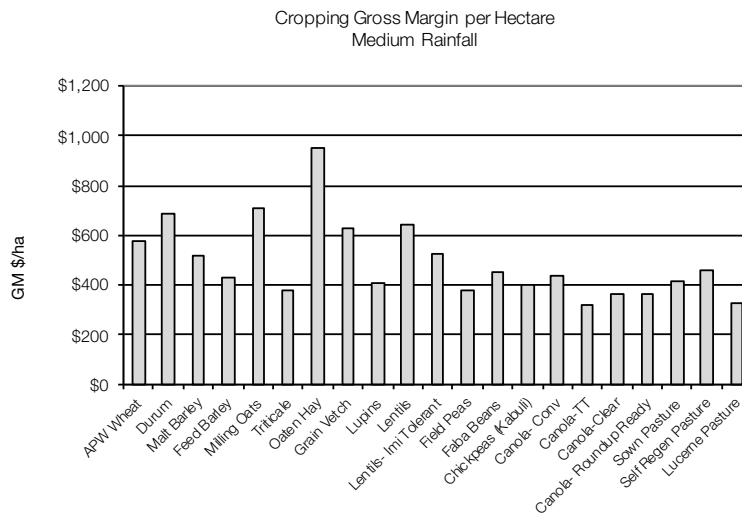
NOTE: 22/23 Forecast Grain Prices: Forecast grain prices for 22/23 are affected by the value of the Australian Dollar, world consumption, and Australian and other major grain exporting countries production. Future pricing is uncertain and caution is needed with projections.

Commodity pricing in the following table is on delivered end-user basis e.g. Grain is delivered port basis (Adelaide/Port Lincoln).

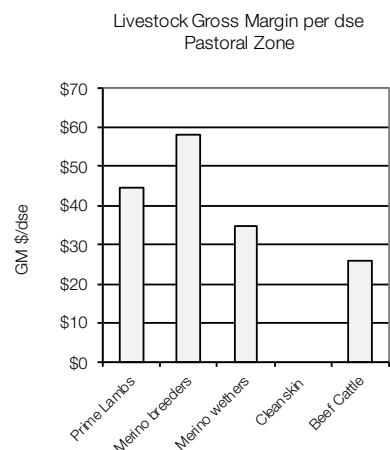
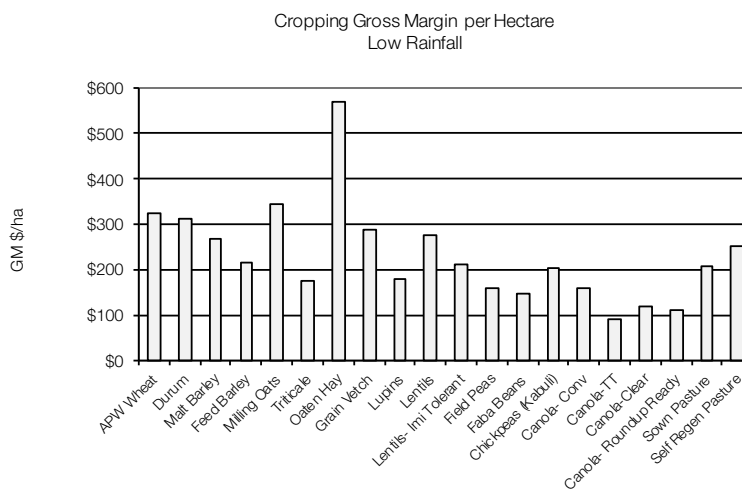
Commodity	Jan 2018	Jan 2019	Jan 2020	Jan 2021	Jan 2022	5 yr Average	2022 Estimate
APW Wheat (\$/t)	240	390	330	280	410	330	350
Durum (\$/t)	310	397	450	375	610	428	550
Malt Barley (\$/t)	288	360	285	230	326	298	280
Feed Barley (\$/t)	225	330	265	225	310	271	260
Milling Oats (\$/t)	200	600	500	250	300	370	275
Feed Oats (\$/t)	180	500	400	215	280	315	240
Triticale (\$/t)	220	315	270	215	300	264	250
Grain Vetch (\$/t)	350	700	700	500	700	590	500
Lupins (\$/t)	270	550	450	300	410	396	350
Lentils (\$/t)	420	600	600	630	1000	650	700
Field Peas (\$/t)	285	640	470	360	500	451	450
Faba Beans (\$/t)	315	900	590	345	550	540	550
Chickpeas 6-8mm Kabuli (\$/t)	900	730	590	560	850	726	800
Canola (\$/t)	480	550	600	580	900	622	750
Oaten Hay (\$/t)	170	340	250	210	220	238	265



Comparative returns between farm enterprises – High Rainfall



Comparative returns between farm enterprises – Medium Rainfall



Comparative returns between farm enterprises – Low Rainfall

APW Wheat

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM			HIGH		
Price (20/21 Forecast)				\$350		\$350		\$350		
Quality APW (Change Price for other grades)										
Yield (t/ha)				1.8		3.2		4.8		
GROSS INCOME				\$630		\$1,120		\$1,680		
VARIABLE COSTS										
Cost				Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	\$/ha	
Seed										
Seed	\$0.41	/kg	@	60	\$24.60	80	\$32.80	100	\$41.00	
Seed Treatment(1)	\$0.05	/kg	@	60	\$2.76	80	\$3.68	100	\$4.60	
Seed Treatment(2)	\$10.48	/100 kg	@	60	\$6.29	80	\$8.38	100	\$10.48	
Levies										
GRDC Levies	1.0%	Gross Income			\$6.30		\$11.20		\$16.80	
EPR & state levies	\$3.50	/tonne sold			\$6.30		\$11.20		\$16.80	
Fertiliser (Bulk)										
18:20:0	\$1,300	/tonne	@	45	\$58.50	70	\$91.00	100	\$130.00	
Flutriafol (on fert)	\$45.00	/litre	@	0.2	\$9.00	0.2	\$9.00	0.2	\$9.00	
Urea	\$1,500	/tonne	@		\$0.00	100	\$150.00	200	\$300.00	
Chemicals-Herbicides										
Summer Weed Control		Various	Allow		\$40.00		\$40.00		\$40.00	
<i>Pre-emergents</i>										
Trifluralin 480g/L	\$8.00	/litre	@	1.5	\$12.00		\$0.00		\$0.00	
Tri-allate 500g/L	\$12.80	/litre	@	1.6	\$20.48		\$0.00	2	\$25.60	
Glyphosate 540	\$15.00	/litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00	
Carfentrazone 400g/L	\$149.50	/litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99	
Sakura	\$357.12	/kg	@		\$0.00	0.118	\$42.14	0.118	\$42.14	
<i>Post-emergents</i>										
Topik (3)	\$34.00	/litre	@			0.085	\$6.55	0.085	\$6.55	
M.C.P.A. LVE	\$15.30	/litre	@	0.5	\$7.65	0.5	\$7.65	0.5	\$7.65	
Metsulfuron methyl(4)	\$0.07	/gm	@	5	\$0.42		\$0.00		\$0.00	
Clopyralid 300g/L	\$42.00	/litre	@	0.075	\$3.15	0	\$0.00	0	\$0.00	
Paradigm® (3)	\$0.52	/gm	@			25	\$16.66	25	\$16.66	
<i>Fungicides</i>										
Epoxiconazole 125g/L	\$30.00	/litre	@			0.5	\$15.00	0.5	\$15.00	
Amistar Xtra	\$36.23	/litre	@			0	\$0.00	0.4	\$14.49	
Operations										
Fuel & Oil					\$12.48		\$14.98		\$17.47	
Repairs & Maintenance					\$16.91		\$20.29		\$23.68	
Freight										
Grain (t)	\$25.00	/tonne	@	1.8	\$45.00	3.2	\$80.00	4.8	\$120.00	
Fertiliser (t)	\$25.00	/tonne	@	0.05	\$1.13	0.17	\$4.25	0.30	\$7.50	
Contract Work										
Aerial spraying	\$15.00	/ha	@		\$0.00		\$0.00	1	\$15.00	
Urea spreading	\$8.50	/ha	@		\$0.00	1	\$8.50	2	\$17.00	
Insurance	\$9.00	/ \$1000	@		\$5.67		\$10.08		\$15.1	
Other	\$0.00	/ha								
	\$0.00	/ha								
TOTAL VARIABLE COSTS					\$300		\$604		\$934	
GROSS MARGIN/hectare					\$330		\$516		\$746	
Break Even Price (to cover variable costs only)					\$166		\$189		\$194	
Break Even Yield (to cover variable costs only)					0.86		1.73		2.67	
Gross Margin based on last 5 year average price					\$294		\$452		\$650	

COMMENTS

- (1) Seed grading plus Smuts and Bunts.
- (2) Aphid Treatment.
- (3) Includes Oil @ 0.5%.
- (4) Includes Surfactant at 0.1% .

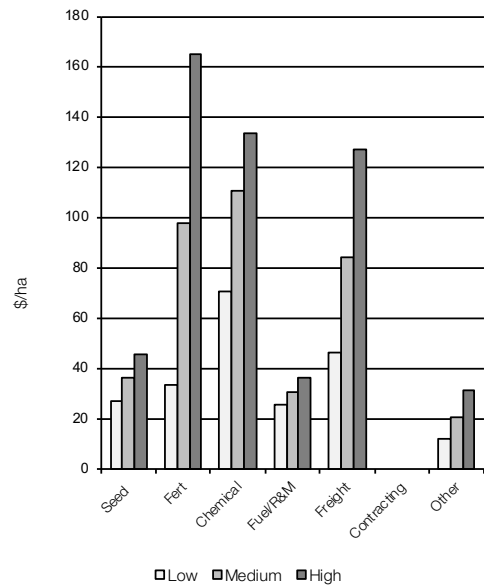
AGRONOMIC NOTES

Nitrogen requirements will vary depending on individual paddocks- seek advice.
If targeting higher protein, additional N inputs will be required.

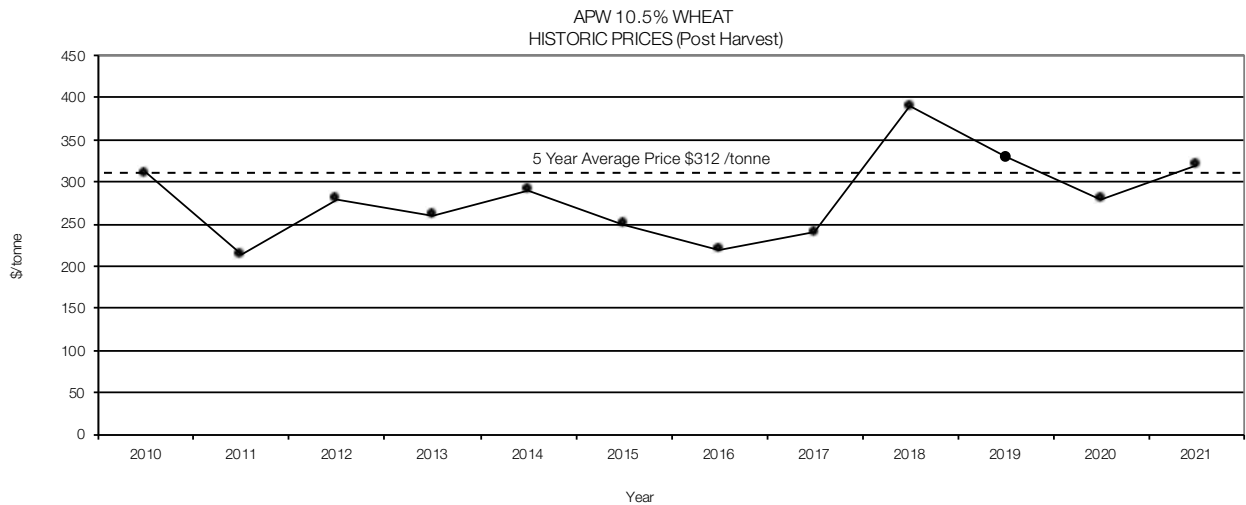
Gross Margin Sensitivity

LOW RAINFALL						
Cash Price \$/t						
		\$250	\$275	\$350	\$325	\$350
Yield t/ha	0.5	-\$128	-\$116	-\$79	-\$91	-\$79
	1.2	\$24	\$53	\$141	\$112	\$141
	1.8	\$154	\$198	\$330	\$286	\$330
	2.5	\$306	\$367	\$551	\$489	\$551
	3.5	\$522	\$608	\$866	\$780	\$866
MEDIUM RAINFALL						
Cash Price \$/t						
		\$250	\$275	\$350	\$325	\$350
Yield t/ha	1	-\$275	-\$251	-\$177	-\$202	-\$177
	2	-\$58	-\$9	\$138	\$89	\$138
	3.2	\$202	\$280	\$516	\$437	\$516
	4	\$375	\$473	\$768	\$669	\$768
	5	\$592	\$715	\$1,082	\$960	\$1,082
HIGH RAINFALL						
Cash Price \$/t						
		\$250	\$275	\$350	\$325	\$350
Yield t/ha	2.5	-\$223	-\$162	\$22	-\$39	\$22
	3.5	-\$6	\$80	\$337	\$251	\$337
	4.8	\$276	\$393	\$746	\$629	\$746
	5.5	\$427	\$562	\$967	\$832	\$967
	6.5	\$644	\$803	\$1,282	\$1,122	\$1,282

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	6	3.80	2.52
harvest#	1	9.67	5.71
TOTAL		16.91	12.48

Rates are for low rainfall zone. Extra cost in higher yielding situations

Durum

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW		MEDIUM		HIGH		
Price (20/21 Forecast)				\$550		\$550		\$550		
Quality	DR 1									
Yield (t/ha)				1.4		2.7		4		
GROSS INCOME				\$770		\$1,485		\$2,200		
VARIABLE COSTS										
	Cost		Rate/ha		Rate/ha		Rate/ha			
			Low		Medium		High			
Seed						\$/ha		\$/ha		
Seed	\$0.61 /kg	@	80	\$48.80	90	\$54.90	110	\$67.10		
Seed Treatment(1)	\$0.17 /kg	@	80	\$13.36	90	\$15.03	110	\$18.37		
Seed Treatment(2)	\$10.48 /100kg	@	80	\$8.38	90	\$9.43	110	\$11.52		
Levies										
GRDC Levies	1.0% Gross Income			\$7.70		\$14.85		\$22.00		
EPR & state levies	\$3.50 /tonne sold			\$4.90		\$9.45		\$14.00		
Fertiliser (Bulk)										
Granulock Z	\$1,400 /tonne	@	45	\$63.00	70	\$98.00	100	\$140.00		
Urea	\$1,500 /tonne	@	50	\$75.00	150	\$225.00	200	\$300.00		
Chemicals-Herbicides										
Summer Weed Control	Various	Allow		\$40.00		\$40.00		\$40.00		
Trifluralin 480g/L	\$8.00 /litre	@	1	\$8.00		\$0.00		\$0.00		
Tri-allate 500g/L	\$12.80 /litre	@	1.6	\$20.48		\$0.00		\$0.00		
Boxer Gold	\$10.60 /litre	@		\$0.00	2.5	\$26.50	2.5	\$26.50		
Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Post-emergents										
MCPA LVE	\$15.30 /litre	@	0.5	\$7.65	0.5	\$7.65	0.5	\$7.65		
Clopyralid 300g/L	\$42.00 /litre	@	0.075	\$3.15		\$0.00		\$0.00		
Paradigm® (3)	\$0.52 /gm	@		\$0.00	25	\$16.66	25	\$16.66		
Metsulfuron methyl(3)	\$0.07 /gm	@	5	\$0.42		\$0.00		\$0.00		
Operations										
Fuel & Oil				\$12.06		\$14.47		\$16.89		
Repairs & Maintenance				\$16.28		\$19.53		\$22.79		
Freight										
Grain (t)	\$25.00 /tonne	@	1.4	\$35.00	2.7	\$67.50	4.0	\$100.00		
Fertiliser (t)	\$25.00 /tonne	@	0.10	\$2.38	0.22	\$5.50	0.30	\$7.50		
Contract Work										
Aerial spraying	\$15.00 /ha	@		\$0.00		\$0.00		\$0.00		
Urea spreading	\$8.50 /ha	@		\$0.00	1	\$8.50	2	\$17.00		
Insurance	\$9.00 /\$1000	@		\$6.93		\$13.37		\$19.80		
Other										
TOTAL VARIABLE COSTS				\$394		\$667		\$869		
GROSS MARGIN/hectare				\$376		\$818		\$1,331		
Break Even Price (to cover variable costs only)				\$282		\$247		\$217		
Break Even Yield (to cover variable costs only)				0.72		1.21		1.58		
Gross Margin based on last 5 year average price				\$236		\$548		\$931		

COMMENTS

Assumes durum follows a legume crop or pasture.
Price assumes Durum 13% is achieved.
(1) Seed grading plus Crown Rot (seedling infestations) and Smuts and Bunts.
(2) Aphid Control.
(3) Includes surfactant and/or oil.

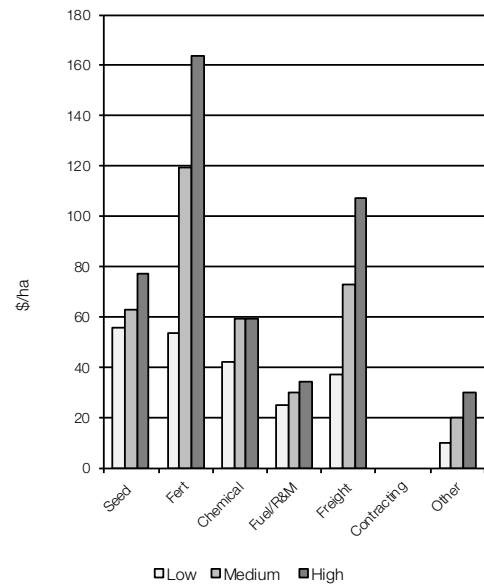
AGRONOMIC NOTES

Some Durum varieties have a narrow safety margin with broadleaf herbicides. Seek advice. The effect is worse when the crop is under stress.

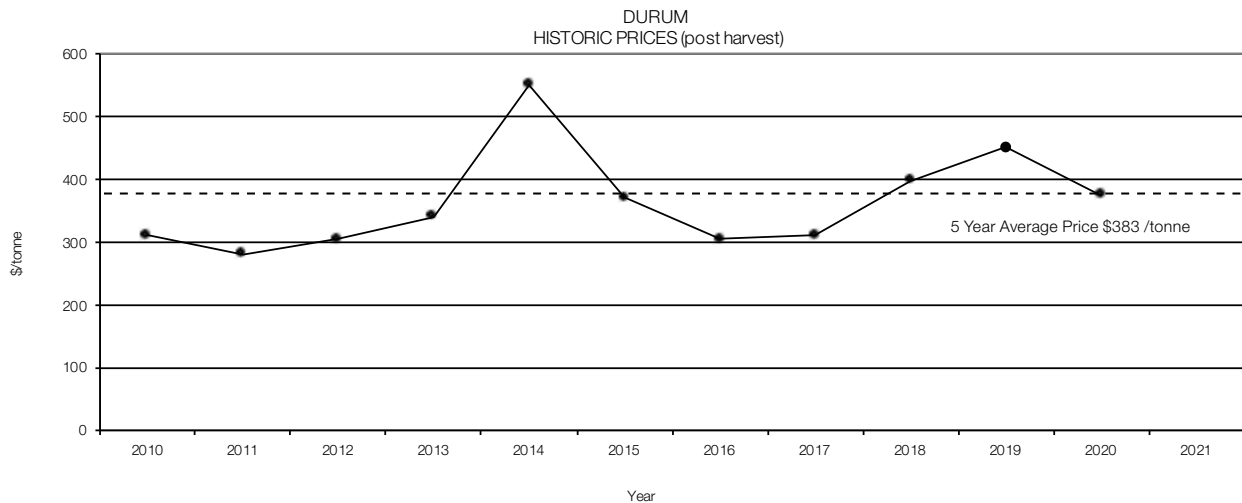
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$550	\$450	\$500
Yield t/ha	0.8	-\$127	-\$88	\$69	-\$10	\$30
	1.4	\$32	\$101	\$376	\$238	\$307
	2	\$192	\$290	\$682	\$486	\$584
	2.8	\$404	\$542	\$1,091	\$816	\$954
MEDIUM RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$550	\$450	\$500
Yield t/ha	1.5	-\$163	-\$90	\$204	\$57	\$131
	2.7	\$155	\$288	\$818	\$553	\$685
	3.5	\$368	\$540	\$1,227	\$883	\$1,055
	4.5	\$634	\$855	\$1,738	\$1,296	\$1,517
HIGH RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$550	\$450	\$500
Yield t/ha	2	-\$181	-\$83	\$309	\$113	\$211
	3	\$84	\$232	\$820	\$526	\$673
	4	\$350	\$546	\$1,331	\$939	\$1,135
	6	\$882	\$1,176	\$2,353	\$1,765	\$2,059

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	5	3.17	2.10
harvest#	1	9.67	5.71
TOTAL		16.28	12.06

Rates are for low rainfall zone. Extra cost in higher yielding situations

Malting Barley

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW		MEDIUM		HIGH		
Price (20/21 Forecast)				\$280		\$280		\$280		
Quality Malt										
Yield (t/ha)				1.8		3.2		4.8		
GROSS INCOME				\$504		\$896		\$1,344		
VARIABLE COSTS										
			Rate/ha		Rate/ha		Rate/ha			
Cost			Low	\$/ha	Medium	\$/ha	High	\$/ha		
Seed										
Seed	\$0.33	/kg	@	60	\$19.56	75	\$24.45	80	\$26.08	
Seed Treatment(1)	\$0.05	/kg	@	60	\$2.76					
Seed Treatment(2)	\$0.36	/kg	@	0	\$0.00	75	\$27.23	80	\$29.05	
Seed Treatment(3)	\$10.48	/100kg	@	60	\$6.29	75	\$7.86	80	\$8.38	
Levies										
GRDC Levies	1.0%	Gross Income			\$5.04		\$8.96		\$13.44	
EPR & state levies	\$4.30	/tonne sold			\$7.74		\$13.76		\$20.64	
Fertiliser (Bulk)										
18:20:0	\$1,300	/tonne	@	45	\$58.50	70	\$91.00	100	\$130.00	
Urea	\$1,500	/tonne	@	50	\$75.00	100	\$150.00	200	\$300.00	
Chemicals-Herbicides										
Summer Weed Control		Various	Allow		\$40.00		\$40.00		\$40.00	
Pre-emergents										
Trifluralin 480g/L	\$8.00	/litre	@	1.5	\$12.00					
Tri-allate 500g/L	\$12.80	/litre	@	1.6	\$20.48					
Glyphosate 540	\$15.00	/litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00	
Carfentrazone 400g/L	\$149.50	/litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99	
Boxer Gold	\$10.60	/litre	@			2.5	\$26.50	2.5	\$26.50	
Post-emergents										
M.C.P.A. LVE	\$15.30	/litre	@	0.5	\$7.65	0.5	\$7.65	0.5	\$7.65	
Metsulfuron methyl(4)	\$0.07	/gm	@	5	\$0.42					
Clopyralid 300g/L	\$42.00	/kg	@	0.04	\$1.68					
Paradigm® (4)	\$0.52	/gm	@			25	\$16.66	25	\$16.66	
Fungicides										
Cogito	\$23.75	/litre	@	0.25	\$5.94		\$0.00	0.25	\$5.94	
Amistar Xtra	\$36.23	/litre	@			0.4	\$14.49	0.4	\$14.49	
Operations										
Fuel & Oil					\$12.06		\$14.47		\$16.89	
Repairs & Maintenance					\$16.28		\$19.53		\$22.79	
Freight										
Grain (t)	\$25.00	/tonne	@	1.8	\$45.00	3.2	\$80.00	4.8	\$120.00	
Fertiliser (t)	\$25.00	/tonne	@	0.10	\$2.38	0.17	\$4.25	0.30	\$7.50	
Contract Work										
Aerial spraying	\$15.00	/ha	@	0	\$0.00	1	\$15.00	1	\$15.00	
Urea Spreading	\$8.50	/ha	@		\$0.00	1	\$8.50	2	\$17.00	
Insurance	\$9.00	/1000	@		\$4.54		\$8.06		\$12.1	
Other										
TOTAL VARIABLE COSTS				\$364		\$599		\$871		
GROSS MARGIN/hectare				\$140		\$297		\$473		
Break Even Price (to cover variable costs only)				\$202		\$187		\$181		
Break Even Yield (to cover variable costs only)				1.30		2.14		3.11		
Gross Margin based on last 5 year average price				\$149		\$313		\$497		

COMMENTS

Assumes barley follows wheat.
Price assumes Malting grade is achieved which is high risk. Achieving feed grade would result in lower Gross Margin.
Having to windrow barley will reduce GM by around 25/ha.
(1) Seed grading plus Smuts and bunts.
(2) Systiva Seed Dressing.
(3) Aphid Control.
(4) Includes surfactant and/or oil.

AGRONOMIC NOTES

Urea may not be required following a legume pasture or grain legume crop.

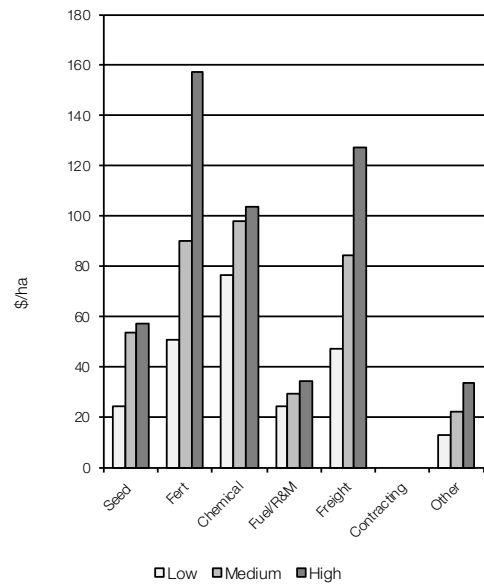
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$170	\$200	\$280	\$270	\$300
Yield t/ha	0.5	-\$233	-\$219	-\$179	-\$184	-\$169
	1.2	-\$137	-\$102	-\$8	-\$19	\$16
	1.8	-\$55	-\$2	\$140	\$122	\$175
	2.5	\$42	\$115	\$311	\$287	\$361
	3.5	\$179	\$282	\$557	\$523	\$626

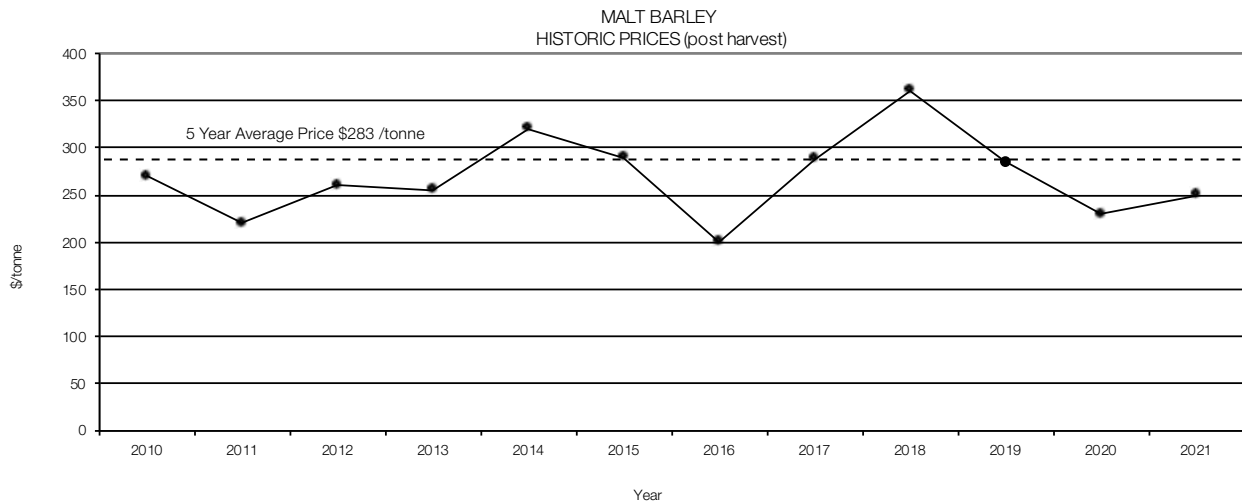
MEDIUM RAINFALL						
		Net Price \$/t				
		\$170	\$200	\$280	\$270	\$300
Yield t/ha	1	-\$351	-\$322	-\$243	-\$253	-\$224
	2	-\$214	-\$155	\$2	-\$17	\$41
	3.2	-\$49	\$45	\$297	\$265	\$359
	4	\$61	\$179	\$493	\$454	\$571
	5	\$199	\$346	\$738	\$689	\$836

HIGH RAINFALL						
		Net Price \$/t				
		\$170	\$200	\$280	\$270	\$300
Yield t/ha	2.5	-\$361	-\$288	-\$91	-\$116	-\$42
	3.5	-\$224	-\$121	\$154	\$120	\$223
	4.8	-\$45	\$96	\$473	\$426	\$567
	5.5	\$51	\$213	\$645	\$591	\$753
	6.5	\$189	\$380	\$890	\$826	\$1,018

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	5	3.17	2.10
harvest#	1	9.67	5.71
TOTAL		16.28	12.06

Rates are for low rainfall zone. Extra cost in higher yielding situations

Feed Barley

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW		MEDIUM		HIGH		
Price (20/21 Forecast)				\$260		\$260		\$260		
Quality	BAR 1									
Yield (t/ha)				1.8		3.2		4.8		
GROSS INCOME				\$468		\$832		\$1,248		
VARIABLE COSTS										
	Cost		Rate/ha		Rate/ha		Rate/ha			
			Low	\$/ha	Medium	\$/ha	High	\$/ha		
Seed										
Seed	\$0.31 /kg	@	60	\$18.60	75	\$23.25	80	\$24.80		
Seed Treatment(1)	\$0.05 /kg	@	60	\$2.76						
Seed Treatment(2)	\$0.36 /kg	@			75	\$27.23	80	\$29.05		
Seed Treatment(3)	\$10.48 /100kg	@	60	\$6.29	75	\$7.86	80	\$8.38		
Levies										
GRDC Levies	1.0% Gross Income			\$4.68		\$8.32		\$12.48		
EPR & state levies	\$2.50 /tonne sold			\$4.50		\$8.00		\$12.00		
Fertiliser (Bulk)										
18:20:0	\$1,300 /tonne	@	45	\$58.50	70	\$91.00	100	\$130.00		
Urea	\$1,500 /tonne	@	50	\$75.00	100	\$150.00	200	\$300.00		
Chemicals-Herbicides										
Summer Weed Control	Various	Allow		\$40.00		\$40.00		\$40.00		
Pre-emergents										
Trifluralin 480g/L	\$8.00 /litre	@	1.5	\$12.00		\$0.00		\$0.00		
Tri-allate 500g/L	\$12.80 /litre	@	1.6	\$20.48						
Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Boxer Gold	\$10.60 /litre	@		\$0.00	2.5	\$26.50	2.5	\$26.50		
Post-emergents										
M.C.P.A. LVE	\$15.30 /litre	@	0.5	\$7.65	0.5	\$7.65	0.5	\$7.65		
Metsulfuron methyl(4)	\$0.07 /gm	@	5	\$0.42						
Clopyralid 300g/L	\$42.00 /kg	@	0.075	\$3.15						
Paradigm® (4)	\$0.52 /gm	@			25	\$16.66	25	\$16.66		
Fungicides										
Cogito	\$23.75 /litre	@	0.25	\$5.94		\$0.00	0.25	\$5.94		
Amistar Xtra	\$36.23 /litre	@			0.4	\$14.49	0.4	\$14.49		
Operations										
Fuel & Oil				\$12.06		\$14.47		\$16.89		
Repairs & Maintenance				\$16.28		\$19.53		\$22.79		
Freight										
Grain (t)	\$25.00 /tonne	@	1.8	\$45.00	3.2	\$80.00	4.8	\$120.00		
Fertiliser (t)	\$25.00 /tonne	@	0.10	\$2.38	0.17	\$4.25	0.30	\$7.50		
Contract Work										
Aerial spraying	\$15.00 /ha	@	0	\$0.00	1	\$15.00	1	\$15.00		
Urea spreading	\$8.50 /ha	@		\$0.00	1	\$8.50	2	\$17.00		
Insurance	\$9.00 /\$1000	@		\$4.21		\$7.49		\$11.2		
Other										
TOTAL VARIABLE COSTS				\$361		\$591		\$859		
GROSS MARGIN/hectare				\$107		\$241		\$389		
Break Even Price (to cover variable costs only)				\$200		\$185		\$179		
Break Even Yield (to cover variable costs only)				1.39		2.27		3.31		
Gross Margin based on last 5 year average price				\$116		\$257		\$413		

COMMENTS

Assumes barley follows wheat.
 Having to windrow barley will reduce GM by around \$25/ha.
 (1) Seed cleaning plus Smuts and bunts.
 (2) Systiva Seed Dressing.
 (3) Aphid Control.
 (4) Includes surfactant and/or oil.

AGRONOMIC NOTES

Urea may not be required following a legume pasture or grain legume crop.

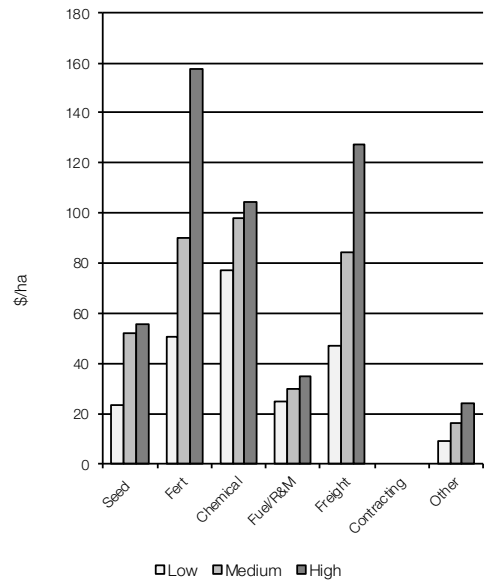
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$150	\$200	\$260	\$300	\$350
Yield t/ha	0.5	-\$243	-\$218	-\$189	-\$169	-\$145
	1.2	-\$159	-\$100	-\$29	\$18	\$77
	1.8	-\$87	\$1	\$107	\$178	\$266
	2.5	-\$3	\$119	\$266	\$365	\$487
	3.5	\$116	\$288	\$494	\$631	\$803

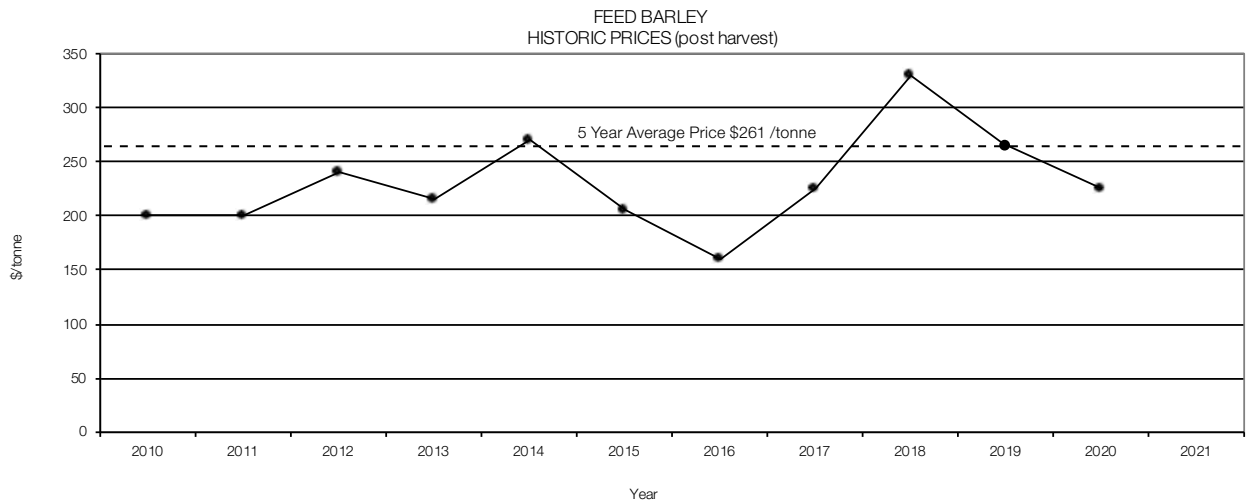
MEDIUM RAINFALL						
		Net Price \$/t				
		\$150	\$200	\$260	\$300	\$350
Yield t/ha	1	-\$368	-\$319	-\$260	-\$221	-\$172
	2	-\$248	-\$150	-\$32	\$46	\$144
	3.2	-\$105	\$52	\$241	\$366	\$523
	4	-\$9	\$187	\$423	\$580	\$776
	5	\$111	\$356	\$650	\$847	\$1,092

HIGH RAINFALL						
		Net Price \$/t				
		\$150	\$200	\$260	\$300	\$350
Yield t/ha	2.5	-\$405	-\$282	-\$135	-\$37	\$86
	3.5	-\$285	-\$113	\$93	\$230	\$402
	4.8	-\$129	\$106	\$389	\$577	\$812
	5.5	-\$46	\$224	\$548	\$764	\$1,034
	6.5	\$74	\$393	\$776	\$1,031	\$1,349

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	5	3.17	2.10
harvest#	1	9.67	5.71
TOTAL		16.28	12.06

Rates are for low rainfall zone. Extra cost in higher yielding situations

Milling Oats

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM			HIGH		
Price (20/21 Forecast)				\$275		\$275		\$275		
Quality	Milling									
Yield (t/ha)				1.5		2.8		4		
GROSS INCOME				\$413		\$770		\$1,100		
VARIABLE COSTS										
Cost			Rate/ha		Rate/ha		Rate/ha			
			Low	\$/ha	Medium	\$/ha	High	\$/ha		
Seed										
Seed	\$0.30 /kg	@	50	\$15.00	65	\$19.50	80	\$24.00		
Seed Treatment (1)	\$0.05 /kg	@	50	\$2.30	65	\$2.99	80	\$3.68		
Seed Treatment (2)	\$10.48 /100kg	@			65	\$6.81	80	\$8.38		
Levies										
GRDC Levies	1.0% Gross Income			\$4.13		\$7.70		\$11.00		
EPR & state levies	\$2.50 /tonne sold			\$3.75		\$7.00		\$10.00		
Fertiliser (Bulk)										
18:20:0	\$1,300 /tonne	@	40	\$52.00	60	\$78.00	80	\$104.00		
Urea	\$1,500 /tonne	@	50	\$75.00	100	\$150.00	180	\$270.00		
Chemicals-Herbicides										
Summer Weed Control	Various	Allow		\$40.00		\$40.00		\$40.00		
Pre-emergents										
Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Dual Gold	\$19.00 /litre	@	0.5	\$9.50	0.5	\$9.50	0.5	\$9.50		
Diuron	\$18.75 /kg	@	0.4	\$7.50	0.4	\$7.50	0.4	\$7.50		
Post-emergents										
MCPA Amine	\$14.00 /litre	@	0.5	\$7.00	0.5	\$7.00	0.5	\$7.00		
Fungicides										
Tebuconazole	\$21.40 /litre	@	0.145	\$3.10	0.145	\$3.10	0.145	\$3.10		
Operations										
Fuel & Oil				\$12.48		\$14.98		\$17.47		
Repairs & Maintenance				\$16.91		\$20.29		\$23.68		
Freight										
Grain (t)	\$25.00 /tonne	@	1.5	\$37.50	2.8	\$70.00	4.0	\$100.00		
Fertiliser (t)	\$25.00 /tonne	@	0.09	\$2.25	0.16	\$4.00	0.26	\$6.50		
Contract Work										
Aerial spraying										
Urea spreading	\$8.50 /ha	@		\$0.00	1	\$8.50	2	\$17.00		
Insurance	\$9.00 /\$1000	@		\$3.71		\$6.93		\$9.90		
Other										
TOTAL VARIABLE COSTS				\$313		\$485		\$694		
GROSS MARGIN/hectare				\$99		\$285		\$406		
Break Even Price (to cover variable costs only)				\$209		\$173		\$173		
Break Even Yield (to cover variable costs only)				1.14		1.76		2.52		
Gross Margin based on last 5 year average price				\$437		\$915		\$1,306		

COMMENTS

Assumes oats follows a cereal. If following a legume less N will be required.

(1) Seed cleaning plus Smuts and bunts.

(2) Aphid treatment.

AGRONOMIC NOTES

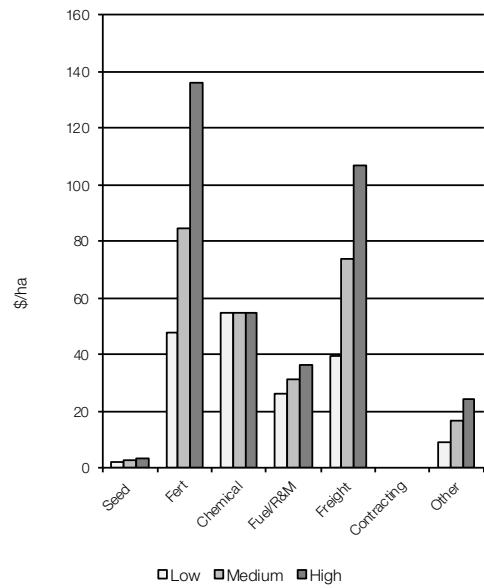
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$150	\$200	\$275	\$300	\$350
Yield t/ha	0.5	-\$204	-\$180	-\$143	-\$131	-\$106
	1.5	-\$85	-\$11	\$99	\$136	\$210
	2.5	\$35	\$158	\$342	\$403	\$526
	3.5	\$155	\$326	\$584	\$670	\$841

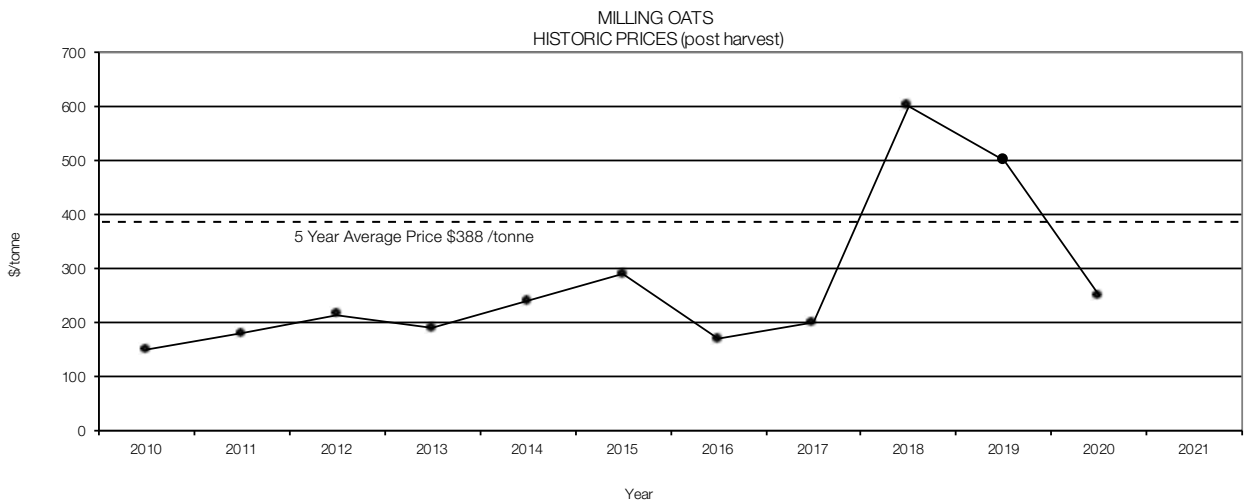
MEDIUM RAINFALL						
		Net Price \$/t				
		\$150	\$200	\$275	\$300	\$350
Yield t/ha	2	-\$154	-\$56	\$91	\$140	\$239
	2.8	-\$58	\$79	\$285	\$354	\$491
	4	\$85	\$282	\$576	\$674	\$870
	5	\$205	\$450	\$818	\$941	\$1,186

HIGH RAINFALL						
		Net Price \$/t				
		\$150	\$200	\$275	\$300	\$350
Yield t/ha	2	-\$324	-\$225	-\$78	-\$29	\$69
	3	-\$204	-\$57	\$164	\$238	\$385
	4	-\$84	\$112	\$406	\$504	\$701
	5	\$35	\$281	\$649	\$771	\$1,016

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery
 (Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	6	3.80	2.52
harvest#	1	9.67	5.71
TOTAL		16.91	12.48

Rates are for low rainfall zone. Extra cost in higher yielding situations

Triticale

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM			HIGH		
Price (20/21 Forecast)				\$250		\$250		\$250		
Quality										
Yield (t/ha)				1.4		2.6		3.7		
GROSS INCOME				\$350		\$650		\$925		
VARIABLE COSTS										
Cost			Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	\$/ha		
Seed										
Seed	\$0.30	/kg @	60	\$18.00	80	\$24.00	85	\$25.50		
Seed Treatment	\$0.05	/kg @	60	\$2.76	80	\$3.68	85	\$3.91		
Levies										
GRDC Levies	1.0%	Gross Income		\$3.50		\$6.50		\$9.25		
EPR & state levies	\$3.00	/tonne sold		\$4.20		\$7.80		\$11.10		
Fertiliser (Bulk)										
18:20:0	\$1,300	/tonne @	40	\$52.00	60	\$78.00	80	\$104.00		
Urea	\$1,500	/tonne @	50	\$75.00	100	\$150.00	150	\$225.00		
Chemicals-Herbicides										
Summer Weed Control					\$40.00		\$40.00		\$40.00	
<i>Pre-emergents</i>										
Trifluralin 480g/L	\$8.00	/litre @	1.5	\$12.00	1.5	\$12.00	1.5	\$12.00		
Glyphosate 540	\$15.00	/litre @	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50	/litre @	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Tri-allate 500g/L	\$12.80	/litre @		\$0.00	1.6	\$20.48	1.6	\$20.48		
<i>Post-emergents</i>										
MCPA LVE	\$15.30	/litre @	0		0.5	\$7.65	0.5	\$7.65		
MCPA amine	\$14.00	/litre @	0.5	\$7.00		\$0.00		\$0.00		
Metsulfuron methyl(1)	\$0.07	/gm @	5	\$0.42	5	\$0.42	5	\$0.42		
Clopyralid 300g/L	\$42.00	/litre @	0.04	\$1.68	0.04	\$1.68	0.04	\$1.68		
<i>Fungicides</i>										
Operations										
Fuel & Oil					\$12.48		\$14.98		\$17.47	
Repairs & Maintenance					\$16.91		\$20.29		\$23.68	
Freight										
Grain (t)	\$25.00	/tonne @	1.4	\$35.00	2.6	\$65.00	3.7	\$92.50		
Fertiliser (t)	\$25.00	/tonne @	0.09	\$2.25	0.16	\$4.00	0.23	\$5.75		
Contract Work										
Aerial spraying										
Urea spreading	\$8.50	/ha @		\$0.00	1	\$8.50	2	\$17.00		
Insurance	\$9.00	/ \$1000 @		\$3.15		\$5.85		\$8.33		
Other										
TOTAL VARIABLE COSTS				\$307		\$492		\$647		
GROSS MARGIN/hectare				\$43		\$158		\$278		
Break Even Price (to cover variable costs only)				\$220		\$189		\$175		
Break Even Yield (to cover variable costs only)				1.23		1.97		2.59		
Gross Margin based on last 5 year average price				\$71		\$210		\$352		

COMMENTS

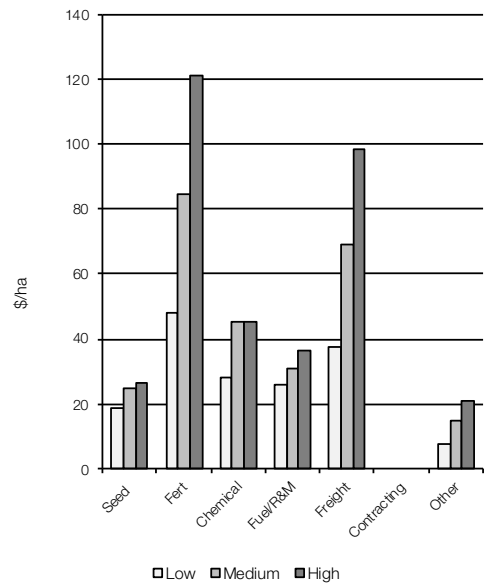
This rate of fertiliser assumes triticale follows a cereal.
(1) Surfactant at 0.1% .

AGRONOMIC NOTES

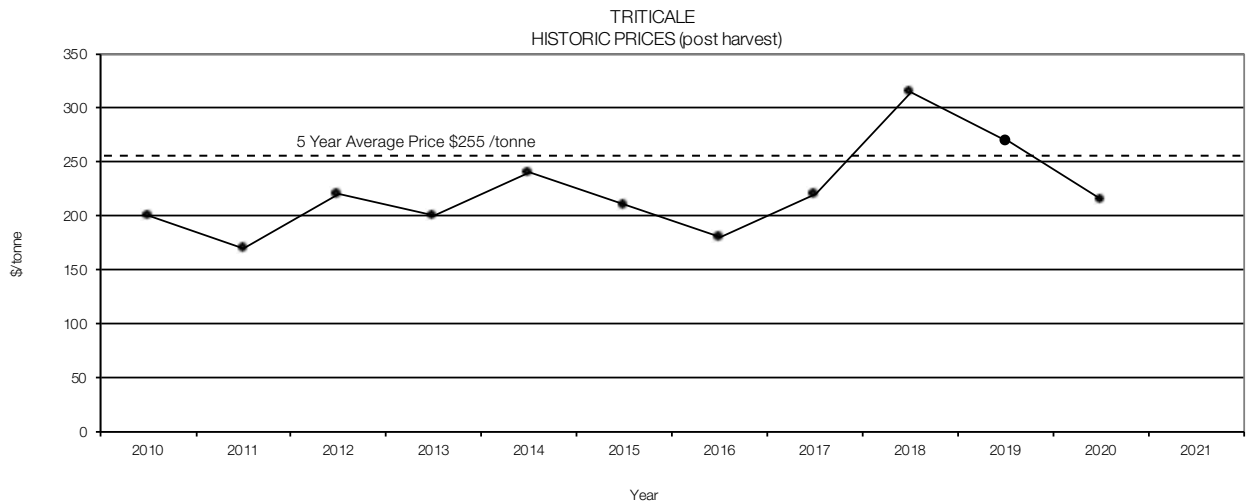
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$180	\$220	\$250	\$300	\$340
Yield t/ha	0.5	-\$187	-\$168	-\$153	-\$128	-\$109
	1	-\$113	-\$74	-\$44	\$5	\$44
	1.4	-\$53	\$1	\$43	\$111	\$166
	2	\$36	\$114	\$173	\$271	\$350
	3	\$184	\$302	\$390	\$537	\$655
MEDIUM RAINFALL						
		Net Price \$/t				
		\$180	\$220	\$250	\$300	\$340
Yield t/ha	1	-\$258	-\$219	-\$189	-\$140	-\$101
	1.6	-\$169	-\$106	-\$59	\$19	\$82
	2.6	-\$20	\$82	\$158	\$286	\$388
	3.2	\$69	\$194	\$289	\$445	\$571
	4	\$188	\$345	\$462	\$659	\$815
HIGH RAINFALL						
		Net Price \$/t				
		\$180	\$220	\$250	\$300	\$340
Yield t/ha	1.5	-\$303	-\$244	-\$200	-\$126	-\$67
	2.5	-\$154	-\$56	\$18	\$140	\$238
	3.7	\$24	\$169	\$278	\$460	\$605
	4.5	\$143	\$320	\$452	\$673	\$849
	5.5	\$292	\$507	\$669	\$939	\$1,155

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	6	3.80	2.52
harvest#	1	9.67	5.71
TOTAL		16.91	12.48

Rates are for low rainfall zone. Extra cost in higher yielding situations

Export Oaten Hay

Gross Margin

INCOME										2022 YOUR ESTIMATE
<i>Rainfall Zone</i>				LOW	MEDIUM			HIGH		
Price (21/22 Forecast) (1)					\$290		\$265		\$230	
Quality Mixed grades										
Yield (t/ha)					3.20		5.50		8	
GROSS INCOME					\$928		\$1,458		\$1,840	
VARIABLE COSTS										
Cost			Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	\$/ha		
Seed										
Levies										
Seed	\$500.00	/tonne	@	90	\$45.00	110	\$55.00	130	\$65.00	
Seed Treatment	\$0.00	/tonne	@			0	\$0.00	0	\$0.00	
Fertiliser (Bulk)										
18:20:0	\$1,300	/tonne	@	60	\$78.00	80	\$104.00	110	\$143.00	
Urea	\$1,500	/tonne	@	30	\$ 45.00	75	\$112.50	150	\$225.00	
Chemicals-Herbicides										
Summer Weed Control Various Allow										
<i>Pre-emergents</i>										
Glyphosate 540	\$15.00	/litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00	
Carfentrazone 400g/L	\$149.50	/litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99	
<i>Post-emergents</i>										
Diuron	\$18.75	/Kg	@	0.4	\$7.50	0.4	\$7.50	0.4	\$7.50	
MCPA Amine	\$14.00	/litre	@	0.5	\$7.00	0.5	\$7.00	0.5	\$7.00	
Pre cutting-Glypho (1)	\$15.00	/litre	@	2	\$30.00	2.5	\$37.50	2.5	\$37.50	
<i>Insecticides</i>										
<i>Fungicides</i>										
Propiconazole 250g/L	\$12.50	/litre	@	0.35	\$4.38	0.35	\$4.38	0.35	\$4.38	
Operations										
Fuel & Oil										
Repairs & Maintenance										
Freight										
Hay	\$30.00	/tonne	@	3.2	\$96.00	5.5	\$165.00	8.0	\$240.00	
Fertiliser (t)	\$25.00	/tonne	@	0.09	\$2.25	0.16	\$3.88	0.26	\$6.50	
Contract Work										
Hay mowing	\$50.00	/ha	@	1.0	\$50.00	1.0	\$50.00	1.0	\$50.00	
Super Conditioner	\$0.00	/ha	@	1.0	\$25.00	1.0	\$30.00	1.0	\$35.00	
Hay baling	\$25.00	/bale	@	3.2	\$110.34	5.5	\$189.66	8.0	\$275.86	
Hay Accumulation	\$3.00	/bale	@	3.2	\$13.24	5.5	\$22.76	8.0	\$33.10	
Insurance	\$2.50	/\$1000	@		\$2.32		\$3.64		\$4.60	
TOTAL VARIABLE COSTS					\$595		\$874		\$1,217	
GROSS MARGIN/hectare					\$333		\$584		\$623	
Break Even Price (to cover variable costs only)					\$186		\$159		\$152	
Break Even Yield (to cover variable costs only)					2.05		3.30		5.29	
Gross Margin based on last 5 year average price					\$205		\$501		\$783	

COMMENTS

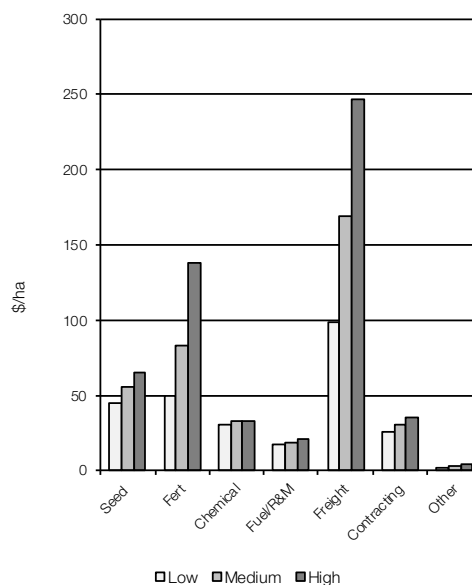
(1) Prices include on-farm shed storage premiums.

AGRONOMIC NOTES

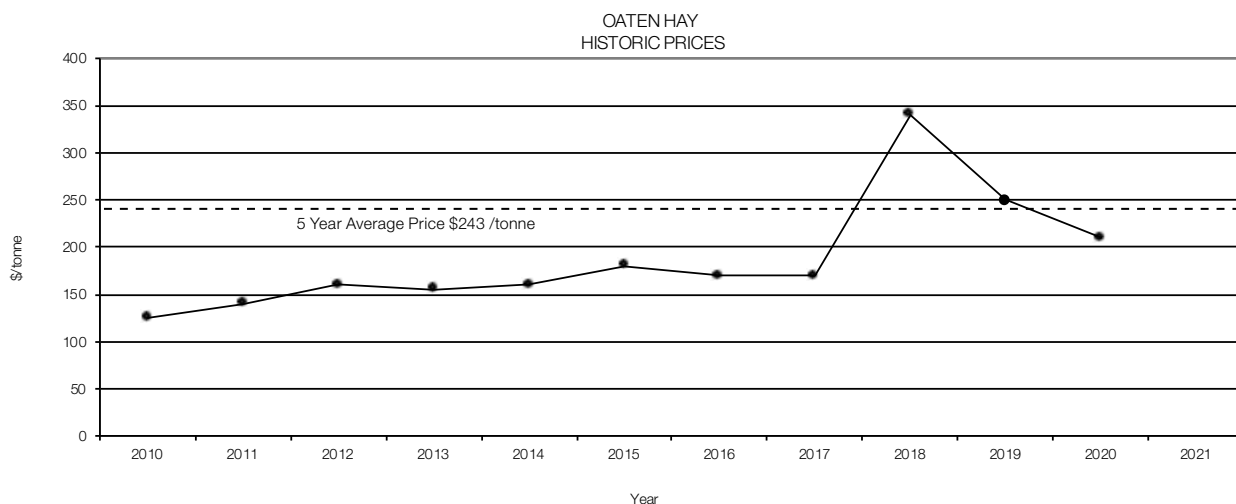
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$250	\$270	\$290	\$310	\$330
Yield t/ha	1.5	-\$102	-\$72	-\$42	-\$12	\$18
	2.5	\$79	\$129	\$178	\$228	\$278
	3.2	\$205	\$269	\$333	\$397	\$461
	4.5	\$440	\$530	\$620	\$709	\$799
MEDIUM RAINFALL						
		Net Price \$/t				
		\$225	\$245	\$265	\$285	\$305
Yield t/ha	2	-\$181	-\$141	-\$101	-\$61	-\$21
	3.5	\$53	\$123	\$192	\$262	\$332
	5.5	\$364	\$474	\$584	\$693	\$803
	7.5	\$676	\$826	\$975	\$1,125	\$1,274
HIGH RAINFALL						
		Net Price \$/t				
		\$190	\$210	\$230	\$260	\$290
Yield t/ha	4	-\$180	-\$100	-\$20	\$99	\$219
	6	\$62	\$182	\$301	\$481	\$660
	8	\$304	\$463	\$623	\$862	\$1,102
	10	\$545	\$745	\$944	\$1,244	\$1,543

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	6	3.80	2.52
roll	1	2.22	1.89
TOTAL		9.46	8.66

Rates are for low rainfall zone. Extra cost in higher yielding situations

Grain Vetch

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM			HIGH		
Price (20/21 Forecast)				\$500		\$500		\$500		
Quality	Morava vetch									
Yield (t/ha)				0.8		1.5		2.2		
GROSS INCOME				\$400		\$750		\$1,100		
VARIABLE COSTS										
	Cost		Rate/ha		Rate/ha		Rate/ha			
			Low	\$/ha	Medium	\$/ha	High	\$/ha		
Seed										
Seed	\$0.70 /kg	@	30	\$21.00	40	\$28.00	50	\$35.00		
Seed Inoculant	\$0.05 /kg	@	30	\$1.50	40	\$2.00	50	\$2.50		
Levies										
GRDC Levies	1.0%	Gross Income		\$4.00		\$7.50		\$11.00		
Fertiliser (Bulk)										
MAP	\$1,300 /tonne	@	40	\$52.00	60	\$78.00	80	\$104.00		
Chemicals-Herbicides										
Summer Weed Control		Various Allow		\$40.00		\$40.00		\$40.00		
<i>Pre-emergents</i>										
Metribuzin 750 gm/kg	\$43.00 /kg	@	0.2	\$8.60	0.25	\$10.75	0.3	\$12.90		
Trifluralin 480g/L	\$8.00 /litre	@	1.5	\$12.00	2	\$16.00	2	\$16.00		
Tri-allate 500g/L	\$12.80 /litre	@		\$0.00	1.6	\$20.48	1.6	\$20.48		
Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
<i>Post-emergents</i>										
Cletho 360g/L(incOil)	\$19.40 /litre	@	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06		
Haloxypop 520g/L	\$46.95 /litre	@	0.04	\$1.88	0.04	\$1.88				
Factor	\$0.13 /gm	@					180	\$23.40		
Paraquat 250 (Topping)	\$8.00 /litre	@	0.8	\$6.40	0.8	\$6.40	0.8	\$6.40		
<i>Insecticides</i>										
Dimethoate (1)	\$16.50 /litre	@	0.4	\$6.60	0.4	\$6.60	0.4	\$6.60		
Karate Zeon® (2)	\$98.00 /litre	@	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35		
Operations										
Fuel & Oil				\$16.39		\$19.67		\$22.95		
Repairs & Maintenance				\$29.40		\$35.28		\$41.16		
Freight										
Grain (t)	\$30.00 /tonne	@	0.8	\$24.00	1.5	\$45.00	2.2	\$66.00		
Fertiliser (t)	\$25.00 /tonne	@	0.04	\$1.00	0.06	\$1.50	0.08	\$2.00		
Contract Work										
Aerial spraying										
Insurance	\$12.00 /\$1000	@		\$4.80		\$9.00		\$13.20		
Other										
TOTAL VARIABLE COSTS				\$263		\$361		\$457		
GROSS MARGIN/hectare				\$137		\$389		\$643		
Break Even Price (to cover variable costs only)				\$329		\$241		\$208		
Break Even Yield (to cover variable costs only)				0.53		0.72		0.91		
Gross Margin based on last 5 year average price				\$297		\$689		\$1,083		

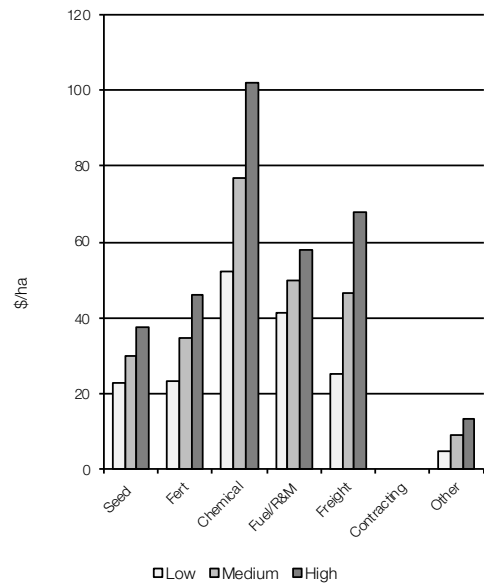
COMMENTS

AGRONOMIC NOTES

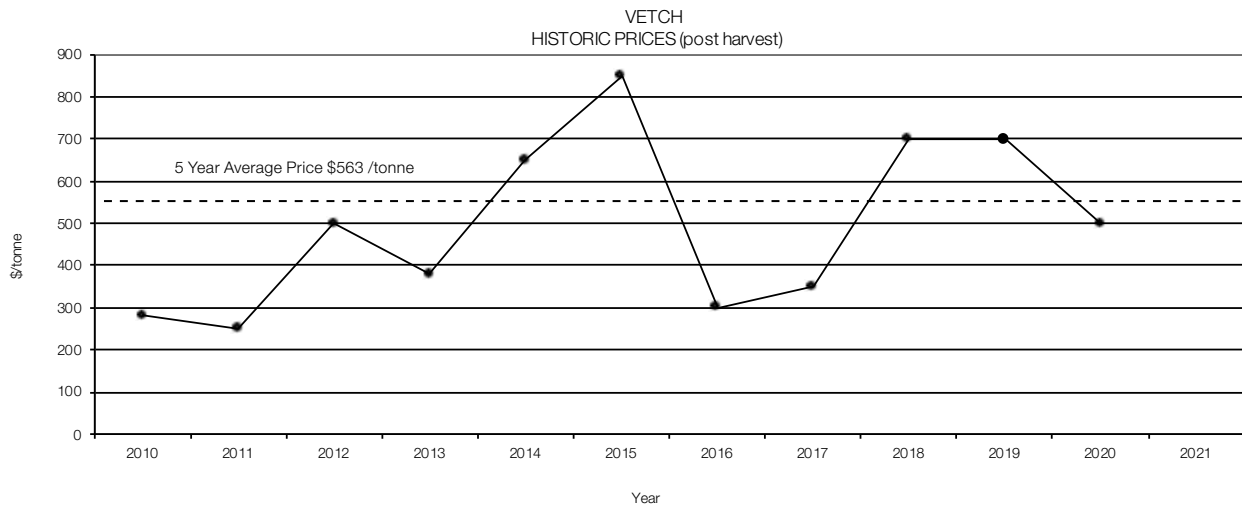
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$400	\$500	\$500	\$700	\$800
Yield t/ha	0.3	-\$122	-\$92	-\$92	-\$34	-\$4
	0.8	\$59	\$137	\$137	\$294	\$372
	1.2	\$203	\$321	\$321	\$555	\$673
	2	\$492	\$688	\$688	\$1,079	\$1,275
MEDIUM RAINFALL						
		Net Price \$/t				
		\$400	\$500	\$500	\$700	\$800
Yield t/ha	0.5	-\$119	-\$70	-\$70	\$27	\$76
	1	\$61	\$159	\$159	\$355	\$452
	1.5	\$242	\$389	\$389	\$682	\$829
	2.5	\$603	\$848	\$848	\$1,337	\$1,581
HIGH RAINFALL						
		Net Price \$/t				
		\$400	\$500	\$500	\$700	\$800
Yield t/ha	0.8	-\$78	\$0	\$0	\$157	\$235
	1.5	\$175	\$322	\$322	\$615	\$762
	2.2	\$428	\$643	\$643	\$1,073	\$1,288
	3	\$717	\$1,010	\$1,010	\$1,597	\$1,890

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	8	5.07	3.36
roll	1	2.22	1.89
harvest#	1	18.67	6.89
TOTAL		29.40	16.39

Rates are for low rainfall zone. Extra cost in higher yielding situations

Lupins

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW		MEDIUM		HIGH		
Price (20/21 Forecast)				\$350		\$350		\$350		
Quality										
Yield (t/ha)				1		1.7		2.4		
GROSS INCOME				\$350		\$595		\$840		
VARIABLE COSTS										
				Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	\$/ha	
Seed										
Seed	\$0.41	/kg	@	90	\$36.90	90	\$36.90	90	\$36.90	
Seed Inoculant	\$0.05	/kg	@	90	\$4.50	90	\$4.50	90	\$4.50	
Seed Treatment(1)	\$13.10	/100kg	@	90	\$11.79	90	\$11.79	90	\$11.79	
Levies										
GRDC Levies	1.0%	Gross Income			\$3.50		\$5.95		\$8.40	
EPR &state levies	\$2.80	/tonne sold			\$2.80		\$4.76		\$6.72	
Fertiliser (Bulk)										
MAP	\$1,300	/tonne	@	40	52	60	\$78.00	80	\$104.00	
Chemicals-Herbicides										
Summer Weed Control		Various	Allow		\$40.00		\$40.00		\$40.00	
Pre-emergents										
Trifluralin 480g/L	\$8.00	/litre	@	1.5	\$12.00					
Propyzamide	\$45.00	/litre	@			1	\$45.00	1	\$45.00	
Glyphosate 540	\$15.00	/litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00	
Simazine Granules	\$8.50	/kg	@	0.83	\$7.06	0.83	\$7.06	0.83	\$7.06	
Carfentrazone 400g/L	\$149.50	/litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99	
Post-emergents										
Cletho 360g/L(incOil)	\$19.40	/litre	@	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06	
Haloxyfop 520g/L	\$46.95	/litre	@	0.04	\$1.88	0.04	\$1.88			
Factor	\$0.13	/gm						180	\$23.40	
Paraquat 250 (Topping)	\$8.00	/litre	@	0.8	\$6.40	0.8	\$6.40	0.8	\$6.40	
Insecticides										
Talstar (2)	\$32.50	/litre	@	0.04	\$1.30	0.04	\$1.30	0.04	\$1.30	
Karate Zeon® (3)	\$98.00	/litre	@	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35	
Operations										
Fuel & Oil					\$14.16		\$16.99		\$19.82	
Repairs & Maintenance					\$21.89		\$26.26		\$30.64	
Freight										
Grain (t)	\$30.00	/tonne	@	1.0	\$30.00	1.7	\$51.00	2.4	\$72.00	
Fertiliser (t)	\$25.00	/tonne	@	0.04	\$1.00	0.06	\$1.50	0.08	\$2.00	
Contract Work										
Aerial spraying	\$15.00	/ha	@		\$0		\$0.00		\$0.00	
Insurance	\$10.00	/ \$1000	@		\$3.50		\$5.95		\$8.40	
Other										
TOTAL VARIABLE COSTS					\$284		\$379		\$462	
GROSS MARGIN/hectare					\$66		\$216		\$378	
Break Even Price (to cover variable costs only)					\$284		\$223		\$192	
Break Even Yield (to cover variable costs only)					0.81		1.08		1.32	
Gross Margin based on last 5 year average price					\$166		\$386		\$618	

COMMENTS

- (1) Seed treatment for aphid control for controlling viruses.
 - (2) RLEM.
 - (3) Native budworm.
- Do not exceed 800ml/Ha when crop topping with Paraquat 250 to avoid any possible residue issues.

AGRONOMIC NOTES

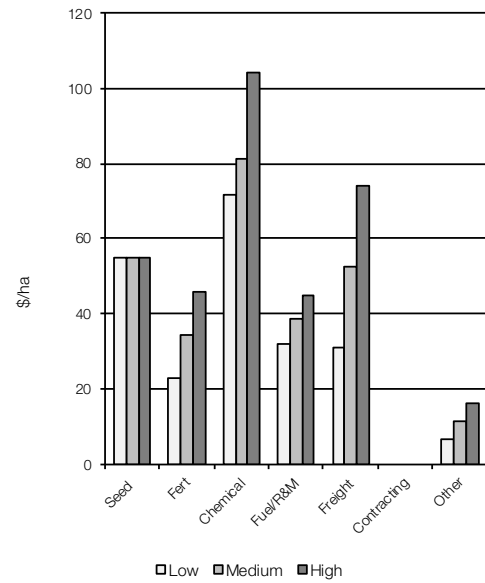
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$350	\$450	\$500
Yield t/ha	0.5	-\$114	-\$89	-\$89	-\$40	-\$16
	1	\$17	\$66	\$66	\$164	\$213
	1.5	\$148	\$221	\$221	\$368	\$442
	2	\$278	\$376	\$376	\$572	\$670

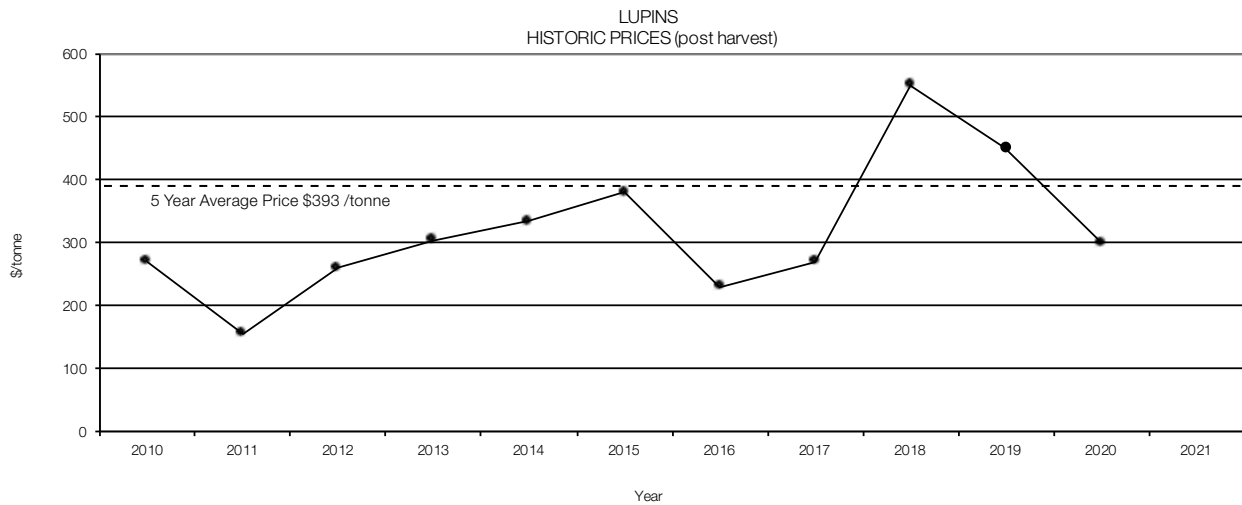
MEDIUM RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$350	\$450	\$500
Yield t/ha	0.5	-\$180	-\$156	-\$156	-\$107	-\$82
	1	-\$50	-\$1	-\$1	\$97	\$146
	1.7	\$133	\$216	\$216	\$383	\$466
	2	\$211	\$309	\$309	\$505	\$603

HIGH RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$350	\$450	\$500
Yield t/ha	1	-\$105	-\$56	-\$56	\$42	\$91
	1.5	\$26	\$99	\$99	\$246	\$320
	2.4	\$261	\$378	\$378	\$613	\$731
	3	\$417	\$564	\$564	\$858	\$1,005

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	8	5.07	3.36
harvest#	1	13.37	6.54
TOTAL		21.89	14.16

Rates are for low rainfall zone. Extra cost in higher yielding situations

Red Lentils

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM			HIGH		
Price (20/21 Forecast)				700				\$700		
Quality	LR Jumbo2									
Yield (t/ha)				0.9		1.7		2.5		
GROSS INCOME				\$630		\$1,190		\$1,750		
VARIABLE COSTS										
Cost			Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	\$/ha		
Seed										
Seed	\$1.00 /kg	@	45	\$45.00	50	\$50.00	55	\$55.00		
Seed Inoculant	\$0.05 /kg	@	45	\$2.25	50	\$2.50	55	\$2.75		
P-Pickel	\$68.00 /tonne			\$0.00	50	\$3.40	55	\$3.74		
Levies										
GRDC Levies	1.0% Gross Income			\$6.30		\$11.90		\$17.50		
EPR & state levies	\$6.00 /tonne sold			\$5.40		\$10.20		\$15.00		
Fertiliser (Bulk)										
MAP	\$1,300 /tonne	@	40	\$52.00	50	\$65.00	60	\$78.00		
Chemicals-Herbicides										
Summer Weed Control	Various	Allow		\$40.00		\$40.00		\$40.00		
<i>Pre-emergents</i>										
Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Propyzamide	\$45.00 /litre	@	1	\$45.00	1	\$45.00	1	\$45.00		
Metribuzin 750 gm/kg	\$43.00 /kg	@	0.18	\$7.74	0.24	\$10.32	0.3	\$12.90		
<i>Post-emergents</i>										
Diflufenican	\$45.00 /litre	@	0.15	\$6.75	0.15	\$6.75	0.15	\$6.75		
Cletho 360g/L (inc Oil)	\$19.40 /litre	@	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06		
Haloxyfop 520g/L	\$46.95 /litre	@	0.04	\$1.88	0.04	\$1.88				
Factor	\$0.13 /gm						180	\$23.40		
Paraquat 250 (Topping)	\$8.00 /litre	@	0.8	\$6.40	0.8	\$6.40	0.8	\$6.40		
<i>Insecticides</i>										
Dimethoate (1)	\$16.50 /litre	@	0.4	\$6.60	0.4	\$6.60	0.4	\$6.60		
Karate Zeon® (2)	\$98.00 /litre	@	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35		
Karate Zeon® (3)	\$98.00 /litre	@			0.024	\$2.35	0.024	\$2.35		
Trojan (4)	\$125.00 /litre	@	0.03	\$3.75	0.03	\$3.75	0.03	\$3.75		
<i>Fungicides</i>										
Chlorothalonil (5)	\$13.40 /litre	@			1.6	\$21.44	2.4	\$32.16		
Carbendazim (6)	\$13.55 /litre	@	0.5	\$6.78	1	\$13.55	1	\$13.55		
Procyimidone (7)	\$20.00 /litre	@					0.5	\$10.00		
Operations										
Fuel & Oil				\$17.23		\$20.68		\$24.13		
Repairs & Maintenance				\$30.67		\$36.80		\$42.93		
Freight										
Grain (t)	\$35.00 /tonne	@	0.9	\$31.50	1.7	\$59.50	2.5	\$87.50		
Fertiliser (t)	\$25.00 /tonne	@	0.04	\$1.00	0.05	\$1.25	0.06	\$1.50		
Contract Work										
Aerial spraying										
Windrowing										
Insurance	\$12.00 /\$1000	@		\$7.56		\$14.28		\$21.00		
Other										
TOTAL VARIABLE COSTS				\$357		\$467		\$585		
GROSS MARGIN/hectare				\$273		\$723		\$1,165		
Break Even Price (to cover variable costs only)				\$397		\$275		\$234		
Break Even Yield (to cover variable costs only)				0.51		0.67		0.84		
Gross Margin based on last 5 year average price				\$183		\$553		\$915		

COMMENTS

(1) Cow Pea and/or Blue Green Aphid.
 (2) Native budworm.
 (3/4) Etiella.
 (5) Ascochyta.
 (6/7) Grey mould.
 Do not exceed 800ml/Ha Paraquat 250 when crop topping to avoid possible residues.

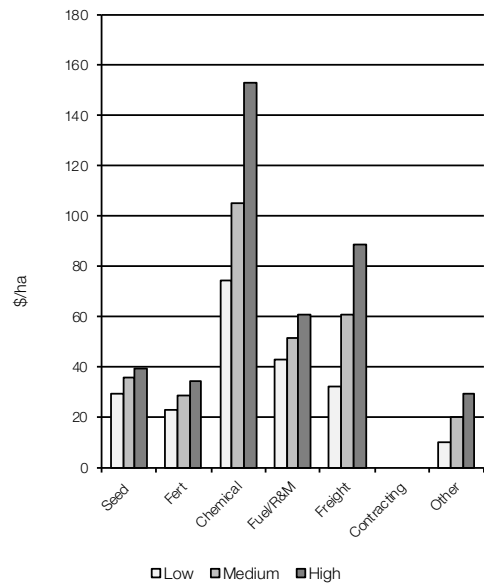
AGRONOMIC NOTES

Some varieties more sensitive to Metribuzin than others.
 Check newly released varieties for suitability to your area.

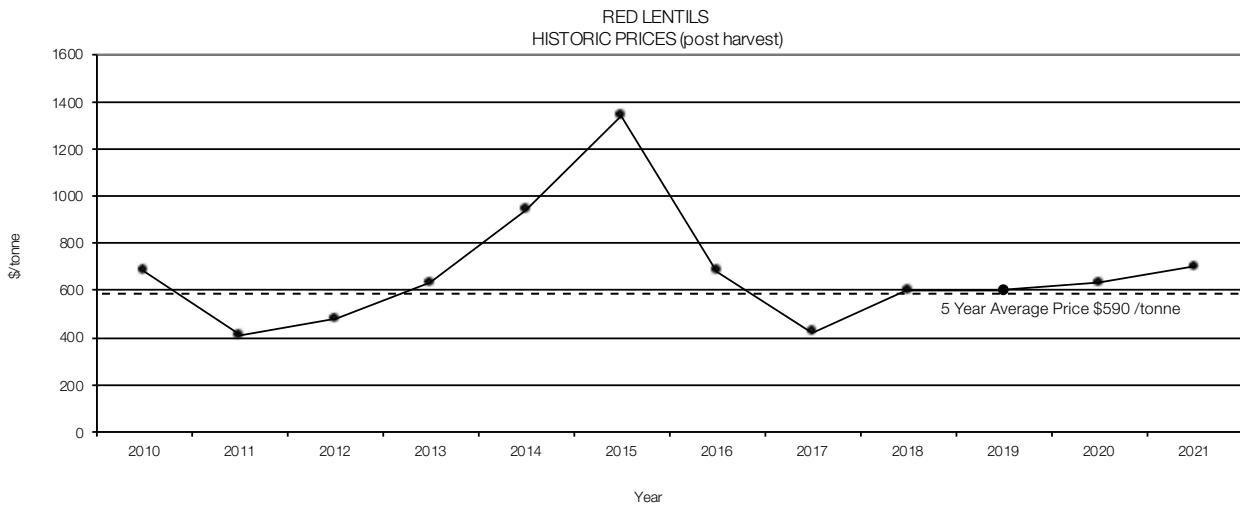
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$400	\$500	\$700	\$700	\$800
Yield t/ha	0.3	-\$201	-\$172	-\$113	-\$113	-\$84
	0.9	\$9	\$97	\$273	\$273	\$361
	1.1	\$79	\$186	\$402	\$402	\$509
	1.5	\$219	\$366	\$659	\$659	\$806
MEDIUM RAINFALL						
		Net Price \$/t				
		\$400	\$500	\$700	\$700	\$800
Yield t/ha	0.8	-\$91	-\$13	\$144	\$144	\$222
	1.7	\$224	\$391	\$723	\$723	\$889
	2.2	\$399	\$615	\$1,045	\$1,045	\$1,260
	3	\$680	\$973	\$1,560	\$1,560	\$1,853
HIGH RAINFALL						
		Net Price \$/t				
		\$400	\$500	\$700	\$700	\$800
Yield t/ha	1.2	-\$24	\$93	\$328	\$328	\$445
	2	\$256	\$452	\$843	\$843	\$1,038
	2.5	\$431	\$676	\$1,165	\$1,165	\$1,409
	3.5	\$781	\$1,124	\$1,808	\$1,808	\$2,151

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	10	6.34	4.20
roll	1	2.22	1.89
harvest#	1	18.67	6.89
TOTAL		30.67	17.23

Rates are for low rainfall zone. Extra cost in higher yielding situations

Red Lentils Imi Tolerant

Gross Margin

INCOME										2022 YOUR ESTIMATE	
Rainfall Zone				LOW		MEDIUM		HIGH			
Price (20/21 Forecast)				700		\$700		\$700			
Quality				Small red- Nipper type							
Yield (t/ha)				0.8		1.5		2.2			
GROSS INCOME				\$560		\$1,050		\$1,540			
VARIABLE COSTS											
Cost			Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	\$/ha			
Seed											
Seed	\$1.00	/kg @	35	\$35.00	40	\$40.00	45	\$45.00			
Seed Inoculant	\$0.05	/kg @	35	\$1.75	40	\$2.00	45	\$2.25			
P-Pickel	\$68.00	/tonne @	0	\$0.00	40	\$2.72	45	\$3.06			
Levies											
GRDC Levies	1.0%	Gross Income		\$5.60		\$10.50		\$15.40			
EPR & state levies	\$6.00	/tonne sold		\$4.80		\$9.00		\$13.20			
Fertiliser (Bulk)											
MAP	\$1,300	/tonne @	40	\$52.00	50	\$65.00	60	\$78.00			
Chemicals-Herbicides											
Summer Weed Control			Various	Allow		\$40.00		\$40.00			
<i>Pre-emergents</i>											
Glyphosate 540	\$15.00	/litre @	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00			
Carfentrazone 400g/L	\$149.50	/litre @	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99			
Propyzamide	\$45.00	/litre @	1	\$45.00	1	\$45.00	1	\$45.00			
Metribuzin 750 gm/kg	\$43.00	/kg @	0	\$0.00	0.24	\$10.32	0.3	\$12.90			
<i>Post-emergents</i>											
Intervix® (1)	\$31.00	/litre @	0.75	\$23.25	0.75	\$23.25	0.75	\$23.25			
Cletho 360g/L (inc Oil)	\$19.40	/litre @	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06			
Haloxyfop 520g/L	\$46.95	/litre @	0.04	\$1.88	0.04	\$1.88					
Factor	\$0.13	/gm					180	\$23.40			
Paraquat 205 (Topping)	\$8.00	/litre @	0.8	\$6.40	0.8	\$6.40	0.8	\$6.40			
<i>Insecticides</i>											
Dimethoate (2)	\$16.50	/litre @	0.4	\$6.60	0.4	\$6.60	0.4	\$6.60			
Karate Zeon® (3)	\$98.00	/litre @			0.024	\$2.35	0.024	\$2.35			
Karate Zeon® (4)	\$98.00	/litre @	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35			
Trojan (5)	\$125.00	/litre @	0.03	\$3.75	0.03	\$3.75	0.03	\$3.75			
<i>Fungicides</i>											
Chlorothalonil (6)	\$13.40	/litre @	0.8	\$10.72	1.6	\$21.44	2.4	\$32.16			
Carbendazim (7)	\$13.55	/litre @	0.5	\$6.78	1	\$13.55	1	\$13.55			
Procyimidone (8)	\$20.00	/litre @					0.5	\$10.00			
Operations											
Fuel & Oil					\$17.23		\$20.68		\$24.13		
Repairs & Maintenance					\$30.67		\$36.80		\$42.93		
Freight											
Grain (t)	\$35.00	/tonne @	0.8	\$28.00	1.5	\$52.50	2.2	\$77.00			
Fertiliser (t)	\$25.00	/tonne @	0.04	\$1.00	0.05	\$1.25	0.06	\$1.50			
Contract Work											
Aerial spraying											
Windrowing											
Insurance	\$12.00	/ \$1000 @		\$6.72		\$12.60		\$18.48			
Other											
TOTAL VARIABLE COSTS				\$361		\$461		\$574			
GROSS MARGIN/hectare				\$199		\$589		\$966			
Break Even Price (to cover variable costs only)				\$451		\$307		\$261			
Break Even Yield (to cover variable costs only)				0.52		0.66		0.82			
Gross Margin based on last 5 year average price				\$119		\$439		\$746			

COMMENTS

- (1) Includes Adjuvant.
 - (2) Cow Pea and/or Blue Green Aphid.
 - (3) Native budworm control.
 - (4/5) Etiella.
 - (6) Ascochyta (7,8) Grey mould.
- Do not exceed 800ml/Ha Paraquat 250 when crop topping to avoid possible residues.

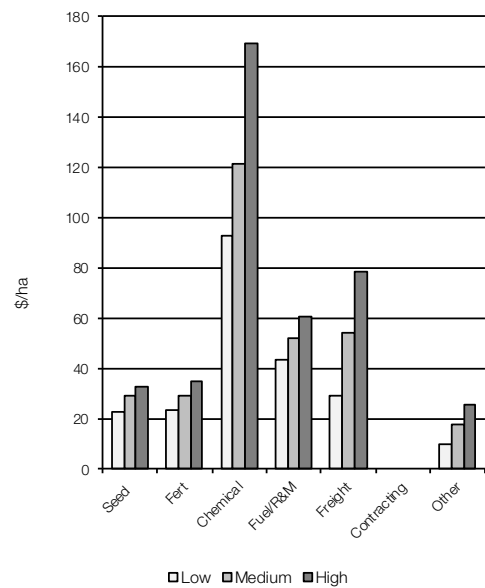
AGRONOMIC NOTES

Imazethapyr is a permit use.

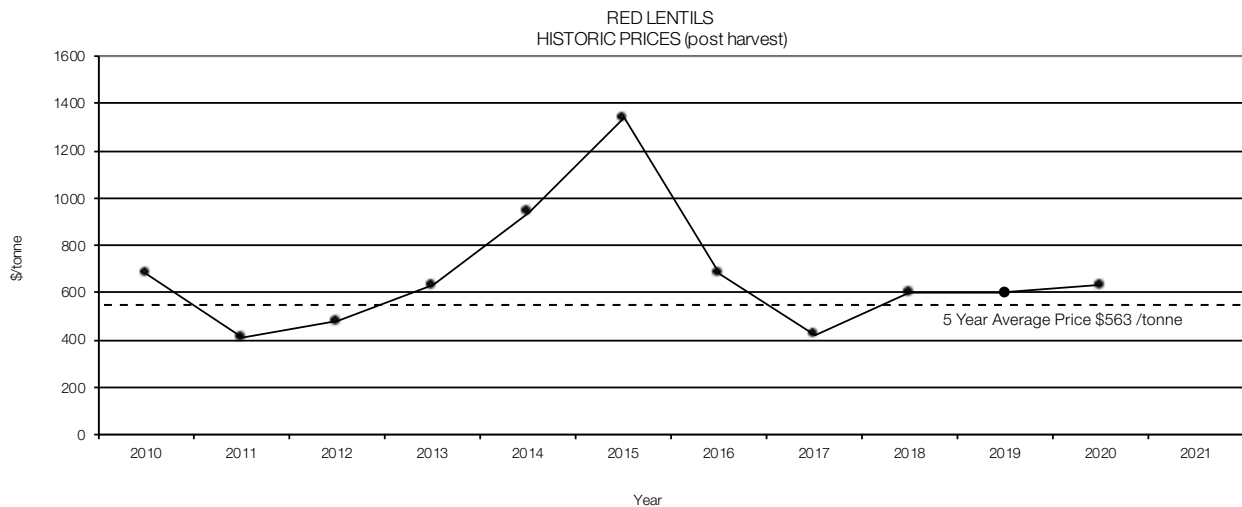
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$400	\$500	\$700	\$700	\$800
Yield t/ha	0.3	-\$210	-\$181	-\$122	-\$122	-\$93
	0.8	-\$35	\$43	\$199	\$199	\$278
	1.1	\$70	\$177	\$393	\$393	\$500
	1.5	\$210	\$357	\$650	\$650	\$797
MEDIUM RAINFALL						
		Net Price \$/t				
		\$400	\$500	\$700	\$700	\$800
Yield t/ha	0.8	-\$96	-\$18	\$138	\$138	\$217
	1.5	\$149	\$296	\$589	\$589	\$736
	2	\$324	\$520	\$911	\$911	\$1,106
	3	\$674	\$968	\$1,554	\$1,554	\$1,848
HIGH RAINFALL						
		Net Price \$/t				
		\$400	\$500	\$700	\$700	\$800
Yield t/ha	0.8	-\$169	-\$91	\$65	\$65	\$143
	1.5	\$76	\$222	\$516	\$516	\$662
	2.2	\$321	\$536	\$966	\$966	\$1,181
	3	\$601	\$894	\$1,481	\$1,481	\$1,775

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	10	6.34	4.20
roll	1	2.22	1.89
harvest#	1	18.67	6.89
TOTAL		30.67	17.23

Rates are for low rainfall zone. Extra cost in higher yielding situations

Field Peas

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM			HIGH		
Price (20/21 Forecast)				\$450		\$450		\$450		
Quality	Kaspa type									
Yield (t/ha)				1		1.7		2.5		
GROSS INCOME				\$450		\$765		\$1,125		
VARIABLE COSTS										
Cost		Rate/ha			Rate/ha			Rate/ha		
		Low	\$/ha	Medium	\$/ha	High	\$/ha			
Seed										
Seed	\$0.50 /kg	@	90	\$45.00	100	\$50.00	110	\$55.00		
Seed Grading	\$30.00 /tonne	@	90	\$2.70	100	\$3.00	110	\$3.30		
P-Pickel	\$68.00 /tonne	@		\$0.00	100	\$6.80	110	\$7.48		
Apron@ XL	\$341.25 /tonne	@		\$0.00		\$0.00	110	\$37.54		
Levies										
GRDC Levies	1.0% Gross Income			\$4.50		\$7.65		\$11.25		
EPR & state levies	\$3.00 /tonne sold			\$3.00		\$5.10		\$7.50		
Fertiliser (Bulk)										
MAP	\$1,300 /tonne	@	40	\$52.00	60	\$78.00	80	\$104.00		
Chemicals-Herbicides										
Summer Weed Control	Various	Allow		\$40.00		\$40.00		\$40.00		
Pre-emergents										
Propyzamide	\$45.00 /litre	@	1	\$45.00	1	\$45.00	1	\$45.00		
Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Metribuzin 750 gm/kg	\$43.00 /kg	@	0.18	\$7.74	0.24	\$10.32	0.3	\$12.90		
Post-emergents										
Diflufenican	\$45.00 /litre	@	0.15	\$6.75	0.15	\$6.75	0.15	\$6.75		
MCPA Amine	\$14.00 /litre	@	0.1	\$1.40	0.1	\$1.40	0.1	\$1.40		
Cletho 360g/L (inc Oil)	\$19.40 /litre	@	0.33	\$6.47	0.33	\$6.47	0.33	\$6.47		
Haloxypop 520g/L	\$46.95 /litre	@	0.04	\$1.88	0.04	\$1.88				
Factor	\$0.13 /gm						180	\$23.40		
Paraquat 250 (Topping)	\$8.00 /litre	@	0.8	\$6.40	0.8	\$6.40	0.8	\$6.40		
Insecticides										
Karate Zeon® (1)	\$98.00 /litre	@	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35		
Karate Zeon® (2)	\$98.00 /litre	@		\$0.00	0.024	\$0.78	0.024	\$0.78		
Dimethoate (3)	\$16.50 /litre	@	0.1	\$1.65	0.1	\$1.65	0.1	\$1.65		
Fungicides										
Tebuconazole (4)	\$21.40 /litre	@	0.145	\$3.10	0.145	\$3.10	0.145	\$3.10		
Operations										
Fuel & Oil				\$16.81		\$20.18		\$23.54		
Repairs & Maintenance				\$30.03		\$36.04		\$42.05		
Freight										
Grain (t)	\$30.00 /tonne	@	1.0	\$30.00	1.7	\$51.00	2.5	\$75.00		
Fertiliser (t)	\$25.00 /tonne	@	0.04	\$1.00	0.06	\$1.50	0.08	\$2.00		
Contract Work										
	/ha	@		\$0.00		\$0.00		\$0.00		
	/ha	@		\$0.00		\$0.00		\$0.00		
Insurance	\$16.00 /\$1000	@		\$7.20		\$12.24		\$18.00		
Other	\$0.00 /ha			\$0.00						
	/ha			\$0.00						
TOTAL VARIABLE COSTS				\$336		\$419		\$558		
GROSS MARGIN/hectare				\$114		\$346		\$567		
Break Even Price (to cover variable costs only)				\$336		\$246		\$223		
Break Even Yield (to cover variable costs only)				0.75		0.93		1.24		
Gross Margin based on last 5 year average price				\$134		\$380		\$617		

COMMENTS

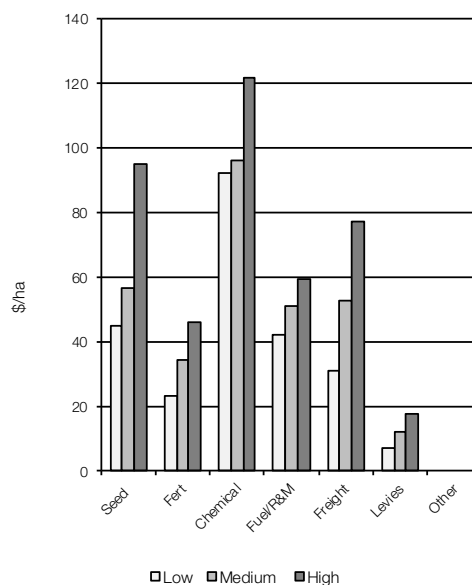
- (1) Native budworm control.
- (2) Pea weevil border spray.
- (3) RLEM.
- (4) Powdery Mildew.

AGRONOMIC NOTES

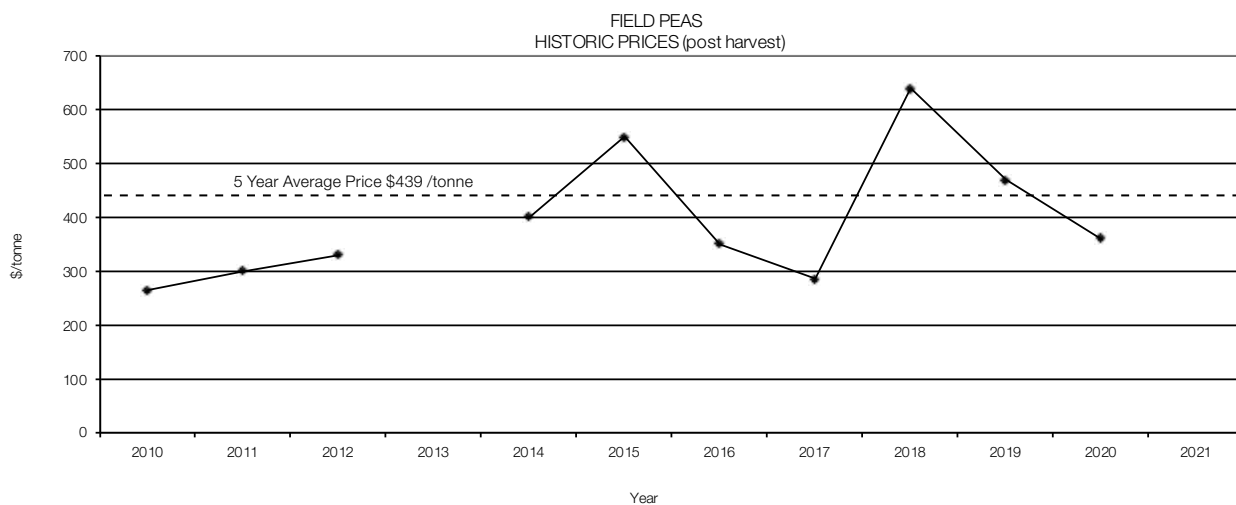
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$450	\$450	\$500
Yield t/ha	0.5	-\$162	-\$137	-\$89	-\$89	-\$64
	1	-\$32	\$17	\$114	\$114	\$163
	1.5	\$98	\$171	\$317	\$317	\$390
	2	\$227	\$325	\$519	\$519	\$617
MEDIUM RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$450	\$450	\$500
Yield t/ha	1	-\$83	-\$35	\$63	\$63	\$111
	1.7	\$98	\$181	\$346	\$346	\$429
	2	\$176	\$273	\$468	\$468	\$565
	2.5	\$305	\$427	\$671	\$671	\$792
HIGH RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$450	\$450	\$500
Yield t/ha	1.5	-\$57	\$16	\$162	\$162	\$235
	2	\$72	\$170	\$364	\$364	\$462
	2.5	\$202	\$324	\$567	\$567	\$689
	3	\$331	\$478	\$770	\$770	\$916

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	9	5.71	3.78
roll	1	2.22	1.89
harvest#	1	18.67	6.89
TOTAL		30.03	16.81

Rates are for low rainfall zone. Extra cost in higher yielding situations

Faba Beans

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW		MEDIUM		HIGH		
Price (20/21 Forecast)				\$550		\$550		\$550		
Quality Fie Grade 1										
Yield (t/ha)				0.8		1.6		2.8		
GROSS INCOME				\$440		\$880		\$1,540		
VARIABLE COSTS										
Cost			Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	\$/ha		
Seed										
Seed	\$0.55	/kg @	100	\$55.00	110	\$60.50	130	\$71.50		
Seed Inoculant	\$0.05	/kg @	100	\$5.00	110	\$5.50	130	\$6.50		
Levies										
GRDC Levies	1.0%	Gross Income		\$4.40		\$8.80		\$15.40		
EPR & state levies	\$4.00	/tonne sold		\$3.20		\$6.40		\$11.20		
Fertiliser (Bulk)										
MAP	\$1,300	/tonne @	40	\$52.00	60	\$78.00	80	\$104.00		
Chemicals-Herbicides										
Summer Weed Control Various Allow										
<i>Pre-emergents</i>										
Glyphosate 540	\$15.00	/litre @	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50	/litre @	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Propyzamide	\$45.00	/litre @	1	\$45.00	1	\$45.00	1	\$45.00		
Simazine 900g/kg	\$8.50	/kg @	0.83	\$7.06	0.83	\$7.06	0.83	\$7.06		
<i>Post-emergents</i>										
Cletho 360g/L(incOil)	\$19.40	/litre @	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06		
Haloxypop 520g/L	\$46.95	/litre @	0.04	\$1.88	0.08	\$3.76				
Factor	\$0.13	/gm					180	\$23.40		
Paraquat 250 (Desiccant)	\$8.00	/litre @	0.8	\$6.40	0.8	\$6.40	0.8	\$6.40		
<i>Insecticides</i>										
Chlorpyrifos (1)	\$12.30	/litre @	0.14	\$1.72	0.14	\$1.72	0.14	\$1.72		
Karate Zeon® (2)	\$98.00	/litre @	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35		
Dimethoate (3)	\$16.50	/litre @	0.5	\$8.25	0.5	\$8.25	0.5	\$8.25		
<i>Fungicides</i>										
Tebuconazole(4)	\$21.40	/litre @		\$0.00	0.3	\$6.42	0.3	\$6.42		
Mancozeb-low r/f	\$12.85	/kg @	1.7	\$21.85	0	\$0.00	0	\$0.00		
Mancozeb-Med/high	\$12.85	/kg @	0	\$0.00	5.1	\$65.54	5.1	\$65.54		
Procymidone	\$20.00	/litre @		\$0.00		\$0.00	0.5	\$10.00		
Carbendazim 2 applic	\$13.55	/litre @			0.5	\$6.78	1	\$13.55		
Operations										
Fuel & Oil				\$15.00		\$17.99		\$20.99		
Repairs & Maintenance				\$23.15		\$27.78		\$32.41		
Freight										
Grain (t)	\$30.00	/tonne @	0.8	\$24.00	1.6	\$48.00	2.8	\$84.00		
Fertiliser (t)	\$25.00	/tonne @	0.04	\$1.00	0.06	\$1.50	0.08	\$2.00		
Contract Work										
Aerial spraying	\$15.00	/ha @		\$0.00	1	\$15.00	1	\$15.00		
Insurance	\$12.00	/ \$1000 @		\$5.28		\$10.56		\$18.48		
Other										
TOTAL VARIABLE COSTS				\$354		\$504		\$642		
GROSS MARGIN/hectare				\$86		\$376		\$898		
Break Even Price (to cover variable costs only)				\$442		\$315		\$229		
Break Even Yield (to cover variable costs only)				0.64		0.92		1.17		
Gross Margin based on last 5 year average price				\$76		\$356		\$863		

COMMENTS

- (1) RLEM control.
- (2) Native Budworm control.
- (3) Cow pea aphid.
- (4) Cercospora Mancozeb for Ascochyta. Procymidone and Carbendazim for chocolate spot.

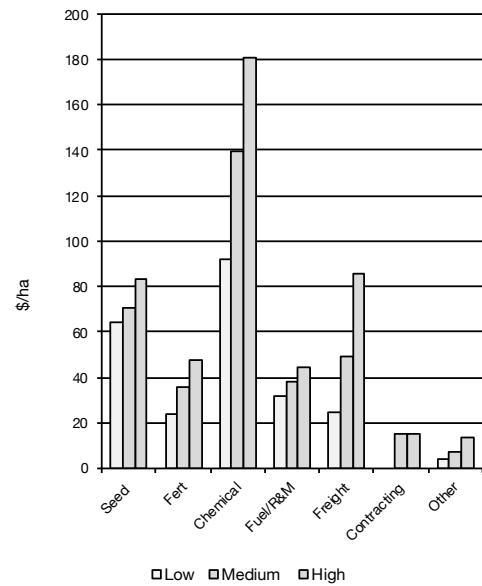
AGRONOMIC NOTES

No allowance is made in this gross margin as to the economic benefit of bean stubble to livestock.

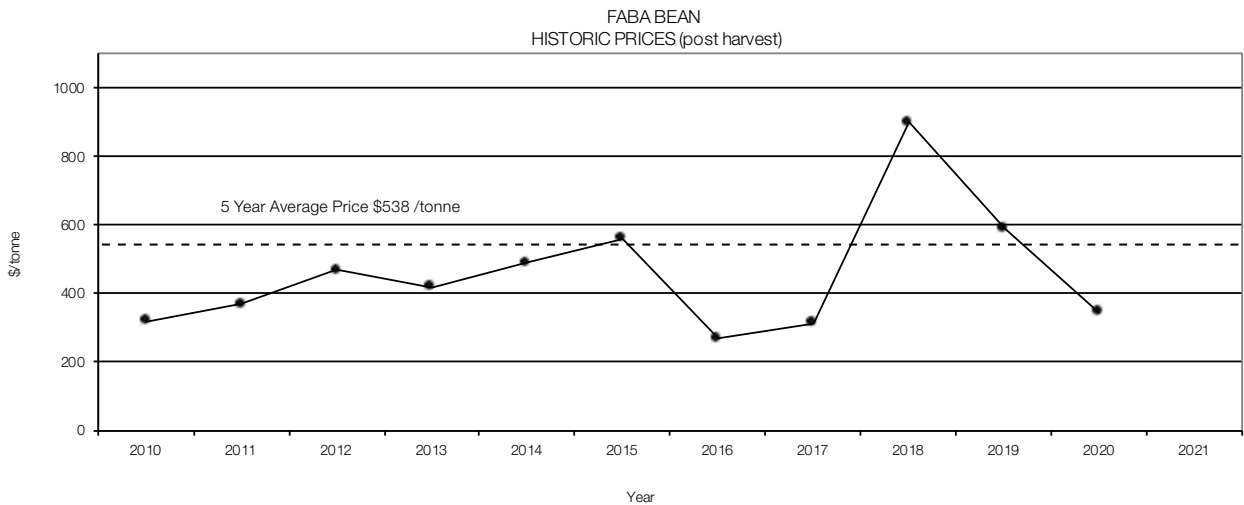
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$550	\$450	\$500
Yield	0.4	-\$213	-\$193	-\$115	-\$154	-\$135
	0.8	-\$109	-\$70	\$86	\$8	\$47
	1.5	\$72	\$146	\$439	\$292	\$366
	2	\$202	\$300	\$691	\$495	\$593
MEDIUM RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$550	\$450	\$500
Yield	1	-\$171	-\$122	\$73	-\$24	\$24
	1.6	-\$16	\$63	\$376	\$219	\$297
	2	\$88	\$186	\$577	\$382	\$479
	2.5	\$218	\$340	\$829	\$585	\$707
HIGH RAINFALL						
		Net Price \$/t				
		\$300	\$350	\$550	\$450	\$500
Yield	1	-\$254	-\$205	-\$9	-\$107	-\$58
	2	\$6	\$103	\$495	\$299	\$397
	2.8	\$213	\$350	\$898	\$624	\$761
	4	\$524	\$720	\$1,502	\$1,111	\$1,307

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	10	6.34	4.20
harvest#	1	13.37	6.54
TOTAL		23.15	15.00

Rates are for low rainfall zone. Extra cost in higher yielding situations

Chickpeas

Gross Margin

										2022 YOUR ESTIMATE				
INCOME														
										LOW	MEDIUM	HIGH		
Rainfall Zone														
Price (20/21 Forecast)										\$800	\$800	\$800		
Quality 6-8 mm Kabuli														
Yield (t/ha)										0.7	1.1	1.6		
GROSS INCOME										\$560	\$880	\$1,280		
VARIABLE COSTS														
										Rate/ha	Rate/ha	Rate/ha		
										Low	Medium	High		
Seed														
Seed Cost \$0.80 /kg @ 90										\$72.00	100	\$80.00	110	\$88.00
Seed Inoculant \$50.00 /tonne @ 90										\$4.50	100	\$5.00	110	\$5.50
P-Pickel \$68.00 /tonne @ 90										\$6.12	100	\$6.80	110	\$7.48
Levies														
GRDC Levies 1.0% Gross Income										\$5.60		\$8.80		\$12.80
EPR & state levies \$5.50 /tonne sold										\$3.85		\$6.05		\$8.80
Fertiliser (Bulk)														
MAP \$1,300 /tonne @ 40										\$52.00	60	\$78.00	80	\$104.00
Chemicals-Herbicides														
Summer Weed Control Various Allow										\$40.00		\$40.00		\$40.00
Pre-emergents														
Propyzamide \$45.00 /litre @ 1										\$45.00	1	\$45.00	1	\$45.00
Glyphosate 540 \$15.00 /litre @ 1.2										\$18.00	1.2	\$18.00	1.2	\$18.00
Carfentrazone 400g/L \$149.50 /litre @ 0.02										\$2.99	0.02	\$2.99	0.02	\$2.99
Balance@ \$0.12 /gram @ 75										\$9.00	100	\$12.00	100	\$12.00
Metribuzin 750 gm/kg \$43.00 /kg @ 0.18										\$7.74	0.24	\$10.32	0.3	\$12.90
Post-emergents														
Cletho 360g/L(incOil) \$19.40 /litre @ 0.33										\$10.06	0.33	\$10.06	0.33	\$10.06
Haloxypop 520g/L \$46.95 /litre @ 0.04										\$1.88	0.08	\$3.76		
Factor \$0.13 /gm													180	\$23.40
Insecticides														
Chlorpyrifos (RLEM) \$12.30 /litre @ 0.14										\$1.72	0.14	\$1.72	0.14	\$1.72
Karate Zeon@ \$98.00 /litre @ 0.024										\$2.35	0.024	\$2.35	0.048	\$4.70
Fungicides														
Aviator Xpro \$54.50 /litre @										\$0.00	0.6	\$32.70	1.2	\$65.40
Chlorothalonil \$13.40 /litre @ 2.0										\$26.80	2.0	\$26.80	2.0	\$26.80
Carbendazim \$13.55 /litre @ 0.5										\$6.78	0.5	\$6.78	0.5	\$6.78
Desiccation														
Paraquat 250 \$8.00 /litre @ 0.8										\$6.40	0.8	\$6.40	0.8	\$6.40
Operations														
Fuel & Oil										\$15.00		\$17.99		\$20.99
Repairs & Maintenance										\$23.15		\$27.78		\$32.41
Freight														
Grain (t) \$30.00 /tonne @ 0.7										\$21.00	1.1	\$33.00	1.6	\$48.00
Fertiliser (t) \$25.00 /tonne @ 0.04										\$1.00	0.06	\$1.50	0.08	\$2.00
Contract Work														
Aerial spraying \$15.00 /ha @										\$0.00		\$0.00		\$0.00
Windrowing \$38.00 /ha @										\$0.00	0	\$0.00	0	\$0.00
Insurance \$10.00 /\$1000 @										\$5.60		\$8.80		\$12.80
Other														
TOTAL VARIABLE COSTS										\$389		\$493		\$619
GROSS MARGIN/hectare										\$171		\$387		\$661
Break Even Price (to cover variable costs only)										\$555		\$448		\$387
Break Even Yield (to cover variable costs only)										0.49		0.62		0.77
Gross Margin based on last 5 year average price										\$98		\$272		\$493

COMMENTS

Seed is inoculated with a Group N inoculant. Do not exceed 800ml/Ha Paraquat 250 when desiccating to avoid possible residue issues.

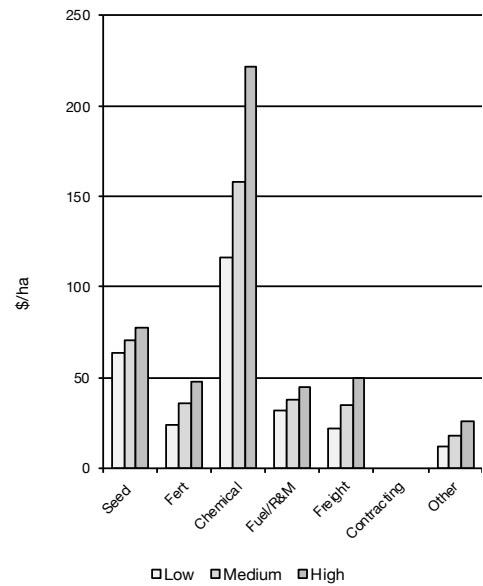
AGRONOMIC NOTES

All commonly grown varieties are susceptible to Ascochyta. Requires diligent fungicide program to control. Price is heavily dependant on grade and quality. Seek advice. May need to store product for up to 12 months before marketing.

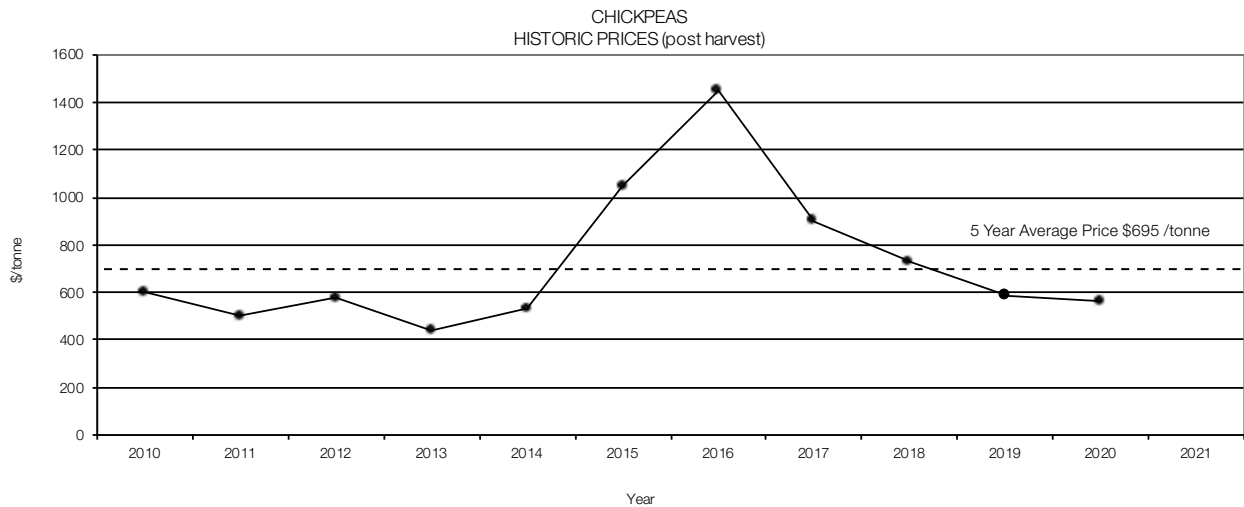
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$500	\$600	\$800	\$800	\$900
Yield	0.4	-\$171	-\$131	-\$53	-\$53	-\$14
	0.7	-\$34	\$34	\$171	\$171	\$240
	1.2	\$193	\$311	\$546	\$546	\$663
	1.8	\$466	\$642	\$995	\$995	\$1,171
MEDIUM RAINFALL						
		Net Price \$/t				
		\$500	\$600	\$800	\$800	\$900
Yield	0.5	-\$209	-\$160	-\$62	-\$62	-\$13
	1.1	\$64	\$172	\$387	\$387	\$495
	1.8	\$382	\$559	\$911	\$911	\$1,088
	2.3	\$609	\$835	\$1,286	\$1,286	\$1,511
HIGH RAINFALL						
		Net Price \$/t				
		\$500	\$600	\$800	\$800	\$900
Yield	1	-\$82	\$16	\$212	\$212	\$310
	1.5	\$145	\$292	\$586	\$586	\$733
	1.6	\$191	\$347	\$661	\$661	\$818
	2.5	\$600	\$845	\$1,335	\$1,335	\$1,580

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	10	6.34	4.20
harvest#	1	13.37	6.54
TOTAL		23.15	15.00

Rates are for low rainfall zone. Extra cost in higher yielding situations

Canola - Conventional

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW		MEDIUM		HIGH		
Price (20/21 Forecast)					\$750		\$750		\$750	
Quality 42% oil										
Yield (t/ha)				0.8		1.5		2.2		
GROSS INCOME				\$600		\$1,125		\$1,650		
VARIABLE COSTS										
Cost			Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	\$/ha		
Seed										
Seed (1)	\$32.00	/kg @	1	\$32.00	1.5	\$48.00	2	\$64.00		
Levies										
GRDC Levies	1.0%	Gross Income		\$6.00		\$11.25		\$16.50		
State levies	\$0.50	/tonne sold		\$0.40		\$0.75		\$1.10		
Fertiliser (Bulk)										
18:20:0	\$1,300	/tonne @	35	\$45.50	55	\$71.50	75	\$97.50		
Flutriafol (on fert)	\$45.00	/litre @	0.2	\$9.00	0.2	\$9.00	0.2	\$9.00		
Urea	\$1,500	/tonne @	50	\$75.00	100	\$150.00	150	\$225.00		
SOA	\$700	/tonne @	50	\$35.00	50	\$35.00	100	\$70.00		
Chemicals-Herbicides										
Summer Weed Control		Various Allow		\$40.00		\$40.00		\$40.00		
Pre-emergents										
Glyphosate 540	\$15.00	/litre @	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50	/litre @	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Propyzamide	\$45.00	/litre @	1	\$45.00	1	\$45.00	1	\$45.00		
Trifluralin 480g/L	\$8.00	/litre @	1.5	\$12.00	2	\$16.00	2	\$16.00		
Post-emergents										
Haloxypop 520g/L	\$46.95	/litre @	0.04	\$1.88	0.04	\$1.88	0.04	\$1.88		
Cletho 360g/L (incOil)	\$19.40	/litre @	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06		
Clopyralid 300g/L	\$42.00	/litre @	0.25	\$10.50	0.25	\$10.50	0.25	\$10.50		
Glypho (pre-harvest) (2)	\$15.00	/litre @	2	\$30.00	2	\$30.00	2	\$30.00		
Insecticides										
Chlorpyrifos 500g/L	\$12.30	/litre @	0.5	\$6.15	0.5	\$6.15	0.5	\$6.15		
Talstar	\$32.50	/litre @	0.04	\$1.30	0.04	\$1.30	0.04	\$1.30		
Transform (3)	\$340.00	/litre @	0.1	\$34.00	0.1	\$34.00	0.1	\$34.00		
Karate Zeon® (4)	\$98.00	/litre @	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35		
Affirm (5)	\$75.00	/litre @	0	\$0.00	0.3	\$22.50	0.3	\$22.50		
Operations										
Fuel & Oil				\$14.58		\$17.50		\$20.41		
Repairs & Maintenance				\$20.08		\$24.10		\$28.11		
Freight										
Grain (t)	\$30.00	/tonne @	0.8	\$24.00	1.5	\$45.00	2.2	\$66.00		
Fertiliser (t)	\$25.00	/tonne @	0.135	\$3.38	0.205	\$5.13	0.325	\$8.13		
Contract Work										
Aerial spraying	\$15.00	/ha @		\$0.00	1	\$15.00	1	\$15.00		
Windrowing	\$38.00	/ha @		\$0.00	1	\$38.00	1	\$38.00		
Insurance	\$12.00	/ \$1000 @		\$7.20		\$13.50		\$19.80		
Urea spreading	\$8.50	/ha @	1	\$8.50	2	\$17.00	2	\$17.00		
Other										
TOTAL VARIABLE COSTS				\$495		\$741		\$936		
GROSS MARGIN/hectare				\$105		\$384		\$714		
Break Even Price (to cover variable costs only)				\$619		\$494		\$426		
Break Even Yield (to cover variable costs only)				0.66		0.99		1.25		
Gross Margin based on last 5 year average price				-\$15		\$159		\$384		

COMMENTS

- (1) Seed treated with insecticide and fungicide.
- (2) Weedmaster DST registered for this purpose.
- (3) Green Peach Aphid.
- (4) Native Budworm-Low rainfall.
- (5) DBM and Native Budworm.

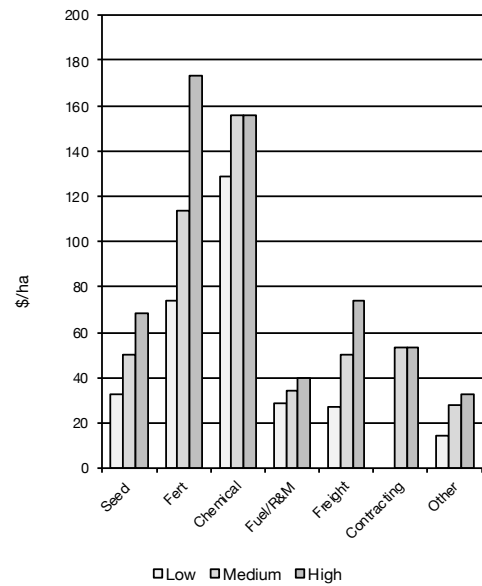
AGRONOMIC NOTES

A maximum of 15 units of nitrogen and 10 units of phosphorus should be applied with seed. Nitrogen rate dependent on target yield. Sulphur required on sandy, neutral/acid soils and intensive cropping systems. Ensure insect control and good seed/soil contact when sowing. Assumes direct heading in low rainfall/yielding situations. Direct heading is becoming more widely used in all zones. In low rainfall situations, oil penalties may apply- conversely oil bonuses may be expected in high rainfall areas.

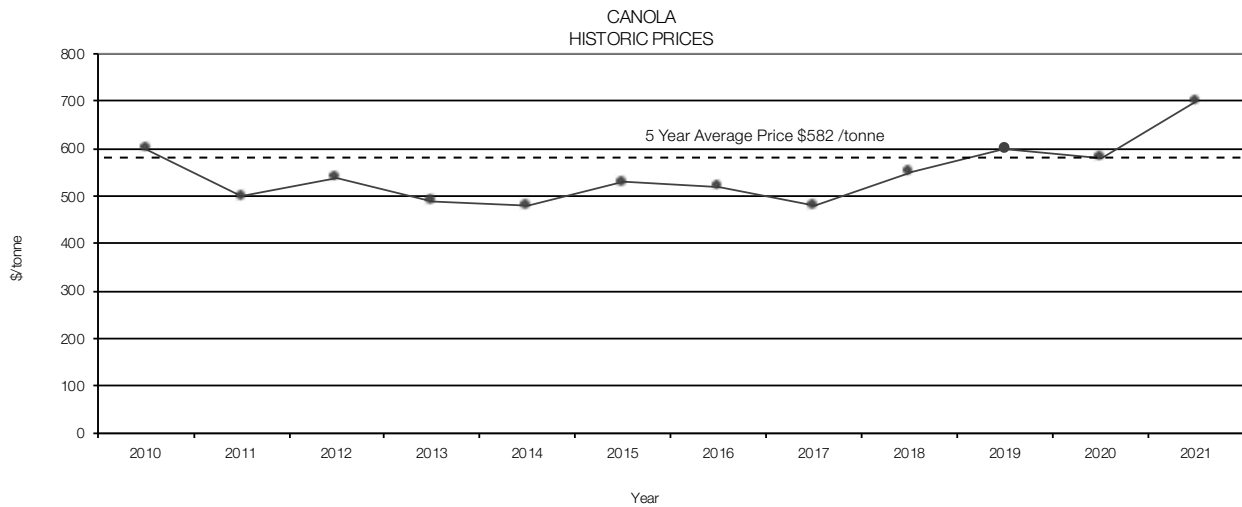
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$650	\$700	\$750	\$800	\$850
Yield	0.3	-\$276	-\$261	-\$246	-\$232	-\$217
	0.8	\$27	\$66	\$105	\$144	\$183
	1.1	\$208	\$262	\$316	\$370	\$424
	1.5	\$451	\$524	\$597	\$671	\$744
MEDIUM RAINFALL						
		Net Price \$/t				
		\$650	\$700	\$750	\$800	\$850
Yield	0.7	-\$247	-\$213	-\$179	-\$145	-\$110
	1.5	\$237	\$310	\$384	\$457	\$530
	2	\$539	\$637	\$735	\$833	\$931
	2.5	\$842	\$964	\$1,087	\$1,209	\$1,331
HIGH RAINFALL						
		Net Price \$/t				
		\$650	\$700	\$750	\$800	\$850
Yield	1	-\$228	-\$179	-\$130	-\$81	-\$32
	1.5	\$75	\$148	\$222	\$295	\$368
	2.2	\$499	\$606	\$714	\$821	\$929
	3	\$983	\$1,129	\$1,276	\$1,423	\$1,570

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	11	6.97	4.62
harvest#	1	9.67	5.71
TOTAL		20.08	14.58

Rates are for low rainfall zone. Extra cost in higher yielding situations

Canola - Triazine Tolerant

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM			HIGH		
Price (20/21 Forecast)				\$750		\$750		\$750		
Quality 42% oil										
Yield (t/ha)				0.7		1.3		2		
GROSS INCOME				\$525		\$975		\$1,500		
VARIABLE COSTS										
Cost			Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	\$/ha		
Seed										
Seed (1)	\$32.00 /kg	@	1.5	\$48.00	2	\$64.00	2.5	\$80.00		
Levies										
GRDC Levies	1.0% Gross Income			\$5.25		\$9.75		\$15.00		
State levies	\$0.50 /tonne sold			\$0.35		\$0.65		\$1.00		
Fertiliser (Bulk)										
18:20:0	\$1,300 /tonne	@	35	\$45.50	55	\$71.50	75	\$97.50		
Flutrialin (on fert)	\$45.00 /litre	@	0.2	\$9.00	0.2	\$9.00	0.2	\$9.00		
Urea	\$1,500 /tonne	@	40	\$60.00	80	\$120.00	120	\$180.00		
SOA	\$700 /tonne	@	50	\$35.00	50	\$35.00	100	\$70.00		
Chemicals-Herbicides										
Summer Weed Control	Various	Allow		\$40.00		\$40.00		\$40.00		
Pre-emergents										
Atrazine (900 g/kg)	\$15.20 /kg	@	1.1	\$16.72	1.1	\$16.72	1.1	\$16.72		
Trifluralin 480g/L	\$8.00 /litre	@	1.5	\$12.00	2	\$16.00	2	\$16.00		
Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Propyzamide	\$45.00 /litre	@	1	\$45.00	1	\$45.00	1	\$45.00		
Post-emergents										
Cletho 360g/L(incOil)	\$19.40 /litre	@	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06		
Haloxyfop 520g/L	\$46.95 /litre	@	0.04	\$1.88	0.04	\$1.88	0.04	\$1.88		
Clopyralid 300g/L	\$42.00 /litre	@	0.25	\$10.50	0.25	\$10.50	0.25	\$10.50		
Glypho (pre-harvest) (2)	\$15.00 /litre	@	2	\$30.00	2	\$30.00	2	\$30.00		
Insecticides										
Chlorpyrifos 500g/L	\$12.30 /litre	@	0.5	\$6.15	0.5	\$6.15	0.5	\$6.15		
Talstar	\$32.50 /litre	@	0.04	\$1.30	0.04	\$1.30	0.04	\$1.30		
Transform (3)	\$340.00 /litre	@	0.1	\$34.00	0.1	\$34.00	0.1	\$34.00		
Karate Zeon® (4)	\$98.00 /litre	@	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35		
Affirm (5)	\$75.00 /litre	@	0	\$0.00	0.3	\$22.50	0.3	\$22.50		
Operations										
Fuel & Oil				\$14.58		\$17.50		\$20.41		
Repairs & Maintenance				\$20.08		\$24.10		\$28.11		
Freight										
Grain (t)	\$30.00 /tonne	@	0.7	\$21.00	1.3	\$39.00	2	\$60.00		
Fertiliser (t)	\$25.00 /tonne	@	0.125	\$3.13	0.185	\$4.63	0.295	\$7.38		
Contract Work										
Aerial spraying	\$15.00 /ha	@		\$0.00	1	\$15.00	1	\$15.00		
Windrowing	\$38.00 /ha	@		\$0.00	1	\$38.00	1	\$38.00		
Insurance	\$12.00 /\$1000	@		\$6.30		\$11.70		\$18.00		
Urea spreading	\$8.50 /ha	@	1	\$8.50	2	\$17.00	2	\$17.00		
Other										
TOTAL VARIABLE COSTS				\$508		\$734		\$914		
GROSS MARGIN/hectare				\$17		\$241		\$586		
Break Even Price (to cover variable costs only)				\$725		\$565		\$457		
Break Even Yield (to cover variable costs only)				0.68		0.98		1.22		
Gross Margin based on last 5 year average price				-\$121		-\$16		\$191		

COMMENTS

- (1) Seed treated with insecticide and fungicide.
- (2) Weedmaster DST registered for this purpose.
- (3) Green Peach Aphid.
- (4) Native Budworm.
- (5) DBM and Native Budworm.

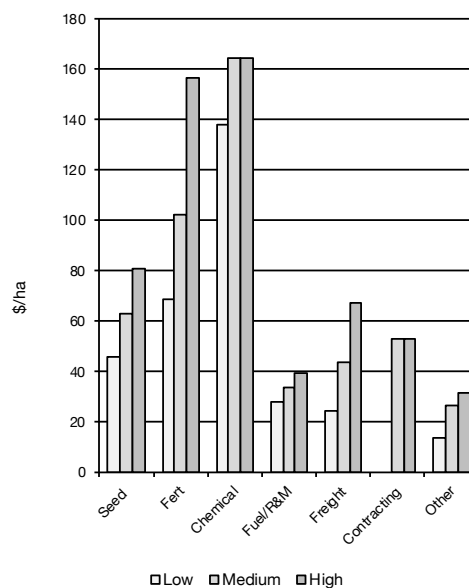
AGRONOMIC NOTES

A maximum of 15 units of nitrogen and 10 units of phosphorus should be applied with seed. Nitrogen rate dependent on target yield. Sulphur required on sandy, neutral/acid soils and intensive cropping systems. Ensure insect control and good seed/soil contact when sowing. Assumes direct heading in low rainfall/ yielding situations. Direct heading is becoming more widely used in all zones. In low rainfall situations, oil penalties may apply- conversely oil bonuses may be expected in high rainfall areas.

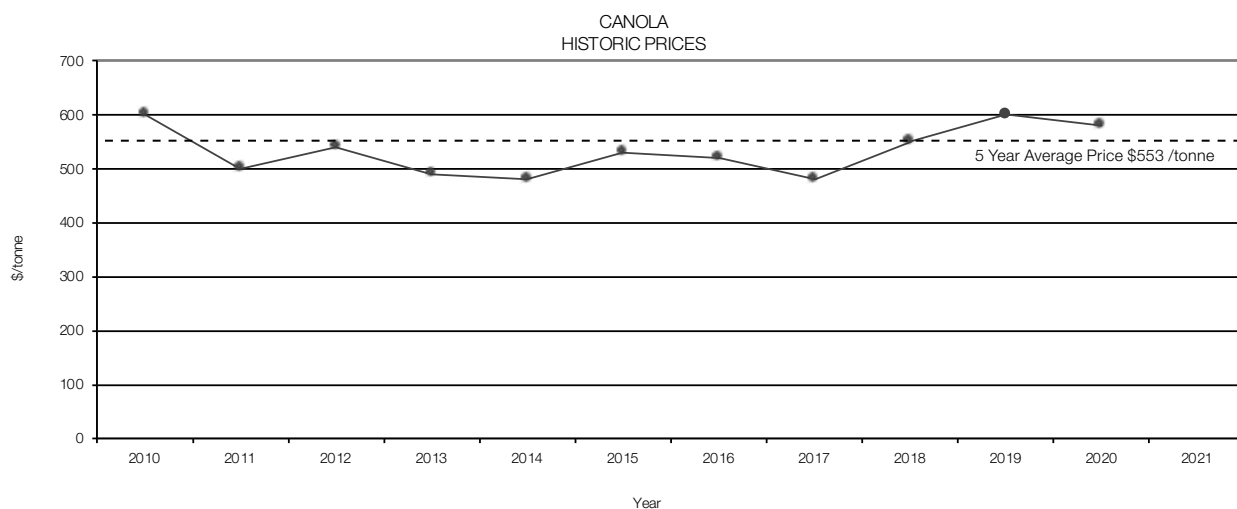
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$650	\$700	\$750	\$800	\$850
Yield	0.3	-\$293	-\$279	-\$264	-\$249	-\$235
	0.7	-\$51	-\$17	\$17	\$52	\$86
	1.1	\$191	\$245	\$299	\$352	\$406
	1.5	\$433	\$506	\$580	\$653	\$726
MEDIUM RAINFALL						
		Net Price \$/t				
		\$650	\$700	\$750	\$800	\$850
Yield	0.7	-\$250	-\$215	-\$181	-\$147	-\$113
	1.3	\$114	\$177	\$241	\$304	\$368
	2	\$537	\$635	\$733	\$831	\$928
	2.5	\$840	\$962	\$1,084	\$1,207	\$1,329
HIGH RAINFALL						
		Net Price \$/t				
		\$650	\$700	\$750	\$800	\$850
Yield	1	-\$215	-\$166	-\$117	-\$68	-\$19
	1.5	\$88	\$161	\$235	\$308	\$381
	2	\$391	\$488	\$586	\$684	\$782
	2	\$391	\$488	\$586	\$684	\$782

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	11	6.97	4.62
harvest#	1	9.67	5.71
TOTAL		20.08	14.58

Rates are for low rainfall zone. Extra cost in higher yielding situations

Canola - Clearfield Hybrid

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW		MEDIUM		HIGH		
Price (20/21 Forecast)					\$750		\$750		\$750	
Quality 42% oil										
Yield (t/ha)				0.75		1.4		2.1		
GROSS INCOME					\$563		\$1,050		\$1,575	
VARIABLE COSTS										
Cost			Rate/ha		Rate/ha		Rate/ha			
			Low	\$/ha	Medium	\$/ha	High	\$/ha		
Seed										
Seed (1)	\$32.00	/kg @	1	\$32.00	1.5	\$48.00	2	\$64.00		
Levies										
GRDC Levies	1.0%	Gross Income		\$5.63		\$10.50		\$15.75		
State levies	\$0.50	/tonne sold		\$0.38		\$0.70		\$1.05		
Fertiliser (Bulk)										
18:20:0	\$1,300	/tonne @	35	\$45.50	55	\$71.50	75	\$97.50		
Flutriafol (on fert)	\$45.00	/litre @	0.2	\$9.00	0.2	\$9.00	0.2	\$9.00		
Urea	\$1,500	/tonne @	50	\$75.00	100	\$150.00	150	\$225.00		
SOA	\$700	/tonne @	50	\$35.00	50	\$35.00	100	\$70.00		
Chemicals-Herbicides										
Summer Weed Control		Various Allow		\$40.00		\$40.00		\$40.00		
Pre-emergents										
Glyphosate 540	\$15.00	/litre @	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Trifluralin 480g/L	\$8.00	/litre @	1.5	\$12.00	2	\$16.00	2	\$16.00		
Carfentrazone 400g/L	\$149.50	/litre @	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Propyzamide	\$45.00	/litre @	1	\$45.00	1	\$45.00	1	\$45.00		
Post-emergents										
Intervix	\$31.00	/litre @	0.4	\$12.40	0.6	\$18.60	0.6	\$18.60		
Adjuvant	\$5.60	/litre @	0.375	\$2.10	0.375	\$2.10	0.375	\$2.10		
Cletho 360g/L(incOil)	\$19.40	/litre @	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06		
Clopyralid 300g/L	\$42.00	/litre @	0.25	\$10.50	0.25	\$10.50	0.25	\$10.50		
Glypho (pre-harvest) (2)	\$15.00	/litre @	2	\$30.00	2	\$30.00	2	\$30.00		
Insecticides										
Chlorpyrifos 500g/L	\$12.30	/litre @	0.5	\$6.15	0.5	\$6.15	0.5	\$6.15		
Talstar	\$32.50	/litre @	0.04	\$1.30	0.04	\$1.30	0.04	\$1.30		
Transform (3)	\$340.00	/litre @	0.1	\$34.00	0.1	\$34.00	0.1	\$34.00		
Karate Zeon® (4)	\$98.00	/litre @	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35		
Affirm (5)	\$75.00	/litre @	0	\$0.00	0.3	\$22.50	0.3	\$22.50		
Operations										
Fuel & Oil					\$14.58		\$17.50		\$20.41	
Repairs & Maintenance					\$20.08		\$24.10		\$28.11	
Freight										
Grain (t)	\$30.00	/tonne @	0.8	\$22.50	1.4	\$42.00	2.1	\$63.00		
Fertiliser (t)	\$25.00	/tonne @	0.135	\$3.38	0.205	\$5.13	0.325	\$8.13		
Contract Work										
Aerial spraying	\$15.00	/ha @		\$0.00	1	\$15.00	1	\$15.00		
Windrowing	\$38.00	/ha @		\$0.00	1	\$38.00	1	\$38.00		
Insurance	\$12.00	/1000 @		\$6.75		\$12.60		\$18.90		
Urea spreading	\$8.50	/ha @	1	\$8.50	2	\$17.00	2	\$17.00		
Other										
TOTAL VARIABLE COSTS					\$505		\$756		\$950	
GROSS MARGIN/hectare					\$57		\$294		\$625	
Break Even Price (to cover variable costs only)					\$674		\$540		\$453	
Break Even Yield (to cover variable costs only)					0.67		1.01		1.27	
Gross Margin based on last 5 year average price					-\$91		\$18		\$210	

COMMENTS

- (1) Seed treated with insecticide and fungicide.
- (2) Weedmaster DST registered for this purpose.
- (3) Green Peach Aphid.
- (4) Native Budworm.
- (5) DBM and Native Budworm.

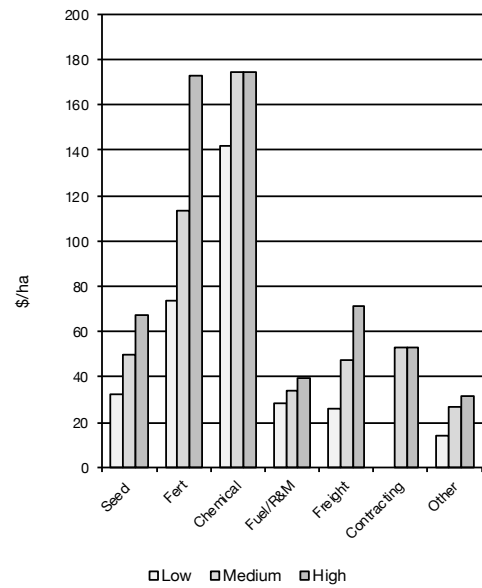
AGRONOMIC NOTES

A maximum of 15 units of nitrogen and 10 units of phosphorus should be applied with seed. Nitrogen rate dependent on target yield. Sulphur required on sandy, neutral/acid soils and intensive cropping systems. Ensure insect control and good seed/soil contact when sowing. Assumes direct heading in low rainfall/yielding situations. Direct heading is becoming more widely used in all zones. In low rainfall situations, oil penalties may apply conversely oil bonuses may be expected in high rainfall areas.

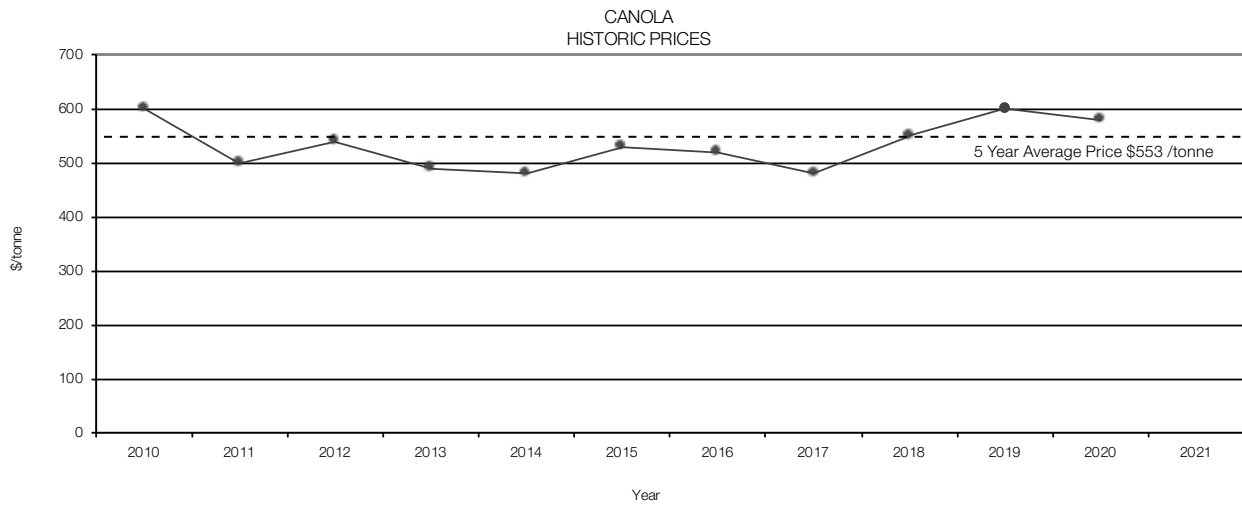
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$650	\$700	\$750	\$800	\$850
Yield t/ha	0.3	-\$288	-\$274	-\$259	-\$244	-\$230
	0.75	-\$16	\$21	\$57	\$94	\$131
	1.1	\$196	\$250	\$303	\$357	\$411
	1.5	\$438	\$511	\$585	\$658	\$731
MEDIUM RAINFALL						
		Net Price \$/t				
		\$650	\$700	\$750	\$800	\$850
Yield t/ha	0.7	-\$266	-\$232	-\$198	-\$163	-\$129
	1.4	\$158	\$226	\$294	\$363	\$431
	2	\$521	\$618	\$716	\$814	\$912
	2.5	\$823	\$945	\$1,068	\$1,190	\$1,312
HIGH RAINFALL						
		Net Price \$/t				
		\$650	\$700	\$750	\$800	\$850
Yield t/ha	1	-\$247	-\$198	-\$149	-\$100	-\$51
	1.5	\$56	\$129	\$203	\$276	\$349
	2.1	\$419	\$522	\$625	\$727	\$830
	2.7	\$782	\$914	\$1,046	\$1,178	\$1,310

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	11	6.97	4.62
harvest#	1	9.67	5.71
TOTAL		20.08	14.58

Rates are for low rainfall zone. Extra cost in higher yielding situations

Canola - Roundup Ready

Gross Margin

INCOME										2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM	HIGH				
Price (20/21 Forecast) (1)				\$720	\$720	\$720				
Quality	42% oil									
Yield (t/ha)				0.75	1.4	2.1				
GROSS INCOME				\$540	\$1,008	\$1,512				
VARIABLE COSTS										
Cost			Rate/ha		Rate/ha		Rate/ha			
			Low	\$/ha	Medium	\$/ha	High	\$/ha		
Seed										
Seed (2)	\$40.50 /kg	@	1	\$40.50	1.5	\$60.75	2	\$81.00		
Technology levy	\$8.90 /kg	@	1	\$8.90	1.5	\$13.35	2	\$17.80		
Levies										
GRDC Levies	1.0% Gross Income			\$5.40		\$10.08		\$15.12		
State levies	\$0.50 /tonne sold			\$0.38		\$0.70		\$1.05		
Fertiliser (Bulk)										
18:20:0	\$1,300 /tonne	@	35	\$45.50	55	\$71.50	75	\$97.50		
Flutriafol (on fert)	\$45.00 /litre	@	0.2	\$9.00	0.2	\$9.00	0.2	\$9.00		
Urea	\$1,500 /tonne	@	50	\$75.00	100	\$150.00	150	\$225.00		
SOA	\$700 /tonne	@	50	\$35.00	50	\$35.00	100	\$70.00		
Chemicals-Herbicides										
Summer Weed Control	Various	Allow		\$40.00		\$40.00		\$40.00		
Pre-emergents										
Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00		
Trifluralin 480g/L	\$8.00 /litre	@	1.5	\$12.00	2	\$16.00	2	\$16.00		
Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99		
Post-emergents										
Roundup Ready 540	\$15.45 /litre	@	1.1	\$17.00	2.3	\$35.54	2.3	\$35.54		
Glyphosate (pre-harvest) (3)	\$15.00 /litre	@	0	\$0.00	1.2	\$18.00	1.2	\$18.00		
Insecticides										
Chlorpyrifos 500g/L	\$12.30 /litre	@	0.5	\$6.15	0.5	\$6.15	0.5	\$6.15		
Talstar	\$32.50 /litre	@	0.04	\$1.30	0.04	\$1.30	0.04	\$1.30		
Transform (4)	\$340.00 /litre	@	0.1	\$34.00	0.1	\$34.00	0.1	\$34.00		
Karate Zeon® (5)	\$98.00 /litre	@	0.024	\$2.35	0.024	\$2.35	0.024	\$2.35		
Affirm (6)	\$75.00 /litre	@	0	\$0.00	0.3	\$22.50	0.3	\$22.50		
Operations										
Fuel & Oil				\$13.32		\$15.99		\$18.65		
Repairs & Maintenance				\$18.18		\$21.82		\$25.45		
Freight										
Grain (t)	\$30.00 /tonne	@	0.8	\$22.50	1.4	\$42.00	2.1	\$63.00		
Fertiliser (t)	\$25.00 /tonne	@	0.135	\$3.38	0.205	\$5.13	0.325	\$8.13		
Contract Work										
Aerial spraying	\$15.00 /ha	@		\$0.00	1	\$15.00	1	\$15.00		
Windrowing	\$38.00 /ha	@		\$0.00	1	\$38.00	1	\$38.00		
Insurance	\$12.00 /\$1000	@		\$6.48		\$12.10		\$18.14		
Urea spreading	\$8.50 /ha	@	1	\$8.50	2	\$17.00	2	\$17.00		
Other										
TOTAL VARIABLE COSTS				\$426	\$714	\$917				
GROSS MARGIN/hectare				\$114	\$294	\$595				
Break Even Price (to cover variable costs only)				\$568	\$510	\$437				
Break Even Yield (to cover variable costs only)				0.59	0.99	1.27				
Gross Margin based on last 5 year average price				-\$11	\$59	\$244				

COMMENTS

- (1) Price achieved will vary depending on markets.
- (2) Treated with insecticide and fungicide.
- (3) Sprayed under the windrow for weed management only.
- (4) Green Peach Aphid.
- (5) Native Budworm.
- (6) DBM and NativeBudworm.

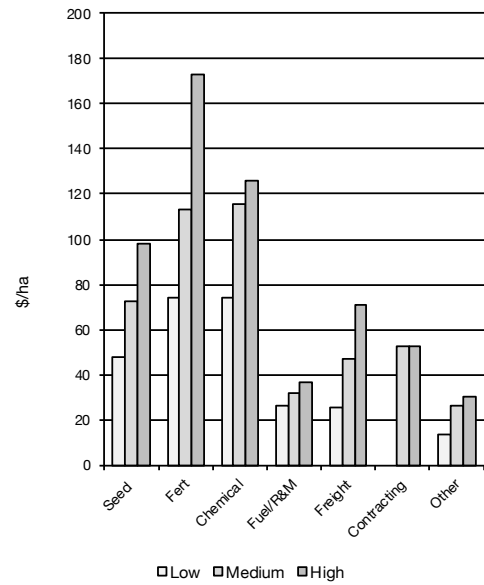
AGRONOMIC NOTES

Growers must participate in a training session either online or face to face and sign a licence and Stewardship agreement before being able to purchase seed with RR Technology from an approved seed retailer. A maximum of 15 units of nitrogen and 10 units of phosphorus should be applied with seed. Nitrogen rate dependent on target yield. Sulphur is required on sandy, neutral/acid soils and intensive cropping systems. Ensure insect control and good seed/soil contact when sowing. Assumes direct heading in low rainfall/yielding situations. Direct heading is becoming more widely used in all zones. In low rainfall situations, oil penalties may apply conversely oil bonuses may be expected in high rainfall areas.

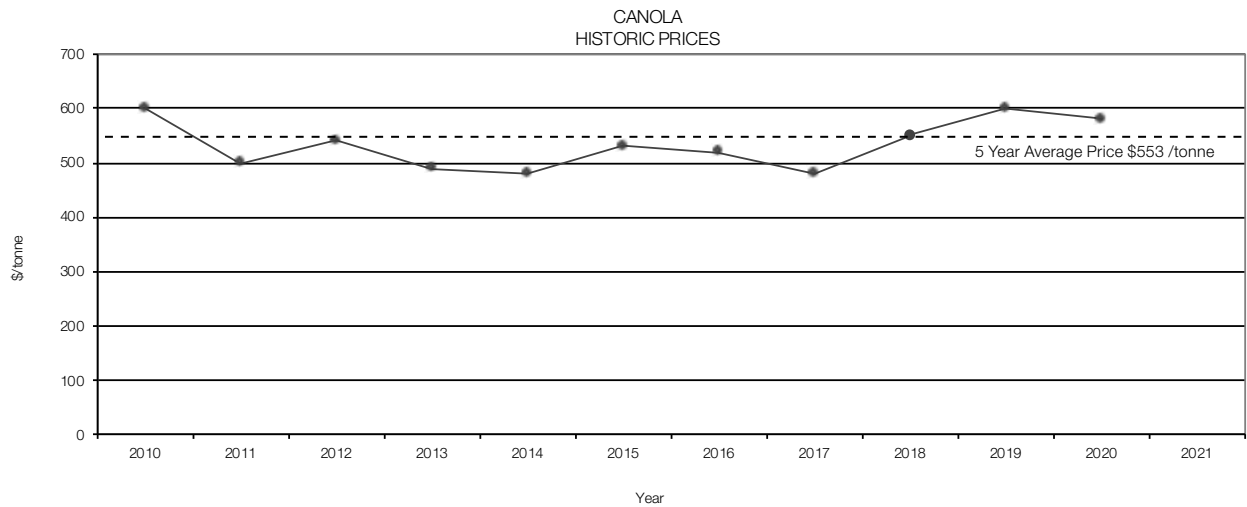
Gross Margin Sensitivity

LOW RAINFALL						
		Net Price \$/t				
		\$620	\$670	\$720	\$770	\$820
Yield t/ha	0.3	-\$218	-\$204	-\$189	-\$174	-\$160
	0.75	\$41	\$78	\$114	\$151	\$188
	1.1	\$242	\$296	\$350	\$404	\$458
	1.5	\$473	\$546	\$619	\$693	\$766
MEDIUM RAINFALL						
		Net Price \$/t				
		\$620	\$670	\$720	\$770	\$820
Yield t/ha	0.7	-\$246	-\$212	-\$178	-\$144	-\$109
	1.4	\$157	\$225	\$294	\$362	\$431
	2	\$502	\$600	\$698	\$796	\$894
	2.5	\$790	\$913	\$1,035	\$1,157	\$1,279
HIGH RAINFALL						
		Net Price \$/t				
		\$620	\$670	\$720	\$770	\$820
Yield t/ha	1	-\$243	-\$195	-\$146	-\$97	-\$48
	1.5	\$44	\$118	\$191	\$264	\$338
	2.1	\$390	\$493	\$595	\$698	\$801
	2.7	\$735	\$867	\$1,000	\$1,132	\$1,264

Variable Costs



Historic Prices and Trends



Machinery Costs

Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	8	5.07	3.36
harvest#	1	9.67	5.71
TOTAL		18.18	13.32

Rates are for low rainfall zone. Extra cost in higher yielding situations

Sown Pasture Vetch

Gross Margin

INCOME								2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM	HIGH		
Carrying Capacity (dry sheep equivalents winter grazed)				4	7	10		
Estimated return per dse based on self replacing Merino Ewe flock (Cereal Zone)				\$65.00	\$65.00	\$75.00		
GROSS INCOME				\$260	\$455	\$750		
VARIABLE COSTS								
Cost	Rate/ha Low		\$/ha	Rate/ha Medium		\$/ha	Rate/ha High	
Seed								
Seed (1)	\$0.70 /kg	@	25	\$17.50	35	\$24.50	50	\$35.00
Seed Inoculant	\$0.05 /kg	@	25	\$1.25	35	\$1.75	50	\$2.50
Levies			\$0.00			\$0.00		\$0.00
Fertiliser (Bulk)								
MAP	\$1,300 /tonne	@	40	\$52.00	60	\$78.00	80	\$104.00
Chemicals-Herbicides								
<i>Pre-emergents</i>								
Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00
Trifluralin	\$8.00 /litre	@	1	\$8.00	1	\$8.00	1	\$8.00
Metribuzin 750 gm/kg	\$43.00 /kg	@	0.2	\$8.60	0.25	\$10.75	0.3	\$12.90
<i>Post-emergents</i>								
Cletho 360g/L (incOil)	\$19.40 /litre	@	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06
Haloxyfop 520g/L	\$46.95 /litre	@	0.075	\$3.52	0.075	\$3.52	0.075	\$3.52
Glypho 540 (desiccant)	\$15.00 /litre	@	1.5	\$22.50	1.5	\$22.50	1.5	\$22.50
Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99
<i>Insecticides</i>								
Dimethoate (2)	\$16.50 /litre	@	0.4	\$6.60	0.4	\$6.60	0.4	\$6.60
Dimethoate (3)	\$16.50 /litre	@			0.1	\$1.65	0.1	\$1.65
Operations								
Fuel & Oil				\$5.93		\$5.93		\$5.93
Repairs & Maintenance				\$5.98		\$5.98		\$5.98
Freight								
Grain (t)	tonnes			\$0.00		\$0.00		\$0.00
Fertiliser (t)	\$25.00 /tonne	@	0.04	\$1.00	0.06	\$1.50	0.08	\$2.00
Contract Work								
Aerial spraying								
Insurance	/\$1000	@		\$0.00		\$0.00		\$0.00
Other								
TOTAL VARIABLE COSTS				\$164	\$202	\$242		
GROSS MARGIN/hectare				\$96	\$253	\$508		

COMMENTS

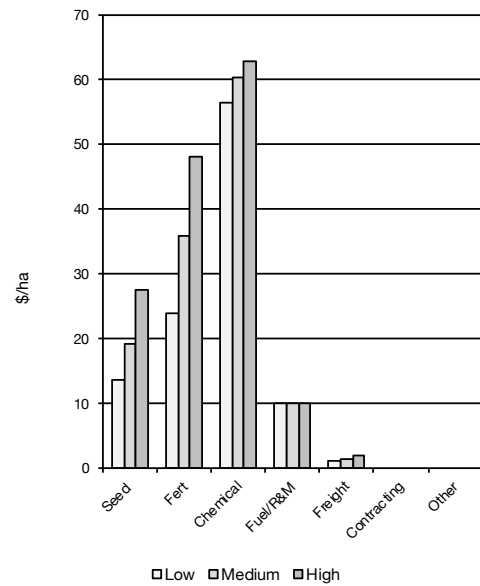
- Seed is not treated with a fungicide or graded.
 (1) Assume Common vetch, other species more expensive.
 (2) Cow pea aphid control.
 (3) RLEM control.

AGRONOMIC NOTES

Gross Margin Sensitivity

LOW RAINFALL						
		GM/dse				
		\$55	\$60	\$65	\$70	\$75
	2	-\$54	-\$44	-\$34	-\$24	-\$14
Carrying	4	\$56	\$76	\$96	\$116	\$136
Capacity	6	\$166	\$196	\$226	\$256	\$286
(dse)	8	\$276	\$316	\$356	\$396	\$436
MEDIUM RAINFALL						
		GM/dse				
		\$55	\$60	\$65	\$70	\$75
	3	-\$37	-\$22	-\$7	\$8	\$23
Carrying	5	\$73	\$98	\$123	\$148	\$173
Capacity	7	\$183	\$218	\$253	\$288	\$323
(dse)	9	\$293	\$338	\$383	\$428	\$473
HIGH RAINFALL						
		GM/dse				
		\$60	\$65	\$75	\$75	\$80
	4	-\$2	\$18	\$58	\$58	\$78
Carrying	7	\$178	\$213	\$283	\$283	\$318
Capacity	10	\$358	\$408	\$508	\$508	\$558
(dse)	12	\$478	\$538	\$658	\$658	\$718

Variable Costs



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	4	2.54	1.68
roll		0.00	0.00
harvest#		0.00	0.00
TOTAL		5.98	5.93

Rates are for low rainfall zone. Extra cost in higher yielding situations

Self-Regenerating Pasture

Gross Margin

INCOME								2022 YOUR ESTIMATE
Rainfall Zone				LOW	MEDIUM	HIGH		
Carrying Capacity (dry sheep equivalents winter grazed)				4	7	10		
Estimated return per dse based on self replacing Merino Ewe flock (Cereal Zone)				\$65.00	\$65.00	\$75.00		
GROSS INCOME				\$260	\$455	\$750		
VARIABLE COSTS								
Cost	Rate/ha Low		\$/ha	Rate/ha Medium		\$/ha	Rate/ha High	
Seed								
Seed	/kg	@	\$0.00			\$0.00		\$0.00
Seed Inoculant	/kg	@	\$0.00			\$0.00		\$0.00
Levies			\$0.00			\$0.00		\$0.00
Fertiliser (Bulk)								
Superphosphate	\$800 /tonne	@	80	\$64.00	120	\$96.00	160	\$128.00
Chemicals-Herbicides								
<i>Pre-emergents</i>								
<i>Post-emergents</i>								
Cletho 360g/L(incOil)	\$19.40 /litre	@	0.33	\$10.06	0.33	\$10.06	0.33	\$10.06
Haloxypop 520g/L	\$46.95 /litre	@	0.075	\$3.52	0.075	\$3.52	0.075	\$3.52
Broadstrike®	\$0.35 /gram	@		\$0.00	25	\$8.75	50	\$17.50
Paraquat 250 (Topping)	\$8.00 /litre	@	0.8	\$6.40	0.8	\$6.40	0.8	\$6.40
<i>Insecticides</i>								
Dimethoate (1)	\$16.50 /litre	@	0.085	\$1.40	0.085	\$1.40	0.085	\$1.40
Operations								
Fuel & Oil				\$1.26		\$1.26		\$1.26
Repairs & Maintenance				\$1.90		\$1.90		\$1.90
Freight								
Grain (t)	tonnes			\$0.00		\$0.00		\$0.00
Fertiliser (t)	\$25.00 /tonne	@	0.08	\$2.00	0.12	\$3.00	0.16	\$4.00
Contract Work								
Fert Spreading	\$8.50 /ha	@	1	\$8.50	1	\$8.50	1	\$8.50
Insurance	/\$1000	@		\$0.00		\$0.00		\$0.00
Other								
TOTAL VARIABLE COSTS				\$99		\$141		\$183
GROSS MARGIN/hectare				\$161		\$314		\$567

COMMENTS

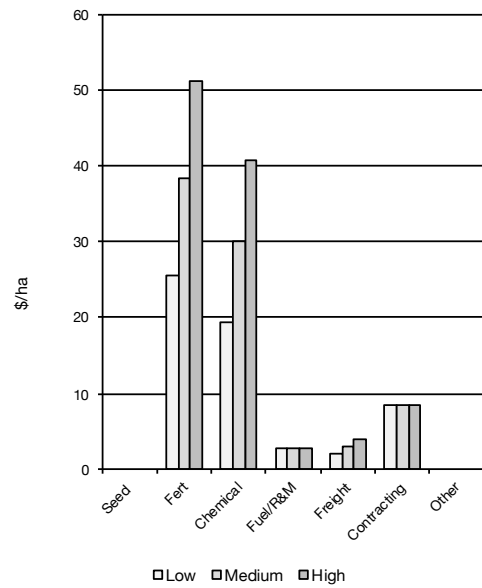
(1) RLEM

AGRONOMIC NOTES

Gross Margin Sensitivity

LOW RAINFALL						
GM/dse						
		\$55	\$60	\$65	\$70	\$75
	2	\$11	\$21	\$31	\$41	\$51
Carrying	4	\$121	\$141	\$161	\$181	\$201
Capacity	6	\$231	\$261	\$291	\$321	\$351
(dse)	8	\$341	\$381	\$421	\$461	\$501
MEDIUM RAINFALL						
GM/dse						
		\$55	\$60	\$65	\$70	\$75
	3	\$24	\$39	\$54	\$69	\$84
Carrying	5	\$134	\$159	\$184	\$209	\$234
Capacity	7	\$244	\$279	\$314	\$349	\$384
(dse)	9	\$354	\$399	\$444	\$489	\$534
HIGH RAINFALL						
GM/dse						
		\$60	\$65	\$75	\$75	\$80
	4	\$57	\$77	\$117	\$117	\$137
Carrying	7	\$237	\$272	\$342	\$342	\$377
Capacity	10	\$417	\$467	\$567	\$567	\$617
(dse)	12	\$537	\$597	\$717	\$717	\$777

Variable Costs



Machinery Costs

Machinery Costs- Assuming full ownership of machinery

(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	0	0.00	0.00
spray	3	1.90	1.26
roll		0.00	0.00
harvest#		0.00	0.00
TOTAL		1.90	1.26

Rates are for low rainfall zone. Extra cost in higher yielding situations

Dry-land Lucerne Pasture

Gross Margin

INCOME				MEDIUM		HIGH		HIGH		2022 YOUR ESTIMATE
				CEREAL		CEREAL		GRAZING		
Carrying Capacity (dry sheep equivalents winter grazed)				6		9		11		
Estimated return per dse based on self replacing Merino Ewe flock (Cereal Zone)				\$65.00		\$75.00		\$75.00		
GROSS INCOME				\$390		\$675		\$825		
ESTABLISHMENT COSTS										
	Cost		Rate/ha Medium	\$/ha	Rate/ha High C	\$/ha	Rate/ha High Gr			
Seed										
	Seed (1)	\$11.00 /kg	@	3	\$33.00	4	\$44.00	4	\$44.00	
	Seed Inoculant	\$0.05 /kg	@	3	\$0.15	4	\$0.20	4	\$0.20	
Fertiliser (Bulk)										
	MAP	\$1,300 /tonne	@	60	\$78.00	70	\$91.00	80	\$104.00	
	Trace elements	\$3 /kg	@				\$0.00	3	\$9.00	
Chemicals-Herbicides										
<i>Pre-emergents</i>										
	Glyphosate 540	\$15.00 /litre	@	1.2	\$18.00	1.2	\$18.00	1.2	\$18.00	
	Carfentrazone 400g/L	\$149.50 /litre	@	0.02	\$2.99	0.02	\$2.99	0.02	\$2.99	
	Trifluran 480	\$8.00 /kg	@	1	\$8.00	1	\$8.00	1	\$8.00	
<i>Post-emergents - seedling</i>										
	Broadstrike	\$0.35 /gm	@	25	\$12.41	25	\$12.41	25	\$12.41	
	Haloxypop 520g/L	\$46.95 /litre	@	0.075	\$3.52	0.075	\$3.52	0.075	\$3.52	
<i>Insecticides</i>										
	Dimethoate (1)	\$16.50 /litre	@	0.1	\$1.65	0.1	\$1.65	0.1	\$1.65	
Operations										
	Fuel & Oil				\$5.51		\$5.51		\$5.51	
	Repairs & Maintenance				\$5.34		\$5.34		\$5.34	
	Loss of Grazing in first year DSE			3	\$195.00	4	\$300.00	5	\$375.00	
Total Establishment Costs					\$363.58		\$492.63		\$589.63	
Depreciation on establishment costs over 7 years					\$51.94		\$70.38		\$84.23	
VARIABLE COSTS Established stands										
<i>Herbicides</i>										
	Sprayseed	\$16.60 /litre	@	2.0	\$33.20	2.0	\$33.20	2.0	\$33.20	
	Diuron 900WG	\$18.75 /kg	@	1.0	\$18.75	1.0	\$18.75	1.0	\$18.75	
	Raptor® WG	\$0.38 /gm	@	45	\$17.88	50	\$19.78	50	\$19.78	
	Broadstrike	\$0.35 /litre	@	25	\$12.41	25	\$12.41	25	\$12.41	
<i>Insecticides</i>										
	Dimethoate (1)	\$16.50 /litre	@	0.1	\$1.65	0.1	\$1.65	0.1	\$1.65	
	Dimethoate (2)	\$16.50 /litre	@			0.375	\$6.19	0.375	\$6.19	
Fertiliser (Bulk)										
	Superphosphate	\$800 /tonne	@	100	\$80.00	125	\$100.00	150	\$120.00	
Operations										
	Fuel & Oil				\$2.73		\$2.73		\$2.73	
	Repairs & Maintenance				\$3.49		\$3.49		\$3.49	
Freight										
	Grain (t)	tonnes			\$0.00		\$0.00		\$0.00	
	Fertiliser (t)	\$25.00 /tonne	@	0.10	\$2.50	0.13	\$3.13	0.15	\$3.75	
Contract Work										
	Aerial spraying									
	Insurance	/\$1000	@		\$0.00		\$0.00		\$0.00	
	Other									
TOTAL VARIABLE COSTS					\$225		\$272		\$306	
GROSS MARGIN/hectare					\$165		\$403		\$519	

COMMENTS

- (1) Price varies between public and private varieties \$6.50 to \$14/kg.
- (2) RLEM control.
- (3) RLEM control.

AGRONOMIC NOTES

Loss of grazing in first year, assumes 8 months grazing on poor quality pasture.

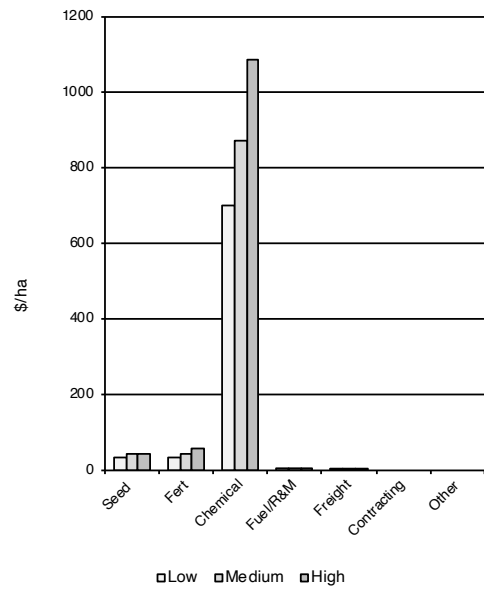
Gross Margin Sensitivity

MEDIUM RAINFALL						
		GM/dse				
		\$55	\$60	\$65	\$70	\$75
Carrying Capacity (dse)	4	-\$5	\$15	\$35	\$55	\$75
	6	\$105	\$135	\$165	\$195	\$225
	8	\$215	\$255	\$295	\$335	\$375
	10	\$325	\$375	\$425	\$475	\$525

HIGH RAINFALL CEREAL						
		GM/dse				
		\$55	\$60	\$75	\$70	\$75
Carrying Capacity (dse)	5	\$3	\$28	\$103	\$78	\$103
	7	\$113	\$148	\$253	\$218	\$253
	9	\$223	\$268	\$403	\$358	\$403
	11	\$333	\$388	\$553	\$498	\$553

HIGH RAINFALL GRAZING						
		GM/dse				
		\$60	\$65	\$75	\$75	\$80
Carrying Capacity (dse)	7	\$114	\$149	\$219	\$219	\$254
	9	\$234	\$279	\$369	\$369	\$414
	11	\$354	\$409	\$519	\$519	\$574
	13	\$474	\$539	\$669	\$669	\$734

Variable Costs



Establishment Machinery Costs

Establishment Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	3	1.90	1.26
roll		0.00	0.00
harvest#		0.00	0.00
TOTAL		5.34	5.51

Rates are for low rainfall zone. Extra cost in higher yielding situations

Machinery Costs

Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	0	0.00	0.00
spray	2	1.27	0.84
spreading	1	2.22	1.89
harvest#		0.00	0.00
TOTAL		3.49	2.73

Phalaris sub-clover Pasture

Gross Margin

INCOME		Rainfall Zone			HIGH CEREAL		HIGH Grazing	2022 YOUR ESTIMATE
Carrying Capacity (dry sheep equivalents winter grazed)					10		14	
Estimated return per dse based on self replacing Merino Ewe flock					\$75		\$75	
GROSS INCOME					\$750		\$1,050	
ESTABLISHMENT COSTS		Cost	Rate/ha Low	\$/ha	Rate/ha Medium	\$/ha	Rate/ha High	
Seed (1)								
Phalaris	\$18.00 /kg	@			1.5	\$27.00	1.5	\$27.00
Cocksfoot	\$12.00 /kg	@			1	\$12.00	1	\$12.00
Sub clover	\$10.00 /kg	@			4	\$40.00	4	\$40.00
Seed Inoculant	\$0.05 /kg	@			4	\$0.20	4	\$0.20
Fertiliser (Bulk)								
MAP	\$1,300 /tonne	@			70	\$91.00	80	\$104.00
Trace elements								
Lime	\$35 /tonne	@			1.5	\$52.50	1.5	\$52.50
Chemicals-Herbicides								
Spring weed control						\$10.00		\$10.00
<i>Pre-emergents</i>								
Glyphosate 540	\$15.00 /litre	@			1.2	\$18.00	1.2	\$18.00
Carfentrazone 400	\$149.50 /litre	@			0.02	\$2.99	0.02	\$2.99
	\$43.00 /kg	@			0	\$0.00	0	\$0.00
<i>Post-emergents</i>								
Bromoxynil 200	\$13.40 /litre	@			1.5	\$20.17	1.5	\$20.17
	\$46.95 /litre	@			0	\$0.00	0	\$0.00
<i>Insecticides</i>								
Dimethoate (2)	\$16.50 /litre	@			0.1	\$1.65	0.1	\$1.65
Dimethoate (3)	\$16.50 /litre	@			0.1	\$1.65	0.1	\$1.65
Operations								
Fuel & Oil						\$0.00		\$0.00
Repairs & Maintenance						\$0.00		\$0.00
Loss of Grazing in first year DSE					4	\$300.00	5	\$375.00
Total Establishment Costs						\$577.16		\$665.16
Depreciation on establishment costs over 7 years						\$92.35		\$106.43
VARIABLE COSTS								
Fertiliser (Bulk)								
Superphosphate	\$800 /tonne	@			120	\$96.00	150	\$120.00
Chemicals-Herbicides								
Tigrex	\$13 /litre	@			0.5	\$6.50	0.75	\$ 9.75
<i>Insecticides</i>								
Dimethoate (3)	\$16.50 /litre	@			0.1	\$1.65	0.1	\$1.65
Operations								
Fuel & Oil						\$0.00		\$0.00
Repairs & Maintenance						\$0.00		\$0.00
Freight								
Fertiliser (t)	\$25.00 /tonne	@			0.12	\$3.00	0.15	\$3.75
Contract Work								
Aerial spraying								
Insurance	/\$1000	@				\$0.00		\$0.00
Other								
TOTAL VARIABLE COSTS						\$199		\$242
GROSS MARGIN/hectare						\$551		\$808

COMMENTS

- (1) Average prices; prices vary between varieties.
- (2) RLEM control.
- (3) RLEM control spring.

AGRONOMIC NOTES

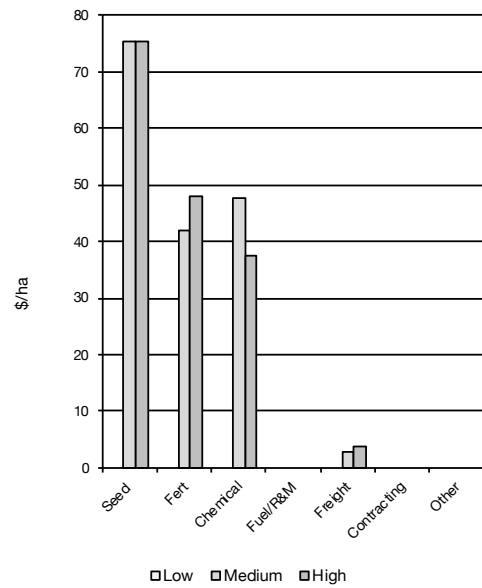
Loss of grazing in first year, assumes 8 months grazing of poor quality pasture.

Gross Margin Sensitivity

HIGH RAINFALL CEREAL						
		GM/dse				
		\$60	\$65	\$75	\$75	\$80
	6	\$161	\$191	\$251	\$251	\$281
Carrying	8	\$281	\$321	\$401	\$401	\$441
Capacity	10	\$401	\$451	\$551	\$551	\$601
(dse)	12	\$521	\$581	\$701	\$701	\$761

HIGH RAINFALL GRAZING						
		GM/dse				
		\$60	\$65	\$75	\$75	\$80
	8	\$238	\$278	\$358	\$358	\$398
Carrying	10	\$358	\$408	\$508	\$508	\$558
Capacity	12	\$478	\$538	\$658	\$658	\$718
(dse)	14	\$598	\$668	\$808	\$808	\$878

Variable Costs



Establishment Machinery Costs

Establishment Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	1	3.44	4.25
spray	3	1.90	1.26
roll		0.00	0.00
harvest#		0.00	0.00
TOTAL		5.34	5.51

Rates are for low rainfall zone. Extra cost in higher yielding situations

Machinery Costs

Machinery Costs- Assuming full ownership of machinery
(Fuel and repairs only- excludes depreciation and other ownership costs)

Operation	No.	Repairs & Maint \$/ha	Fuel \$/ha
seed	0	0.00	0.00
spray	2	1.27	0.84
spread	1	2.22	1.89
harvest#		0.00	0.00
TOTAL		3.49	2.73

Prime Lamb – High Rainfall

Gross Margin

Assumptions			
Ave Breeding Ewe Fibre Diameter	28	Total DSE's (1)	1840
Number of breeding ewes (First Cross)	1000	Stocking rate (DSE/Ha)	12.0
First cross ewe - Terminal meat sire			

INCOME					\$	2022 YOUR ESTIMATE
Wool (kg greasy)	3439.4 Kg	[ave price	236 c/kg] (2)		\$9,031	
Sales	1489 animals	[ave price	\$196.00 per hd]		\$291,780	
GROSS INCOME					\$300,811	
VARIABLE COSTS						
Shearing						
Shearing (3)	969 sheep	@	\$331.98 /100		\$3,217	
(Federal awards)	19 rams	@	\$663.96 /100		\$126	
Shed labour	5 days	@	\$250.95 /day		\$1,255	
Woolclasser	2.50 days	@	\$319.91 /day		\$800	
Superannuation (on ordinary wages only) (4)		@	10.0% wages		\$540	
Work Cover (includes super + o'time etc)		@	4.0% total		\$237	
Wool packs	20 packs	@	\$16.00 /pack		\$320	
Shed sundries	988 sheep	@	\$0.20 /head		\$198	
Lice control	988 sheep	@	\$1.70 /head		\$1,675	
Crutch & Wig	990 ewes	@	\$96.27 /100		\$953	
	19 rams	@	\$192.54 /100		\$37	
Marking						
Lamb marking	1300 lambs	@	\$1.25 /head		\$1,625	
Pain relief	1300 lambs	@	\$1.39 /head		\$1,810	
Ear tags	1300 lambs	@	\$0.30 /head		\$390	
Animal Health						
drench	5660 sheep	@	\$0.83 /head		\$4,692	
vaccinate	3620 sheep	@	\$0.38 /head		\$1,361	
blowfly control	1000 sheep	@	\$1.43 /head		\$1,434	
Stock purchases						
Purchases	(refer opposite page)				\$76,782	
Sale Costs						
Freight						
livestock	189 culls	@	\$4.00 /head		\$756	
	214 ewes	@	\$4.00 /head		\$854	
	1300 prime lambs	@	\$4.00 /head		\$5,200	
wool	20 bales	@	\$15.00 /bale		\$300	
Stock selling charges						
commission/insurance		@	5.5% gross \$		\$16,048	
yard fees	1489 head	@	\$0.85 /head		\$1,266	
levy-sheep	189 head	@	\$0.20 /head		\$38	
levy-lambs	1300 head	@	\$1.50 /head		\$1,950	
SA sheep industry levy	1489 head	@	\$0.67 /head		\$997	
Wool selling charges						
brokerage/testing/insurance		@	\$0.27 /kg		\$929	
wool levy		@	1.5% gross		\$135	
Feed and Other Costs						
hay	20.4 tonne	@	\$160.00 /tonne		\$3,264	
grain	24.6 tonnes	@	\$300.00 /tonne		\$7,380	
Insurance	\$319,900 value	@	\$2.00 /\$'000		\$640	
Water	1840 DSE's	@	\$1.50 /DSE		\$2,760	
Veh Fuel, R&M	1840 DSE's	@	\$1.20 /DSE		\$2,208	
Other	1840 DSE's	@	\$0.50 /DSE		\$920	
TOTAL VARIABLE COSTS					\$143,095	
GROSS MARGIN TOTAL					\$157,716	
GROSS MARGIN/hectare					\$1,029	
GROSS MARGIN/DSE					\$86	

COMMENTS

(1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.

(2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings, locks etc.

(3) Many contractors pay above award rates.

(4) Super/workcover expenses relate only to shearing.

No allowance has been made for pasture expenses such as seed, fertiliser and chemicals. These need to be separately accounted for. Refer to pasture Gross Margins.

Gross Margin Sensitivity

GROSS MARGIN/DSE	Average Weaning Rate (%)					
	95%	105%	130%	125%	135%	145%
\$175	\$41	\$49	\$70	\$66	\$74	\$83
\$180	\$43	\$52	\$73	\$69	\$78	\$86
\$185	\$46	\$54	\$77	\$72	\$81	\$90
\$190	\$48	\$57	\$80	\$75	\$85	\$94
Average \$195	\$50	\$60	\$83	\$79	\$88	\$97
Lamb Sale \$200	\$53	\$63	\$87	\$82	\$92	\$101
Price (\$/hd) \$205	\$55	\$65	\$90	\$85	\$95	\$105
\$210	\$58	\$68	\$93	\$88	\$98	\$109
\$215	\$60	\$71	\$97	\$91	\$102	\$112
\$220	\$63	\$73	\$100	\$95	\$105	\$116
\$225	\$65	\$76	\$103	\$98	\$109	\$120

Production Data

Stocking rate (DSE/Ha)	12.0
Total DSE's	1840
SHEEP GRAZING AREA	153
Number of ewes mated	1000
Ram percentage	2%
Age ewes bought (yrs)	0.5
Age ewes culled	6.5
Years rams kept	3
Flock death rate	3%
Average weaning rate	130%
% Lambs carried over	0%

Culling Rate (% from each group)		
Age group	Ewes	Wethers
0.5	0%	
1.5	0%	
2.5	0%	
3.5	0%	
4.5	0%	
5.5	0%	
6.5	100%	

Sales

SALES	Number	Price/hd	Age	Total
c.f.a ewes	182	\$170.00	6.5	\$30,940
c.f.a rams	6	\$140.00	4.5	\$840
lambs (average price)	1300	\$200.00	20 weeks	\$260,000
TOTAL	1489	\$196.00		\$291,780
PURCHASES	Number	Price/hd	Age yrs	Total
ewes	214	\$300	0.5	\$64,071
rams	7	\$1,850	1.5	\$12,711

Stock Health Requirements

	Number of times				DSE
	Number	Drench	Vacc.	Blowfly	
ewes	1000	3	1	1	1.8
rams	20	3	1	0	2
lambs	1300	2	2	0	
TOTAL	2320	5660	3620	1000	1840

Feeding

	Number	Hay Cost (\$/T)	Kgs Fed per week	No weeks of Feeding	Total cost (\$)
ewes	1000	\$160	2.5	8	\$3,200
rams	20	\$160	2.5	8	\$64
	Number	Grain Cost (\$/T)	Kgs Fed per week	No weeks of Feeding	Total cost (\$)
ewes	1000	\$300	3.0	8	\$7,200
rams	20	\$300	3.0	10	\$180

Shearing

	Number	Wool cut kg/hd	Price	Total
ewes	969	3.50	\$2.65	\$8,972
crossbred rams	19	2.50	\$1.21	\$59
TOTAL	988	3439		\$9,031

Maternal Prime Lamb – High Rainfall

Gross Margin

Assumptions			
Ave Breeding Ewe Fibre Diameter	28	Total DSE's (1)	1840
Number of breeding ewes (First Cross)	1000	Stocking rate (DSE/Ha)	12.0
First cross ewe - Maternal sire			

INCOME					\$	2022 YOUR ESTIMATE
Wool (kg greasy)	3439.4 Kg	[ave price	236 c/kg] (2)		\$9,031	
Sales	1489 animals	[ave price	\$203.34 per hd]		\$302,700	
GROSS INCOME					\$311,731	
VARIABLE COSTS						
Shearing						
Shearing (3)	969 sheep	@	\$331.98 /100		\$3,217	
(Federal awards)	19 rams	@	\$663.96 /100		\$126	
Shed labour	5 days	@	\$250.95 /day		\$1,255	
Woolclasser	2.50 days	@	\$319.91 /day		\$800	
Superannuation (on ordinary wages only) (4)		@	10.0% wages		\$540	
Work Cover (includes super + o'time etc)		@	4.0% total		\$237	
Wool packs	20 packs	@	\$16.00 /pack		\$320	
Shed sundries	988 sheep	@	\$0.20 /head		\$198	
Lice control	988 sheep	@	\$1.70 /head		\$1,675	
Crutch & Wig	990 ewes	@	\$96.27 /100		\$953	
	19 rams	@	\$192.54 /100		\$37	
Marking						
Lamb marking	1300 lambs	@	\$1.25 /head		\$1,625	
Pain relief	1300 lambs	@	\$1.39 /head		\$1,810	
Ear tags	1300 lambs	@	\$0.30 /head		\$390	
Animal Health						
drench	5660 sheep	@	\$0.83 /head		\$4,692	
vaccinate	3620 sheep	@	\$0.38 /head		\$1,361	
blowfly control	1000 sheep	@	\$1.43 /head		\$1,434	
Stock purchases						
Purchases	(refer opposite page)				\$76,782	
Sale Costs						
<i>Freight</i>						
livestock	189 culls	@	\$4.00 /head		\$756	
	214 ewes	@	\$4.00 /head		\$854	
	754 prime lambs	@	\$4.00 /head		\$3,016	
wool	20 bales	@	\$15.00 /bale		\$300	
<i>Stock selling charges</i>						
commission/insurance		@	5.5% gross \$		\$16,649	
yard fees	1489 head	@	\$0.85 /head		\$1,266	
levy-sheep	189 head	@	\$0.20 /head		\$38	
levy-lambs	754 head	@	\$1.50 /head		\$1,131	
SA sheep industry levy	1489 head	@	\$0.67 /head		\$997	
<i>Wool selling charges</i>						
brokerage/testing/insurance		@	\$0.27 /kg		\$929	
wool levy		@	1.5% gross		\$135	
Feed and Other Costs						
hay	20.4 tonne	@	\$160.00 /tonne		\$3,264	
grain	24.6 tonnes	@	\$300.00 /tonne		\$7,380	
Insurance	\$319,900 value	@	\$2.00 /\$'000		\$640	
Water	1840 DSE's	@	\$1.50 /DSE		\$2,760	
Veh Fuel, R&M	1840 DSE's	@	\$1.20 /DSE		\$2,208	
Other	1840 DSE's	@	\$0.50 /DSE		\$920	
TOTAL VARIABLE COSTS					\$140,693	
GROSS MARGIN TOTAL					\$171,038	
GROSS MARGIN/hectare					\$1,115	
GROSS MARGIN/DSE					\$93	

COMMENTS

- (1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.
 (2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings, locks etc.
 (3) Many contractors pay above award rates .
 (4) Super/workcover expenses relate only to shearing.
 No allowance has been made for pasture expenses such as seed, fertiliser and chemicals. These need to be separately accounted for. Refer to pasture Gross Margins.

Gross Margin Sensitivity

GROSS MARGIN/DSE	Average Weaning Rate (%)						
	110%	120%	130%	140%	150%	160%	
	\$183	\$58	\$67	\$76	\$84	\$93	\$102
	\$188	\$61	\$70	\$79	\$88	\$97	\$106
	\$193	\$64	\$73	\$82	\$92	\$101	\$110
	\$198	\$66	\$76	\$86	\$95	\$105	\$114
Average	\$203	\$69	\$79	\$89	\$99	\$109	\$119
Lamb Sale	\$208	\$72	\$82	\$92	\$102	\$113	\$123
Price (\$/hd)	\$213	\$75	\$85	\$96	\$106	\$116	\$127
	\$218	\$78	\$88	\$99	\$110	\$120	\$131
	\$223	\$81	\$91	\$102	\$113	\$124	\$135
	\$228	\$83	\$95	\$106	\$117	\$128	\$139
	\$233	\$86	\$98	\$109	\$120	\$132	\$143

Production Data

Stocking rate (DSE/Ha)	12.0
Total DSE's	1840
SHEEP GRAZING AREA	153
Number of ewes mated	1000
Ram percentage	2%
Age ewes bought (yrs)	1.5
Age ewes culled	6.5
Years rams kept	3
Flock death rate	3%
Average weaning rate	130%
% Lambs carried over	0%

Culling Rate (% from each group)		
Age group	Ewes	Wethers
0.5	0%	
1.5	0%	
2.5	0%	
3.5	0%	
4.5	0%	
5.5	0%	
6.5	100%	

Sales

SALES	Number	Price/hd	Age	Total
c.f.a ewes	182	\$170.00	6.5	\$30,940
c.f.a rams	6	\$140.00	4.5	\$840
Ewe lambs	546	\$220.00	0.5	\$120,120
Wether lambs & cull ewe lambs	754	\$200.00	20 weeks	\$150,800
TOTAL	1489	\$203.34		\$302,700
PURCHASES	Number	Price/hd	Age yrs	Total
ewes	214	\$300	1.5	\$64,071
rams	7	\$1,850	1.5	\$12,711

Stock Health Requirements

	Number	Number of times			DSE
		Drench	Vacc.	Blowfly	
ewes	1000	3	1	1	1.8
rams	20	3	1	0	2
lambs	1300	2	2	0	
TOTAL	2320	5660	3620	1000	1840

Feeding

	Number	Hay Cost (\$/T)	Kgs Fed per week	No weeks of Feeding	Total cost (\$)
ewes	1000	\$160	2.5	8	\$3,200
rams	20	\$160	2.5	8	\$64
	Number	Grain Cost (\$/T)	Kgs Fed per week	No weeks of Feeding	Total cost (\$)
ewes	1000	\$300	3.0	8	\$7,200
rams	20	\$300	3.0	10	\$180

Shearing

	Number	Wool cut kg/hd	Price	Total
ewes	969	3.50	\$2.65	\$8,972
crossbred rams	19	2.50	\$1.21	\$59
TOTAL	988	3439		\$9,031

SR Merino - High Rainfall

Gross Margin

Assumptions			
Ave Breeding Ewe Fibre Diameter	19	Total DSE's (1)	2420
Number of breeding ewes	1000	Stocking rate (DSE/Ha)	12.0

INCOME						2022 YOUR ESTIMATE
					\$	
Wool (kg greasy)	9317	Kg	[ave price	945	c/kg] (2)	\$88,049
Sales	912	animals	[ave price	\$207.33	per hd]	\$188,990
GROSS INCOME						\$277,039
VARIABLE COSTS						
Shearing						
Shearing (3)	2399	sheep	@	\$331.98	/100	\$7,964
(Federal Awards)	25	rams	@	\$663.96	/100	\$166
Shed labour	12	days	@	\$250.95	/day	\$3,011
Woolclasser	6	days	@	\$319.91	/day	\$1,919
Superannuation (on ordinary wages only) (4)			@	10.0%	wages	\$1,306
Work Cover (includes super + o'time etc)			@	4.0%	total	\$575
Wool packs	55	packs	@	\$16.00	/pack	\$880
Shed sundries	2423	sheep	@	\$0.20	/head	\$485
Lice Control	2423	sheep	@	\$1.70	/head	\$4,107
Crutch & wig	1449	sheep	@	\$96.27	/100	\$1,395
	25	rams	@	\$192.54	/100	\$48
Marking						
Lamb marking	900	lambs	@	\$1.50	/head	\$1,350
Pain relief	900	lambs	@	\$1.62	/head	\$1,462
Ear tags	900	lambs	@	\$0.30	/head	\$270
Animal Health						
drench	4000	sheep	@	\$0.91	/head	\$3,648
vaccinate	3400	sheep	@	\$0.38	/head	\$1,278
blowfly control	1525	sheep	@	\$1.43	/head	\$2,187
Sale and Purchase Costs						
Purchases	7	Merino rams	@	\$2,500.00	/head	\$17,500
Freight	912	sheep	@	\$4.00	/head	\$3,648
	55	bales	@	\$15.00	/bale	\$825
Stock selling charges						
commission/insurance			@	5.5%	gross	\$10,394
yard fees	912	head	@	\$0.85	/head	\$775
Sheep trans levy	437	head	@	\$0.20	/head	\$87
Lamb trans levy	475	head	@	\$1.50	/head	\$713
SA sheep industry levy	912	head	@	\$0.67	/head	\$611
Wool selling charges						
brokerage/testing/insurance			@	\$0.27	/kg	\$2,516
Industry levy			@	1.5%	gross	\$1,321
Feed and other Costs						
Hand Feeding						\$7,452
Insurance	\$507,961	value	@	\$2.00	/\$'000	\$1,016
Water	2420	DSE's	@	\$1.50	/DSE	\$3,630
Veh Fuel, R&M	2420	DSE's	@	\$1.20	/DSE	\$2,904
Other	2420	DSE's	@	\$0.50	/DSE	\$1,210
TOTAL VARIABLE COSTS						\$86,653
GROSS MARGIN TOTAL						\$190,387
GROSS MARGIN/hectare						\$944
GROSS MARGIN /DSE						\$79

COMMENTS

(2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings, locks etc.

(3) Many contractors pay above award rates.

(4) Super/workcover expenses relate only to shearing.

No allowance has been made for pasture expenses such as seed, fertiliser and chemicals. These need to be separately accounted for. Refer to pasture Gross Margins.

Gross Margin Sensitivity

GROSS MARGIN/DSE	Average Greasy Wool Price (c/Kg)						
	750	800	945	900	950	1000	
\$160	\$54	\$56	\$62	\$60	\$62	\$64	
\$165	\$56	\$58	\$64	\$62	\$64	\$66	
\$170	\$58	\$60	\$65	\$64	\$66	\$67	
\$175	\$60	\$62	\$67	\$65	\$67	\$69	
Average	\$180	\$62	\$63	\$67	\$69	\$71	
Sale Price	\$185	\$63	\$65	\$71	\$69	\$73	
All Sheep	\$207	\$71	\$73	\$77	\$79	\$81	
(\$/hd)	\$190	\$65	\$67	\$73	\$71	\$75	
	\$195	\$67	\$69	\$74	\$73	\$76	
	\$200	\$69	\$71	\$76	\$74	\$78	
	\$205	\$70	\$72	\$78	\$76	\$80	

Flock Structure

This table shows the number of merino sheep in each age group at mating

Class of Sheep	Age Group						
	0.5 y.o.	1.5 y.o.	2.5 y.o.	3.5 y.o.	4.5 y.o.	5.5 y.o.	6.5 y.o.
Ewes	475	212	206	200	194	188	0
Wethers	0	0	0	0	0	0	0
Rams		7	6	6	6	0	0

Production Data

Stocking rate (DSE/Ha)	12.0
Total DSE's	2420
SHEEP GRAZING AREA	285
Number of ewes mated	1000
Ram percentage	2.5%
Age wethers sold (yrs)	0.5
Years rams kept	4
Flock death rate	3%
Average weaning rate	90%

Age group	Culling Rate (% per each group)	
	Ewes	Wethers
0.5	0%	100%
1.5	54%	0%
2.5	0%	0%
3.5	0%	0%
4.5	0%	0%
5.5	0%	0%
6.5	100%	0%

Sales

SALES	Number	Price/hd	Total
c.f.a ewes	182	\$170.00	\$30,940
c.f.a merino rams	6	\$140.00	\$840
Ewe hoggets	248	\$270.00	\$66,960
Wether lambs (average price)	475	\$190.00	\$90,250
TOTAL	912	\$207.33	\$188,990

Stock Health Requirements

	Number of times				
	Number	DSE	Drench	Vacc.	Blowfly
ewes	1000	1.8	2	1	1
ewe hoggets	475	1.2	2	1	1
wether weaners	0	0.8	1	1	0
merino lambs	950	0.0	1	2	0
merino rams	25	2.0	4	1	2
TOTAL	2450	2420	4000	3400	1525
TOTAL VALUE	\$507,961				

Feeding

Feed	Number of Animals	Feed Cost (\$/T)	kg/Animal	Total cost (\$)
Oats/barley	833	\$300	10 /ewe	\$2,499
Lupins	833	\$410	10 /ewe	\$3,415
Lupins	375	\$410	10 /weaner	\$1,538
TOTAL				\$7,452

Shearing

	Number	Wool cut kg/hd	Total Greasy kg	Yield (%)	Total Clean kg
ewes	981	5.70	5590	70%	3913
ewe hoggets	468	4.50	2105	70%	1474
wether weaners	0	4.50	0	70%	0
lambs	950	1.50	1425	70%	998
merino rams	25	8.00	197	70%	138
Adults	1473	5.68	7892		
TOTAL	2423		9317		6522

Merino Wethers - High Rainfall

Gross Margin

Assumptions:			
Average Wether Fibre Diametre	19	Total DSE's (1)	1200
Number of adult wethers	1000	Stocking rate (DSE/Ha)	12.0

INCOME					\$	2022 YOUR ESTIMATE
Wool (kg greasy)	6790 Kg	[ave price	945 c/kg] (2)		\$64,166	
Sales	182 animals	[ave price	\$185.00 per hd]		\$33,738	
GROSS INCOME					\$97,903	
EXPENSES						
Shearing						
Shearing (3)	970 sheep	@	\$331.98 /100		\$3,220	
Shed labour	5 days	@	\$250.95 /day		\$1,255	
Woolclasser	3 days	@	\$319.91 /day		\$800	
Superannuation (on ordinary wages only) (4)		@	10.0% wages		\$527	
Work Cover (on wages+super+o'time etc)		@	4.0% total		\$232	
Wool packs	40 packs	@	\$16.00 /pack		\$640	
Shed sundries	970 sheep	@	\$0.20 /head		\$194	
Lice control	970 sheep	@	\$1.70 /head		\$1,644	
Crutching	1000 sheep	@	\$96.27 /100		\$963	
Animal Health						
drench	1000 sheep	@	\$0.61 /head		\$608	
vaccinate	1000 sheep	@	\$0.38 /head		\$376	
blowfly control	2000 sheep	@	\$1.43 /head		\$2,868	
Other Expenses	0 sheep	@	\$0.00 /head		\$0	
Stock Purchases						
Purchases	212 wethers	@	\$145.00 /head		\$30,740	
Sale costs and other						
Freight						
livestock	395	@	\$4.00 /head		\$1,580	
wool	40 bales	@	\$15.00 /bale		\$600	
Stock selling charges						
commission/insurance		@	5.5% gross		\$1,856	
yard fees	182 head	@	\$0.85 /head		\$155	
transaction levy	182 head	@	\$0.20 /head		\$36	
SA sheep industry levy	182 head	@	\$0.67 /head		\$122	
Wool selling charges						
brokerage/testing/insurance		@	\$0.27 /kg		\$1,833	
Industry levy		@	1.50% gross		\$962	
Other Expenses						
Hand Feeding					\$2,400	
Insurance	165000 value	@	\$2.00 /\$'000		\$330	
Water	1200 DSE's	@	\$1.50 /DSE		\$1,800	
Veh Fuel, R&M	1200 DSE's	@	\$1.00 /DSE		\$1,200	
Other Expenses	1200 DSE's	@	\$0.50 /DSE		\$600	
TOTAL VARIABLE COSTS					\$57,541	
GROSS MARGIN					\$40,362	
GROSS MARGIN/hectare					\$404	
GROSS MARGIN/DSE					\$34	

COMMENTS

(1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.

(2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings,locks etc.

(3) Many contractors pay above award rates.

(4) Super/workcover expenses relate only to shearing.

No allowance has been made for pasture expenses such as seed, fertiliser and chemicals. These need to be separately accounted for. Refer to pasture Gross Margins.

Gross Margin Sensitivity

GROSS MARGIN/DSE	Average Greasy Wool Price (c/Kg)					
	1050	1100	945	1200	1250	1300
\$160	\$36	\$39	\$30	\$44	\$47	\$50
\$165	\$37	\$39	\$31	\$45	\$48	\$51
\$170	\$37	\$40	\$31	\$46	\$48	\$51
\$175	\$38	\$41	\$32	\$46	\$49	\$52
Average	\$180	\$39	\$42	\$33	\$47	\$50
Sale Price	\$185	\$39	\$42	\$34	\$48	\$51
of wethers	\$190	\$40	\$43	\$34	\$49	\$51
(\$/hd)	\$195	\$41	\$44	\$35	\$49	\$52
	\$200	\$42	\$44	\$36	\$50	\$53
	\$205	\$42	\$45	\$37	\$51	\$54
	\$210	\$43	\$46	\$37	\$51	\$54

Production Data

Stocking rate (DSE/Ha)	12.0
Total DSE's	1200
SHEEP GRAZING AREA	100
Number of wethers	1000
Flock death rate	3%
Age wethers bought (yrs)	0.5
Age wethers culled	5.5

Culling Rate (% from each group)			Stock No's
Age group	Ewes	Wethers	
0.5		0%	212
1.5		0%	206
2.5		0%	200
3.5		0%	194
4.5		0%	188
5.5		100%	

Sales

SALES	Number	Price/hd	Age	Total
c.f.a wethers	182	\$185.00	5.5	\$33,670
TOTAL	182			\$33,670
PURCHASES	Number	Price/hd	Age yrs	Total
wethers	212	\$145	0.5	\$30,793

Stock Value and DSE Requirement

	Number	Value \$/head	Ave Live Wt (Kgs)	DSE rating
wethers	1000	\$165	55	1.2
TOTAL	1000			

Stock Health Requirements

	Number	Number of times			DSE rating
		Drench	Vacc.	Blowfly	
wethers	1000	2	1	2	1.2
TOTAL	1000	2000	1000	2000	1200

Hand Feeding

	kg fed	/animal	\$/tonne	Total
Oats/barley		kg/wether	300	\$0
Hay	15	kg/wether	160	\$2,400
Lupins		kg/wether	410	\$0
TOTAL				\$2,400

Shearing

	Number	Wool cut kg/hd	Total Greasy kg	Yield (%)	Total Clean kg
wethers	970	7.00	6790	70%	4753
TOTAL	970		6790		4753

Lamb Trading - High Rainfall

Gross Margin

Assumptions:			
Number of lambs	1000	Total DSE's (1)	600
Average Lamb Fibre Diameter	20	Number of lambs shorn	100%
Lambs bought at	35 kg liveweight	Stocking rate (DSE/Ha)	12.0
Lambs sold at	55 kg liveweight	@	875 c/kg dwt

INCOME					2022 YOUR ESTIMATE
Wool (kg greasy)	1500 Kg	[ave price	945 c/kg] (2)		\$14,175
Sales	980 animals	[ave price	\$206.94 per hd]		\$202,799
GROSS INCOME					\$216,974
EXPENSES					
Shearing					
Shearing (3)	1000 sheep	@	\$331.98 /100		\$3,320
Shed labour	2 days	@	\$250.95 /day		\$502
Woolclasser	1 days	@	\$319.91 /day		\$320
Superannuation (on ordinary wages only) (4)		@	10.0% wages		\$414
Work Cover (on wages+super+o'time etc)		@	4.0% total		\$182
Wool packs	9 packs	@	\$16.00 /pack		\$144
Shed sundries	1000 sheep	@	\$0.20 /head		\$200
Lice control	1000 sheep	@	\$1.70 /head		\$1,695
Crutching	0 sheep	@	\$96.27 /100		\$0
Animal Health					
drench	1000 sheep	@	\$0.66 /head		\$663
vaccinate	1000 sheep	@	\$0.38 /head		\$376
blowfly control	500 sheep	@	\$1.43 /head		\$717
Other Expenses	0 sheep	@	\$0.00 /head		\$0
Stock Purchases					
Purchases	1000 lambs	@	\$150.00 /head		\$150,000
Sale costs and other					
Freight					
livestock	1980	@	\$4.00 /head		\$7,920
wool	9 bales	@	\$15.00 /bale		\$135
Stock selling charges					
commission/insurance		@	5.5% gross		\$11,154
yard fees	980 head	@	\$0.85 /head		\$833
transaction levy	980 head	@	\$1.50 /head		\$1,470
SA sheep industry levy	980 head	@	\$0.67 /head		\$657
Wool selling charges					
brokerage/testing/insurance		@	\$0.27 /kg		\$405
Industry levy		@	1.50% gross		\$213
Other Expenses					
Supplementary Feeding		0	@	\$0.00 /hd	\$0
Insurance	178468.75 value	@	\$2.00 /\$'000		\$357
Water	600 DSE's	@	\$1.50 /DSE		\$900
Veh Fuel, R&M	600 DSE's	@	\$1.00 /DSE		\$600
Other Expenses	600 DSE's	@	\$0.50 /DSE		\$300
TOTAL VARIABLE COSTS					\$183,476
GROSS MARGIN					\$33,498
GROSS MARGIN/hectare					\$670
GROSS MARGIN/DSE					\$56

COMMENTS

- (1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.
 (2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings, locks etc.
 (3) Many contractors pay above award rates.
 (4) Super/workcover expenses relate only to shearing.
 No allowance has been made for pasture expenses such as seed, fertiliser and chemicals. These need to be separately accounted for. Refer to pasture Gross Margin.

Gross Margin Sensitivity

GROSS MARGIN/DSE	Average Greasy Wool Price (c/Kg)					
	650	700	945	800	850	900
	\$140	(\$55)	(\$54)	(\$47)	(\$51)	(\$49)
	\$145	(\$47)	(\$46)	(\$40)	(\$43)	(\$41)
	\$150	(\$39)	(\$38)	(\$32)	(\$36)	(\$33)
	\$145	(\$47)	(\$46)	(\$40)	(\$43)	(\$41)
Average	\$150	(\$39)	(\$38)	(\$32)	(\$36)	(\$33)
Sale Price	\$207	\$49	\$50	\$56	\$52	\$55
of lambs	\$160	(\$24)	(\$23)	(\$17)	(\$20)	(\$18)
(\$/hd)	\$165	(\$16)	(\$15)	(\$9)	(\$12)	(\$10)
	\$170	(\$8)	(\$7)	(\$1)	(\$5)	(\$2)
	\$175	(\$1)	\$1	\$7	\$3	\$5
	\$180	\$7	\$8	\$14	\$11	\$13

Production Data

Stocking rate (DSE/Ha)	12.0
Total DSE's	600
SHEEP GRAZING AREA	50
Number of lambs	1000
Flock death rate	2%
Age bought (yrs)	0.5
Age sold	0.8

Sales

SALES	Number	Price/hd	Age	Total
Prime lambs	980	\$206.94	0.8	\$202,799
TOTAL	980			\$202,799
PURCHASES	Number	Price/hd	Age yrs	Total
Store lambs	1000	\$150	0.5	\$150,000

Stock Value and DSE Requirement

	Number	Value \$/head	Ave Live Wt (Kgs)	DSE rating
lambs	1000	\$178	45	0.8
TOTAL	1000			

Stock Health Requirements

	Number of times				DSE rating
	Number	Drench	Vacc.	Blowfly	
Lamb	1000	1	1	1	0.6
TOTAL	1000	1000	1000	1000	600

Shearing

	Number	Wool cut kg/hd	Total Greasy kg	Yield (%)	Total Clean kg
lambs	1000	1.50	1500	70%	1050
TOTAL	1000		1500		1050

Prime Lamb - Cereal Zone

Gross Margin

Assumptions			
Ave Breeding Ewe Fibre Diameter	21	Total DSE's (1)	1850
Number of breeding ewes (Merino)	1000	Stocking rate (DSE/Ha)	6.0
Merino ewe - Terminal meat sire			

INCOME					\$	2022 YOUR ESTIMATE
Wool (kg greasy)	6378 Kg	[ave price	727 c/kg] (2)		\$51,547	
Sales	1339 animals	[ave price	\$186.25 per hd]		\$249,560	
GROSS INCOME					\$301,107	
VARIABLE COSTS						
Shearing						
Shearing (3)	970 sheep	@	\$331.98 /100		\$3,220	
(Federal awards)	24 rams	@	\$663.96 /100		\$159	
Shed labour	5 days	@	\$250.95 /day		\$1,255	
Woolclasser	2.5 days	@	\$319.91 /day		\$800	
Superannuation (on ordinary wages only) (4)		@	10.00% total		\$543	
Work Cover (includes super + o'time etc)		@	4.00% wages		\$239.10	
Wool packs	38 packs	@	\$16.00 /pack		\$608	
Shed sundries	994 sheep	@	\$0.20 /head		\$199	
Lice control	994 sheep	@	\$1.70 /head		\$1,685	
Crutch & Wig	0 lambs	@	\$96.27 /100		\$0	
	1019 ewes	@	\$96.27 /100		\$981	
Marking						
Lamb marking	1100 lambs	@	\$1.25 /head		\$1,375	
Pain relief	2125 lambs	@	\$1.39 /head		\$2,958	
Ear tags	1100 lambs	@	\$0.30 /head		\$330	
Animal Health						
drench	2150 sheep	@	\$0.55 /head		\$1,187	
vaccinate	3225 sheep	@	\$0.28 /head		\$903	
blowfly control	1000 sheep	@	\$1.43 /head		\$1,434	
Stock purchases						
Purchases	(refer to opposite page)				\$78,266	
Sale Costs						
Freight						
livestock	239 culls	@	\$4.00 /head		\$956	
	262 ewes	@	\$4.00 /head		\$1,046	
	1100 prime lambs	@	\$4.00 /head		\$4,400	
wool	38 bales	@	\$15.00 /bale		\$570	
Stock selling charges						
commission/insurance		@	5.5% gross		\$13,726	
yard fees	1339 head	@	\$0.85 /head		\$1,138	
levy-sheep	239 head	@	\$0.20 /head		\$48	
levy-lambs	1100 head	@	\$1.50 /head		\$1,650	
SA sheep industry levy	1339 head	@	\$0.67 /head		\$897	
Wool selling charges						
brokerage/testing/insurance		@	\$0.27 kg		\$1,722	
Industry levy		@	1.5% gross		\$773	
Feed and Other Costs						
Water	1850 DSE's	@	\$2.50 /DSE		\$4,625	
Veh Fuel, R&M	1850 DSE's	@	\$1.20 /DSE		\$2,220	
Other	1850 DSE's	@	\$0.50 /DSE		\$925	
hay	20.5 tonne	@	\$160.00 /tonne		\$3,280	
grain	24.8 tonnes	@	\$300.00 /tonne		\$7,425	
Insurance	\$282,750 value	@	\$2.00 /\$'000		\$566	
TOTAL VARIABLE COSTS					\$142,110	
GROSS MARGIN TOTAL					\$158,997	
GROSS MARGIN/hectare					\$516	
GROSS MARGIN/DSE					\$86	

COMMENTS

(1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.

(2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings, locks etc.

(3) Many contractors pay above award rates.

(4) Super/workcover expenses relate only to shearing.

No allowance has been made for pasture expenses such as seed, fertiliser and chemicals. These need to be separately accounted for. Refer to pasture Gross Margins.

Gross Margin Sensitivity

GROSS MARGIN/DSE	Average Weaning Rate (%)					
	90%	100%	110%	120%	130%	140%
\$165	\$58	\$66	\$73	\$81	\$89	\$97
\$170	\$60	\$68	\$76	\$84	\$93	\$101
\$175	\$62	\$71	\$79	\$88	\$96	\$104
\$180	\$65	\$73	\$82	\$91	\$99	\$108
Average	\$185	\$67	\$76	\$85	\$94	\$103
Lamb Sale	\$190	\$69	\$78	\$88	\$97	\$106
Price (\$/hd)	\$195	\$71	\$81	\$90	\$100	\$109
	\$200	\$74	\$83	\$93	\$103	\$113
	\$205	\$76	\$86	\$96	\$106	\$116
	\$210	\$78	\$89	\$99	\$109	\$119
	\$215	\$81	\$91	\$102	\$112	\$123

Production Data

Stocking rate (DSE/Ha)	6.0
Total DSE's	1850
SHEEP GRAZING AREA	308
Number of ewes mated	1000
Ram percentage	2.5%
Age ewes bought (yrs)	1.5
Age ewes culled	5.5
Years rams kept	3
Flock death rate	3%
Average weaning rate	110%
% Lambs carried over	0%

Culling Rate (% from each group)		
Age group	Ewes	Wethers
0.5	0%	
1.5	0%	
2.5	0%	
3.5	0%	
4.5	0%	
5.5	100%	
6.5	0%	

Sales

SALES	Number	Price/hd	Age	Total
c.f.a ewes	232	\$170.00	5.5	\$39,440
c.f.a rams	8	\$140.00	4.5	\$1,120
lambs	1100	\$190.00	20 weeks	\$209,000
TOTAL	1339	186.25		\$249,560
PURCHASES	Number	Price/hd	Age yrs	Total
ewes	262	\$250	1.5	\$65,384
rams	9	\$1,500	1.5	\$12,883

Stock Health Requirements

	Number of times				DSE
	Number	Drench	Vacc.	Blowfly	
ewes	1000	1	1	1	1.8
rams	25	2	1	0	2
lambs	1100	1	2	0	
TOTAL	2125	2150	3225	1000	1850

Feeding

	Number	Hay		Kgs Fed per week	No weeks of Feeding	Total cost (\$)
		Cost (\$/T)				
ewes	1000	\$160		2.5	8	\$3,200
rams	25	\$160		2.5	8	\$80
lambs (35% sold without need for hay)	660	\$160		2.5	5	\$1,320
	Number	Grain		Kgs Fed per week	No weeks of Feeding	Total cost (\$)
		Cost (\$/T)				
ewes	1000	\$300		3.0	8	\$7,200
rams	25	\$250		3.0	10	\$188
lambs (35% sold without need for grain)	660	\$250		6.0	5	\$4,950

Shearing

	Number	Wool cut		Price	Total \$
		kg/hd			
ewes	970	6.50		\$8.16	51449
crossbred rams	24	3.00		\$1.34	98
TOTAL	994	6378			51547

SR Merino - Cereal Zone

Gross Margin

Assumptions			
Ave Breeding Ewe Fibre Diameter	21	Total DSE's (1)	2420
Number of breeding ewes	1000	Stocking rate (DSE/Ha)	6.0

					2022 YOUR ESTIMATE
INCOME					
Wool (kg greasy)	11080 Kg	[ave price	734 c/kg] (2)		\$81,371
Sales	912 animals	[ave price	\$181.76 per hd]		\$165,685
GROSS INCOME					\$247,056
VARIABLE COSTS					
Shearing					
Shearing (3)	2398 sheep	@	\$331.98 /100		\$7,961
(Federal Awards)	25 rams	@	\$663.96 /100		\$166
Shed labour	8 days	@	\$250.95 /day		\$2,008
Woolclasser	4.0 days	@	\$319.91 /day		\$1,280
Superannuation (on ordinary wages only) (4)		@	10.0% wages		\$1,141
Work Cover (includes super + o'time etc)		@	4.0% total		\$502
Wool packs	65 packs	@	\$16.00 /pack		\$1,040
Shed sundries	2423 sheep	@	\$0.20 /head		\$485
Lice control	2423 sheep	@	\$1.70 /head		\$4,107
Crutch & wig	1448 sheep	@	\$96.27 /100		\$1,394
	25 rams	@	\$192.54 /100		\$48
Marking					
Lamb marking	950 lambs	@	\$1.50 /head		\$1,425
Pain relief	900 lambs	@	\$1.62 /head		\$1,462
Ear tags	950 lambs	@	\$0.30 /head		\$285
Animal Health					
drench	2475 sheep	@	\$0.55 /head		\$1,366
vaccinate	3400 sheep	@	\$0.28 /head		\$952
blowfly control	1500 sheep	@	\$1.43 /head		\$2,151
Sale and Purchase Costs					
Purchases	7 Merino rams	@	\$2,500.00 /head		\$17,500
Freight	912 sheep	@	\$4.00 /head		\$3,648
	65 bales	@	\$15.00 /bale		\$975
Stock selling charges					
commission/insurance		@	5.5% gross		\$9,113
yard fees	912 head	@	\$0.85 /head		\$775
sheep tran levy	437 head	@	\$0.20 /head		\$87
lamb trans levy	475 head	@	\$1.50 /head		\$713
SA Sheep industry levy	912 head	@	\$0.67 /head		\$611
wool selling charges					
brokerage/testing/insurance		@	\$0.27 /kg		\$2,992
Industry levy		@	1.5% gross		\$1,221
Feed and other Costs					
Hand Feeding					\$12,348
Insurance	\$445,322 value	@	\$2.00 /\$'000		\$891
Water	2420 DSE's	@	\$2.50 /DSE		\$6,050
Veh Fuel, R&M	2420 DSE's	@	\$1.20 /DSE		\$2,904
Other	2420 DSE's	@	\$0.50 /DSE		\$1,210
TOTAL VARIABLE COSTS					\$88,808
GROSS MARGIN TOTAL					\$158,248
GROSS MARGIN/hectare					\$392
GROSS MARGIN /DSE					\$65

COMMENTS

- (1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.
 - (2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings,locks etc.
 - (3) Many contractors pay above award rates.
 - (4) Super/workcover expenses relate only to shearing.
- No allowance has been made for pasture expenses such as seed, fertiliser and chemicals. These need to be separately accounted for. Refer to pasture Gross Margins.

Gross Margin Sensitivity

GROSS MARGIN/DSE	Average Greasy Wool Price (c/Kg)						
	550	600	734	700	750	800	
	\$105	\$30	\$32	\$38	\$37	\$39	\$41
	\$110	\$32	\$34	\$40	\$38	\$41	\$43
	\$115	\$33	\$36	\$42	\$40	\$42	\$45
	\$120	\$35	\$37	\$43	\$42	\$44	\$46
Average	\$125	\$37	\$39	\$45	\$44	\$46	\$48
Sale Price	\$130	\$39	\$41	\$47	\$45	\$48	\$50
All Sheep	\$182	\$57	\$59	\$65	\$64	\$66	\$68
(\$/hd)	\$140	\$42	\$44	\$51	\$49	\$51	\$53
	\$145	\$44	\$46	\$52	\$51	\$53	\$55
	\$150	\$46	\$48	\$54	\$53	\$55	\$57
	\$155	\$48	\$50	\$56	\$54	\$57	\$59

Flock Structure

This table shows the number of merino sheep in each age group at mating

Class of Sheep	Age Group						
	0.5 y.o.	1.5 y.o.	2.5 y.o.	3.5 y.o.	4.5 y.o.	5.5 y.o.	6.5 y.o.
Ewes	475	234	216	199	183	169	0
Wethers	0	0	0	0	0	0	0
Rams		7	6	6	6	0	0

Production Data

Stocking rate (DSE/Ha)	6.0
Total DSE's	2420
SHEEP GRAZING AREA	285
Number of ewes mated	1000
Ram percentage	2.5%
Age wethers sold (yrs)	0.5
Years rams kept	4
Flock death rate	3%
Average weaning rate	95%
Prime lamb weaning %	0%
% mated for prime lms	0%

Culling Rate (% per each group)		
Age group	Ewes	Wethers
0.5	0%	100%
1.5	49%	0%
2.5	5%	0%
3.5	5%	0%
4.5	5%	0%
5.5	5%	0%
6.5	100%	0%

Sales

SALES	Number	Price/hd	Total
c.f.a ewes	204	\$170.00	\$34,680
c.f.a merino rams	6	\$140.00	\$840
ewe hoggets	227	\$270.00	\$61,290
wether lambs 35kg store	475	\$145.00	\$68,875
TOTAL	912	\$181.76	\$165,685

Stock Health Requirements

	Number of times				
	Number	DSE	Drench	Vacc.	Blowfly
ewes	1000	1.8	1	1	1
ewe hoggets	475	1.2	1	1	1
wether weaners	0	0.8	1	1	1
merino lambs	950	0.0	1	2	0
merino rams	25	2.0	2	1	1
TOTAL	2450	2420	2475	3400	1500
TOTAL VALUE	\$445,322				

Feeding

Feed	Number of Animals	Fodder Cost (\$/T)	kg/ Animal		Total cost (\$)
Oats/barley	1000	\$300	24	/ewe	\$7,200
Hay	1000	\$160	20	/ewe	\$3,200
Lupins	475	\$410	10	/weaner	\$1,948
TOTAL					\$12,348

Shearing

	Number	Wool cut kg/hd	Total Greasy kg	Yield (%)	Total Clean kg
ewes	980	6.50	6373	68%	4333
ewe hoggets	468	5.50	2573	68%	1750
wether weaners	0	5.00	0	68%	0
lambs	950	2.00	1900	68%	1292
merino rams	25	9.50	234	68%	159
Adults	1473	6.63	9180		
TOTAL	2423		11080		7534

Merino Wethers - Cereal Zone

Gross Margin

Assumptions:			
Average Wether Fibre Diameter	21	Total DSE's (1)	1200
Number of adult wethers	1000	Stocking rate (DSE/Ha)	6.0

						2022 YOUR ESTIMATE
INCOME						
Wool (kg greasy)	7275 Kg	[ave price	734 c/kg] (2)		\$	\$53,428
Sales	182 animals	[ave price	\$185.00 per hd]			\$33,738
GROSS INCOME						\$87,165
EXPENSES						
Shearing						
Shearing (3)	970 sheep	@	\$331.98 /100			\$3,220
Shed labour	4 days	@	\$250.95 /day			\$1,004
Woolclasser	2 days	@	\$319.91 /day			\$640
Superannuation (on ordinary wages only) (4)		@	10.0% wages			\$486
Work Cover (on wages+super+o'time etc)		@	4.0% total			\$214
Wool packs	43 packs	@	\$16.00 /pack			\$688
Shed sundries	970 sheep	@	\$0.20 /head			\$194
Lice control	970 sheep	@	\$1.70 /head			\$1,644
Crutching	1000 sheep	@	\$96.27 /100			\$963
Animal Health						
drench	1000 sheep	@	\$0.55 /head			\$552
vaccinate	1000 sheep	@	\$0.28 /head			\$280
blowfly control	1000 sheep	@	\$1.43 /head			\$1,434
Other Expenses	0 sheep	@	\$0.00 /head			\$0
Stock Purchases						
Purchases	212 wethers	@	\$145.00 /head			\$30,740
Sale costs and other						
Freight						
livestock	395	@	\$4.00 /head			\$1,580
wool	43 bales	@	\$15.00 /bale			\$645
Stock selling charges						
commission/insurance		@	5.5% gross			\$1,856
yard fees	182 head	@	\$0.85 /head			\$155
transaction levy	182 head	@	\$0.20 /head			\$36
SA sheep industry levy	182 head	@	\$0.67 /head			\$122
Wool selling charges						
brokerage/testing/insurance		@	\$0.27 /kg			\$1,964
Industry levy		@	1.5% gross			\$801
Other Expenses						
Hand Feeding						\$2,400
Insurance	165000 value	@	\$2.00 /\$'000			\$330
Water	1200 DSE's	@	\$2.50 /DSE			\$3,000
Veh Fuel, R&M	1200 DSE's	@	\$1.00 /DSE			\$1,200
Other Expenses	1200 DSE's	@	\$0.50 /DSE			\$600
TOTAL VARIABLE COSTS						\$56,749
GROSS MARGIN						\$30,417
GROSS MARGIN/hectare						\$152
GROSS MARGIN/DSE						\$25

COMMENTS

(1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.

(2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirting,locks etc.

(3) Many contractors pay above award rates.

(4) Super/workcover expenses relate only to shearing.

No allowance has been made for pasture expenses such as seed, fertiliser and chemicals. These need to be separately accounted for. Refer to pasture Gross Margins.

Gross Margin Sensitivity

GROSS MARGIN/DSE		Average Greasy Wool Price (c/Kg)					
		550	600	734	700	750	800
	\$160	\$11	\$14	\$22	\$20	\$23	\$26
	\$165	\$11	\$14	\$22	\$20	\$23	\$26
	\$170	\$12	\$15	\$23	\$21	\$24	\$27
	\$175	\$13	\$16	\$24	\$22	\$25	\$28
Average	\$180	\$14	\$17	\$25	\$23	\$26	\$29
Sale Price	\$185	\$14	\$17	\$25	\$23	\$26	\$29
of wethers	\$190	\$15	\$18	\$26	\$24	\$27	\$30
(\$/hd)	\$195	\$16	\$19	\$27	\$25	\$28	\$31
	\$200	\$16	\$19	\$28	\$25	\$28	\$31
	\$205	\$17	\$20	\$28	\$26	\$29	\$32
	\$210	\$18	\$21	\$29	\$27	\$30	\$33

Production Data

Stocking rate (DSE/Ha)	6.0
Total DSE's	1200
SHEEP GRAZING AREA	200
Number of wethers	1000
Flock death rate	3%
Age wethers bought (yrs)	0.5
Age wethers culled	5.5

Culling Rate (% from each group)			Stock No's
Age group	Ewes	Wethers	
0.5		0%	212
1.5		0%	206
2.5		0%	200
3.5		0%	194
4.5		0%	188
5.5		100%	

Sales

SALES	Number	Price/hd	Age	Total
c.f.a wethers	182	\$185.00	5.5	\$33,670
TOTAL	182			\$33,670
PURCHASES	Number	Price/hd	Age yrs	Total
wethers	212	\$145	0.5	\$30,793

Stock Value and DSE Requirement

	Number	Value \$/head	Ave Live Wt (Kgs)	DSE Rating
wethers	1000	\$165	55	1.2
TOTAL	1000			

Stock Health Requirements

	Number of times				DSE Rating
	Number	Drench	Vacc.	Blowfly	
wethers	1000	1	1	1	1.2
TOTAL	1000	1000	1000	1000	1200

Hand Feeding

	kg fed	/Animal	\$/tonne	Total
Oats/barley	0	kg/wether	300	\$0
Hay	15	kg/wether	160	\$2,400
Lupins		kg/wether	410	\$0
TOTAL				\$2,400

Shearing

	Number	Wool cut kg/hd	Total Greasy kg	Yield (%)	Total Clean kg
wethers	970	7.50	7275	68%	4947
TOTAL	970		7275		4947

Cleanskin Sheep - Cereal Zone

Gross Margin

Assumptions		Total DSE's (1)	2950
Number of breeding ewes	1000	Stocking rate (DSE/Ha)	6.0

INCOME					\$	2022 YOUR ESTIMATE
Sales	1453 animals	[ave price	\$214.36	per hd]	\$311,520	
GROSS INCOME					\$311,520	
VARIABLE COSTS					\$0	
Marking						
Lamb marking	1500 lambs	@	\$1.25	/head	\$1,875	
Ear tags	1500 lambs	@	\$0.30	/head	\$450	
Animal Health						
drench	3300 sheep	@	\$0.55	/head	\$1,822	
vaccinate	4775 sheep	@	\$0.28	/head	\$1,337	
blowfly control	0 sheep	@	\$1.43	/head	\$0	
Lice control	0 sheep	@	\$1.70	/head	\$0	
Sale and Purchase Costs						
Purchases	7 rams	@	\$1,850.00	/head	\$12,950	
Freight	204 ewes	@	\$4.00	/head	\$816	
	6 rams	@	\$4.00	/head	\$24	
	494 hoggets	@	\$4.00	/head	\$1,976	
	750 lambs	@	\$4.00	/head	\$3,000	
Stock selling charges						
commission/insurance		@	5.5%	gross	\$17,134	
yard fees	1453 head	@	\$0.85	/head	\$1,235	
sheep tran levy	703 head	@	\$0.20	/head	\$141	
lamb trans levy	750 head	@	\$1.50	/head	\$1,125	
SA Sheep industry levy	1453 head	@	\$0.67	/head	\$974	
					\$0	
					\$0	
Feed and other Costs						
Hand Feeding					\$13,475	
Insurance	\$702,013 value	@	\$2.00	/\$'000	\$1,404	
Water	2950 DSE's	@	\$2.50	/DSE	\$7,375	
Veh Fuel, R&M	2950 DSE's	@	\$0.80	/DSE	\$2,360	
Other	2950 DSE's	@	\$0.50	/DSE	\$1,475	
TOTAL VARIABLE COSTS					\$70,947	
GROSS MARGIN TOTAL					\$240,573	
GROSS MARGIN/hectare					\$489	
GROSS MARGIN /DSE					\$82	

COMMENTS

Assumes flock is fully wool shedding and therefore no shearing, crutching or lice control costs are included. Assumes only one lambing per year. No allowance has been made for pasture expenses such as seed, fertiliser and weed control. These need to be separately accounted for.

Gross Margin Sensitivity

GROSS MARGIN/DSE		Average Weaning Percentage					
		120	135	150	165	180	195
	\$194	\$54	\$63	\$73	\$83	\$92	\$102
	\$199	\$55	\$65	\$74	\$84	\$94	\$104
	\$204	\$56	\$66	\$76	\$85	\$95	\$105
	\$209	\$57	\$67	\$77	\$87	\$97	\$107
Average	\$214	\$58	\$68	\$78	\$88	\$98	\$108
Sale Price	\$219	\$59	\$69	\$79	\$89	\$100	\$110
(\$/hd)	\$224	\$60	\$70	\$80	\$91	\$101	\$112
	\$229	\$61	\$71	\$82	\$92	\$103	\$113
	\$234	\$61	\$72	\$83	\$93	\$104	\$115
	\$239	\$62	\$73	\$84	\$95	\$105	\$116
	\$244	\$63	\$74	\$85	\$96	\$107	\$118

Flock Structure

This table shows the number of sheep in each age group at mating

Class of Sheep	Age Group						
	0.5 y.o.	1.5 y.o.	2.5 y.o.	3.5 y.o.	4.5 y.o.	5.5 y.o.	6.5 y.o.
Ewes	750	234	216	199	183	169	0
Wethers	0	0	0	0	0	0	0
Rams		7	6	6	6	0	0

Production Data

Stocking rate (DSE/Ha)	6.0
Total DSE's	2950
SHEEP GRAZING AREA	492
Number of ewes mated	1000
Ram percentage	2.5%
Age wethers sold (yrs)	0.5
Years rams kept	4
Flock death rate	3%
Average weaning rate	150%

Culling Rate (% per each group)		
Age group	Ewes	Wethers
0.5	0%	100%
1.5	68%	0%
2.5	5%	0%
3.5	5%	0%
4.5	5%	0%
5.5	5%	0%
6.5	100%	0%

Sales

SALES	Number	Price/hd	Total
c.f.a ewes	204	\$170.00	\$34,680
c.f.a rams	6	\$130.00	\$780
ewe hoggets	494	\$240.00	\$118,560
wether lambs 55kg finished	750	\$210.00	\$157,500
TOTAL	1453	\$214.36	\$311,520

Stock Health Requirements

	Number	DSE	Number of times			
			Drench	Vacc.	Blowfly	Lice
ewes	1000	2.0	1	1	0	0
ewe hoggets	750	1.2	1	1	0	0
wether weaners	0	1.0	1	1	0	0
lambs	1500	0.0	1	2	0	0
rams	25	2.0	2	1	0	0
TOTAL	3275	2950	3300	4775	0	0
Total Value		\$702,013				

Feeding

Feed	Number of Animals	Fodder Cost (\$/T)	kg/Animal	Total Cost (\$)
Oats/barley	1000	\$300	24 /ewe	\$7,200
Hay	1000	\$160	20 /ewe	\$3,200
Lupins	750	\$410	10 /weaner	\$3,075
TOTAL				\$13,475

Prime Lamb - Pastoral Zone

Gross Margin

Assumptions (Lambs sold to specialist finisher)			
Ave Breeding Ewe Fibre Diameter	22	Total DSE's (1)	1858
Number of breeding ewes	1000	Stocking rate (DSE/Ha)	0.14
Merino ewes - Terminal meat sire			

INCOME						\$	2022 YOUR ESTIMATE
Wool (kg greasy)	6378	Kg	[ave price	646	c/kg] (2)	\$45,778	
Sales	1332	animals	[ave price	\$162.39	per hd]	\$216,300	
GROSS INCOME						\$262,078	
VARIABLE COSTS							
Shearing							
Shearing (3)	970	sheep	@	\$331.98	/100	\$3,220	
(Federal awards)	24	rams	@	\$663.96	/100	\$159	
Shed labour	5	days	@	\$250.95	/day	\$1,255	
Woolclasser	2.50	days	@	\$319.91	/day	\$800	
Superannuation (on ordinary wages only) (4)			@	10.0%	wages	\$543	
Work Cover (on wages+super+o'time etc)			@	4.0%	total	\$239	
Wool packs	38	packs	@	\$16.00	/pack	\$608	
Shed sundries	994	sheep	@	\$0.20	/head	\$199	
Lice control	994	sheep	@	\$1.45	/head	\$1,446	
Crutch & Wig	1100	lambs	@	\$96.27	/100	\$1,059	
	1019	adults	@	\$96.27	/100	\$981	
Marking							
Lamb marking	1100	lambs	@	\$1.25	/head	\$1,375	
Pain relief	2125	lambs	@	\$1.39	/head	\$2,958	
Ear tags	1100	lambs	@	\$0.30	/head	\$330	
Animal Health							
drench	0	sheep	@	\$0.55	/head	\$0	
vaccinate	2125	sheep	@	\$0.28	/head	\$595	
blowfly control	1000	sheep	@	\$1.43	/head	\$1,434	
Stock purchases							
Purchases	(refer opposite page)					\$62,769	
Sale Costs							
Freight							
livestock	232	culls	@	\$7.00	/head	\$1,624	
	262	ewes	@	\$7.00	/head	\$1,831	
	1100	prime lambs	@	\$7.00	/head	\$7,700	
wool	38	bales	@	\$17.00	/bale	\$646	
Stock selling charges							
commission/insurance			@	5.5%	gross	\$11,897	
yard fees	1332	head	@	\$0.85	/head	\$1,132	
levy-sheep	232	head	@	\$0.20	/head	\$46	
levy-lambs	1100	head	@	\$1.50	/head	\$1,650	
SA sheep industry levy	1332	head	@	\$0.67	/head	\$892	
wool selling charges							
Industry levy			@	1.5%	gross	\$687	
brokerage/testing/insurance			@	\$0.27	/kg	\$1,722	
Feed and Other Costs							
Water	1858	DSE's	@	\$1.50	/DSE	\$2,786	
Veh Fuel, R&M	1858	DSE's	@	\$1.70	/DSE	\$3,158	
Other	1858	DSE's	@	\$0.50	/DSE	\$929	
hay	0.0	tonne	@	\$160.00	/tonne	\$0	
grain	1.0	tonnes	@	\$400.00	/tonne	\$400	
Insurance	\$241,875	value	@	\$2.00	/\$'000	\$484	
TOTAL VARIABLE COSTS						\$117,553	
GROSS MARGIN TOTAL						\$144,525	
GROSS MARGIN/hectare						\$10.89	
GROSS MARGIN/DSE						\$78	

COMMENTS

- (1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.
- (2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings,locks etc.
- (3) Many contractors pay above award rates.
- (4) Super/workcover expenses relate only to shearing.

Gross Margin Sensitivity

GROSS MARGIN/DSE	Average Weaning Rate (%)					
	80%	90%	100%	110%	120%	130%
\$90	\$26	\$30	\$33	\$37	\$41	\$45
\$95	\$28	\$32	\$36	\$40	\$44	\$49
\$100	\$30	\$34	\$39	\$43	\$47	\$52
\$105	\$32	\$36	\$41	\$46	\$51	\$55
Average	\$110	\$34	\$39	\$44	\$49	\$54
Lamb Sale	\$115	\$36	\$41	\$46	\$51	\$57
Price (\$/hd)	\$165	\$56	\$64	\$72	\$79	\$87
\$125	\$40	\$46	\$51	\$57	\$63	\$68
\$130	\$42	\$48	\$54	\$60	\$66	\$72
\$135	\$44	\$50	\$56	\$63	\$69	\$75
\$140	\$46	\$52	\$59	\$65	\$72	\$78

Production Data

Stocking rate (DSE/Ha)	0.14
Total DSE's	1858
SHEEP GRAZING AREA	13268
Number of ewes mated	1000
Ram percentage	2.5%
Age ewes bought (yrs)	1.5
Age ewes culled	5.5
Years rams kept	4
Flock death rate	3%
Average weaning rate	110%
% Lambs carried over	0%

Culling Rate (% from each group)		
Age group	Ewes	Wethers
0.5	0%	
1.5	0%	
2.5	0%	
3.5	0%	
4.5	100%	
5.5	0%	
6.5	0%	

Sales

SALES	Number	Price/hd	Age	Total
c.f.a ewes	232	\$150.00	5.5	\$34,800
c.f.a rams	0	\$120.00	5.5	\$0
lambs	1100	\$165.00	20 weeks	\$181,500
TOTAL	1332	\$162.39		\$216,300
PURCHASES	Number	Price/hd	Age yrs	Total
ewes	262	\$210	1.5	\$54,922
rams	7	\$1,200	1.5	\$7,846

Stock Health Requirements

	Number	Number of times			DSE
		Drench	Vacc.	Blowfly	
ewes	1000	0	1	1	1.8
rams	25	0	1	0	2
lambs	1100	0	1	0	
TOTAL	2125	0	2125	1000	1850

Feeding

	Number	Hay Cost (\$/T)	Kgs Fed per week	No Weeks of Feeding	Total Cost (\$)
ewes	1000	\$260	3.0	0	\$0
rams	24	\$260	3.0	0	\$0
	Number	Grain Cost (\$/T)	Kgs Fed per week	No Weeks of Feeding	Total Cost (\$)
ewes	1000		0.0	0	\$0
rams	24		3.0	0	\$0

Shearing

	Number	Wool cut kg/hd	Price	Total
ewes	970	6.50	\$7.25	45680
crossbred rams	24	3.00	\$1.34	98
TOTAL	994	6378		45778

SR Merino - Pastoral Zone

Gross Margin

Assumptions			
Ave Breeding Ewe Fibre Diameter	22	Total DSE's (1)	2660
Number of breeding ewes	1000	Stocking rate (DSE/Ha)	0.14

					2022 YOUR ESTIMATE
INCOME					\$
Wool (kg greasy)	10493 Kg	[ave price	652 c/kg] (2)		\$68,419
Sales	753 animals	[ave price	\$165.62 per hd]		\$124,700
GROSS INCOME					\$193,119
VARIABLE COSTS					
Shearing					
Shearing (3)	2176 sheep	@	\$331.98 /100		\$7,224
(Federal Awards)	30 rams	@	\$663.96 /100		\$199
Shed labour	10 days	@	\$250.95 /day		\$2,510
Woolclasser	5 days	@	\$319.91 /day		\$1,600
Superannuation (on ordinary wages only) (4)		@	10.0% wages		\$1,153
Work Cover (includes super + o'time etc)		@	4.0% total		\$507
Wool packs	62 packs	@	\$16.00 /pack		\$992
Shed sundries	2205 sheep	@	\$0.20 /head		\$441
Lice control	2205 sheep	@	\$1.45 /head		\$3,207
Crutch & wig	1376 sheep	@	\$96.27 /100		\$1,325
Marking					
Lamb marking	800 lambs	@	\$1.50 /head		\$1,200
Pain relief	900 lambs	@	\$1.62 /head		\$1,462
Ear tags	800 lambs	@	\$0.30 /head		\$240
Animal Health					
drench	0 sheep	@	\$0.55 /head		\$0
vaccinate	3030 sheep	@	\$0.28 /head		\$848
blowfly control	1000 sheep	@	\$1.43 /head		\$1,434
other	0 sheep	@	\$0.00 /head		\$0
Sale and Purchase Costs					
Purchases	8 Merino rams	@	\$1,500.00 /head		\$12,000
Freight	753 sheep	@	\$7.00 /head		\$5,271
	62 bales	@	\$17.00 /bale		\$1,054
Stock selling charges					
commission/insurance		@	5.5% gross		\$6,859
yard fees	753 head	@	\$0.85 /head		\$640
transaction levy	753 head	@	\$0.20 /head		\$151
SA sheep industry levy	753 head	@	\$0.67 /head		\$504
Wool selling charges					
brokerage/testing/insurance		@	\$0.27 /kg		\$2,833
Industry levy		@	1.5% gross		\$1,026
Feed and other Costs					
Hand Feeding - rams					\$467
Insurance	\$435,570 value	@	\$2.00 /\$'000		\$871
Water	2660 DSE's	@	\$1.50 /DSE		\$3,990
Veh Fuel, R&M	2660 DSE's	@	\$1.70 /DSE		\$4,522
Other	2660 DSE's	@	\$0.50 /DSE		\$1,330
TOTAL VARIABLE COSTS					\$65,860
GROSS MARGIN TOTAL					\$127,259
GROSS MARGIN/hectare					\$6.70
GROSS MARGIN /DSE					\$48

COMMENTS

- (1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.
- (2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings, locks etc.
- (3) Many contractors pay above award rates.
- (4) Super/workcover expenses relate only to shearing.

Gross Margin Sensitivity

GROSS MARGIN/HA	Average Greasy Wool Price (c/Kg)						
	500	550	600	652	700	750	
	\$141	\$35	\$37	\$39	\$41	\$43	\$45
	\$146	\$37	\$39	\$40	\$42	\$44	\$46
	\$151	\$38	\$40	\$42	\$44	\$46	\$48
	\$156	\$39	\$41	\$43	\$45	\$47	\$49
Average	\$161	\$41	\$43	\$44	\$47	\$48	\$50
Sale	\$166	\$42	\$44	\$46	\$48	\$50	\$52
Price (\$/hd)	\$171	\$43	\$45	\$47	\$49	\$51	\$53
	\$176	\$45	\$47	\$48	\$51	\$52	\$54
	\$181	\$46	\$48	\$50	\$52	\$54	\$56
	\$186	\$47	\$49	\$51	\$53	\$55	\$57
	\$191	\$49	\$51	\$53	\$55	\$56	\$58

Flock Structure

This table shows the number of merino sheep in each age group at mating

Class of Sheep	Age Group						
	0.5 y.o.	1.5 y.o.	2.5 y.o.	3.5 y.o.	4.5 y.o.	5.5 y.o.	6.5 y.o.
Ewes	400	212	206	200	194	188	0
Wethers	400	0	0	0	0	0	0
Rams		8	8	7	7	0	0

Production Data

Stocking rate (DSE/ha)	0.14
Total DSE's	2660
SHEEP GRAZING AREA	19000
Number of ewes mated	1000
Ram percentage	3.0%
Age wethers sold (yrs)	1
Years rams kept	4
Flock death rate	3%
Average weaning rate	80%
Prime lamb weaning %	0%
% mated for prime lms	0%

Culling Rate (% per each group)		
Age group	Ewes	Wethers
0.5	0%	0%
1.5	45%	100%
2.5	0%	0%
3.5	0%	0%
4.5	0%	0%
5.5	0%	0%
6.5	100%	0%

Sales

SALES	Number	Price/hd	Total
c.f.a ewes	182	\$150.00	\$27,300
c.f.a merino rams	7	\$120.00	\$840
ewe hoggets	176	\$240.00	\$42,240
wether lambs 35kg store	388	\$140.00	\$54,320
TOTAL	753	\$165.62	\$124,700

Stock Health Requirements

	Number	Number of times			
		DSE	Drench	Vacc.	Jet
ewes	1000	1.8	0	1	1
ewe hoggets	400	1.2	0	1	0
wether weaners	400	0.8	0	0	0
merino lambs	800	0.0	0	2	0
merino rams	30	2.0	0	1	0
TOTAL	2630	2660	0	3030	1000
TOTAL VALUE	\$435,570				

Feeding

Feed	Number of Animals	Hay Cost (\$/T)	kg/ Fed Animal	Total Cost (\$)
Oats/barley	1000		0.0 /ewe	\$0
Hay	1000	\$260	0.0 /ewe	\$0
Lupins	800	\$410	0.0 /weaner	\$0
Lupins	30	\$410	38.0 /ram	\$467
TOTAL				\$467

Shearing

	Number	Wool Cut kg/hd	Total Greasy kg	Yield (%)	Total Clean kg
ewes	982	6.70	6578	63%	4144
ewe hoggets	394	5.20	2049	63%	1291
wether weaners			0	63%	0
lambs	800	2.00	1600	63%	1008
merino rams	30	9.00	266	63%	168
Adults	1405		8893		
TOTAL	2205		10493		6611

Merino Wethers - Pastoral Zone

Gross Margin

Assumptions:			
Average Wether Fibre Diameter	22	Total DSE's (1)	1200
Number of adult wethers	1000	Stocking rate (DSE/Ha)	0.14

					2022 YOUR ESTIMATE
INCOME					
Wool (kg greasy)	6096 Kg	[ave price	652 c/kg] (2)		\$39,749
Sales	177 animals	[ave price	\$165.00 per hd]		\$29,148
GROSS INCOME					\$68,897
EXPENSES					
Shearing					
Shearing (3)	960 sheep	@	\$331.98 /100		\$3,187
Shed labour	4 days	@	\$250.95 /day		\$1,004
Woolclasser	2 days	@	\$319.91 /day		\$640
Superannuation (on ordinary wages only) (4)		@	10.0% wages		\$483
Work Cover (on wages+super+o'time etc)		@	4.0% total		\$213
Wool packs	36 packs	@	\$16.00 /pack		\$576
Shed sundries	960 sheep	@	\$0.20 /head		\$192
Lice control	960 sheep	@	\$1.45 /head		\$1,396
Crutching	1000 sheep	@	\$96.27 /100		\$963
Animal Health					
drench	0 sheep	@	\$0.55 /head		\$0
vaccinate	1000 sheep	@	\$0.28 /head		\$280
blowfly control	1000 sheep	@	\$1.43 /head		\$1,434
Other Expenses	0 sheep	@	\$0.00 /head		\$0
Stock Purchases					
Purchases	217 wethers	@	\$140.00 /head		\$30,380
Sale costs and other					
Freight					
livestock	393	@	\$7.00 /head		\$2,751
wool	36 bales	@	\$17.00 /bale		\$612
Stock selling charges					
commission/insurance		@	5.5% gross		\$1,603
yard fees	177 head	@	\$0.85 /head		\$150
transaction levy	177 head	@	\$0.20 /head		\$35
SA sheep industry levy	177 head	@	\$0.67 /head		\$118
Wool selling charges					
brokerage/testing/insurance		@	\$0.27 /kg		\$1,646
Industry levy		@	1.5% gross		\$596
Other Expenses					
Hand Feeding					\$0
Insurance	152500 value	@	\$2.00 /\$'000		\$305
Water	1200 DSE's	@	\$1.50 /DSE		\$1,800
Veh Fuel, R&M	1200 DSE's	@	\$1.50 /DSE		\$1,800
Other Expenses	1200 DSE's	@	\$0.50 /DSE		\$600
TOTAL VARIABLE COSTS					\$52,765
GROSS MARGIN					\$16,132
GROSS MARGIN/hectare					\$1.88
GROSS MARGIN/DSE					\$13

COMMENTS

- (1) DSE ratings are based on the maintenance feed requirements of a 2 year old, 50 Kg liveweight Merino Wether with a body condition score of 2.
- (2) The wool price is 90% the price for that micron. This takes into account the lower value of bellies, skirtings,locks etc.
- (3) Many contractors pay above award rates.
- (4) Super/workcover expenses relate only to shearing.

Gross Margin Sensitivity

GROSS MARGIN/DSE	Average Greasy Wool Price (c/Kg)						
	850	950	\$652	1050	1100	1150	
	\$140	\$20	\$25	\$10	\$30	\$32	\$35
	\$145	\$21	\$26	\$11	\$31	\$33	\$36
	\$150	\$21	\$26	\$11	\$31	\$34	\$36
	\$155	\$22	\$27	\$12	\$32	\$34	\$37
Average	\$160	\$23	\$28	\$13	\$33	\$35	\$38
Sale	\$165	\$23	\$28	\$13	\$33	\$36	\$38
Price (\$/hd)	\$170	\$24	\$29	\$14	\$34	\$37	\$39
	\$175	\$25	\$30	\$15	\$35	\$37	\$40
	\$180	\$25	\$30	\$16	\$35	\$38	\$40
	\$185	\$26	\$31	\$16	\$36	\$39	\$41
	\$190	\$27	\$32	\$17	\$37	\$39	\$42

Production Data

Stocking rate (DSE/Ha)	0.14
Total DSE's	1200
SHEEP GRAZING AREA	8571
Number of wethers	1000
Flock death rate	4%
Age wethers bought (yrs)	0.5
Age wethers culled	5.5

Culling Rate (% from each group)			Stock No's
Age group	Ewes	Wethers	
0.5		0%	217
1.5		0%	208
2.5		0%	200
3.5		0%	192
4.5		0%	184
5.5		100%	

Sales

SALES	Number	Price/hd	Age	Total
c.f.a wethers	177	\$165.00	5.5	\$29,205
TOTAL	177			\$29,205
PURCHASES	Number	Price/hd	Age yrs	Total
wethers	217	\$140	0.5	\$30,331

Stock Value and DSE Requirement

	Number	Value \$/head	Ave Live Wt (Kgs)	DSE Rating
wethers	1000	\$153	55	1.20
TOTAL	1000			

Stock Health Requirements

	Number of times				DSE Rating
	Number	Drench	Vacc.	Blowfly	
wethers	1000	0	1	1	1.2
TOTAL	1000	0	1000	1000	1200

Hand Feeding

	kg Fed	/Animal	\$/tonne	Total
Oats/barley	0	kg/wether		\$0
Hay	0	kg/wether	260	\$0
Lupins	0	kg/wether	410	\$0
TOTAL				\$0

Shearing

	Number	Wool cut kg/hd	Total Greasy kg	Yield (%)	Total Clean kg
wether hoggets	208	4.00	832	63%	524
wethers	752	7.00	5264	63%	3316
TOTAL	960		6096		3841

Cleanskin Sheep - Pastoral Zone

Gross Margin

Assumptions		Total DSE's (1)	2830
Number of breeding ewes	1000	Stocking rate (DSE/Ha)	0.14

INCOME					\$	2022 YOUR ESTIMATE
Sales	1256 animals	[ave price	\$189.21 per hd]		\$237,700	
GROSS INCOME					\$237,700	
VARIABLE COSTS					\$0	
Marking						
Lamb marking	1300 lambs	@	\$1.25 /head		\$1,625	
Ear tags	1300 lambs	@	\$0.30 /head		\$390	
Animal Health						
drench	0 sheep	@	\$0.55 /head		\$0	
vaccinate	4275 sheep	@	\$0.28 /head		\$1,197	
blowfly control	0 sheep	@	\$1.43 /head		\$0	
Lice control	0 sheep	@	\$1.45 /head		\$0	
Sale and Purchase Costs						
Purchases	7 rams	@	\$1,850.00 /head		\$12,950	
Freight	204 ewes	@	\$7.00 /head		\$1,428	
	6 rams	@	\$7.00 /head		\$42	
	397 hoggets	@	\$7.00 /head		\$2,779	
	650 lambs	@	\$10.00 /head		\$6,500	
Stock selling charges						
commission/insurance		@	5.5% gross		\$13,074	
yard fees	1256 head	@	\$0.85 /head		\$1,068	
sheep tran levy	606 head	@	\$0.20 /head		\$121	
lamb trans levy	650 head	@	\$1.50 /head		\$975	
SA Sheep industry levy	1256 head	@	\$0.67 /head		\$842	
					\$0	
					\$0	
Feed and other Costs						
Hand Feeding - rams					\$390	
Insurance	\$562,894 value	@	\$2.00 /\$'000		\$1,126	
Water	2830 DSE's	@	\$2.50 /DSE		\$7,075	
Veh Fuel, R&M	2830 DSE's	@	\$0.80 /DSE		\$2,264	
Other	2830 DSE's	@	\$0.50 /DSE		\$1,415	
TOTAL VARIABLE COSTS					\$55,259	
GROSS MARGIN TOTAL					\$182,441	
GROSS MARGIN/hectare					\$9	
GROSS MARGIN /DSE					\$64	

COMMENTS

Assumes flock is fully wool shedding and therefore no shearing, crutching or lice control costs are included. Assumes only one lambing per year. No allowance has been made for pasture expenses such as seed, fertiliser and weed control. These need to be separately accounted for.

Gross Margin Sensitivity

GROSS MARGIN/DSE		Average Weaning Percentage					
		110	120	130	140	150	160
	\$169	\$47	\$52	\$58	\$64	\$70	\$76
	\$174	\$48	\$53	\$59	\$65	\$71	\$77
	\$179	\$48	\$54	\$60	\$66	\$72	\$78
	\$184	\$49	\$55	\$62	\$68	\$74	\$80
Average	\$189	\$50	\$56	\$63	\$69	\$75	\$81
Sale Price (\$/hd)	\$194	\$51	\$57	\$64	\$70	\$76	\$82
	\$199	\$52	\$58	\$65	\$71	\$77	\$84
	\$204	\$53	\$59	\$66	\$72	\$79	\$85
	\$209	\$54	\$60	\$67	\$73	\$80	\$86
	\$214	\$55	\$61	\$68	\$75	\$81	\$88
	\$219	\$56	\$62	\$69	\$76	\$82	\$89

Flock Structure

This table shows the number of sheep in each age group at mating

Class of Sheep	Age Group						
	0.5 y.o.	1.5 y.o.	2.5 y.o.	3.5 y.o.	4.5 y.o.	5.5 y.o.	6.5 y.o.
Ewes	650	234	216	199	183	169	0
Wethers	0	0	0	0	0	0	0
Rams		7	6	6	6	0	0

Production Data

Stocking rate (DSE/Ha)	0.14
Total DSE's	2830
SHEEP GRAZING AREA	20214
Number of ewes mated	1000
Ram percentage	2.5%
Age wethers sold (yrs)	0.5
Years rams kept	4
Flock death rate	3%
Average weaning rate	130%

Culling Rate (% per each group)		
Age group	Ewes	Wethers
0.5	0%	100%
1.5	63%	0%
2.5	5%	0%
3.5	5%	0%
4.5	5%	0%
5.5	5%	0%
6.5	100%	0%

Sales

SALES	Number	Price/hd	Total
c.f.a ewes	204	\$160.00	\$32,640
c.f.a rams	6	\$120.00	\$720
ewe hoggets	397	\$220.00	\$87,340
wether lambs 50kg	650	\$180.00	\$117,000
TOTAL	1256	\$189.21	\$237,700

Stock Health Requirements

	Number of Times					
	Number	DSE	Drench	Vacc.	Blowfly	Lice
ewes	1000	2.0	0	1	0	0
ewe hoggets	650	1.2	0	1	0	0
wether weaners	0	1.0	0	1	0	0
lambs	1300	0.0	0	2	0	0
rams	25	2.0	0	1	0	0
TOTAL	2975	2830	0	4275	0	0
TOTAL VALUE	\$562,894					

Feeding

Feed	Number of Animals	Fodder Cost (\$/T)	kg/	Animal	Total Cost (\$)
Oats/barley	1000	\$300	0	/ewe	\$0
Hay	1000	\$160	0	/ewe	\$0
Lupins	650	\$410	0	/weaner	\$0
Lupins	25	\$410	38	/ram	\$390
TOTAL					\$390

Beef Cattle - High Rainfall

Gross Margin

Assumptions:		<i>(Breeding young cattle for local trade, grass fattened)</i>	
Breeding Cow	14.5 DSE	100	Cow breeding herd
Calf Weaning	90%	13	cows replaced per year
Herd Deaths	3%	3%	Bulls bought for
Cows c.f.a	10 years old		sold for
Uses	13 heifers as replacements		after
Carry over calf	8 DSE	40%	carryover to heavier weights
Weaned @	8 months	6	months extra carry over
Heifers mated @	15 months	1888	Herd DSE
Stocking rate	10 DSE/ha		Drench cows
Area required	189 hectares		Drench calves
Feeds	35 kg/DSE hay equivalent supplement		

					2022 YOUR ESTIMATE
INCOME					\$
Stock sales	54 vealers @	280 kg liveweight @	\$6.05 /kg L/W		\$91,476
	22 yearlings @	420 kg liveweight @	\$5.00 /kg L/W		\$46,200
Culls	10 Cows @	550 kg liveweight @	\$3.00 /kg L/W		\$15,818
	1 bull @				\$2,500
GROSS INCOME					\$155,994
VARIABLE COSTS					
Bull Purchases					
No. of bulls	1		\$12,000 total		\$12,000
Veterinary & Medicines					
Drench - cows 2x calves 1x	290	@	\$6.25 /head		\$1,813
Ear Tags NLIS	90	@	\$4.75 /tag		\$428
Lice Treatments	100	@	\$6.25 /dose		\$625
Vaccine (5 in 1)	180	@	\$0.80 /dose		\$145
Supplementary Feed					
Hay	66 tonne	@	\$160.00 /tonne		\$10,560
Grain	0.00 t/head	@	\$300.00 /tonne		\$0
Blocks/ Mineral Mix	100	@	\$5.50 /head		\$550
Sale costs and other					
Insurance	\$119,000	@	\$2.00 /\$1000		\$238
Water	1888 dse's	@	\$1.50		\$2,832
Veh Fuel, R&M	1888 dse's	@	\$1.20		\$2,266
Other	1888 dse's	@	\$0.50		\$944
Transport: Lvstk	87 head	@	\$30.00 /head		\$2,598
Commission		@	5.5%		\$8,580
Levies		@	\$5.00 /head		\$433
TOTAL VARIABLE COSTS					\$44,010
GROSS MARGIN TOTAL					\$111,984
GROSS MARGIN PER COW					\$1,120
GROSS MARGIN/DSE					\$59.31
GROSS MARGIN/hectare					\$593.12

COMMENTS

Livestock weight will vary between cattle breed, feed type and age

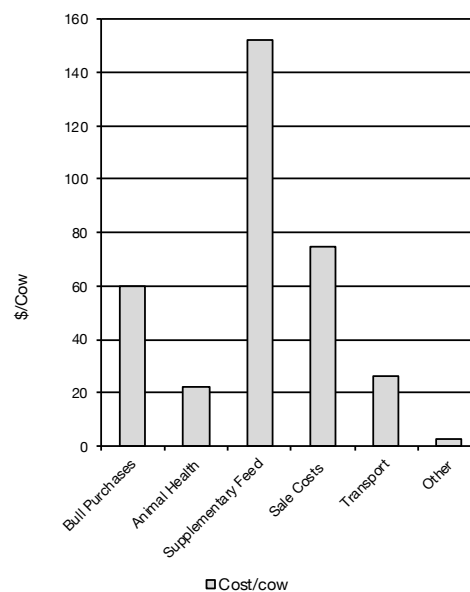
No allowance has been made for pasture expenses such as seed, fertiliser and weed control. These need to be separately accounted for.

Gross Margin Sensitivity

		PER COW				
		\$/kg Liveweight(vealers and yearlings)				
		\$3.75	\$3.95	\$4.15	\$4.35	\$4.55
Weaning %	60%	\$279	\$307	\$336	\$364	\$393
	65%	\$342	\$374	\$405	\$437	\$469
	70%	\$405	\$440	\$475	\$510	\$546
	75%	\$468	\$506	\$545	\$584	\$622
	80%	\$531	\$573	\$615	\$657	\$699
	85%	\$594	\$639	\$684	\$730	\$775
	90%	\$657	\$705	\$754	\$803	\$851
	95%	\$720	\$772	\$824	\$876	\$928
	100%	\$783	\$838	\$893	\$949	\$1,004

		PER DSE				
		\$/kg Liveweight(vealers and yearlings)				
		\$3.75	\$3.95	\$4.15	\$4.35	\$4.55
Weaning %	60%	\$15	\$16	\$18	\$19	\$21
	65%	\$18	\$20	\$21	\$23	\$25
	70%	\$21	\$23	\$25	\$27	\$29
	75%	\$25	\$27	\$29	\$31	\$33
	80%	\$28	\$30	\$33	\$35	\$37
	85%	\$31	\$34	\$36	\$39	\$41
	90%	\$35	\$37	\$40	\$43	\$45
	95%	\$38	\$41	\$44	\$46	\$49
	100%	\$41	\$44	\$47	\$50	\$53

Variable Costs



Beef Cattle - Cereal Zone

Gross Margin

Assumptions:		<i>(Breeding young cattle for local trade, grass fattened)</i>	
Breeding Cow	14.5 DSE	100	Cow breeding herd
Calf Weaning	90%	13	cows replaced per year
Herd Deaths	3%	3%	Bulls bought for
Cows c.f.a	10 years old		sold for
Uses	13 heifers as replacements		after
Carry over calf	8 DSE	50%	carryover to heavier weights
Weaned @	8 months	6	months extra carry over
Heifers mated @	15 months	1960	Herd DSE
Stocking rate	5.00 DSE/ha		Drench cows
Area required	392 hectares		Drench calves
Feeds	35 kg/DSE hay equivalent supplement		

					2022 YOUR ESTIMATE
					\$
INCOME					
Stock sales	45 vealers @	280 kg liveweight @	\$6.05 /kg L/W		\$76,230
	31 yearlings	400 kg liveweight @	\$5.00 /kg L/W		\$62,000
Culls	10 Cows @	550 kg liveweight @	\$3.00 /kg L/W		\$15,818
	1 bull@				\$2,500
GROSS INCOME					\$156,548
VARIABLE COSTS					
Bull Purchases					
No. of bulls	1	@	\$12,000 total		\$12,000
Veterinary & Medicines					
Drench - cows 2x calves 1x	290	@	\$6.25 /head		\$1,813
Ear Tags	90	@	\$4.75 /tag		\$428
Lice Treatments	100	@	\$6.25 /dose		\$625
Vaccine (5 in 1)	180	@	\$0.80 /dose		\$145
Supplementary Feed					
Hay	68 tonne	@	\$160.00 /tonne		\$10,880
Grain	0.00 t/head	@	\$300.00 /tonne		\$0
Blocks/ Mineral Mix	100	@	\$5.50 /head		\$550
Sale costs and other					
Insurance	\$119,000	@	\$2.00 /\$1000		\$238
Water	1960 dse's	@	\$2.50		\$4,900
Veh Fuel, R&M	1960 dse's	@	\$1.20		\$2,352
Other	1960 dse's	@	\$0.50		\$980
Transport: Lvstk	87 head	@	\$30.00 /head		\$2,598
Commission		@	5.5%		\$8,610
Levies		@	\$5.00 /head		\$433
TOTAL VARIABLE COSTS					\$46,550
GROSS MARGIN TOTAL					\$109,997
GROSS MARGIN PER COW					\$1,100
GROSS MARGIN/DSE					\$56.12
GROSS MARGIN/hectare					\$280.60

COMMENTS

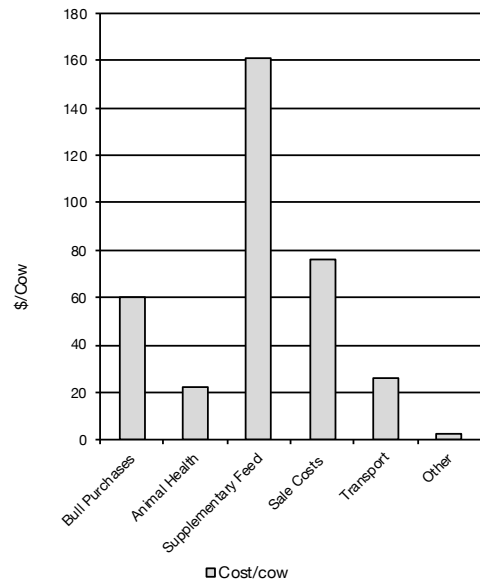
No allowance has been made for pasture expenses such as seed, fertiliser and weed control. These need to be separately accounted for.

Gross Margin Sensitivity

		PER COW				
		\$/kg Liveweight(vealer/yearlings)				
		\$3.70	\$3.90	\$4.10	\$4.30	\$4.50
Weaning %	60%	\$265	\$295	\$324	\$354	\$384
	65%	\$328	\$361	\$394	\$427	\$460
	70%	\$391	\$427	\$464	\$500	\$537
	75%	\$454	\$494	\$534	\$573	\$613
	80%	\$517	\$560	\$603	\$646	\$690
	85%	\$580	\$626	\$673	\$720	\$766
	90%	\$643	\$693	\$743	\$793	\$843
	95%	\$706	\$759	\$812	\$866	\$919
	100%	\$768	\$825	\$882	\$939	\$996

		PER DSE				
		\$/kg Liveweight(vealer/yearlings)				
		\$3.70	\$3.90	\$4.10	\$4.30	\$4.50
Weaning %	60%	\$14	\$15	\$17	\$18	\$20
	65%	\$17	\$18	\$20	\$22	\$23
	70%	\$20	\$22	\$24	\$26	\$27
	75%	\$23	\$25	\$27	\$29	\$31
	80%	\$26	\$29	\$31	\$33	\$35
	85%	\$30	\$32	\$34	\$37	\$39
	90%	\$33	\$35	\$38	\$40	\$43
	95%	\$36	\$39	\$41	\$44	\$47
	100%	\$39	\$42	\$45	\$48	\$51

Variable Costs



Beef Cattle - Pastoral Zone

Gross Margin

Assumptions:		<i>(Breeding young cattle for store trade)</i>	
Breeding Cow	14.5 DSE	100	Cow breeding herd
Calf Weaning	80%	13	cows replaced per year
Herd Deaths	3%	3%	Bulls bought for \$8,000
Cows c.f.a	10 years old		after 3 years sold for \$2,000
Uses	13 heifers as replacements	100%	carryover to heavier weights
Carry over calf	8 DSE	6	months extra carry over
Weaned @	8 months	1997	Herd DSE
Heifers mated @	20 months		Drench cows 0 x
Stocking rate	0.14 DSE/ha		Drench calves 0 x
Area required	14263 hectares		
Feeds	20 kg/DSE hay equivalent supplement		

					2022 YOUR ESTIMATE
INCOME					\$
Stock sales	40 young	280 kg liveweight @	\$5.70 /kg		\$63,840
	27 bullocks	500 kg liveweight @	\$4.00 /kg		\$54,000
Culls	10 Cows @	550 kg lwt @	\$2.75 /kg		\$15,125
	1 bull@				\$2,000
GROSS INCOME					\$134,965
VARIABLE COSTS					
Bull Depreciation					
Bull purchase	1	@	\$8,000 total		\$8,000
Veterinary & Medicines					
Drench	0	@	\$6.25 /head		\$0
Ear Tags	80	@	\$4.75 /tag		\$380
Lice Treatments	0	@	\$6.25 /dose		\$0
Vaccine (5 in 1)	0	@	\$0.80 /dose		\$0
Supplementary Feed					
Hay	45 tonne	@	\$160.00 /tonne		\$7,200
Grain	0.00 t/head	@	\$300.00 /tonne		\$0
Sale costs and other					
Insurance	\$111,500	@	\$2.00 /\$1000		\$223
Water	1997 dse's	@	\$2.50		\$4,992
Veh Fuel, R&M	1997 dse's	@	\$1.20		\$2,396
Other	1997 dse's	@	\$0.50		\$998
Transport:	Lvstk	78 head	@	\$60.00 /head	\$4,680
	Hay	45 tonne	@	\$50.00 /tonne	\$2,250
Commission			@	5.5%	\$7,423
Levies			@	\$5.00 /head	\$390
TOTAL VARIABLE COSTS					\$38,933
GROSS MARGIN TOTAL					\$96,032
GROSS MARGIN PER COW					\$960
GROSS MARGIN/DSE					\$48.09
GROSS MARGIN/hectare					\$6.73

COMMENTS

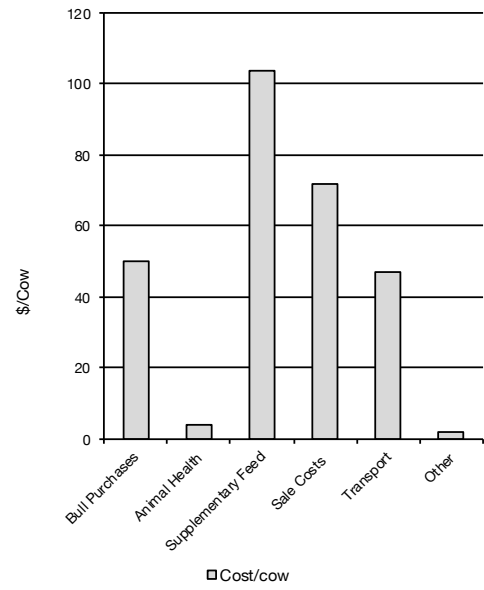
Feed costs include an allowance for drought fodder.
Livestock weight will vary between cattle breed, feed type and age.

Gross Margin Sensitivity

		PER COW				
		\$/kg LWT young				
		\$5.30	\$5.50	\$5.70	\$5.90	\$6.10
Weaning %	60%	\$479	\$506	\$532	\$558	\$585
	65%	\$554	\$583	\$612	\$641	\$670
	70%	\$628	\$660	\$692	\$724	\$755
	75%	\$702	\$737	\$771	\$806	\$841
	80%	\$776	\$814	\$851	\$889	\$926
	85%	\$850	\$891	\$931	\$971	\$1,012
	90%	\$925	\$968	\$1,011	\$1,054	\$1,097
	95%	\$999	\$1,045	\$1,091	\$1,137	\$1,182
	100%	\$1,073	\$1,122	\$1,170	\$1,219	\$1,268

		PER DSE				
		\$/kg LWT young				
		\$5.30	\$5.50	\$5.70	\$5.90	\$6.10
Weaning %	60%	\$24	\$25	\$27	\$28	\$29
	65%	\$28	\$29	\$31	\$32	\$34
	70%	\$31	\$33	\$35	\$36	\$38
	75%	\$35	\$37	\$39	\$40	\$42
	80%	\$39	\$41	\$43	\$45	\$46
	85%	\$43	\$45	\$47	\$49	\$51
	90%	\$46	\$48	\$51	\$53	\$55
	95%	\$50	\$52	\$55	\$57	\$59
	100%	\$54	\$56	\$59	\$61	\$63

Variable Costs



Beef Trading - High Rainfall

Gross Margin

Assumptions:		<i>(Finishing young cattle for local trade, grass fattened)</i>	
Herd Deaths	2%		
Vealers	8 DSE		
Yearlings	12 DSE		
		1960	Herd DSE
Stocking rate	10 DSE/ha		
Area required	196 hectares		Drench vealers 1 x
Feeds	35 kg/DSE hay equivalent supplement		

					2022 YOUR ESTIMATE
INCOME					\$
Stock sales	0 vealers @	280 kg liveweight@	\$6.05 /kg L/W		\$0
	196 yearlings	420 kg liveweight@	\$5.00 /kg L/W		\$411,600
					\$0
					\$0
GROSS INCOME					\$411,600
VARIABLE COSTS					
Purchases					
Vealers		200 @ 280 kg	\$6.05 /kg L/W		\$338,800
Transport		200	\$30 /head		\$6,000
Veterinary & Medicines					
Drench - vealers 1x		200 @	\$6.25 /head		\$1,250
Ear Tags NLIS		196 @	\$4.75 /tag		\$931
Lice Treatments		200 @	\$6.25 /dose		\$1,250
Vaccine (5 in 1)		200 @	\$0.80 /dose		\$161
Supplementary Feed					
Hay	69 tonne	@	\$160.00 /tonne		\$10,976
Grain	0.00 t/head	@	\$300.00 /tonne		\$0
Blocks/ Mineral Mix		0 @	\$5.00 /head		\$0
Sale costs and other					
Insurance		\$338,800 @	\$0.00 /\$1000		\$0
Water	1960 dse's	@	\$1.50		\$2,940
Veh Fuel, R&M	1960 dse's	@	\$1.20		\$2,352
Other	1960 dse's	@	\$0.50		\$980
Transport:	Lvstk 196 head	@	\$30.00 /head		\$5,880
Commission		@	5.5%		\$22,638
Levies		@	\$5.00 /head		\$980
TOTAL VARIABLE COSTS					\$395,138
GROSS MARGIN TOTAL					\$16,462
GROSS MARGIN/DSE					\$8.40
GROSS MARGIN/hectare					\$83.99

COMMENTS

Livestock weight will vary between cattle breed, feed type and age

No allowance has been made for pasture expenses such as seed, fertiliser and weed control. These need to be separately accounted for.

Gross Margin Sensitivity

		PER DSE				
		\$/kg Liveweight sales(yearlings)				
		\$4.60	\$4.80	\$5.00	\$5.20	\$5.40
	\$ 2.70	\$85	\$93	\$101	\$110	\$118
	\$ 2.80	\$82	\$90	\$99	\$107	\$115
	\$ 2.90	\$79	\$88	\$96	\$104	\$112
\$/kg Liveweight	\$ 3.00	\$77	\$85	\$93	\$101	\$110
Purchases	\$ 3.10	\$74	\$82	\$90	\$98	\$107
(Vealers)	\$ 3.20	\$71	\$79	\$87	\$96	\$104
	\$ 3.30	\$68	\$76	\$85	\$93	\$101

Beef Feed Lot

Gross Margin

Assumptions:		Local supermarket, 210kg HSCW Carcase, AUSMEAT Fat Score 3-4			
Steer Costs:					
Steer purchase	\$960	for	240 kg @	\$4.00	/kg liveweight
Transport In	\$30.00	/head		Average weight gain:-	1.80 kg/hd/day
Est. dressing %	55 %			Carcase weight specification :-	230 kg HSCW
				Final liveweight in lot	418 kg
				Avge liveweight in lot	329 kg
				Est. time on feed	100 days
				Avge daily Feed intake	11.515 kg
Feed Costs:					
Total feed consumed		1151 kg		(3.5% of Liveweight)	
Feed Wastage	5%	58 kg	Death Rate		1%
Feed cost per tonne		\$265.00	without premix / supplement		

INCOME					Per	2022
					Head	YOUR
					ESTIMATE	
Finished steers & 2% poor performers sold at 30 days						
	0.97	Steer @	230 kg carcass @	\$9.70 /kg HSCW	\$2,164.07	
	0.02	Steer @	240 kg liveweight	\$6.30 /kg LVWT	\$30.24	
	0.01	Steer @	0	\$0.00	\$0.00	
TOTAL INCOME					\$2,194.31	
VARIABLE COSTS						
<i>Purchases</i>						
Steer purchase		1	@	\$1,500 /head	1,500.00	
<i>Feeding Out & Feed</i>						
Feed purchased		1180 kg	@	\$265.00 /tonne	312.58	
Premix cost per tonne mixed feed		1180 kg	@	\$50.00 /tonne	58.98	
Milling costs + Labour			@	\$28.00 /head	28.00	
Water			@	\$20.00 /head	20.00	
<i>Veterinary & Medicines</i>						
Drench, Dectomax		1	@	\$5.64 /head	5.64	
Ear Tags		1	@	\$0.50 /tag	0.50	
HGP implant , Synovex		0	@	\$2.50 /dose	0.00	
Lice Treatments		0	@	\$0.00 /dose	0.00	
Vaccine, Ultravac 5 in 1		1	@	\$0.58 /dose	0.58	
Veterinary		1	@	\$1.25 /head	1.25	
Vitamin injection		0	@	\$4.08 /head	0.00	
Losses		0.60%	@	\$10.88 /head	10.88	
<i>Sale, transport and other costs</i>						
Insurance		\$1,500	@	\$2.00 /\$1000	3.00	
Transport	In	1	@	\$15.00 /head	15.00	
	Out	1	@	\$30.00 /head	30.00	
Commission			@	6% /head	120.69	
Levies			@	\$5.00 /head	4.95	
Accreditation costs on a 600 hd/year throughput					1.00	
TOTAL VARIABLE COSTS					\$2,113	
GROSS MARGIN PER HEAD					\$81	
Current interest rate 5.0%						
Interest on cattle \$20.55						
Interest on feed \$4.28						
GROSS MARGIN AFTER INTEREST					\$56	
Break even sale price :- c/kg on purchase price, costs & interest					\$945	
Break even purchase price :- c/kg on sale price & costs					\$636	

COMMENTS

Feed consumed allows for poor performing stock sold at 30 days with 5% wastage.

Gross Margin Sensitivity

		PER HEAD				
		\$/kg HSCW Carcase				
		\$6.50	\$6.80	\$7.10	\$7.40	\$7.70
Feed Cost	\$ 210.00	-\$581	-\$512	-\$444	-\$375	-\$307
	\$ 220.00	-\$592	-\$524	-\$456	-\$387	-\$319
	\$ 230.00	-\$604	-\$536	-\$467	-\$399	-\$331
	\$ 240.00	-\$616	-\$548	-\$479	-\$411	-\$342
	\$ 250.00	-\$628	-\$559	-\$491	-\$423	-\$354
	\$ 260.00	-\$640	-\$571	-\$503	-\$434	-\$366
\$ 270.00	-\$651	-\$583	-\$515	-\$446	-\$378	

Farm Costs - Livestock 2022

Note: The below costs have been collected from a number of regional sources and should be seen as an **approximate** guide only. Costs will vary depending on situation. Users of this publication should ascertain the relevance of these costs to their particular situation and make adjustments to gross margin budgets if required.

Sheep

Lice Control	Avenge	\$20.00 /litre
		\$1.60 /80ml dose
	Extinosad	\$50.00 /litre
		\$1.50 /30ml dose
	Extinosad Eliminator	\$200.00 /litre
		\$8.00 per 40mls = 100ltrs wash
	Piranah	\$770.00 /litre
		\$7.70 per 10ml=100ltrs wash
	Viper	\$22.00 /litre
	\$1.76 /80ml dose	
Drench	Triguard	\$38.00 /litre
		\$0.46 /12ml dose
	Avomec Dual	\$49.50 /litre
		\$0.59 /12ml dose
	Q-Drench	\$65.00 /litre
		\$0.78 /12ml dose
	Cydectin	\$30.00 /litre
		\$0.36 /12ml dose
	Dynamax Capsules	\$419.00 /100 capsules
		\$4.19 /capsule
Zolvix Plus	\$187.00 /litre	
	\$1.12 /6ml dose	
Cydectin Long Acting Injectable	\$300.00 /500ml	
	\$1.80 /3ml dose	
Startect	\$90.00 /litre	
	\$1.08 /12ml dose	
Vaccine	Glanvac 3	\$62.00 /250ml
		\$0.25 /1ml dose
	Glanvac 3B12	\$112.00 /250ml
		\$0.45 /1ml dose
	Glanvac 3SB12	\$130.00 /250ml dose
		\$0.52 /1ml dose
	Glanvac 6	\$85.00 /250ml
		\$0.34 /1ml dose
	Glanvac 6B12	\$148.00 /250ml
		\$0.59 /1ml dose
	Glanvac 6SB12	\$165.00 /250ml
		\$0.66 /1ml dose
	Cobalife Vit B12	\$60.00 /500ml
		\$0.12 /1ml dose
	Cobalife Vit B12 + S	\$65.00 /500mls
		\$0.13 /1ml dose
	Ultravac 5 in 1	\$65.00 /250ml
		\$0.26 /1ml dose
	Ultravac 5 in 1 with B12	\$95.00 /500ml
		\$0.38 /2ml dose
	Weanerguard B12 + S	\$220.00 /500ml
		\$1.32 /3ml dose
	Eweguard B12 + S	\$265.00 /500ml
		\$1.33 /2.5ml dose
	Scabigard	\$125.00 /5ml
		\$0.50 /0.02ml dose
	Eryvac	\$170.00 /250ml
	\$0.68 /1ml dose	
Gudiar	\$732.00 /250ml	
	\$2.93 /1ml dose	
Multimin Injection	\$360.00 /500ml	
	\$1.80 /5ml dose	
Vit ADE	\$160.00 /500ml	
	\$0.80 /5ml dose	
Blowfly Control	Clik	\$58.00 /litre
		\$1.39 /24 ml dose
	Vetrazin Spray On	\$12.00 /litre
		\$0.79 /66ml dose
	Vetrazin Jetting Fluid	\$38.00 /litre
	\$76.00 per 2L=1000l jetting fluid	
Blowfly and Lice	\$60.00 /litre	
	\$120.00 per 2L=1000l jetting fluid	

Wool packs	nylon	\$12.40	ea
Shearing	Sheep	\$318.62	/100
	rams	\$637.24	/100
	shed labour	\$241.12	/day
	wool classer	\$306.75	day
	superannuation	9.50%	wages
	Work Cover-Allow	4.00%	total
Crutching	shed sundries	\$0.20	/head
	sheep	\$92.40	/100
Lamb marking	rams	\$184.80	/100
	mulesing / materials	\$1.40	/head
	marking only	\$1.15	/head
	ear tags	\$0.43	/head
	Tri-Solfen	\$165.00	/litre
Stock selling		\$1.65	/10 ml dose
	commission/insurance	6.0%	
	yard fees	\$0.85	/head
	sheep transaction levy	\$0.20	/head
	lamb transaction levy	\$1.50	/head
	SA sheep industry levy	\$0.67	/head
	wool brokerage / testing / insurance	\$0.27	/kg
wool levy	1.5%		

Beef

Drench	Eprinex Pour-on	\$87.50	/litre
		\$4.38	/25ml dose
	Eclipse Combination Pour-on	\$190.00	/litre
		\$5.23	/27.5ml dose
	Cydectin Pour-on	\$77.00	/litre
		\$4.24	/55ml dose
	Baymec LV	\$58.40	/litre
Fly and Lice		\$0.73	/12.5ml dose
	Dectomax Pour-on	\$80.00	/litre
		\$4.40	/55ml dose
	Arrest Easy Dose	\$92.00	/litre
		\$2.76	/30ml dose
	Vaccine	Ultravac 5 in 1	\$65.00
		\$0.52	/2ml dose
	Ultravac 5 in 1 with B12	\$95.00	/500 ml
		\$0.76	/4ml dose
	Ultravac 7 in 1	\$220.00	/250 ml
		\$2.20	/2.5ml dose
	Multimin Inj	\$380.00	/500ml
		\$3.80	/5 ml dose
	Vit ADE	\$160.00	/500ml
		\$1.60	/5ml dose
	Cobalife Vit B12	\$60.00	/500 ml
		\$0.60	/5 ml dose
	Cobalife Vit B12 + S	\$65.00	/500ml dose
		\$0.65	/5ml dose
NLIS Breeder Tags (incl levy)		\$4.75	each
Electronic Sheep Tags		\$1.65	each
Indicative freight costs for GM purposes	Freight cattle in	\$30.00	
	Freight cattle out	\$30.00	
	Freight cattle out (Pastoral)	\$60.00	
	Cattle levy	\$5.00	

Feed & Other Costs

Water	\$2.50	/DSE
Veh Fuel, R&M	\$1.00	/DSE
Other	\$0.50	/DSE
Hay	\$260.00	/tonne incl freight
Feed Cereal grain	\$280.00	/tonne incl freight
Lupins	\$450.00	/tonne incl freight
Pre Lambing Lick Block	\$30.00	/block
Dry Feed Lick Block	\$32.00	/block

Stock Returns

	2017 Average (Clean)	2018 Average (Clean)	2019 Average (Clean)	2020 Estimated Price (Clean)	2020 Estimated Greasy Price
WOOL- High Rainfall 28 mic 70% yield	756	895	1027	915	641
- High Rainfall 19 mic 70% yield	1878	2223	2039	1820	1274
- Med Rainfall 21 mic 68% yield	1533	2085	1995	1780	1210
- Low Rainfall 22 mic 63% yield	1461	2065	1983	1765	1112
- Crossbred Ram 32 mic 64% yield		450	539	485	310

Farm Costs - Cropping 2022

Note: The below costs have been collected from a number of regional sources and should be seen as an **approximate** guide only. Costs will vary depending on situation. Users of this publication should ascertain the relevance of these costs to their particular situation and make adjustments to gross margin budgets if required.

Chemical Costs - Herbicides

2,4-D Amine (625g/l)	\$5.90 /litre
2,4-D LV Ester (680g/l)	\$8.45 /litre
Achieve® WG	\$52.00 /kg
Affinity®	\$114.90 /litre
Aptitude®	\$59.76 /kg
Atlantis® (mesosulfuron 30g/L)	\$88.00 /litre
Atrazine (900 g/kg)	\$6.93 /litre
Axial®	\$130.00 /litre
Balance ®	\$0.15 /gram
Boxer Gold®	\$12.52 /litre
Broadstrike®	\$0.39 /gram
Diflufenican (Brodal)	\$39.50 /litre
Bromoxynil 200	\$16.30 /litre
Bromoxynil /MCPA	\$18.85 /litre
Cadence® (700gm/Kg Dicamba)	\$35.90 /kg
Chlorsulfuron 750g/kg (Glean)	\$0.08 /gram
Clopyralid 300g/L (Lontrel® Advanced)	\$17.25 /litre
Rexade® (New formulation of Crusader®)	\$330.00 /litre
Diuron 900 gm a.i. granules	\$13.25 /kg
Factor® (butoxydim 250g/kg)	\$0.14 /gram
Flight®	\$30.00 /litre
Triclopyr 755g/L	\$20.50 /litre
Triclopyr 600g/L	\$13.80 /litre
Glyphosate 540g/L	\$5.40 /litre
Glyphosate 450g/L	\$4.50 /litre
Carfentrazone 400g/L (Hammer)	\$151.80 /litre
Intervix®	\$29.46 /litre
Metribuzin 750 gm/kg	\$48.00 /kg
M.C.P.A. LVE	\$8.14 /litre
MCPA Amine (750g/L)	\$9.94 /litre
Metsulfuron methyl	\$0.06 /gram
Oxyfluorfen 240g/L	\$15.76 /litre
Paradigm®	\$0.49 /gram
Paraquat 250 g/L	\$4.95 /litre
Precept®	\$16.50 /litre
Propyzamide (500 g/L)	\$21.80 /litre
Quizalofop 200g/L	\$19.80 /litre
Raptor	\$0.50 /litre
Reglone®	\$13.80 /litre
Roundup Ready PL with Plantshield	\$6.00 /litre
Sakura®	\$343.20 /kg
Sentry®	\$0.19 /gram
Clethodim (360g/L)	\$20.50 /litre
Sharpen®	\$0.42 /gram
Simazine Granules 900g/kg	\$7.53 /kg
S-metolachlor 960g/L (Dual®Gold)	\$16.00 /litre
Imazethapyr 700g/kg	\$93.00 /kg
Sprayseed®	\$9.50 /litre
Starane® Advanced (fluroxypyr 333g/L)	\$22.95 /litre
Terbyne® 875	\$21.00 /kg
Tigrex	\$14.00 /lt
Topik® EC	\$33.36 /litre
Tri-allate 500g/L	\$11.50 /litre
Triasulfuron 750g/kg (Logran)	\$0.10 /gm
Valor®	\$146.67 /kg
Velocity®	\$32.15 /litre
Trifluralin 480g/L	\$8.00 /litre
Haloxyfop 520g/L (Verdict)	\$44.00 /litre
Talinor	\$26.26 /litre
Prosulfocarb	\$9.95 /litre
Pixxaro	\$42.50 /litre
Butisan	\$39.00 /litre
Luximax	\$78.00 /litre

Chemical Costs - Adjuvants

Uptake (Oil)	\$6.20 /litre
BS-1000 (WETTER)	\$5.60 /litre
Supercharge®	\$7.20 /litre
Hasten®	\$4.70 /litre
Banjo®	\$4.95 /litre
Adigor®	\$8.40 /litre
Hot-up®	\$5.00 /litre
LI-700	\$4.90 /litre
Ammonium Sulphate	\$0.90 /kg
Oil Cost (Assume 75l/ha @0.5% oil)	\$2.33
Wetter Cost per Ha (Assume 75l/ha @ 0.1% surf)	\$0.42

Chemical Costs - Insecticides

Dimethoate 400g/L	\$9.10 /litre
Alpha-cypermethrin 16g/L	\$7.29 /litre
Lambda-cyhalothrin (Karate Zeon®)	\$108.00 /litre
Trojan®	\$95.98 /litre
Sumi-Alpha® Flex	\$9.84 /litre
Pyrinex® Super	\$11.60 /litre
Imidan®	\$13.50 /litre
Pyrimicarb 500g/kg	\$30.00 /kg
Chlorpyrifos 500g/L	\$9.78 /litre
Bifenthrin 250g/L (Talstar®)	\$34.00 /litre
Imidacloprid 600g/L	\$36.30 /litre
Transform	\$180.00 /litre
Affirm	\$79.70 /litre
Cruiser 350	\$49.50 /litre
Cobalt	\$8.45 /litre
Omethoate	\$28.00 /litre

Chemical Costs - Fungicides

Apron® XL 350 ES	\$395.00 /litre
Mancozeb 750g/kg	\$8.83 /kg
Veto® 25C Flowable	\$13.86 /litre
Vibrance®	\$38.40 /litre
EverGol® Energy	\$54.50 /litre
Rancona Dimension®	\$40.00 /litre
Baytan® T Flowable	\$14.95 /kg
Pontiac®	\$26.25 /kg
P-Pickel T	\$34.00 /litre
Carbendazim 500g/kg	\$9.85 /kg
Tebuconazole 430	\$14.90 /litre
Propiconazole 250g/L	\$11.39 /litre
Chlorothalonil 720g/L	\$12.54 /litre
Prosaro®	\$74.50 /litre
Amistar Xtra®	\$34.00 /litre
Tazer® Xpert	\$14.50 /litre
Systiva®	\$215.30 /litre
Procymidone 500g/L	\$24.60 /litre
Cogito®	\$24.17 /litre
Veritas®	\$24.90 /litre
Epoxiconazole 125g/L	\$24.00 /litre
Flutriafol (500g/l)	\$39.00 /litre
Aviator X-Pro®	\$54.50 /litre
Uniform®	\$63.30 /litre

Chemical Costs - Trace Elements

Zinc (65% Zn)	\$11.40 /litre
Copper (60% Cu)	\$17.50 /litre
Manganese (40% Mn)	\$11.90 /litre

Fertilizer Costs

MAP 10:22	\$575 /tonne
DAP 18:20	\$575 /tonne
Urea	\$500 /tonne
Superphosphate	\$360 /tonne
Granulock Z 11:22:0:4 plus 1% Zinc	\$640 /tonne
DAP + Urea 24:16	\$576 /tonne
DAP + Urea 28:13	\$565 /tonne
DAP + Urea 32:10	\$554 /tonne
Sulphate of Ammonia	\$400 /tonne

Fuel Costs

Total price - Diesel (GST Exc)	\$1.30 /litre
Rebate	\$0.42 /litre
Net Price Diesel - \$/litre (includes rebate)	\$0.88 / bulk

Grain Grading and Pickling

		Cost/Tonne	
Grading and pickling	cereals	\$24.00	
	other crops	\$30.00	
Grain Pickling- <i>Wheat</i>	Veto® 25C Flowable	\$13.86	
	- <i>Durum</i>	EverGol® Energy	\$141.70
	- <i>Barley</i>	Systiva®	\$322.95
Note- Assumes minimum standard of application for smuts and bunts. More expensive options available which may give some control of foliar diseases. Seek advice			
Aphid Control - Cereals	Imidacloprid (240ml/100Kg)	\$8.71	/100 kg treated seed
	- Lupins	Imidacloprid (300ml/100Kg)	\$10.89
Inoculant	Legumes	\$50.00	/tonne treated seed
Seed Treatment	Apron® XL 350 ES	\$296.25	/tonne treated seed
	P-Pickle T	\$68.00	/tonne treated seed

Contract Rates (indicative only)

	Range
Ground Spraying	\$11.00 /hectare
Aerial spraying	\$15.00 /hectare
Contract harvesting cereals, low rainfall	\$60.00 /hectare \$55-65/Ha
Contract harvesting cereals, medium rainfall	\$75.00 /hectare \$70-80/Ha
Contract harvesting cereals, high rainfall	\$90.00 /hectare \$85-95/Ha
Contract harvesting pulse/canola, low rainfall	\$70.00 /hectare \$60-80/Ha
Contract harvesting pulse/canola, medium rainfall	\$85.00 /hectare \$75-95/Ha
Contract harvesting pulse/canola, high rainfall	\$100.00 /hectare \$90-110/Ha
Windrowing	\$38.00 /hectare
Contract spreading	\$8.50 /hectare excludes cartage
Contract sowing	\$50.00 /hectare
<i>Haymaking</i>	
Contract mowing/ conditioning	\$50.00 /hectare
Hire of rake (supply own tractor and labour)	\$8.00 /hectare
Contract baling (725kg square bales)	\$25.00 /bale
Super conditioner (oaten hay)	\$25-40.00 /hectare
Hay Accumulation	\$3.00 /bale

Freight Costs (incl in GMG)

CANOLA (\$ /tonne)	\$30.00
FERTILIZER (\$ /tonne)	\$25.00
LENTILS (\$ /tonne)	\$35.00
OTHER LEGUME GRAINS (\$ /tonne)	\$30.00
CEREAL GRAINS (\$ /tonne)	\$25.00
TRITICALE (\$ /tonne)	\$25.00
HAY-OATEN (\$ /tonne)	\$30.00

Insurance Costs

Livestock	
Sheep and cattle	\$2.00 /\$1,000 insured
Crops	
Cereals	\$9.00 /\$1,000 insured
Chickpeas, lupins, safflower	\$10.00 /\$1,000 insured
Faba beans, vetch, lentils, canola	\$12.00 /\$1,000 insured
Field Peas	\$16.00 /\$1,000 insured

Machinery Cost

Repairs & Maintenance - as a % of new value (shown below).
Lubrication costs - 5% of fuel cost.

Machine	New Value \$	Expected Life - hours	Work Efficiency %	Work Rate ha/hr	Fuel Use litre/hr	Rep & Main % New Value	Hours use per year	Rep & Main	Costs per Hectare Fuel	Lubric'n	Total
Tractor (220kW)	250000	8,000				2	500	\$10.00	Cost per hour		\$10.00
Tractor (90kW)	150000	8,000				2	500	\$6.00	Cost per hour		\$6.00
S.P. header (11.5m)	700000	2,500	85%	9.0	50	2.5	250	\$7.78	\$0.00	\$0.00	\$7.78
S.P. header (11.5m) peas, lentils, vetch	700000	2,500	70%	7.0	50	4	250	\$16.00	\$0.00	\$0.00	\$16.00
S.P. header (11.5m) beans, chicks, lupins	700000	2,500	70%	7.5	50	3	250	\$11.20	\$0.00	\$0.00	\$11.20
Airseeder (15m)	250000	2,000	80%	10.0	45	2	250	\$2.00	\$0.00	\$0.00	\$2.00
Boomspray (36m)	140000	1,500	75%	45.0	20	2	150	\$0.41	\$0.00	\$0.00	\$0.41
Roller (12m)	30000	5,000	90%	10.0	20	1	20	\$1.50	\$0.00	\$0.00	\$1.50
Mower-conditioner (5m)	60000	2,000	80%	4.0	12	2	100	\$3.00	\$0.00	\$0.00	\$3.00



SA grain growers funding research solutions

The South Australian Grain Industry Trust annually invests more than \$1.8 million in a range of areas crucial to advancing the SA grain industry, including grain growing, farming systems, soil management, harvesting, storage, processing and marketing, and for dissemination of technical information to growers.

SAGIT is investing \$2.5 million in new research projects, starting in 2021-22:

- Boosting profitability and efficiency of SA's trade in containerised grain, Australian Export Grains Innovation Centre
- Acid soils, ripping and lentil production improvement, Elders Rural Services
- Lentil varieties for low rainfall and sandy soil environments, Global Grain Genetics
- Variety selection and weed management options for genetically modified canola, Hart Field-Site Group
- Frost Learning Centre for farmers, advisers and researchers, Mid North High Rainfall Zone Group
- Pasture legume choices, establishment and persistence for the Murray Plains, Murray Plains Farmers
- A practical approach to sub-surface acidity in the Mid North, Precision Agriculture
- Developing criteria for soil and plant aluminium and manganese toxicity in South Australia, PIRSA
- 2022 Farm Gross Margin Guide for SA, Rural Solutions SA
- Improving management of Group A resistant barley grass in current farming systems, SARDI/University of Adelaide
- Grower crop root health workshops, SARDI/University of Adelaide
- Measuring and managing yield loss caused by Phoma root in lentil and faba bean, SARDI/University of Adelaide
- Extension support for SA Drought Hub Internship Program, SARDI/University of Adelaide
- Investigating aluminium speciation in wheat roots in alkaline soil, SARDI/University of Adelaide
- Evaluating super high oleic acid safflower in sodic and saline soils, SARDI/University of Adelaide
- Characterising the optimal flowering period for the Murray Plains, SARDI/University of Adelaide
- Eyre Peninsula Farming Systems Summary 2021-2023, SARDI
- The implications of green hydrogen for SA grain growers, SANTFA
- Improving crop safety and broadleaf weed control with herbicides in lentil, Trengove Consulting
- Improved management of variable phosphorus requirement and strategies for highly responsive soils, Trengove Consulting
- Faba bean nutrient omission trial, Thomas Elder Institute
- Understanding and managing fertiliser toxicity in pulses in SA, University of Adelaide
- Revealing the basis for head loss in barley, University of Adelaide
- Developing a DGT methodology to assess bioavailability of herbicide residues, University of South Australia
- Lower Eyre Peninsula Ag Expo 2021, AIR EP
- Maximising performance of post-emergent herbicides workshops on upper Eyre Peninsula, AIR EP

SAGIT is also supporting these ongoing projects:

- Promoting secondary and tertiary student engagement in crop production, AgXtra
- Optimising P nutrition in pulses to maximise N fixation and yield, Agronomy Solutions
- Eyre Peninsula internship in applied grains research, AIR EP
- Regional internship in applied grains research, Hart Field-Site Group
- Long-term cropping systems trial, Hart Field-Site Group
- Taking South Australian canola profitability to the next level, EPAG Research
- MacKillop Farm Management Group annual trial results book, MacKillop Farm Management Group
- Deep ripping to enhance production on Mallee sandy soils, Mallee Sustainable Farming
- Revealing invertebrate species and conditions causing seedling damage in field settings, SARDI/University of Adelaide
- SA Crop Variety Sowing Guide, SARDI
- Improving productivity of oats, SARDI
- Improving the early management of dry sown cereal crops, SARDI
- SANTFA Conference 2021-2023, SANTFA
- Pre-emptive flame retardant as a new tool for SA grain growers, SANTFA
- Management of fungicide resistant wheat powdery mildew, Trengove Consulting
- Enhancing grain production and quality traits for bread wheat, University of Adelaide
- A genetic, environmental and functional investigation of late maturity alpha-amylase (LMA) and its implications for wheat breeding, University of Adelaide
- Development of a dual-purpose common vetch variety for arid South Australia, University of Adelaide
- Upper North barley time of sowing; frost / heat stress effects, Upper North Farming Systems
- Comparative effects of agricultural pesticides on SA soil microbial functions, University of South Australia
- Supporting premier PA events: Precision Ag expos and symposia, Society of Precision Agriculture Australia