



DRYLAND SAFFLOWER (No Till, after wheat)

Farm Enterprise Budget Series - North East NSW

Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

1.50 tonnes/ha@ \$450.00 /tonne (on farm)

Usually only grown under contract, see notes section.

Crop prices were correct at the time of writing (Feb 2012), world market volatility makes estimation of future pricing impractical.

Standard Budget \$/ha	Your Budget \$/ha
\$675.00	

VARIABLE COSTS:

See next page for detail

A. TOTAL INCOME \$/ha:

\$675.00	
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Sowing.....	\$17.82	
Fertiliser.....	\$101.08	
Herbicide.....	\$55.32	
Insecticide.....	\$26.43	
Contract harvesting.....	\$66.24	
Levies.....	\$6.89	
Crop Insurance.....	\$17.28	

B. TOTAL VARIABLE COSTS \$/ha:

\$291.06	
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C. GROSS MARGIN (A-B) \$/ha:

\$383.94	
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Water use efficiency example

Growing season rainfall (ie in-crop): mm	317	
Stored fallow moisture: mm (25% of rainfall in fallow period assumed)	75	
Early crop water use: mm	110	
Total crop water use mm	282	
Gross margin per mm	\$1.36	
kg of grain per mm	5.32	

Please refer to the NSW DPI webpage ["About gross margin budgets"](#) for more information on water use efficiency assumptions used at right.

2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)				
	\$350 /t	\$400 /t	\$450 /t	\$500 /t	\$550 /t
0.75	-\$14	\$22	\$59	\$95	\$131
1.00	\$71	\$119	\$167	\$215	\$263
1.25	\$155	\$215	\$275	\$336	\$396
1.50	\$239	\$312	\$384	\$456	\$529
1.75	\$324	\$408	\$492	\$577	\$661
2.00	\$408	\$504	\$601	\$697	\$794
2.25	\$492	\$601	\$709	\$818	\$926

Gross margin is zero when income is reduced by 57%
or variable costs are increased by 132%

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CALENDAR OF OPERATIONS:		Machinery*			Inputs			Total
Operation	Month	hrs /ha	Cost	Total	Rate/ha	Cost	Total	Total Cost \$/ha
			\$/hour	\$/ha		\$	\$/ha	
broadleaf and grass weed control eg: glyphosate 450 g/L	Dec	0.05	54.96	2.75	1.2 L	4.67/L	5.60	\$8.35
broadleaf weed control eg 2,4-D amine 475 g/L	Dec	with above			1.2 L	5.82/L	6.98	\$6.98
wetting agent	Dec	with above			0.25 L	7.47/L	1.87	\$1.87
broadleaf and grass weed control eg: glyphosate 450 g/L	Jan	0.05	54.96	2.75	1.6 L	4.67/L	7.47	\$10.22
wetting agent	Jan	with above			0.25 L	7.47/L	1.87	\$1.87
broadleaf and grass weed control eg: glyphosate 450 g/L	Apr	0.05	54.96	2.75	1.0 L	4.67/L	4.67	\$7.42
wetting agent	Apr	with above			0.25 L	7.47/L	1.87	\$1.87
nitrogen fertiliser eg. anhydrous ammonia	May	0.17	53.44	9.08	50 kg	0.90/kg	45.00	\$54.08
sowing	Jun	0.17	75.66	12.86	8 kg	0.62/kg	4.96	\$17.82
fertiliser (eg Supreme 12Z)	Jun	with above			50 kg	0.94/kg	47.00	\$47.00
post emerg. weed control eg. metsulfuron-methyl	Jun	0.05	54.96	2.75	7 g	0.07/g	0.49	\$3.24
post emerg. grass weed control eg. Propaquizafop 100 g/L	Jul	0.05	54.96	2.75	0.30 L	33.60/L	10.08	\$12.83
wetter - non-ionic surfactant	Jul	with above			0.10 L	6.77/L	0.68	\$0.68
aerial spray for heliothis	Oct	contract		20.00				\$20.00
insect control eg. deltamethrin	Oct	with above			0.5 L	12.85/L	6.43	\$6.43
contract harvest	Nov/Dec			66.24				\$66.24
levies				1.020%				\$6.89
crop insurance				2.560%	of on-farm value			\$17.28

Input prices were correct at the time of writing (Feb 2012). Current fertiliser and chemical market uncertainty makes estimation of future pricing impractical.

NOTES: Growers should assess soil moisture profiles and fertility levels to assist with yield targets.

Soil type: Suited to the deep heavy cracking clay soils with good moisture holding capacity. However, safflower requires well drained soils since it's waterlogging tolerance is low.

Rotation place: Suitable crop for breaking crop disease cycles in western areas.

Sowing time: A good crop for extending the sowing time of winter crops into the late winter.

Insects: Control of insect pests at budding is essential.

Herbicides: Glyphosate CT used for fallow weed control. Trifluralin may be needed if annual phalaris is a problem weed. Early post emerg. weed control eg. metsulfuron-methyl at 4 to 6 leaf stage

To reduce the risk of herbicide resistance, rotate herbicide groups and weed management techniques.

Refer to the NSW DPI booklet Weed Control in winter crops 2012 for options.

Marketing: A specialist market, contracts should be sourced (usually by March) before growing safflower.

The main birdseed markets are Australia and the Netherlands. The total Japanese oil market is 20,000 to 30,000 t/year with some seed imports as well, but export levels from Australia will depend on the amount grown. India is a key grain (for oil) market.

There is also an oil market to Germany and Switzerland, and a growing market for organic safflower products.

Safflower meal is used in the dairy industry due to a good protein content.

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Always read chemical labels and follow directions, as it is your legal responsibility to do so.

Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.

Machinery - pto power: 130 kW (175HP); engine power: 146 kW (196 HP)
Machinery costs refer to variable costs of: fuel, oil, filters, tyres, batteries and repairs.

LABOUR REQUIREMENTS: - labour is not costed in this budget.

According to the above operations, labour required is 0.49hrs/ha. Then multiplying this by 1.25 to allow for machinery repair time etc, and using a labour cost of \$21/hr, the cost of labour is \$12.86/ha, reducing the gross margin to \$371.08/ha.

This budget should be used as a GUIDE ONLY and should be changed by the grower to take account of movements in crop and input prices, change in seasonal conditions and individual farm characteristics.