



DRYLAND FABA BEANS (No Till)

Farm Enterprise Budget Series - North East NSW

Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

Small grain 2.20 tonnes/ha@ \$270.00 /tonne (on farm)

* Small grain is for stockfeed and is the more common grade achieved. Budget on stockfeed prices.

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

Sample Budget \$/ha	Your Budget \$/ha
\$594.00	

A. TOTAL INCOME \$/ha:

\$594.00

VARIABLE COSTS:

See next page for detail

Sowing.....	\$124.76	
Fertiliser.....	\$54.00	
Herbicide.....	\$65.08	
Insecticides/Fungicides.....	\$59.76	
Contract harvesting.....	\$86.24	
Levies.....	\$6.06	
Crop Insurance.....	\$24.35	

B. TOTAL VARIABLE COSTS \$/ha:

\$420.26

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

\$173.74

Water use efficiency example

Growing season rainfall (ie in-crop): mm

Stored fallow moisture: mm (25% of rainfall in fallow period assumed)

Early crop water use: mm

Total crop water use mm

Gross margin per mm

kg of grain per mm

317	
75	
130	
262	
\$0.66	
8.40	

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 t/ha	On Farm Price				
	\$220 /tonne	\$245 /tonne	\$270 /tonne	\$320 /tonne	\$370 /tonne
1.3	- \$118	- \$88	- \$57	\$5	\$67
1.6	- \$56	- \$18	\$20	\$96	\$172
1.9	\$7	\$52	\$97	\$187	\$277
2.2	\$69	\$122	\$174	\$278	\$382
2.4	\$111	\$168	\$225	\$339	\$453
2.6	\$153	\$215	\$276	\$400	\$523
3.0	\$236	\$308	\$379	\$521	\$663

Gross margin is zero when income is reduced by 29%
or variable costs are increased by 41%

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CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost \$/ha
Operation	Month	hrs /ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/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	Feb	0.05	54.96	2.75	1.8 L	4.67/L	8.41	11.15
wetting agent	Feb	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	0.6 L	4.67/L	2.80	5.55
wetting agent	Apr	with above			0.25 L	7.47/L	1.87	1.87
broadleaf and grass weed control eg. simazine 600g/L	Apr	0.05	54.96	2.75	2.0 L	7.26/L	14.52	17.27
sowing inc. inoculant #	Apr/May	0.17	75.66	12.86	100 kg	1.12/kg	111.90	124.76
fertiliser (eg Supreme 12Z)	Apr/May	with above			50 kg	1.08/kg	54.00	54.00
grass weed control eg haloxyfop-R 520g/L	May/June	0.05	54.96	2.75	75 mL	0.10/mL	7.43	10.17
crop oil	May/June	with above			0.5 L	6.99/L	3.50	3.50
disease control eg.mancozeb	May/June	with above			1 kg	9.21/kg	9.21	9.21
disease control eg.mancozeb	Aug	0.05	54.96	2.75	1 kg	9.21/kg	9.21	11.96
disease control eg.mancozeb	Sep	aerial spray		20.00	1 kg	9.21/kg	9.21	29.21
insect control eg. lambda-cyhalothrin	Sep	with above			36 ml	0.16/ml	5.89	5.89
contract harvest	Nov			86.24				86.24
levies	Nov			1.02%				6.06
crop insurance				4.100%	of on-farm value			24.35

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

AGRONOMIC REQUIREMENTS:

Rotation place: Useful as a break crop later in cereal rotations for disease control, weed control and nitrogen benefits for the following crops. See *Faba bean* Agfact P4.2.7, second edition for detailed information.

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

Sowing time: Northern areas: Mid to late April. Liverpool Plains: mid-April to mid-May.

Significant yield reductions if sown later than the 2nd week of May.

Disease: Crop rotation is essential to minimise loss of yield due to disease.

Chocolate spot and rust can cause significant yield losses, use fungicides as a preventative measure.

See Pulse Australia website (http://www.pulseaus.com.au/crops/faba_beans) for disease management strategies.

Check current permits & registrations prior to using fungicides.

Inoculation: # With faba bean (*Vicia faba*) inoculant, Group E, Strain WSM1455.

Soils: Best grown on the better loam, clay loam and heavy self-mulching clay soils.

Nutrient requirements should be assessed with soil tests and previous strip trial results.

Insects: Heliothis must be monitored from flowering through to podding.

Autumn aphid flights may transmit viral diseases causing potential yield loss.

Herbicides: Weed control is critical and a pre-emergent broadleaf weed control herbicide is important.

Faba beans are sensitive to sulfonylurea herbicide residues.

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

- **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.

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

According to the above operations, labour required is 0.47hrs/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 \$12.34/ha, reducing the gross margin to \$161.40/ha.

MACHINERY ASSUMPTIONS:

Tractor:

- pto power: 130 kW (175 HP); engine power: 146 kW (196 HP)

Machinery costs refer to variable costs of: fuel, oil, filters, tyres, batteries and repairs.