



DRYLAND CHICKPEAS (No Till)

Farm Enterprise Budget Series - North East NSW

Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

1.50 tonnes/ha@ \$440.00 /tonne (on farm)

Sample Budget \$/ha	Your Budget \$/ha
\$660.00	

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

A. TOTAL INCOME \$/ha:

\$660.00	
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VARIABLE COSTS:

See next page for detail

Sowing.....	\$93.92	
Fertiliser.....	\$47.00	
Herbicide.....	\$107.10	
Insecticides.....	\$40.75	
Fungicides.....	\$36.37	
Contract harvesting.....	\$81.24	
Levies.....	\$6.73	
Crop Insurance.....	\$33.86	

B. TOTAL VARIABLE COSTS \$/ha:

\$446.96	
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C. GROSS MARGIN (A-B) \$/ha:

\$213.04	
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Water use efficiency example

Growing season rainfall (ie in-crop): mm

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

Please refer to the NSW DPI webpage

["About gross margin budgets"](#)

for more information on water use efficiency assumptions used at right.

Early crop water use: mm

Total crop water use mm

Gross margin per mm

kg of grain per mm

317	
75	
130	
262	
\$0.81	
5.73	

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

YIELD tonnes/ha	On Farm Price				
	\$340 /tonne	\$390 /tonne	\$440 /tonne	\$490 /tonne	\$540 /tonne
0.9	- \$119	- \$77	- \$35	\$8	\$50
1.1	- \$55	- \$4	\$48	\$99	\$151
1.3	\$8	\$69	\$130	\$191	\$252
1.5	\$72	\$143	\$213	\$283	\$354
2.0	\$232	\$326	\$420	\$513	\$607
2.5	\$391	\$509	\$626	\$743	\$861
3.0	\$551	\$692	\$832	\$973	\$1,114

Gross margin is zero when income is reduced by 32%
or variable costs are increased by 48%

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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	1.5 L	4.67/L	7.01	9.75
broadleaf and grass weed control eg: glyphosate 450 g/L	Mar	0.05	54.96	2.75	1.2 L	4.67/L	5.60	8.35
wetting agent	Mar	with above			0.25 L	7.47/L	1.87	1.87
sowing (inoculated seed)	May	0.17	75.66	12.86	65 kg	1.17/kg	75.86	88.72
P-Pickle T seed treatment	May	with above			130 mL	0.04/mL	5.20	5.20
fertiliser (eg Supreme 12Z)	May	with above			50 kg	0.94/kg	47.00	47.00
PSPE broadleaf weed control eg **isoxaflutole 750 g/kg	May	0.05	54.96	2.75	50 g	0.37/g	18.50	21.25
PSPE broadleaf weed control eg simazine	May	with above			1.3 L	7.97/L	9.96	9.96
disease control eg.mancozeb ¹	Jun	0.05	54.96	2.75	1 kg	9.21/kg	9.21	11.96
grass weed control eg haloxyfop-R 520g/L	Jul	with above			75 mL	0.099/mL	7.43	7.43
crop oil	Jul	with above			0.5 L	6.99/L	3.50	3.50
disease control eg.mancozeb	Jul	with above			1 kg	9.21/kg	9.21	9.21
insect control eg. Indoxacarb ²	Oct	aerial		20.00	0.3 L	69.15/L	20.75	40.75
disease control eg.chlorothalonil	Oct	with above			1.0 L	15.20/L	15.20	15.20
desiccant-eg. glyphosate 540 g/L ³	Nov	aerial		20.00	1.0 L	7.44/L	7.44	27.44
desiccant-eg. metsulfuron methyl ³	Nov	with above			5 g	0.07/g	0.35	0.35
contract harvest ⁴	Nov			81.24				81.24
levies	Nov			1.020%				6.73
crop insurance				5.130%	of on-farm value			33.86

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

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AGRONOMIC REQUIREMENTS:

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

Inoculation: With group N inoculum is essential.

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

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

² Indoxacarb used as example, but must be used within approved window, check permits.

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

Isoxaflutole is **not recommended for use with the chickpea variety Yorker. Application of isoxaflutole post-sowing pre-emergence (PSPE) to crops of Yorker variety chickpeas can result in unacceptable crop damage and may result in yield loss.

Chickpeas in general are highly sensitive to sulfonylurea herbicide residues.

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

³ Desiccants: Examples given only, check current permits before applying.

Disease: Ascochyta blight, phytophthora root rot, botrytis grey mould and Sclerotinia can all reduce yield.

See variety management packages for disease management strategies on the Pulse Australia website

<http://www.pulseaus.com.au/>

Check current permits & registrations prior to using fungicides.

Chlorothalonil (720 g/L) applied in Oct to cover pod-fill stage when all varieties are susceptible, but before 14-day harvest WHP guidelines as per label requirements.

¹ Seasonal conditions, especially rainfall events, and varietal resistance will affect fungicides required.

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

Controlled traffic: Chickpeas grown on wide rows in a controlled traffic layout may be band sprayed with fungicides and insecticides. This may reduce the chemical cost to half and may reduce the application cost from an aerial spray to a ground spray.

Harvest: ⁴ Grading may be required, extra cost approx. \$17/t (not included in budget).

If using a desiccant before harvest (may be required in some seasons), ensure withholding periods are adhered to.

- 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 0.59hrs/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 \$15.49/ha, reducing the gross margin to \$197.56/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.