



DRYLAND MALTING BARLEY (no till)

Farm Enterprise Budget Series - North West NSW

Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

1.85 tonnes/ha@ \$180.00 /tonne (Malting barley, on farm)

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
\$333.00	

A. TOTAL INCOME \$/ha:

\$333.00	
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VARIABLE COSTS:

See next page for detail

Cultivation.....	\$0.00	
Sowing.....	\$49.27	
Herbicide.....	\$72.68	
Contract harvesting.....	\$66.24	
Levies.....	\$3.40	
Insurance.....	\$3.43	

B. TOTAL VARIABLE COSTS \$/ha:

\$195.02	
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C. GROSS MARGIN (A-B) \$/ha:

\$137.98	
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Water use efficiency example

Growing season rainfall (ie in-crop): mm	189	
Stored fallow moisture: mm (25% of rainfall in fallow period)	69	
Early crop water use: mm	90	
Total crop water use mm	168	
Gross margin per mm	\$0.82	
kg of grain per mm	11.0	

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				
	\$80 /tonne	\$130 /tonne	\$180 /tonne	\$230 /tonne	\$280 /tonne
0.50	- \$149	- \$125	- \$100	- \$76	- \$51
0.90	- \$118	- \$74	- \$30	\$15	\$59
1.30	- \$86	- \$23	\$41	\$105	\$168
1.85	- \$43	\$47	\$138	\$229	\$319
2.40	- \$0	\$117	\$235	\$352	\$470
3.00	\$42	\$189	\$336	\$483	\$630
3.50	\$76	\$247	\$419	\$590	\$762

Gross margin is zero when income is reduced by 41%

or variable costs are increased by 71%

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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	
harvest previous crop	Nov							
broadleaf and grass weed control eg: glyphosate 450 g/L	Dec	0.03	56.21	1.69	1.2 L	4.67/L	5.60	7.29
broadleaf weed control eg 2,4-D amine 475 g/L	Dec	with above			1.2 L	5.82/L	6.98	6.98
wetter - non-ionic surfactant	Dec	with above			0.04 L	6.77/L	0.27	0.27
broadleaf and grass weed control eg: glyphosate 450 g/L	Jan	0.03	56.21	1.69	1.0 L	4.67/L	4.67	6.36
broadleaf weed control eg triclopyr 600g	Jan	with above			0.12 L	19.57/L	2.35	2.35
wetter - non-ionic surfactant	Jan	with above			0.04 L	6.77/L	0.27	0.27
broadleaf and grass weed control eg: glyphosate 450 g/L	Feb	0.03	56.21	1.69	1.0 L	4.67/L	4.67	6.36
broadleaf weed control eg 2,4-D amine 475 g/L	Feb	with above			1.2 L	5.82/L	6.98	6.98
wetter - non-ionic surfactant	Feb	with above			0.04 L	6.77/L	0.27	0.27
broadleaf and grass weed control eg paraquat+diquat	May	0.03	56.21	1.69	2.0 L	10.93/L	21.86	23.55
sowing	Jun	0.12	78.21	9.39	40 kg	1.00/kg	39.88	49.27
herbicide (application)	Aug	0.03	56.21	1.69				1.69
broadleaf weed control eg MCPA LVE	Aug	with above			1.0 L	10.32/L	10.32	10.32
harvest (contract)	Dec			66.24				66.24
crop levies	Dec			1.020%				3.40
crop insurance				1.030%	of on-farm value			3.43

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 Considerations: Most barley on the plains is feed quality, however malt can be achieved with the right season and management. In some areas eg Walgett and Coonamble, significant in-crop rainfall will be needed to achieve these yield targets. Growers should assess soil moisture profiles and fertility levels to assist with yield estimates. Stored soil moisture at sowing reduces the risk of crop failure due to variable in crop rainfall. To reduce this risk, crops should be sown with the maximum amount of stored soil moisture. Soils in the North West can store approximately 150-200 mm in the rooting zone, this can be roughly measured at sowing using a push probe.

Barley is a good host for crown rot, it is not advisable to plant wheat following barley.

Sowing Time: Ideally May/June. However, barley is more adapted to late plantings than wheat. Sowing time involves a tradeoff between frost risk with early sowing and moisture/heat stress with later sowing.

Fertiliser: Soil testing and nitrogen budgeting is crucial if malt grade is to be achieved.

Disease: Crop rotation is essential to minimise yield loss due to diseases such as net blotch.

Herbicides: Refer to the NSW DPI booklet *Weed control in winter crops 2012* for options.

Black oat control is not included in budget. Barley is more competitive with weeds than wheat and should be rotated away from wheat in the following season. *Check with your agronomist before applying herbicides in hot, dry conditions where there are sensitive crops in the area.

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 0.27hrs/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 \$7.09/ha, reducing the gross margin to \$130.90/ha.

MACHINERY ASSUMPTIONS:

Tractor: 170 kW PTO (230 HP) and 200 kW engine (265 HP)

machinery costs refer only to variable costs (running costs), not overhead costs.

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, changes in seasonal conditions and individual farm characteristics.