



NSW DEPARTMENT OF PRIMARY INDUSTRIES

BARLEY: FEED/MALTING (Flood Irrigated - Border Check/Conv. Sown) Irrigated Winter - 2009

Murrumbidgee Valley

1. GROSS MARGIN BUDGET:

	Standard Budget \$/ha	Your Budget \$/ha
INCOME:		
4.50 tonnes/ha @ \$170 /t (on farm, feed price)	\$765	
A. TOTAL INCOME \$/ha:	\$765	
VARIABLE COSTS:		
See following page for detail		
Cultivation.....	\$65	
Sowing.....	\$91	
Fertiliser.....	\$252	
Herbicide.....	\$42	
Contract harvesting.....	\$74	
Levies.....	\$15	
Crop insurance.....	\$17	
Irrigation.....	\$92	
B. TOTAL VARIABLE COSTS \$/ha:	\$648	
C. GROSS MARGIN (A-B) \$/ha:	\$117	
D. GROSS MARGIN \$/ML*:	\$47	

* Note. The method of calculation of gross margin per ML for the Murrumbidgee budgets varies because of the difficulty of identifying an alternative dryland alternative on specialist flood irrigated land. It is recommended where farmers can identify a dryland alternative that they subtract the gross margin of the dryland alternative from the gross margin of the irrigated crop and then divide by the number of ML. This will give a better indication of the contribution the irrigation water has made to increasing returns.

SENSITIVITY TABLES

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$130 /t	\$150 /t	\$170 /t	\$190 /t	\$210 /t	
3.00	-\$234	-\$176	-\$118	-\$60	-\$2	
3.50	-\$172	-\$104	-\$36	\$31	\$99	
4.00	-\$113	-\$36	\$42	\$119	\$196	
4.50	-\$57	\$30	\$117	\$204	\$291	←
5.00	-\$1	\$96	\$193	\$289	\$386	
5.50	\$55	\$162	\$268	\$374	\$481	
6.00	\$111	\$227	\$343	\$459	\$576	

3. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER ML:

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ML)
	\$130 /t	\$150 /t	\$170 /t	\$190 /t	\$210 /t	
3.00	-\$94	-\$70	-\$47	-\$24	-\$1	
3.50	-\$69	-\$42	-\$15	\$13	\$40	
4.00	-\$45	-\$14	\$17	\$48	\$79	
4.50	-\$23	\$12	\$47	\$82	\$116	←
5.00	\$0	\$38	\$77	\$116	\$154	
5.50	\$22	\$65	\$107	\$150	\$192	
6.00	\$45	\$91	\$137	\$184	\$230	

BARLEY: FEED/MALTING (Flood Irrigated - Border Check/Conv. Sown)

Murrumbidgee Valley

Irrigated Winter - 2009

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total Cost
Operation	Month	hrs/ha	Cost \$/hour	Total \$/ha	Rate/ha	Cost \$	Total \$/ha	\$/ha
Rip Banks	Nov/Dec	0.22	\$48.80	\$10.89				\$10.89
Disc Plough	Dec/Jan	0.35	\$42.85	\$14.88				\$14.88
Landplane	Mar	0.17	\$45.05	\$7.71				\$7.71
Bank up		0.26	\$46.38	\$12.08				\$12.08
Scarify	Apr/May	0.17	\$45.05	\$7.71				\$7.71
Sow	Apr/May	0.17	\$62.38	\$10.48	90kg/ha	\$0.90/kg	\$81.00	\$91.48
Apply starter fertiliser <i>eg. DAP</i>		with above			125kg/ha	\$1.048/kg	\$131.00	\$131.00
Seed Dressing (eg: Baytan®)		with above			0.125kg/ha	\$36.50/kg	\$4.56	\$4.56
Trail drains		0.26	\$46.38	\$12.08				\$12.08
Grass weed control <i>eg. tralkoxydim,(Achieve ®)</i>	Jun	contract		\$10.00	0.4kg/ha	\$68.04/kg	\$27.22	\$37.22
Topdress nitrogen fertiliser <i>eg. broadcast urea</i>	Jun/Jul	0.17	\$62.38	\$10.48	150kg/ha	\$0.734/kg	\$110.10	\$120.58
Contract harvest	Nov	contract		\$63.89				\$63.89
Chaser Bin		0.22	\$45.05	\$9.91				\$9.91
Irrigation*					2.5ML/ha	\$36.78/ML	\$91.94	\$91.94
Crop Levies			\$1.50 /t	+		1.02% of on-farm value		\$14.51
Crop Insurance						2.280% of on-farm value		\$17.44

This budget is ONLY A GUIDE and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.

AGRONOMIC NOTES:

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

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

Cropcheck	Monitor and record crop performance. Key checks include establishment, weeds, insects, tiller numbers, disease and grain fill.
Rotation	- This is the first crop following wheat after rice.
Varieties	- Check 'Winter Crop Variety Sowing Guide 2009' for approved varieties for SNSW. - There are two main types of barley varieties, malt and feed. For feed grain production consider Tantangara, Tulla, Hindmarsh, Capstan or Gairdner. - Gairdner, Cowabbie, Fairview and Baudin may be suitable for malt on irrigation.
Seed	- Budgets based on seed at \$900/t
Protein	- Protein levels for malt should be between 9-12%, ideal protein 10.5%.
Fertiliser	- For malt barley, nitrogen application and the spring irrigation need to be strategically applied to ensure grain meets protein specifications. High fertility paddocks usually produce grain protein too high for malt grade. High rates of N can optimise feed grain yields
Sowing Time	- See "Winter Crop Variety Sowing Guide 2009" for recommended sowing time for each variety. - May till mid June.
Weed Control	- Herbicides are boomsprayed in a dry year and aerial sprayed in a wet year. - An additional broadleaf herbicide may be required if wireweed or toadrush are a problem. - Refer to "Weed Control in Winter Crops 2009" for alternative herbicides.
Seed Dressing	- Required for control of seedling leaf diseases.
Irrigation	- Budget allows for a pre-irrigation (1.5ML) plus one spring irrigation (1ML). - Only pre-irrigating a proportion of intended winter crop area to reduce risk of waterlogging - Barley is the most susceptible winter cereal to waterlogging. - *The budget uses MIA total water costs based on 50% allocation. - Irrigation cost includes the variable cost and fixed water costs of \$19.18/ML. - Water costs used in the MIA budgets are based on 2008-09 prices. - For prices in other areas and districts, refer to the water prices section.
Machinery	- Machinery costs include variable costs only for the tractor, implements and header. - Contract harvesting does not include the cost of fuel.
Labour	- The labour required for machinery operations is 2.70 hr/ha. - Using a labour cost of \$14/hr, an additional \$38/ha can be deducted from the budget.
Economic note:	- Prices are based on feed barley. These gross margins are only a guide. - They do not include overhead costs or GST. - Input and crop prices are correct at the time of writing (March 2009). Market uncertainty makes estimation of future pricing impractical. - Use your own figures and price assumptions to determine your own gross margin.