



Primary
Industries

Flood Irrigated Wheat Central Zone

Winter 2012

1. GROSS MARGIN BUDGET:

INCOME:

5.00 tonnes/ha @ \$265.00 /tonne (on farm) (AH)

A. TOTAL INCOME \$/ha:

VARIABLE COSTS:

See opposite page for detail

Cultivation.....	\$46.02
Sowing.....	\$95.12
Fertiliser.....	\$264.67
Herbicide.....	\$62.24
Insecticide.....	\$0.00
Irrigation.....	\$74.64
Contract-harvesting.....	\$78.00
Levies.....	\$13.52
Crop Insurance.....	\$27.16
Cartage, grading & bagging.....	\$0.00

B. TOTAL VARIABLE COSTS \$/ha:

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

D. GROSS MARGIN FOR ALTERNATIVE DRYLAND CROP (SF WHEAT)

E. EXTRA GROSS MARGIN DUE TO IRRIGATION (C-D)

F. GROSS MARGIN/ML (E÷ML WATER APPLIED)*

* See agronomic notes on irrigation

Standard Budget \$/ha	Your Budget \$/ha
\$1,325.00	
\$1,325.00	
\$46.02	
\$95.12	
\$264.67	
\$62.24	
\$0.00	
\$74.64	
\$78.00	
\$13.52	
\$27.16	
\$0.00	
\$661.37	
\$663.63	
\$419.12	
\$244.51	
\$61.13	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ha)
	\$225 /t	\$245 /t	\$265 /t	\$285 /t	\$305 /t	
3.50	\$161	\$228	\$296	\$364	\$432	
4.00	\$264	\$341	\$419	\$496	\$574	
4.50	\$367	\$454	\$541	\$628	\$716	
5.00	\$470	\$567	\$664	\$761	\$857	
5.50	\$573	\$679	\$786	\$893	\$999	
6.00	\$676	\$792	\$908	\$1,025	\$1,141	
6.50	\$779	\$905	\$1,031	\$1,157	\$1,283	

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

YIELD tonnes/ha	ON FARM PRICE (\$/tonne)					Gross Margin (\$/ML)
	\$225 /t	\$245 /t	\$265 /t	\$285 /t	\$305 /t	
3.50	-\$65	-\$48	-\$31	-\$14	\$3	
4.00	-\$39	-\$19	\$0	\$19	\$39	
4.50	-\$13	\$9	\$31	\$52	\$74	
5.00	\$13	\$37	\$61	\$85	\$110	
5.50	\$38	\$65	\$92	\$118	\$145	
6.00	\$64	\$93	\$122	\$151	\$181	
6.50	\$90	\$121	\$153	\$184	\$216	

PRODUCT TRADE NAMES

The product trade names in this publication are supplied on the understanding that no preference between equivalent products is intended and that the inclusion of a product does not imply endorsement by NSW DPI

This budget is ONLY A GUIDE and should be altered to cover any other equivalent product from another manufacturer.

Flood Irrigated Wheat Central Zone

Winter 2012

CALENDAR OF OPERATIONS:

Operation	Month	Machinery			Inputs			Total Cost \$/ha
		hrs /ha	Cost \$/hour	Total \$/ha	rate/ha	Cost \$	Total \$/ha	
Off-set	Jan	0.35	60.82	\$21.12				\$21.12
Chisel Plough	Feb	0.22	54.87	\$12.25				\$12.25
Land plane	Mar	0.05	53.40	\$2.88				\$2.88
Light Cultivation	Mar	0.17	57.07	\$9.77				\$9.77
Pre-irrigation	Mar				1.50 ML	\$18.66/ML	\$27.99	\$27.99
Pre-sowing weed control eg: glyphosate 540 g/L (Roundup PowerMax®)	Apr	0.05	53.40	\$2.88	1.50 L	\$8.67/L	\$13.01	\$15.88
Nitrogen fertiliser eg: Urea	May	0.17	57.07	\$9.77	217 kg	\$0.70/kg	\$151.90	\$161.67
Sowing	May	0.17	74.40	\$12.50	90 kg	\$0.92/kg	\$82.62	\$95.12
Starter fertiliser eg: MAP	May	with above			100 kg	\$1.03/kg	\$103.00	\$103.00
Weed control eg: chlorsulfuron 750 g/L (Glean®)	May	0.05	53.40	\$2.88	20 g	\$0.08 /g	\$1.60	\$4.48
Grass weed control eg:diclofop-methyl + fenoxaprop (Tristar® Advance)	Jun	0.05	53.40	\$2.88	1.50 L	\$26.00/L	\$39.00	\$41.88
Irrigation	Aug/Sept				1.25 ML	\$18.66/ML	\$23.33	\$23.33
Irrigation	Sept/Oct				1.25 ML	\$18.66/ML	\$23.33	\$23.33
Contract-harvest	Nov	contract		\$78.00				\$78.00
Crop Levies					1.02%	of on-farm value		\$13.52
Crop Insurance					2.05%	of on-farm value		\$27.16

*** Input and crop prices are correct at the time of writing (March 2012). Market uncertainty makes estimation of future pricing impractical.

NOTES:

Sowing time:

- Sowing at the optimum time for the selected variety is critical for maximum yield, regardless of irrigation.
- There is a 4 to 7% yield loss for every weeks delay past the optimum sowing time.
- Seed price used above is for purchased seed; if using retained seed adjust budget accordingly.

Weed control:

- Weed control, if required, should be implemented either pre-emergent or within 6 to 8 weeks after sowing time to avoid yield loss.
- Glyphosate for fallow knockdown weed control.
- A wide range of herbicides can be used, including chlorsulfuron for early weed control and fenoxaprop for in-crop grass control.
- Rotate herbicide groups and use other non-chemical methods to avoid herbicide resistance developing.

Fertiliser:

- Adequate phosphorus is essential before applying extra nitrogen fertiliser. Nitrogen is essential to maintain protein levels and can be applied either at sowing or top-dressed in-crop.

Irrigation:

- Pre-irrigation may be optional, dependent on stored moisture following summer rainfall
- In-crop irrigation: timing and amount dependent on in-crop winter rainfall: generally two irrigations (2.5 ML/ha) in spring is sufficient.
- This budget is applicable for the Central Zone east, a higher water requirement may be required for the central zone west than the figures used in this budget.
- Some of the yield response for irrigated crops is due to stored soil moisture and growing season rainfall which can be sufficient to grow a dryland crop. Thus the Gross Margin per ML is obtained by (GM/Ha of irrigated crop – GM/Ha alternative dryland crop)÷ML of irrigation water applied.
- Cost/ML is calculated based on the management and usage charges for regulated Maquarie river.

Machinery:

- A tractor with 57 kW (77 HP) pto power and 66kW (90 HP) engine power is assumed.
- Machinery costs refer only to variable costs: fuel, oil, filters, tyres, batteries & repairs.
- Contract-harvesting does not include the cost of fuel.

Labour:

- The labour required for machinery operations is 1.95 hr/ha
- Using a labour cost of \$22/hr, an additional \$42.97 can be deducted from the budget

Important notes:

- These gross margins are only a guide. They do not include overhead costs.
- **Use your own figures and price assumptions to estimate your own gross margin.**
- Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.