



SPRAY IRRIGATED BREAD WHEAT (diesel pump from bore)

Northern Zone

Winter 2009

1. GROSS MARGIN BUDGET:

INCOME:

6.00 tonnes/ha@ \$271.00 /tonne (APH, on farm)

Crop prices were correct at the time of writing (Mar 17 2009), world market volatility makes estimation of future pricing impractical.

Sample Budget \$/ha	Your Budget \$/ha
\$1,626.00	

A. TOTAL INCOME \$/ha:

\$1,626.00	
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VARIABLE COSTS:

See next page for detail

Cultivation.....	\$7.80	
Sowing.....	\$109.08	
Fertiliser.....	\$365.44	
Herbicide.....	\$103.83	
Insecticide.....	\$11.86	
Fungicide.....	\$34.51	
Irrigation.....	\$211.38	
Contract harvesting.....	\$119.92	
Consultant.....	\$14.83	
Levies.....	\$16.59	
Insurance.....	\$33.33	

B. TOTAL VARIABLE COSTS \$/ha:

\$1,028.56	
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C. GROSS MARGIN (A-B) \$/ha:

\$597.44	
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D. Gross margin of alternative dryland crop based on Dryland Wheat after chickpeas (no till)

\$347.89	
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E. Extra gross margin due to irrigation (C-D)

\$249.55	
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F. Gross margin/ML (E÷ML water applied in irrigation)

\$99.82	
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2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	Feed wheat \$176 /tonne	Price			
		\$221 /tonne	\$271 /tonne	\$321 /tonne	\$371 /tonne
4.5	- \$182	\$14	\$232	\$450	\$668
5.0	- \$106	\$112	\$354	\$596	\$839
5.5	- \$31	\$209	\$476	\$742	\$1,009
6.0	\$45	\$307	\$597	\$888	\$1,179
6.5	\$121	\$404	\$719	\$1,034	\$1,349
7.0	\$196	\$502	\$841	\$1,180	\$1,519
7.5	\$272	\$599	\$963	\$1,326	\$1,690

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

YIELD tonnes/ha	Feed wheat \$176 /tonne	Price			
		\$221 /tonne	\$271 /tonne	\$321 /tonne	\$371 /tonne
4.5	- \$212	- \$134	- \$46	\$41	\$128
5.0	- \$182	- \$95	\$2	\$99	\$196
5.5	- \$151	- \$56	\$51	\$158	\$264
6.0	- \$121	- \$16	\$100	\$216	\$332
6.5	- \$91	\$23	\$149	\$275	\$401
7.0	- \$61	\$62	\$197	\$333	\$469
7.5	- \$30	\$101	\$246	\$391	\$537

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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	Dec	0.05	45.64	2.28	2.0 L	9.60/L	19.20	21.48
broadleaf weed control eg: triclopyr	Dec	with above			0.08 L	43.63/L	3.49	3.49
wetting agent	Dec	with above			0.25 L	8.84/L	2.21	2.21
broadleaf and grass weed control eg: paraquat + diquat	Jan	0.05	45.64	2.28	2.5 L	12.25/L	30.63	32.91
wetter - non-ionic surfactant	Jan	with above			0.25 L	6.86/L	1.72	1.72
broadleaf and grass weed control eg	Feb	0.05	45.64	2.28	1.8 L	9.60/L	17.28	19.56
wetting agent	Feb	with above			0.25 L	8.84/L	2.21	2.21
cultivate and fertilise	Mar	0.17	45.91	7.80				7.80
nitrogen fertiliser (anhydrous ammonia)	Mar	with above		100 kg/N	122 Kg	1.09/kg	132.98	132.98
irrigate pre-sowing	Apr				0.5 ML	84.55/ML*	42.28	42.28
sowing	May	0.17	66.34	11.28	100 Kg	0.92/kg	91.80	103.08
seed dressing for stripe rust control eg triadimenol	May	with above			100 Kg	0.06/kg	6.00	6.00
fertiliser (Starter Z)	May	with above			100 Kg	1.17/kg	117.00	117.00
grass weed control (1 year in 4)	Jun	0.05	45.64	2.28				0.57
eg fenoxaprop-p-ethyl	Jun	with above			0.35 L	82.67/L	28.93	7.23
broadleaf weed control eg. MCPA 500	Jun	0.05	45.64	2.28	1.5 L	6.78/L	10.17	12.45
blue oat mite control-methidathion	Jul	0.05	45.64	2.28	0.09 L	44.50/L	4.01	6.29
nitrogen fertiliser (urea)	Aug	aerial		28.50	174 Kg	0.50/kg	86.96	115.46
irrigate	Aug				0.5 ML	84.55/ML*	42.28	42.28
irrigate	Sep				0.5 ML	84.55/ML*	42.28	42.28
fungicide-tebuconazole	Sep	aerial		14.50	0.145 L	138.00/L	20.01	34.51
irrigate	Oct				0.5 ML	84.55/ML*	42.28	42.28
irrigate	Oct				0.5 ML	84.55/ML*	42.28	42.28
heliethis/armyworm control- alpha- cypermethrin; 1 in 3 years	Oct	aerial		14.50	0.24 L	9.25/L	2.22	5.57
harvest (contract)	Nov	contract		119.92				119.92
consultant		approx \$6.00/acre						14.83
levies	Nov			1.020%				16.59
crop insurance				2.050%	of on-farm value			33.33

Input prices were correct at the time of writing (Mar 17 2009). Current fertiliser and chemical market uncertainty makes estimation of future pricing impractical.

AGRONOMIC REQUIREMENTS:

Sowing Time:	Sowing at the optimum time for the selected variety is critical for maximum yield. There is a 4% to 7% yield loss for every weeks delay past the optimum sowing time.
Diseases:	Crown rot can and does occur in irrigation fields. Please refer to the Winter Crops Variety Sowing Guide 2009 for stripe rust ratings for wheat varieties. Any varieties rated less than 5 are not recommended to be sown. However the individual varieties' package needs to be evaluated. If varieties rated <5 are sown two in-crop fungicides should be budgeted for and timing and product rate decisions made depending on seasonal conditions.
Weed Control:	Weed control, if required, should be timely to be cost effective. To reduce the likelihood of herbicide resistance, rotate herbicide groups and weed management techniques.
Fertiliser:	Adequate phosphorus is essential before applying extra nitrogenous fertiliser. Nutrient requirements should be assessed on an individual paddock basis. Moderate existing N amount assumed
Herbicides:	MCPA® 500 used for early post-emergent broadleaf weeds Fenoxaprop-p-ethyl has been included for wild oats, control by rotation is better
Harvesting:	Yields over 2.5 t/ha assumed to cost an extra \$1.70 per extra 100kg harvested grain. - Always read chemical labels and follow directions, as it is your legal responsibility to do so.
<i>Use of a particular brand name does NOT imply a recommendation of that brand by NSW DPI.</i>	

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

MACHINERY ASSUMPTIONS:

Tractor:	- pto power: 130 kW (175HP); engine power: 146 kW (196 HP) - machinery costs refer only to variable costs (running costs), not overhead costs.
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Water pumping costs: * calculated using diesel powered pumping from bore.

Irrigation costs were calculated using 2009 Namoi Valley groundwater charges and pumping costs for a 90m deep bore with 85 metres total head (\$110.66/ML). Your costs are likely to be different and should be allowed for.

Water requirements 2.50 ML/ha Assumes soil profile starts with 50mm stored soil moisture and that 100mm rainfall is received in-crop.

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.