SPRAY IRRIGATED DURUM WHEAT (diesel pump from bore)

Northern Zone — Winter 2012

1. GROSS MARGIN BUDGET:

	Sample Budget $/ha	Your Budget $/ha
INCOME:		
6.50 tonnes/ha@ $310.00 /tonne (DR1 on farm)	$2,015.00	

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

A. TOTAL INCOME $/ha:	**$2,015.00**	
VARIABLE COSTS: See next page for detail		
Sowing	$91.66	
Fertiliser	$467.60	
Herbicide	$83.88	
Insecticide	$0.00	
Fungicide	$0.00	
Irrigation	$235.42	
Contract harvesting	$115.04	
Levies	$20.55	
Insurance	$41.31	
B. TOTAL VARIABLE COSTS $/ha:	**$1,055.46**	
C. GROSS MARGIN (A-B) $/ha:	**$959.54**	
D. Gross margin of alternative dryland crop based on Dryland Durum Wheat (no till)	**$395.05**	
E. Extra gross margin due to irrigation (C-D)	**$564.49**	
F. Gross margin/ML (E÷ML water applied in irrigatio	**$282.24**	

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

YIELD	Feed grade	DR3	DR2	DR1		
tonnes/ha	$140 /tonne	$245.00	$285.00	**$310 /tonne**	$360 /tonne	$410 /tonne
5.0	- $297	$212	$406	$527	$769	$1,012
5.5	- $235	$325	$538	$671	$938	$1,204
6.0	- $173	$437	$670	$815	$1,106	$1,397
6.5	- $112	$550	$802	**$960**	$1,275	$1,590
7.0	- $50	$663	$934	$1,104	$1,443	$1,782
7.5	$12	$775	$1,066	$1,248	$1,611	$1,975
8.0	$74	$888	$1,198	$1,392	$1,780	$2,167

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

YIELD	Feed grade	DR3	DR2	DR1		
tonnes/ha	$140 /tonne	$245.00	$285.00	**$310 /tonne**	$360 /tonne	$410 /tonne
5.0	- $346	- $91	$5	$66	$187	$308
5.5	- $315	- $35	$71	$138	$271	$405
6.0	- $284	$21	$137	$210	$356	$501
6.5	- $253	$77	$203	**$282**	$440	$597
7.0	- $222	$134	$270	$354	$524	$694
7.5	- $192	$190	$336	$426	$608	$790
8.0	- $161	$246	$402	$498	$692	$886

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.

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CALENDAR OF OPERATIONS:		Machinery			Inputs			
			Cost	Total		Cost	Total	**Total Cost**
Operation	Month	hrs /ha	$/hour	$/ha	Rate/ha	$	$/ha	**$/ha**
broadleaf and grass weed control eg: glyphosate 540 g/L	Dec	0.05	54.96	2.75	1.8 L	7.44/L	13.39	**16.14**
broadleaf weed control eg: triclopyr 600g	Dec	with above			0.08 L	19.57/L	1.57	**1.57**
wetting agent	Dec	with above			0.25 L	7.47/L	1.87	**1.87**
broadleaf and grass weed control eg: paraquat + diquat	Jan	0.05	54.96	2.75	2.5 L	10.93/L	27.33	**30.07**
broadleaf and grass weed control eg: glyphosate 540 g/L	Feb	0.05	54.96	2.75	1.6 L	7.44/L	11.90	**14.65**
wetting agent	Feb	with above			0.25 L	7.47/L	1.87	**1.87**
apply N fertiliser	Mar	0.17	75.66	12.86				**12.86**
nitrogen fertiliser (anhydrous ammonia)	Mar	with above		100 kg/N	122 kg	0.90/kg	109.80	**209.84**
irrigate pre-sowing	Apr				0.5 ML	117.71/ML*	58.86	**58.86**
sowing #	Jun	0.17	75.66	12.86	80 kg	0.99/kg	78.80	**91.66**
fertiliser (Starter Z)	Jun	with above			60 kg	0.94/kg	56.40	**56.40**
wild oat control (1 year in 4)	Jun	0.05	54.96	2.75				**0.69**
wild oat control eg fenoxaprop-p-ethyl	Jun	with above			0.35 L	47.29/L	16.55	**4.14**
broadleaf weed control eg. MCPA 500	Jun	0.05	54.96	2.75	1.5 L	6.76/L	10.14	**12.89**
nitrogen fertiliser (urea)	Aug	aerial		28.50	200 kg	0.80/kg	160.00	**188.50**
irrigate	Aug				0.5 ML	117.71/ML*	58.86	**58.86**
irrigate	Sep				0.5 ML	117.71/ML*	58.86	**58.86**
irrigate	Oct				0.5 ML	117.71/ML*	58.86	**58.86**
harvest (contract)	Nov			115.04				**115.04**
levies	Nov			1.020%				**20.55**
crop insurance				2.050%	of on-farm value			**41.31**

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:

Sowing Time: Best yields obtained when sown between late May and mid June

Seed purchase costs vary widely with variety and whether growers have kept their own seed from previous seasons.

Sowing time involves a tradeoff between frost risk with early sowing and heat stress with later sowing.

Diseases: Crown rot can and does occur in irrigation fields.

Please refer to the *Winter Crops Variety Sowing Guide 2012* for stripe rust ratings for wheat varieties. Any varieties rated less than MR-MS are not recommended to be sown. However the individual varietys' package needs to be evaluated. If varieties rated MR are sown two in-crop fungicides should be budgeted for and timing and product rate decisions made depending on seasonal conditions.

Weed Control: All volunteer bread wheat and barley plants should be controlled.

Fertiliser: Adequate phosphorus is essential before applying extra nitrogenous fertiliser.

Nutrient requirements should be assessed on an individual paddock basis.

Moderate existing soil N amount assumed

Harvesting: Care needs to be taken when threshing, since the hard grain has a greater tendency to fracture than bread wheats.

Yields over 2.5 t/ha assumed to cost an extra $1.22 per extra 100 kg of grain.

Herbicides: Durums have a low saftey margin to some chemicals: e.g. chlorsulfuron, tri-allate

A low safety margin means that an application rate above that recommended is likely to cause crop damage.

Refer to the NSW DPI booklet *Weed Control in winter crops 2012* for tolerance of wheat varieties to post-emergent herbicides.

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

MCPA® 500 used for early post-emergence broadleaf weed control

Fenoxaprop-ethyl has been included for wild oats, control by rotation is better.

- 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.

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.

Water pumping costs: * calculated using diesel powered pumping from bore.

Irrigation costs were calculated using 2011-12 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 be different and should be allowed for.

Water requirements 2.00 Ml/ha Assumes soil profile starts with 50mm stored soil moisture and that 100mm rainfall is received in-crop.