NSW DEPARTMENT OF **PRIMARY INDUSTRIES**

DRYLAND WHEAT (Long Fallow, No Till, After Sorghum)

Farm Enterprise Budget Series - North East NSW Winter 2009

1. GROSS MARGIN BUDGET:

	Sample Budget $/ha	Your Budget $/ha
INCOME:		
3.50 tonnes/ha@ $244.00 /tonne (AH12, on farm)	$854.00	

This estimated yield figure is for unconstrained better soils and due to a full moisture profile from long fallow.
Crop prices were correct at the time of writing (Mar 17 2009), world market volatility makes estimation of future pricing impractical.

A. TOTAL INCOME $/ha:	**$854.00**	

VARIABLE COSTS:
See next page for detail

Sowing	$57.18	
Fertiliser	$210.93	
Herbicide	$75.26	
Fungicide	$21.11	
Contract harvesting	$71.92	
Levies	$8.71	
Insurance	$17.51	
B. TOTAL VARIABLE COSTS $/ha:	**$462.61**	
C. GROSS MARGIN (A-B) $/ha:	**$391.39**	

Water use efficiency example

Growing season rainfall (ie in-crop): mm	317	
Stored fallow moisture: mm (25% of rainfall in fallow period assumed)	154	
Early crop water use: mm	110	
Total crop water use mm	361	
Gross margin per mm	**$1.08**	
kg of grain per mm	9.69	

Please refer to the "Water Use Efficiency in Northern NSW Winter Crop Enterprise Budgets" summary for more information on water use efficiency assumptions used at right.

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

YIELD	On Farm Price				
tonnes/ha	$144 /tonne	$194 /tonne	**$244 /tonne**	$294 /tonne	$344 /tonne
1.5	- $208	- $135	- $62	$10	$83
2.2	- $115	- $10	$95	$200	$305
2.8	- $28	$109	$247	$384	$521
3.5	$52	$222	**$391**	$561	$731
4.3	$152	$362	$572	$782	$992
5.2	$253	$503	$754	$1,004	$1,254
6.0	$353	$644	$935	$1,225	$1,516

Gross margin is zero when income is reduced by 46%
or variable costs are increased by 85%

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CALENDAR OF OPERATIONS:		Machinery			Inputs			
Operation	Month	hrs /ha	Cost $/hour	Total $/ha	Rate/ha	Cost $	Total $/ha	**Total Cost $/ha**
harvest sorghum* (dessicated)	Mar-08							
# broadleaf and grass weed control eg: glyphosate 450 g/L	Jun-08	0.05	45.64	2.28	0.60 L	7.43/L	4.46	**6.74**
broadleaf weed control eg. dicamba 700g/kg	Jun-08	with above			150 g	0.05/g	8.23	**8.23**
# broadleaf and grass weed control eg: glyphosate 450 g/L	Aug-08	0.05	45.64	2.28	1.20 L	7.43/L	8.92	**11.20**
wetting agent	Aug-08	with above			0.25 L	8.84/L	2.21	**2.21**
broadleaf weed control eg 2,4-D amine 300g/L	Nov-08	0.05	45.64	2.28	0.60 L	4.23/L	2.54	**4.82**
broadleaf and grass weed control eg: glyphosate 450 g/L	Nov-08	with above			1.50 L	7.43/L	11.15	**11.15**
wetting agent	Nov-08	with above			0.25 L	8.84/L	2.21	**2.21**
nitrogen fertiliser (anhydrous ammonia)	Feb-09	0.17	45.91	7.80	122 kg	1.09/kg	132.93	**140.73**
pre-sowing weed control eg. glyphosate 450g/L	May	0.05	45.64	2.28	1.20 L	7.43/L	8.92	**11.20**
wetting agent	May	with above			0.25 L	8.84/L	2.21	**2.21**
sowing	May	0.17	66.34	11.28	50 kg	0.92/kg	45.90	**57.18**
fertiliser (Starter 12Z)	May	with above			60 kg	1.17/kg	70.20	**70.20**
broadleaf weed control eg. MCPA LVE	Jun	0.05	45.64	2.28	1.0 L	9.74/L	9.74	**12.02**
broadleaf weed control eg metsulfuron-methyl	Jun	0.05	45.64	2.28	5 g	0.20/g	1.00	**3.28**
fungicide for stripe rust ψ eg. propiconazole	Aug	aerial spray		14.50	0.25 L	26.42/L	6.61	**21.11**
harvest (contract)	Nov			71.92				**71.92**
levies	Nov			1.020%				**8.71**
crop insurance				2.050%	of on-farm value			**17.51**

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:

Growers should assess soil moisture profiles and fertility levels to assist with yield estimates.

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. Refer to NSW DPI "Winter Crop Variety Sowing Guide 2009" for sowing guidelines.

Fertiliser: Adequate phosphorus is essential before applying extra nitrogenous fertiliser. Nutrient requirements should be assessed with soil tests, strip trials and records.

Disease: Crop rotation is necessary to minimise loss of yield due to disease. Effective grass weed control is also essential to control diseases such as crown rot. Variety selection also plays a role in minimising the impact of disease on yield and quality. ψ An optional stripe rust control is used, but other control and preventative measures are available also. Check the NSW DPI Disease Management Guide "Stripe Rust: Understanding the disease in wheat" for more information.

Harvest: Yields over 2.5 t/ha are assumed to cost a further $1.48 per extra 100kg of grain harvested.

Long fallow: *In this example, sorghum is dessicated prior to harvest, if there is a frost this may not be needed. In a long fallow situation winter cropping cannot be carried out annually. Fallow sprays allow weed control and moisture conservation.

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.

Efficacy of dessicant herbicide can be reduced in cold conditions, check with your agronomist. Refer to the NSW DPI booklet "Weed Control in Winter Crops 2009" for options. **Check with your agronomist before applying herbicides in unsuitable conditions, particularly where there are sensitive crops in the area.

- 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 0.59hrs/ha. Then multiplying this by 1.25 to allow for machinery repair time etc, and using a labour cost of $19/hr, the cost of labour is $13.65/ha, reducing the gross margin to $377.74/ha.

MACHINERY ASSUMPTIONS:

Tractor: - pto power: 130 kW (175 HP); engine power: 146 kW (196 HP)

Contract harvesting costs include $4.72/ha worth of fuel.

Machinery costs refer to variable costs of: fuel, oil, filters, tyres, batteries and repairs.