



## DRYLAND WHEAT (LONG FALLOW, No Till)

Farm Enterprise Budget Series - North West NSW

Winter 2012

### 1. GROSS MARGIN BUDGET:

**INCOME:**

2.40 tonnes/ha@ \$275.00 /tonne (PH13 on farm)

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

Sample Budget \$/ha	Your Budget \$/ha
\$660.00	

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

<b>\$660.00</b>	
-----------------	--

**VARIABLE COSTS:**

See next page for detail

Sowing.....	\$45.23	
Fertiliser.....	\$85.20	
Herbicide.....	\$95.26	
Insecticide.....	\$0.00	
Contract harvesting.....	\$61.24	
Levies.....	\$6.73	
Insurance.....	\$6.80	

**B. TOTAL VARIABLE COSTS \$/ha:**

<b>\$300.45</b>	
-----------------	--

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

<b>\$359.55</b>	
-----------------	--

Water use efficiency example

Growing season rainfall (ie in-crop): mm  
Stored fallow moisture: mm (25% of rainfall in fallow period)

Early crop water use: mm  
Total crop water use mm  
Gross margin per mm  
kg of grain per mm

189	
122	
110	
201	
<b>\$1.79</b>	
12.0	

Please refer to the NSW DPI webpage "[About gross margin budgets](#)" for more information on water use efficiency assumptions used at right.

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

YIELD tonnes/ha	On Farm Price				
	\$175 /tonne	\$225 /tonne	<b>\$275 /tonne</b>	\$325 /tonne	\$375 /tonne
1.5	- \$30	\$44	\$117	\$191	\$264
1.8	\$22	\$110	\$198	\$286	\$374
2.1	\$73	\$176	\$279	\$382	\$484
<b>2.4</b>	\$124	\$242	<b>\$360</b>	\$477	\$595
3.3	\$265	\$425	\$585	\$745	\$905
4.1	\$405	\$608	\$810	\$1,013	\$1,215
5.0	\$545	\$790	\$1,035	\$1,280	\$1,525

Gross margin is zero when income is reduced by 54%  
or variable costs are increased by 120%

# DRYLAND WHEAT (LONG FALLOW, No Till)

Farm Enterprise Budget Series - North West NSW

Winter 2012

CALENDAR OF OPERATIONS:		Machinery			Inputs			Total
Operation	Month	hrs /ha	Cost	Total	Rate/ha	Cost	Total	Total Cost \$/ha
			\$/hour	\$/ha		\$	\$/ha	
harvest summer crop	Mar							
broadleaf and grass weed control eg: glyphosate 450 g/L	Mar	0.03	56.21	1.69	1.2 L	4.67/L	5.60	<b>7.29</b>
wetter - non-ionic surfactant	Mar	with above			0.04 L	6.77/L	0.27	<b>0.27</b>
broadleaf and grass weed control eg: glyphosate 450 g/L	Aug	0.03	56.21	1.69	1.0 L	4.67/L	4.67	<b>6.36</b>
broadleaf weed control eg 2,4-D amine 475 g/L	Aug	with above			1.2 L	5.82/L	6.98	<b>6.98</b>
wetting agent	Aug	with above			0.04 L	6.77/L	0.27	<b>0.27</b>
broadleaf and grass weed control eg: glyphosate 450 g/L	Dec	0.03	56.21	1.69	1.2 L	4.67/L	5.60	<b>7.29</b>
broadleaf weed control eg 2,4-D amine 475 g/L	Dec	with above			1.2 L	5.82/L	6.98	<b>6.98</b>
wetter - non-ionic surfactant	Dec	with above			0.04 L	6.77/L	0.27	<b>0.27</b>
broadleaf and grass weed control eg: glyphosate 450 g/L	Jan	0.03	56.21	1.69	1.0 L	4.67/L	4.67	<b>6.36</b>
broadleaf weed control eg triclopyr 600g	Jan	with above			0.12 L	19.57/L	2.35	<b>2.35</b>
wetter - non-ionic surfactant	Jan	with above			0.04 L	6.77/L	0.27	<b>0.27</b>
broadleaf and grass weed control eg: glyphosate 450 g/L	Feb	0.03	56.21	1.69	1.0 L	4.67/L	4.67	<b>6.36</b>
broadleaf weed control eg 2,4-D amine 475 g/L	Feb	with above			1.2 L	5.82/L	6.98	<b>6.98</b>
wetter - non-ionic surfactant	Feb	with above			0.04 L	6.77/L	0.27	<b>0.27</b>
broadleaf and grass weed control eg: chlorsulfuron *	Apr	0.03	56.21	1.69	20 g	0.10/g	2.00	<b>3.69</b>
broadleaf and grass weed control eg paraquat+diquat	Apr	with above			2.0 L	10.93/L	21.86	<b>21.86</b>
sowing	May	0.12	78.21	9.39	40 kg	0.90/kg	35.84	<b>45.23</b>
fertiliser (Starter Z)	May	with above			40 kg	1.08/kg	43.20	<b>43.20</b>
nitrogen fertiliser eg. urea	Mar	with above			60 kg	0.70/kg	42.00	<b>42.00</b>
wild oat control (1 year in 4)	Jun	0.03	56.21	1.69				<b>0.42</b>
eg fenoxaprop-p-ethyl	Jun	with above			0.35 L	47.29/L	16.55	<b>4.14</b>
broadleaf weed control eg MCPA LVE	Jul	0.03	56.21	1.69	0.5 L	10.32/L	5.16	<b>6.85</b>
harvest (contract)	Dec			61.24				<b>61.24</b>
crop levies	Nov			1.020%				<b>6.73</b>
crop insurance				1.030%	of on-farm value			<b>6.80</b>

Input prices were correct at the time of writing (Feb 2012). Current fertiliser and chemical market uncertainty makes estimation of future pricing impractical.

## AGRONOMIC REQUIREMENTS:

**Considerations:** In some areas eg Walgett and Coonamble, significant in-crop rainfall will be needed to achieve these yield targets. Growers should assess soil moisture profiles and fertility levels to assist with yield estimates. Stored soil moisture at sowing reduces the risk of crop failure due to variable in crop rainfall. To reduce this risk, crops should be sown with the maximum amount of stored soil moisture. Soils in the North West can store approximately 150-200 mm in the rooting zone, which can be roughly measured at sowing using a push probe.

**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. Sowing time is a tradeoff between frost risk with early sowing and moisture/heat stress with later sowing.

**Fertiliser:** Nitrogen fertiliser requirements are generally less following a long fallow, however they should be assessed on an individual paddock basis by soil testing. Other nutrient requirements (e.g. P and Zn) should be assessed with soil tests and previous strip trial results.

**Fallowing:** While long fallowing is less efficient at storing each mm of rainfall that falls, it can be a useful practice to spread risk, or to alternate between summer and winter crops.

\* In this example, chlorsulfuron (e.g. Glean) is used for weed control, but this would reduce flexibility for the following crop due to plant back periods.

**Disease:** Crop rotation is necessary to minimise yield loss 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.

**Stripe rust:** If a seed dressing has not been applied, continuous monitoring of moderately susceptible/susceptible varieties will determine whether you consider foliar fungicide application to control stripe rust infection.

### Weed Control:

Weed control, if required, should be timely to be cost effective.

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

Refer to the NSW DPI booklet *Weed Control in winter crops 2012* for options.

\*Check with your agronomist before applying herbicides in unsuitable conditions 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 0.3hrs/ha. Multiplying this by 1.25 to allow for machinery repair time etc, and using a labour cost of \$21.00/hr, the cost of labour is \$7.88/ha, reducing the gross margin to \$351.67/ha.

**MACHINERY ASSUMPTIONS:** machinery costs refer only to variable costs (running costs), not overhead costs.

Tractor: 170 kW PTO (230 HP) and 200 kW engine (265 HP)