NSW DEPARTMENT OF **PRIMARY INDUSTRIES**

DRYLAND WINTER WHEAT (long season, grazing & grain)

Northern Zone- East — Winter 2009

1. GROSS MARGIN BUDGET:

	Sample Budget $/Ha	Your Budget $/Ha
INCOME:		
Grain 2.50 tonnes/Ha@ $176.00 /tonne (feed wheat)	$440.00	

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

Grazing (estimated only, will vary substantially depending on stock type, seasonal conditions, crop growth & grazing period)

3000 kg dry matter / 12.9 kg /steer/day = 233 steer grazing days

therefore 233 / 80 days = 2.9 steers/ha fattened

2.9 hd/ha @ 1.00 kg/day x 80 days x $1.80/kg live	$1,879.20	
i.e. sell steers @ 360 kg/hd @ $648/hd		
A. TOTAL INCOME $/Ha:	**$2,319.20**	
VARIABLE COSTS: Cultivation	$0.00	
Sowing	$84.72	
Fertiliser	$215.90	
Herbicide	$39.46	
Insecticide	$8.26	
Contract harvesting	$52.72	
Levies	$4.49	
Insurance	$9.02	
Purchase store steers, 280kg @$1.90/kg=$532/hd….	$1,542.80	
B. TOTAL VARIABLE COSTS $/Ha:	**$1,957.37**	
C. GROSS MARGIN (A-B) $/Ha:	**$361.83**	

2. Effect of wheat yield and price on gross margin per hectare (includes livestock income above)

Grain yield tonnes/Ha	Grain Price $146 /tonne	$161 /tonne	**$176 /tonne**	$196 /tonne	$216 /tonne
1.0	$77	$91	$106	$125	$145
1.5	$148	$169	$191	$220	$249
2.0	$218	$247	$277	$315	$354
2.5	$289	$325	**$362**	$410	$459
3.0	$350	$394	$438	$496	$554
3.5	$411	$462	$513	$581	$649

For detailed livestock budgets see the NSW DPI "Beef Gross Margins" and "Sheep Gross Margins" at www.dpi.nsw.gov.au/agriculture/farm-business/budgets

3. Effect of livestock prices on gross margin per hectare

Purchase Price $/kg	Selling Price $1.60 /kg	$1.70 /kg	**$1.80 /kg**	$1.90 /kg	$2.00 /kg
1.60	$397	$501	$605	$710	$814
1.70	$315	$420	$524	$629	$733
1.80	$234	$339	$443	$547	$652
1.90	$153	$257	**$362**	$466	$571
2.00	$72	$176	$281	$385	$489
2.10	- $9	$95	$199	$304	$408

4. Effect of dry matter/ha and weight gain on gross margin per hectare

Weight Gain kg/day	Dry matter/ha 2,000	2,500	**3,000**	3,500	4,000	Steer sale weight kg/hd
0.70	$164	$200	$237	$273	$309	336
0.80	$191	$235	$278	$322	$366	344
0.90	$218	$269	$320	$371	$422	352
1.00	$246	$304	**$362**	$420	$478	**360**
1.10	$273	$338	$404	$469	$534	368
1.20	$301	$373	$445	$518	$590	376
Steers/ha	1.90	2.40	2.90	3.40	3.90	

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.

DRYLAND WINTER WHEAT (long season, grazing & grain)

Northern Zone- East **Winter 2009**

CALENDAR OF OPERATIONS:		Machinery*			Inputs			
Operation	Month	hrs /Ha	Cost $/hour	Total $/Ha	Rate/Ha	Cost $	Total $/Ha	**Total Cost $/Ha**
broadleaf and grass weed control eg: glyphosate 450 g/L	Sept/Oct	0.05	45.64	2.28	1.5 L	7.43/L	11.15	**13.43**
wetting agent	Sept/Oct	with above			0.25 L	8.84/L	2.21	**2.21**
broadleaf and grass weed control eg: glyphosate 450	Dec	0.05	45.64	2.28	1.2 L	7.43/L	8.92	**11.20**
broadleaf weed control eg 2,4-D amine 300g/L	Dec	with above			1.80 L	4.23/L	7.61	**7.61**
wetting agent	Dec	with above			0.25 L	8.84/L	2.21	**2.21**
nitrogen fertiliser eg. anhydrous ammonia	Jan	0.17	45.91	7.80	60 Kg	1.09/kg	65.40	**73.20**
sowing	Feb/Mar	0.17	66.34	11.28	80 Kg	0.92/Kg	73.44	**84.72**
broadleaf and grass weed control eg: chlosulfuron*	Feb/Mar	with above			20 g	0.14/g	2.80	**2.80**
Fertiliser starter 12Z	Feb/Mar	with above			70 Kg	1.17/Kg	81.90	**81.90**
insect control eg. Omethoate	Apr/May	0.05	45.64	2.28	100 ml	0.06/ml	5.98	**8.26**
nitrogen fertiliser eg.urea	July/Aug	0.17	66.34	11.28	80 Kg	0.76/Kg	60.80	**60.80**
contract harvest	Nov/Dec			52.72				**52.72**
crop insurance				2.050%	of on-farm value			**9.02**
levies				1.020%	of on-farm value			**4.49**

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: # this budget assumes the paddock is coming out of pasture.

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

Approved Varieties: **See "Winter Crop Variety Sowing Guide 2009" NSW Department of Primary Industr**

Sowing Time: Earlier sowing facilitates annual grass (eg *vulpia*) control.

Weed Control: In-crop weed control, if required, should be implemented up to 4 weeks after sowing time to avoid yield loss. Ideally weed control should be undertaken as part of the rotation. Weed control should be done in the previous Sept/Oct before winter weed seed set.

* Consider likely following crops before using residual herbicides.

To reduce problems caused by herbicide resistance, rotate herbicide groups and weed management techniques. Refer to the NSW DPI booklet "Weed Control in Winter Crops 2009" for options.

Insect control: Watch for blue oat mites, army worms which may reduce yields.

Disease: Successive winter wheat crops can lead to a build up of wheat diseases eg crown rot.

- Always read the label 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.

Fertiliser: Nutrient requirements should be assessed on an individual paddock basis.

Nitrogen (N) and phosphorus (P) requirements are linked, insufficient P may affect response to applied N and vice versa. Topdressing with urea is in July/Aug after grazing completed.

Grazing: Examine plant growth points to judge when to cease grazing. Grazing should cease before the growing point (ie crown) reaches 3-4cm (about 1 inch) above the soil surface. Grazing should finish around late July to give maximum chance of grain recovery.

Further information : "Productive Dual Purpose Winter Wheats" NSW Agriculture 2002

Harvesting: Yields over 2.5 t/ha are assumed to cost a further $1.92 per extra 100kg/ha grain.

LABOUR REQUIREMENTS:

Labour: - labour is not costed in this budget. If we assume a labour cost of $18.51 per hour the total labour cost would be $10.18/hectare, reducing the gross margin to $351.65/ha.

***MACHINERY REQUIREMENTS:**

Tractor: 130 kW (175 HP) pto power and 146kW (196 HP) engine power is assumed

- machinery costs refer only to variable costs (running costs), not overhead costs.