

## SURFACE IRRIGATED SORGHUM (diesel pump from bore)

Farm Enterprise Budget Series - Northern Zone

Summer 2009-2010

### 1. GROSS MARGIN BUDGET:

**INCOME:**

8.00 tonnes/ha at \$160.00 /tonne (on farm)

Sample Budget \$/ha	Your Budget \$/ha
\$1,280.00	

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

<b>\$1,280.00</b>	
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**VARIABLE COSTS:**

see following page(s) for details

Cultivation.....	\$7.92	
Sowing.....	\$44.29	
Fertilizer.....	\$243.63	
Herbicide.....	\$114.05	
Insecticide.....	\$24.21	
Irrigation.....	\$187.00	
Harvest.....	\$119.94	
Levies and insurance.....	\$78.94	
<b>B. TOTAL VARIABLE COSTS \$/ha:</b>	<b>\$819.99</b>	

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

<b>\$460.01</b>	
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**D. GROSS MARGIN \$/MI:**

<b>\$121.06</b>	
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### 2. EFFECT OF YIELD AND PRICE ON GROSS MARGIN PER HECTARE:

YIELD tonnes/ha	On Farm Price						
	\$120 /t	\$140 /t	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t
5.00	-\$179	-\$80	\$19	\$118	\$217	\$316	\$415
6.00	-\$71	\$47	\$166	\$285	\$404	\$523	\$641
7.00	\$36	\$175	\$313	\$452	\$590	\$729	\$867
<b>8.00</b>	\$143	\$302	<b>\$460</b>	\$618	\$777	\$935	\$1,093
9.00	\$251	\$429	\$607	\$785	\$963	\$1,141	\$1,320
10.00	\$358	\$556	\$754	\$952	\$1,150	\$1,348	\$1,546
11.00	\$465	\$683	\$901	\$1,118	\$1,336	\$1,554	\$1,772

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

YIELD tonnes/ha	On Farm Price						
	\$120 /t	\$140 /t	\$160 /t	\$180 /t	\$200 /t	\$220 /t	\$240 /t
5.00	-\$47	-\$21	\$5	\$31	\$57	\$83	\$109
6.00	-\$19	\$12	\$44	\$75	\$106	\$138	\$169
7.00	\$9	\$46	\$82	\$119	\$155	\$192	\$228
<b>8.00</b>	\$38	\$79	<b>\$121</b>	\$163	\$204	\$246	\$288
9.00	\$66	\$113	\$160	\$207	\$253	\$300	\$347
10.00	\$94	\$146	\$198	\$250	\$303	\$355	\$407
11.00	\$122	\$180	\$237	\$294	\$352	\$409	\$466

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CALENDAR OF OPERATIONS:		Machinery			Inputs			Total
Operation	Month	hrs/ha	Cost	Total	Rate/ha	Cost	Total	Cost \$/ha
			\$/hour	\$/ha		\$	\$/ha	
Herbicide - ground spray, glyphosate CT	Jan	0.05	47.19	2.36	1.2 L	5.21	6.25	<b>8.61</b>
Herbicide - 2,4-D i.p.a. 300g/L	Jan	with above			0.66 L	4.18	2.76	<b>2.76</b>
Wetter - non-ionic surfactant	Jan	with above			0.2 L	6.86	1.37	<b>1.37</b>
Herbicide - ground spray, glyphosate CT	Mar	0.05	47.19	2.36	1.2 L	5.21	6.25	<b>8.61</b>
Herbicide - triclopyr	Mar	with above			0.08 L	39.99	3.20	<b>3.20</b>
Wetter - non-ionic surfactant	Mar	with above			0.2 L	6.86	1.37	<b>1.37</b>
Herbicide - ground spray, glyphosate CT	May	0.05	47.19	2.36	1.0 L	5.21	5.21	<b>7.57</b>
Wetter - non-ionic surfactant	May	with above			0.2 L	6.86	1.37	<b>1.37</b>
Herbicide - ground spray, glyphosate CT	Aug	0.05	47.19	2.36	1.2 L	5.21	6.25	<b>8.61</b>
Wetter - non-ionic surfactant	Aug	with above			0.2 L	6.86	1.37	<b>1.37</b>
Fertilizer -Bulk Urea	Sep	0.12	65.67	7.88	325 kg	0.59	191.75	<b>199.63</b>
Herbicide - s-metolachlor+atrazine	Sep	0.03	47.06	1.41	3.2 L	13.49	43.17	<b>44.58</b>
Pre-Irrigate #	Oct				1.4 MI	49.21	68.89	<b>68.89</b>
Sowing - thiamethoxam + Concep II treated seed	Oct	0.12	69.06	8.29	3 kg	12.00	36.00	<b>44.29</b>
Fertiliser - Starter 12Z	Oct	with above			40 kg	1.10	44.00	<b>44.00</b>
Inter-row cultivate	Nov	0.15	52.81	7.92				<b>7.92</b>
Irrigate	Dec				1.2 MI	49.21	59.05	<b>59.05</b>
Irrigate	Jan				1.2 MI	49.21	59.05	<b>59.05</b>
Insecticide -Nuclear polyhedrosis virus (4 yrs in 5)	Jan	aerial spray		17.00	0.25 L	53.07	13.27	<b>24.21</b>
Crop insurance *	Jan			4.21%				<b>53.89</b>
Dessicant - aerial spray, glyphosate CT	Mar			17.00	1.2 L	5.21	6.25	<b>23.25</b>
Wetter - non-ionic surfactant	Mar	with above			0.2 L	6.86	1.37	<b>1.37</b>
Harvest **	Mar	contract		119.94	per ha incl fuel			<b>119.94</b>
Grains Research Levy				1.020%	of farm gate value			<b>13.06</b>
GrainCorp Levy \$/t				\$1.50	/tonne			<b>12.00</b>

## AGRONOMIC NOTES:

\*Sorghum is sensitive to zinc deficiency. Zinc treatment should be included where necessary, in this example zinc is applied 1 year in 5.

**Planting time:** Planting sorghum after the end of December significantly increases the chances of sorghum ergot, which can cause a substantial decline in yields and unsaleable grain.

**Insects:** Heliothis control may be required about 4 out of 5 years.

**Weeds:** To reduce the likelihood of herbicide resistance, rotate herbicide groups and weed management techniques.

**Insurance:** \* Varies with local government area and postcode, check with your insurer.

\*\* Harvest costs based on \$65/ha for a crop up to 2.5 t/ha with estimated increment of \$1.00 per extra 100 kg/ha above 2.5 t/ha. Includes estimate of harvester fuel cost.

For further information see the NSW DPI "Summer Crop Production Guide 2009-10"

Use of a particular brand name does NOT imply recommendation of that brand by I&I NSW.

Always read chemical labels and follow directions, as it is your legal responsibility to do so.

## LABOUR REQUIREMENTS:

- labour is not costed in this budget. If labour costs \$20.00 /hr, total labour cost would be \$15.50, reducing the gross margin to \$445 /ha.

This does not include labour required to irrigate since this is more likely to be an overhead cost.

## MACHINERY ASSUMPTIONS:

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

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

You may need to add overhead costs as well, please refer to the Tractor and Implement Costs Guide

**IRRIGATION:** # Water usage charge of \$3.71 per ML assumed, your charges may be different.

Water pumping costs: calculated using a flood/furrow system with diesel powered pumping from a bore.

Water requirements 3.80 ML/ha is sufficient to adequately irrigate sorghum 4 out of 5 years.

This budget should be used as a GUIDE ONLY and should be changed by the grower to take account of movements in crop and in prices, changes in seasonal conditions and individual farm characteristics. Estimated prices are GST-exclusive.