



**SURFACE (furrow) IRRIGATED BREAD WHEAT (diesel pump from surface Northern Zone Winter 2009)**

**1. GROSS MARGIN BUDGET:**

**INCOME:**

6.00 tonnes/ha@ \$271.00 /tonne (APH, on farm)

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

| Sample Budget \$/ha | Your Budget \$/ha |
|---------------------|-------------------|
| \$1,626.00          |                   |

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

|                   |  |
|-------------------|--|
| <b>\$1,626.00</b> |  |
|-------------------|--|

**VARIABLE COSTS:**

See next page for detail

|                          |          |  |
|--------------------------|----------|--|
| Cultivation.....         | \$7.80   |  |
| Sowing.....              | \$109.08 |  |
| Fertiliser.....          | \$336.94 |  |
| Herbicide.....           | \$103.83 |  |
| Insecticide.....         | \$11.86  |  |
| Fungicide.....           | \$34.51  |  |
| Irrigation.....          | \$102.14 |  |
| Contract harvesting..... | \$119.92 |  |
| Consultant.....          | \$14.83  |  |
| Levies.....              | \$16.59  |  |
| Insurance.....           | \$33.33  |  |

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

|                 |  |
|-----------------|--|
| <b>\$890.82</b> |  |
|-----------------|--|

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

|                 |  |
|-----------------|--|
| <b>\$735.18</b> |  |
|-----------------|--|

**D. Gross margin of alternative dryland crop based on Dryland Wheat after chickpeas (no till)**

|                 |  |
|-----------------|--|
| <b>\$347.89</b> |  |
|-----------------|--|

**E. Extra gross margin due to irrigation (C-D)**

|                 |  |
|-----------------|--|
| <b>\$387.28</b> |  |
|-----------------|--|

**F. Gross margin/ML (E÷ML water applied in irrigation)**

|                 |  |
|-----------------|--|
| <b>\$113.91</b> |  |
|-----------------|--|

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

| YIELD tonnes/ha | Feed wheat \$176 /tonne | Price        |              |              |              |
|-----------------|-------------------------|--------------|--------------|--------------|--------------|
|                 |                         | \$221 /tonne | \$271 /tonne | \$321 /tonne | \$371 /tonne |
| 4.5             | -\$44                   | \$152        | \$370        | \$588        | \$806        |
| 5.0             | \$31                    | \$249        | \$492        | \$734        | \$976        |
| 5.5             | \$107                   | \$347        | \$613        | \$880        | \$1,147      |
| <b>6.0</b>      | \$183                   | \$444        | <b>\$735</b> | \$1,026      | \$1,317      |
| 6.5             | \$258                   | \$542        | \$857        | \$1,172      | \$1,487      |
| 7.0             | \$334                   | \$639        | \$979        | \$1,318      | \$1,657      |
| 7.5             | \$410                   | \$737        | \$1,100      | \$1,464      | \$1,827      |

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

| YIELD tonnes/ha | Feed wheat \$176 /tonne | Price        |              |              |              |
|-----------------|-------------------------|--------------|--------------|--------------|--------------|
|                 |                         | \$221 /tonne | \$271 /tonne | \$321 /tonne | \$371 /tonne |
| 4.5             | -\$115                  | -\$58        | \$6          | \$71         | \$135        |
| 5.0             | -\$93                   | -\$29        | \$42         | \$114        | \$185        |
| 5.5             | -\$71                   | -\$0         | \$78         | \$157        | \$235        |
| <b>6.0</b>      | -\$49                   | \$28         | <b>\$114</b> | \$199        | \$285        |
| 6.5             | -\$26                   | \$57         | \$150        | \$242        | \$335        |
| 7.0             | -\$4                    | \$86         | \$186        | \$285        | \$385        |
| 7.5             | \$18                    | \$114        | \$221        | \$328        | \$435        |

**SURFACE (furrow) IRRIGATED BREAD WHEAT (diesel pump from surface supply)**

**Northern Zone**

**Winter 2009**

| CALENDAR OF OPERATIONS:                                       |     | Machinery             |         |                 | Inputs           |           |            | Total Cost<br>\$/ha |
|---|-----|-----------------------|---------|-----------------|------------------|-----------|------------|---------------------|
|   |     | Month                 | hrs /ha | Cost<br>\$/hour | Total<br>\$/ha   | Rate/ha   | Cost<br>\$ |                     |
| broadleaf and grass weed control eg:                          | Dec | 0.05                  | 45.64   | 2.28            | 2.0 L            | 9.60/L    | 19.20      | <b>21.48</b>        |
| broadleaf weed control eg: triclopyr                          | Dec | with above            |         |                 | 0.08 L           | 43.63/L   | 3.49       | <b>3.49</b>         |
| wetting agent   | Dec | with above            |         |                 | 0.25 L           | 8.84/L    | 2.21       | <b>2.21</b>         |
| broadleaf and grass weed control eg: paraquat + diquat        | Jan | 0.05                  | 45.64   | 2.28            | 2.5 L            | 12.25/L   | 30.63      | <b>32.91</b>        |
| wetter - non-ionic surfactant                                 | Jan | with above            |         |                 | 0.25 L           | 6.86/L    | 1.72       | <b>1.72</b>         |
| broadleaf and grass weed control eg:                          | Feb | 0.05                  | 45.64   | 2.28            | 1.8 L            | 9.60/L    | 17.28      | <b>19.56</b>        |
| wetting agent   | Feb | with above            |         |                 | 0.25 L           | 8.84/L    | 2.21       | <b>2.21</b>         |
| cultivate and fertilise                                       | Mar | 0.17                  | 45.91   | 7.80            |                  |           |            | <b>7.80</b>         |
| nitrogen fertiliser (anhydrous ammonia)                       | Mar | with above            |         | 100 kg/N        | 122 Kg           | 1.09/kg   | 132.98     | <b>132.98</b>       |
| irrigate pre-sowing   | Apr |                       |         |                 | 1.2 ML           | 30.04/ML* | 36.05      | <b>36.05</b>        |
| sowing  | May | 0.17                  | 66.34   | 11.28           | 100 Kg           | 0.92/kg   | 91.80      | <b>103.08</b>       |
| seed dressing for stripe rust control eg triadimenol          | May | with above            |         |                 | 100 Kg           | 0.06/kg   | 6.00       | <b>6.00</b>         |
| fertiliser (Starter Z)  | May | with above            |         |                 | 100 Kg           | 1.17/kg   | 117.00     | <b>117.00</b>       |
| grass weed control (1 year in 4)                              | Jun | 0.05                  | 45.64   | 2.28            |                  |           |            | <b>0.57</b>         |
| eg fenoxaprop-p-ethyl   | Jun | with above            |         |                 | 0.35 L           | 82.67/L   | 28.93      | <b>7.23</b>         |
| broadleaf weed control eg. MCPA 500                           | Jun | 0.05                  | 45.64   | 2.28            | 1.5 L            | 6.78/L    | 10.17      | <b>12.45</b>        |
| blue oat mite control-methidathion                            | Jul | 0.05                  | 45.64   | 2.28            | 0.09 L           | 44.50/L   | 4.01       | <b>6.29</b>         |
| irrigate  | Aug |                       |         |                 | 1.2 ML           | 30.04/ML* | 36.05      | <b>36.05</b>        |
| nitrogen fertiliser (urea)                                    | Aug | with above irrigation |         |                 | 174 Kg           | 0.50/kg   | 86.96      | <b>86.96</b>        |
| fungicide-tebuconazole  | Sep | aerial                |         | 14.50           | 0.145 L          | 138.00/L  | 20.01      | <b>34.51</b>        |
| irrigate  | Sep |                       |         |                 | 1.0 ML           | 30.04/ML* | 30.04      | <b>30.04</b>        |
| heliiothis/armyworm control- alpha-cypermethrin; 1 in 3 years | Oct | aerial                |         | 14.50           | 0.24 L           | 9.25/L    | 2.22       | <b>5.57</b>         |
| harvest (contract)  | Nov | contract              |         | 119.92          |                  |           |            | <b>119.92</b>       |
| consultant  |     | approx \$6.00/acre    |         |                 |                  |           |            | <b>14.83</b>        |
| levies  | Nov |                       |         | 1.020%          |                  |           |            | <b>16.59</b>        |
| crop insurance  |     |                       |         | 2.050%          | of on-farm value |           |            | <b>33.33</b>        |

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:**

**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.

**Diseases:** Crown rot can and does occur in irrigation fields. Please refer to the Winter Crops Variety Sowing Guide 2009 for stripe rust ratings for wheat varieties. Any varieties rated less than 5 are not recommended to be sown. However the individual varieties' package needs to be evaluated. If varieties rated <5 are sown two in-crop fungicides should be budgeted for and timing and product rate decisions made depending on seasonal conditions.

**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.

**Fertiliser:** Adequate phosphorus is essential before applying extra nitrogenous fertiliser. Nutrient requirements should be assessed on an individual paddock basis. Moderate existing N amount assumed

**Herbicides:** MCPA@ 500 used for early post-emergent broadleaf weeds Fenoxaprop-p-ethyl has been included for wild oats, control by rotation is better

**Harvesting:** Yields over 2.5 t/ha assumed to cost an extra \$1.70 per extra 100kg harvested grain.

*- 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 surface supply.

Irrigation costs were calculated using 2009 Namoi Valley regulated river water charges and pumping costs for 10 metres total head (\$13.02/ML). Your costs are likely to be different and should be allowed for.

**Water requirements** 3.40 ML/ha