

Enterprise **BEETROOT - PROCESSING** 2001  
 Unit ha Sprinkler Irrigation

<b>GROSS MARGIN BUDGET:</b>				Standard Budget	Your Budget
<b>INCOME:</b>					
	40 t/ha	@	\$103.00 /t	\$4,120.00	
<b>A. Total Income/ha</b>				<b>\$4,120.00</b>	
<b>VARIABLE COSTS:</b>					
<b>Seed</b>					
	DDR	8 kg/ha	\$25.00 per kg	\$200.00	
<b>Tractor costs</b>					
<b>Large equipment including labour, fuel, oil, etc</b>					
	2 Cultivation	0.7 hr/ha	\$30.50 /hr	\$42.70	
	2 Scarify	0.5 hr/ha	\$30.50 /hr	\$30.50	
	1 Inter Row Cult'n	0.5 hr/ha	\$30.50 /hr	\$15.25	
	1 Incorporate herbicide	0.5 hr/ha	\$30.50 /hr	\$15.25	
	7 Boomspray	0.2 hr/ha	\$30.50 /hr	\$42.70	
	1 Harrowing	0.2 hr/ha	\$30.50 /hr	\$6.10	
	1 Sowing	0.5 hr/ha	\$30.50 /hr	\$15.25	
<b>Irrigation</b>					
	Water	5.5 ML/ha	\$17.36 /ML	\$95.48	
	Pumping costs	5.5 ML/ha	\$30.00 /ML	\$165.00	
<b>Fertiliser</b>					
	Starter Fertiliser	570 kg/ha	\$0.45 /kg	\$254.79	
	Ammonium Nitrate	130 kg/ha	\$0.41 /kg	\$52.91	
<b>Pest Control</b>					
	1 Insecticide	0.8 L/ha	\$8.75 /L	\$7.00	
	1 Insecticide	0.8 L/ha	\$14.90 /L	\$11.92	
	4 Fungicide	2.2 kg/ha	\$7.45 /kg	\$65.56	
<b>Weed Control</b>					
	1 Residual	2.5 L/ha	\$14.63 /L	\$36.58	
	1 Residual	4.0 kg/ha	\$77.00 /kg	\$308.00	
	1 Post emergent	1.0 L/ha	\$21.25 /L	\$21.25	
<b>Harvesting</b>					
	Casual harvester	40 t/ha	\$17.50 /t	\$700.00	
<b>Levy</b>					
			0.50%	\$20.60	
<b>Freight</b>					
	Transported by processors			\$0.00	
<b>B. Total Variable Costs</b>				<b>\$2,106.84</b>	
<b>Gross Margin per ha (A-B)</b>				<b>\$2,013.16</b>	
<b>Gross Margin per ML</b>				<b>\$366.03</b>	

Break-even price	\$52.67 /t
Break-even yield	20.45 t/ha

**PRODUCT TRADE NAMES**

The product trade names in this publication are omitted on the understanding that no preference between equivalent products is intended and that the inclusion of a product does not imply endorsement by NSW Agriculture over any other equivalent product from another manufacturer.

Enterprise

**BEETROOT - PROCESSING**
**2001**

Sprinkler Irrigation

**SENSITIVITY ANALYSIS**
**TABLE 1- Effect of Yield and Price on Gross Margin /ha**

YIELD (t)	DELIVERED PRICE (\$/t)					
	93.00	98.00	<b>103.00</b>	108.00	113.00	118.00
30	\$865	\$1,014	\$1,163	\$1,313	\$1,462	\$1,611
35	\$1,240	\$1,414	\$1,588	\$1,762	\$1,936	\$2,111
<b>40</b>	\$1,615	\$1,814	<b>\$2,013</b>	\$2,212	\$2,411	\$2,610
45	\$1,990	\$2,214	\$2,438	\$2,662	\$2,886	\$3,110
50	\$2,366	\$2,614	\$2,863	\$3,112	\$3,361	\$3,609

**TABLE 2- Effect of Yield and Price on Gross Margin /ML**

YIELD (t)	DELIVERED PRICE (\$/t)					
	93.00	98.00	<b>103.00</b>	108.00	113.00	118.00
30	\$157	\$184	\$212	\$239	\$266	\$293
35	\$225	\$257	\$289	\$320	\$352	\$384
<b>40</b>	\$294	\$330	<b>\$366</b>	\$402	\$438	\$475
45	\$362	\$403	\$443	\$484	\$525	\$565
50	\$430	\$475	\$521	\$566	\$611	\$656

The weighted average price shown in bold is based on the Flemington Market prices over a recent 12 month period.

**NOTES:**

- Area** - Bathurst and Cowra are the main growing areas.
- Production** - Crop establishment is difficult due to damping off diseases. Beetroot is able to withstand relatively saline soil and/or irrigation water. Crops are precision sown, usually on small hills.
- Pests** - Aphids and thrips are the major insect pests with damping off and cercospora leaf spot the most common diseases.
- Harvesting** - Traditionally beetroot is sown around January and February for an April to May harvest. With approximately 14 to 18 weeks from direct seeding to harvest. Harvesting is fully mechanised with top lifting root harvesters. The beetroot is then transported to factories in bulk trucks.
- Yields** - This budget represents a high yielding slicing crop. A crop for whole peeling would be considerably lower.
- Packaging** - Large roots (5cm to 10cm) are sliced and small roots (2cm to 5cm) canned whole. About 85% by weight of canned beetroot are sliced.
- Economic note** - **This budget is ONLY A GUIDE** and should be altered for movements in crop and input prices, changes in seasonal conditions and the farm characteristics.  
- This budget does not include overhead costs or GST.