

*AgriProfit\$*

**Cost and Return Profiles for  
Selected Crops, 2002  
*Irrigated Crops***

March, 2006

**Alberta**  
AGRICULTURE, FOOD AND  
RURAL DEVELOPMENT



## TABLE OF CONTENTS

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### 2002 Irrigated Soil Zones

	Page
OVERVIEW .....	3
GRAPHS	
Sugar Beets .....	4
CROPS	
<i>Cereals:</i>	
Spring Wheat .....	5
Durum .....	6
Feed Barley .....	8
Barley Silage.....	11
<i>Special Crops:</i>	
Sugar Beets .....	12
Dry Beans.....	15
Processing Potatoes.....	18
Misc. Commercial Vegetables .....	19
<i>Forages:</i>	
Alfalfa Hay.....	21
Alfalfa Grass/Hay .....	22
FREQUENCY DISTRIBUTIONS .....	24
Sugar Beets .....	26
DEFINITIONS AND ALLOCATIONS .....	27

# OVERVIEW

## 2002 Irrigated Soil Zone

The AgriProfit\$ Cost and Return study is a provincial overview of costs and returns for various annual field crops and forages grown throughout the province. Participating farmers are surveyed throughout the winter and the Alberta Agriculture Economics Unit compiles all the information into this summary package. This detailed and world-class database is used for extension and research purposes.

In this package you will find a brief summary of various field crops and forages grown in the irrigated soil zone. Where numbers warrant, there are two levels of analysis – the group average and the top third. The top third analysis is based on the top third of fields that have the highest return to equity.

The map on the upper right illustrates the Irrigated Soil Zone area of Alberta. In the case of irrigation, only farms in southern Alberta are included in the sample.

The map on the lower right highlights the locations of participating farmers for the 2002 survey season.

For questions regarding this document please contact:

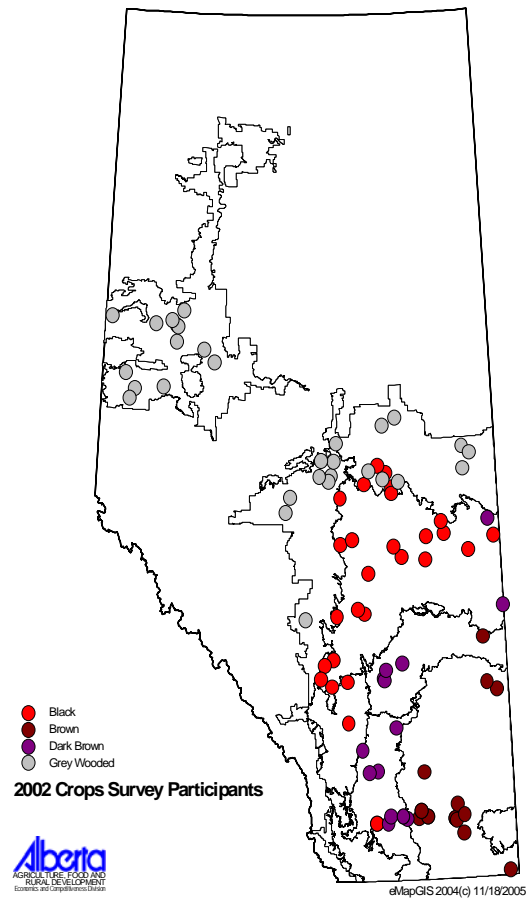
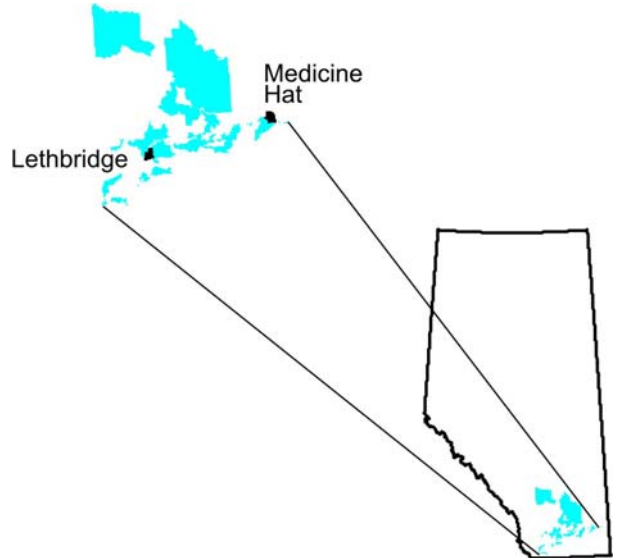
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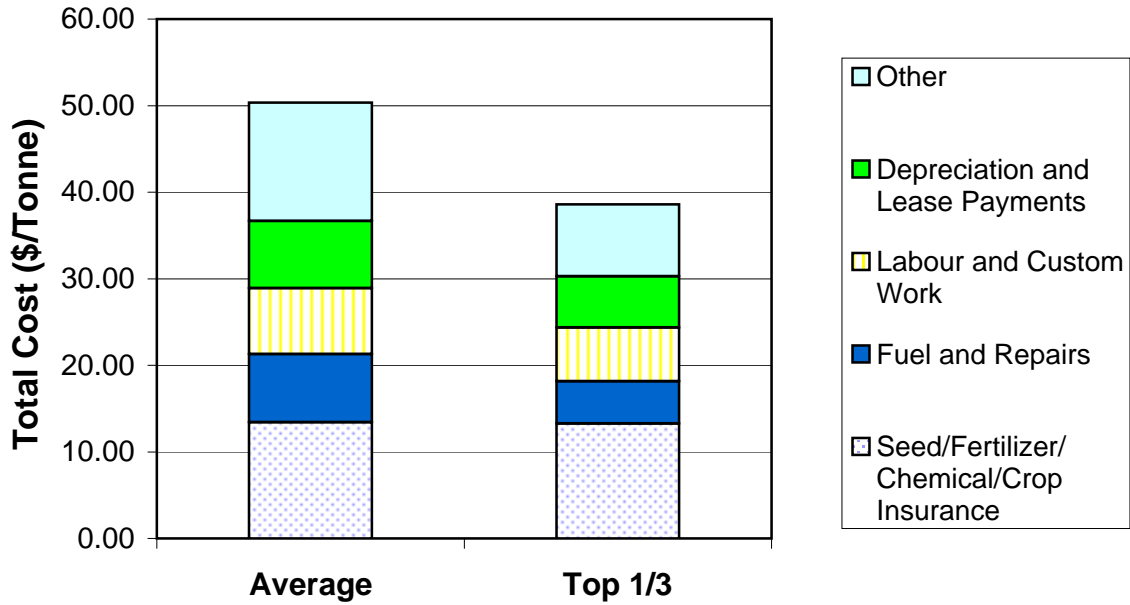
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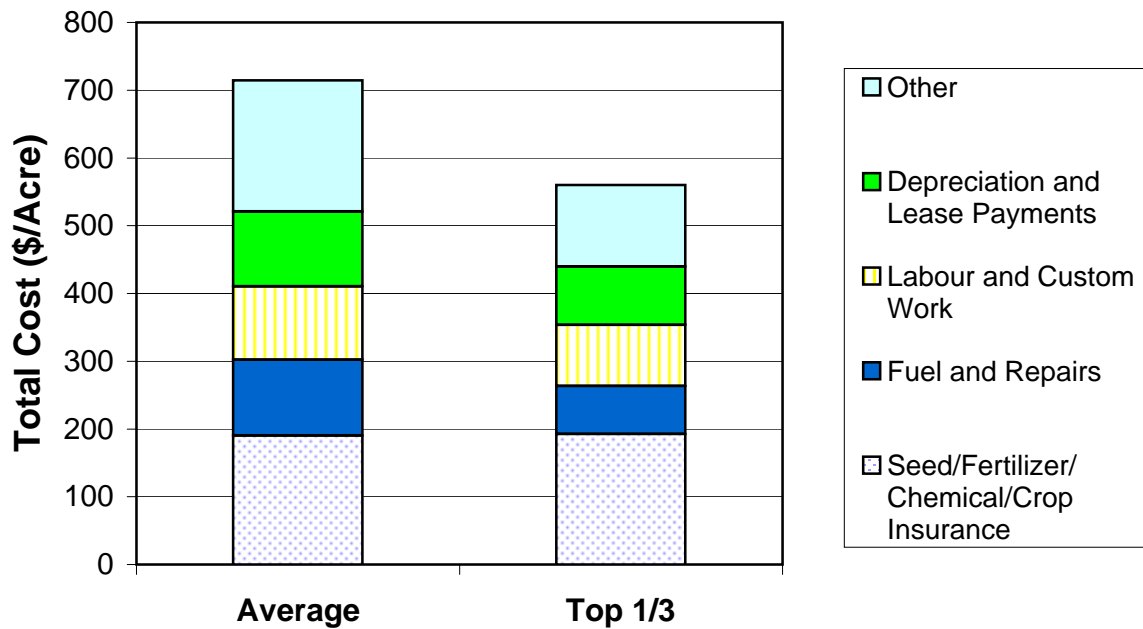
## 2002 Sugar Beets on Irrigated Soil

Total Cost (\$/Tonne)



## 2002 Sugar Beets on Irrigated Soil

Total Cost (\$/Acre)



## 2002 Crop Enterprise Analysis

*AgriProfit\$*

**Crop:** *Spring Wheat - All*  
**Soil Zone:** *- Irrigated*  
**Unit:** *Bushel*

		----- \$/Acre -----		----- \$/Bushel -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	382.78	--	5.50	--
	2. Crop Insurance Receipts	6.06	--	0.09	--
	3. Other Receipts	25.32	--	0.36	--
	<b>Gross Receipts</b>	<b>414.16</b>	<b>0.00</b>	<b>5.95</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	14.12	--	0.20	--
	2. Fertilizer	35.92	--	0.52	--
	3. Chemical	17.33	--	0.25	--
	4. Hail/Crop Insurance Premium	5.35	--	0.08	--
	5. Trucking and Marketing	23.93	--	0.34	--
	6. Fuel	9.19	--	0.13	--
	7. Irrigation Fuel and Electricity	8.44	--	0.12	--
	8. Repairs - Machinery	30.13	--	0.43	--
	9. Repairs - Buildings	11.59	--	0.17	--
	10. Utilities and Miscellaneous	12.27	--	0.18	--
	11. Custom Work	28.25	--	0.41	--
	12. Operating Interest Paid	2.00	--	0.03	--
	13. Paid Labour	10.29	--	0.15	--
	14. Unpaid Labour	24.23	--	0.35	--
	<b>Variable Costs</b>	<b>233.03</b>	<b>0.00</b>	<b>3.35</b>	<b>0.00</b>
<b>(C)</b>	<b>Capital Costs</b>				
	1. Cash/ Share Land Rent	37.05	--	0.53	--
	2. Taxes, Water Rates, License & Ins.	10.65	--	0.15	--
	3. Equipment and Building: a) Depreciation	55.37	--	0.80	--
	b) Lease Payments	0.61	--	0.01	--
	4. Paid Capital Interest	1.44	--	0.02	--
	<b>Capital Costs</b>	<b>105.13</b>	<b>0.00</b>	<b>1.51</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>258.56</b>	<b>--</b>	<b>3.72</b>	<b>--</b>
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>338.16</b>	<b>--</b>	<b>4.86</b>	<b>--</b>
	<b>Gross Margin (A-D)</b>	<b>155.61</b>	<b>--</b>	<b>2.24</b>	<b>--</b>
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>100.23</b>	<b>--</b>	<b>1.44</b>	<b>--</b>
	<b>Return to Investment (A-E+C4)</b>	<b>77.44</b>	<b>--</b>	<b>1.11</b>	<b>--</b>
	<b>Return to Equity (A-E)</b>	<b>76.00</b>	<b>--</b>	<b>1.09</b>	<b>--</b>

**Investment**

Buildings	123.82	--
Machinery	304.72	--
Irrigation Machinery	196.63	--
<b>Total (incl. Land)</b>	<b>1604.11</b>	<b>--</b>

**Management**

Average Yield (Bushel/acre)	69.58	--
Expected Market Price (\$/Bushel)	5.50	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: *Durum - All*  
 Soil Zone: *- Irrigated*  
 Unit: *Bushel*

		----- \$/Acre -----		----- \$/Bushel -----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	388.76	--	5.67	--
	2. Crop Insurance Receipts	33.51	--	0.49	--
	3. Other Receipts	9.07	--	0.13	--
<b>Gross Receipts</b>		<b>431.35</b>	<b>0.00</b>	<b>6.29</b>	<b>0.00</b>
(B)	<b>Cost Items</b>				
	1. Seed	15.00	--	0.22	--
	2. Fertilizer	55.61	--	0.81	--
	3. Chemical	26.14	--	0.38	--
	4. Hail/Crop Insurance Premium	11.39	--	0.17	--
	5. Trucking and Marketing	10.14	--	0.15	--
	6. Fuel	9.35	--	0.14	--
	7. Irrigation Fuel and Electricity	9.91	--	0.14	--
	8. Repairs - Machinery	19.57	--	0.29	--
	9. Repairs - Buildings	8.51	--	0.12	--
	10. Utilities and Miscellaneous	20.42	--	0.30	--
	11. Custom Work	15.49	--	0.23	--
	12. Operating Interest Paid	1.37	--	0.02	--
	13. Paid Labour	11.81	--	0.17	--
	14. Unpaid Labour	9.81	--	0.14	--
<b>Variable Costs</b>		<b>224.51</b>	<b>0.00</b>	<b>3.27</b>	<b>0.00</b>
(C)	1. Cash/ Share Land Rent	5.94	--	0.09	--
	2. Taxes, Water Rates, License & Ins.	27.73	--	0.40	--
	3. Equipment and Building: a) Depreciation	71.17	--	1.04	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	32.59	--	0.47	--
<b>Capital Costs</b>		<b>137.44</b>	<b>0.00</b>	<b>2.00</b>	<b>0.00</b>
(D)	<b>Cash Costs (B+C-B14-C3a)</b>	<b>280.97</b>	--	<b>4.09</b>	--
(E)	<b>Total Production Costs (B+C)</b>	<b>361.95</b>	--	<b>5.27</b>	--
	<b>Gross Margin (A-D)</b>	<b>150.37</b>	--	<b>2.19</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>79.20</b>	--	<b>1.15</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>101.99</b>	--	<b>1.49</b>	--
	<b>Return to Equity (A-E)</b>	<b>69.40</b>	--	<b>1.01</b>	--

**Investment**

Buildings	58.38	--
Machinery	324.60	--
Irrigation Machinery	482.03	--
<b>Total (incl. Land)</b>	<b>2804.70</b>	--

**Management**

Average Yield (Bushel/acre)	68.62	--
Expected Market Price (\$/Bushel)	5.67	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: *Durum - Own*  
 Soil Zone: *- Irrigated*  
 Unit: *Bushel*

		----- \$/Acre -----		----- \$/Bushel -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	383.28	--	5.64	--
	2. Crop Insurance Receipts	35.52	--	0.52	--
	3. Other Receipts	9.40	--	0.14	--
	<b>Gross Receipts</b>	<b>428.20</b>	<b>0.00</b>	<b>6.30</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	15.48	--	0.23	--
	2. Fertilizer	55.72	--	0.82	--
	3. Chemical	27.02	--	0.40	--
	4. Hail/Crop Insurance Premium	11.38	--	0.17	--
	5. Trucking and Marketing	10.75	--	0.16	--
	6. Fuel	9.56	--	0.14	--
	7. Irrigation Fuel and Electricity	10.44	--	0.15	--
	8. Repairs - Machinery	20.13	--	0.30	--
	9. Repairs - Buildings	8.87	--	0.13	--
	10. Utilities and Miscellaneous	18.87	--	0.28	--
	11. Custom Work	15.49	--	0.23	--
	12. Operating Interest Paid	1.36	--	0.02	--
	13. Paid Labour	12.52	--	0.18	--
	14. Unpaid Labour	9.94	--	0.15	--
	<b>Variable Costs</b>	<b>227.53</b>	<b>0.00</b>	<b>3.35</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	0.00	--	0.00	--
	2. Taxes, Water Rates, License & Ins.	29.17	--	0.43	--
	3. Equipment and Building: a) Depreciation	73.48	--	1.08	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	34.55	--	0.51	--
	<b>Capital Costs</b>	<b>137.20</b>	<b>0.00</b>	<b>2.02</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs</b>	<b>281.31</b>	<b>--</b>	<b>4.14</b>	<b>--</b>
<b>(E)</b>	<b>Total Production Costs</b>	<b>364.73</b>	<b>--</b>	<b>5.37</b>	<b>--</b>
	<b>Gross Margin</b>	<b>146.89</b>	<b>--</b>	<b>2.16</b>	<b>--</b>
	<b>Return to Unpaid Labour</b>	<b>73.40</b>	<b>--</b>	<b>1.08</b>	<b>--</b>
	<b>Return to Investment</b>	<b>98.02</b>	<b>--</b>	<b>1.44</b>	<b>--</b>
	<b>Return to Equity</b>	<b>63.47</b>	<b>--</b>	<b>0.93</b>	<b>--</b>

**Investment**

Buildings	61.87	--
Machinery	322.02	--
Irrigation Machinery	511.00	--
<b>Total (incl. Land)</b>	<b>2951.14</b>	<b>--</b>

**Management**

Average Yield	(Bushel/acre)	67.94	--
Expected Market Price	(\$/Bushel)	5.64	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: *Feed Barley - All*  
 Soil Zone: *- Irrigated*  
 Unit: *Bushel*

		----- \$/Acre -----		----- \$/Bushel -----	
		Average	Top 1/3	Average	Top 1/3
(A)	1. Crop Sales	363.52	--	3.95	--
	2. Crop Insurance Receipts	38.15	--	0.41	--
	3. Other Receipts	41.39	--	0.45	--
	<b>Gross Receipts</b>	<b>443.06</b>	<b>0.00</b>	<b>4.82</b>	<b>0.00</b>
(B)	<b>Cost Items</b>				
	1. Seed	11.87	--	0.13	--
	2. Fertilizer	29.10	--	0.32	--
	3. Chemical	18.67	--	0.20	--
	4. Hail/Crop Insurance Premium	11.60	--	0.13	--
	5. Trucking and Marketing	8.57	--	0.09	--
	6. Fuel	13.39	--	0.15	--
	7. Irrigation Fuel and Electricity	5.34	--	0.06	--
	8. Repairs - Machinery	28.73	--	0.31	--
	9. Repairs - Buildings	1.08	--	0.01	--
	10. Utilities and Miscellaneous	19.00	--	0.21	--
	11. Custom Work	11.61	--	0.13	--
	12. Operating Interest Paid	1.70	--	0.02	--
	13. Paid Labour	4.40	--	0.05	--
	14. Unpaid Labour	27.32	--	0.30	--
	<b>Variable Costs</b>	<b>192.41</b>	<b>0.00</b>	<b>2.09</b>	<b>0.00</b>
(C)	1. Cash/ Share Land Rent	36.58	--	0.40	--
	2. Taxes, Water Rates, License & Ins.	14.31	--	0.16	--
	3. Equipment and Building: a) Depreciation	50.02	--	0.54	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	21.25	--	0.23	--
	<b>Capital Costs</b>	<b>122.16</b>	<b>0.00</b>	<b>1.33</b>	<b>0.00</b>
(D)	<b>Cash Costs (B+C-B14-C3a)</b>	<b>237.23</b>	--	<b>2.58</b>	--
(E)	<b>Total Production Costs (B+C)</b>	<b>314.56</b>	--	<b>3.42</b>	--
	<b>Gross Margin (A-D)</b>	<b>205.83</b>	--	<b>2.24</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>155.82</b>	--	<b>1.69</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>149.75</b>	--	<b>1.63</b>	--
	<b>Return to Equity (A-E)</b>	<b>128.50</b>	--	<b>1.40</b>	--

**Investment**

Buildings	158.49	--
Machinery	299.37	--
Irrigation Machinery	173.94	--
<b>Total (incl. Land)</b>	<b>1899.27</b>	--

**Management**

Average Yield (Bushel/acre)	91.99	--
Expected Market Price (\$/Bushel)	3.95	--



## 2002 Crop Enterprise Analysis

*AgriProfit\$*

**Crop:** *Feed Barley - Own*  
**Soil Zone:** *- Irrigated*  
**Unit:** *Bushel*

		----- \$/Acre -----		----- \$/Bushel -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	330.27	--	4.00	--
	2. Crop Insurance Receipts	65.46	--	0.79	--
	3. Other Receipts	37.15	--	0.45	--
	<b>Gross Receipts</b>	<b>432.88</b>	<b>0.00</b>	<b>5.24</b>	<b>0.00</b>
<b>(B) Cost Items</b>					
	1. Seed	11.27	--	0.14	--
	2. Fertilizer	20.45	--	0.25	--
	3. Chemical	18.61	--	0.23	--
	4. Hail/Crop Insurance Premium	9.71	--	0.12	--
	5. Trucking and Marketing	14.71	--	0.18	--
	6. Fuel	14.05	--	0.17	--
	7. Irrigation Fuel and Electricity	6.66	--	0.08	--
	8. Repairs - Machinery	26.51	--	0.32	--
	9. Repairs - Buildings	0.50	--	0.01	--
	10. Utilities and Miscellaneous	20.18	--	0.24	--
	11. Custom Work	11.60	--	0.14	--
	12. Operating Interest Paid	1.99	--	0.02	--
	13. Paid Labour	5.28	--	0.06	--
	14. Unpaid Labour	28.11	--	0.34	--
	<b>Variable Costs</b>	<b>189.64</b>	<b>0.00</b>	<b>2.29</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	0.00	--	0.00	--
	2. Taxes, Water Rates, License & Ins.	22.32	--	0.27	--
	3. Equipment and Building: a) Depreciation	58.41	--	0.71	--
	b) Lease Payments	0.00	--	0.00	--
4. Paid Capital Interest	34.02	--	0.41	--	
	<b>Capital Costs</b>	<b>114.74</b>	<b>0.00</b>	<b>1.39</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>217.87</b>	<b>--</b>	<b>2.64</b>	<b>--</b>
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>304.39</b>	<b>--</b>	<b>3.68</b>	<b>--</b>
	<b>Gross Margin (A-D)</b>	<b>215.01</b>	<b>--</b>	<b>2.60</b>	<b>--</b>
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>156.61</b>	<b>--</b>	<b>1.89</b>	<b>--</b>
	<b>Return to Investment (A-E+C4)</b>	<b>162.51</b>	<b>--</b>	<b>1.97</b>	<b>--</b>
	<b>Return to Equity (A-E)</b>	<b>128.49</b>	<b>--</b>	<b>1.55</b>	<b>--</b>

**Investment**

Buildings	180.67	--
Machinery	264.79	--
Irrigation Machinery	298.50	--
<b>Total (incl. Land)</b>	<b>2919.04</b>	<b>--</b>

**Management**

Average Yield (Bushel/acre)	82.67	--
Expected Market Price (\$/Bushel)	4.00	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

**Crop:** *Feed Barley - Rent*  
**Soil Zone:** *- Irrigated*  
**Unit:** *Bushel*

		----- \$/Acre -----		----- \$/Bushel -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	409.97	--	3.90	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	47.31	--	0.45	--
	<b>Gross Receipts</b>	<b>457.28</b>	<b>0.00</b>	<b>4.35</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	12.71	--	0.12	--
	2. Fertilizer	41.19	--	0.39	--
	3. Chemical	18.75	--	0.18	--
	4. Hail/Crop Insurance Premium	14.25	--	0.14	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	12.47	--	0.12	--
	7. Irrigation Fuel and Electricity	3.50	--	0.03	--
	8. Repairs - Machinery	31.84	--	0.30	--
	9. Repairs - Buildings	1.90	--	0.02	--
	10. Utilities and Miscellaneous	17.35	--	0.17	--
	11. Custom Work	11.63	--	0.11	--
	12. Operating Interest Paid	1.29	--	0.01	--
	13. Paid Labour	3.17	--	0.03	--
	14. Unpaid Labour	26.21	--	0.25	--
	<b>Variable Costs</b>	<b>196.27</b>	<b>0.00</b>	<b>1.87</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	87.67	--	0.83	--
	2. Taxes, Water Rates, License & Ins.	3.12	--	0.03	--
	3. Equipment and Building: a) Depreciation	38.30	--	0.36	--
	b) Lease Payments	0.00	--	0.00	--
4. Paid Capital Interest	3.42	--	0.03	--	
	<b>Capital Costs</b>	<b>132.51</b>	<b>0.00</b>	<b>1.26</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>264.27</b>	--	<b>2.52</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>328.78</b>	--	<b>3.13</b>	--
	<b>Gross Margin (A-D)</b>	<b>193.01</b>	--	<b>1.84</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>154.71</b>	--	<b>1.47</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>131.93</b>	--	<b>1.26</b>	--
	<b>Return to Equity (A-E)</b>	<b>128.51</b>	--	<b>1.22</b>	--

**Investment**

Buildings	127.52	--
Machinery	347.65	--
Irrigation Machinery	0.00	--
<b>Total (incl. Land)</b>	<b>475.17</b>	--

**Management**

Average Yield (Bushel/acre)	105.00	--
Expected Market Price (\$/Bushel)	3.90	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: *Barley Silage - All*  
 Soil Zone: *- Irrigated*  
 Unit: *Tonne*

		----- \$/Acre -----		----- \$/Tonne -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	213.72	--	30.32	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	0.00	--	0.00	--
<b>Gross Receipts</b>		<b>213.72</b>	<b>0.00</b>	<b>30.32</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	13.35	--	1.89	--
	2. Fertilizer	36.81	--	5.22	--
	3. Chemical	12.91	--	1.83	--
	4. Hail/Crop Insurance Premium	6.11	--	0.87	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	31.82	--	4.51	--
	7. Irrigation Fuel and Electricity	3.42	--	0.49	--
	8. Repairs - Machinery	25.84	--	3.67	--
	9. Repairs - Buildings	11.39	--	1.62	--
	10. Utilities and Miscellaneous	22.62	--	3.21	--
	11. Custom Work	5.95	--	0.84	--
	12. Operating Interest Paid	0.55	--	0.08	--
	13. Paid Labour	1.06	--	0.15	--
	14. Unpaid Labour	47.98	--	6.81	--
<b>Variable Costs</b>		<b>219.81</b>	<b>0.00</b>	<b>31.19</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	20.01	--	2.84	--
	2. Taxes, Water Rates, License & Ins.	22.91	--	3.25	--
	3. Equipment and Building: a) Depreciation	71.17	--	10.10	--
	b) Lease Payments	0.28	--	0.04	--
	4. Paid Capital Interest	33.25	--	4.72	--
<b>Capital Costs</b>		<b>147.62</b>	<b>0.00</b>	<b>20.95</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>248.28</b>	--	<b>35.23</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>367.43</b>	--	<b>52.13</b>	--
	<b>Gross Margin (A-D)</b>	<b>(34.56)</b>	--	<b>(4.90)</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>(105.73)</b>	--	<b>(15.00)</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>(120.46)</b>	--	<b>(17.09)</b>	--
	<b>Return to Equity (A-E)</b>	<b>(153.71)</b>	--	<b>(21.81)</b>	--

**Investment**

Buildings	166.13	--
Machinery	357.42	--
Irrigation Machinery	330.08	--
<b>Total (incl. Land)</b>	<b>2812.40</b>	--

**Management**

Average Yield (Tonne/acre)	7.05	--
Expected Market Price (\$/Tonne)	30.32	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: **Sugar Beets - All**  
 Soil Zone: **- Irrigated**  
 Unit: **Tonne**

		----- \$/Acre -----		----- \$/Tonne -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	521.64	533.42	36.74	36.74
	2. Crop Insurance Receipts	113.42	127.93	7.99	8.81
	3. Other Receipts	1.44	0.34	0.10	0.02
<b>Gross Receipts</b>		<b>636.50</b>	<b>661.68</b>	<b>44.84</b>	<b>45.58</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	56.63	56.63	3.99	3.90
	2. Fertilizer	39.46	33.93	2.78	2.34
	3. Chemical	73.88	80.62	5.20	5.55
	4. Hail/Crop Insurance Premium	20.52	21.73	1.45	1.50
	5. Trucking and Marketing	46.83	27.84	3.30	1.92
	6. Fuel	38.61	33.37	2.72	2.30
	7. Irrigation Fuel and Electricity	13.52	12.28	0.95	0.85
	8. Repairs - Machinery	60.26	35.35	4.24	2.44
	9. Repairs - Buildings	13.09	1.79	0.92	0.12
	10. Utilities and Miscellaneous	30.24	18.10	2.13	1.25
	11. Custom Work	27.91	31.32	1.97	2.16
	12. Operating Interest Paid	2.30	2.31	0.16	0.16
	13. Paid Labour	20.17	23.42	1.42	1.61
14. Unpaid Labour	59.82	35.78	4.21	2.46	
<b>Variable Costs</b>		<b>503.24</b>	<b>414.47</b>	<b>35.45</b>	<b>28.55</b>
<b>(C)</b>	1. Cash/ Share Land Rent	43.29	19.60	3.05	1.35
	2. Taxes, Water Rates, License & Ins.	23.11	19.29	1.63	1.33
	3. Equipment and Building:				
	a) Depreciation	99.82	85.70	7.03	5.90
b) Lease Payments	10.56	0.00	0.74	0.00	
4. Paid Capital Interest	34.72	21.14	2.45	10.04	
<b>Capital Costs</b>		<b>211.50</b>	<b>145.73</b>	<b>14.90</b>	<b>18.62</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>555.11</b>	<b>438.72</b>	<b>39.10</b>	<b>38.80</b>
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>714.74</b>	<b>560.20</b>	<b>50.35</b>	<b>47.17</b>
	<b>Gross Margin (A-D)</b>	<b>81.40</b>	<b>222.97</b>	<b>5.73</b>	<b>6.78</b>
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>(18.42)</b>	<b>137.26</b>	<b>(1.30)</b>	<b>0.87</b>
	<b>Return to Investment (A-E+C4)</b>	<b>(43.51)</b>	<b>122.63</b>	<b>(3.07)</b>	<b>8.45</b>
	<b>Return to Equity (A-E)</b>	<b>(78.23)</b>	<b>101.49</b>	<b>(5.51)</b>	<b>(1.59)</b>

**Investment**

Buildings	155.01	69.15
Machinery	629.92	573.54
Irrigation Machinery	392.82	342.71
<b>Total (incl. Land)</b>	<b>2574.44</b>	<b>2679.90</b>

**Management**

Average Yield (Tonne/acre)	14.20	14.52
Expected Market Price (\$/Tonne)	36.74	36.74

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

**Crop:** Sugar Beets - Own  
**Soil Zone:** - Irrigated  
**Unit:** Tonne

		----- \$/Acre -----		----- \$/Tonne -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	476.79	569.18	36.74	36.74
	2. Crop Insurance Receipts	151.76	99.52	11.70	6.42
	3. Other Receipts	1.66	0.39	0.13	0.02
<b>Gross Receipts</b>		<b>630.21</b>	<b>669.09</b>	<b>48.57</b>	<b>43.19</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	56.63	56.63	4.36	3.66
	2. Fertilizer	38.60	36.49	2.97	2.36
	3. Chemical	74.44	79.84	5.74	5.15
	4. Hail/Crop Insurance Premium	19.44	22.53	1.50	1.45
	5. Trucking and Marketing	36.15	22.00	2.79	1.42
	6. Fuel	37.81	27.92	2.91	1.80
	7. Irrigation Fuel and Electricity	13.88	11.21	1.07	0.72
	8. Repairs - Machinery	61.08	32.99	4.71	2.13
	9. Repairs - Buildings	12.84	2.03	0.99	0.13
	10. Utilities and Miscellaneous	29.41	15.56	2.27	1.00
	11. Custom Work	20.55	29.30	1.58	1.89
	12. Operating Interest Paid	2.87	2.82	0.22	0.18
	13. Paid Labour	21.91	24.89	1.69	1.61
	14. Unpaid Labour	64.96	37.07	5.01	2.39
<b>Variable Costs</b>		<b>490.57</b>	<b>401.27</b>	<b>37.81</b>	<b>25.91</b>
<b>(C)</b>	1. Cash/ Share Land Rent	0.00	0.00	0.00	0.00
	2. Taxes, Water Rates, License & Ins.	29.40	23.91	2.27	1.54
	3. Equipment and Building: a) Depreciation	112.11	97.47	8.64	6.29
	b) Lease Payments	13.28	0.00	1.02	0.00
	4. Paid Capital Interest	45.34	24.01	3.49	9.39
<b>Capital Costs</b>		<b>200.13</b>	<b>145.39</b>	<b>15.42</b>	<b>17.22</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>513.63</b>	<b>412.13</b>	<b>39.58</b>	<b>34.44</b>
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>690.70</b>	<b>546.67</b>	<b>53.23</b>	<b>43.13</b>
	<b>Gross Margin (A-D)</b>	<b>116.58</b>	<b>256.97</b>	<b>8.98</b>	<b>8.75</b>
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>4.47</b>	<b>159.49</b>	<b>0.34</b>	<b>2.46</b>
	<b>Return to Investment (A-E+C4)</b>	<b>(15.16)</b>	<b>146.43</b>	<b>(1.17)</b>	<b>9.45</b>
	<b>Return to Equity (A-E)</b>	<b>(60.49)</b>	<b>122.42</b>	<b>(4.66)</b>	<b>0.07</b>

**Investment**

Buildings	146.60	62.46
Machinery	621.84	591.44
Irrigation Machinery	556.63	468.45
<b>Total (incl. Land)</b>	<b>3304.22</b>	<b>3419.34</b>

**Management**

Average Yield (Tonne/acre)	12.98	15.49
Expected Market Price (\$/Tonne)	36.74	36.74

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: **Sugar Beets - Rent**  
 Soil Zone: **- Irrigated**  
 Unit: **Tonne**

		----- \$/Acre -----		----- \$/Tonne -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	629.19	627.14	36.74	36.74
	2. Crop Insurance Receipts	21.48	85.76	1.25	5.02
	3. Other Receipts	0.93	0.37	0.05	0.02
<b>Gross Receipts</b>		<b>651.60</b>	<b>713.27</b>	<b>38.05</b>	<b>41.79</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	56.63	56.63	3.31	3.32
	2. Fertilizer	41.53	45.18	2.43	2.65
	3. Chemical	72.53	81.24	4.24	4.76
	4. Hail/Crop Insurance Premium	23.10	23.73	1.35	1.39
	5. Trucking and Marketing	72.44	58.04	4.23	3.40
	6. Fuel	40.53	22.33	2.37	1.31
	7. Irrigation Fuel and Electricity	12.66	6.10	0.74	0.36
	8. Repairs - Machinery	58.29	36.72	3.40	2.15
	9. Repairs - Buildings	13.70	2.01	0.80	0.12
	10. Utilities and Miscellaneous	32.22	31.63	1.88	1.85
	11. Custom Work	45.55	57.10	2.66	3.35
	12. Operating Interest Paid	0.95	1.93	0.06	0.11
	13. Paid Labour	16.01	15.03	0.93	0.88
	14. Unpaid Labour	47.47	41.91	2.77	2.46
<b>Variable Costs</b>		<b>533.61</b>	<b>479.58</b>	<b>31.16</b>	<b>28.10</b>
<b>(C)</b>	1. Cash/ Share Land Rent	147.09	99.88	8.59	5.85
	2. Taxes, Water Rates, License & Ins.	8.03	5.94	0.47	0.35
	3. Equipment and Building: a) Depreciation	70.34	62.65	4.11	3.67
	b) Lease Payments	4.05	0.00	0.24	0.00
	4. Paid Capital Interest	9.26	8.62	0.54	10.38
<b>Capital Costs</b>		<b>238.76</b>	<b>177.08</b>	<b>13.94</b>	<b>20.25</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>654.57</b>	<b>552.11</b>	<b>38.23</b>	<b>42.22</b>
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>772.38</b>	<b>656.67</b>	<b>45.11</b>	<b>48.34</b>
	<b>Gross Margin (A-D)</b>	<b>(2.97)</b>	<b>161.16</b>	<b>(0.17)</b>	<b>(0.43)</b>
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>(73.30)</b>	<b>98.51</b>	<b>(4.28)</b>	<b>(4.10)</b>
	<b>Return to Investment (A-E+C4)</b>	<b>(111.51)</b>	<b>65.22</b>	<b>(6.51)</b>	<b>3.82</b>
	<b>Return to Equity (A-E)</b>	<b>(120.78)</b>	<b>56.60</b>	<b>(7.05)</b>	<b>(6.55)</b>

**Investment**

Buildings	175.17	102.99
Machinery	649.30	618.27
Irrigation Machinery	0.00	0.00
<b>Total (incl. Land)</b>	<b>824.47</b>	<b>721.26</b>

**Management**

Average Yield (Tonne/acre)	17.12	17.07
Expected Market Price (\$/Tonne)	36.74	36.74

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: *Dry Beans - All*  
 Soil Zone: *- Irrigated*  
 Unit: *Pound*

		----- \$/Acre -----		----- \$/Pound -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	338.05	--	0.22	--
	2. Crop Insurance Receipts	214.06	--	0.14	--
	3. Other Receipts	2.09	--	0.00	--
	<b>Gross Receipts</b>	<b>554.19</b>	<b>0.00</b>	<b>0.36</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	54.18	--	0.04	--
	2. Fertilizer	26.15	--	0.02	--
	3. Chemical	85.74	--	0.06	--
	4. Hail/Crop Insurance Premium	23.48	--	0.02	--
	5. Trucking and Marketing	0.62	--	0.00	--
	6. Fuel	17.17	--	0.01	--
	7. Irrigation Fuel and Electricity	13.81	--	0.01	--
	8. Repairs - Machinery	46.35	--	0.03	--
	9. Repairs - Buildings	3.00	--	0.00	--
	10. Utilities and Miscellaneous	24.60	--	0.02	--
	11. Custom Work	36.26	--	0.02	--
	12. Operating Interest Paid	4.12	--	0.00	--
	13. Paid Labour	25.64	--	0.02	--
	14. Unpaid Labour	38.27	--	0.03	--
	<b>Variable Costs</b>	<b>399.37</b>	<b>0.00</b>	<b>0.26</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	45.54	--	0.03	--
	2. Taxes, Water Rates, License & Ins.	27.83	--	0.02	--
	3. Equipment and Building: a) Depreciation	73.95	--	0.05	--
	b) Lease Payments	4.05	--	0.00	--
	4. Paid Capital Interest	73.53	--	0.05	--
	<b>Capital Costs</b>	<b>224.90</b>	<b>0.00</b>	<b>0.15</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>512.05</b>	--	<b>0.34</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>624.26</b>	--	<b>0.41</b>	--
	<b>Gross Margin (A-D)</b>	<b>42.15</b>	--	<b>0.03</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>(31.80)</b>	--	<b>(0.02)</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>3.46</b>	--	<b>0.00</b>	--
	<b>Return to Equity (A-E)</b>	<b>(70.07)</b>	--	<b>(0.05)</b>	--

**Investment**

Buildings	166.14	--
Machinery	491.03	--
Irrigation Machinery	271.13	--
<b>Total (incl. Land)</b>	<b>2384.45</b>	--

**Management**

Average Yield	(Pound/acre)	1522.62	--
Expected Market Price	(\$/Pound)	0.22	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: *Dry Beans - Own*  
 Soil Zone: *- Irrigated*  
 Unit: *Pound*

		----- \$/Acre -----		----- \$/Pound -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	271.23	--	0.19	--
	2. Crop Insurance Receipts	183.00	--	0.13	--
	3. Other Receipts	1.71	--	0.00	--
	<b>Gross Receipts</b>	<b>455.94</b>	<b>0.00</b>	<b>0.32</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	50.11	--	0.04	--
	2. Fertilizer	35.28	--	0.03	--
	3. Chemical	90.00	--	0.06	--
	4. Hail/Crop Insurance Premium	22.44	--	0.02	--
	5. Trucking and Marketing	0.90	--	0.00	--
	6. Fuel	16.68	--	0.01	--
	7. Irrigation Fuel and Electricity	11.52	--	0.01	--
	8. Repairs - Machinery	52.96	--	0.04	--
	9. Repairs - Buildings	2.53	--	0.00	--
	10. Utilities and Miscellaneous	26.86	--	0.02	--
	11. Custom Work	48.59	--	0.03	--
	12. Operating Interest Paid	4.49	--	0.00	--
	13. Paid Labour	33.93	--	0.02	--
	14. Unpaid Labour	31.97	--	0.02	--
	<b>Variable Costs</b>	<b>428.28</b>	<b>0.00</b>	<b>0.30</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	0.00	--	0.00	--
	2. Taxes, Water Rates, License & Ins.	37.11	--	0.03	--
	3. Equipment and Building: a) Depreciation	77.07	--	0.05	--
	b) Lease Payments	5.95	--	0.00	--
	4. Paid Capital Interest	104.48	--	0.07	--
	<b>Capital Costs</b>	<b>224.61</b>	<b>0.00</b>	<b>0.16</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>543.85</b>	--	<b>0.39</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>652.89</b>	--	<b>0.46</b>	--
	<b>Gross Margin (A-D)</b>	<b>(87.91)</b>	--	<b>(0.06)</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>(164.98)</b>	--	<b>(0.12)</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>(92.47)</b>	--	<b>(0.07)</b>	--
	<b>Return to Equity (A-E)</b>	<b>(196.95)</b>	--	<b>(0.14)</b>	--

**Investment**

Buildings	107.20	--
Machinery	436.81	--
Irrigation Machinery	398.53	--
<b>Total (incl. Land)</b>	<b>3082.90</b>	--

**Management**

Average Yield	(Pound/acre)	1406.96	--
Expected Market Price	(\$/Pound)	0.19	--



## 2002 Crop Enterprise Analysis

*AgriProfit\$*

**Crop:** *Dry Beans - Rent*  
**Soil Zone:** *- Irrigated*  
**Unit:** *Pound*

		----- \$/Acre -----		----- \$/Pound -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	480.25	--	0.27	--
	2. Crop Insurance Receipts	280.16	--	0.16	--
	3. Other Receipts	2.90	--	0.00	--
	<b>Gross Receipts</b>	<b>763.31</b>	<b>0.00</b>	<b>0.43</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	62.84	--	0.04	--
	2. Fertilizer	6.71	--	0.00	--
	3. Chemical	76.67	--	0.04	--
	4. Hail/Crop Insurance Premium	25.68	--	0.01	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	18.23	--	0.01	--
	7. Irrigation Fuel and Electricity	18.68	--	0.01	--
	8. Repairs - Machinery	32.27	--	0.02	--
	9. Repairs - Buildings	4.01	--	0.00	--
	10. Utilities and Miscellaneous	19.77	--	0.01	--
	11. Custom Work	10.00	--	0.01	--
	12. Operating Interest Paid	3.31	--	0.00	--
	13. Paid Labour	7.99	--	0.00	--
	14. Unpaid Labour	51.67	--	0.03	--
	<b>Variable Costs</b>	<b>337.83</b>	<b>0.00</b>	<b>0.19</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	142.47	--	0.08	--
	2. Taxes, Water Rates, License & Ins.	8.07	--	0.00	--
	3. Equipment and Building: a) Depreciation	67.31	--	0.04	--
	b) Lease Payments	0.00	--	0.00	--
4. Paid Capital Interest	7.66	--	0.00	--	
	<b>Capital Costs</b>	<b>225.50</b>	<b>0.00</b>	<b>0.13</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>444.36</b>	--	<b>0.25</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>563.34</b>	--	<b>0.32</b>	--
	<b>Gross Margin (A-D)</b>	<b>318.95</b>	--	<b>0.18</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>251.64</b>	--	<b>0.14</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>207.63</b>	--	<b>0.12</b>	--
	<b>Return to Equity (A-E)</b>	<b>199.97</b>	--	<b>0.11</b>	--

**Investment**

Buildings	291.60	--
Machinery	606.42	--
Irrigation Machinery	0.00	--
<b>Total (incl. Land)</b>	<b>898.02</b>	--

**Management**

Average Yield	(Pound/acre)	1768.75	--
Expected Market Price	(\$/Pound)	0.27	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

**Crop:** *Processing Potatoes - All*  
**Soil Zone:** *- Irrigated*  
**Unit:** *Tonne*

		----- \$/Acre -----		----- \$/Tonne -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	2639.39	--	161.75	--
	2. Crop Insurance Receipts	88.33	--	5.41	--
	3. Other Receipts	4.34	--	0.27	--
	<b>Gross Receipts</b>	<b>2732.06</b>	<b>0.00</b>	<b>167.43</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	218.85	--	13.41	--
	2. Fertilizer	169.67	--	10.40	--
	3. Chemical	187.80	--	11.51	--
	4. Hail/Crop Insurance Premium	39.89	--	2.44	--
	5. Trucking and Marketing	65.58	--	4.02	--
	6. Fuel	54.51	--	3.34	--
	7. Irrigation Fuel and Electricity	20.29	--	1.24	--
	8. Repairs - Machinery	73.52	--	4.51	--
	9. Repairs - Buildings	63.09	--	3.87	--
	10. Utilities and Miscellaneous	107.51	--	6.59	--
	11. Custom Work	39.14	--	2.40	--
	12. Operating Interest Paid	26.51	--	1.62	--
	13. Paid Labour	370.63	--	22.71	--
	14. Unpaid Labour	56.15	--	3.44	--
	<b>Variable Costs</b>	<b>1493.14</b>	<b>0.00</b>	<b>91.51</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	100.00	--	6.13	--
	2. Taxes, Water Rates, License & Ins.	42.17	--	2.58	--
	3. Equipment and Building: a) Depreciation	389.66	--	23.88	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	279.38	--	17.12	--
	<b>Capital Costs</b>	<b>811.21</b>	<b>0.00</b>	<b>49.71</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>1858.54</b>	--	<b>113.90</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>2304.35</b>	--	<b>141.22</b>	--
	<b>Gross Margin (A-D)</b>	<b>873.52</b>	--	<b>53.53</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>483.86</b>	--	<b>29.65</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>707.09</b>	--	<b>43.33</b>	--
	<b>Return to Equity (A-E)</b>	<b>427.71</b>	--	<b>26.21</b>	--

**Investment**

Buildings	2934.94	--
Machinery	2245.83	--
Irrigation Machinery	242.74	--
<b>Total (incl. Land)</b>	<b>6756.84</b>	--

**Management**

Average Yield (Tonne/acre)	16.32	--
Expected Market Price (\$/Tonne)	161.75	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

**Crop:** Misc. Commercial Vegetables - All

**Soil Zone:** - Irrigated

**Unit:** Pound

		----- \$/Acre -----		----- \$/Pound -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	2825.44	--	0.39	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	0.00	--	0.00	--
<b>Gross Receipts</b>		<b>2825.44</b>	<b>0.00</b>	<b>0.39</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	82.44	--	0.01	--
	2. Fertilizer	107.27	--	0.01	--
	3. Chemical	101.32	--	0.01	--
	4. Hail/Crop Insurance Premium	48.46	--	0.01	--
	5. Trucking and Marketing	23.90	--	0.00	--
	6. Fuel	51.32	--	0.01	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	97.31	--	0.01	--
	9. Repairs - Buildings	23.22	--	0.00	--
	10. Utilities and Miscellaneous	966.55	--	0.13	--
	11. Custom Work	18.20	--	0.00	--
	12. Operating Interest Paid	176.21	--	0.02	--
	13. Paid Labour	956.79	--	0.13	--
	14. Unpaid Labour	596.92	--	0.08	--
<b>Variable Costs</b>		<b>3249.90</b>	<b>0.00</b>	<b>0.45</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	0.00	--	0.00	--
	2. Taxes, Water Rates, License & Ins.	66.26	--	0.01	--
	3. Equipment and Building: a) Depreciation	330.28	--	0.05	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	96.92	--	0.01	--
<b>Capital Costs</b>		<b>493.45</b>	<b>0.00</b>	<b>0.07</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>2816.16</b>	--	<b>0.39</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>3743.35</b>	--	<b>0.52</b>	--
	<b>Gross Margin (A-D)</b>	<b>9.28</b>	--	<b>0.00</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>(320.99)</b>	--	<b>(0.04)</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>(820.99)</b>	--	<b>(0.11)</b>	--
	<b>Return to Equity (A-E)</b>	<b>(917.91)</b>	--	<b>(0.13)</b>	--

**Investment**

Buildings	1571.84	--	
Machinery	2783.81	--	
Irrigation Machinery	80.26	--	
<b>Total (incl. Land)</b>	<b>8435.92</b>	<b>--</b>	

**Management**

Average Yield	7253.90	--	
Expected Market Price	0.39	--	

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: *Misc. Commercial Vegetables - Own*

Soil Zone: *- Irrigated*

Unit: *Pound*

		----- \$/Acre -----		----- \$/Pound -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	2825.44	--	0.39	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	0.00	--	0.00	--
<b>Gross Receipts</b>		<b>2825.44</b>	<b>0.00</b>	<b>0.39</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	82.44	--	0.01	--
	2. Fertilizer	107.27	--	0.01	--
	3. Chemical	101.32	--	0.01	--
	4. Hail/Crop Insurance Premium	48.46	--	0.01	--
	5. Trucking and Marketing	23.90	--	0.00	--
	6. Fuel	51.32	--	0.01	--
	7. Irrigation Fuel and Electricity	0.00	--	0.00	--
	8. Repairs - Machinery	97.31	--	0.01	--
	9. Repairs - Buildings	23.22	--	0.00	--
	10. Utilities and Miscellaneous	966.55	--	0.13	--
	11. Custom Work	18.20	--	0.00	--
	12. Operating Interest Paid	176.21	--	0.02	--
	13. Paid Labour	956.79	--	0.13	--
	14. Unpaid Labour	596.92	--	0.08	--
<b>Variable Costs</b>		<b>3249.90</b>	<b>0.00</b>	<b>0.45</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	0.00	--	0.00	--
	2. Taxes, Water Rates, License & Ins.	66.26	--	0.01	--
	3. Equipment and Building: a) Depreciation	330.28	--	0.05	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	96.92	--	0.01	--
<b>Capital Costs</b>		<b>493.45</b>	<b>0.00</b>	<b>0.07</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>2816.16</b>	--	<b>0.39</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>3743.35</b>	--	<b>0.52</b>	--
	<b>Gross Margin (A-D)</b>	<b>9.28</b>	--	<b>0.00</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>(320.99)</b>	--	<b>(0.04)</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>(820.99)</b>	--	<b>(0.11)</b>	--
	<b>Return to Equity (A-E)</b>	<b>(917.91)</b>	--	<b>(0.13)</b>	--

**Investment**

Buildings	1571.84	--	
Machinery	2783.81	--	
Irrigation Machinery	80.26	--	
<b>Total (incl. Land)</b>	<b>8435.92</b>	<b>--</b>	

**Management**

Average Yield	(Pound/acre)	7253.90	--
Expected Market Price	(\$/Pound)	0.39	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

**Crop:** Alfalfa Hay - All  
**Soil Zone:** - Irrigated  
**Unit:** Tonne

		----- \$/Acre -----		----- \$/Tonne -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	522.00	--	120.58	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	0.00	--	0.00	--
	<b>Gross Receipts</b>	<b>522.00</b>	<b>0.00</b>	<b>120.58</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	5.50	--	1.27	--
	2. Fertilizer	16.04	--	3.71	--
	3. Chemical	0.00	--	0.00	--
	4. Hail/Crop Insurance Premium	0.00	--	0.00	--
	5. Trucking and Marketing	0.00	--	0.00	--
	6. Fuel	10.40	--	2.40	--
	7. Irrigation Fuel and Electricity	1.67	--	0.39	--
	8. Repairs - Machinery	36.22	--	8.37	--
	9. Repairs - Buildings	7.88	--	1.82	--
	10. Utilities and Miscellaneous	14.96	--	3.46	--
	11. Custom Work	10.70	--	2.47	--
	12. Operating Interest Paid	0.00	--	0.00	--
	13. Paid Labour	2.30	--	0.53	--
	14. Unpaid Labour	24.28	--	5.61	--
	<b>Variable Costs</b>	<b>129.96</b>	<b>0.00</b>	<b>30.02</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	40.47	--	9.35	--
	2. Taxes, Water Rates, License & Ins.	24.37	--	5.63	--
	3. Equipment and Building: a) Depreciation	65.71	--	15.18	--
	b) Lease Payments	0.00	--	0.00	--
	4. Paid Capital Interest	4.10	--	0.95	--
	<b>Capital Costs</b>	<b>134.65</b>	<b>0.00</b>	<b>31.10</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>174.62</b>	--	<b>40.34</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>264.60</b>	--	<b>61.12</b>	--
	<b>Gross Margin (A-D)</b>	<b>347.38</b>	--	<b>80.24</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>281.68</b>	--	<b>65.07</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>261.50</b>	--	<b>60.40</b>	--
	<b>Return to Equity (A-E)</b>	<b>257.40</b>	--	<b>59.46</b>	--

**Investment**

Buildings	109.01	--	
Machinery	408.36	--	
Irrigation Machinery	155.37	--	
<b>Total (incl. Land)</b>	<b>950.52</b>	<b>--</b>	

**Management**

Average Yield (Tonne/acre)	4.33	--	
Expected Market Price (\$/Tonne)	120.58	--	

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: *Alfalfa/Grass Hay - All*  
 Soil Zone: *- Irrigated*  
 Unit: *Tonne*

		----- \$/Acre -----		----- \$/Tonne -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	289.52	--	115.64	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	7.85	--	3.13	--
<b>Gross Receipts</b>		<b>297.37</b>	<b>0.00</b>	<b>118.77</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	0.00	--	0.00	--
	2. Fertilizer	19.09	--	7.63	--
	3. Chemical	0.00	--	0.00	--
	4. Hail/Crop Insurance Premium	0.00	--	0.00	--
	5. Trucking and Marketing	0.57	--	0.23	--
	6. Fuel	12.60	--	5.03	--
	7. Irrigation Fuel and Electricity	4.64	--	1.85	--
	8. Repairs - Machinery	11.71	--	4.68	--
	9. Repairs - Buildings	4.02	--	1.61	--
	10. Utilities and Miscellaneous	6.86	--	2.74	--
	11. Custom Work	2.98	--	1.19	--
	12. Operating Interest Paid	0.76	--	0.30	--
	13. Paid Labour	16.19	--	6.47	--
	14. Unpaid Labour	21.66	--	8.65	--
<b>Variable Costs</b>		<b>101.10</b>	<b>0.00</b>	<b>40.38</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	1.13	--	0.45	--
	2. Taxes, Water Rates, License & Ins.	7.39	--	2.95	--
	3. Equipment and Building: a) Depreciation	43.04	--	17.19	--
	b) Lease Payments	0.12	--	0.05	--
	4. Paid Capital Interest	9.27	--	3.70	--
<b>Capital Costs</b>		<b>60.96</b>	<b>0.00</b>	<b>24.35</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>97.35</b>	<b>--</b>	<b>38.88</b>	<b>--</b>
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>162.05</b>	<b>--</b>	<b>64.73</b>	<b>--</b>
	<b>Gross Margin (A-D)</b>	<b>200.02</b>	<b>--</b>	<b>79.89</b>	<b>--</b>
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>156.98</b>	<b>--</b>	<b>62.70</b>	<b>--</b>
	<b>Return to Investment (A-E+C4)</b>	<b>144.58</b>	<b>--</b>	<b>57.75</b>	<b>--</b>
	<b>Return to Equity (A-E)</b>	<b>135.31</b>	<b>--</b>	<b>54.05</b>	<b>--</b>

**Investment**

Buildings	93.85	--
Machinery	308.82	--
Irrigation Machinery	97.41	--
<b>Total (incl. Land)</b>	<b>1657.66</b>	<b>--</b>

**Management**

Average Yield (Tonne/acre)	2.50	--
Expected Market Price (\$/Tonne)	115.64	--

## 2002 Crop Enterprise Analysis

*AgriProfit\$*

Crop: *Alfalfa/Grass Hay - Own*  
 Soil Zone: *- Irrigated*  
 Unit: *Tonne*

		----- \$/Acre -----		----- \$/Tonne -----	
		Average	Top 1/3	Average	Top 1/3
<b>(A)</b>	1. Crop Sales	282.23	--	112.14	--
	2. Crop Insurance Receipts	0.00	--	0.00	--
	3. Other Receipts	8.35	--	3.32	--
<b>Gross Receipts</b>		<b>290.59</b>	<b>0.00</b>	<b>115.46</b>	<b>0.00</b>
<b>(B)</b>	<b>Cost Items</b>				
	1. Seed	0.00	--	0.00	--
	2. Fertilizer	20.32	--	8.07	--
	3. Chemical	0.00	--	0.00	--
	4. Hail/Crop Insurance Premium	0.00	--	0.00	--
	5. Trucking and Marketing	0.61	--	0.24	--
	6. Fuel	13.16	--	5.23	--
	7. Irrigation Fuel and Electricity	4.51	--	1.79	--
	8. Repairs - Machinery	9.47	--	3.76	--
	9. Repairs - Buildings	1.43	--	0.57	--
	10. Utilities and Miscellaneous	6.12	--	2.43	--
	11. Custom Work	3.18	--	1.26	--
	12. Operating Interest Paid	0.81	--	0.32	--
	13. Paid Labour	17.23	--	6.85	--
	14. Unpaid Labour	18.33	--	7.28	--
<b>Variable Costs</b>		<b>95.16</b>	<b>0.00</b>	<b>37.81</b>	<b>0.00</b>
<b>(C)</b>	1. Cash/ Share Land Rent	0.00	--	0.00	--
	2. Taxes, Water Rates, License & Ins.	7.76	--	3.08	--
	3. Equipment and Building: a) Depreciation	44.05	--	17.50	--
	b) Lease Payments	0.04	--	0.02	--
	4. Paid Capital Interest	9.87	--	3.92	--
<b>Capital Costs</b>		<b>61.72</b>	<b>0.00</b>	<b>24.52</b>	<b>0.00</b>
<b>(D)</b>	<b>Cash Costs (B+C-B14-C3a)</b>	<b>94.50</b>	--	<b>37.55</b>	--
<b>(E)</b>	<b>Total Production Costs (B+C)</b>	<b>156.88</b>	--	<b>62.33</b>	--
	<b>Gross Margin (A-D)</b>	<b>196.09</b>	--	<b>77.91</b>	--
	<b>Return to Unpaid Labour (A-E+B14)</b>	<b>152.04</b>	--	<b>60.41</b>	--
	<b>Return to Investment (A-E+C4)</b>	<b>143.57</b>	--	<b>57.04</b>	--
	<b>Return to Equity (A-E)</b>	<b>133.70</b>	--	<b>53.12</b>	--

**Investment**

Buildings	91.22	--
Machinery	315.02	--
Irrigation Machinery	103.70	--
<b>Total (incl. Land)</b>	<b>1742.20</b>	--

**Management**

Average Yield (Tonne/acre)	2.52	--
Expected Market Price (\$/Tonne)	112.14	--

## FREQUENCY AND CUMULATIVE FREQUENCY DISTRIBUTION

Distribution charts organize data into pictures, which is a format that the human processing system (the brain) can better understand. Frequency distributions relate the percentage (or number) of observations falling in a specific range. Cumulative frequency distribution displays the same information as frequency distribution, but it is expressed as a “rate of change” (i.e. the steeper the slope the greater the change). Cumulative frequency also illustrates how many observations lie above or below certain values, rather than only recording the number of items within the intervals.

The frequency information in this benchmark report provides an indication of how crops performed, on a field-by-field basis, within the *AgriProfit\$* pool. Looking forward, this information can be used to evaluate how and why this crop might be included in future cropping plans based on these types of frequencies. In the following discussions, the sugar beet frequency distribution charts are used as an example of how to interpret the frequency information.

The first pair of charts provides the distribution of the sugar beet yield range under irrigation. From these charts a lot can be interpreted about yield performance:

- The low is less than 8 tonnes per acre and the high is greater than 19 tonnes per acre, and
- Approximately 65% of the sugar beet fields under irrigation had a yield more than 12 tonnes per acre

This detailed information provides a better understanding of yield variability. The average yield is 14.20 tonnes per acre as listed on page 12 of the sugar beet crop analysis. While the average (or mean) is important, consideration of both the mean and variability ultimately sets the stage for good decision-making and management practices.

The second set of graphs focuses on the distribution of cost totals. Understanding these provides a basis for cost control and managing for yield per dollar invested. It is important to look at cash costs for individual field analysis (as an indication of cash flow pressure points). Cash costs include all cash expenses accrued to the production of that crop. Total production costs are important when assessing all crops together for an overall enterprise analysis, relating the longer term cost efficiency of each crop and the combined crop mix. Total production costs include the non-cash elements of unpaid labour and depreciation, in addition to cash costs. Looking at the charts, if the price of sugar beets was \$60 per tonne, then 59% of the fields are covering their cash costs and 69% of the fields are covering their total production costs. In the long run, the best mix of crops would cover total production costs and give a positive net return per acre.

The third set of graphs highlights contribution and gross margins. Contribution margin is the return over variable costs, which are a combination of variable cash and non-cash (unpaid labour) costs. It is the best single indicator of profitability at the individual field level and it is used to compare and select crops to grow regardless of the fields being owned or rented. The first objective in setting up a crop plan is to select crops with a positive contribution margin; this will identify the most profitable crop mix over the long term. Gross margin is the return over total cash costs, which include fixed costs (land rent, taxes, water rights, licenses and capital interest). It is valuable in predicting each crop’s ability to generate cash flow for the year. From



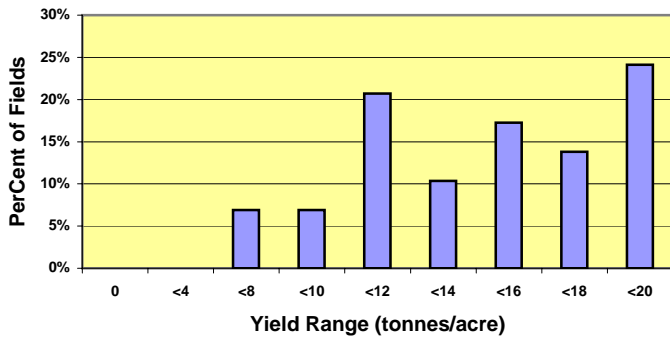
a cash flow point of view, the gross margin provides an indication of the crop's ability to contribute to principal payments and operator withdrawals. From a profitability perspective, gross margin is what is leftover to cover the non-cash costs and provide a return on investment.

The final set of graphs shows the distribution of returns to equity, or profit per unit of production. This example shows that 10% of the fields had a loss and 90% of the fields at least broke even. Return to equity can be used to compare the profitability of one crop versus another or one farm enterprise to another in the same industry.

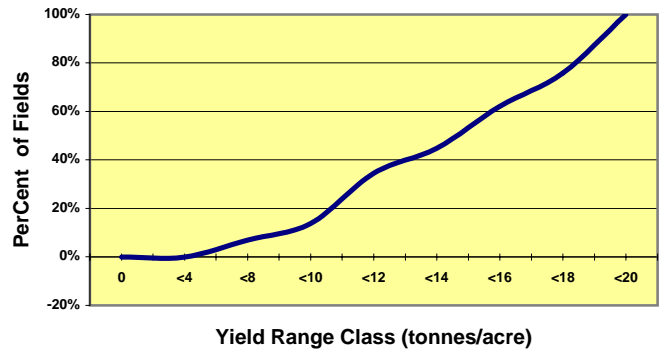
Understanding these concepts in *AgriProfit\$* and evaluating historical performance on a per bushel basis can be very useful for other AAFRD applications. For example, [CropChoice\\$](#) is a tool that combines traditional crop planning with the ability to measure the riskiness of your plan. Producers can then creatively evaluate potential risk management strategies.

# Irrigated Soil Zone - Sugar Beets: 2002

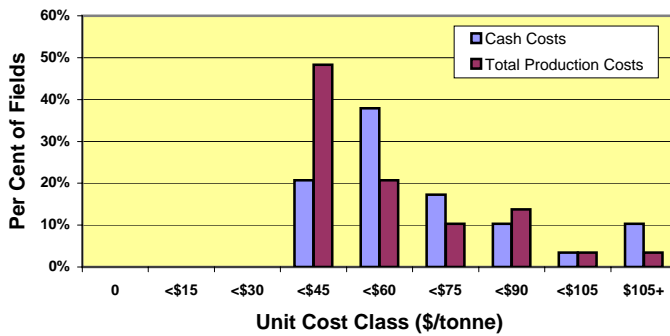
Frequency Distribution: Irrigated Soil Zone - Sugar Beets Yields



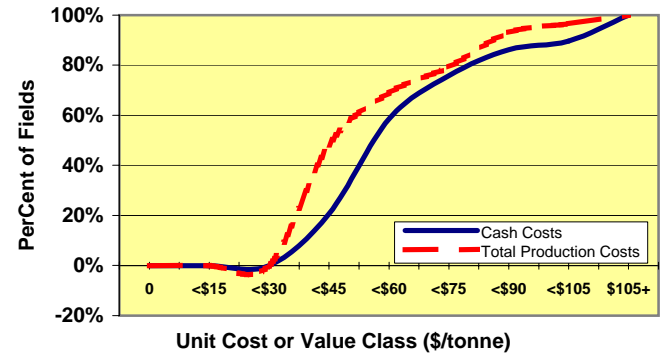
Cumulative Frequency Distribution of Irrigated Soil Zone - Sugar Beets Yields



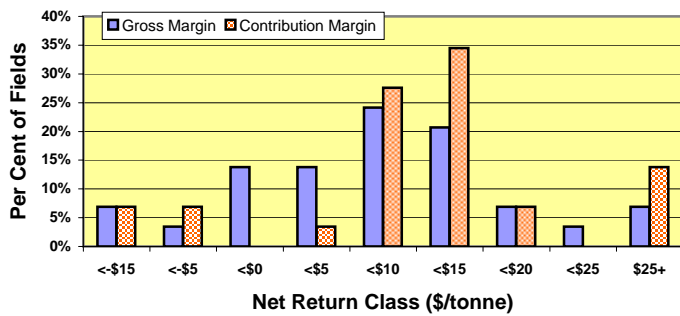
Frequency Distribution: Irrigated Soil Zone - Sugar Beets Costs



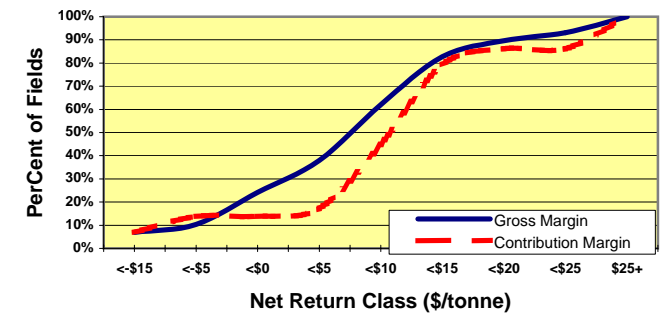
Cumulative Frequency Distribution of Irrigated Soil Zone - Sugar Beets Costs



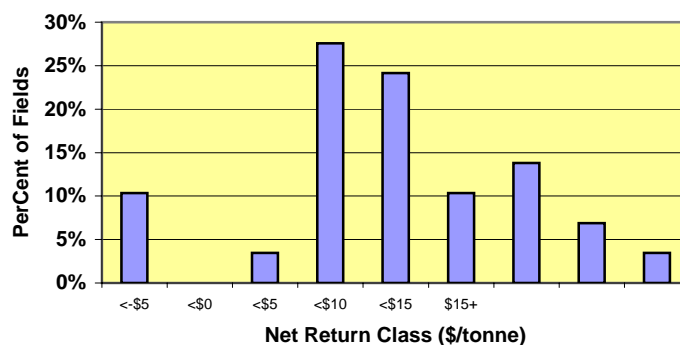
Frequency Distribution: Irrigated Soil Zone - Sugar Beets Margins



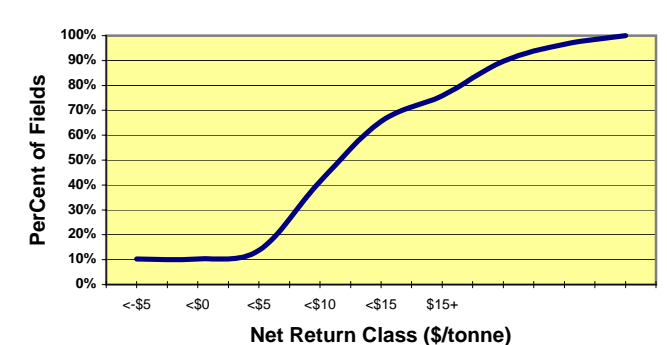
Cumulative Frequency Distribution of Irrigated Soil Zone - Sugar Beets Margins



Frequency Distribution: Irrigated Soil Zone - Sugar Beets Return To Equity



Cumulative Frequency Distribution of Irrigated Soil Zone - Sugar Beets Return To Equity



**DEFINITIONS AND ALLOCATIONS**

**I INCOME**

- A Imputed Value of Production** – total of estimated yields/acre X estimated final prices
- B Crop Insurance Receipts** – added regardless of when payment is received
- C Miscellaneous Receipts** – such as patronage dividends or input rebates
- D Government Program Receipts** – allocated to all cropped acres equally
- E Straw/Aftermath Grazing Revenue** – value of straw + imputed value of grazing

**II EXPENSES**

- A Crop Specific Inputs** – allocated by producer to each crop as documented on the survey form
  - 1. **Seed**
  - 2. **Fertilizer**
  - 3. **Chemical**
  - 4. **Hail and Crop Insurance**
  - 5. **Custom Work and Specialized Labour**
  - 6. **Land Rent** – cash rent or crop share (converted to a cash basis)
- B Allocated Crop Inputs** – allocation ratios based on research from AAFRD
  - 1. **Irrigation to Dryland Ratio** – allocated to crops at a 3:1 ratio
  - 2. **Trucking and Marketing** – allocated to specific cropping acres by producer
  - 3. **Fuel** – Summerfallow – allocation of 0.3:1 compared to crop acres; Sugar beets – allocation of 2.96:1 compared to other irrigated crop acres
  - 4. **Irrigation Fuel** – allocation based on total pumping hours for each crop
  - 5. **Machinery Repairs** – allocated equally to all acres except summerfallow (0.3:1) and special crops (as specified by producer)
  - 6. **Building Repairs** – allocated to all acres equally except for special crops buildings
  - 7. **Operating Interest** – interest paid on operating loans allocated equally
  - 8. **Paid Labour** – based on allocations between crops as specified by producer
  - 9. **Unpaid and Operator Labour** – operator - \$10/hour, other unpaid labour - \$7.50/hour
  - 10. **Land Taxes** – allocated equally to all owned cropped acres
  - 11. **Water Rates** – allocated equally to all owned irrigated acres
  - 12. **Water Rates** – allocated equally to all owned irrigated acres
  - 13. **Equipment Depreciation** – imputed at 8.5% for power equipment, 11% for non-power, based on current market value

- 14. **Insurance and Licenses** – allocated to all cropped acres equally
- 15. **Building Depreciation** – imputed at 5% on the current market value
- 16. **Paid Capital Interest** – allocated to all owned cropped acres equally except summerfallow (0.25:1)

**III CAPITAL INVESTMENT**

- A Land** – producer estimate of bare land value for both irrigated and dryland owned acreage
- B Buildings** – allocated equally to all acreage except special crops buildings (allocated to the crop)
- C Equipment**
  - 1. **General Use** – allocated to all acres equally, except summerfallow (0.3:1)
  - 2. **Crop Specific** – allocated by producer to each crop based on percentage of use
  - 3. **Irrigation** – allocated according to pumping hours as specified by producer

**IV SUMMARY CALCULATION**

- A Gross Return** = imputed value of production + crop insurance receipts + miscellaneous receipts + government program payments + straw/grazing revenue
- B Variable Costs** = seed + fertilizer + chemicals + crop insurance + trucking and marketing + fuel + machinery and building repairs + utilities + miscellaneous overhead + custom work + operating interest + paid and unpaid labour
- C Total Capital Costs** = land rent + land taxes + water rates + insurance + depreciation + paid capital interest
- D Cash Costs** = variable costs + capital costs – unpaid labour – depreciation
- E Total Production Costs** = variable costs + total capital costs
- F Gross Margin** (returns left to cover total capital costs and operator equity) = gross return – total cash costs
- G Return to Unpaid Labour** (funds remaining after all expenses have been paid except unpaid labour) = gross return – total production costs + unpaid labour
- H Return to Investment** (shows the operation's ability to earn a return on its total assets) = gross return – total production costs + paid capital interest
- I Return to Equity** (amount remaining from operations used to provide a return to individual or shareholder equity) = gross return – total production costs