

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION**  
**PROFIT CENTER ANALYSIS : 5-YEAR AVERAGE & 2001**  
**IRRIGATED (ALL) WHEAT**

	1996-2000 Average			2001		
Number of Farms	29			32		
Crop Acres	217			251		
Acres Owned	74			64		
Acres Rented	143			186		
Yield / Acre	51.0			47.9		
Bushels	9,352			9,891		
Operator Percentage	84.59%			82.20%		
Gross Income / Acre	\$160.65			\$157.11		
Variable Costs / Acre	\$113.97			\$102.78		
Total Expense / Acre	\$160.78			\$141.69		
Gross Income / Bushel	\$3.72			\$3.99		
Total Expense / Bushel	\$3.73			\$3.60		
	<b>Total Dollars</b>	<b>\$ / Bushel</b>	<b>\$ / Acre</b>	<b>Total Dollars</b>	<b>\$ / Bushel</b>	<b>\$ / Acre</b>
<b>INCOME:</b>						
Wheat (Operator's Share)	\$26,770.19	\$2.86	\$123.48	\$26,602.35	\$2.69	\$105.99
Patronage Refunds	170.38	0.02	0.79	107.85	0.01	0.43
Government Payments	7,066.76	0.76	32.60	11,725.93	1.19	46.72
Miscellaneous Income	197.92	0.02	0.91	230.42	0.02	0.92
Crop Insurance Proceeds	624.40	0.07	2.88	768.90	0.08	3.06
OTHER INCOME	\$8,059.46	\$0.86	\$37.17	12,833.10	\$1.30	\$51.13
<b>GROSS INCOME</b>	<b>\$34,829.65</b>	<b>\$3.72</b>	<b>\$160.65</b>	<b>\$39,435.45</b>	<b>\$3.99</b>	<b>\$157.11</b>
<b>EXPENSES:</b>						
Labor Hired	\$2,118.65	\$0.23	\$9.77	\$1,284.90	\$0.13	\$5.12
General Machinery Repairs	2,783.65	0.30	12.84	2,347.31	0.24	9.35
Irrigation Equipment Repairs	962.49	0.10	4.44	1,168.79	0.12	4.66
Interest Paid	2,319.57	0.25	10.70	2,710.51	0.27	10.80
Seed / Other Crop Expense	1,328.48	0.14	6.13	1,163.20	0.12	4.63
Crop Insurance	823.49	0.09	3.80	450.52	0.05	1.79
Fertilizer / Lime	2,698.75	0.29	12.45	2,513.72	0.25	10.01
Machine Hire - Lease	3,000.76	0.32	13.84	2,832.93	0.29	11.29
Farm Org Fees / Travel / Publ	348.70	0.04	1.61	405.85	0.04	1.62
Gas / Fuel / Oil	1,798.24	0.19	8.29	2,002.00	0.20	7.98
Irrigation Fuel - Pumping	2,759.09	0.30	12.73	3,902.76	0.39	15.55
Crop Storage & Marketing	208.80	0.02	0.96	172.28	0.02	0.69
Personal Property Tax	84.98	0.01	0.39	105.92	0.01	0.42
General Farm Insurance	441.44	0.05	2.04	562.40	0.06	2.24
Utilities	244.69	0.03	1.13	213.34	0.02	0.85
Cash Farm Rent	1,569.01	0.17	7.24	1,622.60	0.16	6.46
Herbicide / Insecticide	1,126.52	0.12	5.20	2,247.83	0.23	8.96
Conservation	1.30	0.00	0.01	3.38	0.00	0.01
Auto Expense	90.01	0.01	0.42	87.43	0.01	0.35
<b>TOTAL VARIABLE COSTS</b>	<b>\$24,708.62</b>	<b>\$2.64</b>	<b>\$113.97</b>	<b>\$25,797.67</b>	<b>\$2.61</b>	<b>\$102.78</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$10,121.03</b>	<b>\$1.08</b>	<b>\$46.68</b>	<b>\$13,637.78</b>	<b>\$1.38</b>	<b>\$54.33</b>
Depreciation	3,450.93	0.37	15.92	4,116.13	0.42	16.40
Real Estate Tax	355.92	0.04	1.64	316.79	0.03	1.26
Unpaid Operator Labor	2,383.50	0.25	10.99	2,272.55	0.23	9.05
Interest Charge *	420.83	0.05	1.94	154.51	0.02	0.62
<b>TOTAL FIXED COSTS</b>	<b>\$6,611.18</b>	<b>\$0.71</b>	<b>\$30.49</b>	<b>\$6,859.98</b>	<b>\$0.69</b>	<b>\$27.33</b>
Land Charge **	\$3,537.37	\$0.38	\$16.32	\$2,905.82	\$0.29	\$11.58
<b>TOTAL EXPENSE</b>	<b>\$34,857.17</b>	<b>\$3.73</b>	<b>\$160.78</b>	<b>\$35,563.47</b>	<b>\$3.60</b>	<b>\$141.69</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>(\$27.52)</b>	<b>(\$0.00)</b>	<b>(\$0.13)</b>	<b>\$3,871.98</b>	<b>\$0.39</b>	<b>\$15.43</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>\$4,474.63</b>	<b>\$0.48</b>	<b>\$20.64</b>	<b>\$7,429.43</b>	<b>\$0.75</b>	<b>\$29.60</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

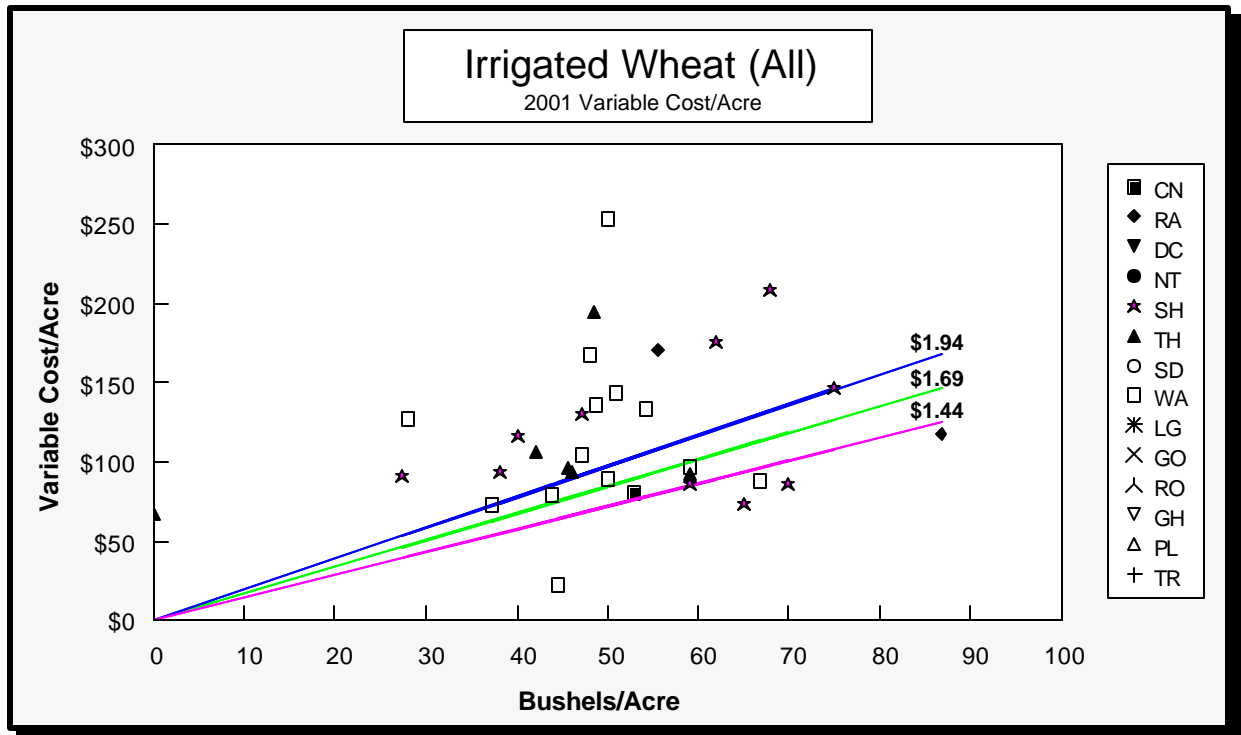


FIGURE 20

Many producers switched irrigated acres to wheat in the fall of 2000 in an effort to save water cost on their irrigation enterprise. On the average irrigated wheat earned a net return to management of \$15.43 per acre as compared to \$6.90 for irrigated corn during 2001 in Northwest Kansas. Irrigated wheat net returns in 2001 compared favorably to the five-year average of net return (loss) to management of \$-.13 per acre. Growing conditions in Northwest Kansas typically provide adequate moisture for wheat production, but in 2001 moisture was inadequate, allowing for a good return to irrigation for those farms who produced irrigated wheat. Average yield of irrigated wheat in 2001 was 47.9 as compared to the five-year average of 51.0 bushels per acre. The increase in irrigated wheat net return to management was generated by a reduction in expenditures. Variable cost per acre in 2001 was \$102.78, some \$11.19 less than the \$113.97 found in the average of 1996 to 2000.

Irrigated Wheat is produced in the western counties of the Northwest Association area. The individual counties are noted in Figure 20 by the different shape of the symbol in the scatter plot. Yields ranged from a high of 75 bushels per acre in Sherman County to a zero in Thomas County. Variable cost ranged from a low of near \$25 per acre to a high over \$250 per acre. Most farms operate between \$75 and \$150 of variable cost per acre.

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION**  
**PROFIT CENTER ANALYSIS: 5 YEARS AVERAGE & 2001**  
**IRRIGATED WHEAT (ALL)**

	1997-2001 Average				2001			
	Low third	Mid third	Top Third	Average	Low third	Mid third	Top Third	Average
Number of Farms	7	7	7	21	11	11	10	32
Crop Acres	1771	2433	3296	2500	2202	2665	2873	2580
Percentage of total crop Acres	15%	12%	6%	10%	9%	12%	8%	10%
Crop Acres	266	303	214	261	200	329	221	251
Acres Owned	113	39	52	70	64	89	39	65
Acres Rented	153	264	161	192	136	240	182	186
Yield / Acre	52	50	58	53	49	44	54	49
Total Operator Bushels	11550	11908	10255	11260	8462	11633	9547	9891
<b>INCOME:</b>								
Irrigated Wheat (Op Share)	120.76	106.68	130.52	119.24	114.10	99.62	135.20	115.72
Patronage Refunds	0.71	0.73	0.56	0.67	0.39	0.87	0.64	0.63
Government Payments	38.30	39.48	39.52	39.07	49.54	57.19	65.73	57.23
Miscellaneous Income	0.80	0.59	0.69	0.70	0.73	0.65	0.64	0.68
Crop Insurance Proceeds	1.10	9.55	1.51	3.98	0.00	1.68	10.73	3.93
OTHER INCOME	\$41.19	\$50.47	\$42.28	\$44.55	\$50.67	\$60.95	\$77.73	\$62.66
<b>GROSS INCOME</b>	<b>\$161.36</b>	<b>\$157.27</b>	<b>\$172.59</b>	<b>\$163.56</b>	<b>\$164.77</b>	<b>\$160.33</b>	<b>\$212.36</b>	<b>\$178.12</b>
<b>EXPENSES:</b>								
Labor Hired	14.42	4.63	4.79	8.20	9.47	2.93	4.01	5.52
General Machinery Repairs	16.32	14.26	8.97	13.34	13.70	13.41	12.57	13.25
Irrigation Repairs	5.48	3.59	5.07	4.73	7.13	5.58	4.85	5.89
Interest Paid	14.70	11.51	9.70	12.09	13.58	10.63	12.87	12.34
Seed / Other Crop Expense	6.59	5.63	6.92	6.38	5.10	5.64	3.41	4.76
Crop Insurance	3.56	3.02	2.23	2.96	4.00	0.93	0.66	1.90
Fertilizer / Lime	10.87	14.44	11.69	12.29	15.62	8.31	11.18	11.72
Machine Hire - Lease	13.32	12.32	9.76	11.87	13.61	9.55	6.97	10.14
Farm Org Fees / Travel / Publ	1.74	2.04	1.61	1.80	2.24	1.63	1.76	1.88
Gas / Fuel / Oil	9.12	7.11	9.61	8.62	10.89	9.30	8.05	9.45
Irrigation Energy	16.43	15.08	11.77	14.53	21.36	16.88	18.43	18.91
Crop Storage & Marketing	1.67	0.31	0.25	0.78	0.53	1.15	0.00	0.58
Personal Property Tax	0.42	0.48	0.59	0.50	0.42	0.49	1.00	0.63
General Farm Insurance	2.10	2.05	1.99	2.05	2.28	2.86	3.87	2.98
Utilities	0.90	1.04	1.21	1.04	0.97	1.36	1.20	1.17
Cash Farm Rent	3.97	6.40	1.63	4.03	15.15	3.79	1.97	7.13
Herbicide / Insecticide	10.38	4.60	5.78	7.05	13.44	7.36	3.99	8.40
Conservation	0.08	0.00	0.03	0.04	0.00	0.05	0.03	0.02
Auto Expense	0.19	0.51	0.58	0.42	0.33	0.45	0.40	0.39
<b>TOTAL VARIABLE COSTS</b>	<b>\$132.25</b>	<b>\$109.04</b>	<b>\$94.61</b>	<b>\$112.85</b>	<b>\$149.81</b>	<b>\$102.30</b>	<b>\$97.22</b>	<b>\$117.04</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$29.10</b>	<b>\$48.23</b>	<b>\$77.98</b>	<b>\$50.71</b>	<b>\$14.97</b>	<b>\$58.04</b>	<b>\$115.14</b>	<b>\$61.08</b>
Depreciation	21.08	18.08	15.46	18.33	22.85	16.07	16.07	18.40
Real Estate Tax	1.98	1.01	1.26	1.44	1.34	1.89	1.97	1.73
Unpaid Operator Labor	11.38	11.07	11.49	11.31	12.42	11.37	8.69	10.90
Interest Charge *	1.94	3.05	2.65	2.53	5.01	2.41	1.10	2.89
<b>TOTAL FIXED COSTS</b>	<b>\$36.38</b>	<b>\$33.20</b>	<b>\$30.86</b>	<b>\$33.61</b>	<b>\$41.62</b>	<b>\$31.74</b>	<b>\$27.83</b>	<b>\$33.91</b>
Land Charge **	14.61	5.44	7.31	9.33	8.78	8.14	17.01	11.13
<b>TOTAL EXPENSE</b>	<b>\$183.23</b>	<b>\$147.69</b>	<b>\$132.78</b>	<b>\$155.78</b>	<b>\$200.20</b>	<b>\$142.18</b>	<b>\$142.06</b>	<b>\$162.09</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>(\$21.88)</b>	<b>\$9.59</b>	<b>\$39.81</b>	<b>\$7.78</b>	<b>(\$35.43)</b>	<b>\$18.15</b>	<b>\$70.30</b>	<b>\$16.03</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>\$3.92</b>	<b>\$25.29</b>	<b>\$56.09</b>	<b>\$27.29</b>	<b>(\$13.54)</b>	<b>\$32.45</b>	<b>\$83.00</b>	<b>\$32.44</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

\*\*Land charge represents a charge (equal to landlord's share) on owned land and equals (production from owned acres X price / unit X 33.33% (25% for Irrigated).Crop production paid to the landlord on rented land (already removed above), or cash rent is th

This crop enterprise is based on the operator's share of production, and thus includes only production expenses paid by the operator. A charge for management is not included in the expenses.

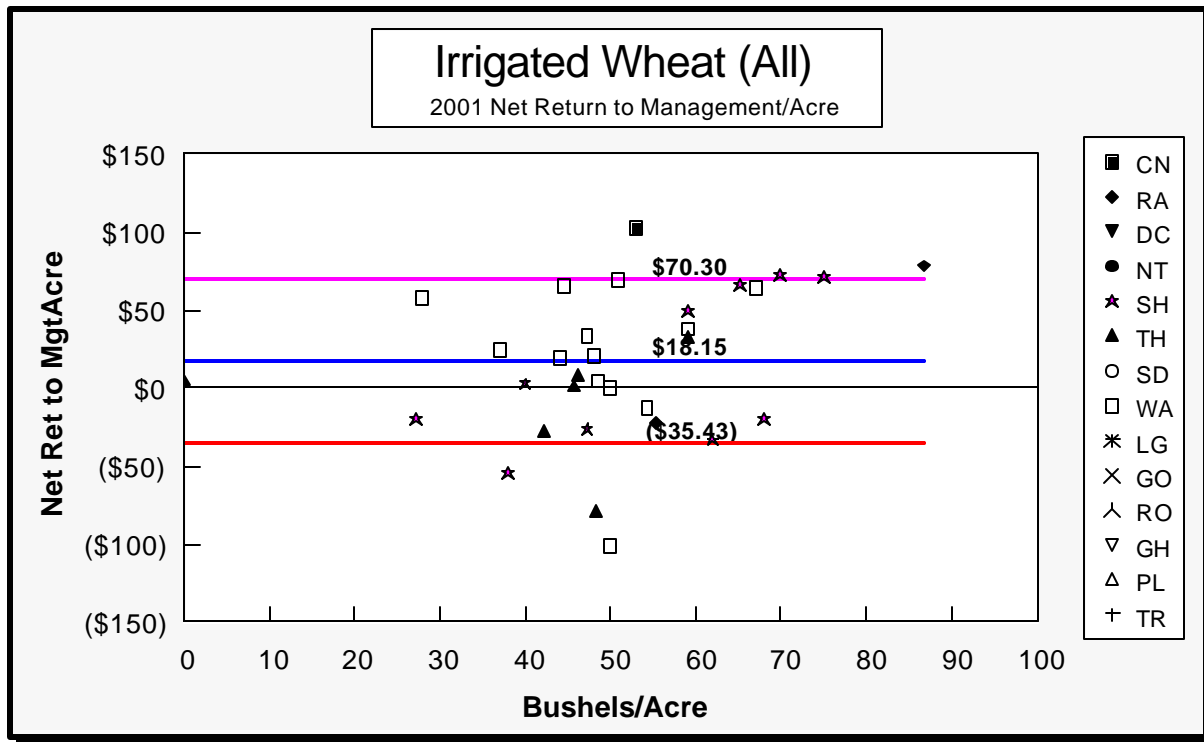


FIGURE 21

The variation in net return to management of top third farms producing irrigated wheat in 2001 was \$70.30 per acre while the mid and low thirds earned \$18.15 and \$-35.43 per acre. The top third irrigated wheat enterprises earned \$105 more net returns to management than the bottom third. Revenue sources from 5 bushels production than average, crop market price, crop insurance proceeds, and government payments earned \$47 more per acre. Savings from reduced expenses accounted for \$58 of the increased net return. The only substantial difference in expense was the reduced use of herbicides on the top third (\$1.97) as compared with the low third (\$15.15). Reduced cost of production for top third farms is spread among any categories.

The variation net return to management of irrigated wheat enterprises can be observed in Figure 21. Those farms enjoying yields above 60 bushels frequently experienced positive net returns to management.

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION**  
**PROFIT CENTER ANALYSIS : 5-YEAR AVERAGE & 2001**  
**IRRIGATED (ALL) CORN**

	1996-2000 Average			2001		
Number of Farms		83			73	
Crop Acres		413			404	
Acres Owned		145			103	
Acres Rented		268			301	
Yield / Acre		173.9			178.2	
Bushels		61,710			60,325	
Operator Percentage		85.84%			83.81%	
Gross Income / Acre		\$406.92			\$396.58	
Variable Costs / Acre		\$292.02			\$312.71	
Total Expense / Acre		\$382.79			\$389.68	
Gross Income / Bushel		\$2.73			\$2.66	
Total Expense / Bushel		\$2.56			\$2.61	
	<b>Total Dollars</b>	<b>\$/ Bushel</b>	<b>\$/ Acre</b>	<b>Total Dollars</b>	<b>\$/ Bushel</b>	<b>\$/ Acre</b>
<b>INCOME:</b>						
Corn (Operator's Share)	\$132,219.62	\$2.14	\$319.83	\$123,243.58	\$2.04	\$305.06
Patronage Refunds	878.35	0.01	2.12	601.69	0.01	1.49
Government Payments	30,674.23	0.50	74.20	35,030.64	0.58	86.71
Miscellaneous Income	1,499.20	0.02	3.63	893.22	0.01	2.21
Crop Insurance Proceeds	2,949.86	0.05	7.14	448.17	0.01	1.11
OTHER INCOME	\$36,001.64	\$0.58	\$87.09	36,973.72	\$0.61	\$91.52
<b>GROSS INCOME</b>	<b>\$168,221.27</b>	<b>\$2.73</b>	<b>\$406.92</b>	<b>\$160,217.30</b>	<b>\$2.66</b>	<b>\$396.58</b>
<b>EXPENSES:</b>						
Labor Hired	\$3,740.75	\$0.06	\$9.05	\$4,536.21	\$0.08	\$11.23
General Machinery Repairs	8,836.34	0.14	21.37	8,328.53	0.14	20.62
Irrigation Equipment Repairs	2,936.50	0.05	7.10	2,416.68	0.04	5.98
Interest Paid	11,112.41	0.18	26.88	11,480.69	0.19	28.42
Seed / Other Crop Expense	14,683.92	0.24	35.52	15,171.15	0.25	37.55
Crop Insurance	4,420.12	0.07	10.69	4,202.57	0.07	10.40
Fertilizer / Lime	17,257.27	0.28	41.74	20,823.17	0.35	51.54
Machine Hire - Lease	11,014.12	0.18	26.64	6,625.69	0.11	16.40
Farm Org Fees / Travel / Publ	1,395.80	0.02	3.38	1,384.71	0.02	3.43
Gas / Fuel / Oil	4,696.39	0.08	11.36	4,922.83	0.08	12.19
Irrigation Fuel - Pumping	14,307.20	0.23	34.61	20,033.58	0.33	49.59
Crop Storage & Marketing	952.26	0.02	2.30	870.94	0.01	2.16
Personal Property Tax	286.06	0.00	0.69	319.60	0.01	0.79
General Farm Insurance	1,893.51	0.03	4.58	2,317.16	0.04	5.74
Utilities	1,324.02	0.02	3.20	1,527.28	0.03	3.78
Cash Farm Rent	5,090.91	0.08	12.31	5,162.58	0.09	12.78
Herbicide / Insecticide	16,217.53	0.26	39.23	15,726.50	0.26	38.93
Conservation	20.22	0.00	0.05	7.14	0.00	0.02
Auto Expense	536.49	0.01	1.30	476.62	0.01	1.18
<b>TOTAL VARIABLE COSTS</b>	<b>\$120,721.80</b>	<b>\$1.96</b>	<b>\$292.02</b>	<b>\$126,333.63</b>	<b>\$2.09</b>	<b>\$312.71</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$47,499.47</b>	<b>\$0.77</b>	<b>\$114.90</b>	<b>\$33,883.67</b>	<b>\$0.56</b>	<b>\$83.87</b>
Depreciation	10,088.74	0.16	24.40	10,663.79	0.18	26.40
Real Estate Tax	1,164.26	0.02	2.82	951.61	0.02	2.36
Unpaid Operator Labor	7,669.26	0.12	18.55	6,867.25	0.11	17.00
Interest Charge *	720.65	0.01	1.74	-	-	-
<b>TOTAL FIXED COSTS</b>	<b>\$19,642.91</b>	<b>\$0.32</b>	<b>\$47.52</b>	<b>\$18,482.65</b>	<b>\$0.31</b>	<b>\$45.75</b>
Land Charge **	\$17,879.17	\$0.29	\$43.25	\$12,613.21	\$0.21	\$31.22
<b>TOTAL EXPENSE</b>	<b>\$158,243.87</b>	<b>\$2.56</b>	<b>\$382.79</b>	<b>\$157,429.49</b>	<b>\$2.61</b>	<b>\$389.68</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>\$9,977.39</b>	<b>\$0.16</b>	<b>\$24.13</b>	<b>\$2,787.81</b>	<b>\$0.05</b>	<b>\$6.90</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>\$21,387.40</b>	<b>\$0.35</b>	<b>\$51.74</b>	<b>\$14,191.27</b>	<b>\$0.24</b>	<b>\$35.13</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

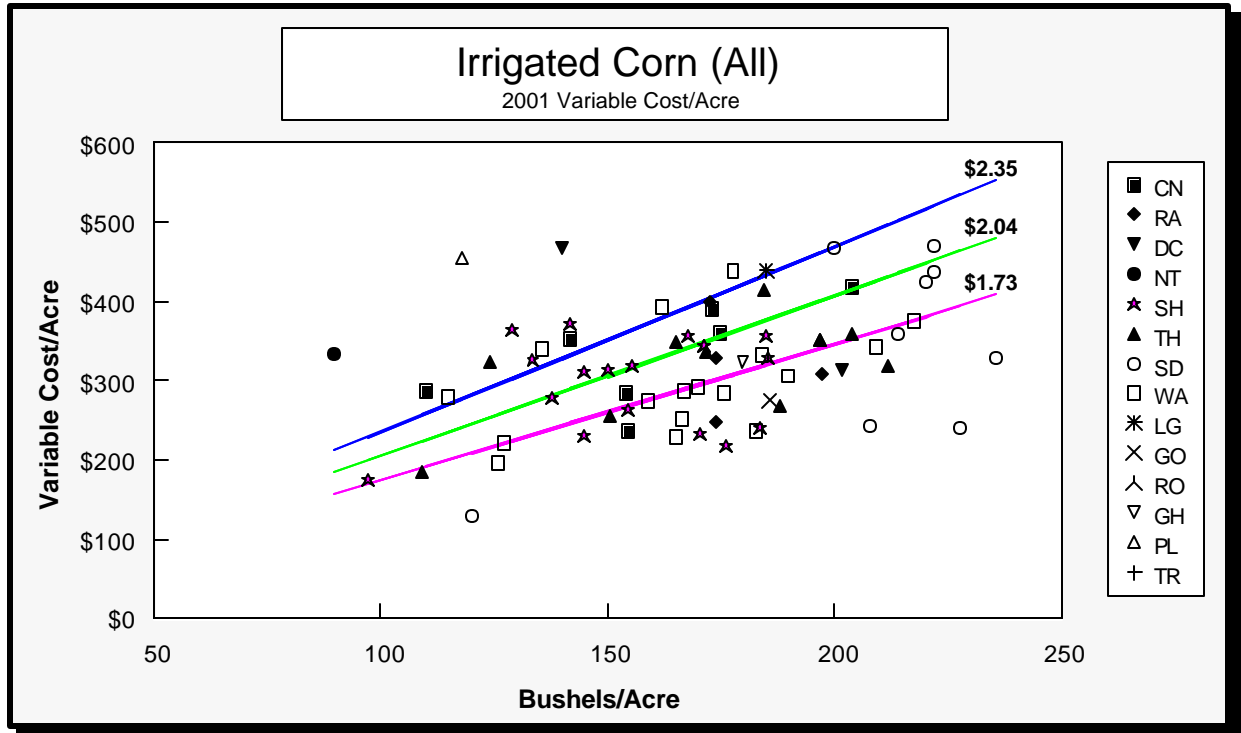


FIGURE 22

Net return to management for the average irrigated corn enterprise was \$6.90 in 2001. This is \$17.23 less than the \$24.13 net returned to management average of 1996 to 2000. Reduced revenue of \$10.34 accounted for 60% of the decline for 2001 when compared to the five-year average. Increased total expense of \$6.89 per acre over the average accounted for the balance of the decline in net return to management.

Review of the Irrigated Corn enterprise in Figure 22 shows the dominance of Sheridan and Thomas counties in the high yield area of the chart. These areas received more growing season precipitation than Cheyenne, Sherman and Wallace Counties. Limited water wells contributed to the lower yields observed in many cases in the 2001 analysis.

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**PROFIT CENTER ANALYSIS: 5 YEARS AVERAGE & 2001**  
**IRRIGATED CORN (ALL)**

	1997-2001 Average				2001			
	Low third	Mid third	Top Third	Average	Low third	Mid third	Top Third	Average
Number of Farms	20	20	19	59	25	24	24	73
Crop Acres	1992	2185	2251	2143	2068	2176	2281	2175
Percentage of total crop Acres	19%	24%	21%	21%	13%	19%	24%	19%
Crop Acres	373	523	476	460	275	405	541	405
Acres Owned	196	184	90	156	90	99	124	104
Acres Rented	177	339	386	305	185	306	417	301
Yield / Acre	166	177	178	174	171	180	180	177
Total Operator Bushels	53884	81263	68904	68557	39657	60562	81619	60325
<b>INCOME:</b>								
Irrigated Corn (Op Share)	291.73	309.16	297.26	299.71	284.48	295.72	311.57	297.08
Patronage Refunds	2.72	2.15	1.36	2.06	1.14	1.38	1.85	1.45
Government Payments	82.39	86.76	94.23	87.93	79.44	87.29	95.79	87.40
Miscellaneous Income	3.95	3.16	1.81	2.95	1.20	1.84	0.69	1.24
Crop Insurance Proceeds	7.07	3.35	6.92	5.72	1.35	2.14	1.51	1.66
OTHER INCOME	\$97.49	\$96.37	\$105.08	\$99.67	\$84.16	\$93.78	\$101.64	\$93.07
<b>GROSS INCOME</b>	<b>\$388.94</b>	<b>\$406.88</b>	<b>\$401.36</b>	<b>\$399.43</b>	<b>\$367.36</b>	<b>\$387.79</b>	<b>\$411.77</b>	<b>\$388.68</b>
<b>EXPENSES:</b>								
Labor Hired	3.88	14.49	6.25	8.40	10.39	6.56	9.86	8.96
General Machinery Repairs	26.48	22.27	19.07	22.50	30.76	20.34	20.43	23.94
Irrigation Repairs	10.66	6.30	5.29	7.32	11.58	6.34	4.44	7.51
Interest Paid	36.40	25.81	21.01	27.48	39.28	29.03	24.23	30.96
Seed / Other Crop Expense	39.62	37.88	34.94	37.43	43.07	38.47	31.67	37.81
Crop Insurance	14.27	10.80	9.40	11.41	12.41	10.61	9.37	10.82
Fertilizer / Lime	48.25	41.86	44.14	44.62	60.28	45.24	47.01	50.97
Machine Hire - Lease	33.59	24.65	22.00	26.53	19.77	22.90	12.78	18.50
Farm Org Fees / Travel / Publ	4.16	3.33	4.27	3.91	5.59	3.36	3.45	4.15
Gas / Fuel / Oil	11.23	12.73	9.83	11.28	14.93	12.97	11.32	13.10
Irrigation Energy	37.22	41.16	34.39	37.64	53.86	51.57	43.65	49.75
Crop Storage & Marketing	2.85	2.05	2.10	2.32	2.40	1.61	1.33	1.79
Personal Property Tax	0.93	0.85	0.76	0.84	0.69	0.95	0.79	0.81
General Farm Insurance	5.40	5.44	5.33	5.39	5.97	6.16	6.54	6.22
Utilities	3.81	3.26	2.64	3.22	3.94	3.23	3.07	3.42
Cash Farm Rent	8.40	12.88	8.67	10.06	6.03	17.69	12.67	12.04
Herbicide / Insecticide	43.29	35.23	36.92	38.31	45.69	34.46	33.05	37.85
Conservation	0.05	0.10	0.06	0.07	0.02	0.02	0.03	0.02
Auto Expense	1.81	1.54	1.65	1.66	1.18	1.15	1.77	1.36
<b>TOTAL VARIABLE COSTS</b>	<b>\$332.28</b>	<b>\$302.93</b>	<b>\$268.87</b>	<b>\$300.53</b>	<b>\$367.86</b>	<b>\$312.66</b>	<b>\$277.45</b>	<b>\$319.99</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$56.86</b>	<b>\$103.95</b>	<b>\$132.49</b>	<b>\$98.95</b>	<b>(\$0.50)</b>	<b>\$75.13</b>	<b>\$134.32</b>	<b>\$68.69</b>
Depreciation	26.02	25.24	23.73	24.97	24.22	25.17	24.75	24.70
Real Estate Tax	4.44	2.80	2.14	3.09	4.14	2.05	2.22	2.82
Unpaid Operator Labor	22.08	18.77	17.31	19.31	24.97	17.22	15.96	19.46
Interest Charge *	4.97	6.55	7.91	6.52	6.00	7.12	5.69	6.26
<b>TOTAL FIXED COSTS</b>	<b>\$57.50</b>	<b>\$53.36</b>	<b>\$51.09</b>	<b>\$53.88</b>	<b>\$59.32</b>	<b>\$51.56</b>	<b>\$48.61</b>	<b>\$53.25</b>
Land Charge **	47.64	34.32	19.18	33.34	34.46	27.18	25.49	29.12
<b>TOTAL EXPENSE</b>	<b>\$437.42</b>	<b>\$390.61</b>	<b>\$339.13</b>	<b>\$387.76</b>	<b>\$461.65</b>	<b>\$391.40</b>	<b>\$351.55</b>	<b>\$402.35</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>(\$48.48)</b>	<b>\$16.27</b>	<b>\$62.23</b>	<b>\$11.67</b>	<b>(\$94.28)</b>	<b>(\$3.61)</b>	<b>\$60.23</b>	<b>(\$13.68)</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>(\$22.52)</b>	<b>\$49.52</b>	<b>\$85.79</b>	<b>\$39.37</b>	<b>(\$58.92)</b>	<b>\$20.17</b>	<b>\$86.05</b>	<b>\$14.74</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

\*\*Land charge represents a charge (equal to landlord's share) on owned land and equals (production from owned acres X price / unit X 33.33% (25% for Irrigated).Crop production paid to the landlord on rented land (already removed above), or cash rent is th

This crop enterprise is based on the operator's share of production, and thus includes only production expenses paid by the operator. A charge for management is not included in the expenses.

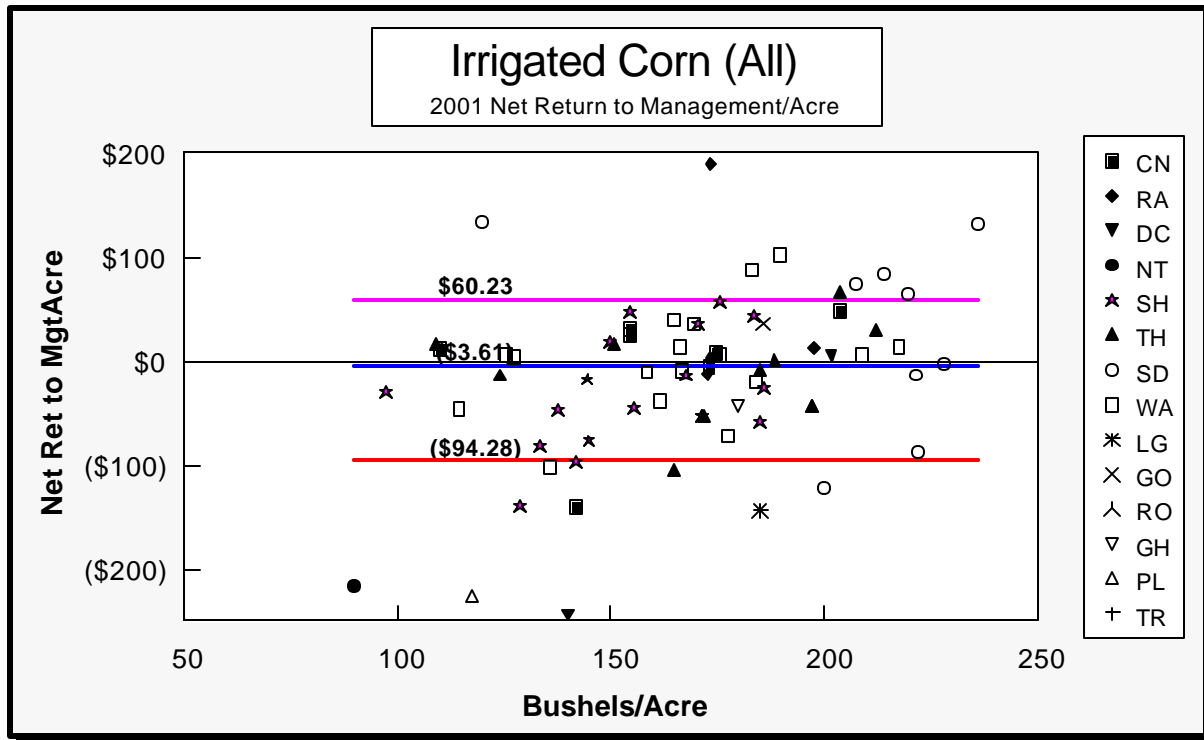


FIGURE 23

Irrigated corn enterprises in the Northwest Association analysis had a \$154.41 range between the average of the top third and low third of farms in 2001. The range of net return to management from top to low third farms in the most recent five-year average was \$110.71. Revenue sources for the top third farms in 2001 contributed to 28.76% or \$44.41 of the higher net return to management. Reduced expenses contributed to over 71% or \$110 of the larger net return to management for top third farms in 2001. No specific expense item was an obvious contributor to cost savings, but the cumulative effect is substantial.

Review of the Irrigated Corn net return to management observations in Figure 23 demonstrates that simply higher yield does not guarantee financial success. Some irrigated corn observations had positive net returns to management with yields of only 120 bushels per acre; whereas, other enterprises with yields in excess of 200 bushels per acre earned net losses to management per acre

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION**  
**PROFIT CENTER ANALYSIS : 5-YEAR AVERAGE & 2001**  
**IRRIGATED (ALL) SOYBEANS**

	<b>1996-2000 Average</b>			<b>2001</b>		
Number of Farms		18			35	
Crop Acres		121			180	
Acres Owned		35			62	
Acres Rented		86			118	
Yield / Acre		53.0			56.5	
Bushels		5,059			8,485	
Operator Percentage		78.92%			83.42%	
Gross Income / Acre		\$290.06			\$300.37	
Variable Costs / Acre		\$173.43			\$189.47	
Total Expense / Acre		\$234.43			\$245.14	
Gross Income / Bushel		\$6.94			\$6.37	
Total Expense / Bushel		\$5.61			\$5.20	
	<b>Total Dollars</b>	<b>\$/ Bushel</b>	<b>\$/ Acre</b>	<b>Total Dollars</b>	<b>\$/ Bushel</b>	<b>\$/ Acre</b>
<b>INCOME:</b>						
Soybeans (Operator's Share)	\$25,942.80	\$5.13	\$214.40	\$32,920.44	\$3.88	\$182.89
Patronage Refunds	192.10	0.04	1.59	174.77	0.02	0.97
Government Payments	8,109.59	1.60	67.02	20,483.44	2.41	113.80
Miscellaneous Income	281.46	0.06	2.33	346.07	0.04	1.92
Crop Insurance Proceeds	570.74	0.11	4.72	141.65	0.02	0.79
OTHER INCOME	\$9,153.88	\$1.81	\$75.65	21,145.93	\$2.49	\$117.48
<b>GROSS INCOME</b>	<b>\$35,096.68</b>	<b>\$6.94</b>	<b>\$290.06</b>	<b>\$54,066.37</b>	<b>\$6.37</b>	<b>\$300.37</b>
<b>EXPENSES:</b>						
Labor Hired	\$941.37	\$0.19	\$7.78	\$1,071.66	\$0.13	\$5.95
General Machinery Repairs	1,816.43	0.36	15.01	2,456.43	0.29	13.65
Irrigation Equipment Repairs	569.10	0.11	4.70	1,261.07	0.15	7.01
Interest Paid	1,991.43	0.39	16.46	3,519.13	0.41	19.55
Seed / Other Crop Expense	3,067.07	0.61	25.35	4,651.41	0.55	25.84
Crop Insurance	1,277.20	0.25	10.56	1,283.78	0.15	7.13
Fertilizer / Lime	831.48	0.16	6.87	2,165.02	0.26	12.03
Machine Hire - Lease	2,257.83	0.45	18.66	2,457.72	0.29	13.65
Farm Org Fees / Travel / Publ	295.85	0.06	2.45	525.59	0.06	2.92
Gas / Fuel / Oil	900.75	0.18	7.44	1,320.14	0.16	7.33
Irrigation Fuel - Pumping	3,041.04	0.60	25.13	6,720.62	0.79	37.34
Crop Storage & Marketing	57.73	0.01	0.48	136.38	0.02	0.76
Personal Property Tax	59.51	0.01	0.49	95.31	0.01	0.53
General Farm Insurance	372.78	0.07	3.08	868.35	0.10	4.82
Utilities	339.16	0.07	2.80	383.73	0.05	2.13
Cash Farm Rent	531.81	0.11	4.40	1,373.30	0.16	7.63
Herbicide / Insecticide	2,460.66	0.49	20.34	3,642.06	0.43	20.23
Conservation	10.07	0.00	0.08	4.72	0.00	0.03
<u>Auto Expense</u>	163.34	0.03	1.35	168.40	0.02	0.94
<b>TOTAL VARIABLE COSTS</b>	<b>\$20,984.61</b>	<b>\$4.15</b>	<b>\$173.43</b>	<b>\$34,104.82</b>	<b>\$4.02</b>	<b>\$189.47</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$14,112.06</b>	<b>\$2.79</b>	<b>\$116.63</b>	<b>\$19,961.55</b>	<b>\$2.35</b>	<b>\$110.90</b>
Depreciation	1,960.13	0.39	16.20	3,139.17	0.37	17.44
Real Estate Tax	281.22	0.06	2.32	378.74	0.04	2.10
Unpaid Operator Labor	1,821.51	0.36	15.05	2,094.53	0.25	11.64
Interest Charge *	190.33	0.04	1.57	-	-	-
<b>TOTAL FIXED COSTS</b>	<b>\$4,253.19</b>	<b>\$0.84</b>	<b>\$35.15</b>	<b>\$5,612.44</b>	<b>\$0.66</b>	<b>\$31.18</b>
Land Charge **	\$3,128.25	\$0.62	\$25.85	\$4,407.62	\$0.52	\$24.49
<b>TOTAL EXPENSE</b>	<b>\$28,366.06</b>	<b>\$5.61</b>	<b>\$234.43</b>	<b>\$44,124.88</b>	<b>\$5.20</b>	<b>\$245.14</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>\$6,730.62</b>	<b>\$1.33</b>	<b>\$55.62</b>	<b>\$9,941.49</b>	<b>\$1.17</b>	<b>\$55.23</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>\$9,493.50</b>	<b>\$1.88</b>	<b>\$78.46</b>	<b>\$13,107.68</b>	<b>\$1.54</b>	<b>\$72.82</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

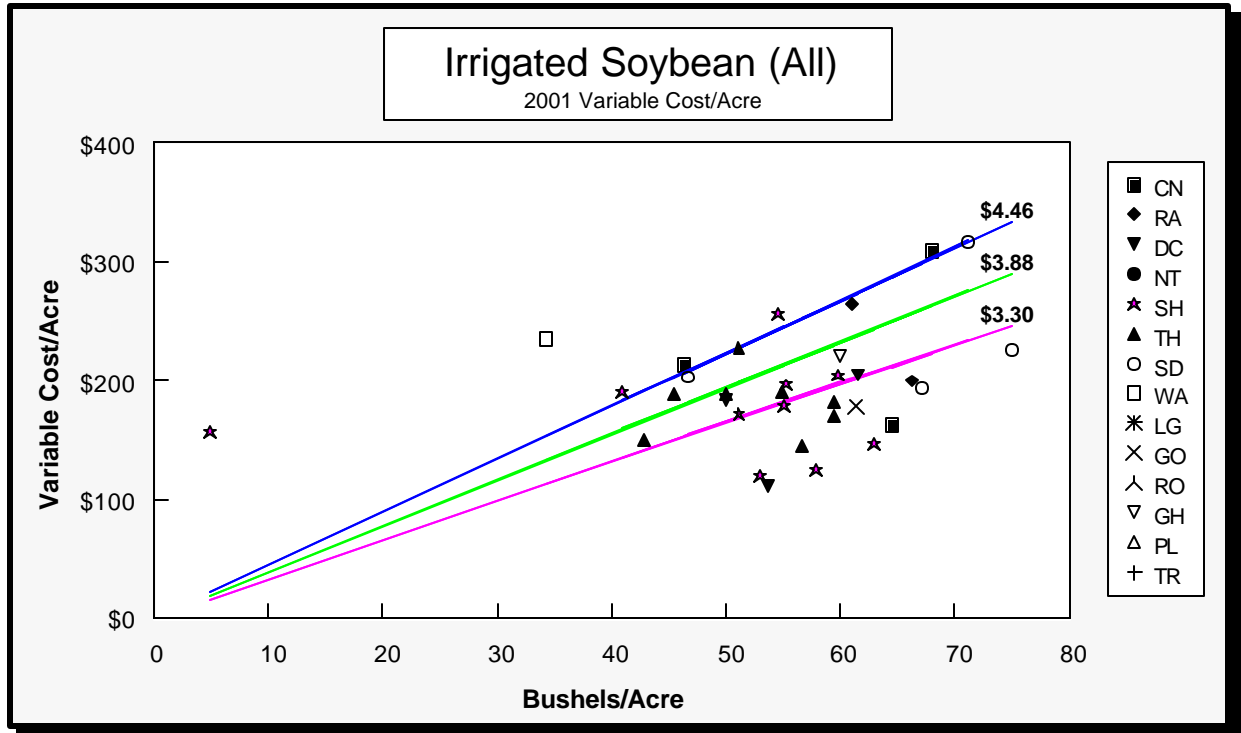


FIGURE 24

Irrigated soybean earned a good net return to management of \$55.23 per acre on the average in 2001. This is nearly identical with the average net return to management of \$55.62 for the 1996-2000 period. Irrigated soybean yields in 2001 were 56.5 bushel per acre, which was 3.5 bushel above the 1996-2000 average. Irrigated soybeans have the highest five-year net return to management of the irrigated crops in Northwest Kansas. It is interesting to note the increased acreage between 2001 (181 acres or 1 ½ circle) and the 1996-2000 average (121 acres or 1 circle) in the table on the facing page. Irrigated soybeans are definitely earning a place in the irrigated crop rotations of Northwest Association farms.

Two-thirds of the observations in Figure 24 have variable cost lower than the revenue generated from crop production if the market price was at the average of \$3.88 for 2001. The general rule of thumb that irrigated soybeans need to yield more than 50 bushels per acres still fits the data in Figure 24.

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION**  
**PROFIT CENTER ANALYSIS: 5 YEARS AVERAGE & 2001**  
**IRRIGATED SOYBEAN (ALL)**

	1997-2001 Average				2001			
	Low third	Mid third	Top Third	Average	Low third	Mid third	Top Third	Average
Number of Farms	5	5	4	14	12	11	10	33
Crop Acres	2140	2154	2650	2315	1853	1953	2788	2198
Percentage of total crop Acres	5%	7%	7%	6%	6%	13%	7%	8%
Crop Acres	98	147	177	140	109	248	206	185
Acres Owned	41	31	57	42	49	78	66	64
Acres Rented	57	116	120	98	60	170	141	121
Yield / Acre	48	52	63	54	48	56	62	55
Total Operator Bushels	4105	5936	9300	6373	4271	11560	10912	8713
<b>INCOME:</b>								
Irrigated Soybeans (Op Share)	184.49	185.24	228.31	198.25	144.29	184.10	210.33	177.58
Patronage Refunds	1.59	1.70	1.43	1.58	1.37	0.97	1.42	1.26
Government Payments	71.55	81.58	113.04	87.98	88.95	112.27	144.55	113.57
Miscellaneous Income	2.23	1.57	0.78	1.54	0.95	0.45	2.07	1.12
Crop Insurance Proceeds	0.24	1.72	3.28	1.71	0.00	3.66	0.00	1.22
OTHER INCOME	\$75.75	\$87.05	\$119.10	\$93.22	\$92.40	\$117.36	\$148.03	\$117.58
<b>GROSS INCOME</b>	<b>\$260.36</b>	<b>\$271.14</b>	<b>\$345.97</b>	<b>\$290.64</b>	<b>\$236.69</b>	<b>\$299.47</b>	<b>\$358.37</b>	<b>\$294.49</b>
<b>EXPENSES:</b>								
Labor Hired	3.64	5.56	8.58	5.86	8.79	3.36	6.17	6.19
General Machinery Repairs	17.60	14.34	12.15	14.73	15.28	13.94	13.65	14.34
Irrigation Repairs	6.47	4.85	3.96	5.11	5.40	8.06	4.10	5.89
Interest Paid	23.81	8.58	22.03	17.70	21.80	19.25	25.91	22.20
Seed / Other Crop Expense	30.86	25.80	27.09	27.85	27.14	25.33	22.34	25.08
Crop Insurance	5.02	8.71	9.83	7.85	8.99	7.05	6.70	7.65
Fertilizer / Lime	7.26	8.92	8.15	8.14	11.19	15.44	10.40	12.37
Machine Hire - Lease	20.85	13.97	13.38	16.04	15.88	14.44	14.34	14.93
Farm Org Fees / Travel / Publ	5.60	2.03	1.79	3.13	2.63	2.79	2.80	2.74
Gas / Fuel / Oil	7.72	7.35	5.07	6.77	8.52	6.12	7.73	7.48
Irrigation Energy	25.75	27.30	31.40	28.05	36.19	40.70	33.62	36.91
Crop Storage & Marketing	0.33	0.13	0.15	0.20	0.09	0.52	0.55	0.37
Personal Property Tax	0.73	0.50	0.59	0.60	0.32	0.90	0.55	0.58
General Farm Insurance	3.94	2.30	3.73	3.28	3.39	3.76	5.85	4.26
Utilities	2.26	2.10	1.40	1.94	1.79	2.57	2.21	2.18
Cash Farm Rent	3.05	1.20	11.35	4.92	5.00	11.89	12.00	9.42
Herbicide / Insecticide	27.01	22.21	24.94	24.62	22.51	20.61	17.90	20.48
Conservation	0.01	0.00	0.02	0.01	0.05	0.04	0.03	0.04
Auto Expense	0.75	2.03	1.46	1.44	0.64	1.11	0.93	0.88
<b>TOTAL VARIABLE COSTS</b>	<b>\$192.73</b>	<b>\$158.36</b>	<b>\$187.06</b>	<b>\$178.43</b>	<b>\$195.60</b>	<b>\$197.85</b>	<b>\$189.85</b>	<b>\$194.61</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$67.63</b>	<b>\$112.78</b>	<b>\$158.91</b>	<b>\$112.21</b>	<b>\$41.09</b>	<b>\$101.63</b>	<b>\$168.52</b>	<b>\$99.88</b>
Depreciation	15.98	16.46	15.35	15.96	15.86	16.27	18.14	16.69
Real Estate Tax	2.38	1.98	1.69	2.02	2.76	1.50	2.27	2.19
Unpaid Operator Labor	18.06	12.35	9.03	13.19	16.73	13.25	9.49	13.38
Interest Charge *	1.91	6.06	0.88	3.11	4.76	4.85	2.10	3.98
<b>TOTAL FIXED COSTS</b>	<b>\$38.33</b>	<b>\$36.86</b>	<b>\$26.96</b>	<b>\$34.29</b>	<b>\$40.11</b>	<b>\$35.87</b>	<b>\$32.00</b>	<b>\$36.24</b>
Land Charge **	25.29	16.46	20.05	20.45	20.71	17.13	18.94	18.98
<b>TOTAL EXPENSE</b>	<b>\$256.36</b>	<b>\$211.68</b>	<b>\$234.06</b>	<b>\$233.17</b>	<b>\$256.42</b>	<b>\$250.84</b>	<b>\$240.80</b>	<b>\$249.83</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>\$4.00</b>	<b>\$59.46</b>	<b>\$111.91</b>	<b>\$57.47</b>	<b>(\$19.73)</b>	<b>\$48.63</b>	<b>\$117.57</b>	<b>\$44.67</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>\$25.71</b>	<b>\$77.37</b>	<b>\$129.51</b>	<b>\$76.52</b>	<b>\$5.79</b>	<b>\$65.24</b>	<b>\$133.23</b>	<b>\$64.23</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

\*\*Land charge represents a charge (equal to landlord's share) on owned land and equals (production from owned acres X price / unit X 33.33% (25% for Irrigated). Crop production paid to the landlord on rented land (already removed above), or cash rent is th

This crop enterprise is based on the operator's share of production, and thus includes only production expenses paid by the operator. A charge for management is not included in the expenses.

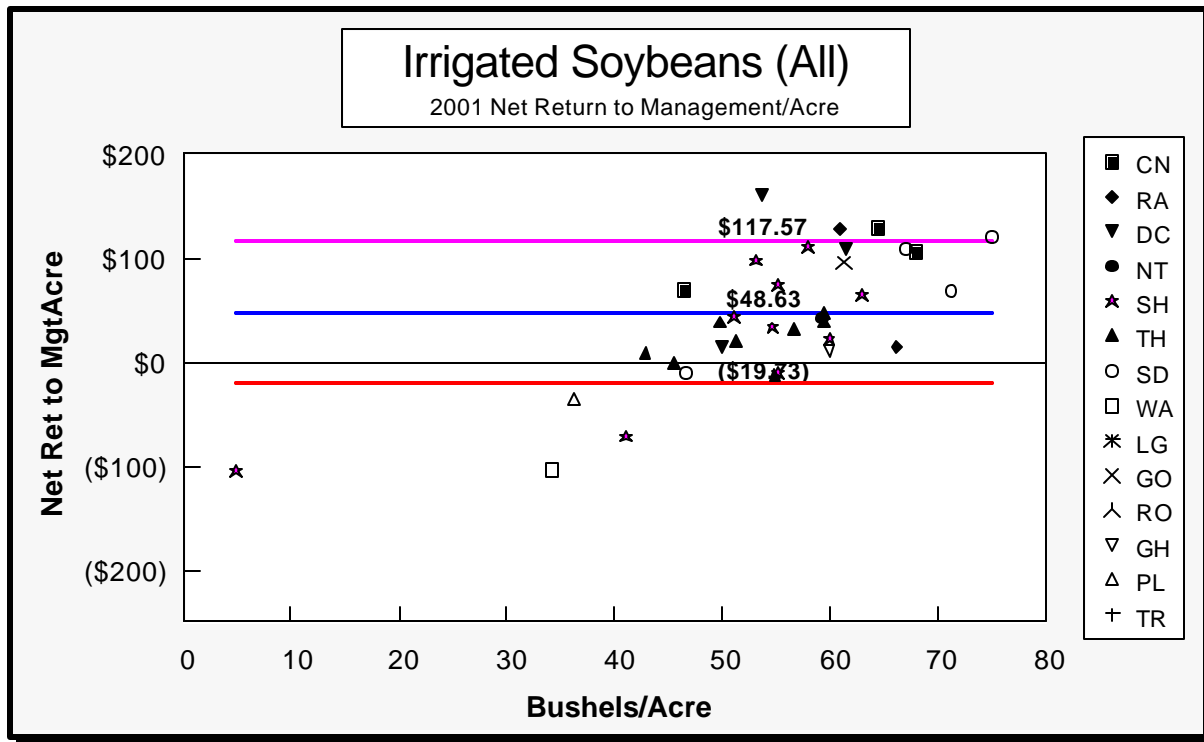


FIGURE 25

The average net return to management of top third irrigated soybeans in 2001 was \$117.57 per acre. This is increased from the five-year average of 1997-2001 of \$111.91 per acre. The range from top to low third of net return to management for 2001 was \$137.30 per acre. Revenue difference between the top and low third farms was \$121.68 per acre or 88.6% of the variation. Revenue differences in 2001 can be attributed to higher yields, better marketing success, and larger government payments. Irrigated soybean yield for top third enterprises was 62 bushels compared to 48 bushels for the low third farms in 2001. The average price received for irrigated soybeans on top third enterprises was \$3.99 per bushel compared to \$3.68 for low third enterprises. A significant part of the government payments for soybeans come from (LDP's). The combination of higher yields, better marketing prices and related LDP's all contribute to the revenue generated for the top third enterprises. Total expense was \$15.62 larger for the low third farms than the top third on average in 2001 accounting for 11.4% of the variation in net return to management for 2001.

Net return to management of irrigated soybean enterprises displayed in Figure 25 was above zero for all but two farms with yields greater than 50 bushels per acre.

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION  
PROFIT CENTER ANALYSIS : 5-YEAR AVERAGE & 2001  
IRRIGATED (ALL) PINTO BEANS**

	1996-2000 Average			2001		
Number of Farms	13			9		
Crop Acres	190			239		
Acres Owned	56			67		
Acres Rented	134			172		
Yield / Acre	21.3			18.3		
Cwt	3,470			3,555		
Operator Percentage	85.85%			81.46%		
Gross Income / Acre	\$391.91			\$399.62		
Variable Costs / Acre	\$271.99			\$227.72		
Total Expense / Acre	\$339.47			\$302.98		
Gross Income / Cwt	\$21.44			\$26.87		
Total Expense / Cwt	\$18.57			\$20.37		
	<b>Total Dollars</b>	<b>\$ / Cwt</b>	<b>\$ / Acre</b>	<b>Total Dollars</b>	<b>\$ / Cwt</b>	<b>\$ / Acre</b>
<b>INCOME:</b>						
Pinto Beans (Operator's Share)	\$59,945.61	\$17.28	\$315.84	\$78,182.04	\$21.99	\$327.12
Patronage Refunds	398.56	0.11	2.10	168.97	0.05	0.71
Government Payments	11,930.61	3.44	62.86	11,706.19	3.29	48.98
Miscellaneous Income	624.49	0.18	3.29	422.02	0.12	1.77
Crop Insurance Proceeds	1,485.95	0.43	7.83	5,030.98	1.42	21.05
OTHER INCOME	\$14,439.60	\$4.16	\$76.08	17,328.16	\$4.87	\$72.50
<b>GROSS INCOME</b>	<b>\$74,385.21</b>	<b>\$21.44</b>	<b>\$391.91</b>	<b>\$95,510.20</b>	<b>\$26.87</b>	<b>\$399.62</b>
<b>EXPENSES:</b>						
Labor Hired	\$2,598.68	\$0.75	\$13.69	\$2,168.01	\$0.61	\$9.07
General Machinery Repairs	3,410.44	0.98	17.97	3,385.01	0.95	14.16
Irrigation Equipment Repairs	1,274.04	0.37	6.71	1,287.08	0.36	5.39
Interest Paid	4,801.87	1.38	25.30	6,428.54	1.81	26.90
Seed / Other Crop Expense	7,187.96	2.07	37.87	6,166.82	1.73	25.80
Crop Insurance	1,952.42	0.56	10.29	1,283.71	0.36	5.37
Fertilizer / Lime	4,108.89	1.18	21.65	4,486.30	1.26	18.77
Machine Hire - Lease	5,958.75	1.72	31.39	6,386.93	1.80	26.72
Farm Org Fees / Travel / Publ	647.08	0.19	3.41	752.69	0.21	3.15
Gas / Fuel / Oil	2,615.84	0.75	13.78	2,942.34	0.83	12.31
Irrigation Fuel - Pumping	5,637.93	1.62	29.70	10,065.10	2.83	42.11
Crop Storage & Marketing	241.32	0.07	1.27	84.25	0.02	0.35
Personal Property Tax	163.22	0.05	0.86	185.76	0.05	0.78
General Farm Insurance	886.72	0.26	4.67	1,332.31	0.37	5.57
Utilities	452.32	0.13	2.38	723.42	0.20	3.03
Cash Farm Rent	2,372.94	0.68	12.50	202.06	0.06	0.85
Herbicide / Insecticide	7,094.72	2.04	37.38	6,141.42	1.73	25.70
Conservation	2.42	0.00	0.01	2.34	0.00	0.01
<u>Auto Expense</u>	215.22	0.06	1.13	400.33	0.11	1.68
<b>TOTAL VARIABLE COSTS</b>	<b>\$51,622.78</b>	<b>\$14.88</b>	<b>\$271.99</b>	<b>\$54,424.42</b>	<b>\$15.31</b>	<b>\$227.72</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$22,762.43</b>	<b>\$6.56</b>	<b>\$119.93</b>	<b>\$41,085.78</b>	<b>\$11.56</b>	<b>\$171.91</b>
Depreciation	3,669.19	1.06	19.33	5,555.12	1.56	23.24
Real Estate Tax	390.05	0.11	2.06	386.55	0.11	1.62
Unpaid Operator Labor	2,484.49	0.72	13.09	3,165.00	0.89	13.24
Interest Charge *	132.96	0.04	0.70	-	-	-
<b>TOTAL FIXED COSTS</b>	<b>\$6,676.70</b>	<b>\$1.92</b>	<b>\$35.18</b>	<b>\$9,106.67</b>	<b>\$2.56</b>	<b>\$38.10</b>
Land Charge **	\$6,132.75	\$1.77	\$32.31	\$8,880.80	\$2.50	\$37.16
<b>TOTAL EXPENSE</b>	<b>\$64,432.23</b>	<b>\$18.57</b>	<b>\$339.47</b>	<b>\$72,411.89</b>	<b>\$20.37</b>	<b>\$302.98</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>\$9,952.99</b>	<b>\$2.87</b>	<b>\$52.44</b>	<b>\$23,098.31</b>	<b>\$6.50</b>	<b>\$96.65</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>\$15,036.16</b>	<b>\$4.33</b>	<b>\$79.22</b>	<b>\$28,431.32</b>	<b>\$8.00</b>	<b>\$118.96</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

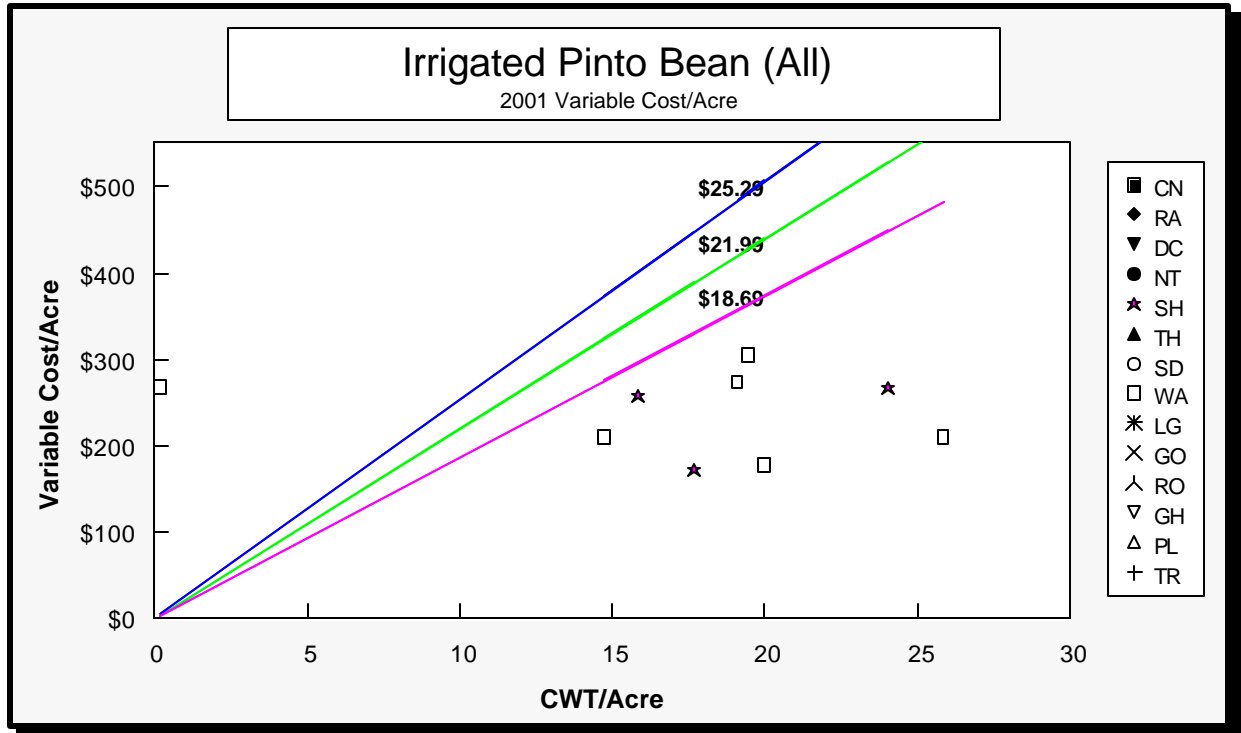


FIGURE 26

Wallace and Sherman county Association members were the only farms included in the irrigated pinto bean enterprise. Net return to management averaged \$96.65 per acre in 2001. Irrigated pinto beans earned the highest net return to management of any irrigated enterprise in 2001. The five-year average net return to management for 1996-2000 was \$52.44 per acre. Irrigated pinto bean yields were 18.3 cwt per acre in 2001, which was lower than the 21.3 cwt yield for 1996-2000. Irrigated pinto bean prices improved to \$21.99 per cwt in 2001. The increased price for pinto beans more than compensated the reduced yield in 2001 compared with the average of the previous five years.

Variable cost per acre of irrigated pinto bean enterprises in Figure 26 were below the revenue lines displayed with the exception of the farm with a zero yield. Several producers in Wallace County experienced hail damage to their pinto beans just a few days prior to harvest.

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION**  
**PROFIT CENTER ANALYSIS : 5-YEAR AVERAGE & 2001**  
**IRRIGATED (ALL) OILSEED SUNFLOWERS**

	1996-2000 Average			2001		
Number of Farms	8			13		
Crop Acres	116			144		
Acres Owned	36			42		
Acres Rented	79			101		
Yield / Acre	16.1			17.2		
Cwt	1,501			2,086		
Operator Percentage	80.47%			84.37%		
Gross Income / Acre	\$155.41			\$240.05		
Variable Costs / Acre	\$135.46			\$178.10		
Total Expense / Acre	\$184.03			\$235.28		
Gross Income / Cwt	\$11.99			\$16.57		
Total Expense / Cwt	\$14.20			\$16.24		
	<b>Total Dollars</b>	<b>\$ / Cwt</b>	<b>\$ / Acre</b>	<b>Total Dollars</b>	<b>\$ / Cwt</b>	<b>\$ / Acre</b>
<b>INCOME:</b>						
Sunflowers (Operator's Share)	\$13,120.21	\$8.74	\$113.30	\$21,933.62	\$10.51	\$152.32
Patronage Refunds	120.27	0.08	1.04	104.25	0.05	0.72
Government Payments	4,471.61	2.98	38.61	12,161.06	5.83	84.45
Miscellaneous Income	131.84	0.09	1.14	184.57	0.09	1.28
Crop Insurance Proceeds	153.07	0.10	1.32	184.32	0.09	1.28
OTHER INCOME	\$4,876.78	\$3.25	\$42.11	12,634.20	\$6.06	\$87.74
<b>GROSS INCOME</b>	<b>\$17,997.00</b>	<b>\$11.99</b>	<b>\$155.41</b>	<b>\$34,567.82</b>	<b>\$16.57</b>	<b>\$240.05</b>
<b>EXPENSES:</b>						
Labor Hired	\$861.81	\$0.57	\$7.44	\$1,448.24	\$0.69	\$10.06
General Machinery Repairs	1,343.86	0.90	11.61	3,658.00	1.75	25.40
Irrigation Equipment Repairs	731.98	0.49	6.32	610.39	0.29	4.24
Interest Paid	1,409.52	0.94	12.17	2,059.90	0.99	14.30
Seed / Other Crop Expense	1,893.97	1.26	16.36	2,797.03	1.34	19.42
Crop Insurance	237.25	0.16	2.05	504.41	0.24	3.50
Fertilizer / Lime	1,494.96	1.00	12.91	2,900.36	1.39	20.14
Machine Hire - Lease	1,503.09	1.00	12.98	1,450.97	0.70	10.08
Farm Org Fees / Travel / Publ	225.00	0.15	1.94	360.56	0.17	2.50
Gas / Fuel / Oil	780.65	0.52	6.74	1,902.28	0.91	13.21
Irrigation Fuel - Pumping	2,081.81	1.39	17.98	4,062.62	1.95	28.21
Crop Storage & Marketing	26.43	0.02	0.23	16.92	0.01	0.12
Personal Property Tax	60.36	0.04	0.52	77.41	0.04	0.54
General Farm Insurance	242.64	0.16	2.10	541.50	0.26	3.76
Utilities	184.52	0.12	1.59	350.29	0.17	2.43
Cash Farm Rent	590.35	0.39	5.10	1,014.79	0.49	7.05
Herbicide / Insecticide	1,898.62	1.27	16.40	1,785.85	0.86	12.40
Conservation	5.23	0.00	0.05	6.59	0.00	0.05
Auto Expense	113.72	0.08	0.98	98.83	0.05	0.69
<b>TOTAL VARIABLE COSTS</b>	<b>\$15,685.77</b>	<b>\$10.45</b>	<b>\$135.46</b>	<b>\$25,646.94</b>	<b>\$12.29</b>	<b>\$178.10</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$2,311.22</b>	<b>\$1.54</b>	<b>\$19.96</b>	<b>\$8,920.88</b>	<b>\$4.28</b>	<b>\$61.95</b>
Depreciation	1,692.23	1.13	14.61	2,499.34	1.20	17.36
Real Estate Tax	179.87	0.12	1.55	371.94	0.18	2.58
Unpaid Operator Labor	1,693.91	1.13	14.63	2,568.41	1.23	17.84
Interest Charge *	351.24	0.23	3.03	278.71	0.13	1.94
<b>TOTAL FIXED COSTS</b>	<b>\$3,917.26</b>	<b>\$2.61</b>	<b>\$33.83</b>	<b>\$5,718.40</b>	<b>\$2.74</b>	<b>\$39.71</b>
Land Charge **	\$1,708.04	\$1.14	\$14.75	\$2,514.69	\$1.21	\$17.46
<b>TOTAL EXPENSE</b>	<b>\$21,311.07</b>	<b>\$14.20</b>	<b>\$184.03</b>	<b>\$33,880.03</b>	<b>\$16.24</b>	<b>\$235.28</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>(\$3,314.07)</b>	<b>(\$2.21)</b>	<b>(\$28.62)</b>	<b>\$687.79</b>	<b>\$0.33</b>	<b>\$4.78</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>(\$758.35)</b>	<b>(\$0.51)</b>	<b>(\$6.55)</b>	<b>\$4,704.44</b>	<b>\$2.26</b>	<b>\$32.67</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

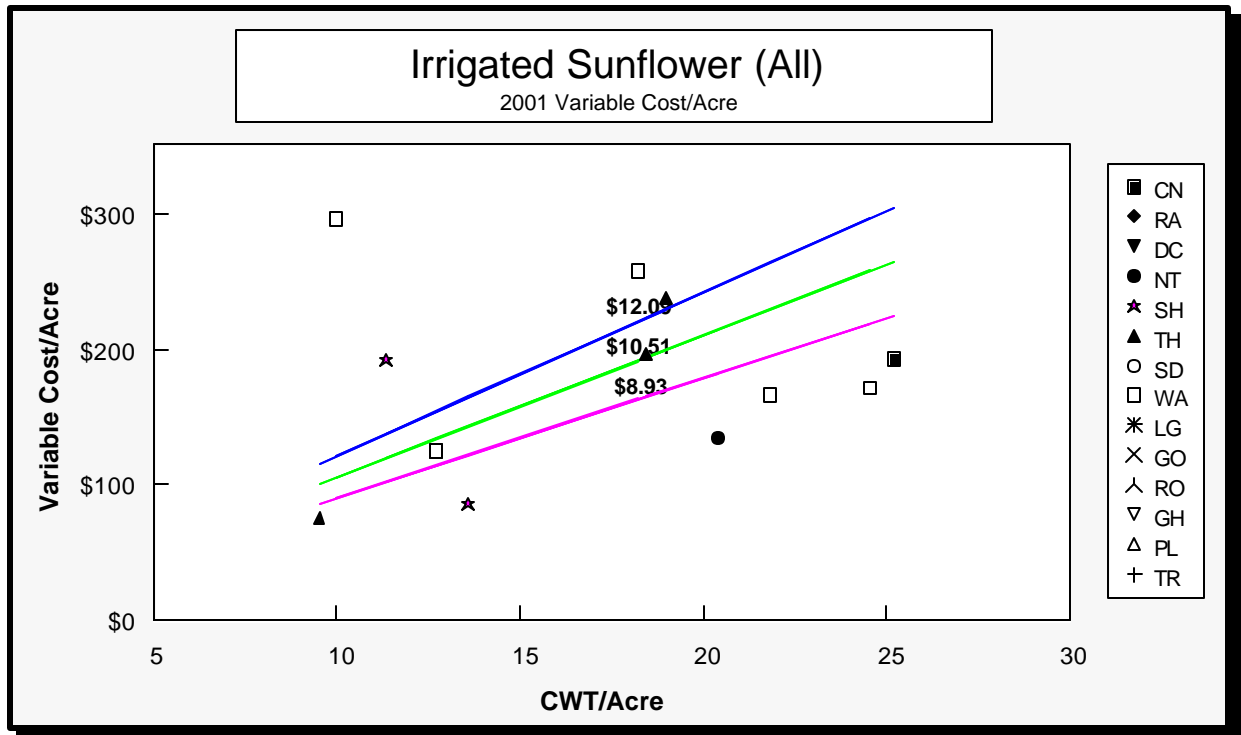


FIGURE 27

Net returns to management for irrigated sunflower improved in 2001 to \$4.78 per acre. This compares favorably to the 1996-2000 average net loss of \$-28.62. Irrigated sunflower yields were slightly better at 17.2 cwt per acre in 2001 than the previous five-year average of 16.1 cwt per acre. Better prices of \$10.51 per cwt in 2001 compared to \$8.74 over the previous five years and larger government payment LDP's contributed to the marked improvement in gross income earned in 2001. Higher gross income more than offset larger variable cost and total expenses that were observed in 2001.

Revenue as presented in Figure 27 does not include government payments, LDP's or crop insurance proceeds, but rather the proceeds from the sale of the crop produced in the enterprise. Most producers would have covered their variable cost at the average price of \$10.51 per cwt. Those enterprises with variable cost below \$150 could continue to produce irrigated sunflower with yields above 16 cwt. Note that one half of the enterprises in the irrigated sunflower summary fall below 16 cwt yield.

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION**  
**PROFIT CENTER ANALYSIS: 5-YEAR AVERAGE & 2001**  
**IRRIGATED (ALL) ALFALFA**

	1996-2000 Average			2001		
Number of Farms		14			17	
Crop Acres		86			83	
Acres Owned		22			33	
Acres Rented		64			50	
Yield / Acre		5.3			4.6	
Tons		373			325	
Operator Percentage		81.93%			84.39%	
Gross Income / Acre		\$309.84			\$381.60	
Variable Costs / Acre		\$176.91			\$223.01	
Total Expense / Acre		\$261.18			\$340.83	
Gross Income / Ton		\$71.27			\$97.45	
Total Expense / Ton		\$60.08			\$87.04	
	<b>Total Dollars</b>	<b>\$ / Ton</b>	<b>\$ / Acre</b>	<b>Total Dollars</b>	<b>\$ / Ton</b>	<b>\$ / Acre</b>
<b>INCOME:</b>						
Alfalfa (Operator's Share)	\$24,221.46	\$64.94	\$282.30	\$27,597.31	\$84.91	\$332.50
Patronage Refunds	71.37	0.19	0.83	95.39	0.29	1.15
Government Payments	2,051.56	5.50	23.91	3,862.95	11.89	46.54
Miscellaneous Income	239.70	0.64	2.79	116.81	0.36	1.41
Crop Insurance Proceeds	-	-	-	-	-	-
OTHER INCOME	\$2,362.62	\$6.33	\$27.54	4,075.15	\$12.54	\$49.10
<b>GROSS INCOME</b>	<b>\$26,584.08</b>	<b>\$71.27</b>	<b>\$309.84</b>	<b>\$31,672.46</b>	<b>\$97.45</b>	<b>\$381.60</b>
<b>EXPENSES:</b>						
Labor Hired	\$505.13	\$1.35	\$5.89	\$581.75	\$1.79	\$7.01
General Machinery Repairs	2,930.64	7.86	34.16	4,078.39	12.55	49.14
Irrigation Equipment Repairs	896.46	2.40	10.45	791.12	2.43	9.53
Interest Paid	1,925.25	5.16	22.44	2,336.18	7.19	28.15
Seed / Other Crop Expense	401.68	1.08	4.68	1,024.71	3.15	12.35
Crop Insurance	-	-	-	-	-	-
Fertilizer / Lime	1,133.92	3.04	13.22	741.28	2.28	8.93
Machine Hire - Lease	1,369.38	3.67	15.96	1,085.36	3.34	13.08
Farm Org Fees / Travel / Publ	468.26	1.26	5.46	476.98	1.47	5.75
Gas / Fuel / Oil	1,088.05	2.92	12.68	1,324.66	4.08	15.96
Irrigation Fuel - Pumping	2,458.42	6.59	28.65	4,564.58	14.04	54.99
Crop Storage & Marketing	0.30	0.00	0.00	7.25	0.02	0.09
Personal Property Tax	72.70	0.19	0.85	63.34	0.19	0.76
General Farm Insurance	296.67	0.80	3.46	418.21	1.29	5.04
Utilities	303.59	0.81	3.54	213.58	0.66	2.57
Cash Farm Rent	419.11	1.12	4.88	47.84	0.15	0.58
Herbicide / Insecticide	722.08	1.94	8.42	606.06	1.86	7.30
Conservation	4.82	0.01	0.06	-	-	-
<u>Auto Expense</u>	182.29	0.49	2.12	148.47	0.46	1.79
<b>TOTAL VARIABLE COSTS</b>	<b>\$15,178.77</b>	<b>\$40.69</b>	<b>\$176.91</b>	<b>\$18,509.76</b>	<b>\$56.95</b>	<b>\$223.01</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$11,405.31</b>	<b>\$30.58</b>	<b>\$132.93</b>	<b>\$13,162.70</b>	<b>\$40.50</b>	<b>\$158.59</b>
Depreciation	1,964.04	5.27	22.89	2,638.60	8.12	31.79
Real Estate Tax	201.12	0.54	2.34	205.22	0.63	2.47
Unpaid Operator Labor	2,461.96	6.60	28.69	2,595.44	7.99	31.27
Interest Charge *	42.13	0.11	0.49	-	-	-
<b>TOTAL FIXED COSTS</b>	<b>\$4,669.24</b>	<b>\$12.52</b>	<b>\$54.42</b>	<b>\$5,439.26</b>	<b>\$16.74</b>	<b>\$65.53</b>
Land Charge **	\$2,561.41	\$6.87	\$29.85	\$4,340.03	\$13.35	\$52.29
<b>TOTAL EXPENSE</b>	<b>\$22,409.42</b>	<b>\$60.08</b>	<b>\$261.18</b>	<b>\$28,289.05</b>	<b>\$87.04</b>	<b>\$340.83</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>\$4,174.66</b>	<b>\$11.19</b>	<b>\$48.66</b>	<b>\$3,383.41</b>	<b>\$10.41</b>	<b>\$40.76</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>\$7,141.75</b>	<b>\$19.15</b>	<b>\$83.24</b>	<b>\$6,560.60</b>	<b>\$20.19</b>	<b>\$79.04</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

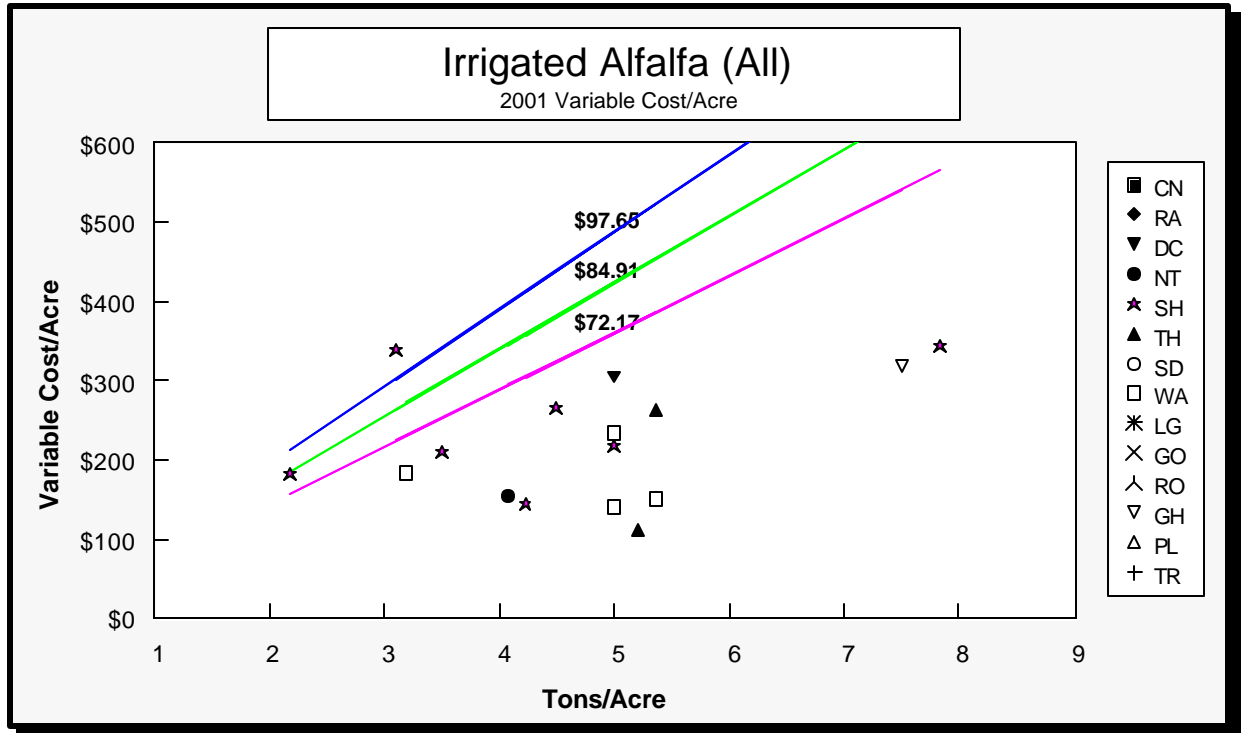


FIGURE 28

Irrigated Alfalfa net return to management of \$40.76 per acre in 2001 was lower than the previous five-year average of \$48.66 per acre. Yields for irrigated alfalfa of 4.6 ton per acre in 2001 were lower than the previous five-year average of 5.3 ton per acre. Variable cost per unit of production was \$56.95 per ton on the average in 2001 and only \$40.69 per ton on the average for the previous five years. Total cost per unit of production for 2001 was \$87.04 per ton, slightly above the average price received of \$84.91 per ton in 2001. The previous five-year average actually fared better than 2001 from the perspective of total expense per unit (\$60.08/ton) and price received (\$64.94). Without government payments from freedom to farm spread across all irrigated acres on the Northwest Association farms, irrigated alfalfa, as an enterprise would have shown a net loss to management.

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION  
PROFIT CENTER ANALYSIS: 5-YEAR AVERAGE & 2001  
IRRIGATED (ALL) CORN SILAGE**

	1996-2000 Average			2001		
Number of Farms		11			10	
Crop Acres		59			54	
Acres Owned		34			33	
Acres Rented		25			21	
Yield / Acre		18.2			20.0	
Tons		991			1,055	
Operator Percentage		92.50%			97.64%	
Gross Income / Acre		\$471.37			\$475.56	
Variable Costs / Acre		\$342.23			\$309.02	
Total Expense / Acre		\$473.36			\$445.60	
Gross Income / Ton		\$27.96			\$24.34	
Total Expense / Ton		\$28.08			\$22.81	
	<b>Total Dollars</b>	<b>\$ / Ton</b>	<b>\$ / Acre</b>	<b>Total Dollars</b>	<b>\$ / Ton</b>	<b>\$ / Acre</b>
<b>INCOME:</b>						
Silage (Operator's Share)	\$19,293.01	\$19.46	\$328.11	\$21,616.72	\$20.49	\$400.31
Patronage Refunds	147.48	0.15	2.51	137.06	0.13	2.54
Government Payments	5,003.41	5.05	85.09	3,646.58	3.46	67.53
Miscellaneous Income	200.20	0.20	3.40	92.18	0.09	1.71
Crop Insurance Proceeds	3,072.66	3.10	52.26	187.45	0.18	3.47
OTHER INCOME	\$8,423.74	\$8.50	\$143.26	4,063.27	\$3.85	\$75.25
<b>GROSS INCOME</b>	<b>\$27,716.76</b>	<b>\$27.96</b>	<b>\$471.37</b>	<b>\$25,679.99</b>	<b>\$24.34</b>	<b>\$475.56</b>
<b>EXPENSES:</b>						
Labor Hired	\$960.14	\$0.97	\$16.33	\$931.65	\$0.88	\$17.25
General Machinery Repairs	1,066.50	1.08	18.14	995.32	0.94	18.43
Irrigation Equipment Repairs	404.55	0.41	6.88	204.82	0.19	3.79
Interest Paid	1,373.88	1.39	23.37	1,509.16	1.43	27.95
Seed / Other Crop Expense	2,097.60	2.12	35.67	1,140.40	1.08	21.12
Crop Insurance	459.80	0.46	7.82	384.48	0.36	7.12
Fertilizer / Lime	2,687.04	2.71	45.70	1,843.18	1.75	34.13
Machine Hire - Lease	4,056.74	4.09	68.99	3,424.92	3.25	63.42
Farm Org Fees / Travel / Publ	180.01	0.18	3.06	348.12	0.33	6.45
Gas / Fuel / Oil	543.65	0.55	9.25	803.31	0.76	14.88
Irrigation Fuel - Pumping	2,399.29	2.42	40.80	2,320.32	2.20	42.97
Crop Storage & Marketing	23.35	0.02	0.40	-	-	-
Personal Property Tax	15.41	0.02	0.26	50.02	0.05	0.93
General Farm Insurance	229.11	0.23	3.90	382.11	0.36	7.08
Utilities	170.05	0.17	2.89	93.74	0.09	1.74
Cash Farm Rent	989.03	1.00	16.82	685.08	0.65	12.69
Herbicide / Insecticide	2,353.66	2.37	40.03	1,517.71	1.44	28.11
Conservation	7.41	0.01	0.13	-	-	-
Auto Expense	106.09	0.11	1.80	52.90	0.05	0.98
<b>TOTAL VARIABLE COSTS</b>	<b>\$20,123.31</b>	<b>\$20.30</b>	<b>\$342.23</b>	<b>\$16,687.24</b>	<b>\$15.82</b>	<b>\$309.02</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$7,593.45</b>	<b>\$7.66</b>	<b>\$129.14</b>	<b>\$8,992.75</b>	<b>\$8.52</b>	<b>\$166.53</b>
Depreciation	1,249.09	1.26	21.24	1,474.88	1.40	27.31
Real Estate Tax	186.83	0.19	3.18	118.59	0.11	2.20
Unpaid Operator Labor	1,736.79	1.75	29.54	1,044.00	0.99	19.33
Interest Charge *	415.29	0.42	7.06	-	-	-
<b>TOTAL FIXED COSTS</b>	<b>\$3,588.00</b>	<b>\$3.62</b>	<b>\$61.02</b>	<b>\$2,637.47</b>	<b>\$2.50</b>	<b>\$48.84</b>
Land Charge **	\$4,122.17	\$4.16	\$70.10	\$4,737.58	\$4.49	\$87.73
<b>TOTAL EXPENSE</b>	<b>\$27,833.48</b>	<b>\$28.08</b>	<b>\$473.36</b>	<b>\$24,062.29</b>	<b>\$22.81</b>	<b>\$445.60</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>(\$116.72)</b>	<b>(\$0.12)</b>	<b>(\$1.99)</b>	<b>\$1,617.70</b>	<b>\$1.53</b>	<b>\$29.96</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>\$2,580.21</b>	<b>\$2.60</b>	<b>\$43.88</b>	<b>\$3,593.35</b>	<b>\$3.41</b>	<b>\$66.54</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

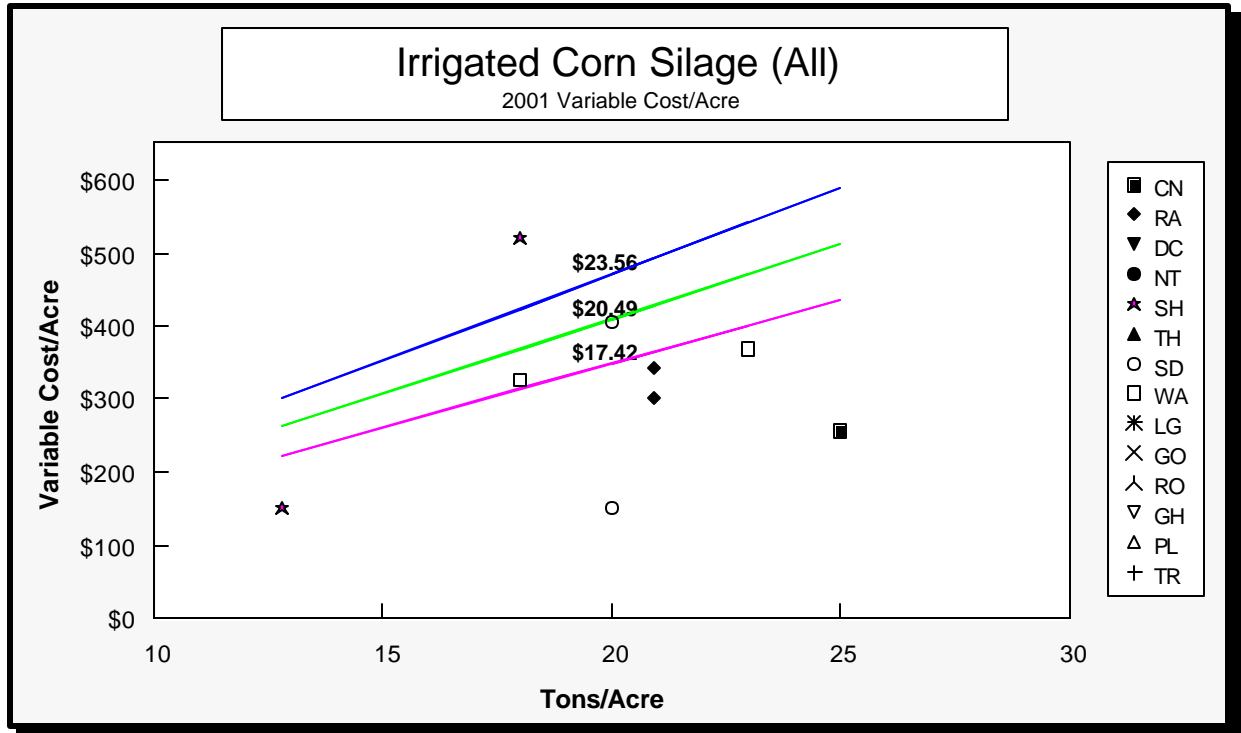


FIGURE 29

Irrigated Corn Silage net returns to management were very good in 2001 at \$29.96 per acre. This represents an improvement from the five-year average of \$-1.99 per acre. Irrigated corn silage yields were better in 2001 at 20 ton per acre on the average compared to 18.2 ton per acre for the previous five years. Variable cost and total expenses were both lower for 2001 than the previous five-year average. The combination of better crop revenue and lower costs in 2001 improved the net return to management when compared to the 1996-2000 average.

**NORTHWEST KANSAS FARM MANAGEMENT ASSOCIATION**  
**PROFIT CENTER ANALYSIS : 2000 & 2001**  
**IRRIGATED (ALL) SUDAN/CANE HAY**

	2000			2001		
Number of Farms	6			18		
Crop Acres	70			73		
Acres Owned	14			25		
Acres Rented	56			47		
Yield / Acre	4.95			3.47		
Tons	291			228		
Operator Percentage	83.98%			90.01%		
Gross Income / Acre	\$282.45			\$206.54		
Variable Costs / Acre	\$154.72			\$164.11		
Total Expense / Acre	\$226.86			\$232.96		
Gross Income / Ton	\$67.94			\$66.13		
Total Expense / Ton	\$54.57			\$74.59		
	<b>Total Dollars</b>	<b>\$ / Ton</b>	<b>\$ / Acre</b>	<b>Total Dollars</b>	<b>\$ / Ton</b>	<b>\$ / Acre</b>
<b>INCOME:</b>						
Sudan/Cane Hay (Operator's Share)	\$16,073.28	\$55.23	\$229.62	\$10,326.86	\$45.29	\$141.46
Patronage Refunds	38.87	0.13	0.56	48.90	0.21	0.67
Government Payments	3,478.50	11.95	49.69	4,635.39	20.33	63.50
Miscellaneous Income	180.78	0.62	2.58	66.54	0.29	0.91
Crop Insurance Proceeds	-	-	-	-	-	-
OTHER INCOME	\$3,698.15	\$12.71	\$52.83	4,750.83	\$20.84	\$65.08
<b>GROSS INCOME</b>	<b>\$19,771.43</b>	<b>\$67.94</b>	<b>\$282.45</b>	<b>\$15,077.69</b>	<b>\$66.13</b>	<b>\$206.54</b>
<b>EXPENSES:</b>						
Labor Hired	\$471.63	\$1.62	\$6.74	\$612.60	\$2.69	\$8.39
General Machinery Repairs	1,856.55	6.38	26.52	1,494.52	6.55	20.47
Irrigation Equipment Repairs	130.72	0.45	1.87	484.21	2.12	6.63
Interest Paid	1,406.16	4.83	20.09	1,422.71	6.24	19.49
Seed / Other Crop Expense	459.00	1.58	6.56	761.57	3.34	10.43
Crop Insurance	-	-	-	8.30	0.04	0.11
Fertilizer / Lime	1,010.56	3.47	14.44	604.75	2.65	8.28
Machine Hire - Lease	594.83	2.04	8.50	1,551.64	6.81	21.26
Farm Org Fees / Travel / Publ	228.80	0.79	3.27	193.96	0.85	2.66
Gas / Fuel / Oil	737.69	2.54	10.54	846.83	3.71	11.60
Irrigation Fuel - Pumping	2,406.18	8.27	34.37	2,942.94	12.91	40.31
Crop Storage & Marketing	-	-	-	5.54	0.02	0.08
Personal Property Tax	18.87	0.06	0.27	33.48	0.15	0.46
General Farm Insurance	251.79	0.87	3.60	240.89	1.06	3.30
Utilities	162.61	0.56	2.32	109.43	0.48	1.50
Cash Farm Rent	810.00	2.78	11.57	208.33	0.91	2.85
Herbicide / Insecticide	136.58	0.47	1.95	424.60	1.86	5.82
Conservation	-	-	-	-	-	-
Auto Expense	148.15	0.51	2.12	33.89	0.15	0.46
<b>TOTAL VARIABLE COSTS</b>	<b>\$10,830.12</b>	<b>\$37.22</b>	<b>\$154.72</b>	<b>\$11,980.19</b>	<b>\$52.54</b>	<b>\$164.11</b>
<b>RETURN ABOVE VARIABLE COSTS</b>	<b>\$8,941.31</b>	<b>\$30.73</b>	<b>\$127.73</b>	<b>\$3,097.50</b>	<b>\$13.59</b>	<b>\$42.43</b>
Depreciation	1,107.43	3.81	15.82	1,517.20	6.65	20.78
Real Estate Tax	99.23	0.34	1.42	108.32	0.48	1.48
Unpaid Operator Labor	2,171.25	7.46	31.02	2,207.50	9.68	30.24
Interest Charge *	-	-	-	-	-	-
<b>TOTAL FIXED COSTS</b>	<b>\$3,377.91</b>	<b>\$11.61</b>	<b>\$48.26</b>	<b>\$3,833.02</b>	<b>\$16.81</b>	<b>\$52.51</b>
Land Charge **	\$1,672.21	\$5.75	\$23.89	\$1,192.81	\$5.23	\$16.34
<b>TOTAL EXPENSE</b>	<b>\$15,880.24</b>	<b>\$54.57</b>	<b>\$226.86</b>	<b>\$17,006.02</b>	<b>\$74.59</b>	<b>\$232.96</b>
<b>NET RETURN TO MANAGEMENT</b>	<b>\$3,891.19</b>	<b>\$13.37</b>	<b>\$55.59</b>	<b>(\$1,928.33)</b>	<b>(\$8.46)</b>	<b>(\$26.42)</b>
<b>NET RETURN TO LABOR-MGT</b>	<b>\$6,534.07</b>	<b>\$22.45</b>	<b>\$93.34</b>	<b>\$891.77</b>	<b>\$3.91</b>	<b>\$12.22</b>

\*Interest charge equals: ((8.0% times three-fourths the variable costs) plus (4.0% times depreciation times 8)) minus cash interest paid.

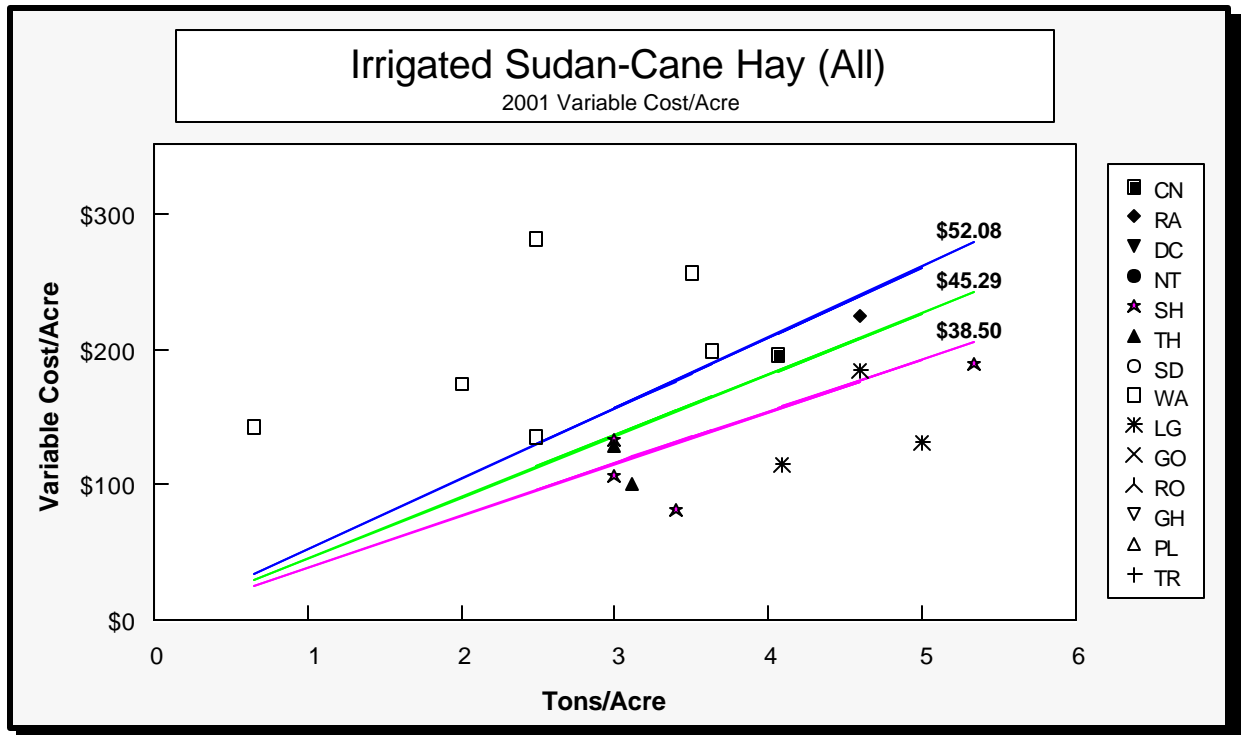


FIGURE 30

Many producers in the Northwest Association have attempted to use Irrigated cane hay as a second crop in an irrigated wheat/irrigated cane hay double crop rotation. Net return to management of the irrigated cane hay enterprise in 2001 was a loss of \$-26.42 per acre on average. This compares very unfavorably to the results for 2000 where net return to management was \$55.59 per acre on average. Price per ton was \$45.29 per ton in 2001 compared to \$55.23 per ton in 2000. Irrigated cane hay yields were 3.47 ton per acre in 2001, more than a ton lower than the 4.95 ton per acre experienced in 2000. Total expense for irrigated cane hay in 2001 was \$232,96 per acre, \$6.10 per acre higher than 2000. The combination of lower yields and lower prices contributed to most of the reduction in net return to management for irrigated cane hay in 2001.

Note the irrigated cane hay enterprises in Figure 30 with yields above 4 ton per acre. These farms generated revenues at or above variable cost from crop revenue sales, allowing government payments to pay the fixed costs of depreciation, labor, and land charge, there could have been a positive net return to management for these enterprises.