

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... VALENCIA & SOUTHERN BERNALILLO COUNTIES, Projected 2010.  
FARM SIZE..... 100.00 ACRES  
IRRIGATION TYPE..... FLOOD  
NUMBER OF CROPS..... 4

VERSION 1.0

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TABLE 1. Acreage Summary, Valencia and Souther Bernalillo Counties, Projected 2010.

BUDGET AREA.....	VALENCIA & SOUTHERN BERNALILLO COUNTIES		
FARM SIZE.....	100 ACRES		
IRRIGATION TYPE.....	FLOOD		
NUMBER OF CROPS...	4		
	WATER USE		
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	12.00 *	12	144
ALFALFA	71.00	44	3,124
SMALL GRAIN HAY	10.00	24	240
SORGHUM HAY	10.00 *	24	240
CORN SILAGE	10.00	42	420
ROADS, HOMESTEAD	9.00		
TOTAL	100.00		4,168
	ACRE FEET PER ACRE OF WATER RIGHTS		3.47

\* DOUBLE-CROPPED

TABLE 2. Basic cost information for Valencia and Southern Bernalillo Counties, Projected 2010.

Item		
Labor Wage Rate:	\$/hour	\$7.25
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.58
Phosphate (P205)	\$/pound	\$0.51
Anhydrous Ammonia (NH3)	\$/ton	\$525.00
Seed:		
Alfalfa	\$/pound	\$3.75
Oats	\$/pound	\$0.32
Corn	\$/bag	\$225.00
Sorghum	\$/pound	\$2.10
Baling Wire	\$/pound	\$0.61
Canal water	\$/acre	\$28.00
Energy:		
Butane	\$/gallon	\$2.40
Diesel fuel	\$/gallon	\$2.80
Gasoline	\$/gallon	\$2.50
Electricity	Cents/KwHr	11.52
Natural Gas	\$/MCF	\$5.90
Employee Liability Insurance	\$/ \$1,000 wages	\$20.00
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
Financial Rates:		
Operating Capital Interest Rate	percent	7.50%
Land Interest Rate	percent	7.00%
Equipment Interest Rate	percent	7.50%
Real Interest Rate	percent	3.00%
Land Taxes	\$483.00 /acre (full value)	\$5.42
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value) \$27.87
Supervision Factors		
Irrigation	\$/labor hour	\$1.00
Equipment & General	\$/labor hour	\$0.50
Management Rate	percent	7.00%

TABLE 3. Overhead cost information for Valencia and Southern Bernalillo Counties, Projected 2010.

Item			
Electricity (Domestic & Shop)		\$129.80 per month	\$1,558
Telephone		\$94.40 per month	\$1,133
Accounting & Legal			\$566
Misc. Supplies & Hand Tools			\$572
Pickup and Auto			
miles	12,154	@ \$0.415 per mile	\$5,044
Insurance			
- general liability (non-employee)			\$1,198
- fire/theft			\$802
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$602
Dues, fees, publications			\$319
Farmstead Equipment			\$195
		Total	\$17,998
		Total per planted acre	\$197.78

TABLE 4. Equipment summary for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, projected 2016.

EQUIPMENT ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VARIABLE COSTS				FIXED COSTS		
				FUEL OIL LUBRICANT	REPAIR	FUEL OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR
TRACTOR 50 HP	79	1	\$6,644	\$741	\$85	\$9.38	\$1.08	\$993	\$101	\$11.42
TRACTOR 50 HP	41	1	\$15,960	\$631	\$88	\$15.22	\$2.07	\$1,152	\$194	\$22.46
BALER PTO	86	1	\$1,900		\$10	\$0.15		\$265	\$43	\$4.44
CULTIVATOR 4 ROW	4	1	\$1,500		\$8	\$1.86		\$200	\$17	\$5.63
LAND PLANE 12 FT	7	1	\$2,500		\$2	\$0.29		\$323	\$26	\$42.29
DISC 12 FT	13	1	\$2,200		\$5	\$0.79		\$300	\$25	\$26.86
LISTERPLANER 4 ROW	3	1	\$3,000		\$6	\$2.40		\$441	\$36	\$46.23
PLOW (2WAY) 12 FT BOTTOM	21	1	\$1,300		\$7	\$4.15		\$84	\$7	\$27.53
DRILL 14 FT	8	1	\$3,300		\$29	\$1.58		\$1,460	\$163	\$21.10
SWATHER 14 FT	1	1	\$750	\$577	\$1	\$10.48	\$0.25	\$100	\$8	\$88.56
BORDER DISC 14 FT	1	1	\$750		\$1	\$0.25		\$100	\$8	\$88.56
			\$45,154	\$1,388	\$357			\$6,825	\$893	

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUIP CODE	MAX HOURS	FUEL UNITS/HR	LUBE COEF	ACCUM HOURS	INTEREST AGE	EXPENSE
TRACTOR 50 HP	17975.00	6644.00	20.00	1.00	800.00	3.40	0.10	1188.60	15.00	674.06
TRACTOR 50 HP	34950.00	15960.00	30.00	1.00	800.00	5.54	0.10	950.86	23.00	1229.63
BALER PTO	1900.00	1900.00	20.00	2.00	500.00	0.00	0.00	1188.02	18.00	288.75
CULTIVATOR 4 ROW	3000.00	1500.00	15.00	3.00	300.00	0.00	0.00	67.20	16.00	112.50
LAND PLANE 12 FT	5000.00	2500.00	15.00	4.00	300.00	0.00	0.00	76.20	16.00	187.50
DISC 12 FT	4500.00	2250.00	15.00	3.00	300.00	0.00	0.00	201.28	16.00	168.75
LISTERPLANER 4 ROW	10000.00	5000.00	10.00	8.00	800.00	0.00	0.00	36.40	14.00	375.00
PLOW (2WAY) 12 FT BOTTOM	6700.00	3350.00	15.00	3.00	300.00	0.00	0.00	84.24	16.00	211.25
DRILL 14 FT	3600.00	1800.00	10.00	8.00	100.00	0.00	0.00	104.20	12.00	135.00
SWATHER 14 FT	2500.00	390.00	20.00	2.00	800.00	3.12	0.20	703.36	14.00	1087.50
BORDER DISC 14 FT	1500.00	750.00	15.00	3.00	300.00	0.00	0.00	17.90	16.00	56.25

USAGE LIST

ALFALFA EST.	ALFALFA HAY	SMALL GRAIN	SORGHUM	CORN FOR SILAGE	PER ACRE TOTAL
0.30	0.84	0.51	0.67	0.42	2.74
1.01	0.00	1.25	0.17	1.51	3.94
0.00	0.84	0.21	0.42	0.30	1.47
0.00	0.00	0.00	0.00	0.42	0.42
0.00	0.00	0.24	0.00	0.24	0.48
0.34	0.00	0.34	0.17	0.34	1.15
0.00	0.00	0.00	0.00	0.26	0.26
0.00	0.00	0.00	0.00	0.26	0.26
0.00	0.00	0.00	0.00	0.26	0.26
0.00	0.00	0.00	0.00	0.26	0.26
0.00	0.84	0.16	0.32	0.00	1.12
0.05	0.00	0.05	0.00	0.00	0.10

INTEREST PROPORTION

ALFALFA	SMALL GRAIN	SORGHUM	CORN FOR SILAGE
7.55	4.34	4.70	3.87
0.00	39.10	5.32	47.23
3.68	0.82	1.84	5.00
0.00	0.00	0.00	11.25
0.00	9.28	0.00	3.28
0.00	4.58	2.28	4.56
0.00	0.00	0.00	37.50
0.00	7.00	0.00	7.80
0.00	4.24	0.00	0.00
12.85	3.46	6.93	0.00
0.00	2.56	0.00	0.00
24.88	78.38	28.38	121.34

ALFALFA ESTABLISHMENT

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
DISC	96 HP	1.00	0.17	0.17	
PLOW	96 HP	1.00	0.67	0.67	
BORDER DISC	96 HP	1.00	0.17	0.17	
LAND PLANE (CUSTOM)	50 HP	1.00	0.05	0.05	70.71
DRILL	50 HP	1.00	0.25	0.25	
IRRIGATE (X)			0.00	0.00	

ALFALFA HAY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
IRRIGATE (X)		8.00	0.50	4.00	
SWATHER (X)	14 FT	4.00	0.16	0.64	
BALER PTO (X)	50 HP	4.00	0.21	0.84	
BALE WAGON (CUSTOM)					0.39

SMALL GRAIN HAY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
DISC (X)	96 HP	1.00	0.17	0.17	
PLOW	96 HP	1.00	0.67	0.67	
BORDER DISC	96 HP	1.00	0.17	0.17	
DRILL	50 HP	1.00	0.25	0.25	
IRRIGATE (X)			0.00	0.00	
SWATHER (X)	14 FT	1.00	0.16	0.16	
BALER PTO (X)	50 HP	1.00	0.21	0.21	
BALEWAGON					0.39

SORGHUM HAY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
DISC	96 HP	1.00	0.17	0.17	
DRILL	50 HP	1.00	0.25	0.25	
IRRIGATE (X)			0.00	0.00	
SWATHER (X)	14 FT	2.00	0.16	0.32	
BALER PTO (X)	50 HP	2.00	0.21	0.42	
BALEWAGON					0.39

CORN SILAGE

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
PLOW	96 HP	1.00	0.67	0.67	
DISC (X)	96 HP	2.00	0.17	0.34	
LAND PLANE	96 HP	1.00	0.24	0.24	
LISTERPLANER	96 HP	1.00	0.28	0.28	
CULTIVATOR (X)	50 HP	2.00	0.21	0.42	
IRRIGATE (X)			0.00	0.00	

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE

Hours of Use	1	2	3	4	5	6	7	8	9
8	0.000000	0.000020	0.000040	0.000060	0.000080	0.000100	0.000120	0.000140	0.000160
10	0.000000	0.000020	0.000040	0.000060	0.000080	0.000100	0.000120	0.000140	0.000160
15	0.000000	0.000030	0.000060	0.000090	0.000120	0.000150	0.000180	0.000210	0.000240
20	0.000030	0.000060	0.000090	0.000120	0.000150	0.000180	0.000210	0.000240	0.000270
30	0.000060	0.000120	0.000180	0.000240	0.000300	0.000360	0.000420	0.000480	0.000540
40	0.000090	0.000180	0.000270	0.000360	0.000450	0.000540	0.000630	0.000720	0.000810
50	0.000120	0.000240	0.000360	0.000480	0.000600	0.000720	0.000840	0.000960	0.001080
60	0.000150	0.000300	0.000450	0.000600	0.000750	0.000900	0.001050	0.001200	0.001350
70	0.000180	0.000360	0.000540	0.000720	0.000900	0.001080	0.001260	0.001440	0.001620
80	0.000210	0.000420	0.000630	0.000840	0.001050	0.001260	0.001470	0.001680	0.001890
90	0.000240	0.000480	0.000720	0.000960	0.001200	0.001440	0.001680	0.001920	0.002160
100	0.000270	0.000540	0.000810	0.001080	0.001350	0.001620	0.001890	0.002160	0.002430
120	0.000360	0.000720	0.001080	0.001440	0.001800	0.002160	0.002520	0.002880	0.003240
140	0.000450	0.000900	0.001350	0.001800	0.002250	0.002700	0.003150	0.003600	0.004050
160	0.000540	0.001080	0.001620	0.002160	0.002700	0.003240	0.003780	0.004320	0.004860
180	0.000630	0.001260	0.001890	0.002520	0.003150	0.003780	0.004410	0.005040	0.005670
200	0.000720	0.001440	0.002160	0.002880	0.003600	0.004320	0.005040	0.005760	0.006480
250	0.000900	0.001800	0.002700	0.003600	0.004500	0.005400	0.006300	0.007200	0.008100
300	0.001080	0.002160	0.003240	0.004320	0.005400	0.006480	0.007560	0.008640	0.009720
350	0.001260	0.002520	0.003780	0.005040	0.006300	0.007560	0.008820	0.010080	0.011340
400	0.001440	0.002880	0.004320	0.005760	0.007200	0.008640	0.010080	0.011520	0.012960
450	0.001620	0.003240	0.004860	0.006480	0.008100	0.009720	0.011340	0.012960	0.014580
500	0.001800	0.003600	0.005400	0.007200	0.009000	0.010800	0.012600	0.014400	0.016200
550	0.001980	0.003960	0.005940	0.007920	0.009900	0.011880	0.013860	0.015840	0.017820
600	0.002160	0.004320	0.006480	0.008640	0.010800	0.012960	0.015120	0.017280	0.019440
650	0.002340	0.004680	0.007020	0.009360	0.011700	0.013980	0.016260	0.018540	0.020820
700	0.002520	0.005040	0.007560	0.010080	0.012600	0.015120	0.017640	0.020160	0.022700
750	0.002700	0.005400	0.008100	0.010800	0.013500	0.016200	0.018900	0.021600	0.024300
800	0.002880	0.005760	0.008640	0.011520	0.014400	0.017280	0.020160	0.023040	0.025920
850	0.003060	0.006120	0.009180	0.012240	0.015300	0.018360	0.021420	0.024480	0.027540
900	0.003240	0.006480	0.009720	0.012960	0.016200	0.019440	0.022680	0.025840	0.029000
950	0.003420	0.006840	0.010260	0.013680	0.017100	0.020580	0.023940	0.027300	0.030660
1000	0.003600	0.007200	0.010800	0.014400	0.018000	0.021600	0.025080	0.028560	0.032040

\* Based on unpublished data of D. R. Hurt, Department of Agricultural Engineering, University of Illinois.

\*\* Based on "Agricultural Machinery Data" in Agricultural Engineers Yearbook, 1963.

- Codes

TABLE 5. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2010.

Planting dates: August 15 - September 15								
ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASED INPUTS</u>								
SEED	\$3.75	20 LBS		\$75.00				\$75.00
PHOSPHATE (P2O5)	\$0.51	90 LBS		\$45.90				\$45.90
NITROGEN (N)	\$0.58	35 LBS		\$20.30				\$20.30
CANAL WATER		12 AC. IN.						
SUBTOTAL				\$141.20				\$141.20
<u>PREHARVEST OPERATIONS</u>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	96 HP	0.17 HR		\$1.23	\$2.59	\$0.83	\$9.92	\$14.57
PLOW	96 HP	0.67 HR		\$4.86	\$10.20	\$4.17	\$36.90	\$56.13
DISC	96 HP	0.17 HR		\$1.23	\$2.59	\$0.83	\$9.92	\$14.57
LASER PLANE (CUSTOM)			\$70.71					\$70.71
BORDER DISC	50 HP	0.05 HR		\$0.36	\$0.47	\$0.10	\$5.56	\$6.49
DRILL	50 HP	0.25 HR		\$1.81	\$2.34	\$0.49	\$15.04	\$19.67
IRRIGATE (2X)		1.00 HR		\$7.25				\$7.25
SUBTOTAL		2.31 HR	\$70.71	\$16.75	\$18.18	\$6.41	\$77.33	\$189.38
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.33 HR		\$2.37				\$2.37
EMPLOYEE BENEFITS				\$3.01				\$3.01
INSURANCE			\$0.33					\$0.33
SUPERVISION AND MANAGEMENT				\$24.80				\$24.80
SUBTOTAL		0.33 HR	\$0.33	\$30.18				\$30.52
<u>TOTAL OPERATING EXPENSES</u>		2.64 HR	\$212.24	\$46.93	\$18.18	\$6.41	\$77.33	\$361.10

TABLE 6. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2010.  
Harvesting dates: June 1 - October 15

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
ALFALFA HAY	\$140.00	5.00 TONS (STACKED)						\$700.00
GRAZING	\$10.00	1.00 ACRE						\$10.00
<b>TOTAL</b>								<b>\$710.00</b>
<b>PURCHASED INPUTS</b>								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
PHOSPHATE (P2O5)	\$0.51	90 LBS	\$45.90					\$45.90
INSECTICIDE (CUSTOM)	\$21.71	1 X/ACRE	\$21.71					\$21.71
WIRE	\$0.36	43 LBS	\$15.39					\$15.39
ESTABLISHMENT: Principal		6 YEARS					\$60.18	\$60.18
: Interest							\$13.16	\$13.16
CANAL WATER		44 AC. IN.	\$28.00					\$28.00
<b>SUBTOTAL</b>			<b>\$111.00</b>				<b>\$73.34</b>	<b>\$184.35</b>
<b>PREHARVEST OPERATIONS</b>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (8X)		4.00 HR		\$29.00				\$29.00
<b>HARVEST OPERATIONS</b>								
SWATHER (4X)	14 FT.	0.64 HR		\$4.64	\$6.71	\$0.37	\$20.55	\$32.27
BALER, PTO (4X)	50 HP	0.84 HR		\$6.09	\$7.85	\$1.04	\$16.05	\$31.03
BALE WAGON (CUSTOM) (2X)			\$23.40					\$23.40
<b>SUBTOTAL</b>		1.48 HR	\$23.40	\$10.73	\$14.56	\$1.41	\$36.60	\$86.70
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.37 HR		\$2.68				\$2.68
EMPLOYEE BENEFITS				\$7.15				\$7.15
INSURANCE			\$0.79					\$0.79
LAND TAXES						\$5.42		\$5.42
SUPERVISION AND MANAGEMENT				\$54.44				\$54.44
OTHER EXPENSES			\$197.78					\$197.78
<b>SUBTOTAL</b>		0.37 HR	\$198.58	\$64.27		\$5.42		\$268.27
<b>TOTAL OPERATING EXPENSES</b>		5.85 HR	\$332.98	\$104.00	\$14.56	\$1.41	\$115.36	\$568.32
<b>NET OPERATING PROFIT</b>								<b>\$141.68</b>
INTEREST ON OPERATING CAPITAL		( \$58.78 @ 7.50% )						\$4.41
INTEREST ON EQUIPMENT INVESTMENT								\$24.68
<b>RETURN TO LAND AND RISK</b>								<b>\$112.60</b>
<b>BUDGET SUMMARY</b>								
GROSS RETURN		\$710.00						
VARIABLE OPERATING EXPENSES	\$348.95							
RETURN OVER VARIABLE EXPENSES	\$361.05	(GROSS MARGIN)						
FIXED EXPENSES	\$115.36							
NET FARM INCOME	\$245.69	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	\$104.00							
NET OPERATING PROFIT	\$141.68	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	\$29.09							
RETURN TO LAND AND RISK		\$112.60						

TABLE 7. Small grain hay, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2010.  
 Planting dates: March 1 - May 1  
 Harvesting dates: June 15 - July 15

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
SMALL GRAIN HAY	\$130.00	2.50 TONS (STACKED)						\$325.00
<b>TOTAL</b>								<b>\$325.00</b>
<hr/>								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
SEED	\$0.32	80 LBS	\$25.60					\$25.60
WIRE	\$0.36	26 LBS	\$9.31					\$9.31
CANAL WATER		24 AC. IN.	\$28.00					\$28.00
<b>SUBTOTAL</b>			<b>\$62.91</b>					<b>\$62.91</b>
<hr/>								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$4.86	\$10.20	\$4.17	\$36.90	\$56.13
DISC (2X)	96 HP	0.34 HR		\$2.47	\$5.18	\$1.65	\$19.84	\$29.13
PLANE	96 HP	0.24 HR		\$1.74	\$3.65	\$0.52	\$25.87	\$31.78
BORDER DISC	50 HP	0.05 HR		\$0.36	\$0.47	\$0.10	\$5.56	\$6.49
DRILL	50 HP	0.25 HR		\$1.81	\$2.34	\$0.49	\$15.04	\$19.67
IRRIGATE (4X)		2.00 HR		\$14.50				\$14.50
<b>SUBTOTAL</b>		<b>3.55 HR</b>		<b>\$25.74</b>	<b>\$21.84</b>	<b>\$6.93</b>	<b>\$103.20</b>	<b>\$157.70</b>
<hr/>								
<b>HARVEST OPERATIONS</b>								
SWATHER	14 FT.	0.16 HR		\$1.16	\$1.68	\$0.09	\$5.14	\$8.07
BALER, PTO	50 HP	0.21 HR		\$1.52	\$1.96	\$0.26	\$4.01	\$7.76
BALEWAGON			\$27.30					\$27.30
<b>SUBTOTAL</b>		<b>0.37 HR</b>		<b>\$2.68</b>	<b>\$3.64</b>	<b>\$0.35</b>	<b>\$9.15</b>	<b>\$43.12</b>
<hr/>								
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.48 HR		\$3.48				\$3.48
EMPLOYEE BENEFITS				\$5.12				\$5.12
INSURANCE			\$0.57					\$0.57
LAND TAXES							\$2.71	\$2.71
SUPERVISION AND MANAGEMENT				\$25.71				\$25.71
OTHER EXPENSES			\$98.89					\$98.89
<b>SUBTOTAL</b>		<b>0.48 HR</b>		<b>\$99.46</b>	<b>\$34.31</b>		<b>\$2.71</b>	<b>\$136.48</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>4.40 HR</b>		<b>\$162.37</b>	<b>\$62.73</b>	<b>\$25.48</b>	<b>\$7.28</b>	<b>\$400.21</b>
<b>NET OPERATING PROFIT</b>								<b>(\$75.21)</b>
INTEREST ON OPERATING CAPITAL ( \$38.98 @ 7.50% )								\$2.92
INTEREST ON EQUIPMENT INVESTMENT								\$26.28
<b>RETURN TO LAND AND RISK</b>								<b>(\$104.42)</b>
<hr/>								
<b>BUDGET SUMMARY</b>								
GROSS RETURN			\$325.00					
VARIABLE OPERATING EXPENSES	\$195.13							
RETURN OVER VARIABLE EXPENSES	\$129.87	(GROSS MARGIN)						
FIXED EXPENSES	\$115.06							
NET FARM INCOME	\$14.81	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	\$62.73							
NET OPERATING PROFIT	(\$47.91)	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	\$29.21							
RETURN TO LAND AND RISK	(\$77.12)							

TABLE 8. Sorghum hay, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Count Projected 2010.  
 Planting dates: July 1 - July 31  
 Harvesting dates: August 10 - September 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
SORGHUM HAY	\$115.00	2.00 TONS (STACKED)	\$230.00
GRAZING	\$5.00	1.00 ACRE	\$5.00
<b>TOTAL</b>			<b>\$235.00</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$2.10	35 LBS	\$73.50		\$73.50
WIRE	\$0.36	17 LBS	\$6.09		\$6.09
CANAL WATER		24 AC. IN.	\$28.00		\$28.00
<b>SUBTOTAL</b>			<b>\$107.59</b>		<b>\$107.59</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	96 HP	0.17 HR		\$1.23	\$2.59	\$0.83	\$9.92	\$14.57
DRILL	50 HP	0.25 HR		\$1.81	\$2.34	\$0.49	\$15.04	\$19.67
IRRIGATE (4X)		2.00 HR		\$14.50				\$14.50
<b>SUBTOTAL</b>		<b>2.42 HR</b>		<b>\$17.55</b>	<b>\$4.93</b>	<b>\$1.31</b>	<b>\$24.95</b>	<b>\$48.74</b>

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER (2X)	14 FT.	0.32 HR		\$2.32	\$3.35	\$0.19	\$10.27	\$16.13
BALER, PTO (2X)	50 HP	0.42 HR		\$3.05	\$3.93	\$0.52	\$8.03	\$15.52
BALEWAGON			\$23.40					\$23.40
<b>SUBTOTAL</b>		<b>0.74 HR</b>		<b>\$5.37</b>	<b>\$7.28</b>	<b>\$0.70</b>	<b>\$18.30</b>	<b>\$55.05</b>

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.29 HR		\$2.10				\$2.10
EMPLOYEE BENEFITS			\$4.12				\$4.12
INSURANCE		\$0.46					\$0.46
LAND TAXES						\$2.71	\$2.71
SUPERVISION AND MANAGEMENT			\$19.03				\$19.03
OTHER EXPENSES		\$98.89					\$98.89
<b>SUBTOTAL</b>	<b>0.29 HR</b>		<b>\$99.35</b>	<b>\$25.26</b>		<b>\$2.71</b>	<b>\$127.32</b>

TOTAL OPERATING EXPENSES 3.45 HR \$206.94 \$48.17 \$12.21 \$2.02 \$45.96 \$338.69

NET OPERATING PROFIT (\$103.69)

INTEREST ON OPERATING CAPITAL ( \$56.02 @ 7.50% ) \$4.20  
 INTEREST ON EQUIPMENT INVESTMENT \$26.28

RETURN TO LAND AND RISK (\$134.17)

BUDGET SUMMARY

GROSS RETURN		\$235.00	
VARIABLE OPERATING EXPENSES	\$221.16		
RETURN OVER VARIABLE EXPENSES	\$13.84	(GROSS MARGIN)	
FIXED EXPENSES	\$45.96		
NET FARM INCOME		(\$32.12)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$48.17		
NET OPERATING PROFIT		(\$80.29)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$30.48		
RETURN TO LAND AND RISK		(\$110.77)	

TABLE 9. Corn silage, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2010.  
 Planting dates: May 1 - June 15  
 Harvesting dates: August 15 - September 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
CORN SILAGE	\$24.00	20.00 TONS (STANDING)	\$480.00
TOTAL			\$480.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$2.81	30 000	\$84.38		\$84.38
ANHYDROUS AMMONIA (NH3)	\$0.26	125 LBS	\$32.81		\$32.81
HERBICIDE (GRANULAR)	\$6.85	1 ACRE	\$6.85		\$6.85
INSECTICIDE (GRANULAR)	\$34.24	1 ACRE	\$34.24		\$34.24
CANAL WATER		42 AC. IN.	\$28.00		\$28.00
SUBTOTAL			\$186.28		\$186.28

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$4.86	\$10.20	\$4.17	\$36.90	\$56.13
DISC (2X)	96 HP	0.34 HR		\$2.47	\$5.18	\$1.65	\$19.84	\$29.13
LAND PLANE	96 HP	0.24 HR		\$1.74	\$3.65	\$0.52	\$25.87	\$31.78
LISTER/PLANTER	96 HP	0.26 HR		\$1.89	\$3.96	\$1.16	\$114.06	\$121.07
CULTIVATOR (2X)	50 HP	0.42 HR		\$3.05	\$3.93	\$1.23	\$26.98	\$35.19
IRRIGATE (8X)		4.00 HR		\$29.00				\$29.00
SUBTOTAL		5.93 HR		\$42.99	\$26.92	\$8.74	\$223.65	\$302.30

OVERHEAD EXPENSES

DOWNTIME		0.48 HR		\$3.50				\$3.50
EMPLOYEE BENEFITS				\$7.74				\$7.74
INSURANCE			\$0.86					\$0.86
LAND TAXES							\$5.42	\$5.42
SUPERVISION AND MANAGEMENT				\$38.57				\$38.57
OTHER EXPENSES			\$197.78					\$197.78
SUBTOTAL		0.48 HR	\$198.64	\$49.80			\$5.42	\$253.87

TOTAL OPERATING EXPENSES 6.41 HR \$384.92 \$92.79 \$26.92 \$8.74 \$229.07 \$742.44

NET OPERATING PROFIT (\$262.44)

INTEREST ON OPERATING CAPITAL ( \$102.05 @ 7.50% ) \$7.65  
 INTEREST ON EQUIPMENT INVESTMENT \$121.34

RETURN TO LAND AND RISK (\$391.44)

BUDGET SUMMARY

GROSS RETURN	\$480.00		
VARIABLE OPERATING EXPENSES	\$420.58		
RETURN OVER VARIABLE EXPENSES	\$59.42	(GROSS MARGIN)	
FIXED EXPENSES	\$229.07		
NET FARM INCOME	(\$169.65)	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$92.79		
NET OPERATING PROFIT	(\$262.44)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$129.00		
RETURN TO LAND AND RISK	(\$391.44)		

TABLE 10. Summary of per acre costs and returns for a 100 acre farm with above average average management, Projected 2010.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	SMALL GRAIN HAY	SORGHUM HAY	CORN FOR SILAGE
		TONS	TONS	TONS	TONS
PRIMARY YIELD		5.00	2.50	2.00	20.00
PRIMARY PRICE		\$140.00	\$130.00	\$115.00	\$24.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$0.00
SECOND INCOME		\$10.00	\$0.00	\$5.00	\$0.00
GROSS RETURN		\$710.00	\$325.00	\$235.00	\$480.00
CASH OPERATING EXPENSES					
SEED	\$75.00		\$25.60	\$73.50	\$84.38
FERTILIZER	\$66.20	\$45.90			\$32.81
CHEMICALS		\$21.71			\$41.09
CROP INSURANCE					
OTHER PURCHASED INPUTS		\$15.39	\$9.31	\$6.09	
CANAL WATER		\$28.00	\$28.00	\$28.00	\$28.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$18.18	\$14.56	\$25.48	\$12.21	\$26.92
FUEL-IRRIGATION					
REPAIRS	\$6.41	\$1.41	\$7.28	\$2.02	\$8.74
CUSTOM CHARGES	\$70.71	\$23.40			
LAND TAXES		\$5.42	\$2.71	\$2.71	\$5.42
OTHER EXPENSES	\$0.33	\$198.58	\$99.46	\$99.35	\$198.64
TOTAL CASH EXPENSES	\$236.84	\$354.37	\$197.84	\$223.87	\$426.00
RETURN OVER CASH EXPENSES	(\$236.84)	\$355.63	\$127.16	\$11.13	\$54.00
FIXED EXPENSES	\$77.33	\$109.94	\$112.35	\$43.25	\$223.65
TOTAL EXPENSES	\$314.17	\$464.31	\$310.19	\$267.12	\$649.65
NET FARM INCOME	(\$314.17)	\$245.69	\$14.81	(\$32.12)	(\$169.65)
LABOR AND MANAGEMENT COSTS	\$46.93	\$104.00	\$62.73	\$48.17	\$92.79
NET OPERATING PROFIT	(\$361.10)	\$141.68	(\$47.91)	(\$80.29)	(\$262.44)
CAPITAL COSTS					
INTEREST ON OPERATING CAPITAL		\$4.41	\$2.92	\$4.20	\$7.65
INTEREST ON EQUIPMENT INVESTMENT		\$24.68	\$26.28	\$26.28	\$121.34
TOTAL CAPITAL COSTS	\$0.00	\$29.09	\$29.21	\$30.48	\$129.00
RETURN TO LAND AND RISK	(\$361.10)	\$112.60	(\$77.12)	(\$110.77)	(\$391.44)

TABLE 11. Whole farm summary, Valencia and Southern Bernalillo Counties,  
Projected 2010.

GROSS RETURNS		
ALFALFA HAY	71.00 ACRES	
CROP		\$49,700
GRAZING		\$710
SMALL GRAIN HAY	10.00 ACRES	
CROP		\$3,250
SORGHUM HAY	10.00 ACRES	
CROP		\$2,300
GRAZING		\$50
CORN FOR SILAGE	10.00 ACRES	
CROP		\$4,800
GROSS RETURN		\$60,810
CASH OPERATING EXPENSES		
SEED		\$2,735
FERTILIZER		\$4,381
CHEMICALS		\$1,952
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$1,247
CANAL WATER		\$2,828
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,898
FUEL-IRRIGATION		\$0
REPAIRS		\$357
CUSTOM CHARGES		\$2,510
LAND TAXES		\$493
OTHER EXPENSES		\$18,078
TOTAL CASH EXPENSES		\$36,480
RETURN OVER CASH EXPENSES		\$24,330
FIXED EXPENSES		\$8,253
TOTAL EXPENSES		\$44,733
NET FARM INCOME		\$16,077
LABOR AND MANAGEMENT COSTS		\$9,984
NET OPERATING PROFIT		\$6,093
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$461
INTEREST ON EQUIPMENT INVESTMENT		\$3,491
TOTAL CAPITAL COSTS		\$3,952
RETURN TO LAND AND RISK		\$2,141

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$5,000 /ACRE	(\$12,859)	1.12%
\$6,500 /ACRE	(\$17,359)	0.88%
\$8,000 /ACRE	(\$21,859)	0.72%
\$9,500 /ACRE	(\$26,359)	0.61%
\$11,000 /ACRE	(\$30,859)	0.53%
\$12,500 /ACRE	(\$35,359)	0.47%

\* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

\*\* NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)