

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... VALENCIA & SOUTHERN BERNALILLO COUNT
FARM SIZE..... 100.00 ACRES
IRRIGATION TYPE..... FLOOD
NUMBER OF CROPS..... 4

VERSION 1.0

COPYRIGHT (C) 1984 by NEW MEXICO STATE UNIVERSITY BOARD OF REGENTS

TABLE 1. Acreage Summary, Valencia and Souther Bernalillo Counties, Projected 2006.

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 2006.

Item			
Labor Wage Rate:		\$/hour	\$5.15
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)		\$/pound	\$0.52
Phosphate (P205)		\$/pound	\$0.40
Anhydrous Ammonia (NH3)		\$/ton	\$525.00
Seed:			
Alfalfa		\$/pound	\$3.20
Oats		\$/pound	\$0.32
Corn		\$/bag	\$100.00
Sorghum		\$/pound	\$1.22
Baling Wire		\$/pound	\$0.50
Canal water		\$/acre	\$28.00
Energy:			
Butane		\$/gallon	\$1.95
Diesel fuel		\$/gallon	\$2.10
Gasoline		\$/gallon	\$2.00
Electricity		Cents/KwHr	11.75
Natural Gas		\$/MCF	\$3.28
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	8.00%
Land Interest Rate		percent	8.00%
Equipment Interest Rate		percent	8.00%
Real Interest Rate		percent	3.00%
Land Taxes		\$483.00 /acre (full value)	\$5.09
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value)	\$31.59 \$26.59
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 2006.

Item			
Electricity (Domestic & Shop)		\$116.60 per month	\$1,399
Telephone		\$84.80 per month	\$1,018
Accounting & Legal			\$509
Misc. Supplies & Hand Tools			\$514
Pickup and Auto			
miles	10,918	@ \$0.415 per mile	\$4,531
Insurance			
- general liability (non-employee)			\$1,076
- fire/theft			\$721
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$541
Dues, fees, publications			\$286
Farmstead Equipment			\$175
Total			\$16,779
Total per planted acre			\$184.39

TABLE 4. Equipment summary for a 100 acre farm with above average management, Valencia and Sorheim-Bernardo Counties
Project 2006

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	\$7,311	\$993	\$85	\$7.48	\$1.08	\$993	\$95	\$12.54
TRACTOR 50 HP	41	1	\$4,857	\$504	\$88	\$12.18	\$2.07	\$1,152	\$152	\$22.20
BALER PTO	86	1	\$1,600		\$10			\$395	\$41	\$8.45
CULTIVATOR 4 ROW	4	1	\$1,500		\$8			\$300	\$16	\$5.38
LAND PLANE 12 FT	13	1	\$2,200		\$22			\$320	\$28	\$28.00
DISC 12 FT	13	1	\$2,200		\$22			\$320	\$28	\$28.00
LISTER-PLANTER 4 ROW	3	1	\$1,300		\$6			\$192	\$23	\$40.68
DISC 12 FT	21	1	\$1,300		\$13			\$260	\$25	\$27.47
SWATHER 14 FT	8	1	\$1,300		\$13			\$192	\$19	\$31.90
BORDER DISC 14 FT	1	1	\$750	\$395	\$29	\$7.86	\$1.08	\$1,490	\$153	\$88.09
			\$38,816	\$1,482	\$357			\$5,620	\$650	

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUIP CODE	MAX HOURS	FUEL UNITS/HR	LUBE COEF	ACCLIM HOURS	INTEREST AGE EXPENSE
TRACTOR 50 HP	17975.00	7310.00	20.00	1.00	800.00	3.40	0.10	1188.60	15.00
TRACTOR 50 HP	34950.00	8957.00	30.00	1.00	800.00	5.54	0.10	350.85	23.00
BALER PTO	7700.00	1600.00	20.00	2.00	500.00	0.00	0.00	1198.02	16.00
CULTIVATOR 4 ROW	3900.00	1500.00	15.00	3.00	300.00	0.00	0.00	67.20	16.00
LAND PLANE 12 FT	5900.00	2500.00	15.00	4.00	300.00	0.00	0.00	76.80	16.00
DISC 12 FT	4500.00	2250.00	15.00	3.00	300.00	0.00	0.00	67.20	16.00
LISTER-PLANTER 4 ROW	10000.00	5000.00	10.00	8.00	800.00	0.00	0.00	36.40	14.00
DISC 12 FT	6700.00	3350.00	15.00	3.00	300.00	0.00	0.00	61.84	16.00
SWATHER 14 FT	3600.00	1500.00	10.00	8.00	100.00	0.00	0.00	104.00	12.00
BORDER DISC 14 FT	2900.00	390.00	20.00	2.00	800.00	3.12	0.20	703.38	14.00
BORDER DISC 14 FT	1500.00	750.00	15.00	3.00	300.00	0.00	0.00	17.90	16.00

USAGE LIST

ALFALFA EST.	ALFALFA HAY	SMALL GRAIN	SORGHUM	CORN FOR SILAGE	PER ACRE TOTALS
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	0.21	0.21
0.22	0.00	0.22	0.22	0.00	0.76
0.00	0.84	0.18	0.32	0.00	1.12
0.05	0.00	0.05	0.00	0.00	0.10

INTEREST PROXATION

ALFALFA HAY	SMALL GRAIN	SORGHUM	CORN FOR SILAGE
7.82	4.63	6.08	3.81
0.00	41.71	5.87	50.38
3.82	0.98	1.98	0.00
0.00	0.00	0.00	12.00
0.00	10.00	0.00	10.00
0.00	4.88	2.43	4.86
0.00	0.00	0.00	0.00
0.00	8.38	0.00	8.38
0.00	4.38	0.00	4.38
14.37	3.89	7.29	0.00
0.00	2.73	0.00	0.00
26.92	\$1.46	28.93	159.43

ALFALFA ESTABLISHMENT

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
DISC	90 HP	1.00	0.17	0.17	
PLDW	90 HP	1.00	0.67	0.67	
BORDER DISC	90 HP	1.00	0.17	0.17	
LASER PLANE (CUSTOM)	50 HP	1.00	0.05	0.05	70.71
DRILL	50 HP	1.00	0.25	0.25	
IRRIGATE (X)			8.00	0.50	4.00

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) (X)					0.39

SMALL GRAIN HAY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
PLDW	90 HP	1.00	0.67	0.67	
DISC (X)	90 HP	1.00	0.17	0.17	
PLANE	90 HP	1.00	0.24	0.24	
BORDER DISC	90 HP	1.00	0.05	0.05	
DRILL	50 HP	1.00	0.25	0.25	
IRRIGATE (X)			8.00	0.50	2.00
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	90 HP	1.00	0.17	0.17	
DRILL	50 HP	1.00	0.25	0.25	
IRRIGATE (X)			8.00	0.50	2.00
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
PLDW	90 HP	1.00	0.67	0.67	
DISC (X)	90 HP	1.00	0.17	0.17	
LAND PLANE	90 HP	1.00	0.24	0.24	
LISTER-PLANTER	90 HP	1.00	0.28	0.28	
CULTIVATOR 4 ROW	50 HP	2.00	0.21	0.42	
IRRIGATE (X)			8.00	0.50	4.00

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE

Hours of Use	1	2	3	4	5	6	7	8	9
0	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
50	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
100	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
200	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
400	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
600	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
700	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
800	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
900	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
1000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
1200	0.000040	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
1400	0.000040	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
1500	0.000150	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
1600	0.000150	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
1800	0.000075	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
2000	0.000100	0.000000	0.000000	0.000000	0.000000	0.001340	0.000040	0.002440	0.000000
2500	0.000000								
3000	0.000000								
4000	0.000000								
4500	0.000108								
5000	0.000122								
5500	0.000136								
6000	0.000148								
6500	0.000162								
7000	0.000176								
7500	0.000188								
8000	0.000204								

* Based on unpublished data of D. R. Hunt, Department of Agriculture Engineering, University of Illinois.

** Based on "Agricultural Machinery Data" in Agriculture Engineers Yearbook, 1983.

- Codes
- 1 tractor
 - 2 balers, combines, forage harvesters, windrowers, pickups
 - 3 rotary hoes, disks, moldboard plows, chisels, field cultivators
 - 4 row cultivators, laser planes
 - 4 harrows, weepers, flails, row buck, drag, roller, water furrow
 - 4 hay choppers
 - 5 balers/pickers, cotton pickers, cotton strippers, corn pickers
 - 6 corn heads, forage equipment, rotary mowers, walk choppers
 - 6 mowers, mowers, sickle mowers
 - 7 tillage, erosion, control sprayers
 - 8 planters, tillage, seeding equipment, mounted sprayers
 - 9 fertilizer distributing equipment

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 2006.

Planting dates: August 15 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS				TOTAL	
PURCHASED INPUTS								
SEED	\$3.20	20 LBS		\$64.00			\$64.00	
PHOSPHATE (P2O5)	\$0.40	90 LBS		\$36.00			\$36.00	
NITROGEN (N)	\$0.52	35 LBS		\$18.20			\$18.20	
CANAL WATER		12 AC. IN.						
SUBTOTAL				\$118.20			\$118.20	
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	96 HP	0.17 HR		\$0.88	\$2.07	\$0.83	\$9.85	\$13.62
PLOW	96 HP	0.67 HR		\$3.45	\$8.16	\$4.17	\$36.63	\$52.41
DISC	96 HP	0.17 HR		\$0.88	\$2.07	\$0.83	\$9.85	\$13.62
LASER PLANE (CUSTOM)			\$70.71					\$70.71
BORDER DISC	50 HP	0.05 HR		\$0.26	\$0.37	\$0.10	\$5.53	\$6.26
DRILL	50 HP	0.25 HR		\$1.29	\$1.87	\$0.49	\$14.98	\$18.62
IRRIGATE (2X)		1.00 HR		\$5.15				\$5.15
SUBTOTAL		2.31 HR	\$70.71	\$11.90	\$14.54	\$6.41	\$76.83	\$180.40
OVERHEAD EXPENSES								
DOWNTIME		0.33 HR		\$1.69				\$1.69
EMPLOYEE BENEFITS				\$2.14				\$2.14
INSURANCE			\$0.24					\$0.24
SUPERVISION AND MANAGEMENT				\$22.56				\$22.56
SUBTOTAL		0.33 HR	\$0.24	\$26.38				\$26.62
TOTAL OPERATING EXPENSES		2.64 HR	\$189.15	\$38.28	\$14.54	\$6.41	\$76.83	\$325.22

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 2006.
Harvesting dates: June 1 - October 15

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
ALFALFA HAY	\$130.00	5.00 TONS (STACKED)							\$650.00
GRAZING	\$10.00	1.00 ACRE							\$10.00
TOTAL								\$660.00	
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS					FIXED COST	TOTAL
PHOSPHATE (P2O5)	\$0.40	90 LBS	\$36.00						\$36.00
INSECTICIDE (CUSTOM)	\$21.71	1 X/ACRE	\$21.71						\$21.71
WIRE	\$0.36	43 LBS	\$15.39						\$15.39
ESTABLISHMENT: Principal		6 YEARS						\$54.20	\$54.20
: Interest								\$12.33	\$12.33
CANAL WATER		44 AC. IN.	\$28.00						\$28.00
SUBTOTAL			\$101.10					\$66.54	\$167.64
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (8X)		4.00 HR		\$20.60					\$20.60
HARVEST OPERATIONS									
SWATHER (4X)	14 FT.	0.64 HR		\$3.30	\$5.03	\$0.37	\$20.42	\$29.12	
BALER, PTO (4X)	50 HP	0.84 HR		\$4.33	\$6.28	\$1.04	\$15.95	\$27.60	
BALE WAGON (CUSTOM) (2X)			\$23.40						\$23.40
SUBTOTAL		1.48 HR	\$23.40	\$7.62	\$11.32	\$1.41	\$36.37	\$80.11	
OVERHEAD EXPENSES									
DOWNTIME		0.37 HR		\$1.91					\$1.91
EMPLOYEE BENEFITS				\$5.08					\$5.08
INSURANCE			\$0.56						\$0.56
LAND TAXES								\$5.09	\$5.09
SUPERVISION AND MANAGEMENT				\$50.94					\$50.94
OTHER EXPENSES			\$184.39						\$184.39
SUBTOTAL		0.37 HR	\$184.95	\$57.93				\$5.09	\$247.96
TOTAL OPERATING EXPENSES		5.85 HR	\$309.45	\$86.15	\$11.32	\$1.41	\$107.99	\$516.31	
NET OPERATING PROFIT								\$143.69	
INTEREST ON OPERATING CAPITAL		(\$53.56 @ 8.00%)							\$4.28
INTEREST ON EQUIPMENT INVESTMENT									\$26.32
RETURN TO LAND AND RISK								\$113.08	
BUDGET SUMMARY									
GROSS RETURN		\$660.00							
VARIABLE OPERATING EXPENSES	\$322.17								
RETURN OVER VARIABLE EXPENSES		\$337.83	(GROSS MARGIN)						
FIXED EXPENSES	\$107.99								
NET FARM INCOME		\$229.84	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	\$86.15								
NET OPERATING PROFIT		\$143.69	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	\$30.61								
RETURN TO LAND AND RISK		\$113.08							

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 2006.
 Planting dates: March 1 - May 1
 Harvesting dates: June 15 - July 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
SMALL GRAIN HAY	\$120.00	2.50 TONS (STACKED)						\$300.00
TOTAL								\$300.00
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
SUBTOTAL			\$62.91					\$62.91
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$3.45	\$8.16	\$4.17	\$36.63	\$52.41
DISC (2X)	96 HP	0.34 HR		\$1.75	\$4.14	\$1.65	\$19.69	\$27.24
PLANE	96 HP	0.24 HR		\$1.24	\$2.92	\$0.52	\$25.71	\$30.39
BORDER DISC	50 HP	0.05 HR		\$0.26	\$0.37	\$0.10	\$5.53	\$6.26
DRILL	50 HP	0.25 HR		\$1.29	\$1.87	\$0.49	\$14.98	\$18.62
IRRIGATE (4X)		2.00 HR		\$10.30				\$10.30
SUBTOTAL		3.55 HR		\$18.28	\$17.47	\$6.93	\$102.54	\$145.23
HARVEST OPERATIONS								
SWATHER	14 FT.	0.16 HR		\$0.82	\$1.26	\$0.09	\$5.10	\$7.28
BALER, PTO	50 HP	0.21 HR		\$1.08	\$1.57	\$0.26	\$3.99	\$6.90
BALEWAGON			\$27.30					\$27.30
SUBTOTAL		0.37 HR		\$1.91	\$2.83	\$0.35	\$9.09	\$41.48
OVERHEAD EXPENSES								
DOWNTIME		0.48 HR		\$2.47				\$2.47
EMPLOYEE BENEFITS				\$3.63				\$3.63
INSURANCE			\$0.40					\$0.40
LAND TAXES							\$2.54	\$2.54
SUPERVISION AND MANAGEMENT				\$23.96				\$23.96
OTHER EXPENSES			\$92.19					\$92.19
SUBTOTAL		0.48 HR	\$92.60	\$30.07			\$2.54	\$125.20
TOTAL OPERATING EXPENSES		4.40 HR	\$155.50	\$50.25	\$20.30	\$7.28	\$114.18	\$374.82
NET OPERATING PROFIT								(\$74.82)
INTEREST ON OPERATING CAPITAL		(\$37.82	@	8.00%)		\$3.03
INTEREST ON EQUIPMENT INVESTMENT								\$28.03
RETURN TO LAND AND RISK								(\$105.88)

BUDGET SUMMARY		
GROSS RETURN		\$300.00
VARIABLE OPERATING EXPENSES	\$183.09	
RETURN OVER VARIABLE EXPENSES	\$116.91	(GROSS MARGIN)
FIXED EXPENSES	\$114.18	
NET FARM INCOME	\$2.74	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$50.25	
NET OPERATING PROFIT	(\$47.52)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$31.06	
RETURN TO LAND AND RISK	(\$78.58)	

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 2006.
 Planting dates: July 1 - July 31
 Harvesting dates: August 10 - September 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
SORGHUM HAY	\$105.00	2.00 TONS (STACKED)	\$210.00
GRAZING	\$5.00	1.00 ACRE	\$5.00
TOTAL			\$215.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$1.22	35 LBS	\$42.70		\$42.70
WIRE	\$0.36	17 LBS	\$6.09		\$6.09
CANAL WATER		24 AC. IN.	\$28.00		\$28.00
SUBTOTAL			\$76.79		\$76.79

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	96 HP	0.17 HR		\$0.88	\$2.07	\$0.83	\$9.85	\$13.62
DRILL	50 HP	0.25 HR		\$1.29	\$1.87	\$0.49	\$14.98	\$18.62
IRRIGATE (4X)		2.00 HR		\$10.30				\$10.30
SUBTOTAL		2.42 HR		\$12.46	\$3.94	\$1.31	\$24.82	\$42.54

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER (2X)	14 FT.	0.32 HR		\$1.65	\$2.52	\$0.19	\$10.21	\$14.56
BALER, PTO (2X)	50 HP	0.42 HR		\$2.16	\$3.14	\$0.52	\$7.98	\$13.80
BALEWAGON			\$23.40					\$23.40
SUBTOTAL		0.74 HR		\$3.81	\$5.66	\$0.70	\$18.18	\$51.76

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.29 HR		\$1.49				\$1.49
EMPLOYEE BENEFITS			\$2.93				\$2.93
INSURANCE		\$0.33					\$0.33
LAND TAXES						\$2.54	\$2.54
SUPERVISION AND MANAGEMENT			\$17.63				\$17.63
OTHER EXPENSES		\$92.19					\$92.19
SUBTOTAL	0.29 HR	\$92.52	\$22.05			\$2.54	\$117.11

TOTAL OPERATING EXPENSES	3.45 HR	\$169.30	\$38.33	\$9.60	\$2.02	\$45.55	\$288.19
--------------------------	---------	----------	---------	--------	--------	---------	----------

NET OPERATING PROFIT							(\$73.19)
----------------------	--	--	--	--	--	--	-----------

INTEREST ON OPERATING CAPITAL	(\$40.24	@	8.00%)		\$3.22
INTEREST ON EQUIPMENT INVESTMENT							\$28.03

RETURN TO LAND AND RISK							(\$104.45)
-------------------------	--	--	--	--	--	--	------------

BUDGET SUMMARY

GROSS RETURN		\$215.00	
VARIABLE OPERATING EXPENSES	\$180.92		
RETURN OVER VARIABLE EXPENSES		\$34.08	(GROSS MARGIN)
FIXED EXPENSES	\$45.55		
NET FARM INCOME		(\$11.47)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$38.33		
NET OPERATING PROFIT		(\$49.79)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$31.25		
RETURN TO LAND AND RISK		(\$81.05)	

ties

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 2006.
 Planting dates: May 1 - June 15
 Harvesting dates: August 15 - September 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
CORN SILAGE	\$16.00	20.00 TONS (STANDING)	\$320.00
TOTAL			\$320.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$1.25	30 000	\$37.50		\$37.50
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			\$139.40		\$139.40

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$3.45	\$8.16	\$4.17	\$36.63	\$52.41
DISC (2X)	96 HP	0.34 HR		\$1.75	\$4.14	\$1.65	\$19.69	\$27.24
LAND PLANE	96 HP	0.24 HR		\$1.24	\$2.92	\$0.52	\$25.71	\$30.39
LISTER/PLANTER	96 HP	0.26 HR		\$1.34	\$3.17	\$1.16	\$113.64	\$119.30
CULTIVATOR (2X)	50 HP	0.42 HR		\$2.16	\$3.14	\$1.23	\$26.84	\$33.38
IRRIGATE (8X)		4.00 HR		\$20.60				\$20.60
SUBTOTAL		5.93 HR		\$30.54	\$21.53	\$8.74	\$222.52	\$283.33

OVERHEAD EXPENSES

DOWNTIME		0.48 HR		\$2.48				\$2.48
EMPLOYEE BENEFITS				\$5.50				\$5.50
INSURANCE			\$0.61					\$0.61
LAND TAXES							\$5.09	\$5.09
SUPERVISION AND MANAGEMENT				\$27.37				\$27.37
OTHER EXPENSES			\$184.39					\$184.39
SUBTOTAL		0.48 HR	\$185.00	\$35.35			\$5.09	\$225.43

TOTAL OPERATING EXPENSES 6.41 HR \$324.40 \$65.89 \$21.53 \$8.74 \$227.60 \$648.16

NET OPERATING PROFIT (\$328.16)

INTEREST ON OPERATING CAPITAL (\$ 77.27 @ 8.00%) \$6.18
 INTEREST ON EQUIPMENT INVESTMENT \$129.43

RETURN TO LAND AND RISK (\$463.78)

BUDGET SUMMARY

GROSS RETURN		\$320.00	
VARIABLE OPERATING EXPENSES	\$354.67		
RETURN OVER VARIABLE EXPENSES		(\$34.67)	(GROSS MARGIN)
FIXED EXPENSES	\$227.60		
NET FARM INCOME		(\$262.27)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$65.89		
NET OPERATING PROFIT		(\$328.16)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$135.61		
RETURN TO LAND AND RISK		(\$463.78)	

TABLE 10. Summary of per acre costs and returns for a 100 acre farm with above average average management, Projected 2006.

	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		\$130.00	\$120.00	\$105.00	\$16.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$0.00
SECOND INCOME		\$10.00	\$0.00	\$5.00	\$0.00
GROSS RETURN		\$660.00	\$300.00	\$215.00	\$320.00
CASH OPERATING EXPENSES					
SEED	\$64.00		\$25.60	\$42.70	\$37.50
FERTILIZER	\$54.20	\$36.00			\$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	\$14.54	\$11.32	\$20.30	\$9.60	\$21.53
FUEL-IRRIGATION					
REPAIRS	\$6.41	\$1.41	\$7.28	\$2.02	\$8.74
CUSTOM CHARGES	\$70.71	\$23.40			
LAND TAXES		\$5.09	\$2.54	\$2.54	\$5.09
OTHER EXPENSES	\$0.24	\$184.95	\$92.60	\$92.52	\$185.00
TOTAL CASH EXPENSES	\$210.10	\$327.26	\$185.63	\$183.46	\$359.76
RETURN OVER CASH EXPENSES	(\$210.10)	\$332.74	\$114.37	\$31.54	(\$39.76)
FIXED EXPENSES	\$76.83	\$102.90	\$111.64	\$43.01	\$222.52
TOTAL EXPENSES	\$286.94	\$430.16	\$297.26	\$226.47	\$582.27
NET FARM INCOME	(\$286.94)	\$229.84	\$2.74	(\$11.47)	(\$262.27)
LABOR AND MANAGEMENT COSTS	\$38.28	\$86.15	\$50.25	\$38.33	\$65.89
NET OPERATING PROFIT	(\$325.22)	\$143.69	(\$47.52)	(\$49.79)	(\$328.16)
CAPITAL COSTS					
INTEREST ON OPERATING CAPITAL		\$4.28	\$3.03	\$3.22	\$6.18
INTEREST ON EQUIPMENT INVESTMENT		\$26.32	\$28.03	\$28.03	\$129.43
TOTAL CAPITAL COSTS	\$0.00	\$30.61	\$31.06	\$31.25	\$135.61
RETURN TO LAND AND RISK	(\$325.22)	\$113.08	(\$78.58)	(\$81.05)	(\$463.78)

TABLE 11. Whole farm summary, Valencia and Southern Bernalillo Counties,
Projected 2006.

GROSS RETURNS		
ALFALFA HAY	71.00 ACRES	
CROP		\$46,150
GRAZING		\$710
SMALL GRAIN HAY	10.00 ACRES	
CROP		\$3,000
SORGHUM HAY	10.00 ACRES	
CROP		\$2,100
GRAZING		\$50
CORN FOR SILAGE	10.00 ACRES	
CROP		\$3,200
GROSS RETURN		\$55,210
CASH OPERATING EXPENSES		
SEED		\$1,826
FERTILIZER		\$3,535
CHEMICALS		\$1,952
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$1,247
CANAL WATER		\$2,828
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,492
FUEL-IRRIGATION		\$0
REPAIRS		\$357
CUSTOM CHARGES		\$2,510
LAND TAXES		\$463
OTHER EXPENSES		\$16,835
TOTAL CASH EXPENSES		\$33,045
RETURN OVER CASH EXPENSES		\$22,165
FIXED EXPENSES		\$8,151
TOTAL EXPENSES		\$41,196
NET FARM INCOME		\$14,014
LABOR AND MANAGEMENT COSTS		\$8,121
NET OPERATING PROFIT		\$5,893
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$428
INTEREST ON EQUIPMENT INVESTMENT		\$3,724
TOTAL CAPITAL COSTS		\$4,152
RETURN TO LAND AND RISK		\$1,741

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$5,000 /ACRE	(\$13,259)	1.09%
\$6,500 /ACRE	(\$17,759)	0.86%
\$8,000 /ACRE	(\$22,259)	0.70%
\$9,500 /ACRE	(\$26,759)	0.60%
\$11,000 /ACRE	(\$31,259)	0.52%
\$12,500 /ACRE	(\$35,759)	0.46%

* 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)