

TABLE 1. Basic cost information for the Carlsbad Basin, Eddy County, 2003.

Item			
Labor Wage Rate:			
Equipment operators		\$/hour	\$6.80
General & Irrigators		\$/hour	\$6.35
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)		\$/pound	\$0.36
Phosphate (P205)		\$/pound	\$0.33
Canal water	3 AC. FT.	\$/acre	\$41.00
Wire		\$/lb.	\$0.38
Seed:			
Alfalfa		\$/pound	\$3.00
Cotton			
Picker		\$/pound	\$0.56
Stripper		\$/pound	\$0.51
Barley		\$/pound	\$0.40
Sudan		\$/pound	\$0.52
Diesel fuel		\$/gallon	\$1.30
Gasoline		\$/gallon	\$1.35
Electricity		cents/KwHr	5.50
Natural Gas		\$/MCF	\$3.29
LP Gas		\$/gallon	\$0.80
Employee Liability Insurance		\$/ \$1,000 wages	\$20.00
Employee Benefits		percent/w ages	18.00%
Labor Downtime		percent	25.00%
Financial Rates:			
Operating Capital Interest Rate		percent	8.00%
Land Interest Rate		percent	7.00%
Equipment Interest Rate		percent	8.00%
Real Interest Rate		percent	4.00%
Land Taxes	\$250.00	/acre (full value)	\$1.88
Personal Property Tax Rate - NR		\$/ \$1,000 (Assessed Value)	\$22.56
	- R		\$19.86
Supervision Factors			
Field Crop-Irrigation		\$/labor hour	\$1.00
Field Crop-Equipment & General		\$/labor hour	\$0.50
Vegetable Crop-Irrigation		\$/labor hour	\$2.90
Vegetable Crop-Equip & General		\$/labor hour	\$1.00
Management Rate			
Field Crops		percent/GR	7.00%
Vegetable Crops		percent/TOE	10.00%

TABLE 1a. Overhead cost information for the Carlsbad Basin, Eddy County, 2003.

ITEM			
Electricity (Domestic & Shop)		\$185.00 per month	\$2,220
Telephone		\$115.00 per month	\$1,380
Accounting & Legal			\$660
Misc. Supplies & Hand Tools			\$810
Pickup and Auto			
miles	15,000	@ \$0.365 per mile	\$5,475
Insurance			
- general liability (non-employee)			\$1,305
- fire/theft			\$865
Property Taxes			
- non-planted land			\$40
- other than land & machinery			\$300
Fixed Costs: Pump			\$1,566
Building repairs and maintenance			\$520
Dues, fees, publications			\$195
Farmstead Equipment			\$8,890
Total			\$24,226
Total Per Planted Acre			\$134.59

BUDGET AREA..... CARLSBAD BASIN, EDDY COUNTY, 2003.
 FARM SIZE..... 200 ACRES
 IRRIGATION TYPE..... FLOOD
 NUMBER OF CROPS..... 6

ACREAGE SUMMARY:	WATER USE		
	LAND USE (ACRES)	AC. IN. PER ACRE	TOTAL AC. IN.
ALFALFA ESTABLISHMENT *	25.00	8	200
ALFALFA	100.00	48	4,800
BARLEY	4.25	20	85
ARP	0.00		
FLEX IN PICKER COTTON	0.75	22	17
PICKER COTTON	51.00	22	1,122
ARP	0.00		
FLEX IN PICKER COTTON	9.00	22	198
STRIPPER COTTON	0.00	0	0
ARP	0.00		
FLEX	0.00		0
SUDAN	10.00	24	240
RED CHILE	5.00	48	240
ROADS, DITCHES, BORDERS, HOMESTEAD	20.00		
TOTAL	200.00		6,902
ACRE FEET PER ACRE OF WATER RIGHTS			2.88

* DOUBLE-CROPPED

TABLE 2. Pumping costs and data for irrigation wells, Carlsbad Basin, Eddy County, 2003.

INPUT DATA

DELIVERY PSI:		DEPTH CHARACTERISTICS:	
SPRINKLER...	0	STATIC...	80
		DRAW DOV	45
		TOTAL HEAD....	125
		CASING...	160
GALLONS PER MINUTE (GPM)...	1200		
WORK HORSEPOWER.....	38		
EFFICIENCY FACTOR:			
ELECTRICITY.	0.470		
NATURAL GAS.	0.120		
LP GAS.....	0.120		
DIESEL.....	0.160		
FUEL COST PER UNIT :			
ELECTRICITY.	\$5.50	cents/KwHr	
NATURAL GAS.	\$3.29	\$/MCF	
LP GAS.....	\$0.80	\$/GAL	
DIESEL.....	\$1.30	\$/GAL	

FUEL PUMPING COSTS

ELECTRIC WELL:	
COST PER HOUR.....	\$3.34
COST PER ACRE INCH.....	\$1.26
NATURAL GAS WELL:	
COST PER HOUR.....	\$2.93
COST PER ACRE INCH.....	\$1.10
LP GAS WELL:	
COST PER HOUR.....	\$7.03
COST PER ACRE INCH.....	\$2.65
DIESEL WELL:	
COST PER HOUR.....	\$5.56
COST PER ACRE INCH.....	\$2.10

TABLE 3. Equipment summary for a 200 acre flood-irrigated farm with above average management, Carlsbad Basin, 2003.

EQUIPMENT ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	VARIABLE COSTS					FIXED COSTS		
			TOTAL VALUE	FUEL AND LUBRICANT	REPAIR	FUEL,LUBE PER HR	REPAIR PER HR	DEPRECI- ATION	TAXES	TOTAL PER HOUR
TRACTOR 27 HP	93	1	\$2,330	\$254	\$14	\$2.73	\$0.15	\$50	\$9	\$0.64
TRACTOR 96 HP	169	1	\$19,240	\$1,620	\$435	\$9.59	\$2.57	\$1,430	\$161	\$9.43
TRACTOR 145 HP	254	1	\$31,475	\$2,977	\$1,062	\$11.74	\$4.19	\$4,652	\$262	\$19.38
SWATHER 14 FT SP	80	1	\$4,300	\$389	\$46	\$4.87	\$0.58	\$1,450	\$109	\$19.49
BORDER DISC 6-DISC	33	1	\$300		\$12		\$0.37	\$40	\$2	\$1.27
DISC 12 FT	51	1	\$2,250		\$141		\$2.79	\$300	\$17	\$6.27
PLOW 3-16 IN	69	1	\$3,350		\$288		\$4.15	\$447	\$25	\$6.80
CULTIVATOR 4-ROW	54	1	\$1,500		\$101		\$1.86	\$200	\$11	\$3.90
DRILL 12 FT	8	1	\$2,200		\$9		\$1.06	\$220	\$17	\$28.70
PLANTER 4-ROW	17	1	\$3,400		\$28		\$1.63	\$340	\$26	\$21.38
DRAG 12 FT	18	1	\$250		\$0		\$0.01	\$17	\$2	\$1.04
LISTER 4-ROW	12	1	\$1,600		\$23		\$1.98	\$107	\$12	\$10.03
SHREDDER 2-ROW	19	1	\$1,250		\$4		\$0.20	\$83	\$9	\$4.86
BALER PTO 2-WIRE	126	1	\$1,500		\$19		\$0.15	\$385	\$29	\$3.29
RIPPER 7-SHANK	7	1	\$1,200		\$10		\$1.49	\$160	\$9	\$25.04
COTTON TRAILER	30	5	\$3,500		\$1		\$0.03	\$467	\$26	\$16.23
VEGETABLE TRAILER	5	1	\$700		\$0		\$0.03	\$93	\$5	\$19.72
HAY RAKE 1-REEL	48	1	\$750		\$10		\$0.21	\$100	\$6	\$2.20
ROLLING CULTIVATOR 4-ROW	13	1	\$2,000		\$32		\$2.48	\$267	\$15	\$22.08
ELECTRIC WELL	91	1	\$13,200	\$302	\$8	\$3.34	\$0.09	\$1,389	\$99	\$16.45
TOTAL			\$96,295	\$5,542	\$2,244			\$12,197	\$853	

TABLE 4. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 200 acre farm with above average management, Carlsbad Basin, 2003.
Planting dates: August 20 - September 30

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASED INPUTS</u>								
SEED	\$3.00	25 LBS						\$75.00
CANAL WATER		8 AC. IN.						\$0.00
PUMP WATER		0 AC. IN.						
SUBTOTAL								\$75.00
<u>PREHARVEST OPERATIONS</u>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.16	\$2.00	\$1.19	\$4.36	\$8.70
PLOW	145 HP	0.67 HR		\$4.56	\$7.87	\$5.59	\$17.54	\$35.55
DISC (3X)	145 HP	0.51 HR		\$3.47	\$5.99	\$3.56	\$13.08	\$26.10
LASER (CUSTOM)			\$73.33					\$73.33
RIPPER	145 HP	0.27 HR		\$1.84	\$3.17	\$1.53	\$11.99	\$18.53
DISC	145 HP	0.17 HR		\$1.16	\$2.00	\$1.19	\$4.36	\$8.70
DRAG	96 HP	0.17 HR		\$1.16	\$1.63	\$0.44	\$1.78	\$5.01
BORDER DISC (2X)	27 HP	0.10 HR		\$0.68	\$0.27	\$0.05	\$0.19	\$1.20
DRILL	96 HP	0.21 HR		\$1.43	\$2.01	\$0.76	\$8.01	\$12.21
IRRIGATE (2X)		1.00 HR		\$6.35	\$0.00	\$0.00	\$0.00	\$6.35
SUBTOTAL		3.27 HR	\$73.33	\$21.79	\$24.93	\$14.31	\$61.32	\$195.67
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.57 HR		\$3.86				\$3.86
EMPLOYEE BENEFITS				\$3.92				\$3.92
INSURANCE			\$0.44					\$0.44
SUPERVISION AND MANAGEMENT				\$21.08				\$21.08
SUBTOTAL		0.57 HR	\$0.44	\$28.86				\$29.30
TOTAL OPERATING EXPENSES		3.84 HR	\$148.77	\$50.65	\$24.93	\$14.31	\$61.32	\$299.97

TABLE 5. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 200 acre farm with above average management, Carlsbad Basin, 2003.
Harvesting dates: May 20 - October 15

ITEM	PRICE	YIELD						TOTAL			
GROSS RETURNS											
ALFALFA HAY	\$140.00	6.00	TONS (STACKED)					\$840.00			
GRAZING	\$10.00	1	ACRE					\$10.00			
TOTAL								\$850.00			
PURCHASED INPUTS											
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS		FIXED COST		TOTAL			
NITROGEN (N)	\$0.36	36	LBS		\$12.96		\$12.96				
PHOSPHATE (P205)	\$0.33	92	LBS		\$30.36		\$30.36				
INSECTICIDE (CUSTOM)	\$27.53	1	X/ACRE		\$27.53		\$27.53				
HERBICIDE (CUSTOM)	\$26.23	1	X/ACRE		\$26.23		\$26.23				
WIRE	\$0.38	51	LBS		\$19.38		\$19.38				
ESTABLISHMENT: Principal		4	YEARS				\$74.99	\$74.99			
: Interest							\$12.39	\$12.39			
CANAL WATER		48	AC. IN.		\$41.00		\$41.00				
PUMP WATER*		0	AC. IN.				\$0.00				
SUBTOTAL				\$157.46		\$87.38		\$244.84			
PREHARVEST OPERATIONS											
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL		
BORDER DISC (6X)	27 HP	0.30	HR		\$2.04	\$0.82	\$0.16	\$0.57	\$3.59		
FERTILIZE	DEALER APPLIED										
IRRIGATE (8X)		4.00	HR		\$25.40	\$0.00	\$0.00	\$0.00	\$25.40		
SUBTOTAL				4.30 HR		\$27.44	\$0.82	\$0.16	\$0.57	\$28.99	
HARVEST OPERATIONS											
SWATHER (6X)	14 FT SP	0.80	HR		\$5.44	\$3.89	\$0.46	\$15.59	\$25.39		
RAKE (4X)	96 HP	0.48	HR		\$3.26	\$4.60	\$1.34	\$5.58	\$14.79		
BALER (6X)	145 HP	1.26	HR		\$8.57	\$14.79	\$5.47	\$28.56	\$57.39		
BALEWAGON					\$57.60				\$57.60		
SUBTOTAL				2.54 HR		\$57.60	\$17.27	\$23.29	\$7.27	\$49.73	\$155.17
OVERHEAD EXPENSES											
DOWNTIME		0.71	HR		\$4.83				\$4.83		
EMPLOYEE BENEFITS					\$8.05				\$8.05		
INSURANCE					\$0.89				\$0.89		
LAND TAXES								\$1.88	\$1.88		
SUPERVISION AND MANGEMENT					\$64.92				\$64.92		
OTHER EXPENSES					\$134.59				\$134.59		
SUBTOTAL				0.71 HR		\$135.48	\$77.80	\$1.88		\$215.16	
TOTAL OPERATING EXPENSES				7.55 HR		\$350.54	\$122.51	\$24.11	\$7.43	\$139.57	\$644.16
NET OPERATING PROFIT								\$205.84			
INTEREST ON OPERATING CAPITAL	(\$81.52	@	8.00%)				\$6.52		
INTEREST ON EQUIPMENT INVESTMENT									\$34.57		
RETURN TO LAND AND RISK								\$164.75			

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$850.00	
VARIABLE OPERATING EXPENSES	\$382.08		
RETURN OVER VARIABLE EXPENSES		\$467.92	(GROSS MARGIN)
FIXED EXPENSES	\$139.57		
NET FARM INCOME		\$328.35	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$122.51		
NET OPERATING PROFIT		\$205.84	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$41.09		
RETURN TO LAND AND RISK		\$164.75	

TABLE 6. Barley, flood-irrigated, budgeted per acre costs and returns for a 200 acre farm with above average management, Carlsbad Basin, 2003.

Planting dates: August 20 - September 30

Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
BARLEY	\$3.30	25.00	CWT					\$82.50	
DIRECT PAYMENT	\$0.24	25.00	CWT					\$6.00	
COUNTER CYCLICAL PAYMENT	\$0.00							\$0.00	
GRAZING	\$40.00	1.00	ACRE					\$40.00	
TOTAL								\$128.50	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS				TOTAL	
SEED	\$0.40	110	LBS	\$44.00				\$44.00	
NITROGEN (N)	\$0.36	40	LBS	\$14.40				\$14.40	
HERBICIDE	\$14.11	1	X/ACRE	\$14.11				\$14.11	
CANAL WATER		20	AC. IN.	\$41.00				\$41.00	
PUMP WATER*		0	AC. IN.					\$0.00	
CROP INSURANCE	\$11.76			\$11.76				\$11.76	
SUBTOTAL				\$125.27				\$125.27	
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.67	HR		\$4.56	\$7.87	\$5.59	\$17.54	\$35.55
DISC (2X)	145 HP	0.34	HR		\$2.31	\$3.99	\$2.37	\$8.72	\$17.40
DRAG	96 HP	0.17	HR		\$1.16	\$1.63	\$0.44	\$1.78	\$5.01
BORDER DISC	27 HP	0.05	HR		\$0.34	\$0.14	\$0.03	\$0.10	\$0.60
DRILL	96 HP	0.21	HR		\$1.43	\$2.01	\$0.76	\$8.01	\$12.21
IRRIGATE (5X)		2.50	HR		\$15.88	\$0.00	\$0.00	\$0.00	\$15.88
SUBTOTAL		3.94	HR		\$25.67	\$15.64	\$9.19	\$36.14	\$86.64
HARVEST OPERATIONS									
COMBINE (CUSTOM)				\$14.68					\$14.68
HAUL (CUSTOM)				\$7.80					\$7.80
SUBTOTAL				\$22.48					\$22.48
OVERHEAD EXPENSES									
DOWNTIME		0.36	HR		\$2.45				\$2.45
EMPLOYEE BENEFITS					\$4.62				\$4.62
INSURANCE				\$0.51					\$0.51
LAND TAXES							\$1.88		\$1.88
SUPERVISION AND MANGEMENT					\$9.00				\$9.00
OTHER EXPENSES				\$134.59					\$134.59
SUBTOTAL		0.36	HR	\$135.10	\$16.06		\$1.88		\$153.04
TOTAL OPERATING EXPENSES		4.30	HR	\$282.85	\$41.73	\$15.64	\$9.19	\$38.02	\$387.43
NET OPERATING PROFIT									(\$258.93)
INTEREST ON OPERATING CAPITAL	(	\$70.72	@	8.00%	)				\$5.66
INTEREST ON EQUIPMENT INVESTMENT									\$23.54
RETURN TO LAND AND RISK									(\$288.14)

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$128.50	
VARIABLE OPERATING EXPENSES	\$307.68		
RETURN OVER VARIABLE EXPENSES		(\$179.18)	(GROSS MARGIN)
FIXED EXPENSES	\$38.02		
NET FARM INCOME		(\$217.20)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$41.73		
NET OPERATING PROFIT		(\$258.93)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$29.20		
RETURN TO LAND AND RISK		(\$288.14)	

TABLE 7. Sudan, flood-irrigated, budgeted per acre costs and returns for a 200 acre farm with above average management, Carlsbad Basin, 2003.
 Planting Dates: August 20 - September 30
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL		
GROSS RETURNS										
GRAZING	\$110.00	1 TON	(STACKED)					\$110.00		
TOTAL								\$110.00		
PURCHASED INPUTS										
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS				TOTAL		
SEED	\$0.52	25	LBS	\$13.00				\$13.00		
NITROGEN (N)	\$0.36	250	LBS	\$90.00				\$90.00		
PHOSPHATE (P2O5)	\$0.33	60	LBS	\$19.80				\$19.80		
CANAL WATER		24	AC. IN.	\$41.00				\$41.00		
PUMP WATER*		0	AC. IN.					\$0.00		
SUBTOTAL				\$163.80				\$163.80		
PREHARVEST OPERATIONS										
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.67	HR		\$4.56	\$7.87	\$5.59	\$17.54	\$35.55	
DISC (2X)	145 HP	0.28	HR		\$1.90	\$3.29	\$1.95	\$7.18	\$14.33	
DRAG	96 HP	0.17	HR		\$1.16	\$1.63	\$0.44	\$1.78	\$5.01	
BORDER DISC	27 HP	0.05	HR		\$0.34	\$0.14	\$0.03	\$0.10	\$0.60	
DRILL	96 HP	0.21	HR		\$1.43	\$2.01	\$0.76	\$8.01	\$12.21	
IRRIGATE (6X)		3.00	HR		\$19.05	\$0.00	\$0.00	\$0.00	\$19.05	
SUBTOTAL		4.38	HR		\$28.43	\$14.94	\$8.77	\$34.61	\$86.74	
OVERHEAD EXPENSES										
DOWNTIME		0.35	HR		\$2.35				\$2.35	
EMPLOYEE BENEFITS					\$5.12				\$5.12	
INSURANCE				\$0.57					\$0.57	
LAND TAXES							\$1.88		\$1.88	
SUPERVISION AND MANGEMENT					\$11.39				\$11.39	
OTHER EXPENSES				\$134.59					\$134.59	
SUBTOTAL		0.35	HR		\$135.16	\$18.85		\$1.88	\$155.89	
TOTAL OPERATING EXPENSES		4.73	HR		\$298.96	\$47.29	\$14.94	\$8.77	\$36.49	\$406.43
NET OPERATING PROFIT								(\$296.43)		
INTEREST ON OPERATING CAPITAL	(	\$87.83	@	8.00%	)			\$7.03
INTEREST ON EQUIPMENT INVESTMENT								\$22.67		
RETURN TO LAND AND RISK								(\$326.13)		

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$110.00	
VARIABLE OPERATING EXPENSES	\$322.66		
RETURN OVER VARIABLE EXPENSES		(\$212.66)	(GROSS MARGIN)
FIXED EXPENSES	\$36.49		
NET FARM INCOME		(\$249.15)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$47.29		
NET OPERATING PROFIT		(\$296.43)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$29.70		
RETURN TO LAND AND RISK		(\$326.13)	

TABLE 8. Upland cotton (picker), flood-irrigated, budgeted per acre costs and returns for a 200 acre farm with above average management, Carlsbad Basin, 2003.
 Planting dates: April 15 - May 15
 Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
COTTON LINT	\$0.570	675 LBS						\$384.75
COTTON SEED	\$0.08	1,080 LBS						\$81.00
DIRECT PAYMENT	\$0.0667	675 LBS						\$45.02
COUNTER CYCLICAL PAYMENT	\$0.0873	675 LBS						\$58.93
TOTAL							\$569.70	
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS		TOTAL		
SEED	\$0.56	20 LBS	\$11.20			\$11.20		
NITROGEN (N)	\$0.36	20 LBS	\$7.20			\$7.20		
PHOSPHATE (P205)	\$0.33	40 LBS	\$13.20			\$13.20		
HERBICIDE	\$13.22	1 ACRE	\$13.22			\$13.22		
INSECTICIDE (CUSTOM)	\$27.39	2 X/ACRE	\$54.78			\$54.78		
CROP INSURANCE		FCIC	\$0.82			\$0.82		
CANAL WATER		22 AC. IN.	\$41.00			\$41.00		
PUMP WATER*		0 AC. IN.	\$0.00			\$0.00		
SUBTOTAL			\$141.43			\$141.43		
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.67 HR		\$4.56	\$7.87	\$5.59	\$17.54	\$35.55
DISC	145 HP	0.17 HR		\$1.16	\$2.00	\$1.19	\$4.36	\$8.70
DRAG	96 HP	0.17 HR		\$1.16	\$1.63	\$0.44	\$1.78	\$5.01
DISC & SPRAY	145 HP	0.20 HR		\$1.36	\$2.35	\$1.40	\$5.13	\$10.23
LISTER	96 HP	0.18 HR		\$1.22	\$1.73	\$0.82	\$3.50	\$7.27
FERTILIZE	DEALER APPLIED							
PRE-IRRIGATE		0.75 HR		\$4.76	\$0.00	\$0.00	\$0.00	\$4.76
ROLLING CULTIVATOR	96 HP	0.21 HR		\$1.43	\$2.01	\$1.06	\$6.62	\$11.12
PLANTER	96 HP	0.26 HR		\$1.77	\$2.49	\$1.09	\$8.01	\$13.37
CULTIVATOR (4X)	27 HP	0.84 HR		\$5.71	\$2.30	\$1.69	\$3.81	\$13.51
HOEING			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$9.53	\$0.00	\$0.00	\$0.00	\$9.53
SUBTOTAL		4.95 HR	\$20.00	\$32.65	\$22.37	\$13.27	\$50.76	\$139.05
HARVEST OPERATIONS								
COTTON PICKER (CUSTOM)			\$101.05					\$101.05
HAUL	80 HP	0.50 HR		\$3.40	\$4.80	\$1.30	\$12.83	\$22.33
GIN COTTON (CUSTOM)			\$101.05					\$101.05
SUBTOTAL		0.50 HR	\$202.10	\$3.40	\$4.80	\$1.30	\$12.83	\$224.42
POSTHARVEST OPERATIONS								
SHREDDER	80 HP	0.29 HR		\$1.97	\$2.78	\$0.80	\$4.14	\$9.70
SUBTOTAL		0.29 HR		\$1.97	\$2.78	\$0.80	\$4.14	\$9.70
OVERHEAD EXPENSES								
DOWNTIME		0.83 HR		\$5.64				\$5.64
EMPLOYEE BENEFITS				\$6.84				\$6.84
INSURANCE			\$0.76					\$0.76
LAND TAXES						\$1.88		\$1.88
SUPERVISION AND MANGEMENT				\$43.79				\$43.79
OTHER EXPENSES			\$134.59					\$134.59
SUBTOTAL		0.83 HR	\$135.35	\$56.28			\$1.88	\$193.50
TOTAL OPERATING EXPENSES		6.57 HR	\$498.87	\$94.30	\$29.95	\$15.38	\$69.61	\$708.10
NET OPERATING PROFIT							(\$138.40)	
INTEREST ON OPERATING CAPITAL	(	\$81.03	@	8.00%	)		\$6.48	
INTEREST ON EQUIPMENT INVESTMENT							\$45.83	
RETURN TO LAND AND RISK							(\$190.72)	

* Pump water costs are shown under irrigation in the preharvest operations section.
 BUDGET SUMMARY

GROSS RETURN		\$569.70	
VARIABLE OPERATING EXPENSES	\$544.20		
RETURN OVER VARIABLE EXPENSES		\$25.50	(GROSS MARGIN)
FIXED EXPENSES	\$69.61		
NET FARM INCOME		(\$44.11)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$94.30		
NET OPERATING PROFIT		(\$138.40)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$52.32		
RETURN TO LAND AND RISK		(\$190.72)	

TABLE 9. Upland cotton (stripper), flood-irrigated, budgeted per acre costs and returns for a 200 acre farm with above average management, Carlsbad Basin, 2003.
 Planting dates: April 15 - May 15
 Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
COTTON LINT	\$0.520	675 LBS						\$351.00
COTTON SEED	\$0.08	1,080 LBS						\$81.00
DIRECT PAYMENT	\$0.0667	675 LBS						\$45.02
COUNTER CYCLICAL PAYMENT	\$0.1373	675 LBS						\$92.68
TOTAL							\$569.70	
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.51	20 LBS	\$10.20					\$10.20
NITROGEN (N)	\$0.36	20 LBS	\$7.20					\$7.20
PHOSPHATE (P205)	\$0.33	40 LBS	\$13.20					\$13.20
HERBICIDE	\$13.22	1 X/ACRE	\$13.22					\$13.22
INSECTICIDE (CUSTOM)	\$25.95	2 X/ACRE	\$51.89					\$51.89
CROP INSURANCE		FCIC	\$8.69					\$8.69
CANAL WATER		22 AC. IN.	\$41.00					\$41.00
PUMP WATER*		0 AC. IN.	\$0.00					\$0.00
SUBTOTAL			\$145.40					\$145.40
PREHARVEST OPERATIONS								
POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.67 HR	\$4.56	\$7.87	\$5.59	\$17.54	\$35.55	
DISC	145 HP	0.17 HR	\$1.16	\$2.00	\$1.19	\$4.36	\$8.70	
DRAG	96 HP	0.17 HR	\$1.16	\$1.63	\$0.44	\$1.78	\$5.01	
DISC & SPRAY	145 HP	0.20 HR	\$1.36	\$2.35	\$1.40	\$5.13	\$10.23	
LISTER	96 HP	0.18 HR	\$1.22	\$1.73	\$0.82	\$3.50	\$7.27	
FERTILIZE	DEALER APPLIED							
PRE-IRRIGATE		0.75 HR	\$4.76	\$0.00	\$0.00	\$0.00	\$4.76	
ROLLING CULTIVATOR	96 HP	0.21 HR	\$1.43	\$2.01	\$1.06	\$6.62	\$11.12	
PLANTER	96 HP	0.26 HR	\$1.77	\$2.49	\$1.09	\$8.01	\$13.37	
CULTIVATOR (4X)	27 HP	0.84 HR	\$5.71	\$2.30	\$1.69	\$3.81	\$13.51	
IRRIGATE (2X)		1.00 HR	\$6.35	\$0.00	\$0.00	\$0.00	\$6.35	
SUBTOTAL		4.45 HR	\$29.47	\$22.37	\$13.27	\$50.76	\$115.87	
HARVEST OPERATIONS								
COTTON STRIPPER (CUSTOM)			\$121.10					\$121.10
HAUL	96 HP	0.75 HR	\$5.10	\$7.19	\$1.95	\$19.24	\$33.49	
GIN COTTON (CUSTOM)			\$121.10					\$121.10
SUBTOTAL		0.75 HR	\$242.19	\$5.10	\$7.19	\$1.95	\$19.24	\$275.68
POSTHARVEST OPERATIONS								
SHREDDER	80 HP	0.29 HR	\$1.97	\$2.78	\$0.80	\$4.14	\$9.70	
SUBTOTAL		0.29 HR	\$1.97	\$2.78	\$0.80	\$4.14	\$9.70	
OVERHEAD EXPENSES								
DOWNTIME		0.94 HR	\$6.36					\$6.36
EMPLOYEE BENEFITS			\$6.58					\$6.58
INSURANCE			\$0.73					\$0.73
LAND TAXES						\$1.88	\$1.88	
SUPERVISION AND MANGEMENT			\$43.16					\$43.16
OTHER EXPENSES			\$134.59					\$134.59
SUBTOTAL		0.94 HR	\$135.32	\$56.10			\$1.88	\$193.30
TOTAL OPERATING EXPENSES		6.43 HR	\$522.91	\$92.64	\$32.35	\$16.03	\$76.02	\$739.95
NET OPERATING PROFIT							(\$170.25)	
INTEREST ON OPERATING CAPITAL	(	\$83.27	@	8.00%			\$6.66
INTEREST ON EQUIPMENT INVESTMENT							\$48.84	
RETURN TO LAND AND RISK							(\$225.75)	

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$569.70	
VARIABLE OPERATING EXPENSES	\$571.29		
RETURN OVER VARIABLE EXPENSES		(\$1.59)	(GROSS MARGIN)
FIXED EXPENSES	\$76.02		
NET FARM INCOME		(\$77.61)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$92.64		
NET OPERATING PROFIT		(\$170.25)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$55.50		
RETURN TO LAND AND RISK		(\$225.75)	

TABLE 9. Red chile, flood-irrigated, budgeted per acre costs and returns for a 200 acre farm with above average management, Carlsbad Basin, 2003.
 Planting dates: April 1 - April 15
 Harvesting dates: September 1 - October 30

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
RED CHILE	\$0.68	3,200	LBS						\$2,176.00
TOTAL									\$2,176.00
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS			TOTAL		
SEED	\$21.00	8	LBS	\$168.00				\$168.00	
NITROGEN (N)	\$0.36	200	LBS	\$72.00				\$72.00	
PHOSPHATE (P205)	\$0.33	60	LBS	\$19.80				\$19.80	
HERBICIDE (CUSTOM)	\$31.08	1	X/ACRE	\$31.08				\$31.08	
INSECTICIDE (CUSTOM)	\$44.48	1	X/ACRE	\$44.48				\$44.48	
CROP INSURANCE		40	DOLLARS	\$40.00				\$40.00	
CANAL WATER		48	AC. IN.	\$41.00				\$41.00	
SUBTOTAL				\$416.36				\$416.36	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	145 HP	0.17 HR		\$1.16	\$2.00	\$1.19	\$4.36	\$8.70	
PLOW	145 HP	0.48 HR		\$3.26	\$5.64	\$4.00	\$12.57	\$25.47	
DISC (2X)	145 HP	0.34 HR		\$2.31	\$3.99	\$2.37	\$8.72	\$17.40	
FLOAT	96 HP	0.16 HR		\$1.09	\$1.53	\$0.41	\$1.67	\$4.71	
FERTILIZE (CUSTOM)	DEALER APPLIED								
LISTER	145 HP	0.18 HR		\$1.22	\$2.11	\$1.11	\$5.29	\$9.74	
PRE-IRRIGATE		0.05 HR		\$0.32	\$0.00	\$0.20	\$37.22	\$37.74	
CULTIVATOR	96 HP	0.21 HR		\$1.43	\$2.01	\$0.93	\$2.80	\$7.17	
PLANTER	96 HP	0.26 HR		\$1.77	\$2.49	\$1.09	\$8.01	\$13.37	
CULTIVATOR (2X)	27 HP	0.42 HR		\$2.86	\$1.15	\$0.84	\$1.91	\$6.75	
THIN & HOE (2X)			\$80.00					\$80.00	
IRRIGATE (7X)		3.50 HR		\$22.23	\$0.00	\$0.00	\$0.00	\$22.23	
SUBTOTAL		5.60 HR	\$80.00	\$37.64	\$20.93	\$12.16	\$82.55	\$233.28	
HARVEST OPERATIONS									
HAND PICK			\$640.00					\$640.00	
FIELD HAUL	96 HP	1.00 HR		\$6.80	\$9.59	\$2.60	\$29.14	\$48.14	
HAUL (CUSTOM)			\$96.00					\$96.00	
SUBTOTAL		1.00 HR	\$736.00	\$6.80	\$9.59	\$2.60	\$29.14	\$784.14	
POSTHARVEST OPERATIONS									
SHREDDER	27 HP	0.29 HR		\$1.97	\$0.79	\$0.10	\$1.60	\$4.46	
OVERHEAD EXPENSES									
DOWNTIME		0.88 HR		\$5.97				\$5.97	
EMPLOYEE BENEFITS				\$6.77				\$6.77	
INSURANCE			\$0.75					\$0.75	
LAND TAXES						\$1.88		\$1.88	
SUPERVISION AND MANGEMENT				\$98.58				\$98.58	
OTHER EXPENSES			\$134.59					\$134.59	
SUBTOTAL		0.88 HR	\$135.34	\$111.32			\$1.88	\$248.54	
TOTAL OPERATING EXPENSES		7.77 HR	\$1,367.70	\$157.73	\$31.31	\$14.86	\$115.17	\$1,686.78	
NET OPERATING PROFIT								\$489.22	
INTEREST ON OPERATING CAPITAL	(	281.80	@	8.00%				\$22.54
INTEREST ON EQUIPMENT INVESTMENT								\$266.54	
RETURN TO LAND AND RISK								\$200.13	

* Pump water costs are shown under irrigation in the preharvest operations section.
 BUDGET SUMMARY

GROSS RETURN		\$2,176.00	
VARIABLE OPERATING EXPENSES	\$1,413.88		
RETURN OVER VARIABLE EXPENSES		\$762.12	(GROSS MARGIN)
FIXED EXPENSES	\$115.17		
NET FARM INCOME		\$646.95	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$157.73		
NET OPERATING PROFIT		\$489.22	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$289.08		
RETURN TO LAND AND RISK		\$200.13	

TABLE 10. Summary of per acre costs and returns for a 200 acre farm with above average management, Carlsbad Basin, Eddy County, 2003.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY	SUDAN FLOOD	PICKER COTTON	STRIPPER COTTON	RED CHILE
		TONS	CWT	ACRE	LBS	LBS	CWT
PRIMARY YIELD		6.00	25.00	1.00	675.00	0.00	3200.00
PRIMARY PRICE		140.00	3.30	110.00	0.57	0.00	0.68
GOVERNMENT PAYMENTS		0.00	6.00	0.00	103.95	0.00	0.00
SECOND INCOME		10.00	40.00	0.00	81.00	0.00	0.00
GROSS RETURN		\$850.00	\$128.50	\$110.00	\$569.70	\$0.00	\$2,176
CASH OPERATING EXPENSES							
SEED	\$75.00		\$44.00	\$13.00	\$11.20	\$0.00	\$168.00
FERTILIZER		\$43.32	\$14.40	\$109.80	\$20.40	\$0.00	\$91.80
CHEMICALS		\$53.76	\$14.11		\$68.01	\$0.00	\$75.56
CROP INSURANCE			\$11.76		\$0.82	\$0.00	\$40.00
OTHER PURCHASED INPUTS		\$19.38					
CANAL WATER	\$0.00	\$41.00	\$41.00	\$41.00	\$41.00	\$0.00	\$41.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$24.93	\$24.11	\$15.64	\$14.94	\$29.95	\$0.00	\$31.31
FUEL-IRRIGATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
REPAIRS	\$14.31	\$7.43	\$9.19	\$8.77	\$15.38	\$0.00	\$14.86
CUSTOM CHARGES	\$73.33	\$57.60	\$22.48		\$222.10	\$0.00	\$816.00
LAND TAXES		\$1.88	\$1.88	\$1.88	\$1.88	\$0.00	\$1.88
OTHER EXPENSES	\$0.44	\$135.48	\$135.10	\$135.16	\$135.35	\$0.00	\$135.34
TOTAL CASH EXPENSES	\$188.00	\$383.96	\$309.56	\$324.54	\$546.08	\$0.00	\$1,415.76
RETURN OVER CASH EXPENSES	(\$188.00)	\$466.04	(\$181.06)	(\$214.54)	\$23.62	\$0.00	\$760.24
FIXED EXPENSES	\$61.32	\$137.69	\$36.14	\$34.61	\$67.73	\$0.00	\$113.29
TOTAL EXPENSES	\$249.32	\$521.65	\$345.70	\$359.15	\$613.81	\$0.00	\$1,529.05
NET FARM INCOME	(\$249.32)	\$328.35	(\$217.20)	(\$249.15)	(\$44.11)	\$0.00	\$646.95
LABOR AND MANAGEMENT COSTS	\$50.65	\$122.51	\$41.73	\$47.29	\$94.30	\$0.00	\$157.73
NET OPERATING PROFIT	(\$299.97)	\$205.84	(\$258.93)	(\$296.43)	(\$138.40)	\$0.00	\$489.22
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$6.52	\$5.66	\$7.03	\$6.48	\$0.00	\$22.54
INTEREST ON EQUIPMENT INVESTMENT		\$34.57	\$23.54	\$22.67	\$45.83	\$0.00	\$266.54
TOTAL CAPITAL COSTS	\$0.00	\$41.09	\$29.20	\$29.70	\$52.32	\$0.00	\$289.08
RETURN TO LAND AND RISK	(\$299.97)	\$164.75	(\$288.14)	(\$326.13)	(\$190.72)	\$0.00	\$200.13

TABLE 11. Whole farm budget summary, Carlsbad Basin, Eddy County, 2003.

GROSS RETURNS		
ALFALFA HAY	100 ACRES	
CROP		\$84,000
GRAZING		\$1,000
BARLEY	4 ACRES	
CROP		\$351
DIRECT PAYMENT		\$26
COUNTER CYCLICAL PAYMENT		\$0
GRAZING		\$170
UPLAND COTTON	61 ACRES	
COTTON LINT		\$23,374
COTTON SEED		\$4,921
DIRECT PAYMENT		\$2,296
COUNTER CYCLICAL PAYMENT		\$3,580
STRIPPER COTTON	0 ACRES	
COTTON LINT		\$0
COTTON SEED		\$0
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
SUDAN	10 ACRES	
GRAZING		\$1,100
RED CHILE	5 ACRES	
CROP		\$10,880
GROSS RETURN		\$131,696
CASH OPERATING EXPENSES		
SEED		\$3,712
FERTILIZER		\$7,190
CHEMICALS		\$9,945
CROP INSURANCE		\$300
OTHER PURCHASED INPUTS		\$1,938
CANAL WATER		\$7,380
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$5,226
FUEL-IRRIGATION		\$0
REPAIRS		\$2,236
CUSTOM CHARGES		\$25,261
LAND TAXES		\$338
OTHER EXPENSES		\$24,384
TOTAL CASH EXPENSES		\$87,910
RETURN OVER CASH EXPENSES		\$43,786
FIXED EXPENSES		\$12,983
TOTAL EXPENSES		\$100,893
NET FARM INCOME		\$30,803
LABOR AND MANAGEMENT COSTS		\$20,684
NET OPERATING PROFIT		\$10,119
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$1,253
INTEREST ON EQUIPMENT INVESTMENT		\$7,901
TOTAL CAPITAL COSTS		\$9,154
RETURN TO LAND AND RISK		\$965

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$750 /ACRE	(\$5,035)	4.11%
\$1,500 /ACRE	(\$11,035)	2.55%
\$2,250 /ACRE	(\$17,035)	1.85%
\$3,000 /ACRE	(\$23,035)	1.45%

* 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)