

TABLE 1. Basic cost information for the Roswell-Hagerman area,
Chaves County, 2003.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.55
General & Irrigators	\$/hour	\$6.45
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.36
Phosphate (P205)	\$/pound	\$0.33
Seed:		
Alfalfa	\$/pound	\$3.00
Cotton		
picker	\$/pound	\$0.56
stripper	\$/pound	\$0.51
Oat Hay	\$/pound	\$0.40
Corn	\$/bag	\$89.75
Plastic Twine:	\$/box	\$19.00
Natural gas	\$/MCF	\$3.28
Diesel fuel	\$/gallon	\$1.30
Gasoline	\$/gallon	\$1.35
Electricity	cents/KwHr	5.84
LP Gas	\$/gallon	\$1.21
Employee Liability Insurance	\$/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	\$185.00 /acre (full value)	\$1.49
Personal Property Tax Rate - NR	\$/ \$1,000 (Assessed Value)	\$24.18
- R		\$20.02
Supervision Factors		
Field Crop-Irrigation	\$/labor hour	\$1.00
Field Crop-Equipment & General	\$/labor hour	\$0.50
Management Rate	percent	7.00%

TABLE 1a. Overhead cost information for Roswell-Hagerman area,
Chaves County, 2003.

ITEM		
Electricity (Domestic & Shop)	\$210.00 per month	\$2,520
Telephone	\$110.00 per month	\$1,320
Accounting & Legal		\$1,535
Misc. Supplies & Hand Tools		\$2,320
Pickup and Auto		
miles	20,000 @ \$0.365 per mile	\$7,300
Insurance		
- general liability (non-employee)		\$1,660
- fire/theft		\$1,315
Property Taxes		
- non-planted land		\$17
- other than land & machinery		\$600
Building repairs and maintenance		\$1,260
Dues, fees, publications		\$380
Farmstead Equipment		\$165
	Total	<u>\$20,392</u>
	Total Per Planted Acre	\$65.78

TABLE 2. Pumping costs and data for irrigation wells, Roswell-Hagerman area, Chaves County, 2003.

INPUT DATA

DELIVERY PSI: SPRINKLER... 40	DEPTH CHARACTERISTICS: STATIC... 150 DRAW DOV... 30 TOTAL HEAD... 180 CASING... 600	DELIVERY PSI: BOOSTER PUMP... 40
GALLONS PER MINUTE (GPM)... 1000 WORK HORSEPOWER..... 69		GALLONS PER MINUTE (GPM)... 1000 WORK HORSEPOWER..... 23
EFFICIENCY FACTOR: ELECTRICITY..... 0.540 NATURAL GAS..... 0.154 LP GAS..... 0.154 DIESEL..... 0.160		EFFICIENCY FACTOR: ELECTRICITY..... 0.540 NATURAL GAS..... 0.154 LP GAS..... 0.154 DIESEL..... 0.160
FUEL COST PER UNIT: ELECTRICITY..... 5.84 CENTS/K wHr NATURAL GAS..... \$3.28 \$/MCF LP GAS..... \$1.21 \$/GAL DIESEL..... \$1.30 \$/GAL		FUEL COST PER UNIT: ELECTRICITY..... 5.84 CENTS/KwHr NATURAL GAS..... \$3.28 \$/MCF LP GAS..... \$1.21 \$/GAL DIESEL..... \$1.30 \$/GAL

PUMPING FUEL COSTS

ELECTRIC WELL:	
COST PER HOUR.....\$	\$5.58
COST PER ACRE INCH.....\$	\$2.53
NATURAL GAS WELL:	
COST PER HOUR.....\$	\$4.12
COST PER ACRE INCH.....\$	\$1.86
LP GAS WELL:	
COST PER HOUR.....\$	\$15.01
COST PER ACRE INCH.....\$	\$6.79
DIESEL WELL:	
COST PER HOUR.....\$	\$10.08
COST PER ACRE INCH.....\$	\$4.56

PUMPING FUEL COSTS

ELECTRIC:	
COST PER HOUR.....\$	\$1.91
COST PER ACRE INCH.....\$	\$0.87
NATURAL GAS:	
COST PER HOUR.....\$	\$1.42
COST PER ACRE INCH.....\$	\$0.64
LP GAS:	
COST PER HOUR.....\$	\$5.11
COST PER ACRE INCH.....\$	\$2.31
DIESEL:	
COST PER HOUR.....\$	\$3.43
COST PER ACRE INCH.....\$	\$1.55

TABLE 3. Equipment summary for a 320 acre sprinkler-irrigated farm with above average management, Roswell-Hagerman area, 2003.

EQUIPMENT		VARIABLE COSTS							FIXED COSTS		
ITEM &	SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	FUEL AND LUBRICANT	REPAIR	FUEL, LUBE PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HOUR
TRACTOR 96 HP		213	1	\$19,240	\$2,041	\$511	\$9.59	\$2.40	\$1,430	\$173	\$7.54
TRACTOR 130 HP		155	1	\$12,325	\$1,472	\$474	\$9.48	\$3.05	\$2,907	\$176	\$19.85
TRACTOR 145 HP		176	1	\$31,475	\$2,062	\$1,348	\$11.74	\$7.68	\$4,652	\$281	\$28.09
COTTON PICKER 2-ROW		42	1	\$11,720	\$331	\$1,055	\$7.86	\$25.03	\$5,960	\$360	\$149.91
COTTON STRIPPER MTD		42	1	\$2,520		\$136		\$3.22	\$767	\$46	\$19.28
SWATHER 16 FT		103	1	\$24,740	\$501	\$671	\$4.87	\$6.52	\$3,621	\$292	\$38.02
BALER 1-TON		63	1	\$48,920		\$110		\$1.74	\$5,812	\$351	\$97.32
PLANTER 4-ROW		18	1	\$3,400		\$61		\$3.47	\$680	\$27	\$40.01
ROLLING CULT 4-ROW		61	1	\$2,000		\$75		\$1.24	\$267	\$16	\$4.67
DISC OFFSET 14 FT		51	1	\$5,750		\$186		\$3.68	\$767	\$46	\$16.05
DRILL 13 FT		21	1	\$2,150		\$58		\$2.71	\$430	\$17	\$20.88
FLOAT 14 FT		11	1	\$600		\$0		\$0.02	\$60	\$4	\$5.85
LISTER 4-ROW		12	1	\$1,600		\$17		\$1.38	\$213	\$13	\$18.48
PLOW (MOLDBOARD) 4-16 IN		62	1	\$4,000		\$153		\$2.48	\$533	\$32	\$9.17
SHREDDER 4-ROW		10	1	\$2,500		\$7		\$0.70	\$333	\$20	\$37.13
COTTON TRAILER		85	4	\$4,800		\$12		\$0.14	\$640	\$39	\$7.98
SPRAYER 12 FT		18	1	\$1,375		\$31		\$1.73	\$183	\$11	\$11.00
FRONT END LOADER (ATTACH)		46	1	\$2,550		\$75		\$1.63	\$255	\$21	\$6.01
SEMI-TRUCK & FLATBED		108	1	\$15,500	\$739	\$1,560	\$6.83	\$14.42	\$3,100	\$125	\$29.79
RAKES		46	1	\$3,400		\$122		\$2.65	\$340	\$27	\$8.02
V-DITCHER		17	1	\$1,250		\$2		\$0.10	\$167	\$10	\$10.40
SIDE-ROLL SPRINKLER		6109	8	\$20,000		\$287		\$0.05	\$2,667	\$161	\$0.46
NATURAL GAS BOOSTER PUMP		6109	2	\$5,000	\$8,654	\$1,142	\$1.42	\$0.19	\$667	\$40	\$0.12
ELECTRIC WELL		6109	2	\$85,000	\$34,103	\$553	\$5.58	\$0.09	\$7,083	\$685	\$1.27
				\$311,815	\$49,904	\$8,647			\$43,533	\$2,975	

TABLE 4. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, 2003.
Planting dates: September 1 - September 31

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASED INPUTS</u>								
SEED	\$3.00	30 LBS		\$90.00				\$90.00
INSECTICIDE (CUSTOM)	\$8.77	1 ACRE		\$8.77				\$8.77
PUMP WATER*		16 AC. IN.						
SUBTOTAL				\$98.77				\$98.77
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.28	\$2.00	\$1.93	\$7.50	\$12.71
PLOW	145 HP	0.48 HR		\$3.62	\$5.64	\$4.88	\$17.88	\$32.02
DISC (2X)	145 HP	0.34 HR		\$2.57	\$3.99	\$3.86	\$15.01	\$25.43
DRILL	96 HP	0.21 HR		\$1.59	\$2.01	\$1.07	\$5.97	\$10.64
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$0.95	\$0.32	\$3.02	\$5.04
IRRIGATE (2X)		0.50 HR		\$3.23	\$50.68	\$2.35	\$13.40	\$69.65
SUBTOTAL		1.80 HR		\$13.04	\$65.26	\$14.41	\$62.78	\$155.49
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.33 HR		\$2.45				\$2.45
EMPLOYEE BENEFITS				\$2.35				\$2.35
INSURANCE			\$0.26					\$0.26
SUPERVISION AND MANAGEMENT				\$18.90				\$18.90
SUBTOTAL		0.33 HR	\$0.26	\$23.70				\$23.96
TOTAL OPERATING EXPENSES		2.13 HR	\$99.03	\$36.74	\$65.26	\$14.41	\$62.78	\$278.21

TABLE 5. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, 2003.
Harvesting dates: May 20 - October 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$140.00	7.00 TONS (DELIVERED)						\$980.00
TOTAL								\$980.00
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST	TOTAL	
FERTILIZER (10-26-10)	\$0.20	200 LBS	\$40.00				\$40.00	
INSECTICIDE (CUSTOM)	\$19.52	2 X/ACRE	\$39.04				\$39.04	
HERBICIDE (CUSTOM)	\$26.09	1 X/ACRE	\$26.09				\$26.09	
PLASTIC TWINE	\$19.00	170 FT/TON	\$5.65				\$5.65	
ESTABLISHMENT: Principal		5 YEARS				\$55.64	\$55.64	
: Interest						\$10.87	\$10.87	
PUMP WATER*		54 AC. IN.						
SUBTOTAL			\$110.78			\$66.51	\$177.29	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (6X)		1.50 HR		\$9.68	\$171.03	\$7.93	\$45.21	\$233.85
SUBTOTAL		1.50 HR		9.68	171.03	7.93	45.21	233.85
HARVEST OPERATIONS								
SWATHER (5X)	16 FT	0.55 HR		\$4.15	\$2.68	\$3.58	\$20.91	\$31.33
RAKE (5X)	96 HP	0.25 HR		\$1.89	\$2.40	\$1.26	\$3.89	\$9.44
BALER (5X)	145 HP	0.35 HR		\$2.64	\$4.11	\$3.30	\$43.89	\$53.94
FRONT END LOADER (5X)	130 HP	0.25 HR		\$1.89	\$2.37	\$1.17	\$6.47	\$11.89
HAUL	SEMI	0.50 HR		\$3.78	\$3.41	\$7.21	\$14.90	\$29.29
SUBTOTAL		1.90 HR		\$14.35	\$14.97	\$16.52	\$90.06	\$135.89
OVERHEAD EXPENSES								
DOWNTIME		0.48 HR		\$3.59				\$3.59
EMPLOYEE BENEFITS				\$4.32				\$4.32
INSURANCE			\$0.48					\$0.48
LAND TAXES						\$1.49		\$1.49
SUPERVISION AND MANAGEMENT				\$71.05				\$71.05
OTHER EXPENSES			\$65.78					\$65.78
SUBTOTAL		0.48 HR	\$66.26	\$78.96			\$1.49	\$146.71
TOTAL OPERATING EXPENSES		3.88 HR	\$177.04	\$102.98	\$186.00	\$24.45	\$203.27	\$693.75
NET OPERATING PROFIT								\$286.25
INTEREST ON OPERATING CAPITAL	(	102.75	@	8.00%				\$8.22
INTEREST ON EQUIPMENT INVESTMENT								\$68.67
RETURN TO LAND AND RISK								\$209.37

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

BUDGET SUMMARY

GROSS RETURN		\$980.00	
VARIABLE OPERATING EXPENSES	\$387.49		
RETURN OVER VARIABLE EXPENSES		\$592.51	(GROSS MARGIN)
FIXED EXPENSES	\$203.27		
NET FARM INCOME		\$389.23	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$102.98		
NET OPERATING PROFIT		\$286.25	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$76.89		
RETURN TO LAND AND RISK		\$209.37	

TABLE 6. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, 2003.

Planting dates: August 15 - November 1

Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
WHEAT	\$5.75	30.00 CWT						\$172.50	
DIRECT PAYMENT	\$0.87	30.00 CWT						\$26.10	
COUNTER CYCLICAL PAYMENT	\$0.00							\$0.00	
GRAZING	\$44.00	1.00 ACRE						\$44.00	
TOTAL								\$242.60	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				TOTAL		
SEED	\$0.11	100 LBS	\$11.00				\$11.00		
NITROGEN (N)	\$0.36	150 LBS	\$54.00				\$54.00		
PHOSPHATE (P205)	\$0.33	50 LBS	\$16.50				\$16.50		
INSECTICIDE (CUSTOM)	\$18.62	1 ACRE	\$18.62				\$18.62		
PUMP WATER*		28 AC. IN.							
CROP INSURANCE	\$1.96		\$1.96				\$1.96		
SUBTOTAL								\$102.08	
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.48 HR		\$3.62	\$5.64	\$4.88	\$17.88	\$32.02	
DISC (2X)	145 HP	0.28 HR		\$2.11	\$3.29	\$3.18	\$12.36	\$20.94	
FERTILIZE	DEALER APPLIED								
DRILL	96 HP	0.21 HR		\$1.59	\$2.01	\$1.07	\$5.97	\$10.64	
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$0.95	\$0.32	\$3.02	\$5.04	
IRRIGATE (4X)		1.00 HR		\$6.45	\$88.68	\$4.11	\$23.44	\$122.69	
SUBTOTAL								\$191.33	
HARVEST OPERATIONS									
COMBINE (CUSTOM)				\$12.28				\$12.28	
HAUL (CUSTOM)				\$6.00				\$6.00	
COMBINE & HAUL (CUSTOM)								\$18.28	
OVERHEAD EXPENSES									
DOWNTIME		0.27 HR		\$2.02				\$2.02	
EMPLOYEE BENEFITS				\$2.62				\$2.62	
INSURANCE				\$0.29				\$0.29	
LAND TAXES							\$1.49	\$1.49	
SUPERVISION AND MANAGEMENT				\$18.47				\$18.47	
OTHER EXPENSES				\$65.78				\$65.78	
SUBTOTAL								\$90.66	
TOTAL OPERATING EXPENSES		2.34 HR		\$186.43	\$37.63	\$100.57	\$13.56	\$64.17	\$402.36
NET OPERATING PROFIT								(\$159.76)	
INTEREST ON OPERATING CAPITAL	(	81.10	@	8.00%	)			\$6.49
INTEREST ON EQUIPMENT INVESTMENT								\$30.08	
RETURN TO LAND AND RISK								(\$196.33)	

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

BUDGET SUMMARY

GROSS RETURN		\$242.60	
VARIABLE OPERATING EXPENSES	\$300.56		
RETURN OVER VARIABLE EXPENSES		(\$57.96)	(GROSS MARGIN)
FIXED EXPENSES	\$64.17		
NET FARM INCOME		(\$122.13)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$37.63		
NET OPERATING PROFIT		(\$159.76)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$36.57		
RETURN TO LAND AND RISK		(\$196.33)	

TABLE 7. Oat hay, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, 2003.

Planting dates: February 15 - April 1

Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD							TOTAL	
GROSS RETURNS										
OAT HAY	\$130.00	5.00	TONS (DELIVERED)						\$650.00	
TOTAL									\$650.00	
PURCHASED INPUTS		PRICE	QUANTITY		PURCHASED INPUTS			TOTAL		
SEED	\$0.40	80	LBS		\$32.00				\$32.00	
NITROGEN (N)	\$0.36	85	LBS		\$30.60				\$30.60	
PUMP WATER*		21	AC. IN.							
SUBTOTAL					\$62.60				\$62.60	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC (2X)	145 HP	0.34	HR		\$2.57	\$3.99	\$3.86	\$15.01	\$25.43	
DRILL	96 HP	0.21	HR		\$1.59	\$2.01	\$1.07	\$5.97	\$10.64	
DITCHER (2X)	130 HP	0.10	HR		\$0.76	\$0.95	\$0.32	\$3.02	\$5.04	
IRRIGATE (4X)		1.00	HR		\$6.45	\$66.51	\$3.08	\$17.58	\$93.63	
SUBTOTAL		1.65	HR		\$11.36	\$73.47	\$8.33	\$41.58	\$134.74	
HARVEST OPERATIONS										
SWATHER	14 FT	0.16	HR		\$1.21	\$0.78	\$1.04	\$6.08	\$9.11	
RAKE	96 HP	0.05	HR		\$0.38	\$0.48	\$0.25	\$0.78	\$1.89	
BALER	145 HP	0.05	HR		\$0.38	\$0.59	\$0.47	\$6.27	\$7.71	
FRONT END LOADER	130 HP	0.05	HR		\$0.38	\$0.47	\$0.23	\$1.29	\$2.38	
HAUL	SEMI	0.50	HR		\$3.78	\$3.41	\$7.21	\$14.90	\$29.29	
SUBTOTAL		0.81	HR		\$6.12	\$5.73	\$9.21	\$29.32	\$50.38	
OVERHEAD EXPENSES										
DOWNTIME		0.37	HR		\$2.76				\$2.76	
EMPLOYEE BENEFITS					\$3.15				\$3.15	
INSURANCE					\$0.35				\$0.35	
LAND TAXES								\$1.49	\$1.49	
SUPERVISION AND MANAGEMENT					\$47.18				\$47.18	
OTHER EXPENSES					\$65.78				\$65.78	
SUBTOTAL		0.37	HR		\$66.13	\$53.08		\$1.49	\$120.70	
TOTAL OPERATING EXPENSES		2.83	HR		\$128.73	\$70.55	\$79.20	\$17.54	\$72.39	\$368.42
NET OPERATING PROFIT									\$281.58	
INTEREST ON OPERATING CAPITAL	(	53.00	@	8.00%	)				\$4.24
INTEREST ON EQUIPMENT INVESTMENT									\$34.76	
RETURN TO LAND AND RISK									\$242.59	

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

BUDGET SUMMARY

GROSS RETURN		\$650.00	
VARIABLE OPERATING EXPENSES	\$225.47		
RETURN OVER VARIABLE EXPENSES		\$424.53	(GROSS MARGIN)
FIXED EXPENSES	\$72.39		
NET FARM INCOME		\$352.14	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$70.55		
NET OPERATING PROFIT		\$281.58	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$39.00		
RETURN TO LAND AND RISK		\$242.59	

TABLE 8. Upland cotton (picker), sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, 2003.
 Planting dates: April 15 - June 1
 Harvesting dates: October 1 - December 31

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
COTTON LINT	\$0.520	900 LBS							\$468.00
COTTON SEED	\$0.08	1,440 LBS							\$108.00
DIRECT PAYMENT	\$0.0667	900 LBS							\$60.03
COUNTER CYCLICAL PAYMENT	\$0.0873	900 LBS							\$78.57
TOTAL								\$714.60	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
SEED	\$0.56	20 LBS	\$11.20						\$11.20
NITROGEN (N)	\$0.36	32 LBS	\$11.52						\$11.52
PHOSPHATE (P205)	\$0.33	40 LBS	\$13.20						\$13.20
HERBICIDE	\$15.41	1 ACRE	\$15.41						\$15.41
HERBICIDE (CUSTOM)	\$15.68	1 ACRE	\$15.68						\$15.68
INSECTICIDE (CUSTOM)	\$19.52	2 X/ACRE	\$39.04						\$39.04
CROP INSURANCE			\$1.47						\$1.47
PUMP WATER*		28 AC. IN.							
SUBTOTAL			\$107.52						\$107.52
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	145 HP	0.17 HR		\$1.28	\$2.00	\$1.93	\$7.50	\$12.71	
PLOW	145 HP	0.48 HR		\$3.62	\$5.64	\$4.88	\$17.88	\$32.02	
FLOAT	130 HP	0.16 HR		\$1.21	\$1.52	\$0.49	\$4.11	\$7.33	
FERTILIZE	DEALER APPLIED								
LISTER	130 HP	0.18 HR		\$1.36	\$1.71	\$0.80	\$6.90	\$10.76	
PRE-IRRIGATE		0.25 HR		\$1.61	\$22.17	\$1.03	\$5.86	\$30.67	
CULT & SPRAY	96 HP	0.26 HR		\$1.96	\$2.49	\$1.40	\$6.03	\$11.89	
PLANTER	130 HP	0.26 HR		\$1.96	\$2.47	\$1.70	\$15.56	\$21.69	
CULTIVATOR (3X)	96 HP	0.63 HR		\$4.76	\$6.04	\$2.30	\$7.69	\$20.79	
HAND HOE (CUSTOM)			\$20.00						\$20.00
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$0.95	\$0.32	\$3.02	\$5.04	
IRRIGATE (3X)		0.75 HR		\$4.84	\$66.51	\$3.08	\$17.58	\$92.02	
SUBTOTAL			3.24 HR	\$20.00	\$23.36	\$111.49	\$17.91	\$92.15	\$264.91
HARVEST OPERATIONS									
COTTON PICKER (2X)	2-ROW	1.24 HR		\$9.36	\$9.75	\$31.04	\$185.89	\$236.04	
HAUL (2X)	65 HP	1.00 HR		\$7.55	\$9.59	\$2.55	\$15.52	\$35.21	
GIN COTTON (CUSTOM)			\$148.32						\$148.32
SUBTOTAL			2.24 HR	\$148.32	\$16.91	\$19.34	\$33.59	\$201.41	\$419.57
POSTHARVEST OPERATIONS									
SHREDDER	96 HP	0.14 HR		\$1.06	\$1.33	\$0.53	\$7.98	\$10.89	
SUBTOTAL			0.14 HR	\$1.06	\$1.33	\$0.53	\$7.98	\$10.89	
OVERHEAD EXPENSES									
DOWNTIME		1.16 HR		\$8.72					\$8.72
EMPLOYEE BENEFITS				\$7.44					\$7.44
INSURANCE			\$0.83						\$0.83
LAND TAXES							\$1.49	\$1.49	
SUPERVISION AND MANAGEMENT				\$53.28					\$53.28
OTHER EXPENSES			\$65.78						\$65.78
SUBTOTAL			1.16 HR	\$66.61	\$69.44			\$1.49	\$137.54
TOTAL OPERATING EXPENSES		6.78 HR	\$342.45	\$110.77	\$132.16	\$52.02	\$303.03	\$940.43	
NET OPERATING PROFIT								(\$225.83)	
INTEREST ON OPERATING CAPITAL	(90.98 @	8.00%)						\$7.28
INTEREST ON EQUIPMENT INVESTMENT								\$34.76	
RETURN TO LAND AND RISK								(\$267.87)	

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

BUDGET SUMMARY

GROSS RETURN		\$714.60	
VARIABLE OPERATING EXPENSES	\$526.63		
RETURN OVER VARIABLE EXPENSES	\$187.97	(GROSS MARGIN)	
FIXED EXPENSES	\$303.03		
NET FARM INCOME		(\$115.06)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$110.77		
NET OPERATING PROFIT		(\$225.83)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$42.04		
RETURN TO LAND AND RISK		(\$267.87)	

TABLE 9. Upland cotton (stripper), sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, 2003.
Planting dates: April 15 - June 1
Harvesting dates: October 1 - December 31

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
COTTON LINT	\$0.470	900 LBS							\$423.00
COTTON SEED	\$0.08	1,440 LBS							\$108.00
DIRECT PAYMENT	\$0.0667	900 LBS							\$60.03
COUNTER CYCLICAL PAYMENT	\$0.0873	900 LBS							\$78.57
TOTAL								\$669.60	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				TOTAL		
SEED	\$0.51	25 LBS	\$12.75				\$12.75		
NITROGEN (N)	\$0.36	32 LBS	\$11.52				\$11.52		
PHOSPHORUS (P205)	\$0.33	40 LBS	\$13.20				\$13.20		
HERBICIDE	\$15.41	1 ACRE	\$15.41				\$15.41		
HERBICIDE (CUSTOM)	\$15.68	1 ACRE	\$15.68				\$15.68		
INSECTICIDE (CUSTOM)	\$14.86	2 X/ACRE	\$29.72				\$29.72		
CROP INSURANCE			\$1.47				\$1.47		
PUMP WATER*		28 AC. IN.							
SUBTOTAL			\$99.75				\$99.75		
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	145 HP	0.17 HR		\$1.28	\$2.00	\$1.93	\$7.50	\$12.71	
PLOW	145 HP	0.48 HR		\$3.62	\$5.64	\$4.88	\$17.88	\$32.02	
FLOAT	130 HP	0.16 HR		\$1.21	\$1.52	\$0.49	\$4.11	\$7.33	
FERTILIZE	DEALER APPLIED								
LISTER	130 HP	0.18 HR		\$1.36	\$1.71	\$0.80	\$6.90	\$10.76	
PRE-IRRIGATE		0.25 HR		\$1.61	\$22.17	\$1.03	\$5.86	\$30.67	
CULT & SPRAY	96 HP	0.26 HR		\$1.96	\$2.49	\$1.40	\$6.03	\$11.89	
PLANTER	130 HP	0.26 HR		\$1.96	\$2.47	\$1.70	\$15.56	\$21.69	
CULTIVATOR (3X)	96 HP	0.63 HR		\$4.76	\$6.04	\$2.30	\$7.69	\$20.79	
HAND HOE (CUSTOM)			\$20.00					\$20.00	
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$0.95	\$0.32	\$3.02	\$5.04	
IRRIGATE (3X)		0.75 HR		\$4.84	\$66.51	\$3.08	\$17.58	\$92.02	
SUBTOTAL			3.24 HR	\$20.00	\$23.36	\$111.49	\$17.91	\$92.15	\$264.91
HARVEST OPERATIONS									
COTTON STRIPPER	130 HP	1.24 HR		\$9.36	\$11.76	\$7.78	\$48.52	\$77.42	
HAUL	96 HP	1.50 HR		\$11.33	\$14.39	\$3.82	\$23.28	\$52.81	
GIN COTTON (CUSTOM)			\$190.89					\$190.89	
SUBTOTAL			2.74 HR	\$190.89	\$20.69	\$26.15	\$11.60	\$71.80	\$321.12
POSTHARVEST OPERATIONS									
SHREDDER	96 HP	0.14 HR		\$1.06	\$1.33	\$0.53	\$7.98	\$10.89	
SUBTOTAL			0.14 HR	\$1.06	\$1.33	\$0.53	\$7.98	\$10.89	
OVERHEAD EXPENSES									
DOWNTIME		1.28 HR		\$9.66				\$9.66	
EMPLOYEE BENEFITS				\$8.12				\$8.12	
INSURANCE			\$0.90					\$0.90	
LAND TAXES							\$1.49	\$1.49	
SUPERVISION AND MANAGEMENT				\$50.38				\$50.38	
OTHER EXPENSES			\$65.78					\$65.78	
SUBTOTAL			1.28 HR	\$66.68	\$68.17		\$1.49	\$136.34	
TOTAL OPERATING EXPENSES			7.40 HR	\$377.32	\$113.27	\$138.96	\$30.03	\$173.42	\$833.01
NET OPERATING PROFIT								(\$163.41)	
INTEREST ON OPERATING CAPITAL	(	85.83 @	8.00%)					\$6.87
INTEREST ON EQUIPMENT INVESTMENT							\$94.02		
RETURN TO LAND AND RISK								(\$264.30)	

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

BUDGET SUMMARY

GROSS RETURN		\$669.60	
VARIABLE OPERATING EXPENSES	\$546.32		
RETURN OVER VARIABLE EXPENSES	\$123.28	(GROSS MARGIN)	
FIXED EXPENSES	\$173.42		
NET FARM INCOME		(\$50.14)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$113.27		
NET OPERATING PROFIT		(\$163.41)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$100.88		
RETURN TO LAND AND RISK		(\$264.30)	

TABLE 10. Summary of per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Chaves County, 2003.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	WHEAT -----SPRINKLER-----	OAT HAY	PICKER COTTON	STRIPPER COTTON
		TONS	CWT	TONS	LBS	LBS
PRIMARY YIELD		7.00	30.00	5.00	900.00	900.00
PRIMARY PRICE		140.00	5.75	130.00	0.52	0.47
GOVERNMENT PAYMENTS		0.00	26.10	0.00	138.60	138.60
SECOND INCOME		0.00	44.00	0.00	108.00	108.00
GROSS RETURN		\$980.00	\$242.60	\$650.00	\$714.60	\$669.60
CASH OPERATING EXPENSES						
SEED	\$90.00		\$11.00	\$32.00	\$11.20	\$12.75
FERTILIZER	\$8.77	\$40.00	\$70.50	\$30.60	\$24.72	\$24.72
CHEMICALS		\$65.13	\$18.62		\$70.13	\$60.81
CROP INSURANCE			\$1.96		\$1.47	\$1.47
OTHER PURCHASED INPUTS		\$5.65				
CANAL WATER						
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$14.59	\$14.97	\$11.89	\$12.69	\$43.48	\$50.28
FUEL-IRRIGATION	\$50.68	\$171.03	\$88.68	\$66.51	\$88.68	\$88.68
REPAIRS	\$14.41	\$24.45	\$13.56	\$17.54	\$52.02	\$30.03
CUSTOM CHARGES			\$18.28		\$168.32	\$210.89
LAND TAXES		\$1.49	\$1.49	\$1.49	\$1.49	\$1.49
OTHER EXPENSES	\$0.26	\$66.26	\$66.07	\$66.13	\$66.61	\$66.68
TOTAL CASH EXPENSES	\$178.70	\$388.99	\$302.05	\$226.96	\$528.12	\$547.81
RETURN OVER CASH EXPENSES	(\$178.70)	\$591.01	(\$59.45)	\$423.04	\$186.48	\$121.79
FIXED EXPENSES	\$62.78	\$201.78	\$62.68	\$70.90	\$301.54	\$171.93
TOTAL EXPENSES	\$241.48	\$590.77	\$364.73	\$297.86	\$829.66	\$719.74
NET FARM INCOME	(\$241.48)	\$389.23	(\$122.13)	\$352.14	(\$115.06)	(\$50.14)
LABOR AND MANAGEMENT COSTS	\$36.74	\$102.98	\$37.63	\$70.55	\$110.77	\$113.27
NET OPERATING PROFIT	(\$278.21)	\$286.25	(\$159.76)	\$281.58	(\$225.83)	(\$163.41)
CAPITAL COSTS						
INTEREST ON OPERATING CAPITAL		\$8.22	\$6.49	\$4.24	\$7.28	\$6.87
INTEREST ON EQUIPMENT INVESTMENT		\$68.67	\$30.08	\$34.76	\$34.76	\$94.02
TOTAL CAPITAL COSTS	\$0.00	\$76.89	\$36.57	\$39.00	\$42.04	\$100.88
RETURN TO LAND AND RISK	(\$278.21)	\$209.37	(\$196.33)	\$242.59	(\$267.87)	(\$264.30)

TABLE 11. Whole farm summary, Roswell-Hagerman Area, Chaves County, 2002.

GROSS RETURNS		
ALFALFA HAY	175 ACRES	
CROP		\$171,500
WHEAT	26 ACRES	
CROP		\$4,399
GRAZING		\$1,122
DIRECT PAYMENT		\$666
COUNTER CYCLICAL PAYMENT		\$0
OAT HAY	42 ACRES	
CROP		\$26,975
UPLAND COTTON (PICKER)	34 ACRES	
COTTON LINT		\$15,912
COTTON SEED		\$3,672
DIRECT PAYMENT		\$1,051
COUNTER CYCLICAL PAYMENT		\$2,671
UPLAND COTTON (STRIPPER)	34 ACRES	
COTTON LINT		\$14,382
COTTON SEED		\$3,672
DIRECT PAYMENT		\$2,041
COUNTER CYCLICAL PAYMENT		\$2,671
GROSS RETURN		<u>\$250,734</u>
CASH OPERATING EXPENSES		
SEED		\$5,573
FERTILIZER		\$12,055
CHEMICALS		\$16,324
CROP INSURANCE		\$150
OTHER PURCHASED INPUTS		\$989
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$7,147
FUEL-IRRIGATION		\$42,757
REPAIRS		\$8,647
CUSTOM CHARGES		\$13,359
LAND TAXES		\$462
OTHER EXPENSES		\$20,565
TOTAL CASH EXPENSES		<u>\$128,030</u>
RETURN OVER CASH EXPENSES		\$122,704
FIXED EXPENSES		\$48,411
TOTAL EXPENSES		\$176,440
NET FARM INCOME		\$74,294
LABOR AND MANAGEMENT COSTS		\$30,812
NET OPERATING PROFIT		\$43,481
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$2,261
INTEREST ON EQUIPMENT INVESTMENT		\$18,604
TOTAL CAPITAL COSTS		<u>\$20,865</u>
RETURN TO LAND AND RISK		<u><u>\$22,616</u></u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$9,816	6.88%
\$3,000 /ACRE	(\$15,784)	3.42%
\$5,000 /ACRE	(\$41,384)	2.27%
\$7,000 /ACRE	(\$66,984)	1.70%
\$9,000 /ACRE	(\$92,584)	1.36%

* 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)