

TABLE 1. Basic cost information for the Roswell-Hagerman area, Chaves County, 2002.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.55
General & Irrigators	\$/hour	\$6.45
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.32
Phosphate (P205)	\$/pound	\$0.30
Seed:		
Alfalfa	\$/pound	\$2.90
Cotton picker	\$/pound	\$0.70
Cotton stripper	\$/pound	\$0.65
Oat	\$/pound	\$0.23
Corn	\$/bag	\$89.75
Plastic Twine:	\$/roll	\$20.00
Natural gas (service charge)	\$/MCF	\$3.28
	\$/month	\$10.00
Diesel fuel	\$/gallon	\$1.05
Gasoline	\$/gallon	\$1.00
Electricity	cents/KwHr	5.56
LP Gas	\$/gallon	\$0.86
Employee Liability Insurance	\$/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	7.50%
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%

BUDGET AREA..... ROSWELL-HAGERMAN AREA, CHAVES COUNTY, 2002.
 FARM SIZE..... 640 ACRES
 IRRIGATION TYPE..... FLOOD

NUMBER OF CROPS... 6

ACREAGE SUMMARY:	LAND USE (ACRES)	WATER USE	
		AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	60.0 *	16	960
ALFALFA	300.0	54	16,200
WHEAT	51.0	28	1,428
ARP	0.0		
FLEX IN OAT HAY	9.0	28	252
OAT HAY	60.0	21	1,260
PICKER COTTON	51.0	28	1,428
ARP	0.0		
FLEX IN OAT HAY	9.0	28	252
STRIPPER COTTON	51.0	28	1,428
ARP	0.0		
FLEX IN OAT HAY	9.0	28	252
CORN SILAGE	60.0	48	2,880
ROADS, DITCHES, HOMESTEAD	40.0		
TOTAL	640.0		26,340
ACRE FEET PER ACRE OF WATER RIGHTS			3.43

* DOUBLE-CROPPED

TABLE 1a. Overhead cost information for Roswell-Hagerman area, Chaves County, 2002.

ITEM		
Electricity (Domestic & Shop)	\$205.00 per month	\$2,460
Telephone	\$100.00 per month	\$1,200
Accounting & Legal		\$1,475
Misc. Supplies & Hand Tools		\$2,220
Pickup and Auto		
miles	20,000 @ \$0.345 per mile	\$6,900
Insurance		
- general liability (non-employee)		\$1,610
- fire/theft		\$1,270
Property Taxes		
- non-planted land		\$17
- other than land & machinery		\$580
Building repairs and maintenance		\$1,215
Dues, fees, publications		\$370
Farmstead Equipment		\$160
Total		\$19,477
Total Per Planted Acre		\$32.46

TABLE 2. Pumping costs and data for irrigation wells, Roswell-Hagerman area, Chaves County, 2002.

INPUT DATA

DELIVERY PSI:	0	DEPTH CHARACTERISTICS:	
		STATIC.....	150
		DRAW DOWN.....	30
		TOTAL HEAD.....	180
		CASING.....	600
GALLONS PER MINUTE (GPM).....	1000		
WORK HORSEPOWER.....	45		
EFFICIENCY FACTOR:			
ELECTRICITY.....	0.540		
NATURAL GAS.....	0.154		
LP GAS.....	0.154		
DIESEL.....	0.160		
FUEL COST PER UNIT:			
ELECTRICITY.....	5.56	CENTS/Kwhr	
NATURAL GAS.....	\$3.28	\$/MCF	
LP GAS.....	\$0.86	\$/GAL	
DIESEL.....	\$1.05	\$/GAL	

PUMPING FUEL COSTS

ELECTRIC WELL:		
COST PER HOUR.....	\$3.52	
COST PER ACRE INCH.....	\$1.59	
NATURAL GAS WELL:		
COST PER HOUR.....	\$2.73	
COST PER ACRE INCH.....	\$1.24	
LP GAS WELL:		
COST PER HOUR.....	\$7.06	
COST PER ACRE INCH.....	\$3.20	
DIESEL WELL:		
COST PER HOUR.....	\$5.39	
COST PER ACRE INCH.....	\$2.44	

TABLE 3. Equipment summary for a 640 acre flood-irrigated farm with above average management, Roswell-Hagerman area, 2002.

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	DEPRE- CIATION	TAXES	TOTAL PER HOUR
TRACTOR 96 HP	380	1	\$23,030	\$2,700	\$1,989	\$7.11	\$5.24	\$1,073	\$173	\$3.28
TRACTOR 130 HP	315	1	\$11,750	\$2,408	\$2,222	\$7.66	\$7.06	\$1,453	\$176	\$5.18
TRACTOR 145 HP	345	1	\$39,110	\$3,276	\$2,314	\$9.48	\$6.70	\$4,652	\$281	\$14.28
COTTON PICKER 2-ROW	63	1	\$12,630	\$402	\$1,866	\$6.35	\$29.50	\$5,960	\$360	\$99.94
COTTON STRIPPER MTD	63	1	\$2,520		\$255		\$4.03	\$767	\$46	\$12.86
SWATHER 16 FT	179	1	\$30,700	\$703	\$1,684	\$3.93	\$9.41	\$3,621	\$292	\$21.87
BALER 1-TON	109	1	\$54,240		\$286		\$2.62	\$5,812	\$351	\$56.36
PLANTER 4-ROW	42	1	\$3,400		\$246		\$5.85	\$680	\$27	\$16.79
ROLLING CULT 4-ROW	132	1	\$1,500		\$111		\$0.84	\$200	\$12	\$1.61
DISC OFFSET 14 FT	105	1	\$5,750		\$344		\$3.28	\$767	\$46	\$7.74
DRILL 13 FT	42	1	\$2,150		\$154		\$3.70	\$430	\$17	\$10.76
PLANE 12 FT	29	1	\$2,500		\$13		\$0.45	\$333	\$20	\$12.27
FLOAT 14 FT	26	1	\$600		\$9		\$0.33	\$60	\$4	\$2.45
LISTER 4-ROW	29	1	\$1,600		\$35		\$1.18	\$213	\$13	\$7.76
PLOW (MOLDBOARD) 4-16 IN	131	1	\$4,000		\$294		\$2.24	\$533	\$32	\$4.32
SHREDDER 4-ROW	14	1	\$2,500		\$13		\$0.90	\$333	\$20	\$24.75
COTTON TRAILER	128	4	\$4,800		\$31		\$0.24	\$640	\$39	\$5.32
SPRAYER 12 FT	42	1	\$1,375		\$105		\$2.50	\$183	\$11	\$4.62
FRONT END LOADER (ATTACH)	79	1	\$2,550		\$123		\$1.56	\$255	\$21	\$3.47
SEMI-TRUCK & FLATBED	194	1	\$15,500	\$1,067	\$0	\$5.51	\$0.00	\$3,100	\$125	\$16.67
RAKES	79	1	\$3,400		\$248		\$3.13	\$340	\$27	\$4.63
V-DITCHER	32	1	\$1,250		\$8		\$0.25	\$167	\$10	\$5.58
NATURAL GAS WELL	11835	3	\$127,500	\$32,323	\$2,692	\$2.73	\$0.23	\$10,625	\$1,028	\$1.02
			\$354,355	\$42,879	\$15,041			\$42,197	\$3,132	

TABLE 4. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, 2002.

Planting dates: September 1 - September 31

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASED INPUTS</u>								
SEED	\$2.90	30 LBS		\$87.00				\$87.00
INSECTICIDE (CUSTOM)	\$13.06	1 ACRE		\$13.06				\$13.06
PUMP WATER*		16 AC. IN.						
SUBTOTAL				\$100.06				\$100.06
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.28	\$3.22	\$1.70	\$3.74	\$9.95
PLOW	145 HP	0.48 HR		\$3.62	\$4.55	\$4.29	\$8.93	\$21.39
DISC (2X)	145 HP	0.34 HR		\$2.57	\$3.22	\$3.39	\$7.49	\$16.67
PLANE (2X)	130 HP	0.48 HR		\$3.62	\$3.68	\$3.61	\$8.38	\$19.28
DRILL	96 HP	0.21 HR		\$1.59	\$1.49	\$1.88	\$2.95	\$7.90
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$0.77	\$0.73	\$1.08	\$3.33
IRRIGATE (2X)		1.00 HR		\$6.45	\$19.78	\$1.65	\$7.35	\$35.22
SUBTOTAL		2.78 HR		\$19.89	\$36.71	\$17.24	\$39.91	\$113.75
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.45 HR		\$3.36				\$3.36
EMPLOYEE BENEFITS				\$3.58				\$3.58
INSURANCE			\$0.40					\$0.40
SUPERVISION AND MANAGEMENT				\$16.81				\$16.81
SUBTOTAL		0.45 HR	\$0.40	\$23.75				\$24.14
TOTAL OPERATING EXPENSES		3.23 HR	\$100.46	\$43.64	\$36.71	\$17.24	\$39.91	\$237.95

TABLE 5. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, 2002.
Harvesting dates: May 20 - October 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$130.00	6.50 TONS (DELIVERED)						\$845.00
TOTAL								\$845.00
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST	TOTAL	
FERTILIZER (10-26-10)	\$0.20		200 LBS	\$40.00			\$40.00	
INSECTICIDE (CUSTOM)	\$43.44		1 ACRE	\$43.44			\$43.44	
HERBICIDE (CUSTOM)	\$27.45		1 ACRE	\$27.45			\$27.45	
PLASTIC TWINE	\$20.00		170 FT/TON	\$5.53			\$5.53	
ESTABLISHMENT: Principal			5 YEARS			\$47.59	\$47.59	
: Interest						\$9.99	\$9.99	
PUMP WATER*			54 AC. IN.					
SUBTOTAL				\$116.41		\$57.58	\$174.00	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (6X)		3.00 HR		\$19.35	\$66.74	\$5.56	\$24.81	\$116.46
SUBTOTAL		3.00 HR		19.35	66.74	5.56	24.81	116.46
HARVEST OPERATIONS								
SWATHER (5X)	14 FT	0.55 HR		\$4.15	\$2.16	\$5.18	\$12.03	\$23.52
RAKE (5X)	96 HP	0.25 HR		\$1.89	\$1.78	\$2.09	\$1.98	\$7.73
BALER (5X)	145 HP	0.35 HR		\$2.64	\$3.32	\$3.26	\$24.72	\$33.95
FRONT END LOADER (5X)	130 HP	0.25 HR		\$1.89	\$1.91	\$2.15	\$2.16	\$8.12
HAUL	SEMI	0.50 HR		\$3.78	\$2.76	\$0.00	\$8.33	\$14.86
SUBTOTAL		1.90 HR		\$14.35	\$11.93	\$12.68	\$49.22	\$88.18
OVERHEAD EXPENSES								
DOWNTIME		0.48 HR		\$3.59				\$3.59
EMPLOYEE BENEFITS				\$6.07				\$6.07
INSURANCE				\$0.67				\$0.67
LAND TAXES							\$1.49	\$1.49
SUPERVISION AND MANAGEMENT				\$63.10				\$63.10
OTHER EXPENSES				\$32.46				\$32.46
SUBTOTAL		0.48 HR		\$33.14	\$72.75		\$1.49	\$107.38
TOTAL OPERATING EXPENSES		5.38 HR		\$149.55	\$106.45	\$78.67	\$18.24	\$133.10
NET OPERATING PROFIT								\$358.99
INTEREST ON OPERATING CAPITAL	(	78.33	@	8.00%	)			\$6.27
INTEREST ON EQUIPMENT INVESTMENT								\$37.13
RETURN TO LAND AND RISK								\$315.59

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

BUDGET SUMMARY

GROSS RETURN		\$845.00	
VARIABLE OPERATING EXPENSES	\$246.46		
RETURN OVER VARIABLE EXPENSES		\$598.54	(GROSS MARGIN)
FIXED EXPENSES	\$133.10		
NET FARM INCOME		\$465.43	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$106.45		
NET OPERATING PROFIT		\$358.99	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$43.40		
RETURN TO LAND AND RISK		\$315.59	

TABLE 6. Wheat, flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, 2002.

Planting dates: August 15 - November 1

Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
WHEAT	\$5.65	40.00	CWT						\$226.00
ASCS DEFICIENCY	\$0.80	40.00	CWT						\$32.00
ASCS DIVERSION	\$0.00								\$0.00
GRAZING	\$44.00	1.00	ACRE						\$44.00
TOTAL									\$302.00
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$0.11	100	LBS	\$11.00					\$11.00
NITROGEN (N)	\$0.32	150	LBS	\$48.00					\$48.00
PHOSPHATE (P205)	\$0.30	50	LBS	\$15.00					\$15.00
INSECTICIDE	\$18.73	1	ACRE	\$18.73					\$18.73
PUMP WATER*		28	AC. IN.						
CROP INSURANCE	\$0.98			\$0.98					\$0.98
SUBTOTAL									\$93.71
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	\$4.55	\$4.29	\$8.93	\$21.39
DISC (2X)	145 HP	0.34	HR		\$2.57	\$3.22	\$3.39	\$7.49	\$16.67
FERTILIZE	DEALER APPLIED								
DRILL	96 HP	0.21	HR		\$1.59	\$1.49	\$1.88	\$2.95	\$7.90
DITCHER (2X)	130 HP	0.10	HR		\$0.76	\$0.77	\$0.73	\$1.08	\$3.33
IRRIGATE (4X)		2.00	HR		\$12.90	\$34.61	\$2.88	\$12.86	\$63.25
SUBTOTAL		3.13	HR		\$21.43	\$44.64	\$13.17	\$33.30	\$112.55
HARVEST OPERATIONS									
COMBINE (CUSTOM)					\$28.04				\$28.04
HAUL (CUSTOM)					\$6.80				\$6.80
SUBTOTAL					\$34.84				\$34.84
OVERHEAD EXPENSES									
DOWNTIME		0.28	HR		\$2.13				\$2.13
EMPLOYEE BENEFITS					\$3.86				\$3.86
INSURANCE					\$0.43				\$0.43
LAND TAXES							\$1.49		\$1.49
SUPERVISION AND MANAGEMENT					\$23.66				\$23.66
OTHER EXPENSES					\$32.46				\$32.46
SUBTOTAL		0.28	HR		\$32.89	\$29.65		\$1.49	\$64.03
TOTAL OPERATING EXPENSES		3.41	HR		\$161.44	\$51.08	\$44.64	\$13.17	\$34.79
NET OPERATING PROFIT									(\$3.12)
INTEREST ON OPERATING CAPITAL	(	64.21	@	8.00%	)				\$5.14
INTEREST ON EQUIPMENT INVESTMENT									\$15.61
RETURN TO LAND AND RISK									(\$23.87)

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

BUDGET SUMMARY

GROSS RETURN		\$302.00	
VARIABLE OPERATING EXPENSES	\$219.25		
RETURN OVER VARIABLE EXPENSES		\$82.75	(GROSS MARGIN)
FIXED EXPENSES	\$34.79		
NET FARM INCOME		\$47.96	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$51.08		
NET OPERATING PROFIT		(\$3.12)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$20.75		
RETURN TO LAND AND RISK		(\$23.87)	

TABLE 7. Oat hay, flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, 2001.

Planting dates: February 15 - April 1

Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD							TOTAL	
GROSS RETURNS										
OAT HAY	\$80.00	5.00 TONS (DELIVERED)							\$400.00	
TOTAL									\$400.00	
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PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL	
SEED	\$0.23	80 LBS		\$18.40					\$18.40	
NITROGEN (N)	\$0.32	85 LBS		\$27.20					\$27.20	
PUMP WATER*		21 AC. IN.								
SUBTOTAL				\$45.60					\$45.60	
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PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC (2X)	145 HP	0.34	HR		\$2.57	\$3.22	\$3.39	\$7.49	\$16.67	
DRILL	96 HP	0.21	HR		\$1.59	\$1.49	\$1.88	\$2.95	\$7.90	
DITCHER (2X)	130 HP	0.05	HR		\$0.38	\$0.38	\$0.37	\$0.54	\$1.66	
IRRIGATE (3X)		1.50	HR		\$9.68	\$25.96	\$2.16	\$9.65	\$47.44	
SUBTOTAL		2.10	HR		\$14.21	\$31.06	\$7.80	\$20.62	\$73.68	
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HARVEST OPERATIONS										
SWATHER	14 FT	0.16	HR		\$1.21	\$0.63	\$1.51	\$3.50	\$6.84	
RAKE	96 HP	0.05	HR		\$0.38	\$0.36	\$0.42	\$0.40	\$1.55	
BALER	145 HP	0.05	HR		\$0.38	\$0.47	\$0.47	\$3.53	\$4.85	
FRONT END LOADER	130 HP	0.05	HR		\$0.38	\$0.38	\$0.43	\$0.43	\$1.62	
HAUL	SEMI	0.50	HR		\$3.78	\$2.76	\$0.00	\$8.33	\$14.86	
SUBTOTAL		0.81	HR		\$6.12	\$4.60	\$2.82	\$16.19	\$29.73	
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OVERHEAD EXPENSES										
DOWNTIME		0.35	HR		\$2.66				\$2.66	
EMPLOYEE BENEFITS					\$3.66				\$3.66	
INSURANCE					\$0.41				\$0.41	
LAND TAXES								\$1.49	\$1.49	
SUPERVISION AND MANAGEMENT					\$30.18				\$30.18	
OTHER EXPENSES					\$32.46				\$32.46	
SUBTOTAL		0.35	HR		\$32.87	\$36.50		\$1.49	\$70.86	
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TOTAL OPERATING EXPENSES		3.26	HR		\$78.47	\$56.82	\$35.65	\$10.62	\$38.30	\$219.86
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NET OPERATING PROFIT									\$180.14	
INTEREST ON OPERATING CAPITAL	(33.13	@	8.00%)				\$2.65	
INTEREST ON EQUIPMENT INVESTMENT									\$17.81	
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RETURN TO LAND AND RISK									\$159.68	

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

BUDGET SUMMARY

GROSS RETURN		\$400.00	
VARIABLE OPERATING EXPENSES	\$124.74		
RETURN OVER VARIABLE EXPENSES		\$275.26	(GROSS MARGIN)
FIXED EXPENSES	\$38.30		
NET FARM INCOME		\$236.96	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$56.82		
NET OPERATING PROFIT		\$180.14	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$20.46		
RETURN TO LAND AND RISK		\$159.68	

TABLE 8. Upland cotton (picker), flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, 2002.

Planting dates: April 15 - June 1

Harvesting dates: October 1 - December 31

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
COTTON LINT	\$0.550	750 LBS						\$412.50	
COTTON SEED	\$0.05	1200 LBS						\$58.50	
ASCS DEFICIENCY	\$0.0599	750 LBS						\$44.93	
FARM LOAN DEFICIENCY	\$0.04	750 LBS						\$30.00	
TOTAL							\$545.93		
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL	
SEED	\$0.70	20 LBS	\$14.00					\$14.00	
NITROGEN (N)	\$0.32	32 LBS	\$10.24					\$10.24	
PHOSPHATE (P205)	\$0.30	40 LBS	\$12.00					\$12.00	
HERBICIDE	\$15.51	1 ACRE	\$15.51					\$15.51	
HERBICIDE (CUSTOM)	\$16.56	1 ACRE	\$16.56					\$16.56	
INSECTICIDE (CUSTOM) 2X	\$36.28	1 ACRE	\$36.28					\$36.28	
CROP INSURANCE			\$0.98					\$0.98	
PUMP WATER*		28 AC. IN.							
SUBTOTAL			\$105.57					\$105.57	
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	\$1.61	\$1.70	\$3.74	\$8.34	
PLOW	145 HP	0.48 HR		\$3.62	\$4.55	\$4.29	\$8.93	\$21.39	
FLOAT	130 HP	0.16 HR		\$1.21	\$1.23	\$1.18	\$1.22	\$4.84	
FERTILIZE	DEALER APPLIED								
LISTER	130 HP	0.18 HR		\$1.36	\$1.38	\$1.48	\$2.33	\$6.55	
PRE-IRRIGATE		0.75 HR		\$4.84	\$8.65	\$0.72	\$3.22	\$17.43	
CULT & SPRAY	96 HP	0.26 HR		\$1.96	\$1.85	\$2.23	\$2.47	\$8.51	
PLANTER	130 HP	0.26 HR		\$1.96	\$1.99	\$3.36	\$5.71	\$13.02	
CULTIVATOR (3X)	96 HP	0.63 HR		\$4.76	\$4.48	\$3.83	\$3.08	\$16.14	
HAND HOE (CUSTOM)			\$20.00					\$20.00	
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$0.77	\$0.73	\$1.08	\$3.33	
IRRIGATE (3X)		1.50 HR		\$9.68	\$25.96	\$2.16	\$9.65	\$47.44	
SUBTOTAL			4.49 HR	\$20.00	\$31.42	\$52.46	\$21.68	\$41.42	\$166.99
HARVEST OPERATIONS									
COTTON PICKER (2X)	2-ROW	1.24 HR		\$9.36	\$7.87	\$36.58	\$123.93	\$177.75	
HAUL (2X)	65 HP	1.00 HR		\$7.55	\$7.11	\$5.48	\$8.60	\$28.73	
GIN COTTON (CUSTOM)			\$81.68					\$81.68	
SUBTOTAL			2.24 HR	\$81.68	\$16.91	\$14.98	\$42.06	\$132.53	\$288.15
POSTHARVEST OPERATIONS									
SHREDDER	96 HP	0.14 HR		\$1.06	\$1.07	\$1.11	\$4.19	\$7.43	
SUBTOTAL			0.14 HR	\$1.06	\$1.07	\$1.11	\$4.19	\$7.43	
OVERHEAD EXPENSES									
DOWNTIME		1.16 HR		\$8.72				\$8.72	
EMPLOYEE BENEFITS				\$8.89				\$8.89	
INSURANCE			\$0.99					\$0.99	
LAND TAXES							\$1.49	\$1.49	
SUPERVISION AND MANAGEMENT				\$42.72				\$42.72	
OTHER EXPENSES			\$32.46					\$32.46	
SUBTOTAL			1.16 HR	\$33.45	\$60.34			\$1.49	\$95.28
TOTAL OPERATING EXPENSES		8.03 HR	\$240.69	\$109.73	\$68.51	\$64.86	\$179.63	\$663.42	
NET OPERATING PROFIT							(\$117.50)		
INTEREST ON OPERATING CAPITAL	(	76.26	@	8.00%			\$6.10	
INTEREST ON EQUIPMENT INVESTMENT							\$17.81		
RETURN TO LAND AND RISK							(\$141.41)		

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

BUDGET SUMMARY

GROSS RETURN		\$545.93	
VARIABLE OPERATING EXPENSES	\$374.06		
RETURN OVER VARIABLE EXPENSES	\$171.87	(GROSS MARGIN)	
FIXED EXPENSES	\$179.63		
NET FARM INCOME		(\$7.77)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$109.73		
NET OPERATING PROFIT		(\$117.50)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$23.91		
RETURN TO LAND AND RISK		(\$141.41)	

TABLE 9. Upland cotton (stripper), flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, 2002.

Planting dates: April 15 - June 1

Harvesting dates: October 1 - December 31

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
COTTON LINT	\$0.500	750 LBS						\$375.00	
COTTON SEED	\$0.05	1200 LBS						\$58.50	
ASCS DEFICIENCY	\$0.0599	750 LBS						\$44.93	
FARM LOAN DEFICIENCY	\$0.04	750 LBS						\$30.00	
TOTAL							\$508.43		
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL	
SEED	\$0.65	25 LBS	\$16.25					\$16.25	
NITROGEN (N)	\$0.32	32 LBS	\$10.24					\$10.24	
PHOSPHATE (P205)	\$0.30	40 LBS	\$12.00					\$12.00	
HERBICIDE	\$15.51	1 ACRE	\$15.51					\$15.51	
HERBICIDE (CUSTOM)	\$15.45	1 ACRE	\$15.45					\$15.45	
INSECTICIDE (CUSTOM) 2X	\$34.38	1 X/ACRE	\$34.38					\$34.38	
CROP INSURANCE			\$0.98					\$0.98	
PUMP WATER*		28 AC. IN.							
SUBTOTAL			\$104.81					\$104.81	
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	\$1.61	\$1.70	\$3.74	\$8.34	
PLOW	145 HP	0.48 HR		\$3.62	\$4.55	\$4.29	\$8.93	\$21.39	
FLOAT	130 HP	0.16 HR		\$1.21	\$1.23	\$1.18	\$1.22	\$4.84	
FERTILIZE	DEALER APPLIED								
LISTER	130 HP	0.18 HR		\$1.36	\$1.38	\$1.48	\$2.33	\$6.55	
PRE-IRRIGATE		0.75 HR		\$4.84	\$8.65	\$0.72	\$3.22	\$17.43	
CULT & SPRAY	96 HP	0.26 HR		\$1.96	\$1.85	\$2.23	\$2.47	\$8.51	
PLANTER	130 HP	0.26 HR		\$1.96	\$1.99	\$3.36	\$5.71	\$13.02	
CULTIVATOR (3X)	96 HP	0.63 HR		\$4.76	\$4.48	\$3.83	\$3.08	\$16.14	
HAND HOE (CUSTOM)			\$20.00					\$20.00	
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$0.77	\$0.73	\$1.08	\$3.33	
IRRIGATE (3X)		1.50 HR		\$9.68	\$25.96	\$2.16	\$9.65	\$47.44	
SUBTOTAL			4.49 HR	\$20.00	\$31.42	\$52.46	\$21.68	\$41.42	\$166.99
HARVEST OPERATIONS									
COTTON STRIPPER	96 HP	1.24 HR		\$9.36	\$9.50	\$13.75	\$22.36	\$54.97	
HAUL	130 HP	1.50 HR		\$11.33	\$10.66	\$8.21	\$12.90	\$43.10	
GIN COTTON (CUSTOM)			\$107.48					\$107.48	
SUBTOTAL			2.74 HR	\$107.48	\$20.69	\$20.15	\$21.96	\$35.27	\$205.54
POSTHARVEST OPERATIONS									
SHREDDER	130 HP	0.14 HR		\$1.06	\$1.07	\$1.11	\$4.19	\$7.43	
SUBTOTAL			0.14 HR	\$1.06	\$1.07	\$1.11	\$4.19	\$7.43	
OVERHEAD EXPENSES									
DOWNTIME		1.28 HR		\$9.66				\$9.66	
EMPLOYEE BENEFITS				\$9.57				\$9.57	
INSURANCE			\$1.06					\$1.06	
LAND TAXES							\$1.49	\$1.49	
SUPERVISION AND MANAGEMENT				\$40.35				\$40.35	
OTHER EXPENSES			\$32.46					\$32.46	
SUBTOTAL			1.28 HR	\$33.53	\$59.58			\$1.49	\$94.60
TOTAL OPERATING EXPENSES		8.65 HR	\$265.81	\$112.75	\$73.68	\$44.76	\$82.37	\$579.37	
NET OPERATING PROFIT								(\$70.95)	
INTEREST ON OPERATING CAPITAL	(	74.63	@	8.00%				\$5.97
INTEREST ON EQUIPMENT INVESTMENT								\$49.75	
RETURN TO LAND AND RISK								(\$126.67)	

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

BUDGET SUMMARY

GROSS RETURN		\$508.43	
VARIABLE OPERATING EXPENSES	\$384.25		
RETURN OVER VARIABLE EXPENSES	\$124.17		(GROSS MARGIN)
FIXED EXPENSES	\$82.37		
NET FARM INCOME	\$41.80		(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$112.75		
NET OPERATING PROFIT	(\$70.95)		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$55.72		
RETURN TO LAND AND RISK		(\$126.67)	

TABLE 10. Corn silage, flood-irrigated, budgeted per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, 2002.

Planting dates: April 1 - April 15

Harvesting dates: August 1 - August 31

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
CORN FOR SILAGE	\$18.00	STANDING	25	TONS					\$450.00
TOTAL								<u>\$450.00</u>	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUT						TOTAL
SEED	\$1.12	32 000		\$35.90					\$35.90
NITROGEN (N)	\$0.32	200 LBS		\$64.00					\$64.00
INSECTICIDE (CUSTOM) 2X	\$43.38	1 ACRE		\$43.38					\$43.38
CROP INSURANCE		400 DOLLARS		\$20.00					\$20.00
PUMP WATER*		48 AC. IN.							
SUBTOTAL				<u>\$163.28</u>					<u>\$163.28</u>
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	\$1.61	\$1.70	\$3.74	\$8.34	
PLOW	145 HP	0.48 HR		\$3.62	\$4.55	\$4.29	\$8.93	\$21.39	
FLOAT	130 HP	0.16 HR		\$1.21	\$1.23	\$1.18	\$1.22	\$4.84	
FERTILIZE	DEALER APPLIED								
LISTER	130 HP	0.18 HR		\$1.36	\$1.38	\$1.48	\$2.33	\$6.55	
PRE-IRRIGATE		0.75 HR		\$4.84	\$9.89	\$0.82	\$3.67	\$19.22	
CULT & SPRAY	96 HP	0.26 HR		\$1.96	\$1.85	\$2.23	\$2.47	\$8.51	
PLANTER	130 HP	0.26 HR		\$1.96	\$1.99	\$3.36	\$5.71	\$13.02	
CULTIVATOR (2X)	96 HP	0.42 HR		\$3.17	\$2.98	\$2.55	\$2.05	\$10.76	
DITCHER (2X)	130 HP	0.10 HR		\$0.76	\$0.77	\$0.73	\$1.08	\$3.33	
IRRIGATE (5X)		2.50 HR		\$16.13	\$49.44	\$4.12	\$18.37	\$88.06	
SUBTOTAL		5.28 HR		<u>\$36.29</u>	<u>\$75.68</u>	<u>\$22.47</u>	<u>\$49.58</u>	<u>\$184.02</u>	
OVERHEAD EXPENSES									
DOWNTIME		0.51 HR		\$2.54				\$2.54	
EMPLOYEE BENEFITS				\$6.53				\$6.53	
INSURANCE				\$0.73				\$0.73	
LAND TAXES							\$1.49	\$1.49	
SUPERVISION AND MANAGEMENT				\$35.72				\$35.72	
OTHER EXPENSES				\$32.46				\$32.46	
SUBTOTAL		0.51 HR		<u>\$33.19</u>	<u>\$44.78</u>		<u>\$1.49</u>	<u>\$79.46</u>	
TOTAL OPERATING EXPENSES		5.79 HR		<u>\$196.46</u>	<u>\$81.07</u>	<u>\$75.68</u>	<u>\$22.47</u>	<u>\$51.08</u>	
NET OPERATING PROFIT								<u>\$23.24</u>	
INTEREST ON OPERATING CAPITAL	(	106.18	@	8.00%				\$8.49
INTEREST ON EQUIPMENT INVESTMENT								\$24.67	
RETURN TO LAND AND RISK								<u>(\$9.93)</u>	

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

BUDGET SUMMARY

GROSS RETURN		\$450.00	
VARIABLE OPERATING EXPENSES	\$294.61		
RETURN OVER VARIABLE EXPENSES		\$155.39	(GROSS MARGIN)
FIXED EXPENSES	\$51.08		
NET FARM INCOME		\$104.31	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$81.07		
NET OPERATING PROFIT		\$23.24	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$33.16		
RETURN TO LAND AND RISK		(\$9.93)	

TABLE 11. Summary of per acre costs and returns for a 640 acre farm with above average management, Roswell-Hagerman area, Chaves County, 2002.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	WHEAT	OAT HAY	PICKER COTTON	STRIPPER COTTON	CORN SILAGE
	-----FLOOD-----						
		TONS	CWT	TONS	LBS	LBS	TONS
PRIMARY YIELD		6.50	40.00	5.00	750.00	750.00	25.00
PRIMARY PRICE		130.00	130.00	80.00	0.55	0.50	18.00
GOVERNMENT PAYMENTS		0.00	32.00	0.00	74.93	74.93	0.00
SECOND INCOME		0.00	44.00	0.00	58.50	58.50	0.00
GROSS RETURN		\$845.00	\$302.00	\$400.00	\$545.93	\$508.43	\$450.00
CASH OPERATING EXPENSES							
SEED	\$87.00		\$11.00	\$18.40	\$14.00	\$16.25	\$35.90
FERTILIZER		\$40.00	\$63.00	\$27.20	\$22.24	\$22.24	\$64.00
CHEMICALS	\$13.06	\$70.89	\$18.73		\$68.35	\$65.34	\$43.38
CROP INSURANCE			\$0.98		\$0.98	\$0.98	\$20.00
OTHER PURCHASED INPUTS		\$5.53					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$16.93	\$11.93	\$10.03	\$9.70	\$33.90	\$39.07	\$16.36
FUEL-IRRIGATION	\$19.78	\$66.74	\$34.61	\$25.96	\$34.61	\$34.61	\$59.33
REPAIRS	\$17.24	\$18.24	\$13.17	\$10.62	\$64.86	\$44.76	\$22.47
CUSTOM CHARGES			\$34.84		\$101.68	\$127.48	
LAND TAXES		\$1.49	\$1.49	\$1.49	\$1.49	\$1.49	\$1.49
OTHER EXPENSES	\$0.40	\$33.14	\$32.89	\$32.87	\$33.45	\$33.53	\$33.19
TOTAL CASH EXPENSES	\$154.41	\$247.95	\$220.74	\$126.23	\$375.55	\$385.74	\$296.10
RETURN OVER CASH EXPENSES	(\$154.41)	\$597.05	\$81.26	\$273.77	\$170.37	\$122.68	\$153.90
FIXED EXPENSES	\$39.91	\$131.61	\$33.30	\$36.81	\$178.14	\$80.88	\$49.58
TOTAL EXPENSES	\$194.32	\$379.57	\$254.04	\$163.04	\$553.69	\$466.62	\$345.69
NET FARM INCOME	(\$194.32)	\$465.43	\$47.96	\$236.96	(\$7.77)	\$41.80	\$104.31
LABOR AND MANAGEMENT COSTS	\$43.64	\$106.45	\$51.08	\$56.82	\$109.73	\$112.75	\$81.07
NET OPERATING PROFIT	(\$237.95)	\$358.99	(\$3.12)	\$180.14	(\$117.50)	(\$70.95)	\$23.24
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$6.27	\$5.14	\$2.65	\$6.10	\$5.97	\$8.49
INTEREST ON EQUIPMENT INVESTMENT		\$37.13	\$15.61	\$17.81	\$17.81	\$49.75	\$24.67
TOTAL CAPITAL COSTS	\$0.00	\$43.40	\$20.75	\$20.46	\$23.91	\$55.72	\$33.16
RETURN TO LAND AND RISK	(\$237.95)	\$315.59	(\$23.87)	\$159.68	(\$141.41)	(\$126.67)	(\$9.93)

TABLE 12. Whole farm summary, Roswell-Hagerman area, Chaves County, 2002.

GROSS RETURNS		
ALFALFA HAY	300 ACRES	
CROP		\$253,500
WHEAT	51 ACRES	
CROP		\$11,526
GRAZING		\$2,244
ASCS DEFICIENCY		\$1,632
ASCS DIVERSION		\$0
SMALL GRAINS	87 ACRES	
CROP		\$34,800
UPLAND COTTON (PICKER)	51 ACRES	
COTTON LINT		\$21,038
COTTON SEED		\$2,984
ASCS DEFICIENCY		\$1,078
ASCS DIVERSION		\$1,530
UPLAND COTTON (STRIPPER)	51 ACRES	
COTTON LINT		\$19,125
COTTON SEED		\$2,984
ASCS DEFICIENCY		\$2,291
ASCS DIVERSION		\$1,530
CORN	60 ACRES	
CROP		\$27,000
GROSS RETURN		<u>\$383,261</u>
CASH OPERATING EXPENSES		
SEED		\$11,079
FERTILIZER		\$23,688
CHEMICALS		
CROP INSURANCE		\$1,350
OTHER PURCHASED INPUTS		\$1,658
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$10,653
FUEL-IRRIGATION		\$32,323
REPAIRS		\$15,041
CUSTOM CHARGES		\$13,463
LAND TAXES		\$895
OTHER EXPENSES		\$19,908
TOTAL CASH EXPENSES		<u>\$130,057</u>
RETURN OVER CASH EXPENSES		\$253,204
FIXED EXPENSES		\$48,687
TOTAL EXPENSES		\$178,744
NET FARM INCOME		\$204,517
LABOR AND MANAGEMENT COSTS		\$58,311
NET OPERATING PROFIT		\$146,205
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$3,498
INTEREST ON EQUIPMENT INVESTMENT		\$18,412
TOTAL CAPITAL COSTS		<u>\$21,910</u>
RETURN TO LAND AND RISK		<u>\$124,296</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$98,696	14.70%
\$3,000 /ACRE	\$47,496	6.43%
\$5,000 /ACRE	(\$3,704)	4.11%
\$7,000 /ACRE	(54,904)	3.02%
\$9,000 /ACRE	(106,104)	2.39%

* 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)