

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... ROSWELL-HAGERMAN AREA, CHAVES COUN Projected 2018  
FARM SIZE..... 320.00 ACRES  
IRRIGATION TYPE..... SPRINKLER  
NUMBER OF CROPS..... 5

VERSION 1.0

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

New Mexico State University is an equal opportunity employer. All programs are available to everyone regardless of race, color, religion, sex, age, handicap, or national origin. New Mexico State University and the U.S. Department of Agriculture Cooperating.

\* YOU MAY ENTER DATA IN ANY INPUT TABLE WITH HIGHLIGHTED CELLS OR YOU MAY STRIKE [ENTER] AND RETURN TO THE MENU

\*\* BE SURE PRINTER IS ON AND PAPER IS ALIGNED BEFORE YOU PRINT

TABLE 1. Acreage Summary, Chaves County, Roswell-Hagermand Area, Projected 2018

BUDGET AREA.....	ROSWELL-HAGERMAN AREA, CHAVES COUNTY
FARM SIZE.....	320 ACRES
IRRIGATION TYPE.....	SPRINKLER
NUMBER OF CROPS.....	5

ACREAGE SUMMARY:	WATER USE		
	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	35.00 *	16	560
ALFALFA	175.00	54	9,450
WHEAT	25.50	28	714
ARP	0.00		
FLEX IN OAT HAY	4.50	28	126
OAT HAY	25.00	21	525
PICKER COTTON	34.00	28	952
ARP	0.00		
FLEX IN OAT HAY	6.00	28	168
STRIPPER COTTON	34.00	28	952
ARP	0.00		
FLEX IN OAT HAY	6.00	28	168
ROADS, DITCHES, HOMESTEAD	10.00		
<b>TOTAL</b>	<b>320.0</b>		<b>13,615</b>
<b>ACRE FEET PER ACRE OF WATER RIGHTS</b>			<b>3.55</b>

\* DOUBLE-CROPPED

TABLE 2. Basic cost information for the Roswell-Hagerman area, Chaves County, Projected 2018

Item		
<b>Labor Wage Rate:</b>		
Equipment operators	\$/hour	\$8.55
General & Irrigators	\$/hour	\$7.50
<b>Purchased Inputs:</b>		
<b>Fertilizer:</b>		
Nitrogen (N)	\$/pound	\$0.31
Phosphate (P205)	\$/pound	\$0.24
<b>Seed:</b>		
Alfalfa	\$/pound	\$4.00
Cotton		
picker	\$/pound	\$7.55
stripper	\$/pound	\$7.55
Oat Hay	\$/pound	\$0.86
Wheat	\$/pound	\$0.44
Plastic Twine:	\$/box	\$0.72
Natural gas	\$/MCF	\$4.00
Diesel fuel	\$/gallon	\$2.70
Gasoline	\$/gallon	\$2.40
Electricity	cents/KwHr	\$7.84
LP Gas	\$/gallon	\$2.85
Employee Liability Insurance	\$/wages	\$20.00
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
<b>Financial Rates:</b>		
Operating Capital Interest Rate	percent	5.50%
Land Interest Rate	percent	5.00%
Equipment Interest Rate	percent	5.50%
Real Interest Rate	percent	3.00%
Land Taxes	\$185.00 /acre (full value)	\$1.54
Personal Property Tax Rate - NR	\$/ \$1,000 (Assessed Value)	\$24.91
- R		\$16.12
<b>Supervision Factors</b>		
Field Crop-Irrigation	\$/labor hour	\$1.00
Field Crop-Equipment & General	\$/labor hour	\$0.50
Management Rate	percent	7.00%

TABLE 3. Overhead cost information for Roswell-Hagerman area, Chaves County, Projected 2018

Item			
Electricity (Domestic & Shop)		\$241.30 per month	\$2,896
Telephone		\$120.65 per month	\$1,448
Accounting & Legal			\$1,784
Misc. Supplies & Hand Tools			\$2,692
Pickup and Auto			
miles	25,400 @	\$0.500 per mile	\$12,700
<b>Insurance</b>			
- general liability (non-employee)			\$1,930
- fire/theft			\$1,530
<b>Property Taxes</b>			
- non-planted land			\$0
- other than land & machinery			\$0
Building repairs and maintenance			\$1,467
Dues, fees, publications			\$445
Farmstead Equipment			\$191
<b>Total</b>			<b>\$27,083</b>
<b>Total Per Planted Acre</b>			<b>\$87.36</b>

TABLE 1. Summary of major equipment with replacement and spare parts

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
1	Generator set (1000 KVA)	1		1000000
2	Transformer (1000 KVA)	1		500000
3	Control panel	1		50000
4	Exciter	1		100000
5	Rectifier	1		100000
6	Filter capacitor	1		50000
7	UPS (1000 KVA)	1		1000000
8	Transformer (1000 KVA)	1		500000
9	Control panel	1		50000
10	Exciter	1		100000
11	Rectifier	1		100000
12	Filter capacitor	1		50000

TABLE 2. Summary of major equipment with replacement and spare parts

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
13	Generator set (1000 KVA)	1		1000000
14	Transformer (1000 KVA)	1		500000
15	Control panel	1		50000
16	Exciter	1		100000
17	Rectifier	1		100000
18	Filter capacitor	1		50000
19	UPS (1000 KVA)	1		1000000
20	Transformer (1000 KVA)	1		500000
21	Control panel	1		50000
22	Exciter	1		100000
23	Rectifier	1		100000
24	Filter capacitor	1		50000

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
25	Generator set (1000 KVA)	1		1000000
26	Transformer (1000 KVA)	1		500000
27	Control panel	1		50000
28	Exciter	1		100000
29	Rectifier	1		100000
30	Filter capacitor	1		50000
31	UPS (1000 KVA)	1		1000000
32	Transformer (1000 KVA)	1		500000
33	Control panel	1		50000
34	Exciter	1		100000
35	Rectifier	1		100000
36	Filter capacitor	1		50000

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
37	Generator set (1000 KVA)	1		1000000
38	Transformer (1000 KVA)	1		500000
39	Control panel	1		50000
40	Exciter	1		100000
41	Rectifier	1		100000
42	Filter capacitor	1		50000
43	UPS (1000 KVA)	1		1000000
44	Transformer (1000 KVA)	1		500000
45	Control panel	1		50000
46	Exciter	1		100000
47	Rectifier	1		100000
48	Filter capacitor	1		50000

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
49	Generator set (1000 KVA)	1		1000000
50	Transformer (1000 KVA)	1		500000
51	Control panel	1		50000
52	Exciter	1		100000
53	Rectifier	1		100000
54	Filter capacitor	1		50000
55	UPS (1000 KVA)	1		1000000
56	Transformer (1000 KVA)	1		500000
57	Control panel	1		50000
58	Exciter	1		100000
59	Rectifier	1		100000
60	Filter capacitor	1		50000

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
61	Generator set (1000 KVA)	1		1000000
62	Transformer (1000 KVA)	1		500000
63	Control panel	1		50000
64	Exciter	1		100000
65	Rectifier	1		100000
66	Filter capacitor	1		50000
67	UPS (1000 KVA)	1		1000000
68	Transformer (1000 KVA)	1		500000
69	Control panel	1		50000
70	Exciter	1		100000
71	Rectifier	1		100000
72	Filter capacitor	1		50000

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
73	Generator set (1000 KVA)	1		1000000
74	Transformer (1000 KVA)	1		500000
75	Control panel	1		50000
76	Exciter	1		100000
77	Rectifier	1		100000
78	Filter capacitor	1		50000
79	UPS (1000 KVA)	1		1000000
80	Transformer (1000 KVA)	1		500000
81	Control panel	1		50000
82	Exciter	1		100000
83	Rectifier	1		100000
84	Filter capacitor	1		50000

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
85	Generator set (1000 KVA)	1		1000000
86	Transformer (1000 KVA)	1		500000
87	Control panel	1		50000
88	Exciter	1		100000
89	Rectifier	1		100000
90	Filter capacitor	1		50000
91	UPS (1000 KVA)	1		1000000
92	Transformer (1000 KVA)	1		500000
93	Control panel	1		50000
94	Exciter	1		100000
95	Rectifier	1		100000
96	Filter capacitor	1		50000

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
97	Generator set (1000 KVA)	1		1000000
98	Transformer (1000 KVA)	1		500000
99	Control panel	1		50000
100	Exciter	1		100000
101	Rectifier	1		100000
102	Filter capacitor	1		50000
103	UPS (1000 KVA)	1		1000000
104	Transformer (1000 KVA)	1		500000
105	Control panel	1		50000
106	Exciter	1		100000
107	Rectifier	1		100000
108	Filter capacitor	1		50000

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
109	Generator set (1000 KVA)	1		1000000
110	Transformer (1000 KVA)	1		500000
111	Control panel	1		50000
112	Exciter	1		100000
113	Rectifier	1		100000
114	Filter capacitor	1		50000
115	UPS (1000 KVA)	1		1000000
116	Transformer (1000 KVA)	1		500000
117	Control panel	1		50000
118	Exciter	1		100000
119	Rectifier	1		100000
120	Filter capacitor	1		50000

ITEM NO.	DESCRIPTION	QTY	REMARKS	EST. PRICE
121	Generator set (1000 KVA)	1		1000000
122	Transformer (1000 KVA)	1		500000
123	Control panel	1		50000
124	Exciter	1		100000
125	Rectifier	1		100000
126	Filter capacitor	1		50000
127	UPS (1000 KVA)	1		1000000
128	Transformer (1000 KVA)	1		500000
129	Control panel	1		50000
130	Exciter	1		100000
131	Rectifier	1		100000
132	Filter capacitor	1		50000

1. Based on the information provided by the client.

2. Based on the information provided by the client.

3. Based on the information provided by the client.

4. Based on the information provided by the client.

5. Based on the information provided by the client.

6. Based on the information provided by the client.

7. Based on the information provided by the client.

8. Based on the information provided by the client.

9. Based on the information provided by the client.

10. Based on the information provided by the client.

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2018  
Planting dates: September 1 - September 31

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<b>PURCHASED INPUTS</b>								
SEED	\$4.00	30 LBS		\$120.00				\$120.00
INSECTICIDE (CUSTOM)	\$8.77	1 ACRE		\$8.77				\$8.77
PUMP WATER*		16 AC. IN.						
SUBTOTAL				\$128.77				\$128.77
<b>PREHARVEST OPERATIONS</b>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.45	\$3.79	\$1.89	\$5.56	\$12.69
PLOW	145 HP	0.48 HR		\$4.10	\$10.69	\$4.94	\$13.61	\$33.34
DISC (2X)	145 HP	0.34 HR		\$2.91	\$7.57	\$3.77	\$11.12	\$25.38
DRILL	96 HP	0.21 HR		\$1.80	\$3.07	\$0.41	\$4.97	\$10.25
DITCHER (2X)	130 HP	0.10 HR		\$0.86	\$2.23	\$0.40	\$4.06	\$7.54
IRRIGATE (2X)		0.50 HR		\$3.75	\$66.65	\$0.66	\$5.97	\$77.02
SUBTOTAL		1.80 HR		\$14.87	\$94.00	\$12.08	\$45.29	\$166.22
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.33 HR		\$2.78				\$2.78
EMPLOYEE BENEFITS				\$2.68				\$2.68
INSURANCE			\$0.30					\$0.30
SUPERVISION AND MANAGEMENT				\$21.75				\$21.75
SUBTOTAL		0.33 HR	\$0.30	\$27.20				\$27.50
<b>TOTAL OPERATING EXPENSES</b>		2.13 HR	\$129.07	\$42.07	\$94.00	\$12.08	\$45.29	\$322.49

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2018  
Harvesting dates: May 20 - October 15

ITEM	PRICE	YIELD						TOTAL		
GROSS RETURNS										
ALFALFA HAY	\$195.00	5.80 TONS (DELIVERED)						\$1,131.00		
TOTAL								\$1,131.00		
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST	TOTAL			
FERTILIZER (10-26-10)	\$0.22	200 LBS	\$44.00				\$44.00			
INSECTICIDE (CUSTOM)	\$19.52	2 X/ACRE	\$39.04				\$39.04			
HERBICIDE (CUSTOM)	\$26.09	1 X/ACRE	\$26.09				\$26.09			
PLASTIC TWINE	\$0.72	170 FT/TON	\$0.18				\$0.18			
ESTABLISHMENT: Principal		5 YEARS				\$64.50	\$64.50			
: Interest						\$9.47	\$9.47			
PUMP WATER*		54 AC. IN.								
SUBTOTAL			\$109.30			\$73.97	\$183.28			
PREHARVEST OPERATIONS		POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (6X)			1.50 HR		\$11.25	\$224.94	\$2.21	\$20.14	\$258.54	
SUBTOTAL			1.50 HR		\$11.25	\$224.94	\$2.21	\$20.14	\$258.54	
HARVEST OPERATIONS										
SWATHER (5X)	16 FT		0.55 HR		\$4.70	\$5.56	\$0.80	\$20.96	\$32.02	
RAKE (5X)	96 HP		0.25 HR		\$2.14	\$3.65	\$0.47	\$2.70	\$8.97	
BALER (5X)	145 HP		0.35 HR		\$2.99	\$7.80	\$2.00	\$39.94	\$52.73	
FRONT END LOADER (5X)	130 HP		0.25 HR		\$2.14	\$5.57	\$1.78	\$9.05	\$18.54	
HAUL	SEMI		0.50 HR		\$4.28	\$7.09	\$1.40	\$16.84	\$29.60	
SUBTOTAL			1.90 HR		\$16.25	\$29.66	\$6.45	\$89.50	\$141.86	
OVERHEAD EXPENSES										
DOWNTIME			0.48 HR		\$4.06				\$4.06	
EMPLOYEE BENEFITS					\$4.95				\$4.95	
INSURANCE				\$0.55					\$0.55	
LAND TAXES							\$1.54		\$1.54	
SUPERVISION AND MANAGEMENT					\$81.62				\$81.62	
OTHER EXPENSES				\$87.36					\$87.36	
SUBTOTAL			0.48 HR		\$87.91	\$90.63		\$1.54	\$180.08	
TOTAL OPERATING EXPENSES			3.88 HR		\$197.22	\$118.13	\$254.60	\$8.67	\$185.15	\$763.76
NET OPERATING PROFIT									\$367.24	
INTEREST ON OPERATING CAPITAL			( \$114.45 @ 5.50% )						\$6.29	
INTEREST ON EQUIPMENT INVESTMENT									\$43.68	
RETURN TO LAND AND RISK									\$317.27	

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

BUDGET SUMMARY

GROSS RETURN		\$1,131.00	
VARIABLE OPERATING EXPENSES	\$460.49		
RETURN OVER VARIABLE EXPENSES	\$670.51		(GROSS MARGIN)
FIXED EXPENSES	\$185.15		
NET FARM INCOME	\$485.37		(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$118.13		
NET OPERATING PROFIT	\$367.24		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$49.98		
RETURN TO LAND AND RISK		\$317.27	

TABLE 8. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2018  
 Planting dates: August 15 - November 1  
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD	BASE					TOTAL
<b>GROSS RETURNS</b>								
WHEAT	\$7.33	40.00 CWT						\$293.33
DIRECT PAYMENT	\$0.00	40.00 CWT	0.85					\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00							\$0.00
GRAZING	\$44.00	1.00 ACRE						\$44.00
<b>TOTAL</b>								<b>\$337.33</b>
<b>PURCHASED INPUTS</b>								
	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$2.85	100.00 LBS	\$285.00					\$285.00
NITROGEN (N)	\$0.31	150.00 LBS	\$46.50					\$46.50
PHOSPHATE (P205)	\$0.24	50.00 LBS	\$12.00					\$12.00
INSECTICIDE (CUSTOM)	\$18.62	1.00 ACRE	\$18.62					\$18.62
PUMP WATER*		28.00 AC. IN.						
CROP INSURANCE	\$1.96		\$1.96					\$1.96
<b>SUBTOTAL</b>			<b>\$364.08</b>					<b>\$364.08</b>
<b>PREHARVEST OPERATIONS</b>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$4.10	\$10.69	\$4.94	\$13.61	\$33.34
DISC (2X)	145 HP	0.28 HR		\$2.39	\$6.24	\$3.11	\$9.16	\$20.90
FERTILIZE	DEALER APPLIED							
DRILL	96 HP	0.21 HR		\$1.80	\$3.07	\$0.41	\$4.97	\$10.25
DITCHER (2X)	130 HP	0.10 HR		\$0.86	\$2.23	\$0.40	\$4.06	\$7.54
IRRIGATE (4X)		1.00 HR		\$7.50	\$116.64	\$1.15	\$10.44	\$135.73
<b>SUBTOTAL</b>		<b>2.07 HR</b>		<b>\$16.65</b>	<b>\$138.86</b>	<b>\$10.01</b>	<b>\$42.24</b>	<b>\$207.76</b>
<b>HARVEST OPERATIONS</b>								
COMBINE (CUSTOM)			\$14.18					\$14.18
HAUL (CUSTOM)			\$8.00					\$8.00
<b>COMBINE &amp; HAUL (CUSTOM)</b>			<b>\$22.18</b>					<b>\$22.18</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.27 HR		\$2.29				\$2.29
EMPLOYEE BENEFITS				\$3.00				\$3.00
INSURANCE			\$0.33					\$0.33
LAND TAXES							\$1.54	\$1.54
SUPERVISION AND MANAGEMENT				\$25.10				\$25.10
OTHER EXPENSES			\$87.36					\$87.36
<b>SUBTOTAL</b>		<b>0.27 HR</b>	<b>\$87.70</b>	<b>\$30.38</b>			<b>\$1.54</b>	<b>\$119.61</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>2.34 HR</b>	<b>\$473.96</b>	<b>\$47.03</b>	<b>\$138.86</b>	<b>\$10.01</b>	<b>\$43.78</b>	<b>\$713.64</b>
<b>NET OPERATING PROFIT</b>								<b>(\$376.31)</b>
INTEREST ON OPERATING CAPITAL		( \$221.11 @	5.50%	)				\$12.16
INTEREST ON EQUIPMENT INVESTMENT								\$18.33
<b>RETURN TO LAND AND RISK</b>								<b>(\$406.80)</b>

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

**BUDGET SUMMARY**

GROSS RETURN		\$337.33	
VARIABLE OPERATING EXPENSES	\$622.83		
RETURN OVER VARIABLE EXPENSES		(\$285.50)	(GROSS MARGIN)
FIXED EXPENSES	\$43.78		
NET FARM INCOME		(\$329.28)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$47.03		
NET OPERATING PROFIT		(\$376.31)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$30.49		
RETURN TO LAND AND RISK		(\$406.80)	

TABLE 9. Oat hay, sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2018  
 Planting dates: February 15 - April 1  
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL		
GROSS RETURNS										
OAT HAY	\$150.00	5.0 TONS (DELIVERED)						\$750.00		
TOTAL								\$750.00		
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST		TOTAL		
SEED	\$0.86	80 LBS		\$68.80				\$68.80		
NITROGEN (N)	\$0.31	85 LBS		\$26.35				\$26.35		
PUMP WATER*		21 AC. IN.								
SUBTOTAL				\$95.15				\$95.15		
PREHARVEST OPERATIONS		POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC (2X)	145 HP	0.34 HR			\$2.91	\$7.57	\$3.77	\$11.12	\$25.38	
DRILL	96 HP	0.21 HR			\$1.80	\$3.07	\$0.41	\$4.97	\$10.25	
DITCHER (2X)	130 HP	0.10 HR			\$0.86	\$2.23	\$0.40	\$4.06	\$7.54	
IRRIGATE (4X)		1.00 HR			\$7.50	\$87.48	\$0.86	\$7.83	\$103.67	
SUBTOTAL			1.65 HR		\$13.06	\$100.35	\$5.45	\$27.99	\$146.84	
HARVEST OPERATIONS										
SWATHER	14 FT	0.16 HR			\$1.37	\$1.62	\$0.23	\$6.10	\$9.31	
RAKE	96 HP	0.05 HR			\$0.43	\$0.73	\$0.09	\$0.54	\$1.79	
BALER	145 HP	0.05 HR			\$0.43	\$1.11	\$0.29	\$5.71	\$7.53	
FRONT END LOADER	130 HP	0.05 HR			\$0.43	\$1.11	\$0.36	\$1.81	\$3.71	
HAUL	SEMI	0.50 HR			\$4.28	\$7.09	\$1.40	\$16.84	\$29.60	
SUBTOTAL			0.81 HR		\$6.93	\$11.66	\$2.37	\$30.99	\$51.95	
OVERHEAD EXPENSES										
DOWNTIME		0.37 HR			\$3.12				\$3.12	
EMPLOYEE BENEFITS					\$3.60				\$3.60	
INSURANCE				\$0.40					\$0.40	
LAND TAXES							\$1.54		\$1.54	
SUPERVISION AND MANAGEMENT					\$54.18				\$54.18	
OTHER EXPENSES				\$87.36					\$87.36	
SUBTOTAL			0.37 HR		\$87.76	\$60.90		\$1.54	\$150.20	
TOTAL OPERATING EXPENSES			2.83 HR		\$182.91	\$80.88	\$112.01	\$7.82	\$60.51	\$444.14
NET OPERATING PROFIT									\$305.86	
INTEREST ON OPERATING CAPITAL		( \$75.19 @ 5.50% )							\$4.14	
INTEREST ON EQUIPMENT INVESTMENT									\$22.33	
RETURN TO LAND AND RISK									\$279.40	

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

BUDGET SUMMARY

GROSS RETURN		\$750.00	
VARIABLE OPERATING EXPENSES	\$302.74		
RETURN OVER VARIABLE EXPENSES		\$447.26	(GROSS MARGIN)
FIXED EXPENSES	\$60.51		
NET FARM INCOME		\$386.74	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$80.88		
NET OPERATING PROFIT		\$305.86	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$26.47		
RETURN TO LAND AND RISK		\$279.40	

TABLE 10. Upland cotton (picker), sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2018  
 Planting dates: April 15 - June 1  
 Harvesting dates: October 1 - December 31

ITEM	PRICE	YIELD	BASE	TOTAL
<b>GROSS RETURNS</b>				
COTTON LINT	\$0.75	750 LBS		\$562.50
COTTON SEED	\$0.10	1,200 LBS		\$117.00
DIRECT PAYMENT	\$0.0000	750 LBS	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.1373	750 LBS	0.85	\$87.53
<b>TOTAL</b>				<b>\$767.03</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$7.55	20 LBS	\$151.00		\$151.00
NITROGEN (N)	\$0.31	32 LBS	\$9.92		\$9.92
PHOSPHATE (P205)	\$0.24	40 LBS	\$9.60		\$9.60
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.			
<b>SUBTOTAL</b>			<b>\$242.12</b>		<b>\$242.12</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.45	\$3.79	\$1.89	\$5.56	\$12.69
PLOW	145 HP	0.48 HR		\$4.10	\$10.69	\$4.94	\$13.61	\$33.34
FLOAT	130 HP	0.16 HR		\$1.37	\$3.56	\$0.64	\$5.77	\$11.34
FERTILIZE	DEALER APPLIED							
LISTER	130 HP	0.18 HR		\$1.54	\$4.01	\$1.07	\$8.77	\$15.38
PRE-IRRIGATE		0.25 HR		\$1.88	\$29.16	\$0.29	\$2.61	\$33.93
CULT & SPRAY	96 HP	0.26 HR		\$2.22	\$3.80	\$1.06	\$4.80	\$11.89
PLANTER	130 HP	0.26 HR		\$2.22	\$5.79	\$1.46	\$18.26	\$27.73
CULTIVATOR (3X)	96 HP	0.63 HR		\$5.39	\$9.21	\$2.16	\$4.70	\$21.45
HAND HOE (CUSTOM)			\$20.00					\$20.00
DITCHER (2X)	130 HP	0.10 HR		\$0.86	\$2.23	\$0.40	\$4.06	\$7.54
IRRIGATE (3X)		0.75 HR		\$5.63	\$87.48	\$0.86	\$7.83	\$101.79
<b>SUBTOTAL</b>		<b>3.24 HR</b>	<b>\$20.00</b>	<b>\$26.65</b>	<b>\$159.71</b>	<b>\$14.76</b>	<b>\$75.96</b>	<b>\$297.09</b>

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
COTTON PICKER (2X)	2-ROW	1.24 HR		\$10.60	\$20.25	\$8.87	\$186.21	\$225.93
HAUL (2X)	65 HP	1.00 HR		\$8.55	\$14.62	\$0.99	\$8.89	\$33.05
GIN COTTON (CUSTOM)			\$123.60					\$123.60
<b>SUBTOTAL</b>		<b>2.24 HR</b>	<b>\$123.60</b>	<b>\$19.15</b>	<b>\$34.86</b>	<b>\$9.86</b>	<b>\$195.10</b>	<b>\$382.58</b>

POSTHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SHREDDER	96 HP	0.14 HR		\$1.20	\$3.12	\$0.61	\$9.43	\$14.36
<b>SUBTOTAL</b>		<b>0.14 HR</b>		<b>\$1.20</b>	<b>\$3.12</b>	<b>\$0.61</b>	<b>\$9.43</b>	<b>\$14.36</b>

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	1.16 HR		\$9.88				\$9.88
EMPLOYEE BENEFITS			\$8.46				\$8.46
INSURANCE		\$0.94					\$0.94
LAND TAXES						\$1.54	\$1.54
SUPERVISION AND MANAGEMENT			\$56.95				\$56.95
OTHER EXPENSES		\$87.36					\$87.36
<b>SUBTOTAL</b>	<b>1.16 HR</b>	<b>\$88.30</b>	<b>\$75.29</b>			<b>\$1.54</b>	<b>\$165.13</b>

<b>TOTAL OPERATING EXPENSES</b>	<b>6.78 HR</b>	<b>\$474.03</b>	<b>\$122.29</b>	<b>\$197.69</b>	<b>\$25.24</b>	<b>\$282.03</b>	<b>\$1,101.27</b>
<b>NET OPERATING PROFIT</b>							<b>(\$334.24)</b>
INTEREST ON OPERATING CAPITAL	(	\$169.34	@	5.50%	)		\$9.31
INTEREST ON EQUIPMENT INVESTMENT							\$22.33
<b>RETURN TO LAND AND RISK</b>							<b>(\$365.88)</b>

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

**BUDGET SUMMARY**

GROSS RETURN		\$767.03	
VARIABLE OPERATING EXPENSES	\$696.95		
RETURN OVER VARIABLE EXPENSES	\$70.07	(GROSS MARGIN)	
FIXED EXPENSES	\$282.03		
NET FARM INCOME		(\$211.95)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$122.29		
NET OPERATING PROFIT		(\$334.24)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$31.64		
RETURN TO LAND AND RISK		(\$365.88)	



TABLE 11. Upland cotton (stripper), sprinkler-irrigated, budgeted per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Projected 2018  
 Planting dates: April 15 - June 1  
 Harvesting dates: October 1 - December 31

ITEM	PRICE	YIELD	BASE	TOTAL
<b>GROSS RETURNS</b>				
COTTON LINT	\$0.73	750 LBS		\$547.50
COTTON SEED	\$0.10	1,200 LBS		\$117.00
DIRECT PAYMENT	\$0.0000	750 LBS	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.1373	750 LBS	0.85	\$87.53
<b>TOTAL</b>				<b>\$752.03</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$7.55	25 LBS	\$188.75		\$188.75
NITROGEN (N)	\$0.31	32 LBS	\$9.92		\$9.92
PHOSPHORUS (P205)	\$0.24	40 LBS	\$9.60		\$9.60
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.			
<b>SUBTOTAL</b>			<b>\$270.55</b>		<b>\$270.55</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.45	\$3.79	\$1.89	\$5.56	\$12.69
PLOW	145 HP	0.48 HR		\$4.10	\$10.69	\$4.94	\$13.61	\$33.34
FLOAT	130 HP	0.16 HR		\$1.37	\$3.56	\$0.64	\$5.77	\$11.34
FERTILIZE	DEALER APPLIED							
LISTER	130 HP	0.18 HR		\$1.54	\$4.01	\$1.07	\$8.77	\$15.38
PRE-IRRIGATE		0.25 HR		\$1.88	\$29.16	\$0.29	\$2.61	\$33.93
CULT & SPRAY	96 HP	0.26 HR		\$2.22	\$3.80	\$1.06	\$4.80	\$11.89
PLANTER	130 HP	0.26 HR		\$2.22	\$5.79	\$1.46	\$18.26	\$27.73
CULTIVATOR (3X)	96 HP	0.63 HR		\$5.39	\$9.21	\$2.16	\$4.70	\$21.45
HAND HOE (CUSTOM)			\$20.00					\$20.00
DITCHER (2X)	130 HP	0.10 HR		\$0.86	\$2.23	\$0.40	\$4.06	\$7.54
IRRIGATE (3X)		0.75 HR		\$5.63	\$87.48	\$0.86	\$7.83	\$101.79
<b>SUBTOTAL</b>		<b>3.24 HR</b>	<b>\$20.00</b>	<b>\$26.65</b>	<b>\$159.71</b>	<b>\$14.76</b>	<b>\$75.96</b>	<b>\$297.09</b>

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
COTTON STRIPPER	130 HP	1.24 HR		\$10.60	\$27.62	\$6.06	\$61.38	\$105.66
HAUL	96 HP	1.50 HR		\$12.83	\$21.92	\$1.49	\$13.33	\$49.57
GIN COTTON (CUSTOM)			\$159.08					\$159.08
<b>SUBTOTAL</b>		<b>2.74 HR</b>	<b>\$159.08</b>	<b>\$23.43</b>	<b>\$49.54</b>	<b>\$7.55</b>	<b>\$74.71</b>	<b>\$314.30</b>

POSTHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SHREDDER	96 HP	0.14 HR		\$1.20	\$3.12	\$0.61	\$9.43	\$14.36
<b>SUBTOTAL</b>		<b>0.14 HR</b>		<b>\$1.20</b>	<b>\$3.12</b>	<b>\$0.61</b>	<b>\$9.43</b>	<b>\$14.36</b>

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	1.28 HR		\$10.94				\$10.94
EMPLOYEE BENEFITS			\$9.23				\$9.23
INSURANCE		\$1.03					\$1.03
LAND TAXES						\$1.54	\$1.54
SUPERVISION AND MANAGEMENT			\$56.15				\$56.15
OTHER EXPENSES		\$87.36					\$87.36
<b>SUBTOTAL</b>	<b>1.28 HR</b>	<b>\$88.39</b>	<b>\$76.33</b>			<b>\$1.54</b>	<b>\$166.25</b>

<b>TOTAL OPERATING EXPENSES</b>	<b>7.40 HR</b>	<b>\$538.02</b>	<b>\$127.60</b>	<b>\$212.37</b>	<b>\$22.93</b>	<b>\$161.64</b>	<b>\$1,062.55</b>
<b>NET OPERATING PROFIT</b>							<b>(\$310.53)</b>
INTEREST ON OPERATING CAPITAL	(	\$184.59	@	5.50%	)		\$10.15
INTEREST ON EQUIPMENT INVESTMENT							\$62.61
<b>RETURN TO LAND AND RISK</b>							<b>(\$383.29)</b>

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

GROSS RETURN		\$752.03	
VARIABLE OPERATING EXPENSES	\$773.31		
RETURN OVER VARIABLE EXPENSES		(\$21.29)	(GROSS MARGIN)
FIXED EXPENSES	\$161.64		
NET FARM INCOME		(\$182.92)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$127.60		
NET OPERATING PROFIT		(\$310.53)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$72.76		
RETURN TO LAND AND RISK		(\$383.29)	

TABLE 12. Summary of per acre costs and returns for a 320 acre farm with above average management, Roswell-Hagerman area, Chaves County,  
Projected 2018

	ALFALFA ESTABLISHMENT	ALFALFA HAY	WHEAT	OAT HAY	PICKER COTTON	STRIPPER COTTON
		TONS	CWT	TONS	LBS	LBS
PRIMARY YIELD		5.80	40.00	5.00	750.00	750.00
PRIMARY PRICE		\$195.00	\$7.33	\$150.00	\$0.75	\$0.73
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$87.53	\$87.53
SECOND INCOME		\$0.00	\$44.00	\$0.00	\$117.00	\$117.00
GROSS RETURN		\$1,131.00	\$337.33	\$750.00	\$767.03	\$752.03
CASH OPERATING EXPENSES						
SEED	\$120.00		\$285.00	\$68.80	\$151.00	\$188.75
FERTILIZER	\$8.77	\$44.00	\$58.50	\$26.35	\$19.52	\$19.52
CHEMICALS		\$65.13	\$18.62		\$70.13	\$60.81
CROP INSURANCE			\$1.96		\$1.47	\$1.47
OTHER PURCHASED INPUTS		\$0.18				
CANAL WATER						
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$27.35	\$29.66	\$22.22	\$24.53	\$81.06	\$95.73
FUEL-IRRIGATION	\$66.65	\$224.94	\$116.64	\$87.48	\$116.64	\$116.64
REPAIRS	\$12.08	\$8.67	\$10.01	\$7.82	\$25.24	\$22.93
CUSTOM CHARGES			\$22.18		\$143.60	\$179.08
LAND TAXES		\$1.54	\$1.54	\$1.54	\$1.54	\$1.54
OTHER EXPENSES	\$0.30	\$87.91	\$87.70	\$87.76	\$88.30	\$88.39
TOTAL CASH EXPENSES	\$235.14	\$462.02	\$624.37	\$304.28	\$698.49	\$774.85
RETURN OVER CASH EXPENSES	(\$235.14)	\$668.98	(\$287.04)	\$445.72	\$68.54	(\$22.82)
FIXED EXPENSES	\$45.29	\$183.61	\$42.24	\$58.98	\$280.49	\$160.10
TOTAL EXPENSES	\$280.42	\$645.63	\$666.61	\$363.26	\$978.98	\$934.95
NET FARM INCOME	(\$280.42)	\$485.37	(\$329.28)	\$386.74	(\$211.95)	(\$182.92)
LABOR AND MANAGEMENT COSTS	\$42.07	\$118.13	\$47.03	\$80.88	\$122.29	\$127.60
NET OPERATING PROFIT	(\$322.49)	\$367.24	(\$376.31)	\$305.86	(\$334.24)	(\$310.53)
CAPITAL COSTS						
INTEREST ON OPERATING CAPITAL		\$6.29	\$12.16	\$4.14	\$9.31	\$10.15
INTEREST ON EQUIPMENT INVESTMENT		\$43.68	\$18.33	\$22.33	\$22.33	\$62.61
TOTAL CAPITAL COSTS	\$0.00	\$49.98	\$30.49	\$26.47	\$31.64	\$72.76
RETURN TO LAND AND RISK	(\$322.49)	\$317.27	(\$406.80)	\$279.40	(\$365.88)	(\$383.29)
Flex Computation			-346.23	360.71	-63.06	-160.58

TABLE 13. Whole farm summary, Roswell-Hagerman Area, Chaves County,  
Projected 2018

GROSS RETURNS		
ALFALFA HAY	175.00 ACRES	
CROP		\$197,925
WHEAT	25.50 ACRES	
CROP		\$7,480
GRAZING		\$1,122
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
OAT HAY	41.50 ACRES	
CROP		\$31,125
UPLAND COTTON (PICKER)	34.00 ACRES	
COTTON LINT		\$19,125
COTTON SEED		\$3,978
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$2,976
UPLAND COTTON (STRIPPER)	34.00 ACRES	
COTTON LINT		\$18,615
COTTON SEED		\$3,978
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$2,976
GROSS RETURN		<u>\$289,300</u>
CASH OPERATING EXPENSES		
SEED		\$25,874
FERTILIZER		\$11,920
CHEMICALS		\$16,324
CROP INSURANCE		\$150
OTHER PURCHASED INPUTS		\$31
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$13,744
FUEL-IRRIGATION		\$56,233
REPAIRS		\$4,157
CUSTOM CHARGES		\$11,537
LAND TAXES		\$476
OTHER EXPENSES		\$27,281
TOTAL CASH EXPENSES		<u>\$167,726</u>
RETURN OVER CASH EXPENSES		\$121,573
FIXED EXPENSES		\$40,934
TOTAL EXPENSES		\$208,661
NET FARM INCOME		\$80,639
LABOR AND MANAGEMENT COSTS		\$35,196
NET OPERATING PROFIT		\$45,443
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$2,245
INTEREST ON EQUIPMENT INVESTMENT		\$11,926
TOTAL CAPITAL COSTS		<u>\$14,171</u>
RETURN TO LAND AND RISK		<u><u>\$31,271</u></u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$21,671	7.76%
\$3,000 /ACRE	\$2,471	3.71%
\$5,000 /ACRE	(\$16,729)	2.44%
\$7,000 /ACRE	(\$35,929)	1.81%
\$9,000 /ACRE	(\$55,129)	1.44%

\* 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)