

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

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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 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								
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								
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								
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>

TOTAL OPERATING EXPENSES		6.78 HR	\$474.03	\$122.29	\$197.69	\$25.24	\$282.03	\$1,101.27
NET OPERATING PROFIT								(\$334.24)
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)