

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... CURRY COUNTY, Projected 2011.  
FARM SIZE..... 520 ACRES  
IRRIGATION TYPE..... FLOOD  
NUMBER OF CROPS..... 2

VERSION 1.0

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TABLE 1. Acreage Summary, Curry County,  
Projected 2011.

BUDGET AREA.....	CURRY COUNTY		
FARM SIZE.....	520 ACRES		
IRRIGATION TYPE.....	FLOOD		
NUMBER OF CROPS..	2		
		WATER USE	
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
WHEAT	255	15	3,825
ARP	0		
FLEX IN WHEAT	45	15	675
GRAIN SORGHUM	170	20	3,400
ARP	0		
FLEX IN WHEAT	30	15	450
ROADS, DITCHES			
HOMESTEAD	20		
TOTAL	520		8,350
ACRE FEET PER ACRE OF WATER RIGHTS			1.34

TABLE 2. Basic cost information for Curry County,  
Projected 2011.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.45
General & Irrigators	\$/hour	\$7.25
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.71
Phosphate (P205)	\$/pound	\$0.65
Anhydrous (NH3)	\$/ton	\$625.00
Seed:		
Grain Sorghum	\$/pound	\$1.78
Wheat	\$/pound	\$0.32
Diesel fuel	\$/gallon	\$2.95
Gasoline	\$/gallon	\$3.05
Electricity (SWPS)	cents/KwHr	6.78
LP gas	\$/gallon	\$2.45
Natural Gas (Gas NM)	\$/MCF	\$3.75
Employee Liability Insurance	\$/1,000 wages	\$20.00
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
Financial Rates:		
Operating Capital Interest Rate	percent	7.00%
Land Interest Rate	percent	6.00%
Equipment Interest Rate	percent	7.00%
Real Interest Rate	percent	3.00%
Land Taxes	\$109.00 /acre (full value)	\$0.79
Personal Propety Tax Rate	- NR - R	\$/1,000 (Assessed Value) \$21.81 \$21.93
Supervision Factors		
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 Curry County,  
Projected 2011.

Item			
Electricity (Domestic & Shop)		\$242.00 per month	\$2,904
Telephone		\$121.00 per month	\$1,452
Accounting & Legal			\$1,785
Misc. Supplies & Hand Tools			\$2,668
Pickup and Auto			
miles	24,200	@ \$0.500 per mile	\$12,100
Insurance			
- general liability (non-employee)			\$2,384
- fire/theft			\$1,912
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$0
Building repairs and maintenance			\$1,579
Dues, fees, publications			\$436
Farmstead Equipment			\$182
Total			\$27,400
Total Per Planted Acre			\$64.47



TABLE 6. Wheat, flood-irrigated, budgeted per acre costs and returns for a 520 acre farm with above average management, Curry County, Projected 2011.  
Planting Dates: August 15 - September 15  
Harvesting Dates: June 15 - July 15

ITEM	PRICE	YIELD	BASE	TOTAL
<b>GROSS RETURNS</b>				
WHEAT	\$6.50	65.00 BUSHELS		\$422.50
DIRECT PAYMENT	\$0.00	65.00 BUSHEL	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00			\$0.00
GRAZING	\$40.00	1.00 ACRE		\$40.00
<b>TOTAL</b>				<b>\$462.50</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.32	60 LBS	\$19.20		\$19.20
ANHYDROUS AMMONIA (NH3)	\$0.31	100 LBS	\$31.25		\$31.25
NITROGEN (N)	\$0.71	18 LBS	\$12.78		\$12.78
PHOSPHORUS (P205)	\$0.65	46 LBS	\$29.90		\$29.90
INSECTICIDE (CUSTOM)	\$9.59	1 ACRE	\$9.59		\$9.59
HERBICIDE (CUSTOM)	\$10.69	1 ACRE	\$10.69		\$10.69
PUMP WATER*		15 AC. IN.			
CROP INSURANCE	\$0.15		\$0.15		\$0.15
<b>SUBTOTAL</b>			<b>\$113.56</b>		<b>\$113.56</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC (3X)	185 HP	0.33 HR		\$2.46	\$10.08	\$5.59	\$13.00	\$31.14
ANHYDROUS APPL	185 HP	0.17 HR		\$1.27	\$5.19	\$0.98	\$4.86	\$12.30
LISTER	185 HP	0.12 HR		\$0.89	\$3.67	\$1.01	\$4.28	\$9.86
FERT SPREADER	145 HP	0.05 HR		\$0.37	\$1.15	\$0.22	\$2.47	\$4.21
DRILL	145 HP	0.13 HR		\$0.97	\$3.00	\$0.79	\$9.31	\$14.06
IRRIGATE (3X)		1.50 HR		\$10.88	\$49.46	\$0.00	\$3.66	\$64.00
<b>SUBTOTAL</b>		<b>2.30 HR</b>		<b>\$16.84</b>	<b>\$72.56</b>	<b>\$8.60</b>	<b>\$37.57</b>	<b>\$135.56</b>

HARVEST OPERATIONS								
COMBINE (CUSTOM)				\$24.74				\$24.74
HAUL (CUSTOM)				\$10.40				\$10.40
<b>SUBTOTAL</b>				<b>\$35.14</b>				<b>\$35.14</b>

OVERHEAD EXPENSES								
DOWNTIME		0.20 HR		\$1.49				\$1.49
EMPLOYEE BENEFITS				\$3.03				\$3.03
INSURANCE			\$0.34					\$0.34
LAND TAXES							\$0.79	\$0.79
SUPERVISION AND MANAGEMENT				\$34.28				\$34.28
OTHER EXPENSES			\$64.47					\$64.47
<b>SUBTOTAL</b>		<b>0.20 HR</b>	<b>\$64.81</b>	<b>\$38.80</b>			<b>\$0.79</b>	<b>\$104.40</b>

TOTAL OPERATING EXPENSES 2.50 HR \$213.51 \$55.63 \$72.56 \$8.60 \$38.36 \$388.66

NET OPERATING PROFIT \$73.84

INTEREST ON OPERATING CAPITAL ( \$80.00 @ 7.00% ) \$5.60  
INTEREST ON EQUIPMENT INVESTMENT \$13.15

RETURN TO LAND AND RISK \$55.10

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

BUDGET SUMMARY

GROSS RETURN		\$462.50	
VARIABLE OPERATING EXPENSES	\$294.66		
RETURN OVER VARIABLE EXPENSES	\$167.84	(GROSS MARGIN)	
FIXED EXPENSES	\$38.36		
NET FARM INCOME	\$129.47	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$55.63		
NET OPERATING PROFIT	\$73.84	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$18.75		
RETURN TO LAND AND RISK	\$55.10		

TABLE 7. Grain sorghum, flood-irrigated, budgeted per acre costs and returns for a 520 acre farm with above average management, Curry County, Projected 2011.  
 Planting Dates: May 15 - June 15  
 Harvesting Dates: October 15 - November 15

ITEM	PRICE	YIELD	BASE	TOTAL
<b>GROSS RETURNS</b>				
GRAIN SORGHUM	\$8.63	65.00 CWT		\$560.63
DIRECT PAYMENT	\$0.00	65.00 CWT	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT		\$0.00
GRAZING	\$9.00	1.00 ACRE		\$9.00
<b>TOTAL</b>				<b>\$569.63</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$1.78	5 LBS	\$8.90		\$8.90
ANHYDROUS (NH3)	\$0.31	150 LBS	\$46.88		\$46.88
NITROGEN (N)	\$0.71	25 LBS	\$17.75		\$17.75
PHOSPHORUS (P205)	\$0.65	50 LBS	\$32.50		\$32.50
HERBICIDE (CUSTOM)	\$14.11	1 X/ACRE	\$14.11		\$14.11
INSECTICIDE (CUSTOM)	\$13.49	1 X/ACRE	\$13.49		\$13.49
TRACE ELEMENTS	\$13.89	1 ACRE	\$13.89		\$13.89
PUMP WATER*		20 AC. IN.			
CROP INSURANCE	\$0.29		\$0.29		\$0.29
<b>SUBTOTAL</b>			<b>\$147.80</b>		<b>\$147.80</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	185 HP	0.11 HR		\$0.82	\$3.36	\$1.86	\$4.33	\$10.38
CHISEL	185 HP	0.15 HR		\$1.12	\$4.58	\$1.17	\$6.21	\$13.09
DISC (2X)	185 HP	0.22 HR		\$1.64	\$6.72	\$3.73	\$8.67	\$20.76
ANHYDROUS APPL	185 HP	0.17 HR		\$1.27	\$5.19	\$0.98	\$4.86	\$12.30
LISTER	185 HP	0.12 HR		\$0.89	\$3.67	\$1.01	\$4.28	\$9.86
PRE-IRRIGATE		0.50 HR		\$3.73	\$13.19	\$0.00	\$0.98	\$17.89
ROD WEEDER	140 HP	0.08 HR		\$0.60	\$1.84	\$0.41	\$4.68	\$7.53
PLANTER	140 HP	0.17 HR		\$1.27	\$3.92	\$1.09	\$15.02	\$21.29
CULTIVATOR (2X)	140 HP	0.26 HR		\$1.94	\$5.99	\$2.74	\$18.67	\$29.35
IRRIGATE (4X)		2.00 HR		\$14.50	\$52.76	\$0.00	\$3.90	\$71.16
<b>SUBTOTAL</b>		<b>3.78 HR</b>		<b>\$27.76</b>	<b>\$101.24</b>	<b>\$13.00</b>	<b>\$71.60</b>	<b>\$213.60</b>

<b>HARVEST OPERATIONS</b>								
COMBINE (CUSTOM)			\$28.43					\$28.43
HAUL (CUSTOM)			\$12.35					\$12.35
<b>SUBTOTAL</b>			<b>\$40.78</b>					<b>\$40.78</b>

<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.32 HR		\$2.38				\$2.38
EMPLOYEE BENEFITS				\$5.00				\$5.00
INSURANCE			\$0.56					\$0.56
LAND TAXES						\$0.79		\$0.79
SUPERVISION AND MANAGEMENT				\$42.76				\$42.76
OTHER EXPENSES			\$64.47					\$64.47
<b>SUBTOTAL</b>		<b>0.32 HR</b>	<b>\$65.03</b>	<b>\$50.14</b>		<b>\$0.79</b>		<b>\$115.96</b>

TOTAL OPERATING EXPENSES 4.10 HR \$253.61 \$77.91 \$101.24 \$13.00 \$72.39 \$518.15

NET OPERATING PROFIT \$51.47

INTEREST ON OPERATING CAPITAL ( \$105.86 @ 7.00% ) \$7.41  
 INTEREST ON EQUIPMENT INVESTMENT \$24.96

RETURN TO LAND AND RISK \$19.10

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

GROSS RETURN		\$569.63	
VARIABLE OPERATING EXPENSES	\$367.85		
RETURN OVER VARIABLE EXPENSES		\$201.77	(GROSS MARGIN)
FIXED EXPENSES	\$72.39		
NET FARM INCOME		\$129.38	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$77.91		
NET OPERATING PROFIT		\$51.47	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$32.37		
RETURN TO LAND AND RISK		\$19.10	

TABLE 8. Summary of per acre costs and returns for a 520 acre farm with above average management, Curry County Projected 2011.

	WHEAT	GRAIN SORGHUM
	BUSHELS	CWT
PRIMARY YIELD	65.00	65.00
PRIMARY PRICE	\$6.50	\$8.63
GOVERNMENT PAYMENTS	\$0.00	\$0.00
SECOND INCOME	\$40.00 ACRE	\$9.00 ACRE
GROSS RETURN	\$462.50	\$569.63
CASH OPERATING EXPENSES		
SEED	\$19.20	\$8.90
FERTILIZER	\$73.93	\$111.01
CHEMICALS	\$20.28	\$27.60
CROP INSURANCE	\$0.15	\$0.29
OTHER PURCHASED INPUTS		
CANAL WATER		
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$23.10	\$35.29
FUEL-IRRIGATION	\$49.46	\$65.95
REPAIRS	\$8.60	\$13.00
CUSTOM CHARGES	\$35.14	\$40.78
LAND TAXES	\$0.79	\$0.79
OTHER EXPENSES	\$64.81	\$65.03
TOTAL CASH EXPENSES	<u>\$295.45</u>	<u>\$368.65</u>
RETURN OVER CASH EXPENSES	\$167.05	\$200.98
FIXED EXPENSES	\$37.57	\$71.60
TOTAL EXPENSES	\$333.03	\$440.25
NET FARM INCOME	\$129.47	\$129.38
LABOR AND MANAGEMENT COSTS	\$55.63	\$77.91
NET OPERATING PROFIT	\$73.84	\$51.47
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL	\$5.60	\$7.41
INTEREST ON EQUIPMENT INVESTMENT	\$13.15	\$24.96
TOTAL CAPITAL COSTS	<u>\$18.75</u>	<u>\$32.37</u>
RETURN TO LAND AND RISK	<u>\$55.10</u>	<u>\$19.10</u>
Flex Computation	105.82	115.66

TABLE 9. Whole farm summary, Curry County,  
Projected 2011.

GROSS RETURNS		
WHEAT	330 ACRES	
CROP		\$139,425
GRAZING		\$13,200
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GRAIN SORGHUM	170 ACRES	
CROP		\$95,306
GRAZING		\$1,530
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$249,461</u>
CASH OPERATING EXPENSES		
SEED		\$7,849
FERTILIZER		\$43,269
CHEMICALS		\$11,382
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$0
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$13,620
FUEL-IRRIGATION		\$27,534
REPAIRS		\$5,048
CUSTOM CHARGES		\$18,529
LAND TAXES		\$396
OTHER EXPENSES		\$32,441
TOTAL CASH EXPENSES		<u>\$160,169</u>
RETURN OVER CASH EXPENSES		\$89,292
FIXED EXPENSES		\$24,571
TOTAL EXPENSES		\$184,740
NET FARM INCOME		\$64,721
LABOR AND MANAGEMENT COSTS		\$31,602
NET OPERATING PROFIT		\$33,119
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$3,108
INTEREST ON EQUIPMENT INVESTMENT		\$8,581
TOTAL CAPITAL COSTS		<u>\$11,689</u>
RETURN TO LAND AND RISK		<u><u>\$21,430</u></u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$500 /ACRE	\$13,630	8.56%
\$1,000 /ACRE	\$5,830	5.12%
\$1,500 /ACRE	(\$1,970)	3.65%
\$2,000 /ACRE	(\$9,770)	2.84%
\$2,500 /ACRE	(\$17,570)	2.32%

\* 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)