

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... CAUSEY-LINGO AREA, ROOSEVELT COUJ Projected 2006.  
FARM SIZE..... 1,280.00 ACRES  
IRRIGATION TYPE..... DRYLAND  
NUMBER OF CROPS..... 3

VERSION 1.0

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TABLE 1. Acreage Summary, Roosevelt County, Projected 2006.

BUDGET AREA.....	CAUSEY-LINGO AREA, ROOSEVELT COUNTY
FARM SIZE.....	1,280 ACRES
IRRIGATION TYPE.....	DRYLAND
NUMBER OF CROPS....	3

  

ACREAGE SUMMARY:	LAND USE (ACRES)
GRAIN SORGHUM	357.00
ARP	0.00
FLEX IN COTTON	63.00
COTTON	357.00
ARP	0.00
FLEX IN COTTON	63.00
WHEAT	357.00
ARP	0.00
FLEX IN COTTON	63.00
ROADS, HOMESTEAD	20.00
<b>TOTAL</b>	<b>1,280.00</b>

TABLE 2. Basic cost information for the Causey-Lingo area, Roosevelt County, Projected 2006.

Item		
<b>Labor Wage Rate:</b>		
Equipment operators	\$/hour	\$7.45
General & Irrigators	\$/hour	\$6.65
<b>Purchased Inputs:</b>		
<b>Seed:</b>		
Wheat	\$/pound	\$0.28
Grain Sorghum	\$/pound	\$1.22
Cotton	\$/pound	\$2.00
<b>Fuel:</b>		
Diesel fuel	\$/gallon	\$2.10
Gasoline	\$/gallon	\$2.00
Employee Liability Insurance	\$/ \$1,000 wages	\$20.00
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
<b>Financial Rates:</b>		
Operating Capital Interest Rate	percent	8.00%
Land Interest Rate	percent	8.00%
Equipment Interest Rate	percent	8.00%
Real Interest Rate	percent	3.00%
Land Taxes	\$89.00 /acre (full value)	\$0.74
Personal Property Tax Rate	- NR \$/\$1,000 (Assessed Value)	\$24.84
	- R	\$13.80
Supervision Factor	\$/labor hour	\$0.50
Management Rate	percent	7.00%

TABLE 3. Overhead cost information for the Causey-Lingo area, Roosevelt County, Projected 2006.

Item		
Electricity (Domestic & Shop)	\$206.70 per month	\$2,480
Telephone	\$95.40 per month	\$1,145
Accounting & Legal		\$1,564
Misc. Supplies & Hand Tools		\$2,337
Pickup and Auto		
miles	27,295 @ \$0.415 per mile	\$11,327
<b>Insurance</b>		
- general liability (non-employee)		\$1,696
- fire/theft		\$1,314
<b>Property Taxes</b>		
- non-planted land		\$0
- other than land & machinery		\$6,010
Building repairs and maintenance		\$1,277
Dues, fees, publications		\$382
Farmstead Equipment		\$170
	<b>Total</b>	<b>\$29,702</b>
	<b>Total Per Planted Acre</b>	<b>\$23.57</b>

TABLE 4. Equipment summary for a 1,280 acre, dryland farm with above average management, Causey-Lingo area, Roosevelt County, projected 2006.

Table with columns: EQUIPMENT ITEM & SIZE, ANNUAL HOURS OF USE, NUMBER, TOTAL VALUE, FUEL OIL LUBRICANT, FUEL OIL LUBRICANT REPAIR PER HR, FUEL OIL LUBRICANT REPAIR PER HR, DEPRECIATION TAXES, TOTAL PER HR. Lists various equipment like tractors, trucks, tillage, and harvesting equipment with associated costs.

EQUIPMENT LIST

Table with columns: ITEM, NEW VALUE, USED VALUE, YEARS LIFE, EQUIP CODE, MAX HOURS, FUEL CONSUMPTION, LUBE COST, ACCUM HOURS, INTEREST EXPENSE. Provides a breakdown of equipment usage and costs.

USAGE LIST

Table with columns: GRAIN (SORGHUM, COTTON, WHEAT), PER ACRE TOTALS. Shows usage metrics per acre for different crops.

INTEREST PROJECTION

Table with columns: GRAIN (SORGHUM, COTTON, WHEAT), showing interest rates per acre for different crops.

GRAIN SORGHUM

Table with columns: MACHINE, POWER UNIT, TIMES OVER, RATE, TOTAL, CUSTOM. Lists machinery used for grain sorghum production.

COTTON

Table with columns: MACHINE, POWER UNIT, TIMES OVER, RATE, TOTAL, CUSTOM. Lists machinery used for cotton production.

WHEAT

Table with columns: MACHINE, POWER UNIT, TIMES OVER, RATE, TOTAL, CUSTOM. Lists machinery used for wheat production.

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE

Table with columns: Hours of Use (0 to 9), showing repair cost percentages for various hours of use.

\* Based on unpublished data of D. R. Hunt, Department of Agriculture Engineering, University of Illinois

\*\* Based on "Agricultural Machinery Data" in Agriculture Engineers Yearbook, 1983

Codes

- 1 Tractors
2 Balers, combines, forage harvesters, windrowers, pickups
3 rotary hoes, disks, moldboard plows, chains, feed cutters, row cultivators, laser plans
4 harrows, weepers, flails, mtn. buck, dog, roller, water furrow, bed shaper
5 baler-wreckers, cotton pickers, cotton strippers, corn pickers, corn heads, forage equipment, rotary mowers, stalk choppers, feed weepers, front loaders
6 rakes, cultivar mowers
7 baler or engine, manure spreaders
8 planters, drills, seeding equipment, mounted sprayers
9 fertilizer distributing equipment

TABLE 5. Grain sorghum, dryland, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Causey-Lingo area, Roosevelt County  
Projected 2006.

Planting Dates: May 15 - May 30

Harvest Dates: October 15 - November 15

ITEM	PRICE	YIELD	BASE	TOTAL
<b>GROSS RETURNS</b>				
GRAIN SORGHUM	\$3.70	15.00 CWT		\$55.45
DIRECT PAYMENT	\$0.00	15.00 CWT	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT		\$0.00
GRAZING	\$5.00	1 ACRE		\$5.00
<b>TOTAL</b>				<b>\$60.45</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$1.22	3 LBS	\$3.66		\$3.66
INSECTICIDE	\$15.88	1 X/ACRE	\$15.88		\$15.88
CROP INSURANCE	\$0.14		\$0.14		\$0.14
<b>SUBTOTAL</b>			<b>\$19.68</b>		<b>\$19.68</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	165 HP	0.11 HR		\$0.82	\$2.07	\$1.62	\$2.24	\$6.74
STUBBLE MULCH	165 HP	0.10 HR		\$0.75	\$1.88	\$1.34	\$2.56	\$6.53
LISTER	165 HP	0.09 HR		\$0.67	\$1.69	\$0.84	\$1.64	\$4.85
ROD WEED	165 HP	0.05 HR		\$0.37	\$0.94	\$0.34	\$0.76	\$2.42
PLANTER	93 HP	0.12 HR		\$0.89	\$1.46	\$0.57	\$2.74	\$5.66
CULTIVATOR	93 HP	0.10 HR		\$0.75	\$1.22	\$0.70	\$0.56	\$3.22
SPRAYER	93 HP	0.06 HR		\$0.45	\$0.73	\$0.17	\$0.69	\$2.04
<b>SUBTOTAL</b>		<b>0.63 HR</b>		<b>\$4.69</b>	<b>\$10.00</b>	<b>\$5.58</b>	<b>\$11.19</b>	<b>\$31.46</b>

<b>HARVEST OPERATIONS</b>								
COMBINE		0.14 HR		\$1.04	\$2.46	\$0.39	\$13.93	\$17.83
HAUL	2 TON	0.14 HR		\$1.04	\$1.87	\$0.86	\$1.72	\$5.49
<b>SUBTOTAL</b>		<b>0.28 HR</b>		<b>\$2.09</b>	<b>\$4.32</b>	<b>\$1.26</b>	<b>\$15.65</b>	<b>\$23.32</b>

<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.12 HR		\$0.88				\$0.88
EMPLOYEE BENEFITS				\$1.22				\$1.22
INSURANCE			\$0.14					\$0.14
LAND TAXES							\$0.74	\$0.74
SUPERVISION AND MANAGEMENT				\$4.61				\$4.61
OTHER EXPENSES			\$23.57					\$23.57
<b>SUBTOTAL</b>		<b>0.12 HR</b>		<b>\$23.71</b>	<b>\$6.70</b>		<b>\$0.74</b>	<b>\$31.15</b>

TOTAL OPERATING EXPENSES 1.03 HR \$43.39 \$13.48 \$14.32 \$6.83 \$27.58 \$105.61

NET OPERATING PROFIT (\$45.17)

INTEREST ON OPERATING CAPITAL ( \$14.20 @ 8.00% ) \$1.14  
 INTEREST ON EQUIPMENT INVESTMENT \$13.64

RETURN TO LAND AND RISK (\$59.94)

**BUDGET SUMMARY**

GROSS RETURN		\$60.45	
VARIABLE OPERATING EXPENSES	\$64.55		
RETURN OVER VARIABLE EXPENSES		(\$4.11)	(GROSS MARGIN)
FIXED EXPENSES	\$27.58		
NET FARM INCOME		(\$31.68)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$13.48		
NET OPERATING PROFIT		(\$45.17)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$14.78		
RETURN TO LAND AND RISK		(\$59.94)	

TABLE 6. Upland cotton (stripper), dryland, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Causey-Lingo area, Roosevelt County Projected 2006.

Planting Dates: May 1 - June 10

Harvest Dates: October 15 - November 15

ITEM	PRICE	YIELD	BASE					TOTAL
<b>GROSS RETURNS</b>								
LINT	\$0.55	250.00 LBS						\$137.50
SEED	\$0.07	400 LBS						\$26.00
DIRECT PAYMENT	\$0.0000	250.00 LBS	0.85					\$0.00
COUNTER CYCLICAL PAYMENT	\$0.1373	250.00 LBS	0.85					\$29.18
TOTAL								\$192.68
<b>PURCHASED INPUTS</b>								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$2.00	15 LBS	\$30.00					\$30.00
INSECTICIDE (CUSTOM)	\$20.01	1 X/ACRE	\$20.01					\$20.01
CROP INSURANCE	\$0.09		\$0.09					\$0.09
SUBTOTAL			\$50.10					\$50.10
<b>PREHARVEST OPERATIONS</b>								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
CHISEL	165 HP	0.15 HR		\$1.12	\$2.82	\$1.06	\$2.25	\$7.25
DISC	165 HP	0.11 HR		\$0.82	\$2.07	\$1.62	\$2.24	\$6.74
LISTER	165 HP	0.09 HR		\$0.67	\$1.69	\$0.84	\$1.64	\$4.85
ROD WEED	165 HP	0.05 HR		\$0.37	\$0.94	\$0.34	\$0.76	\$2.42
PLANTER	165 HP	0.12 HR		\$0.89	\$2.26	\$0.96	\$4.06	\$8.17
CULTIVATOR (2X)	93 HP	0.20 HR		\$1.49	\$2.44	\$1.41	\$1.11	\$6.45
HAND HOE (CUSTOM)			\$6.00					\$6.00
SUBTOTAL		0.72 HR	\$6.00	\$5.36	\$12.23	\$6.23	\$12.06	\$41.88
<b>HARVEST OPERATIONS</b>								
COTTON STRIPPER (MTD)	93 HP	0.58 HR		\$4.32	\$7.06	\$1.74	\$3.95	\$17.07
HAUL	2 TON	0.50 HR		\$3.73	\$6.67	\$3.08	\$6.14	\$19.62
GIN COTTON (CUSTOM)			\$38.40					\$38.40
SUBTOTAL		1.08 HR	\$38.40	\$8.05	\$13.73	\$4.82	\$10.09	\$75.09
<b>POST HARVEST OPERATIONS</b>								
SHREDDER	93 HP	0.25 HR		\$1.86	\$3.04	\$0.62	\$1.06	\$6.59
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.47 HR		\$3.52				\$3.52
EMPLOYEE BENEFITS				\$2.75				\$2.75
INSURANCE			\$0.31					\$0.31
LAND TAXES						\$0.74		\$0.74
SUPERVISION AND MANAGEMENT				\$14.43				\$14.43
OTHER EXPENSES			\$23.57					\$23.57
SUBTOTAL		0.47 HR	\$23.88	\$20.70			\$0.74	\$45.32
TOTAL OPERATING EXPENSES		2.52 HR	\$118.38	\$35.97	\$29.01	\$11.66	\$23.95	\$218.97
NET OPERATING PROFIT								(\$26.30)
INTEREST ON OPERATING CAPITAL		( \$32.12 @	8.00%	)				\$2.57
INTEREST ON EQUIPMENT INVESTMENT								\$9.25
RETURN TO LAND AND RISK								(\$38.12)

BUDGET SUMMARY

GROSS RETURN		\$192.68	
VARIABLE OPERATING EXPENSES	\$159.04		
RETURN OVER VARIABLE EXPENSES		\$33.63	(GROSS MARGIN)
FIXED EXPENSES	\$23.95		
NET FARM INCOME		\$9.68	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$35.97		
NET OPERATING PROFIT		(\$26.30)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$11.82		
RETURN TO LAND AND RISK		(\$38.12)	

TABLE 7. Wheat, dryland, budgeted per acre costs and returns for a 1,280 acre farm with above average management, Causey-Lingo area, Roosevelt County Projected 2006.

Planting dates: August 15 - September 15

Harvesting dates: June 1 - June 25

ITEM	PRICE	YIELD	BASE						TOTAL
<b>GROSS RETURNS</b>									
WHEAT	\$3.75	18.00 BUSHELS							\$67.50
DIRECT PAYMENT	\$0.00	18.00 BUSHEL	0.85						\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00								\$0.00
GRAZING	\$10.00	1.00 ACRE							\$10.00
TOTAL									\$77.50
<b>PURCHASED INPUTS</b>									
	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
SEED	\$0.28	30 LB	\$8.40						\$8.40
CROP INSURANCE	\$0.14		\$0.14						\$0.14
			\$8.54						\$8.54
<b>PREHARVEST OPERATIONS</b>									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
STUBBLE MULCH	165 HP	0.10 HR		\$0.75	\$1.88	\$1.34	\$2.56	\$6.53	
DISC	165 HP	0.11 HR		\$0.82	\$2.07	\$1.62	\$2.24	\$6.74	
RODWEED	165 HP	0.05 HR		\$0.37	\$0.94	\$0.34	\$0.76	\$2.42	
DRILL	93 HP	0.05 HR		\$0.37	\$0.61	\$0.29	\$4.60	\$5.88	
SUBTOTAL		0.31 HR		\$2.31	\$5.50	\$3.59	\$10.16	\$21.56	
<b>HARVEST OPERATIONS</b>									
COMBINE		0.14 HR		\$1.04	\$2.46	\$0.39	\$13.93	\$17.83	
HAUL	2 TON	0.14 HR		\$1.04	\$1.87	\$0.86	\$1.72	\$5.49	
SUBTOTAL		0.28 HR		\$2.09	\$4.32	\$1.26	\$15.65	\$23.32	
<b>OVERHEAD EXPENSES</b>									
DOWNTIME		0.10 HR		\$0.75				\$0.75	
EMPLOYEE BENEFITS				\$0.79				\$0.79	
INSURANCE			\$0.09					\$0.09	
LAND TAXES							\$0.74	\$0.74	
SUPERVISION AND MANAGEMENT				\$5.58				\$5.58	
OTHER EXPENSES			\$23.57					\$23.57	
SUBTOTAL		0.10 HR	\$23.66	\$7.12			\$0.74	\$31.51	
TOTAL OPERATING EXPENSES		0.41 HR	\$32.06	\$11.51	\$9.83	\$4.85	\$26.55	\$84.80	
NET OPERATING PROFIT								(\$7.30)	
INTEREST ON OPERATING CAPITAL		( \$6.94 @ 8.00% )						\$0.56	
INTEREST ON EQUIPMENT INVESTMENT								\$13.41	
RETURN TO LAND AND RISK								(\$21.26)	

**BUDGET SUMMARY**

GROSS RETURN		\$77.50	
VARIABLE OPERATING EXPENSES	\$46.74		
RETURN OVER VARIABLE EXPENSES		\$30.76	(GROSS MARGIN)
FIXED EXPENSES	\$26.55		
NET FARM INCOME		\$4.21	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$11.51		
NET OPERATING PROFIT		(\$7.30)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$13.96		
RETURN TO LAND AND RISK		(\$21.26)	

TABLE 8. Summary of per acre costs and returns for a 1,280 acre farm with above average management, Roosevelt County Projected 2006.

	GRAIN SORGHUM	STRIPPER COTTON	WHEAT
	CWT	LBS	BU
PRIMARY YIELD	15.00	250.00	18.00
PRIMARY PRICE	\$3.70	\$0.55	\$3.75
GOVERNMENT PAYMENTS	\$0.00	\$0.00	\$0.00
SECOND INCOME	\$5.00	\$26.00	\$10.00
GROSS RETURN	\$60.45	\$192.68	\$77.50
CASH OPERATING EXPENSES			
SEED	\$3.66	\$30.00	\$8.40
FERTILIZER			
CHEMICALS	\$15.88	\$20.01	
CROP INSURANCE	\$0.14	\$0.09	\$0.14
OTHER PURCHASED INPUTS			
CANAL WATER			
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$14.32	\$29.01	\$9.83
FUEL-IRRIGATION			
REPAIRS	\$6.83	\$11.66	\$4.85
CUSTOM CHARGES	\$0.00	\$44.40	\$0.00
LAND TAXES	\$0.74	\$0.74	\$0.74
OTHER EXPENSES	\$23.71	\$23.88	\$23.66
TOTAL CASH EXPENSES	\$65.29	\$159.78	\$47.61
RETURN OVER CASH EXPENSES	(\$4.84)	\$32.90	\$29.89
FIXED EXPENSES	\$26.84	\$23.22	\$25.82
TOTAL EXPENSES	\$92.13	\$183.00	\$73.43
NET FARM INCOME	(\$31.68)	\$9.68	\$4.07
LABOR AND MANAGEMENT COSTS	\$13.48	\$35.97	\$11.51
NET OPERATING PROFIT	(\$45.17)	(\$26.30)	(\$7.44)
CAPITAL COSTS			
INTEREST ON OPERATING CAPITAL	\$1.14	\$2.57	\$0.56
INTEREST ON EQUIPMENT INVESTMENT	\$13.64	\$9.25	\$13.41
TOTAL CAPITAL COSTS	\$14.78	\$11.82	\$13.96
RETURN TO LAND AND RISK	(\$59.94)	(\$38.12)	(\$21.40)

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TABLE 9. Whole farm summary, Causey-Lingo area, Roosevelt County,  
Projected 2006.

GROSS RETURNS		
GRAIN SORGHUM	357.00 ACRES	
CROP		\$19,794
GRAZING		\$1,785
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
COTTON	546.00 ACRES	
LINT		\$75,075
SEED		\$14,196
DIRECT PAYMENT		\$0
WHEAT	357.00 ACRES	
CROP		\$24,098
GRAZING		\$3,570
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$138,518</u>
CASH OPERATING EXPENSES		
SEED		\$20,685
FERTILIZER		\$0
CHEMICALS		\$16,594
CROP INSURANCE		\$150
OTHER PURCHASED INPUTS		\$0
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$24,459
FUEL-IRRIGATION		\$0
REPAIRS		\$10,537
CUSTOM CHARGES		\$24,242
LAND TAXES		\$929
OTHER EXPENSES		\$29,949
TOTAL CASH EXPENSES		<u>\$127,546</u>
RETURN OVER CASH EXPENSES		\$10,972
FIXED EXPENSES		\$31,475
TOTAL EXPENSES		\$159,021
NET FARM INCOME		(\$20,503)
LABOR AND MANAGEMENT COSTS		\$28,564
NET OPERATING PROFIT		(\$49,068)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$2,007
INTEREST ON EQUIPMENT INVESTMENT		\$14,708
TOTAL CAPITAL COSTS		<u>\$16,715</u>
RETURN TO LAND AND RISK		<u>(\$65,782)</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$150 /ACRE	(\$71,542)	-13.37%
\$200 /ACRE	(\$73,462)	-11.39%
\$250 /ACRE	(\$75,382)	-9.92%
\$300 /ACRE	(\$77,302)	-8.78%
\$350 /ACRE	(\$79,222)	-7.88%
\$400 /ACRE	(\$81,142)	-7.14%

\* 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)