

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... SAN JON-NARA VISA AREA, QUAY COUNTY. Projected 2010.
FARM SIZE..... 800.00 ACRES
IRRIGATION TYPE..... DRYLAND
NUMBER OF CROPS..... 3

VERSION 1.0

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TABLE 1. Acreage Summary, Quay County,
Projected 2010.

BUDGET AREA.....	SAN JON-NARA VISA AREA, QUAY COUNTY
FARM SIZE.....	800 ACRES
IRRIGATION TYPE.....	DRYLAND
NUMBER OF CROPS...	3

ACREAGE SUMMARY:	LAND USE (ACRES)
ALFALFA ESTABLISHMENT	6.00 *
ALFALFA	60.00
GRAIN SORGHUM	289.00
ARP	0.00
FLEX IN GRAIN SORGHUM	51.00
WHEAT	340.00
ARP	0.00
FLEX IN GRAIN SORGHUM	60.00
TOTAL	800.00

* DOUBLE-CROPPED

TABLE 2. Basic cost information for the San Jon-Nara Visa area, Quay County,
Projected 2010.

Item			
Labor Wage Rate:			
Equipment operators		\$/hour	\$8.55
General & Irrigators		\$/hour	\$7.25
Purchased Inputs:			
Seed:			
Alfalfa		\$/pound	\$3.75
Grain Sorghum		\$/pound	\$2.10
Wheat		\$/pound	\$0.26
Energy:			
Diesel fuel		\$/gallon	\$2.80
Gasoline		\$/gallon	\$2.50
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	7.50%
Land Interest Rate		percent	7.00%
Equipment Interest Rate		percent	7.50%
Real Interest Rate		percent	3.00%
Land Taxes		\$38.00 /acre (full value)	\$0.34
Personal Property Tax Rate	-NR - R	\$/ \$1,000 (Assessed Value)	\$26.87 \$20.94
Supervision Factor		\$/labor hour	\$1.00
Management Rate		percent	7.00%

TABLE 3. Overhead cost information for the San Jon-Nara Visa area, Quay County,
Projected 2010.

Item				
Electricity (Domestic & Shop)			\$218.30 per month	\$2,620
Telephone			\$129.80 per month	\$1,558
Accounting & Legal				\$1,493
Misc. Supplies & Hand Tools				\$2,177
Pickup and Auto				
miles	24,308	@	\$0.415 per mile	\$10,088
Insurance				
- general liability (non-employee)				\$1,422
- fire/theft				\$1,198
Property Taxes				
- non-planted land				\$0
- other than land & machinery				\$0
Building repairs and maintenance				\$6,010
Dues, fees, publications				\$944
Farmstead Equipment				\$448
Total				\$27,957
Total per planted acre				\$34.95

TABLE 5. Alfalfa establishment, dryland, budgeted per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, Projected 2010.
Planting dates: August 1 - August 31

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
ALFALFA SEED	\$3.75	10 LBS	\$37.50					\$37.50
WHEAT SEED	\$0.26	30 LBS	\$7.80					\$7.80
SUBTOTAL			\$45.30					\$45.30
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.10 HR		\$0.86	\$2.51	\$0.85	\$3.76	\$7.97
RODWEEDER	96 HP	0.08 HR		\$0.68	\$1.36	\$0.23	\$0.46	\$2.73
DRILL WHEAT	96 HP	0.09 HR		\$0.77	\$1.53	\$0.28	\$1.72	\$4.31
FLY ON ALFALFA SEED			\$4.50					\$4.50
SUBTOTAL		0.27 HR	\$4.50	\$2.31	\$5.41	\$1.36	\$5.94	\$19.51
OVERHEAD EXPENSES								
DOWNTIME		0.07 HR		\$0.58				\$0.58
EMPLOYEE BENEFITS				\$0.42				\$0.42
INSURANCE			\$0.05					\$0.05
SUPERVISION AND MANAGEMENT				\$4.87				\$4.87
SUBTOTAL		0.07 HR	\$0.05	\$5.87				\$5.91
TOTAL OPERATING EXPENSES		0.34 HR	\$49.85	\$8.18	\$5.41	\$1.36	\$5.94	\$70.73

TABLE 6. Alfalfa hay, dryland, budgeted per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, Projected 2010.
Harvesting dates: June 15 - October 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALF/FA HAY	\$130.00	1.50	TONS (IN FIELD)					\$195.00
GRAZING	\$12.00	1.00	ACRE					\$12.00
TOTAL								\$207.00
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
WIRE	\$5.00	13 LBS	\$64.28					\$64.28
ESTABLISHMENT: Principal		6 YEARS					\$11.79	\$11.79
: Interest							\$3.00	\$3.00
SUBTOTAL			\$64.28				\$14.79	\$79.07
HARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER (3X)	14 FT SP	0.48 HR		\$4.10	\$5.03	\$0.28	\$26.33	\$35.75
BALER (3X)	96 HP	0.63 HR		\$5.39	\$10.74	\$1.38	\$5.69	\$23.20
SUBTOTAL		1.11 HR		\$9.49	\$15.77	\$1.66	\$32.02	\$58.95
OVERHEAD EXPENSES								
DOWNTIME		0.28 HR		\$2.37				\$2.37
EMPLOYEE BENEFITS				\$1.71				\$1.71
INSURANCE			\$0.19					\$0.19
LAND TAXES							\$0.34	\$0.34
SUPERVISION AND MANAGEMENT				\$15.60				\$15.60
OTHER EXPENSES			\$34.95					\$34.95
SUBTOTAL		0.28 HR		\$35.14	\$19.68		\$0.34	\$55.16
TOTAL OPERATING EXPENSES		1.39 HR		\$99.41	\$29.17	\$15.77	\$1.66	\$193.17
NET OPERATING PROFIT								\$13.83
INTEREST ON OPERATING CAPITAL		(\$33.59	@	7.50%)		\$2.52
INTEREST ON EQUIPMENT INVESTMENT								\$26.23
RETURN TO LAND AND RISK								(\$14.92)

BUDGET SUMMARY		
GROSS RETURN		\$207.00
VARIABLE OPERATING EXPENSES	\$116.84	
RETURN OVER VARIABLE EXPENSES	\$90.16	(GROSS MARGIN)
FIXED EXPENSES	\$47.15	
NET FARM INCOME	\$43.00	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$29.17	
NET OPERATING PROFIT	\$13.83	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$28.75	
RETURN TO LAND AND RISK		(\$14.92)

TABLE 7. Grain sorghum, dryland, budgeted per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, Projected 2010.
 Planting dates: June 1 - July 4
 Harvesting dates: October 5 - November 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
GRAIN SORGHUM	\$7.70	16.00 CWT		\$123.20
DIRECT PAYMENT	\$0.00	16.00 CWT	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT		\$0.00
GRAZING	\$5.00	1.00 ACRE		\$5.00
TOTAL				\$128.20

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$2.10	3 LBS	\$5.25		\$5.25
HERBICIDE (CUSTOM)	\$15.07	1 ACRE	\$15.07		\$15.07
CROP INSURANCE	\$0.13		\$0.13		\$0.13
SUBTOTAL			\$20.44		\$20.44

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.10 HR		\$0.86	\$2.51	\$0.85	\$3.76	\$7.97
ROD WEED	96 HP	0.08 HR		\$0.68	\$1.36	\$0.23	\$0.46	\$2.73
LISTER/PLANTER	96 HP	0.18 HR		\$1.54	\$3.07	\$0.67	\$2.62	\$7.90
CULTIVATOR (2X)	96 HP	0.26 HR		\$2.22	\$4.43	\$1.18	\$1.94	\$9.78
SUBTOTAL		0.62 HR		\$5.30	\$11.38	\$2.93	\$8.78	\$28.38
HARVEST OPERATIONS								
COMBINE	22 FT	0.14 HR		\$1.20	\$3.27	\$0.39	\$12.80	\$17.67
HAUL	2 TON	0.14 HR		\$1.20	\$2.49	\$0.86	\$6.21	\$10.76
SUBTOTAL		0.28 HR		\$2.39	\$5.76	\$1.26	\$19.02	\$28.43
OVERHEAD EXPENSES								
DOWNTIME		0.23 HR		\$1.92				\$1.92
EMPLOYEE BENEFITS				\$1.73				\$1.73
INSURANCE			\$0.15					\$0.15
LAND TAXES						\$0.34		\$0.34
SUPERVISION AND MANAGEMENT				\$9.87				\$9.87
OTHER EXPENSES			\$34.95					\$34.95
SUBTOTAL		0.23 HR	\$35.10	\$13.53		\$0.34		\$48.97
TOTAL OPERATING EXPENSES		1.35 HR	\$40.35	\$21.22	\$17.14	\$4.18	\$28.13	\$111.03
NET OPERATING PROFIT								\$17.17
INTEREST ON OPERATING CAPITAL		(\$14.38 @	7.50%)				\$1.08
INTEREST ON EQUIPMENT INVESTMENT								\$14.81
RETURN TO LAND AND RISK								\$1.28

BUDGET SUMMARY	
GROSS RETURN	\$128.20
VARIABLE OPERATING EXPENSES	\$61.67
RETURN OVER VARIABLE EXPENSES	\$66.53 (GROSS MARGIN)
FIXED EXPENSES	\$28.13
NET FARM INCOME	\$38.39 (RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$21.22
NET OPERATING PROFIT	\$17.17 (RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$15.89
RETURN TO LAND AND RISK	\$1.28

TABLE 8. Wheat, dryland, budgeted per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, Projected 2010.
 Planting dates: September 1 - September 15
 Harvesting dates: June 15 - July 15

ITEM	PRICE	YIELD	BASE						TOTAL
GROSS RETURNS									
WHEAT	\$6.00	14.00	BUSHEL						\$84.00
DIRECT PAYMENT	\$0.00	14.00	BUSHEL	0.85					\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00								\$0.00
GRAZING	\$2.00	1.00	ACRE						\$2.00
TOTAL									\$86.00
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST			TOTAL	
SEED	\$0.26	25	LBS	\$6.50					\$6.50
CROP INSURANCE	\$0.15			\$0.15					\$0.15
SUBTOTAL				\$6.65					\$6.65
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
SWEEP (2X)	145 HP	0.26 HR		\$2.22	\$6.53	\$2.21	\$9.77	\$20.73	
RODWEED	145 HP	0.16 HR		\$1.37	\$4.02	\$0.99	\$5.74	\$12.11	
DRILL	96 HP	0.09 HR		\$0.77	\$1.53	\$0.28	\$1.72	\$4.31	
SUBTOTAL		0.51 HR		\$4.36	\$12.08	\$3.47	\$17.23	\$37.14	
HARVEST OPERATIONS									
COMBINE	22 FT	0.14 HR		\$1.20	\$3.27	\$0.39	\$3.51	\$18.37	
HAUL	2 TON	0.14 HR		\$1.20	\$2.49	\$0.86	\$6.21	\$10.76	
SUBTOTAL		0.28 HR		\$2.39	\$5.76	\$1.26	\$19.72	\$29.13	
OVERHEAD EXPENSES									
DOWNTIME		0.20 HR		\$0.74				\$0.74	
EMPLOYEE BENEFITS				\$1.01				\$1.01	
INSURANCE				\$0.14				\$0.14	
LAND TAXES							\$0.34	\$0.34	
SUPERVISION AND MANAGEMENT				\$4.30				\$4.30	
OTHER EXPENSES				\$34.95				\$34.95	
SUBTOTAL		0.20 HR		\$35.08	\$6.05		\$0.34	\$41.47	
TOTAL OPERATING EXPENSES		0.99 HR		\$41.58	\$12.81	\$17.84	\$4.73	\$37.29	\$114.25
NET OPERATING PROFIT									(\$28.25)
INTEREST ON OPERATING CAPITAL		(\$7.80	@	7.50%)			\$0.58
INTEREST ON EQUIPMENT INVESTMENT									\$18.41
RETURN TO LAND AND RISK									(\$47.24)
BUDGET SUMMARY									
GROSS RETURN				\$86.00					
VARIABLE OPERATING EXPENSES	\$64.15								
RETURN OVER VARIABLE EXPENSES		\$21.85	(GROSS MARGIN)						
FIXED EXPENSES	\$37.29								
NET FARM INCOME		(\$15.44)	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	\$12.81								
NET OPERATING PROFIT		(\$28.25)	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	\$18.99								
RETURN TO LAND AND RISK		(\$47.24)							

TABLE 9. Summary of per acre costs and returns for an 800 acre farm, San Jon-Nara Visa area, Quay County, Projected 2010.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	GRAIN SORGHUM	WHEAT
		TONS	CWT	BU
PRIMARY YIELD		1.50	16.00	14.00
PRIMARY PRICE		\$130.00	\$7.70	\$6.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00
SECOND INCOME		\$12.00	\$5.00	\$2.00
GROSS RETURN		\$207.00	\$128.20	\$86.00
CASH OPERATING EXPENSES				
SEED	\$37.50		\$5.25	\$6.50
FERTILIZER	\$7.80			
CHEMICALS				
CROP INSURANCE			\$0.13	\$0.15
OTHER PURCHASED INPUTS	\$0.05	\$64.46	\$0.15	\$0.14
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$5.41	\$15.77	\$17.14	\$17.84
FUEL-IRRIGATION				
REPAIRS	\$1.36	\$1.66	\$4.18	\$4.73
CUSTOM CHARGES	\$4.50	\$0.00		
LAND TAXES		\$0.34	\$0.34	\$0.34
OTHER EXPENSES		\$34.95	\$34.95	\$34.95
TOTAL CASH EXPENSES	\$56.61	\$117.19	\$62.14	\$64.64
RETURN OVER CASH EXPENSES	(\$56.61)	\$89.81	\$66.06	\$21.36
FIXED EXPENSES	\$5.94	\$46.81	\$27.79	\$36.95
TOTAL EXPENSES	\$62.55	\$164.00	\$89.93	\$101.59
NET FARM INCOME	(\$62.55)	\$43.00	\$38.27	(\$15.59)
LABOR AND MANAGEMENT COSTS	\$8.18	\$29.17	\$21.22	\$12.81
NET OPERATING PROFIT	(\$70.73)	\$13.83	\$17.04	(\$28.39)
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$2.52	\$1.08	\$0.58
INTEREST ON EQUIPMENT INVESTMENT		\$26.23	\$14.81	\$18.41
TOTAL CAPITAL COSTS	\$0.00	\$28.75	\$15.89	\$18.99
RETURN TO LAND AND RISK	(\$70.73)	(\$14.92)	\$1.15	(\$47.39)

TABLE 10. Whole farm summary, San Jon-Nara Visa area, Quay County,
Projected 2010.

GROSS RETURNS		
ALFALFA HAY	60.00 ACRES	
CROP		\$11,700
GRAZING		\$720
GRAIN SORGHUM	400.00 ACRES	
CROP		\$49,280
GRAZING		\$2,000
DIRECT PAYMENT		\$0
WHEAT	340.00 ACRES	
CROP		\$28,560
GRAZING		\$680
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$92,940</u>
CASH OPERATING EXPENSES		
SEED		\$4,535
FERTILIZER		\$47
CHEMICALS		\$0
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$3,976
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$13,902
FUEL-IRRIGATION		\$0
REPAIRS		\$3,388
CUSTOM CHARGES		\$27
LAND TAXES		\$272
OTHER EXPENSES		\$27,957
TOTAL CASH EXPENSES		<u>\$54,204</u>
RETURN OVER CASH EXPENSES		\$38,736
FIXED EXPENSES		\$25,816
TOTAL EXPENSES		<u>\$80,020</u>
NET FARM INCOME		\$12,920
LABOR AND MANAGEMENT COSTS		\$14,643
NET OPERATING PROFIT		(\$1,723)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$781
INTEREST ON EQUIPMENT INVESTMENT		\$13,758
TOTAL CAPITAL COSTS		<u>\$14,539</u>
RETURN TO LAND AND RISK		<u>(\$16,263)</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$150 /ACRE	(\$19,863)	-0.65%
\$300 /ACRE	(\$23,463)	-0.45%
\$450 /ACRE	(\$27,063)	-0.34%
\$600 /ACRE	(\$30,663)	-0.28%
\$750 /ACRE	(\$34,263)	-0.23%
\$900 /ACRE	(\$37,863)	-0.20%

* 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)