

TABLE 1. Basic cost information for the San Jon-Nara Visa area, Quay County, 2003.

Item			
Labor Wage Rate:			
Equipment operators		\$/hour	\$7.55
General & Irrigators		\$/hour	\$6.75
Purchased Inputs:			
Seed:			
Alfalfa		\$/pound	\$3.00
Grain Sorghum		\$/pound	\$1.20
Wheat		\$/pound	\$0.13
Energy:			
Diesel fuel		\$/gallon	\$1.30
Gasoline		\$/gallon	\$1.35
Employee Liability Insurance	\$/ \$1,000	wages	\$20.00
Employee Benefits	percent/w	ages	18.00%
Labor Downtime	percent		25.00%
Financial Rates:			
Operating Capital Interest Rate	percent		8.00%
Land Interest Rate	percent		7.00%
Equipment Interest Rate	percent		8.00%
Real Interest Rate	percent		4.00%
Land Taxes	\$38.00	/acre (full value)	\$0.33
Personal Property Tax Rate - NR	\$/ \$1,000	(Assessed Value)	\$26.43
	- R		\$24.88
Supervision Factor	\$/labor hour		\$0.50
Management Rate	percent		7.00%

TABLE 1a. Overhead cost information for the San Jon-Nara Visa area, Quay County, 2003.

ITEM			
Electricity (Domestic & Shop)		\$200.00 per month	\$2,400
Telephone		\$125.00 per month	\$1,500
Accounting & Legal			\$1,385
Misc. Supplies & Hand Tools			\$2,015
Pickup and Auto			
miles	20,600	@ \$0.365 per mile	\$7,519
Insurance			
- general liability (non-employee)			\$1,315
- fire/theft			\$1,110
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$530
Building repairs and maintenance			\$875
Dues, fees, publications			\$410
Farmstead Equipment			\$180
		Total	\$19,240
		Total per planted acre	\$24.05

TABLE 2. Equipment summary for an 800 acre dryland farm, San Jon-Nara Visa, Quay County, 2003.

EQUIPMENT		VARIABLE COSTS						FIXED COSTS		
ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	FUEL, OIL LUBRICANT	REPAIR	FUEL,OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HOUR
TRACTOR 95 HP	277	1	\$19,240	\$2,563	\$976	\$9.24	\$3.52	\$1,430	\$189	\$5.84
TRACTOR 165 HP	183	1	\$31,475	\$2,153	\$1,408	\$11.74	\$7.68	\$4,652	\$307	\$27.04
COMBINE 145 HP	104	1	\$38,150	\$1,125	\$2,244	\$10.86	\$21.66	\$7,600	\$502	\$78.21
GRAIN HEAD, 22 FT	104	1	\$3,100		\$148	\$0.00	\$1.43	\$501	\$33	\$5.16
SWATHER 14 FT SP	29	1	\$4,300	\$140	\$50	\$4.87	\$1.74	\$1,450	\$128	\$54.78
TRUCK 2 TON	104	1	\$22,000	\$856	\$866	\$8.26	\$8.36	\$4,400	\$194	\$44.34
ROD WEED 23 FT	87	1	\$625		\$47	\$0.00	\$0.54	\$83	\$6	\$1.02
ROLLING CULTIVATOR 6-ROW	104	1	\$3,000		\$178	\$0.00	\$1.71	\$400	\$26	\$4.10
DRILL 13 FT	31	1	\$2,150		\$95	\$0.00	\$3.05	\$430	\$19	\$14.42
LISTER/PLANTER 6-ROW	72	1	\$5,000		\$770	\$0.00	\$10.70	\$1,000	\$44	\$14.50
BALER PTO 2-WIRE	38	1	\$1,500		\$26	\$0.00	\$0.69	\$385	\$34	\$11.08
SWEEP 19 FT	129	1	\$2,500		\$181	\$0.00	\$1.40	\$333	\$22	\$2.75
			\$133,040	\$6,836	\$6,990			\$22,666	\$1,504	

TABLE 3. 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, 2003.
Planting dates: August 1 - August 31

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASED INPUTS</u>								
ALFALFA SEED	\$3.00	10 LBS						\$30.00
WHEAT SEED	\$0.13	30 LBS						\$3.90
SUBTOTAL								\$33.90
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.10 HR		\$0.76	\$1.17	\$0.91	\$2.98	\$5.82
RODWEEDER	96 HP	0.08 HR		\$0.60	\$0.74	\$0.32	\$0.55	\$2.22
DRILL WHEAT	96 HP	0.09 HR		\$0.68	\$0.83	\$0.59	\$1.82	\$3.93
FLY ON ALFALFA SEED			\$4.50					\$4.50
SUBTOTAL		0.27 HR	\$4.50	\$2.04	\$2.74	\$1.82	\$5.35	\$16.46
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.07 HR		\$0.51				\$0.51
EMPLOYEE BENEFITS				\$0.37				\$0.37
INSURANCE			\$0.04					\$0.04
SUPERVISION AND MANAGEMENT				\$3.69				\$3.69
SUBTOTAL		0.07 HR	0.04	\$4.57				\$4.61
TOTAL OPERATING EXPENSES		0.34 HR	\$38.44	\$6.61	\$2.74	\$1.82	\$5.35	\$54.97

TABLE 4. 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, 2003.
Harvesting dates: June 15 - October 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$120.00	1.50 TONS (IN FIELD)						\$180.00
GRAZING	\$12.00	1.00 ACRE						\$12.00
TOTAL							\$192.00	
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS			FIXED COST	TOTAL	
WIRE ESTABLISHMENT: Principal	\$0.36	13 LBS	\$4.63				\$4.63	
: Interest		6 YEARS				\$9.16	\$9.16	
						\$2.46	\$2.46	
SUBTOTAL			\$4.63			\$11.63	\$16.25	
HARVEST OPERATIONS								
HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
SWATHER (3X)	14 FT SP	0.48 HR		\$3.62	\$2.34	\$0.84	\$26.30	\$33.09
BALER (3X)	96 HP	0.63 HR		\$4.76	\$5.82	\$2.65	\$10.66	\$23.89
SUBTOTAL	1.11 HR			\$8.38	\$8.16	\$3.49	\$36.96	\$56.98
OVERHEAD EXPENSES								
DOWNTIME		0.28 HR		\$2.10				\$2.10
EMPLOYEE BENEFITS				\$1.51				\$1.51
INSURANCE			\$0.17					\$0.17
LAND TAXES							\$0.33	\$0.33
SUPERVISION AND MANAGEMENT				\$14.00				\$14.00
OTHER EXPENSES			\$24.05					\$24.05
SUBTOTAL	0.28 HR		\$24.22	\$17.60			\$0.33	\$42.15
TOTAL OPERATING EXPENSES	1.39 HR		\$28.85	\$25.98	\$8.16	\$3.49	\$48.92	\$115.38
NET OPERATING PROFIT								\$76.62
INTEREST ON OPERATING CAPITAL	(\$3.28	@	8.00%)			\$0.26
INTEREST ON EQUIPMENT INVESTMENT								\$31.64
RETURN TO LAND AND RISK								\$44.72

BUDGET SUMMARY

GROSS RETURN	\$192.00	
VARIABLE OPERATING EXPENSES	\$40.49	
RETURN OVER VARIABLE EXPENSES	\$151.51	(GROSS MARGIN)
FIXED EXPENSES	\$48.92	
NET FARM INCOME	\$102.59	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$25.98	
NET OPERATING PROFIT	\$76.62	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$31.90	
RETURN TO LAND AND RISK	\$44.72	

TABLE 5. 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, 2003.

Planting dates: June 1 - July 4

Harvesting dates: October 5 - November 15

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
GRAIN SORGHUM	\$4.39	14 CWT	\$61.46
DIRECT PAYMENT	\$0.625	14 CWT	\$8.75
COUNTER CYCLICAL PAYMENT	\$0.00	0 CWT	\$0.00
GRAZING	\$5.00	1 ACRE	\$5.00
TOTAL			\$75.21

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL
SEED	\$1.20	3 LBS	\$3.00	\$3.00
HERBICIDE (CUSTOM)	\$15.07	1 ACRE	\$15.07	\$15.07
CROP INSURANCE	\$0.13		\$0.13	\$0.13
SUBTOTAL			\$18.19	\$18.19

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.10 HR		\$0.76	\$1.17	\$0.91	\$2.98	\$5.82
ROD WEED	96 HP	0.08 HR		\$0.60	\$0.74	\$0.32	\$0.55	\$2.22
LISTER/PLANTER	96 HP	0.18 HR		\$1.36	\$1.66	\$2.56	\$3.66	\$9.24
CULTIVATOR (2X)	96 HP	0.26 HR		\$1.96	\$2.40	\$1.36	\$2.58	\$8.31
SUBTOTAL		0.62 HR		\$4.68	\$5.98	\$5.15	\$9.77	\$25.58

HARVEST OPERATIONS								
COMBINE	22 FT	0.14 HR		\$1.06	\$1.52	\$3.23	\$11.15	\$16.96
HAUL	2 TON	0.14 HR		\$1.06	\$1.16	\$1.17	\$6.21	\$9.59
SUBTOTAL		0.28 HR		\$2.11	\$2.68	\$4.40	\$17.36	\$26.55

OVERHEAD EXPENSES								
DOWNTIME		0.23 HR		\$1.70				\$1.70
EMPLOYEE BENEFITS				\$1.53				\$1.53
INSURANCE			\$0.14					\$0.14
LAND TAXES							\$0.33	\$0.33
SUPERVISION AND MANAGEMENT				\$5.71				\$5.71
OTHER EXPENSES			\$24.05					\$24.05
SUBTOTAL		0.23 HR	\$24.19	\$8.94			\$0.33	\$33.46

TOTAL OPERATING EXPENSES		1.35 HR		\$27.19	\$15.74	\$8.65	\$9.55	\$27.47	\$88.60
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NET OPERATING PROFIT									(\$13.39)
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INTEREST ON OPERATING CAPITAL	(\$12.47	@	8.00%)				\$1.00
INTEREST ON EQUIPMENT INVESTMENT									\$15.49

RETURN TO LAND AND RISK									(\$29.87)
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BUDGET SUMMARY

GROSS RETURN		\$75.21	
VARIABLE OPERATING EXPENSES	\$45.39		
RETURN OVER VARIABLE EXPENSES		\$29.82	(GROSS MARGIN)
FIXED EXPENSES	\$27.47		
NET FARM INCOME		\$2.35	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$15.74		
NET OPERATING PROFIT		(\$13.39)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$16.49		
RETURN TO LAND AND RISK		(\$29.87)	

TABLE 6. Wheat, dryland, budgeted per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, 2003.

Planting dates: September 1 - September 15

Harvesting dates: June 15 - July 15

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
WHEAT	\$3.45	11.80 BUSHELS	\$40.71
DIRECT PAYMENT	\$0.52	11.80 BUSHELS	\$6.14
COUNTER CYCLICAL PAYMENT	\$0.00		\$0.00
GRAZING	\$2.00	1.00 ACRE	\$2.00
TOTAL			\$48.85

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL
SEED	\$0.13	25 LBS	\$3.25	\$3.25
CROP INSURANCE	\$0.15		\$0.15	\$0.15
SUBTOTAL			\$3.40	\$3.40

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
SWEEP (2X)	145 HP	0.26 HR		\$1.96	\$3.05	\$2.36	\$7.75	\$15.12
RODWEED	145 HP	0.16 HR		\$1.21	\$1.88	\$1.32	\$4.49	\$8.89
DRILL	96 HP	0.09 HR		\$0.68	\$0.83	\$0.59	\$1.82	\$3.93
SUBTOTAL		0.51 HR		\$3.85	\$5.76	\$4.27	\$14.06	\$27.94

HARVEST OPERATIONS								
COMBINE	22 FT	0.14 HR		\$1.06	\$1.52	\$3.23	\$11.67	\$17.48
HAUL	2 TON	0.14 HR		\$1.06	\$1.16	\$1.17	\$6.21	\$9.59
SUBTOTAL		0.28 HR		\$2.11	\$2.68	\$4.40	\$17.88	\$27.07

OVERHEAD EXPENSES								
DOWNTIME		0.20 HR		\$0.74				\$0.74
EMPLOYEE BENEFITS				\$0.89				\$0.89
INSURANCE				\$0.12				\$0.12
LAND TAXES							\$0.33	\$0.33
SUPERVISION AND MANAGEMENT				\$2.44				\$2.44
OTHER EXPENSES				\$24.05				\$24.05
SUBTOTAL		0.20 HR		\$24.17	\$4.08		\$0.33	\$28.58

TOTAL OPERATING EXPENSES		0.99 HR		\$27.42	\$10.04	\$8.44	\$8.67	\$32.28	\$86.84
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NET OPERATING PROFIT									(\$38.00)
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INTEREST ON OPERATING CAPITAL	(\$4.80	@	8.00%)				\$0.38
INTEREST ON EQUIPMENT INVESTMENT									\$16.89

RETURN TO LAND AND RISK									(\$55.27)
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BUDGET SUMMARY

GROSS RETURN		\$48.85		
VARIABLE OPERATING EXPENSES	\$44.53			
RETURN OVER VARIABLE EXPENSES		\$4.32	(GROSS MARGIN)	
FIXED EXPENSES	\$32.28			
NET FARM INCOME		(\$27.96)	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$10.04			
NET OPERATING PROFIT		(\$38.00)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$17.27			
RETURN TO LAND AND RISK		(\$55.27)		

TABLE 7. Summary of per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, 2002.

	ALFALFA ESTABLISHMENT	ALFALFA HAY -----DRYLAND-----	GRAIN SORGHUM	WHEAT
		TONS	CWT	BU
PRIMARY YIELD		1.50	14.00	11.80
PRIMARY PRICE		120.00	4.39	3.45
GOVERNMENT PAYMENTS		0.00	8.75	6.14
SECOND INCOME		12.00	5.00	2.00
GROSS RETURN		\$192.00	\$75.21	\$48.85
CASH OPERATING EXPENSES				
SEED	\$30.00		\$3.00	\$3.25
FERTILIZER	\$3.90			
CHEMICALS				
CROP INSURANCE			\$0.13	\$0.15
OTHER PURCHASED INPUTS	\$0.04	\$4.80	\$0.14	\$0.12
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$2.74	\$8.16	\$8.65	\$8.44
FUEL-IRRIGATION				
REPAIRS	\$1.82	\$3.49	\$9.55	\$8.67
CUSTOM CHARGES	\$4.50	\$0.00		
LAND TAXES		\$0.33	\$0.33	\$0.33
OTHER EXPENSES		\$24.05	\$24.05	\$24.05
TOTAL CASH EXPENSES	\$43.01	\$40.82	\$45.85	\$45.01
RETURN OVER CASH EXPENSES	(\$43.01)	\$151.18	\$29.36	\$3.84
FIXED EXPENSES	\$5.35	\$48.58	\$27.13	\$31.94
TOTAL EXPENSES	\$48.36	\$89.41	\$72.98	\$76.95
NET FARM INCOME	(\$48.36)	\$102.59	\$2.23	(\$28.10)
LABOR AND MANAGEMENT COSTS	\$6.61	\$25.98	\$15.74	\$10.04
NET OPERATING PROFIT	(\$54.97)	\$76.62	(\$13.51)	(\$38.14)
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$0.26	\$1.00	\$0.38
INTEREST ON EQUIPMENT INVESTMENT		\$31.64	\$15.49	\$16.89
TOTAL CAPITAL COSTS	\$0.00	\$31.90	\$16.49	\$17.27
RETURN TO LAND AND RISK	(\$54.97)	\$44.72	(\$30.00)	(\$55.42)
Flex Computation			\$12.62	(\$6.59)

TABLE 8. Whole farm summary, San Jon-Nara Visa area, Quay County, 2002.

GROSS RETURNS		
ALFALFA HAY	60 ACRES	
CROP		\$10,800
GRAZING		\$720
GRAIN SORGHUM	400 ACRES	
CROP		\$24,584
GRAZING		\$2,000
DIRECT PAYMENT		\$2,529
WHEAT	340 ACRES	
CROP		\$13,841
GRAZING		\$680
DIRECT PAYMENT		\$2,086
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		\$57,240
CASH OPERATING EXPENSES		
SEED		\$2,485
FERTILIZER		\$23
CHEMICALS		\$0
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$383
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$6,836
FUEL-IRRIGATION		\$0
REPAIRS		\$6,990
CUSTOM CHARGES		\$27
LAND TAXES		\$268
OTHER EXPENSES		\$19,240
TOTAL CASH EXPENSES		\$36,352
RETURN OVER CASH EXPENSES		\$20,888
FIXED EXPENSES		\$24,109
TOTAL EXPENSES		\$60,461
NET FARM INCOME		(\$3,221)
LABOR AND MANAGEMENT COSTS		\$11,307
NET OPERATING PROFIT		(\$14,528)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$545
INTEREST ON EQUIPMENT INVESTMENT		\$13,835
TOTAL CAPITAL COSTS		\$14,381
RETURN TO LAND AND RISK		(\$28,909)

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$150 /ACRE	(\$33,709)	-0.06
\$300 /ACRE	(\$38,509)	-0.04
\$450 /ACRE	(\$43,309)	-0.03
\$600 /ACRE	(\$48,109)	-0.02
\$750 /ACRE	(\$52,909)	-0.02
\$900 /ACRE	(\$57,709)	-0.02

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VA