

TABLE 1. Basic cost information for the San Jon-Nara Visa area, Quay County, 2002.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.55
General & Irrigators	\$/hour	\$6.75
Purchased Inputs:		
Seed:		
Alfalfa	\$/pound	\$2.90
Grain Sorghum	\$/pound	\$1.11
Wheat	\$/pound	\$0.16
Energy:		
Diesel fuel	\$/gallon	\$1.05
Gasoline	\$/gallon	\$1.00
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	8.00%
Land Interest Rate	percent	7.50%
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%

BUDGET AREA..... SAN JON-NARA VISA AREA, QUAY COUNTY, 2002.
 FARM SIZE..... 800 ACRES
 IRRIGATION TYPE..... DRYLAND
 NUMBER OF CROPS... 3

ACREAGE SUMMARY:	LAND USE (ACRES)
ALFALFA ESTABLISHMENT	6.0 *
ALFALFA	60.0
GRAIN SORGHUM	289.0
ARP	0.0
FLEX IN GRAIN SORGHUM	51.0
WHEAT	340.0
ARP	0.0
FLEX IN GRAIN SORGHUM	60.0
TOTAL	800.0

* DOUBLE-CROPPED

TABLE 1a. Overhead cost information for the San Jon-Nara Visa area, Quay County, 2002.

ITEM			
Electricity (Domestic & Shop)		\$195.00 per month	\$2,340
Telephone		\$120.00 per month	\$1,440
Accounting & Legal			\$1,345
Misc. Supplies & Hand Tools			\$1,955
Pickup and Auto			
miles	20,600	@ \$0.345 per mile	\$7,107
Insurance			
- general liability (non-employee)			\$1,275
- fire/theft			\$1,075
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$515
Building repairs and maintenance			\$850
Dues, fees, publications			\$400
Farmstead Equipment			\$175
		Total	\$18,477
		Total per planted acre	\$0.00

TABLE 2. Equipment summary for an 800 acre dryland farm, San Jon-Nara Visa, Quay County, 2002.

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	DEPRE-CIATION	TAXES	TOTAL PER HOUR
TRACTOR 96 HP	277	1	\$23,030	\$2,070	\$976	\$7.46	\$3.52	\$1,430	\$189	\$5.84
TRACTOR 145 HP	183	1	\$39,110	\$1,739	\$1,408	\$9.48	\$7.68	\$4,652	\$307	\$27.04
COMBINE 145 HP	104	1	\$57,005	\$909	\$2,244	\$8.77	\$21.66	\$7,600	\$502	\$78.21
GRAIN HEAD, 22 FT	104	1	\$4,150		\$148	\$0.00	\$1.43	\$501	\$33	\$5.16
SWATHER 14 FT SP	29	1	\$5,100	\$113	\$50	\$3.93	\$1.74	\$1,450	\$128	\$54.78
TRUCK 2 TON	104	1	\$11,500	\$691	\$453	\$6.67	\$4.37	\$2,300	\$101	\$23.18
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
			\$154,670	\$5,522	\$6,576			\$20,566	\$1,412	

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, 2002.
Planting dates: August 1 - August 31

ITEM	PRICE	QUANTITY	PURCHASED INPUTS		TOTAL			
<u>PURCHASED INPUTS</u>								
ALFALFA SEED	\$2.90	10 LBS	\$29.00		\$29.00			
WHEAT SEED	\$0.16	30 LBS	\$4.80		\$4.80			
SUBTOTAL			<u>\$33.80</u>		<u>\$33.80</u>			
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.10 HR		\$0.76	\$0.95	\$0.91	\$2.98	\$5.59
RODWEEDER	96 HP	0.08 HR		\$0.60	\$0.60	\$0.32	\$0.55	\$2.07
DRILL WHEAT	96 HP	0.09 HR		\$0.68	\$0.67	\$0.59	\$1.82	\$3.77
FLY ON ALFALFA SEED			\$4.50					\$4.50
SUBTOTAL		0.27 HR	\$4.50	\$2.04	\$2.22	\$1.82	\$5.35	\$15.93
<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				\$3.65				\$3.65
SUBTOTAL		0.07 HR	0.04	\$4.53				\$4.57
TOTAL OPERATING EXPENSES		0.34 HR	\$38.34	\$6.56	\$2.22	\$1.82	\$5.35	\$54.30

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, 2002.
Harvesting dates: June 15 - October 1

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA FA HAY	\$110.00	1.50	TONS (IN FIELD)					\$165.00	
GRAZING	\$12.00	1.00	ACRE					\$12.00	
TOTAL								\$177.00	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS				FIXED COST	TOTAL
WIRE	\$0.36	13	LBS	\$4.63					\$4.63
ESTABLISHMENT: Principal		6	YEARS					\$9.05	\$9.05
: Interest								\$2.43	\$2.43
SUBTOTAL				\$4.63				\$11.48	\$16.11
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	\$1.89	\$0.84	\$26.30	\$32.64
BALER (3X)	96 HP	0.63	HR		\$4.76	\$4.70	\$2.65	\$10.66	\$22.77
SUBTOTAL		1.11	HR		\$8.38	\$6.59	\$3.49	\$36.96	\$55.41
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					\$12.95				\$12.95
OTHER EXPENSES				\$23.10					\$23.10
SUBTOTAL		0.28	HR	\$23.26	\$16.55			\$0.33	\$40.15
TOTAL OPERATING EXPENSES		1.39	HR	\$27.89	\$24.93	\$6.59	\$3.49	\$48.77	\$111.67
NET OPERATING PROFIT									\$65.33
INTEREST ON OPERATING CAPITAL	(\$3.15	@	8.00%					\$0.25
INTEREST ON EQUIPMENT INVESTMENT									\$31.64
RETURN TO LAND AND RISK									\$33.44
BUDGET SUMMARY									
GROSS RETURN		\$177.00							
VARIABLE OPERATING EXPENSES	\$37.97								
RETURN OVER VARIABLE EXPENSES		\$139.03	(GROSS MARGIN)						
FIXED EXPENSES	\$48.77								
NET FARM INCOME		\$90.26	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	\$24.93								
NET OPERATING PROFIT		\$65.33	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	\$31.89								
RETURN TO LAND AND RISK		\$33.44							

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, 2002.

Planting dates: June 1 - July 4
Harvesting dates: October 5 - November 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
GRAIN SORGHUM	\$3.75	16 CWT						\$60.00
ASCS DEFICIENCY	\$0.58	16 CWT						\$9.28
ASCS DIVERSION	\$0.00	0 CWT						\$0.00
GRAZING	\$5.00	1 ACRE						\$5.00
TOTAL								\$74.28
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$1.11	3 LBS	\$2.78					\$2.78
HERBICIDE (CUSTOM)	\$14.71	1 ACRE	\$14.71					\$14.71
CROP INSURANCE	\$0.13		\$0.13					\$0.13
SUBTOTAL			\$17.61					\$17.61
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.10 HR		\$0.76	\$0.95	\$0.91	\$2.98	\$5.59
ROD WEED	96 HP	0.08 HR		\$0.60	\$0.60	\$0.32	\$0.55	\$2.07
LISTER/PLANTER	96 HP	0.18 HR		\$1.36	\$1.34	\$2.56	\$3.66	\$8.92
CULTIVATOR (2X)	96 HP	0.26 HR		\$1.96	\$1.94	\$1.36	\$2.58	\$7.85
SUBTOTAL		0.62 HR		\$4.68	\$4.83	\$5.15	\$9.77	\$24.43
HARVEST OPERATIONS								
COMBINE	22 FT	0.14 HR		\$1.06	\$1.23	\$3.23	\$11.15	\$16.67
HAUL	2 TON	0.14 HR		\$1.06	\$0.93	\$0.61	\$3.25	\$5.85
SUBTOTAL		0.28 HR		\$2.11	\$2.16	\$3.84	\$14.39	\$22.51
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				\$5.65				\$5.65
OTHER EXPENSES			\$23.10					\$23.10
SUBTOTAL		0.23 HR	\$23.23	\$8.88			\$0.33	\$32.44
TOTAL OPERATING EXPENSES		1.35 HR	\$26.01	\$15.67	\$6.99	\$9.00	\$24.50	\$82.17
NET OPERATING PROFIT								(\$7.89)
INTEREST ON OPERATING CAPITAL	(\$11.80	@	8.00%)			\$0.94
INTEREST ON EQUIPMENT INVESTMENT								\$14.35
RETURN TO LAND AND RISK								(\$23.18)

BUDGET SUMMARY

GROSS RETURN		\$74.28	
VARIABLE OPERATING EXPENSES	\$41.99		
RETURN OVER VARIABLE EXPENSES	\$32.29		(GROSS MARGIN)
FIXED EXPENSES	\$24.50		
NET FARM INCOME	\$7.79		(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$15.67		
NET OPERATING PROFIT	(\$7.89)		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$15.30		
RETURN TO LAND AND RISK		(\$23.18)	

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, 2002.
 Planting dates: September 1 - September 15
 Harvesting dates: June 15 - July 15

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
WHEAT	\$3.40	15.00	BUSHEL						\$51.00
ASCS DEFICIENCY	\$0.474	15.00	BUSHEL						\$7.11
ASCS DIVERSION	\$0.00								\$0.00
GRAZING	\$2.00	1.00	ACRE						\$2.00
TOTAL									\$60.11
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$0.16	25	LBS	\$4.00					\$4.00
CROP INSURANCE	\$0.15			\$0.15					\$0.15
SUBTOTAL				\$4.15					\$4.15
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
SWEEP (2X)	145 HP	0.26	HR		\$1.96	\$2.47	\$2.36	\$7.75	\$14.54
RODWEED	145 HP	0.16	HR		\$1.21	\$1.52	\$1.32	\$4.49	\$8.53
DRILL	96 HP	0.09	HR		\$0.68	\$0.67	\$0.59	\$1.82	\$3.77
SUBTOTAL		0.51	HR		\$3.85	\$4.65	\$4.27	\$14.06	\$26.83
HARVEST OPERATIONS									
COMBINE	22 FT	0.14	HR		\$1.06	\$1.23	\$3.23	\$11.67	\$17.19
HAUL	2 TON	0.14	HR		\$1.06	\$0.93	\$0.61	\$3.25	\$5.85
SUBTOTAL		0.28	HR		\$2.11	\$2.16	\$3.84	\$14.92	\$23.04
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					\$3.01				\$3.01
OTHER EXPENSES				\$23.10					\$23.10
SUBTOTAL		0.20	HR	\$23.22	\$4.64			\$0.33	\$28.19
TOTAL OPERATING EXPENSES		0.99	HR	\$27.22	\$10.60	\$6.82	\$8.11	\$29.31	\$82.06
NET OPERATING PROFIT									(\$21.95)
INTEREST ON OPERATING CAPITAL	(\$4.80	@	8.00%)				\$0.38
INTEREST ON EQUIPMENT INVESTMENT									\$15.75
RETURN TO LAND AND RISK									(\$38.09)
BUDGET SUMMARY									
GROSS RETURN		\$60.11							
VARIABLE OPERATING EXPENSES	\$42.14								
RETURN OVER VARIABLE EXPENSES	\$17.97	(GROSS MARGIN)							
FIXED EXPENSES	\$29.31								
NET FARM INCOME	(\$11.34)	(RETURN TO CAPITAL, LABOR, LAND & RISK)							
LABOR AND MANAGEMENT COST	\$10.60								
NET OPERATING PROFIT	(\$21.95)	(RETURN TO CAPITAL, LAND & RISK)							
CAPITAL COSTS	\$16.14								
RETURN TO LAND AND RISK	(\$38.09)								

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	16.00	15.00
PRIMARY PRICE		110.00	3.75	3.40
GOVERNMENT PAYMENTS		0.00	9.28	7.11
SECOND INCOME		12.00	5.00	2.00
GROSS RETURN		\$177.00	\$74.28	\$60.11
CASH OPERATING EXPENSES				
SEED	\$29.00		\$2.78	\$4.00
FERTILIZER	\$4.80			
CHEMICALS				
CROP INSURANCE			\$0.13	\$0.15
OTHER PURCHASED INPUTS	\$0.04	\$4.80	\$0.14	\$0.12
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$2.22	\$6.59	\$6.99	\$6.82
FUEL-IRRIGATION				
REPAIRS	\$1.82	\$3.49	\$9.00	\$8.11
CUSTOM CHARGES	\$4.50	\$0.00		
LAND TAXES		\$0.33	\$0.33	\$0.33
OTHER EXPENSES		\$23.10	\$23.10	\$23.10
TOTAL CASH EXPENSES	\$42.38	\$38.30	\$42.45	\$42.62
RETURN OVER CASH EXPENSES	(\$42.38)	\$138.70	\$31.83	\$17.49
FIXED EXPENSES	\$5.35	\$48.43	\$24.17	\$28.98
TOTAL EXPENSES	\$47.73	\$86.74	\$66.62	\$71.60
NET FARM INCOME	(\$47.73)	\$90.26	\$7.66	(\$11.49)
LABOR AND MANAGEMENT COSTS	\$6.56	\$24.93	\$15.67	\$10.60
NET OPERATING PROFIT	(\$54.30)	\$65.33	(\$8.01)	(\$22.09)
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$0.25	\$0.94	\$0.38
INTEREST ON EQUIPMENT INVESTMENT		\$31.64	\$14.35	\$15.75
TOTAL CAPITAL COSTS	\$0.00	\$31.89	\$15.30	\$16.14
RETURN TO LAND AND RISK	(\$54.30)	\$33.44	(\$23.31)	(\$38.23)

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

GROSS RETURNS		
ALFALFA HAY	60 ACRES	
CROP		\$9,900
GRAZING		\$720
GRAIN SORGHUM	400 ACRES	
CROP		\$24,000
GRAZING		\$2,000
ASCS DEFICIENCY		\$2,682
WHEAT	340 ACRES	
CROP		\$17,340
GRAZING		\$680
ASCS DEFICIENCY		\$2,417
ASCS DIVERSION		\$0
GROSS RETURN		\$59,739
CASH OPERATING EXPENSES		
SEED		\$2,644
FERTILIZER		\$29
CHEMICALS		\$0
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$383
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$5,522
FUEL-IRRIGATION		\$0
REPAIRS		\$6,576
CUSTOM CHARGES		\$27
LAND TAXES		\$268
OTHER EXPENSES		\$18,477
TOTAL CASH EXPENSES		\$34,025
RETURN OVER CASH EXPENSES		\$25,714
FIXED EXPENSES		\$21,915
TOTAL EXPENSES		\$55,940
NET FARM INCOME		\$3,799
LABOR AND MANAGEMENT COSTS		\$11,409
NET OPERATING PROFIT		(\$7,610)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$523
INTEREST ON EQUIPMENT INVESTMENT		\$12,995
TOTAL CAPITAL COSTS		\$13,519
RETURN TO LAND AND RISK		(\$21,129)

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$150 /ACRE	(\$25,929)	-0.03
\$300 /ACRE	(\$30,729)	-0.02
\$450 /ACRE	(\$35,529)	-0.01
\$600 /ACRE	(\$40,329)	-0.01
\$750 /ACRE	(\$45,129)	-0.01
\$900 /ACRE	(\$49,929)	-0.01

* 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)