

TABLE 1. Basic cost information for the Estancia Basin, 2003.

Item			
Labor Wage Rate:			
Equipment operators		\$/hour	\$6.75
General & Irrigators		\$/hour	\$6.45
Purchased Inputs:			
Fertilizer:			
Anhydrous Ammonia (NH3)		\$/ton	\$310.00
Nitrogen (N)		\$/pound	\$0.36
Phosphate (P205)		\$/pound	\$0.33
Potash (K20)		\$/pound	\$0.21
Seed:			
Alfalfa		\$/pound	\$3.00
Wheat		\$/pound	\$0.13
Corn		\$/bag	\$89.75
Pinto Beans		\$/pound	\$0.43
Baling Wire		\$/pound	\$0.39
Baling Twine		\$/roll	\$19.00
Natural gas		\$/MCF	\$3.28
(service charge)		\$/month	\$10.00
Diesel fuel		\$/gallon	\$1.30
Gasoline		\$/gallon	\$1.35
Electricity		cents/KwHr	6.90
LP Gas		\$/gallon	\$1.21
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	\$100.00	/acre (full value)	\$0.88
Personal Property Tax Rate - NR	\$/ \$1,000	(Assessed	\$26.40
- R		Value)	\$25.49
Supervision Factors			
Field Crop-Irrigation		\$/labor hour	\$1.00
Field Crop-Equipment & General		\$/labor hour	\$0.50
Management Rate		percent	7.00%

TABLE 1a. Overhead cost information for the Estancia Basin, 2003.

ITEM			
Electricity (Domestic & Shop)		\$215.00 per month	\$2,580
Telephone		\$130.00 per month	\$1,560
Accounting & Legal			\$1,560
Misc. Supplies & Hand Tools			\$2,340
Pickup and Auto			
miles	25,750	@ \$0.365 per mile	\$9,399
Insurance			
- general liability (non-employee)			\$2,045
- fire/theft			\$1,720
Property Taxes			
- non-planted land			\$72
- other than land & machinery			\$745
Building repairs and maintenance			\$1,310
Dues, fees, publications			\$390
Farmstead Equipment			\$170
Total			\$23,890
Total Per Planted Acre			\$29.94

TABLE 2. Pumping costs and data for irrigation wells, Estancia Basin, 2003.

INPUT DATA

DELIVERY PSI:		DEPTH CHARACTERISTICS:	
SPRINKLER...	40	STATIC... ..	175
		DRAW DOWN	25
		TOTAL HEAD....	200
		CASING... ..	250
GALLONS PER MINUTE (GPM)...	850		
WORK HORSEPOWER	63		
EFFICIENCY FACTOR:			
ELECTRICITY.	0.540		
NATURAL GAS.	0.154		
LP GAS..... ..	0.154		
DIESEL..... ..	0.160		
FUEL COSTS:			
ELECTRICITY.	\$6.90	CENTS/K	wHr
NATURAL GAS.	\$3.28	\$/MCF	
LP GAS..... ..	\$1.21	\$/GAL	
DIESEL..... ..	\$1.30	\$/GAL	

PUMPING COSTS

ELECTRIC WELL:	
COST PER HOUR.....	\$6.02
COST PER ACRE INCH	\$3.20
NATURAL GAS WELL:	
COST PER HOUR.....	\$3.76
COST PER ACRE INCH	\$2.00
LP GAS WELL:	
COST PER HOUR.....	\$13.69
COST PER ACRE INCH	\$7.29
DIESEL WELL:	
COST PER HOUR.....	\$9.20
COST PER ACRE INCH	\$4.90

TABLE 3. Equipment summary for a 900 acre irrigated farm with above average management, Estancia Basin, 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	
(DOLLARS)											
TRACTOR 65 HP	143	1	\$2,400	\$936	\$107	\$6.56	\$0.75	\$138	\$24	\$1.13	
TRACTOR 126 HP	749	1	\$31,240	\$6,882	\$10,464	\$9.19	\$13.97	\$2,740	\$301	\$4.06	
TRACTOR 185 HP	442	1	\$40,700	\$5,969	\$2,228	\$13.49	\$5.04	\$5,995	\$396	\$14.44	
COMBINE 95 HP	120	1	\$1,200	\$1,255	\$0	\$10.47	\$0.00	\$338	\$59	\$3.31	
GRAIN HD 13.00 FT	20	1	\$2,250		\$7		\$0.34	\$380	\$25	\$19.86	
CORN HD 4-ROW	60	1	\$1,300		\$96		\$1.62	\$283	\$19	\$5.08	
BEAN HEAD 12.67 FT	40	1	\$1,200		\$50		\$1.24	\$267	\$18	\$7.11	
TRUCK 2 TON	599	1	\$22,000	\$7,338	\$5,377	\$12.25	\$8.98	\$4,400	\$194	\$7.67	
SWATHER 16 FT	106	1	\$24,740	\$514	\$688	\$4.87	\$6.52	\$3,621	\$319	\$37.30	
BALER PTO 1-TON	67	1	\$48,920		\$117		\$1.74	\$5,812	\$384	\$92.19	
TWIN RAKES 28 FT	48	1	\$3,400		\$134		\$2.79	\$340	\$30	\$7.71	
PLANTER 6-ROW	80	1	\$4,250		\$768		\$9.65	\$850	\$37	\$11.15	
CHISEL 12 FT	79	1	\$1,200		\$58		\$0.73	\$160	\$11	\$2.16	
CULTIVATOR 6-ROW	64	1	\$2,500		\$99		\$1.55	\$333	\$22	\$5.58	
DISC 21 FT	127	1	\$6,000		\$427		\$3.36	\$800	\$53	\$6.71	
DRILL 12 FT	28	1	\$2,200		\$87		\$3.12	\$440	\$19	\$16.57	
PLANE 14 FT	89	1	\$2,750		\$113		\$1.27	\$367	\$24	\$4.39	
ENSILAGE CHOPPER 3-ROW	114	1	\$6,520		\$355		\$3.13	\$920	\$81	\$8.81	
LISTER 6-ROW	69	1	\$2,150		\$92		\$1.33	\$287	\$19	\$4.41	
ROD WEEDER 23 FT	6	1	\$625		\$4		\$0.63	\$83	\$6	\$13.88	
SPRAYER 16 FT	131	1	\$1,400		\$0		\$0.00	\$187	\$12	\$1.52	
FRONT END LOADER	480	1	\$2,550	\$2,995	\$0	\$6.24	\$0.00	\$255	\$22	\$0.58	
FERT SPREADER	43	1	\$2,300		\$111		\$2.58	\$511	\$20	\$12.33	
SPRINKLER CENTER PIVOT	10710	4	\$60,000	\$296	\$9,693	\$0.03	\$0.91	\$8,000	\$528	\$0.80	
NATURAL GAS WELL	13777	8	\$118,000	\$51,797	\$2,755	\$3.76	\$0.20	\$12,421	\$1,038	\$1.05	
			\$391,795	\$77,982	\$33,829			\$49,925	\$3,661		

TABLE 4. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 900 acre farm above average management, Estancia Basin, 2003.
Planting dates: August 1 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
<u>PURCHASED INPUTS</u>									
SEED	\$3.00	20 LBS		\$60.00					\$60.00
PUMP WATER*		4 AC. IN.							\$0.00
									\$0.00
SUBTOTAL				\$60.00					\$60.00
<u>PREHARVEST OPERATIONS</u>									
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
DISC (2X)	185 HP	0.18 HR			\$1.22	\$2.43	\$1.51	\$3.81	\$8.96
CHISEL	185 HP	0.20 HR			\$1.35	\$2.70	\$1.15	\$3.32	\$8.52
DISC	185 HP	0.09 HR			\$0.61	\$1.21	\$0.76	\$1.90	\$4.48
FERT SPREADER	65 HP	0.05 HR			\$0.34	\$0.33	\$0.17	\$0.67	\$1.50
PLANE	185 HP	0.19 HR			\$1.28	\$2.56	\$1.20	\$3.58	\$8.62
DRILL	65 HP	0.21 HR			\$1.42	\$1.38	\$0.81	\$3.72	\$7.33
IRRIGATE (2X)		0.20 HR			\$1.29	\$8.07	\$2.35	\$3.92	\$15.63
SUBTOTAL		1.12 HR			\$7.50	\$18.68	\$7.95	\$20.93	\$55.05
<u>OVERHEAD EXPENSES</u>									
DOWNTIME		0.23 HR			\$1.55				\$1.55
EMPLOYEE BENEFITS					\$1.35				\$1.35
INSURANCE				\$0.15					\$0.15
SUPERVISION AND MANAGEMENT					\$8.71				\$8.71
SUBTOTAL		0.23 HR		0.15	11.62				11.77
TOTAL OPERATING EXPENSES		1.35 HR		\$60.15	\$19.12	\$18.68	\$7.95	\$20.93	\$126.82

TABLE 5. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 900 acre farm with above average management, Estancia Basin, 2003.
Harvesting dates: June 15 - October 15

ITEM	PRICE	YIELD							TOTAL	
GROSS RETURNS										
ALFALFA HAY	\$140.00	5.60	TONS (STACKED)						\$784.00	
GRAZING	\$10.00	1.00	ACRE						\$10.00	
TOTAL									\$794.00	
PURCHASED INPUTS										
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS				FIXED COST	TOTAL	
PHOSPHATE (P205)	\$0.33	92	LBS	\$30.36					\$30.36	
INSECTICIDE (CUSTOM)	\$23.14	1	ACRE	\$23.14					\$23.14	
LIVESTOCK FAC & EQUIP							\$5.00	\$5.00		
PLASTIC TWINE	\$19.00	952	FT	\$4.52					\$4.52	
ESTABLISHMENT: Principal		5	YEARS				\$25.36	\$25.36		
: Interest							\$5.34	\$5.34		
PUMP WATER*		44	AC. IN.							
SUBTOTAL				\$58.02				\$35.71	\$93.73	
PREHARVEST OPERATIONS										
PURCHASED INPUTS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL	
FERT SPREADER	185 HP	0.05	HR		\$0.34	\$0.67	\$0.38	\$1.34	\$2.73	
IRRIGATE (10X)		1.00	HR		\$6.45	\$88.72	\$25.89	\$43.17	\$164.23	
SUBTOTAL				1.05 HR	\$6.79	\$89.40	\$26.27	\$44.51	\$166.96	
HARVEST OPERATIONS										
SWATHER (3X)	16 FT SP	0.33	HR		\$2.23	\$1.61	\$2.15	\$12.31	\$18.29	
RAKE (3X)	65 HP	0.15	HR		\$1.01	\$0.98	\$0.53	\$1.33	\$3.85	
BALER (3X)	155 HP	0.21	HR		\$1.42	\$2.83	\$1.42	\$22.39	\$28.07	
LOAD & HAUL (3X)	2 TON	1.50	HR		\$10.13	\$41.52	\$34.42	\$18.46	\$104.53	
SUBTOTAL				2.19 HR	\$14.78	\$46.94	\$38.53	\$54.49	\$154.74	
OVERHEAD EXPENSES										
DOWNTIME		0.52	HR		\$3.53				\$3.53	
EMPLOYEE BENEFITS					\$3.88				\$3.88	
INSURANCE				\$0.43					\$0.43	
LAND TAXES							\$0.88		\$0.88	
SUPERVISION AND MANAGEMENT					\$57.63				\$57.63	
OTHER EXPENSES				\$29.94					\$29.94	
SUBTOTAL				0.52 HR	\$30.37	\$65.03		\$0.88	\$96.28	
TOTAL OPERATING EXPENSES				3.76 HR	\$88.39	\$86.60	\$136.34	\$64.79	\$135.59	\$511.72
NET OPERATING PROFIT									\$282.28	
INTEREST ON OPERATING CAPITAL	(	\$65.05	@	8.00%					\$5.20
INTEREST ON EQUIPMENT INVESTMENT									\$9.47	
RETURN TO LAND AND RISK									\$267.61	

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

BUDGET SUMMARY

GROSS RETURN		\$794.00	
VARIABLE OPERATING EXPENSES	\$289.53		
RETURN OVER VARIABLE EXPENSES		\$504.47	(GROSS MARGIN)
FIXED EXPENSES	\$135.59		
NET FARM INCOME		\$368.88	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$86.60		
NET OPERATING PROFIT		\$282.28	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$14.67		
RETURN TO LAND AND RISK		\$267.61	

TABLE 6. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 900 acre farm with above average management, Estancia Basin, 2003.
 Planting dates: September 15 - October 31
 Harvesting dates: July 15 - August 5

ITEM	PRICE	YIELD		PURCHASED INPUTS					TOTAL
GROSS RETURNS									
WHEAT	\$3.45	20.00	BUSHEL						\$69.00
DIRECT PAYMENT	\$0.52	55.00	BUSHEL						\$28.60
COUNTER CYCLICAL PAYMENT	\$0.00								\$0.00
GRAZING	\$40.00	1.00	ACRE						\$40.00
TOTAL									\$137.60
PURCHASED INPUTS									
SEED	\$0.13	100	LBS	\$13.00					\$13.00
ANHYDROUS AMMONIA (NH3)	\$0.1550	100	LBS	\$15.50					\$15.50
NITROGEN (N)	\$0.36	22	LBS	\$7.92					\$7.92
PHOSPHATE (P205)	\$0.33	44	LBS	\$14.52					\$14.52
POTASH (K20)	\$0.21	22	LBS	\$4.62					\$4.62
LIVESTOCK FAC & EQUIP							\$5.00		\$5.00
PUMP WATER*		15	ACRE IN.						
CROP INSURANCE	\$0.74								\$0.74
SUBTOTAL				\$55.56			\$5.00		\$61.30
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
DISC (2X)	185 HP	0.18	HR		\$1.22	\$2.43	\$1.51	\$3.81	\$8.96
FERT SPREADER	185 HP	0.05	HR		\$0.34	\$0.67	\$0.38	\$1.34	\$2.73
ANHYDROUS APPL.	185 HP	0.17	HR		\$1.15	\$2.29	\$0.86	\$2.46	\$6.75
ER 6-ROW	126 HP	0.12	HR		\$0.81	\$1.10	\$1.84	\$0.94	\$4.69
DRILL	65 HP	0.21	HR		\$1.42	\$1.38	\$0.81	\$3.72	\$7.33
IRRIGATE (4X)		2.00	HR		\$12.90	\$30.25	\$8.83	\$14.72	\$66.69
SUBTOTAL		2.73	HR		\$17.83	\$38.12	\$14.22	\$26.98	\$97.15
HARVEST OPERATIONS									
COMBINE	126 HP	0.30	HR		\$2.03	\$3.14	\$0.10	\$6.95	\$12.22
HAUL	2 TON	0.50	HR		\$3.38	\$6.13	\$4.49	\$3.83	\$17.82
SUBTOTAL		0.80	HR	\$0.00	\$5.40	\$9.27	\$4.59	\$10.78	\$30.04
OVERHEAD EXPENSES									
DOWNTIME		0.18	HR		\$1.23				\$1.23
EMPLOYEE BENEFITS					\$4.18				\$4.18
INSURANCE				\$0.36					\$0.36
LAND TAXES							\$0.88		\$0.88
SUPERVISION AND MANAGEMENT					\$12.00				\$12.00
OTHER EXPENSES				\$29.94					\$29.94
SUBTOTAL		0.18	HR	\$30.29	\$17.41		\$0.88		\$48.58
TOTAL OPERATING EXPENSES		3.71	HR	\$85.85	\$40.64	\$47.39	\$18.81	\$43.64	\$237.07
NET OPERATING PROFIT									(\$99.47)
INTEREST ON OPERATING CAPITAL	(	\$42.39	@	8.00%	)				\$3.39
INTEREST ON EQUIPMENT INVESTMENT									\$14.29
RETURN TO LAND AND RISK									(\$117.15)

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

BUDGET SUMMARY

GROSS RETURN		\$137.60	
VARIABLE OPERATING EXPENSES	\$152.06		
RETURN OVER VARIABLE EXPENSES		(\$14.46)	(GROSS MARGIN)
FIXED EXPENSES	\$43.64		
NET FARM INCOME		(\$58.10)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$40.64		
NET OPERATING PROFIT		(\$98.74)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$17.68		
RETURN TO LAND AND RISK		(\$116.42)	

TABLE 7. Corn for grain, sprinkler-irrigated, budgeted per acre costs and returns for a 900 acre farm with above average management, Estancia Basin, 2003.
 Planting dates: April 20 - May 5
 Harvesting dates: October 15 - November 15

ITEM	PRICE	YIELD							TOTAL	
GROSS RETURNS										
CORN	\$2.85	160.00	BUSHEL						\$456.00	
DIRECT PAYMENT	\$0.28	150.00	BUSHEL						\$42.00	
COUNTER CYCLICAL PAYMENT	\$0.00	0.00	BUSHEL						\$0.00	
GRAZING	\$12.00	1.00	ACRE						\$12.00	
TOTAL									\$510.00	
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS					TOTAL	
SEED	\$1.12	25	000	\$28.05					\$28.05	
ANHYDROUS AMMONIA (NH3)	\$0.1550	250	LBS	\$38.75					\$38.75	
NITROGEN (N)	\$0.36	22	LBS	\$7.92					\$7.92	
PHOSPHATE (P205)	\$0.33	44	LBS	\$14.52					\$14.52	
INSECTICIDE (FLY-ON)	\$11.37	1	ACRE	\$11.37					\$11.37	
INSECTICIDE	\$16.99	1	ACRE	\$16.99					\$16.99	
HERBICIDE	\$16.99	1	ACRE	\$16.99					\$16.99	
LIVESTOCK FAC & EQUIP						\$5.00			\$5.00	
PUMP WATER*		28	AC. IN.						\$5.00	
CROP INSURANCE	\$0.29								\$0.29	
SUBTOTAL				\$134.57		\$5.00			\$139.87	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL	
DISC (2X)	185 HP	0.18	HR		\$1.22	\$2.43	\$1.51	\$3.81	\$8.96	
CHISEL	185 HP	0.20	HR		\$1.35	\$2.70	\$1.15	\$3.32	\$8.52	
FERT SPREADER	185 HP	0.05	HR		\$0.34	\$0.67	\$0.38	\$1.34	\$2.73	
DISC & SPRAY	185 HP	0.14	HR		\$0.95	\$1.89	\$1.18	\$3.17	\$7.18	
ANHYDROUS APPL.	185 HP	0.17	HR		\$1.15	\$2.29	\$0.86	\$2.46	\$6.75	
LISTER	126 HP	0.12	HR		\$0.81	\$1.10	\$1.84	\$1.02	\$4.77	
PLANTER & SPRAY	126 HP	0.20	HR		\$1.35	\$1.84	\$4.72	\$3.35	\$11.26	
CULTIVATOR (1X)	65 HP	0.13	HR		\$0.88	\$0.85	\$0.30	\$0.87	\$2.90	
IRRIGATE (13X)		1.30	HR		\$8.39	\$56.46	\$16.47	\$27.47	\$108.79	
SUBTOTAL		2.49	HR		\$16.42	\$70.24	\$28.41	\$46.81	\$161.87	
HARVEST OPERATIONS										
COMBINE	126 HP	0.35	HR		\$2.36	\$3.66	\$0.57	\$2.94	\$9.53	
HAUL	2-TON	0.50	HR		\$3.38	\$6.13	\$4.49	\$3.83	\$17.82	
SUBTOTAL		0.85	HR		\$5.74	\$9.79	\$5.05	\$6.77	\$27.35	
OVERHEAD EXPENSES										
DOWNTIME		0.47	HR		\$3.16				\$3.16	
EMPLOYEE BENEFITS					\$3.99				\$3.99	
INSURANCE				\$0.44					\$0.44	
LAND TAXES							\$0.88		\$0.88	
SUPERVISION AND MANAGEMENT					\$39.64				\$39.64	
OTHER EXPENSES				\$29.94					\$29.94	
SUBTOTAL		0.47	HR		\$30.38	\$46.78		\$0.88	\$78.04	
TOTAL OPERATING EXPENSES		3.81	HR		\$164.96	\$68.93	\$80.03	\$33.46	\$59.46	\$407.13
NET OPERATING PROFIT									\$102.87	
INTEREST ON OPERATING CAPITAL	(	\$93.33	@	8.00%					\$7.47
INTEREST ON EQUIPMENT INVESTMENT									\$17.90	
RETURN TO LAND AND RISK									\$77.51	

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

GROSS RETURN		\$510.00	
VARIABLE OPERATING EXPENSES	\$278.44		
RETURN OVER VARIABLE EXPENSES		\$231.56	(GROSS MARGIN)
FIXED EXPENSES	\$59.46		
NET FARM INCOME		\$172.10	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$68.93		
NET OPERATING PROFIT		\$103.17	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$25.36		
RETURN TO LAND AND RISK		\$77.80	

TABLE 8. Corn silage, flood-irrigated, budgeted per acre costs and returns for a 900 acre farm with above average management, Estancia Basin, 2003.
 Planting dates: April 20 - May 5
 Harvesting dates: September 15 - October 15

ITEM	PRICE	YIELD		PURCHASED INPUTS					TOTAL	
GROSS RETURNS										
CORN SILAGE	\$27.00	25.00	TONS (CUT)							\$675.00
TOTAL									\$675.00	
PURCHASED INPUTS										
SEED	\$1.12	25	000		\$28.05					\$28.05
ANHYDROUS AMMONIA (NH3)	\$0.1550	250	LBS		\$38.75					\$38.75
NITROGEN (N)	\$0.36	22	LBS		\$7.92					\$7.92
PHOSPHATE (P205)	\$0.33	44	LBS		\$14.52					\$14.52
HERBICIDE	\$15.41	1	ACRE		\$15.41					\$15.41
INSECTICIDE (FLY-ON)	\$11.37	1	ACRE		\$11.37					\$11.37
INSECTICIDE	\$15.44	1	ACRE		\$15.44					\$15.44
IRRIGATION WATER		30	AC. IN.							
SUBTOTAL					\$131.45					\$131.45
PREHARVEST OPERATIONS										
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL	
DISC (2X)	185 HP	0.18	HR		\$1.22	\$2.43	\$1.51	\$3.81	\$8.96	
CHISEL	185 HP	0.20	HR		\$1.35	\$2.70	\$1.15	\$3.32	\$8.52	
LAND PLANE	185 HP	0.24	HR		\$1.62	\$3.24	\$1.51	\$4.52	\$10.89	
FERT SPREADER	185 HP	0.05	HR		\$0.34	\$0.67	\$0.38	\$1.34	\$2.73	
LISTER & SPRAY	126 HP	0.17	HR		\$1.15	\$1.56	\$2.60	\$1.70	\$7.01	
PRE-IRRIGATE		0.75	HR		\$4.84	\$12.01	\$0.64	\$3.34	\$20.83	
PLANTER & SPRAY	126 HP	0.20	HR		\$1.35	\$1.84	\$4.72	\$3.35	\$11.26	
CULTIVATOR	65 HP	0.13	HR		\$0.88	\$0.85	\$0.30	\$0.87	\$2.90	
IRRIGATE (4X)		2.00	HR		\$12.90	\$48.04	\$2.56	\$13.37	\$76.87	
SUBTOTAL		3.92	HR		\$25.64	\$73.34	\$15.38	\$35.62	\$149.98	
HARVEST OPERATIONS										
ENSILAGE CHOPPER	126 HP	0.71	HR		\$4.79	\$6.52	\$12.14	\$9.14	\$32.60	
SUBTOTAL		0.71	HR		\$4.79	\$6.52	\$12.14	\$9.14	\$32.60	
OVERHEAD EXPENSES										
DOWNTIME		0.47	HR		\$3.17					\$3.17
EMPLOYEE BENEFITS					\$5.48					\$5.48
INSURANCE				\$0.61					\$0.61	
LAND TAXES							\$0.88			\$0.88
SUPERVISION AND MANAGEMENT					\$50.92					\$50.92
OTHER EXPENSES				\$29.94					\$29.94	
SUBTOTAL		0.47	HR		\$30.55	\$59.57		\$0.88	\$91.00	
TOTAL OPERATING EXPENSES		5.10	HR		\$162.00	\$90.00	\$79.87	\$27.52	\$45.64	\$405.02
NET OPERATING PROFIT									\$269.98	
INTEREST ON OPERATING CAPITAL	(\$89.46	@	8.00%)					\$7.16
INTEREST ON EQUIPMENT INVESTMENT									\$21.09	
RETURN TO LAND AND RISK									\$241.73	

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

BUDGET SUMMARY

GROSS RETURN		\$675.00	
VARIABLE OPERATING EXPENSES	\$269.38		
RETURN OVER VARIABLE EXPENSES		\$405.62	(GROSS MARGIN)
FIXED EXPENSES	\$45.64		
NET FARM INCOME		\$359.97	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$90.00		
NET OPERATING PROFIT		\$269.98	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$28.24		
RETURN TO LAND AND RISK		\$241.73	

TABLE 9. Pinto beans, flood-irrigated, budgeted per acre costs and returns for a 900 acre farm with above average management, Estancia Basin, 2003.
 Planting dates: May 15 - June 10
 Harvesting dates: September 1 - October 31

ITEM	PRICE	YIELD		PURCHASED INPUTS					TOTAL	
GROSS RETURNS										
PINTO BEANS	\$20.00	20.00	CWT (THRESHER RUN)							\$400.00
TOTAL									\$400.00	
PURCHASED INPUTS										
SEED	\$0.43	60	LBS	\$25.80						\$25.80
NITROGEN (N)	\$0.36	18	LBS	\$6.48						\$6.48
PHOSPHATE (P205)	\$0.33	46	LBS	\$15.18						\$15.18
INSECTICIDE (CUSTOM)	\$15.62	1	ACRE	\$15.62						\$15.62
HERBICIDE	\$16.99	1	ACRE	\$16.99						\$16.99
PUMP WATER*		12	AC. IN.							
SUBTOTAL				\$80.06						\$80.06
PREHARVEST OPERATIONS										
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL	
DISC (2X)	185 HP	0.18	HR		\$1.22	\$2.43	\$1.51	\$3.81	\$8.96	
LAND PLANE (2X)	185 HP	0.48	HR		\$3.24	\$6.48	\$3.02	\$9.04	\$21.78	
FERT SPREADER	185 HP	0.05	HR		\$0.34	\$0.67	\$0.38	\$1.34	\$2.73	
LISTER & SPRAY	126 HP	0.17	HR		\$1.15	\$1.56	\$2.60	\$1.70	\$7.01	
PLANTER	126 HP	0.17	HR		\$1.15	\$1.56	\$4.02	\$2.59	\$9.31	
CULTIVATOR (2X)	65 HP	0.26	HR		\$1.76	\$1.71	\$0.60	\$1.75	\$5.80	
IRRIGATE (3X)		1.50	HR		\$9.68	\$24.02	\$1.28	\$6.69	\$41.66	
SUBTOTAL		2.81	HR		\$18.52	\$38.43	\$13.41	\$26.90	\$97.26	
HARVEST OPERATIONS										
ROD WEED	126 HP	0.08	HR		\$0.54	\$0.74	\$1.17	\$1.44	\$3.88	
COMBINE	126 HP	0.50	HR		\$3.38	\$5.23	\$0.62	\$5.21	\$14.44	
SUBTOTAL		0.58	HR		\$3.92	\$5.97	\$1.79	\$6.64	\$18.31	
OVERHEAD EXPENSES										
DOWNTIME		0.91	HR		\$6.13				\$6.13	
EMPLOYEE BENEFITS					\$4.04				\$4.04	
INSURANCE				\$0.45					\$0.45	
LAND TAXES							\$0.88		\$0.88	
SUPERVISION AND MANAGEMENT					\$30.18				\$30.18	
OTHER EXPENSES				\$29.94					\$29.94	
SUBTOTAL		0.91	HR		\$30.39	\$40.34		\$0.88	\$71.61	
TOTAL OPERATING EXPENSES		4.30	HR		\$110.45	\$62.78	\$44.40	\$15.20	\$34.43	\$267.25
NET OPERATING PROFIT									\$132.75	
INTEREST ON OPERATING CAPITAL	(	\$53.64	@	8.00%					\$4.29
INTEREST ON EQUIPMENT INVESTMENT									\$18.04	
RETURN TO LAND AND RISK									\$110.42	

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

BUDGET SUMMARY

GROSS RETURN		\$400.00	
VARIABLE OPERATING EXPENSES	\$170.04		
RETURN OVER VARIABLE EXPENSES		\$229.96	(GROSS MARGIN)
FIXED EXPENSES	\$34.43		
NET FARM INCOME		\$195.53	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$62.78		
NET OPERATING PROFIT		\$132.75	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$22.33		
RETURN TO LAND AND RISK		\$110.42	

TABLE 10. Summary of per acre costs and returns for a 900 acre farm with above average management, Estancia Basin, New Mexico, 2002.

	ALFALFA ESTABLISHMENT -----Sprinkler-----	ALFALFA HAY	WHEAT	CORN FOR GRAIN	CORN FOR SILAGE -----Flood-----	PINTO BEANS
	TONS	BU	BU	TONS	CWT	
PRIMARY YIELD	5.60	20.00	160.00	25.00	20.00	
PRIMARY PRICE	140.00	3.45	2.85	27.00	20.00	
GOVERNMENT PAYMENTS	0.00	28.60	42.00	0.00	0.00	
SECOND INCOME	10.00	40.00	12.00	0.00	0.00	
GROSS RETURN	\$794.00	\$137.60	\$510.00	\$675.00	\$400.00	
CASH OPERATING EXPENSES						
SEED	\$60.00		\$13.00	\$28.05	\$28.05	\$25.80
FERTILIZER		\$30.36	\$42.56	\$61.19	\$61.19	\$21.66
CHEMICALS		\$23.14		\$45.34	\$42.21	\$32.60
CROP INSURANCE			\$0.74	\$0.29		
OTHER PURCHASED INPUTS		\$4.52				
CANAL WATER						
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$10.61	\$47.62	\$17.14	\$23.57	\$19.82	\$20.38
FUEL-IRRIGATION	\$8.07	\$88.72	\$30.25	\$56.46	\$60.05	\$24.02
REPAIRS	\$7.95	\$64.79	\$18.81	\$33.46	\$27.52	\$15.20
CUSTOM CHARGES			\$0.00	\$0.00	\$0.00	
LAND TAXES		\$0.88	\$0.88	\$0.88	\$0.88	\$0.88
OTHER EXPENSES	\$0.15	\$30.37	\$30.29	\$30.38	\$30.55	\$30.39
TOTAL CASH EXPENSES	\$86.78	\$290.41	\$153.67	\$279.62	\$270.26	\$170.92
RETURN OVER CASH EXPENSES	(\$86.78)	\$503.59	(\$16.07)	\$230.38	\$404.74	\$229.08
FIXED EXPENSES	\$20.93	\$134.71	\$42.76	\$58.58	\$44.76	\$33.55
TOTAL EXPENSES	\$107.70	\$425.12	\$196.44	\$338.19	\$315.03	\$204.47
NET FARM INCOME	(\$107.70)	\$368.88	(\$58.84)	\$171.81	\$359.97	\$195.53
LABOR AND MANAGEMENT COSTS	\$19.12	\$86.60	\$40.64	\$68.93	\$90.00	\$62.78
NET OPERATING PROFIT	(\$126.82)	\$282.28	(\$99.47)	\$102.87	\$269.98	\$132.75
CAPITAL COSTS						
INTEREST ON OPERATING CAPITAL		\$5.20	\$3.39	\$7.47	\$7.16	\$4.29
INTEREST ON EQUIPMENT INVESTMENT		\$9.47	\$14.29	\$17.90	\$21.09	\$18.04
TOTAL CAPITAL COSTS	\$0.00	\$14.67	\$17.68	\$25.36	\$28.24	\$22.33
RETURN TO LAND AND RISK	(\$126.82)	\$267.61	(\$117.15)	\$77.51	\$241.73	\$110.42

TABLE 11. Whole farm summary, Estancia Basin, 2002.

GROSS RETURNS		
ALFALFA HAY	320 ACRES	
CROP		\$250,880
GRAZING		\$3,200
WHEAT	68 ACRES	
CROP		\$4,692
GRAZING		\$2,720
DIRECT PAYMENT		\$1,945
COUNTER CYCLICAL PAYMENT		\$0
CORN FOR GRAIN	170 ACRES	
CROP		\$77,520
GRAZING		\$2,040
DIRECT PAYMENT		\$5,628
CORN FOR SILAGE	160 ACRES	
CROP		\$108,000
PINTO BEANS	80 ACRES	
CROP		\$32,000
GROSS RETURN		\$488,625
CASH OPERATING EXPENSES		
SEED		\$16,043
FERTILIZER		\$34,535
CHEMICALS		\$24,475
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$1,447
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$25,890
FUEL-IRRIGATION		\$52,092
REPAIRS		\$33,829
CUSTOM CHARGES		\$0
LAND TAXES		\$702
OTHER EXPENSES		\$24,271
TOTAL CASH EXPENSES		\$213,386
RETURN OVER CASH EXPENSES		\$275,239
FIXED EXPENSES		\$59,041
TOTAL EXPENSES		\$272,426
NET FARM INCOME		\$216,198
LABOR AND MANAGEMENT COSTS		\$62,841
NET OPERATING PROFIT		\$153,358
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$4,654
INTEREST ON EQUIPMENT INVESTMENT		\$11,861
TOTAL CAPITAL COSTS		\$16,514
RETURN TO LAND AND RISK		\$136,844

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$750 /ACRE	\$109,844	14.38%
\$1,000 /ACRE	\$100,844	11.87%
\$1,250 /ACRE	\$91,844	10.11%
\$1,500 /ACRE	\$82,844	8.80%

* 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)