

Table 8A. Income and Cash Operating Cost Summary, Barley, 1996

COUNTY: Graham	FARM: Graham County Farm	WATER SOURCE: Both	TILLAGE: Conventional
CROP: Barley	ACRES: 1.0	IRRIGATION SYSTEM: Flood Furrow	SOIL: Sandy-Loam
AREA: Safford Valley	YIELD: 5,400.0 Lb/Acre	PREVIOUS CROP: Cotton, Upland	DATE: 10/16/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Grain	Pound	5,400.00	\$0.0567	\$306.18	\$306.18	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					37.70	_____
Tractor/Self Propelled				8.68		_____
Irrigation				26.46		_____
Other/Contract				2.57		_____
Chemicals & Custom Applications					61.47	_____
Fertilizers				61.47		_____
Farm Machinery and Vehicles					14.38	_____
Diesel Fuel				6.65		_____
Repairs & Maint.				7.73		_____
Irrigation (excluding labor)					16.81	_____
Pump Energy - Elect.				15.80		_____
Repairs & Maint.				1.01		_____
Water Assessment (See Note Below) **					**	_____
Other Purchased Inputs & Services					44.10	_____
Seed/Transplants				44.10		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					174.46	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					0.42	_____
Tractor/Self Propelled				0.42		_____
Farm Machinery and Vehicles					0.54	_____
Diesel Fuel				0.24		_____
Repairs & Maint.				0.30		_____
Custom Harvest/Post Harvest					49.90	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					50.86	_____
OPERATING OVERHEAD->PICKUP USE					7.43	_____
OPERATING INTEREST AT 8.0%					4.82	_____
TOTAL CASH OPERATING EXPENSES					\$237.57	=====
RETURNS OVER CASH OPERATING EXPENSES					\$68.61	=====

Notes: The above figures do not include ownership costs, see Table 8B on Next Page for detailed cost allocation.

\*\* A water assessment charge of \$35.00/Acre is included in the ownership costs of Table 8B.

Table 8B. Allocation of Ownership Costs; Barley, 1996

COUNTY: Graham	FARM: Graham County Farm	WATER SOURCE: Both	TILLAGE: Conventional
CROP: Barley	ACRES: 1.0	IRRIGATION SYSTEM: Flood Furrow	SOIL: Sandy-Loam
AREA: Safford Valley	YIELD: 5,400.0 Lb/Acre	PREVIOUS CROP: Cotton, Upland	DATE: 10/16/96

Item	- CASH COST BASIS (\$/ACRE) -		- TOTAL COST BASIS (\$/ACRE) -	
	Income & Costs	Net Returns	Income & Costs	Net Returns
TOTAL INCOME at \$ 0.0567/Lb	\$306.18		\$306.18	
TOTAL OPERATING EXPENSES	237.57		237.57	
RETURN OVER CASH OPERATING EXPENSES		\$68.60		\$68.60
<b>CASH OVERHEAD EXPENSES</b>				
Taxes, Housing & Insur., Farm Machinery	1.73		1.73	
Wells & Irrig. System	4.92		4.92	
Gen. & Off. Overhead ( 5% of Tot. Oper. Exp.)	11.87		11.87	
General Farm Maint. ( 3% of Tot. Oper. Exp.)	7.13		7.13	
Total Cash Overhead Expenses	25.65		25.65	
Total Cash Oper. & Over. Cost	263.23		263.23	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		42.94		42.94
<b>CAPITAL ALLOCATIONS (100% Equity)</b>				
Capital Replacement, Machinery & Vehicles			9.69	
Wells & Irrig. System			8.77	
Interest on Equity, Machinery & Vehicles			5.21	
Wells & Irrig. System			3.34	
Total Capital Allocations			27.01	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK		42.94		
RETURNS TO LAND, MANAGEMENT & RISK				15.93
<b>LAND COSTS / OWNERSHIP (100% Equity)</b>				
Property Taxes (\$660 X 16% X .10016)	10.57		10.57	
Opport. Inter. on Land (100% X 6.0% X \$660)			39.60	
Water Assessment **	35.00		35.00	
Total Land Costs	45.57		85.17	
RETURNS TO MANAGEMENT, CAPITAL & RISK		( 2.62)		
RETURNS TO MANAGEMENT & RISK				( 69.24)
Management Services ( 8% of Tot. Oper. Exp.)			19.00	
TOTAL OWNERSHIP COST	71.23		156.85	
TOTAL COST	\$308.80		\$394.42	
RETURN TO MANAGEMENT, CAPITAL & RISK		( \$2.62)		
RETURN TO RISK (PROFITS)				( \$88.24)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.0439		\$0.0439
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.0131		\$0.0290
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.0571		\$0.0730

Table 8C. Variable Operating Costs; Barley, 1996

COUNTY: Graham FARM: Graham County Farm WATER SOURCE: Both TILLAGE: Conventional  
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 5,400.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/16/96

No.	First Month	Operation	Hours * -		Operating Costs (\$/Acre*)				Total Times	Tot. Cash Expense	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials				Total
1	Dec	Disk	0.300	0.333	3.59	2.80			6.39	1.0	6.39	L
2	Dec	Landplane	0.273	0.300	2.74	2.52			5.26	1.0	5.26	L
3	Dec	Plant	0.300	0.666	3.83	5.13		83.48	92.44	1.0	92.44	L
4	Dec	Disk Ends	0.030	0.033	0.36	0.28			0.64	1.0	0.64	G
5	Dec	Buck Rows	0.030	0.066	0.26	0.51			0.77	1.0	0.77	G
6	Dec	Irrigate		0.403		2.82			2.82	4.0	11.28	G
7	Dec	Irrigate		0.606	7.00	4.25			11.25	2.0	22.50	G
8	Mar	Irrigate/Run Fertilizer		0.538		3.77		22.10	25.87	0.7	18.11	G
9	Mar	Irrigate/Run Fertilizer		0.806	9.34	5.65		22.10	37.09	0.3	11.13	G
10	Jun	Prepare Ends	0.045	0.050	0.54	0.42			0.96	1.0	0.96	H
11	Jun	Combine Harvest						36.40	36.40	1.0	36.40	H
12	Jun	Haul, Custom 54.0 CW						13.50	13.50	1.0	13.50	H
13	Jul	Disk Residue	0.300	0.333	3.59	2.33			5.92	1.0	5.92	L
		Pickup Use 30 Mi/Ac	1.000		7.43						7.43	O
		Operating Interest at 8.00%						5.18			5.18	O
TOTAL CASH OPERATING EXPENSES:					\$39.15	\$38.10	\$55.08	\$105.58			\$237.91	T

\* NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The 'Tot. Cash Expense' column and the 'TOTAL CASH OPERATING EXPENSES:' row include all operations, all times over. Classes are defined below. A water assessment charge of \$35.00/Acre included as ownership cost in Table 8B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$110.01								
Growing (G)	64.42								
Harvest (H)	50.85	Yields		\$0.04	\$0.05	\$0.05	\$0.06	\$0.07	
Post Harvest (P)	0.00							Break-even	
Marketing (M)	0.00	-25%	4,050.0	-52.97	-18.52	4.43	27.39	61.84	0.05
Operating Overhead (O)	12.61	-10%	4,860.0	-26.15	15.17	42.73	70.28	111.62	0.04
		Budgeted	5,400.0	-8.27	37.64	68.26	98.88	144.81	0.04
Total (T)	\$237.91	+10%	5,940.0	9.59	60.11	93.79	127.47	177.99	0.04
		+25%	6,750.0	36.41	93.82	132.09	170.36	227.77	0.03
		Break-even Yield		5,650.08	4,495.26	3,956.19	3,532.57	3,043.69	

Table 8D. Resource and Cash Flow Requirements; Barley, 1996

COUNTY: Graham FARM: Graham County Farm WATER SOURCE: Both TILLAGE: Conventional  
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Safford Valley YIELD: 5,400.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/16/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total
DEC P	1.0	6.0	1.18		8.19	9.02	19.69	22.05		58.95
JAN C	1.0	6.0	1.18		8.19	9.02	19.69	22.05		58.95
MAR C	2.0	14.0	1.08		4.90	7.59	22.10			34.59
APR C	2.0	12.0	0.92		4.20	6.50				10.70
MAY C	1.0	6.0	0.46		2.10	3.25				5.35
JUN C			0.05		0.54	0.42			28.25	29.21
JUL C			0.33		3.59	2.33			2.75	8.68
Pickup Use 30 Mi/Ac					7.43					7.43
Operating Interest at 8.0% Water Assessment				**					5.19	5.19
<b>Total</b>	<b>7.0</b>	<b>44.0</b>	<b>5.22</b>		<b>39.15</b>	<b>38.12</b>	<b>61.48</b>	<b>44.10</b>	<b>36.19</b>	<b>219.05</b>
%					17.87	17.40	28.07	20.13	16.52	100.00

TOTAL RESOURCES REQUIREMENTS (/Acre)		TOTAL ENERGY REQUIREMENTS (/Acre)		
Total N	148.0 lbs	Diesel Fuel	6.3	Gal
Total P	60.0 lbs	Regular Gas	0.0	Gal
Total K	0.0 lbs	NonLead Gas	3.0	Gal
Total Labor	5.2 Hrs	Electricity/Pumping	159.2	KWH
Total Water	44.0 AI	All Direct Energy	1.7	M BTU

EQUIPMENT REQUIREMENTS (/Acre)				
Tractor, 100 PTO HP, MFWD	1.28 Hrs	Offset Disk, 13.5'	0.68 Hrs	Landplane 12' X 45'
Grain Drill 12' W/Fert Box	0.30 Hrs	Rowbuck, 10'	0.03 Hrs	Pickup Truck, 1/2 Ton
				0.27 Hrs
				1.00 Hrs

MATERIALS REQUIREMENTS (/Acre)				
Barley Sd, Cert	175.00 Lb	16-20-00, Dry	300.00 Lb	Water, District
Water, Pump	14.40 AI	82-00-00, Anhyd. Ammonia	122.00 Lb	
				29.60 AI

LABOR REQUIREMENTS (/Acre)				
Tractor	1.08 Hrs	Other	0.37 Hrs	Irrigators
				3.78 Hrs

\* NOTE: P = Previous Year C = Current Year N = Next Year  
 \*\* A water assessment charge of \$35.00/Acre included as ownership cost in Table 8B.

Table 8E Schedule of Operations; Barley, 1996

Page 35

COUNTY: Graham	FARM: Graham County Farm	WATER SOURCE: Both	TILLAGE: Conventional
CROP: Barley	ACRES: 1.0	IRRIGATION SYSTEM: Flood Furrow	SOIL: Sandy-Loam
AREA: Safford Valley	YIELD: 5,400.0 Lb/Acre	PREVIOUS CROP: Cotton, Upland	DATE: 10/16/96

No.	First Month	Times	Operation	Equipment/Custom Oper.		Job Rate Acres/Hr	— Material Use & Cost —			Service Cost \$/Unit	Labor Type
				HP	Self-Prop./Implem.		Name	Appl. Rate	\$/Unit		
1	Dec	1.0	Disk	100	Offset Disk, 13.5'	3.00					Tractor
2	Dec	1.0	Landplane	100	Landplane 12'X 45'	3.30					Tractor
3	Dec	1.0	Plant	100	Grain Drill 12' W/Fert	3.00	Barley Sd, Cert 16-20-00, Dry	175.00 Lb 300.00 Lb	24.00 CW 250.00 Tn		Tractor Other
4	Dec	1.0	Disk Ends	100	Offset Disk, 13.5'	30.00					Tractor
5	Dec	1.0	Buck Rows	100	Rowbuck, 10'	30.00					Tractor Other
6	Dec	4.0	Irrigate			2.48	Water, District	6.00 AI	0.00 AF		Irrigator
7	Dec	2.0	Irrigate			1.65	Water, Pump	6.00 AI	14.00 AF		Irrigator
8	Mar	0.7	Irrigate/Run Fertiliz			1.86	Water, District 82-00-00, Anhyd. A	8.00 AI 122.00 Lb	0.00 AF 345.00 Tn		Irrigator
9	Mar	0.3	Irrigate/Run Fertiliz			1.24	Water, Pump 82-00-00, Anhyd. A	8.00 AI 122.00 Lb	14.00 AF 345.00 Tn		Irrigator
10	Jun	1.0	Prepare Ends	100	Offset Disk, 13.5'	20.00					Tractor
11	Jun	1.0	Combine Harvest		CST Combine Barley					17.50 Ac	
12	Jun	1.0	Haul, Custom		CST Haul Grain					0.25 CW	
13	Jul	1.0	Disk Residue Pickup Use 30 Mi/Ac	100	Offset Disk, 13.5' Pickup Truck, 1/2 Ton	3.00 1.00					Irrigator

\* NOTE: Machine times, labor times, and material rates are for one time over the designated acreage.

\*\* A water assessment charge of \$35.00/Acre included as ownership cost in Table 8B.

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