BL-VS-80-3

IRRIGATED BARLEY - SINGLE CROPPED

Cost Analysis Work Sheet - 1980

Sample costs to produce irrigated barley in Fresno County (West Side). Based on a yield of 4500 lbs. per acre. Field labor at \$4.50 per hour total and equipment operator \$5.50, including social security and workmen's compensation insurance. Heavy crawler per hour cash costs \$10.20, depreciation \$4.40, and interest \$4.00. Medium wheel diesel tractor

\$4.60, \$2.00, and \$1.40.			
<u> </u>	Sample	Costs	My Costs
	Per	Per	Per Per
	Acre	CWT	Acre CWT
PRE-HARVEST CASH COSTS:			
Land preparation: $1\frac{1}{2}$ hrs labor & crawler tractor	\$23.55		
Disc & harrow: 1/4 hr crawler tractor	2.62		
Plant: seed 80 lbs @ 15¢/1b	12.00		
1/4 hr wheel tractor	2.52		
Fertilizer: 80 lbs N @ 15¢ (NH3)	12.00		
Broadleaf weed control - custom, 1/3 acres/yr .	1.50		
Oat control, 1/3 acreage per year	2.38		
Two crop irrigations: labor 1 hr.	4.50		
Water: 1.9' ac.ft @ \$12.00/Ac.Ft.1/	22.80		
Misc. labor incl. 1/6 hr crawler	4.00		
County taxes	11.00		
Repairs to equipment except tractors	9.00		
Office, car, operating capital, insurance, etc.	12.54		
TOTAL PRE-HARVEST CASH COSTS	120.41	2.68	
HARVESTING COSTS:			•
\$9.00 per acre + \$4.400 per ton + \$6.00 per ton hauli	ng 31.50		
TOTAL HARVESTING COSTS	31.50	.70	
TOTAL CASH COSTS	151.91	3.38	
DEPRECIATION:			
Irrigation system: 260 - 16 yrs	16.25		
Crawler: 1 5/6 hrs @ \$4.40	8.07		
Wheel Tractor: 1/4 hr @ \$2.00	.50		
Equipment except tractors: \$90 - 10 yrs life	9.00		
TOTAL DEPRECIATION	33.82	.75	
NTEREST ON INVESTMENT @ 12%:			·
Land: \$900	108.00		
Irrigation system: 1/2 cost \$130	15.60		
Crawler: 1 5/6 hrs @ \$4.00	7.33		
Wheel Tractor: 1/4 hrs @ \$1.40	.35		
Equipment except tractors: 1/2 cost \$45.00	5.40		
TOTAL INTEREST ON INVESTION	136.68	3.03	
TOTAL COST OF PRODUCTION	322.41	7.16	
TOTAL COST OF PRODUCTION	322.41	7.10	

^{1/} See back for sample costs at varying yields and water costs.

SAMPLE COST AT VARYING YIELDS & WATER COSTS

Water Cost \$12.00/Ac.Ft.

Yield: Lbs/A	3500	4000	4500	5000	5500
Cash Cost/CWT	4.20	3.74	3.38	3.09	2.85
Total Cost/CWT	9.07	8.00	7.16	6.50	5.95

Water Cost \$32.00/Ac.Ft.

			1101101		
Yield: Lbs/A	3500	4000	4500	5000	5500
Cash Cost/CWT	5.29	4.69	4.22	3.85	3.54
Total Cost/CWT	10.16	8.95	8.00	7.26	6.64

Water Cost \$87.00/Ac.Ft

	1140	<u>σε σσου φολίσο</u>	, ne		<u> </u>
Yield: Lbs/A	3500	4000	4500	5000	5500
Cash Cost/CWT	8.27	7.30	6.55	5.94	5.44
Total Cost/CWT	13.14	11.56	10.33	9.35	8.54

Jerry St. Andre Farm Advisor

E. A. Yeary Area Farm Advisor

Farm & Home Advisors 1720 S. Maple Ave. Fresno, Ca. 93702

CO-OPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, U.S. Department of Agriculture,
University of California, and County of Fresno Co-operating.

The University of California Cooperative Extension in compliance with the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and the Rehabilitation Act of 1973 does not discriminate on the basis of race, creed, religion, color, national origin, sex or mental or physical handicap in any of its programs or activities. Inquiries regarding this policy may be directed to: Affirmative Action Officer, Cooperative Extension, 317 University Hall, University of California, Berkeley, California 94732, (415) 642-0903.

UC Cooperative Extension

TITLE: IRRIGATED BARLEY PRODUCTION
WESTSIDE FRESHO COUNTY 1980
SINGLE CROPPED - YIELD OF 45 CWT.

BY BC% SHEESLEY, FARM ADVISOR

		TINU	PRICE OR COST/UNIT	QUANTITY	VALUE OR COST PER ACRE	YOUR COST
1.	GROSS RECEIPTS FROM PRODUCTION: BARLEY	CWT.	5.940	45.000	267.30	
	TOTAL RECEIPTS:		· . ` ·	\$	267.30	
2.	NITROGEN IRRIG DIST WATER BROAD LEAF HERB HERBICIDE APP WILD OAT CONTROL TRACTOR (FUEL-LUBE-REPAIRS) BUILDINGS (FUEL-LUBE-REPAIRS)	CHT. LBS. ACIN ACRE APLC ACRE ACRE ACRE	15.000 0.150 1.000 3.000 2.500 3.500	80.000 22.800 0.333 0.667 0.334	12.00 22.80 1.00 1.67 1.17 12.70 8.93 1.55	
	IRRIGATION (POWER-LUBE-REP) MACHINERY LABOR IRRIGATION LABOR INTEREST ON OPERATING CAP.	ACIN HOUR HOUR DOL.	0.675 5.500 4.500 0.140	22.800 1.368 1.000 35.783	7.52	
	TOTAL PREHARVEST COSTS: PREHARVEST COST PER CWT.				106.05 2.3566	
	HARVEST: CUSTOR COMBINE CUSTOR COMBINE CUSTOR HAULING	ACRE CWT. TON	9.000 0.220 6.000	1.000 45.000 2.250	9.00 9.90 13.50	
: : :	TOTAL HARVEST COSTS: HARVEST COST PER CMT.				32.40 0.7200	
	TOTAL VARIABLE COSTS: VARIABLE COST PER CWT.			\$	138.45 3.0766	
3.	INCOME ABOVE VARIABLE COSTS: INCOME PER CHT.			\$	128.85 2.8634	
4.	CASH OVERHEAD: REAL PROPERTY TAXES:		vitoja Gradina	**************************************	11.00	olivi, series estate Talia estate Personali
	TOTAL CASH OVERHEAD: OVERHEAD COST PER CWT.			**************************************	11.00 0.2444	
5.	INCOME ABOVE ALL CASH COSTS: INCOME PER CUT.		and	\$	117.85 2.6189	
6.	ONNERSHIP COSTS: DEPRECIATION: MACHINERY & EQUIPMENT IRRIGATION SYSTEM BUILDINGS	ACRE ACRE ACRE			8.21 6.28 5.65	
	TOTAL DEPRECIATION:			\$	20.14	
	CAPITAL & INTEREST: MACHINERY&EQUIPMENT IRRIGATION SYSTEM BUILDINGS LAND		0.140 0.140 0.107 0.107	62.712 64.783 107.187 900.000	8.78 9.07 11.44 96.03	
	TOTAL INTEREST CHARGE:			\$	125.32	
	TOTAL FIXED COSTS: FIXED COST PER CWT.				145.46 3.2325	
7.	TOTAL OF ABOVE COSTS: TOTAL COST PER CWT.				294.91 6.5535	
8.	HET RETURNS: NET RETURNS PER CWT.			(1 y 1) \$	-27.61 -0.6135	****

SPRINKLER IRRIGATED TO ACRE FIELD SIZE

UPDATED 05/10/80

BUDGET IDENTIFICATION NUMBER 2111000000 420 1 DATE PRINTED: 06/09/80 1980 default data BUDGET RECORD NUMBER 143 HARVEST MONTH: 5

UC Cooperative Extension

IDENTIFICATION NUMBER 2111000000 420 1 IRRIGATED BARLEY PRODUCTION WESTSIDE FRESNO COUNTY 1980 SINGLE CROPPED - YIELD OF 45 CWT.

HARVEST MONTH 5 BUDGET RECORD NUMBER 143 BY BOB SHEESLEY, FARM ADVISOR

No. 1											4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
CATEGORY	TINU	JAN	MONTHLY FEB	SUMMA MAR	RY OF I	RECEIPTS MAY	AND EXP	ENSES JUL	AUG	SEP	OCT	HOV	DEC	TOTAL
TOTAL RECEIPTS	\$/AC	0.00	0.00	0.00	0.00	267.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	267.30
OPERATING EXPENSES BARLEY, SEED NITROGEN IRRIG DIST WATER CUSTOM COMBINE CUSTOM HAULING BROAD LEAF HERB HERBICIDE APP WILD OAT CONTROL MACHINE LABOR COST INTEREST ON OPER. CAP. TRACTOR COST EQUIPMENT COST IRRIGATION COST IRRIGATION COST	\$/AC \$/AC \$/AC \$/AC \$/AC \$/AC \$/AC \$/AC	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.84 1.17 0.00 0.12 0.95 0.22 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 10.80 0.00 0.00 0.00 0.00 0.00	0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 6.77 1.45 11.68 2.96 0.22 0.00	12.00 12.00 12.00 0.00 0.00 0.00 0.83 0.00 0.75 2.88 1.02 1.36 0.22 8.10 2.25	12.00 12.00 22.80 9.00 9.90 13.50 1.00 1.67 1.17 7.52 4.82 12.70 8.93 1.55 15.40 4.50
TOTAL EXPENSES	\$/AC	0.96	3.30	0.94	21.77	34.00	0.00	0.00	0.00	0.00	0.00	23.08	54.41	138.45
						, ,,,								
MACHINE LABOR GATION LABOR S. WATER APPLIED	HR/AC HR/AC ACIN	0.00 0.00 0.00	MONTHLY 0.00 0.00 0.00	IRRIG 0.00 0.00 0.00	0.00 0.50 0.80		R REQUIR 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	1.23 0.00 0.00	0.14 0.50 12.00	1.37 1.00 22.80

MACHINERY FIXED AND VARIABLE COSTS PER ACRE

	RCHASE YEARS HOURS RICE OWNED USED	FIXED COST I	PER ACRE TAX &INS TOTAL	VARIABLE COS	T PER ACRE REPAIRS TOTAL	HRS PER ACRE
TRACTOR 75 HP 3 75.0 TRACTOR 90 HP 4 90.0	17400. 7. 1800. 27600. 7. 1800. 85200. 10. 1600. 9600. 25. 3200. 5040. 7. 385. 5400. 10. 260. 2880. 4. 650. 23400. 5. 500. 5400. 16. 160. 31310. 10. 5000. 14321. 35.	0.19 0.20 0.50 0.55 2.46 3.16 1.25 2.60 0.32 0.27 0.38 0.38 0.14 0.08 2.30 1.58 1.71 2.27 5.03 6.47 3.68 8.40 1.95 2.90	0.05 0.44 0.13 1.18 0.78 6.40 0.77 4.62 0.07 0.66 0.10 0.87 0.02 0.24 0.38 4.26 0.67 4.64 1.61 13.11 1.43 13.52 0.42 5.26	0.76	0.47 1.34 1.26 3.02 3.48 8.34 0.80 10.29 0.63 0.64 0.70 0.72 0.33 0.34 1.24 1.26 5.19 5.29	0.219 0.370 0.654 11.400 0.231 0.223 0.199 0.364 0.884 11.400
FUELTANK 550 GAL 18 MACHINERY & EQUIPMENT INVESTMENT & COSTS PER ACRE	159. 30. 2319.	19.93 29.00	0.02 0.17 6.45 55.37	0.00 17.29 1.38	0.00 0.00	

TOTAL INVESTMENT

231887.

UC Cooperative Extension

SPRINKLER IRRIGATED 100 ACRE FIELD SIZE

FUEL USE SUMMARY FOR BUDGET NUMBER 2111000000 420 1

IRRIGATED BARLEY PRODUCTION WESTSIDE FRESNO COUNTY 1980 SINGLE CROPPED - YIELD OF 45 CMT.

BY BOB SHEESLEY, FARM ADVISOR

FUEL USED IN GALLONS PER HOUR

TRACTOR 75 HP		3.600 4.320
CRAWLER 120 HP		6.720
IRR PUMP 40 HP		0.149

FUEL ALLOCATED TO OPERATIONS IN GALLONS PER ACRE COVERED

GALLONS	POWER UNIT
0.075	2014 PD 400 HD
1.344	CRAWLER 120 HP
1.061 0.787	TRACTOR 90 HF Tractor 75 HP
1.077	TRACTOR 90 HP
	0.075 1.708 1.344 1.061 0.787

FUEL ALLOCATED TO OPERATIONS FOR THE BUDGET UNIT

PLANE 16X90 DISC OFFSET SPIKE HARROW GRAIN DRILL GRAIN DRILL	1 0.000 0.000 0.000 0.000 0.000 0.539	2 0.000 0.000 0.000 0.000 0.000 0.754	3 0.000 0.000 0.000 0.000 0.000	4 0.000 0.000 0.000 0.000 0.000 0.754	5 0.000 0.000 0.000 0.000 0.000 1.077	6.000 0.000 0.000 0.000 0.000	7 0.000 0.000 0.000 0.000 0.000	8 0.000 0.000 0.000 0.000 0.000	9 0.000 0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000 0.000 0.000	11 1.708 2.689 1.061 0.787 0.000 0.000	0.000 0.000 0.000 0.000 0.539 0.539	1.708 2.689 1.061 0.787 0.539 4.200	FUEL	TYPE 3 3 3 3 3	
TOTALS	0.539	0.754	0.539	0.754	1.077	0.000	0.000	0.000	0.000	0.000	6.245	1.077	10.984			

GALLONS FUEL BY TYPE 0.00 GAS 0.00 LP 10.98 DIESEL FUEL TYPES 1=6AS 2=L.P. 3=DIESEL IRRIGATED BARLEY PRODUCTION WESTSIDE FRESNO COUNTY 1980 SINGLE CROPPED - YIELD OF 45 CWT.

OPERATION	ITEM NO. DAT		LABOR HOURS	MACHINE HOURS	FUEL,OIL LUB.,REP PER ACRE	. COSTS
CHISEL 4 WH PLANE 16X90 DISC OFFSEI SPIKE HARROW GRAIN DRILL	11, 43 NOV 11, 86 NOV 3, 71 NOV 4, 107 DEC 107 DEC 107 JAN 107 FEI 107 MAF 107 API	2.00 1.00 1.00 0.50 0.50 0.50 0.70 0.50	0.280 0.440 0.270 0.241 0.137 0.000 0.000 0.000 0.000 0.000	0.231 0.364 0.223 0.199 0.113 0.113 0.113 0.159 0.159 0.222	3.88 6.36 2.72 1.68 1.70 0.68 0.95 0.68 0.95	3.14 8.17 1.65 0.68 0.99 0.60 0.83 0.60 0.83
TOTALS	•		1.368	2.014	21.62	19.28

SPRINKLER IRRIGATED 100 ACRE FIELD SIZE

UPDATED 05/10/80

BUDGET IDENTIFICATION NUMBER--- 2111000000 420 1
ANNUAL CAPITAL MONTH 5 BUDGET RECORD NUMBER

143



BUDGET IDENTIFICATION NUMBER 2111000000 420 1 HARVEST OR SALE MONTH 5

IRRIGATED BARLEY PRODUCTION WESTSIDE FRESNO COUNTY 1980 SINGLE CROPPED - YIELD OF 45 CWT.

GENERAL NAME CHANGE->253 WILD OAT CONTROL

VALUE RW CL 5.500000 12.

PARAMETER CHGS-->10.

1980 default data

BY BOB SHEESLEY, FARM ADVISOR

COSTS AND RETURNS WILL BE DIVIDED BY 45.0 CWT. TO OBTAIN PER CWT. COSTS

LINE	1 Jan	FEB	3 HAR	4 APR	5 MAY	JUN		8 904	9 SEP	OCT		12 DEC	PRICE	14 SHARE RENT	15 UNIT CODE	ITER	17 TYPE	18 XXXX
PRODUCTION 1 BARLEY	0.00	0.00	0.00	0.00	NUMBE 45.00	R OF U 0.00	NITS 0.00	0.00	0.00	0.00		0.00	5.940	0.000	16.	11.	2.	0.
OPERATING INPUTS					RAT	E/UKIT							PRICE	SHARE RENT	UNIT	ITEM	TYPE	HARV CODE
6 BARLEY, SEED 7 MITROGEN 8 IRRIG DIST WATER 9 CUSTOM COMBINE 10 CUSTOM COMBINE 11 CUSTOM HAULING 13 BROAD LEAF HERB 14 HERBICIDE APP 15 WILD OAT CONTROL	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.33 0.33	0.00	0.00 10.80 0.00	0.00 0.00 0.00 1.00 45.00 2.25 0.00 0.00	0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00	80.00 12.00 0.00 0.00 0.00 0.33	15.000 0.150 1.000 9.000 0.220 6.000 3.000 2.500 3.500	0.000 0.000 0.000 0.000 0.000 0.000 0.000	16. 12. 11. 7. 16. 3.	111. 211. 323. 305. 305. 306. 252. 358.	つっていれている	0. 0. 9. 9. 9. 0. 0.
MACHINERY REQUIREMEN	TS	IMPLEM	ENTS =	TIRES	OVER,	TRUCK	S = #	MILES/	ACRE,	TRACTO	RS = H	IRS/ACI	RE	M CREW I		MACH CODE		HARV
26 CHISEL 27 4 WH PLANE 16X90 28 DISC OFFSET 29 SPIKE HARROW 30 GRAIN DRILL	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.70	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.70	0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00	2.00 1.00 1.00 0.00 0.00	0.00 0.00 0.00 0.50 0.50	0.000 0.000 0.000 0.000 0.000 SHARE	0.000 0.000 0.000 0.000 0.000 SHARE	11. 11. 4. 3. 4. 0. POWER	43. 86. 60. 71. 107. 107. 5YSM	4. 4. 4. 4. 4.	0. 0. 0. 0.
49 ACIN IRRIG WATER 50 NO. TIMES IRRIG	0.00	0.00	0.00	10.80 1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00		0.00	UNIT 21.		LIFT 50.	1
EQUIPMENT REQUIREMENT 51 FARM SHOP 52 TOOLS-SHOP EQUIP 53 FUELTANK 550 GAL														PROPORT OF COST 0.340 0.340 0.340	XXX I	CODE 2.	TYPE 5. 5.	XXXX 0. 0. 0.
LAND REQUIREMENTS 71		HARGE METHOD			ER ICRES 00.00	VALUE COST/ 9	acre	TAXES PER A 11.0	CRE YR	PERENN S LIFE O.O	- COST							
SPRINKLER 100 ACRE F	IRRIGA IELD S	ITED SIZE								UPDATE	D 05/1	0/80		NERY COI MENT COI			4 1	

LINE CHANGE

BN CL

VALUE

0.500000

LINE CHANGE

BH CL

VALUE

UC Cooperative Extension

YALUE

LINE CHANGE

BH CL

VALUE

LINE CHANGE

YALUE RW CL 4.500000 18.