

1984 SAMPLE COSTS TO PRODUCE WHEAT ON MINERAL AND PEAT SOILS

PLANTING DATES - November 1 to January 1; Delta plantings as late as February.

HARVEST DATES - June 20 - August 1.

VARIETIES - Anza, Yolo, and other commercial varieties.

SEEDING RATES - 100 to 125 lbs/ac dryland; 125 to 150 lbs/ac irrigated; up to 180 lbs/ac on peat soils planted late.

FERTILIZER - 100 lbs/ac Nitrogen preplant; 100 to 130 lbs/ac 11-48-0 with seed as starter. Topdress 50 lbs/ac nitrogen in Jan-Feb followed by rain. Use urea early in season and ammonium nitrate later when conditions are warmer.

IRRIGATION - Plant on beds for drainage and irrigation. Irrigate when needed, before dough stage. Spud ditch if growing in delta.

ROTATIONS - Useful for drying out sub-irrigated soils. This helps in restoring row crop productivity especially tomatoes following wheat.

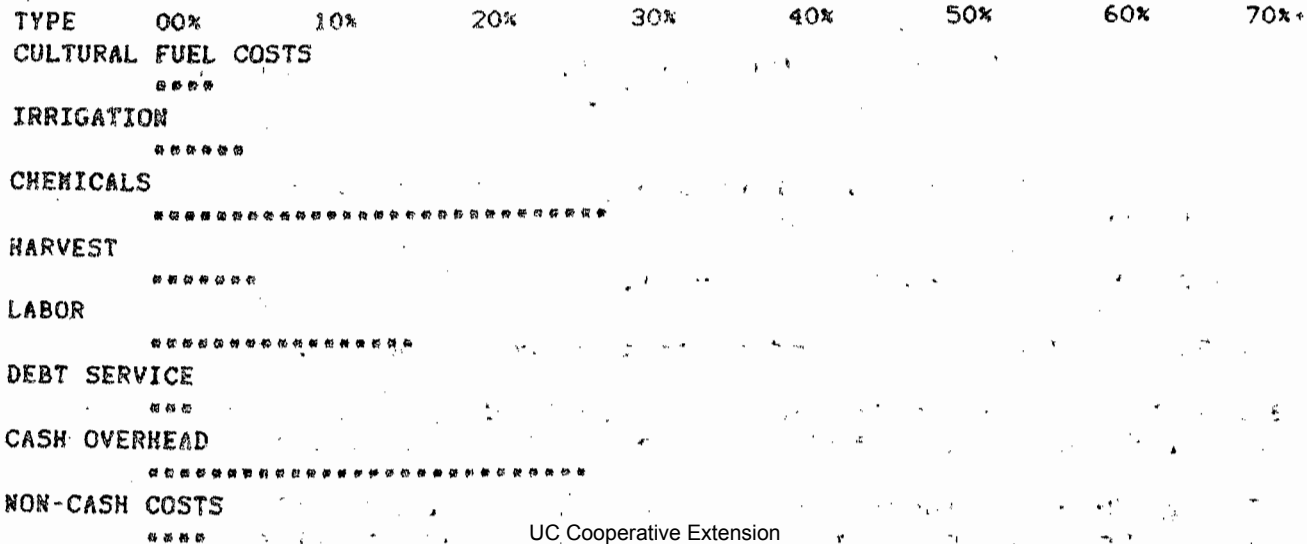
YIELDS - 2000 to 4000 lbs/ac dryland; 5000 to 7000 irrigated.

INSECTS - Aphids, spray when populations are high, 3-5 aphids in 30 to 50% of heads.

DISEASES - Stripe rust can be devastating on non-resistant varieties. Yellow dwarf, powdery mildew and root rots are occasional problems. Septoria can be a problem on stressed wheat from water or lack of nitrogen.

WEED CONTROL - Apply 2,4-D for broadleaf weed control when crop is well established and tillered, but before boot stage. Bromoxynil can also be used for broadleaf weeds when crop has reached the 2 leaf stage and before the boot stage, and weeds are in early seedling stage. Severe injury can occur if wheat is sprayed with 2,4-D too early; prior to tillering. For grassy weeds use Avenge for wild oats and Hoelon for Ryegrass and wild oats. Hoelon can be tank mixed with bromoxynil for single applications. Injury can occur when Hoelon is applied to stressed wheat.

GRAPH OF CROP EXPENSES CANNING TOMATOES



EQUIPMENT -- \$750,000 investment in new equipment depreciated in 10 years. Interest rate at 12%.

PRODUCTION LOANS -- \$750,000 at 14% with annual payback, three times per year.

LABOR -- Cultural labor at \$5/hr., Irrigation Labor at \$4/hr.

BUILDINGS -- 2 metal type including shop, 5 grain storage bins, 1 pole type, 1 employee house, misc. storage (chemicals, etc.). Estimated value at \$186,000, \$165,000 loan at 12% for 30 years.

REPAIRS AND MAINTENANCE -- Based on total farm operation with each crop being charged a proportionate share.

IRRIGATION -- Amounts are based on the average amount of water applied to each crop. Valued at \$12.00/acre foot.

SHARE RENTS -- For the purpose of this study it is assumed that all crops are grown on leased ground. The following table represents the average share rent percentages for each crop.

<u>CROP</u>	<u>% SHARE RENT</u>
Canning Tomatoes	18
Wheat	33
Sugar Beets	20
Corn	25
Alfalfa	25
Safflower	25
Grain Sorghum	25
Pink Beans	20

INTEREST RATES -- Based on average rates charged by loan institutions as of August 1984. Included are variable rate loans that would change at pay-off time.

MANAGEMENT SALARY -- Owner/management income is calculated at \$50,000/year plus \$20,000 in benefits.

NOTE: This cost study was computed on a modification of the Crop Management System program supplied by PD, Inc., Fairfield, Ca.

SAMPLE COST TO PRODUCE WHEAT ON MINERAL SOIL

TYPE OF CROP.....=	WHEAT/MINERAL	NUMBER OF ACRES.....=	500
YIELD PER ACRE....=	2.7 TONS	MARKET VALUE PER TONS..=	125
GROSS INCOME.....=	168,750.00	GROSS INCOME/ACRE.....=	337.50

EXPENSES

TYPE	PER ACRE	TOTAL	CHANGES
CULTURAL FUEL COSTS			
Chop Stubble	0.57	285.00	-----
Disc 2x	2.20	1,100.00	-----
Plow	2.75	1,375.00	-----
Level Plane 2x	2.72	1,360.00	-----
Pre-N/Flt/Roll	0.75	375.00	-----
List Beds	1.50	750.00	-----
Plant/drill	1.00	500.00	-----
Seed (150 #/ac)	19.50	9,750.00	-----
Open/Close Ditches	0.20	100.00	-----
TOTAL ***	31.19	15,595.00	-----
IRRIGATION			
Irrigation 2x	8.00	4,000.00	-----
TOTAL ***	8.00	4,000.00	-----
CHEMICALS			
Aqua/Preplant-N	23.51	11,755.00	-----
Herb. (2,4-D)/air	8.36	4,180.00	-----
Herb. (Hoelon)/air	26.22	13,110.00	-----
Topdress-N/50#/air	14.50	7,250.00	-----
Start. 11-48-0 100	14.00	7,000.00	-----
Di-Syton/Air/Aphi	18.86	9,430.00	-----
TOTAL ***	105.45	52,725.00	-----
HARVEST			
Truck Fuel Costs	1.00	500.00	-----
Harvester Fuel Cos	2.50	1,250.00	-----
Hauling (@5.50/ton)	14.85	7,425.00	-----
TOTAL ***	18.35	9,175.00	-----

WHEAT, MINERAL CONTINUED

LABOR

Irrigation (\$4/hr)	8.00	4,000.00	-----
Cultural (\$5/hr)	10.03	5,025.00	-----
Harvest/2 men	3.99	1,995.00	-----
Shop Mechanic	10.00	5,000.00	-----
Irrig. Drain Maint	5.00	2,500.00	-----
Open/Close Ditches	0.40	200.00	-----
TOTAL ***	37.44	18,720.00	-----

DEBT SERVICE

Interest on Loan	19.65	9,825.00	-----
Interest on Equip	9.00	4,500.00	-----
TOTAL ***	28.65	14,325.00	-----

CASH OVERHEAD

Mgmt. Sal/Benifits	35.00	17,500.00	-----
Maint./Repairs	54.25	27,125.00	-----
Share Rent (33%)	106.92	53,460.00	-----
Exp. Benifits (30%)	6.72	3,360.00	-----
Taxes on Equip.	2.57	1,285.00	-----
Office/Mgat. Exp.	15.00	7,500.00	-----
TOTAL ***	220.46	110,230.00	-----

TOTAL CASH EXPENSES \$	449.54	\$ 224,770.00
NET INCOME @ 2.7 TONS		
\$	-112.04	\$ -56,020.00

NON-CASH COSTS

Interest on Bldgs.	10.67	5,335.00	-----
Bldg. Depreciation	4.44	2,220.00	-----
Equip. Deprec.	37.50	18,750.00	-----
TOTAL NON-CASH COSTS \$	52.61	\$ 26,305.00	-----

GRAPH OF CROP EXPENSES

TYPE	00%	10%	20%	30%	40%	50%	60%	70%
CULTURAL FUEL COSTS								
IRRIGATION								
CHEMICALS								
HARVEST								
LABOR								
DEBT SERVICE								
CASH OVERHEAD								
NON-CASH COSTS								

PRODUCTION COST STUDIES IN SACRAMENTO
AND SOLANO COUNTY - 1984

GENERAL REMARKS

The following crop production studies represent an average cost estimate to assist growers in economic management of their individual enterprises. Individual line items per study represent the average regional cost to accomplish the task. In this study five major crops grown in the region were analyzed. Also included are cost of production estimates of three alternate or double crops. Since the two county regions encompass both mineral and organic soil types, cost estimates are also provided for corn and wheat grown on either soil type.

The intent of this study is to supply growers, lending institutions, consultants, chemical advisors, UC Farm Advisors, and all interested persons with information concerning potential returns and line item cultural costs. Actual cost will vary from farm to farm and from grower to grower, due to different soil types, operational size, types of equipment used, rotational patterns, salaries and wages, water costs, etc. Provided with each study is a blank column for growers to insert their own cost for each item. The cost estimates provided represent only annual cash cost for each crop. Provided, but not included, in the total cash cost per acre is an estimate of the non-cash cost encouraged in the farming enterprise.

The authors wish to express gratitude to those growers, industry personnel, and interested individuals who assisted in providing cost information and review of this study.

PARAMETERS

Hypothetical Farm Operation

<u>Crop</u>	<u>Acres</u>
Canning Tomatoes	500
Wheat	500
Sugar Beets	500
Corn	500
Alfalfa	300

TOTAL	2300

Alternate or Double Crops

Safflower	300
Grain Sorghum	300
Pink Beans	300

EQUIPMENT -- \$750,000 investment in new equipment depreciated in 10 years. Interest rate at 12%.

PRODUCTION LOANS -- \$750,000 at 14% with annual payback, three times per year.

LABOR -- Cultural labor at \$5/hr., Irrigation Labor at \$4/hr.

BUILDINGS -- 2 metal type including shop, 5 grain storage bins, 1 pole type, 1 employee house, misc. storage (chemicals, etc.). Estimated value at \$186,000, \$165,000 loan at 12% for 30 years.

REPAIRS AND MAINTENANCE -- Based on total farm operation with each crop being charged a proportionate share.

IRRIGATION -- Amounts are based on the average amount of water applied to each crop. Valued at \$12.00/acre foot.

SHARE RENTS -- For the purpose of this study it is assumed that all crops are grown on leased ground. The following table represents the average share rent percentages for each crop.

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Pink Beans	20

INTEREST RATES -- Based on average rates charged by loan institutions as of August 1984. Included are variable rate loans that would change at pay-off time.

MANAGEMENT SALARY -- Owner/management income is calculated at \$50,000/year plus \$20,000 in benefits.

NOTE: This cost study was computed on a modification of the Crop Management System program supplied by PD, Inc., Fairfield, Ca.

SAMPLE COST TO PRODUCE WHEAT ON PEAT TYPE SOIL

TYPE OF CROP.....*	WHEAT/PEAT	NUMBER OF ACRES.....*	500
YIELD PER ACRE.....*	2.7 TONS	MARKET VALUE PER TONS..*	125
GROSS INCOME.....*	168,750.00	GROSS INCOME/ACRE.....*	337.50

EXPENSES

TYPE	PER ACRE	TOTAL	CHANGES
CULTURAL FUEL COSTS			
Stubble Chop	0.57	285.00	-----
Disc 2x	2.20	1,100.00	-----
Plow	2.75	1,375.00	-----
Disc 2x	2.20	1,100.00	-----
Plant/Fertilize	1.00	500.00	-----
Spud Ditches	2.50	1,250.00	-----
Seed (175 lbs/ac)	21.00	10,500.00	-----
TOTAL ***	32.22	16,110.00	-----
CHEMICALS			
Di-Syston/Air/Aphi	18.86	9,430.00	-----
Starter/11-48-0/10	14.00	7,000.00	-----
Hoelon/grass/air	26.22	13,110.00	-----
Am. Nit./Air/2x 15	31.50	15,750.00	-----
2.4-D/weeds/air	8.36	4,180.00	-----
TOTAL ***	98.94	49,470.00	-----
HARVEST			
Trucks (Fuel)	1.00	500.00	-----
Hauling (@\$5.00/ton)	14.25	7,125.00	-----
Harvester (Fuel)	2.50	1,250.00	-----
TOTAL ***	18.35	9,175.00	-----
LABOR			
Load Truck	0.53	265.00	-----
Harvest (2 men)	3.99	1,995.00	-----
Drain Maintenance	5.50	2,750.00	-----
Shop Mechanic	10.00	5,000.00	-----
Cultural (@\$5/hr)	9.95	4,975.00	-----
TOTAL ***	29.97	14,985.00	-----

WHEAT ON PEAT CONTINUED

EXPENSES

TYPE	PER ACRE	TOTAL	CHANGES
DEBT SERVICE			
Interest on Loan	19.65	9,825.00	-----
Interest on Equip.	9.00	4,500.00	-----
TOTAL ***	28.65	14,325.00	-----
CASH OVERHEAD			
Repairs/Maintenan	30.00	15,000.00	-----
Office/Mgat Exp.	15.00	7,500.00	-----
Mgat. Sal/Benifits	35.00	17,500.00	-----
Taxes on Equipament	2.57	1,285.00	-----
Emp. Benifits (30%)	7.48	3,740.00	-----
Share Rent (33%)	106.92	53,460.00	-----
TOTAL ***	196.97	98,485.00	-----
TOTAL CASH EXPENSES #	405.10	\$ 202,550.00	
NET INCOME @ 2.7 TONS	-67.60	\$ -33,800.00	

NON-CASH COSTS

Interest on Bldgs	10.67	5,335.00	-----
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