

KIDNEY BEANS

SAMPLE COSTS TO PRODUCE

BUTTE AND GLENN COUNTIES

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Revised
April 1972

Yield: 18 Cwt/A Clean Beans (20 Cwt/A Uncleaned)
 Labor: \$2.25/hr. including
 fringe benefits
 (Revised April 1972)

SAMPLE COSTS TO PRODUCE KIDNEY BEANS

Butte and Glenn Counties, April 1972

Operation	Hours per Acre	Cash and Labor Cost per Acre				My Production Costs	
		Labor	Fuel and Repairs	Materials			Total
				Kind and Quantity	Cost		
<u>Cultural Costs</u>							
Disc 4X (offset)	1.00	\$ 2.25	\$ 3.26			\$ 5.51	
Land Plane 2X							
(every 4th year)	.20	.45	.39	Rent @ \$1.00/A	\$.50	1.34	
Chisel	.25	.56	.79			1.35	
Fertilize (aqua NH ₃)	.30	.68	.59	Rent rig, .50/A 100 lbs. N/A, 5.70	6.20	7.47	
Harrow, Spike tooth	.13	.29	.31			.60	
Incorporate Herbicide							
Disc 2X	.60	1.35	1.67	Rent tag-a-long, .50/A herbicide, 5.25	5.75	8.77	
Float	.25	.56	.51			1.07	
List Beds (4 row)	.30	.68	.67			1.35	
Ditch 4X (season)	.15	.68	.46			1.14	
Pre-Irrigate	1.00	2.25		Pumping Charge	1.30	3.55	
Plow Out and Grade							
Ditch 4X (season)	.08	.36	.24			.60	
Knife Beds (4 row)	.40	.90	.83			1.73	
Plant (4 row)	.50	1.13	1.30	Seed 70 lbs. @ \$15.00/Cwt.	9.00	11.43	
Roll Beds	.25	.56	.45			1.01	
Irrigate 5X (season)	.42	14.05		Pumping Charge	6.10	20.15	
Cultivate	.40	.90	.83			1.73	
Spray (Ground rig)	.40	.90	.96	Insecticide	8.19	10.05	
Spray (Airplane 1 1/2X)				Airplane @ \$2.25/A = \$3.37			
				Insecticide @ 3.95/A	7.32	7.32	
Hand Weeding	.50	1.13				1.13	
TOTAL CULTURAL COSTS		\$29.68	\$13.26		\$44.36	\$87.30	

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Operation	Hours per Acre	Cash and Labor Cost per Acre				My Pro- duction Costs	
		Labor	Fuel and Repairs	Materials			Total
				Kind and Quantity	Cost		
<u>Harvest Costs</u>							
Cut	.35	\$.79	\$.58			\$ 1.37	
Windrow				Custom Swather @ \$4.00/A	\$ 4.00	4.00	
Hand Turn Row Ends	.10	.23				.23	
Thresh				Custom @ .60/Cwt	12.00	12.00	
Tractor (pull thresher)	.30	.68	.59			1.27	
Hauling (6000 lbs/trip)	.30	.68		16 mile round trip @ .10/mile	.53	1.21	
Warehousing (tenants share - 75%)							
Cleaning				15 Cwt @ .45/Cwt	6.75	6.75	
Sacks (Clean beans)				13.5 Cwt @ .35/each	4.73	4.73	
Storage (Clean beans)				13.5 Cwt @ 7.00/ton	4.73	4.73	
TOTAL HARVEST COSTS		\$2.38	\$1.17		\$32.74	\$ 36.29	
<u>Cash Overhead</u>							
Misc., office, etc.				6% of Cultural and Harvest Costs		\$ 7.42	
Taxes on Equipment						2.00	
Rent				25% of Uncleaned Crop Delivered (Net = \$55.10)		55.10	
TOTAL CASH OVERHEAD						\$ 64.52	
TOTAL CASH COST						\$188.11	
Management 5% of 18 Cwt @ 12.00/Cwt						\$ 10.80	
<u>INVESTMENT</u>							
	Per Acre	Annual Cost					
Land	_____	Depreciation	Interest				
Irrigation System	_____	_____	_____				
Buildings	_____	_____	_____				
Equipment	<u>105.53</u>	<u>8.88</u>	<u>4.41</u>				
Total	105.53	8.88	4.41			\$ 13.29	
TOTAL COST PER ACRE						\$212.20	
Cost per Cwt @ 18 Cwt (Cleaned) yield						\$ 11.79	

BASIS OF COST STUDY -- KIDNEY BEANS

1. This study was based on a 640 acre field crop operation with 150 acres of kidney beans and 150 acres of other irrigated crops. Other crops may include grain sorghum, sugar beets, irrigated wheat, dryland grain, safflower, etc.

Kidney beans were considered as a single crop in this study. The rental agreement was 25% of the uncleaned crop delivered to the warehouse. The landlord pays his own warehouse costs.
2. All labor costs were based upon a \$2.25 per hour rate. This rate includes social security, compensation insurance, etc.
3. In allocating the equipment cost per acre (page 4), the following calculations were made: (a) "Cost" of equipment is the estimated cost for new equipment. Except where otherwise designated, all equipment listed is based on the new cost. (b) "Cost per acre" is the new or used cost divided by the number of acres on which the equipment will be used. (c) "Depreciation" is based upon the "per acre cost" divided by the expected life of the equipment. (d) "Interest" on investment is figured on one-half the new cost per acre multiplied by 6%.
4. Miscellaneous expenses have been found to be approximately 5% of the total cultural and harvest costs. Included are such costs as preparing roadways, general weed control, office, bookkeeping, interest on operating money (for six months or less), etc.
5. Operating costs (Fuel & Repair) includes cost of fuel, maintenance, replacement parts, tires, grease, etc. This information was obtained from Machinery Costs and Performance, 1970 (Adjusted) by A. D. Reed, University of California Extension Economist, stationed at Davis.
6. Included in these sample costs is a management fee of 5%. This rewards the grower for his management decisions.

General Considerations

It should be understood that these sample costs are a "composite" and do not represent any single operation. A column is provided for the grower to compare his costs against those shown.

Growers may be able to reduce their costs of production some years by reducing the number of operations for land preparation. However, in a wet spring or following a crop other than grain, the number of operations in land preparation may be greater than those shown.

On some soils, growers are applying phosphorus to their fields. This would be an additional cost. Other growers have applied zinc to correct deficiencies (cost varies with source and whether applied as foliar or preplant). Some growers apply 50 to 60 pounds of nitrogen per acre -- not 100 pounds of nitrogen per acre as shown in this study.

Insecticide costs will vary from year to year depending upon the problem encountered.

Information for this study was provided by a committee of bean growers. Appreciation is expressed for their time.

EQUIPMENT LIST

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Item	Total Cost	Annual Use (acres)	Cost Per Acre	Life (yrs.)	Depreciation	Interest
Tractor, Crawler, Diesel 50-60 hp	\$ 21,390	640	\$ 33.42	15	\$2.23	\$1.00
Tractor, Wheel, Diesel, 40-50 hp	9,660	640	15.09	10	1.51	.45
Disc, 13 ft. - offset	1,990	640	3.11	10	.31	.09
Chisel, 12 ft.	1,780	640	2.78	10	.28	.08
Float, 12 x 24	460	300	1.53	10	.15	.05
Cultivator, 4 row	2,600	300	8.67	15	.58	.26
Ditcher, 4 ft.	1,610	300	5.37	10	.54	.16
Planter, 4 row	1,610	300	5.37	10	.54	.16
Roller, Smizer	650	300	2.17	20	.11	.07
Sprayer, 4 row	1,625	640	2.54	10	.25	.08
Truck, 1 1/2 ton (used)	3,000	640	4.69	10	.47	.14
Water tank & pump (1500 gal.)	900	640	1.41	10	.14	.04
Bean Cutter, 4 row	460	150	3.07	10	.31	.09
Disc, 12 ft., tandem	1,265	640	1.98	10	.20	.06
Harrow, Spike tooth, 30 ft.	1,125	640	1.76	20	.09	.05
Fuel Storage	625	640	.98	15	.07	.03
Plow, 5-14"	1,380	300	4.60	10	.46	1.38
Grader, used	350	300	1.67	15	.11	.05
Pickup	3,100	640	4.84	10	.48	.15
Siphon Tubes 100, 2"	109	300	.04	10	.01	.01
200, 1 1/2"	276	300	.09	10		
Lister Bottoms	1,035	300	.35	10	.04	.01
Total	\$57,000		\$105.53		\$ 8.88	\$4.41

Co-operative Extension work in Agriculture and Home Economics,
College of Agriculture, University of California, and United
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