

SAMPLE COSTS TO
PRODUCE
KIDNEY BEANS

BUTTE AND GLENN COUNTIES

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Yield: 1.5 Cwt/A Clean Beans (20 Cwt/A Uncleaned)
 Labor: \$2.00/hr. including fringe benefits

*(1) Cost of prod. studies
 1/1/69*

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Operation	Hours per Acre	Cash and Labor Cost per Acre				My Production Costs	
		Labor	Fuel and Repairs	Materials			Total
				Kind and Quantity	Cost		
Cultural Costs							
Shred Straw	.30	\$.60	\$.66			\$ 1.26	
Disk 4x (offset)	1.00	2.00	3.00			5.00	
Land Plane 2x (every 4th year)	.20	.40	.32	Rent @ \$1.00/A	.50	1.22	
Chisel	.25	.50	.56			1.06	
Fertilize (aqua NH ₃)	.30	.60	.48	Rent rig, .50/A. 100 lbs. N/A, 5.70	6.20	7.28	
Harrow, Spike tooth	.13	.26	.26			.52	
Incorporate Herbicide							
Disk 2x	.60	1.20	1.35	Rent tag-a-long, .50/A. Herbicide, 6.00	6.50	9.05	
Float	.25	.50	.42			.92	
Make Beds (4 row)	.30	.60	.51			1.11	
Ditch 4x (season)	.15	.60	.39			.99	
Pre-Irrigate	1.00	2.00		Pumping Charge	1.30	3.30	
Plow Out and Grade							
Ditch 4x (season)	.08	.32	.16			.48	
Knife Beds (4 row)	.40	.80	.68			1.48	
Plant (4 row)	.50	1.00	.85	Seed 80 lbs. @ \$15.00/Cwt.	12.00	13.85	
Roll Beds	.25	.50	.33			.83	
Irrigate 5x (season)	.42	10.50		Pumping Charge	6.10	16.60	
Cultivate	.40	.80	.68			1.48	
Spray (Ground rig)	.40	.80	.78	Insecticide	3.30	4.88	
Spray (Airplane 1 1/4x)				Airplane @ \$2.00/A = \$2.50			
				Insecticide @ \$6.75/A = \$8.44	10.94	10.94	
Hand Weeding	.50	1.00				1.00	
TOTAL CULTURAL COSTS		\$24.98	\$11.43		\$46.84	\$83.25	

Operation	Hours Per Acre	Cash and Labor Cost per Acre				Production Costs
		Labor	Fuel and Repairs	Materials		
				Kind and Quantity	Cost	
Harvest Costs						
Cut	.35	\$.70	\$.60			\$ 1.30
Windrow				Custom Swather @ \$3.00/A	\$ 3.00	3.00
Hand Turn Row Ends	.10	.20				.20
Thresh				Custom @ .50/Cwt	10.00	10.00
Tractor (pull thresher)	.30	.60	.48			1.08
Hauling (6000 lbs/trip)	.30	.60		16 mile round trip @ .085/mi.	.45	1.05
Warehousing (tenants share - 75%)						
Cleaning				15 Cwt @ .40/Cwt	6.00	6.00
Sacks (Clean beans)				13.5 Cwt @ .27/each	3.65	3.65
Storage (Clean beans)				13.5 Cwt @ 6.25/ton	4.22	4.22
TOTAL HARVEST COSTS		\$2.10	\$1.08		\$27.32	\$ 30.50
Cash Overhead						
Misc., office, etc.				5% of Cultural and Harvest Costs		\$ 5.69
Taxes on Equipment						1.25
Rent				25% of Uncleaned Crop Delivered (Net = \$44.87)		44.87
TOTAL CASH OVERHEAD						\$ 51.81
TOTAL CASH COST						\$165.56
Management 5% of 18 Cwt @ \$11.00/Cwt						\$ 9.90
INVESTMENT						
	Per Acre	Annual Cost				
Land	—	Depreciation	Interest			
Irrigation System	—	—	—			
Buildings	—	—	—			
Equipment	<u>90.19</u>	<u>6.58</u>	<u>2.61</u>			
Total	90.19	6.58	2.61			\$ 9.19
TOTAL COST PER ACRE						\$184.65
Cost per Cwt @ 18 Cwt. yield						\$ 10.26
SAMPLE COSTS/CWT. AT VARIOUS CWT YIELDS - CLEAN BEANS						
	<u>10</u>	<u>14</u>	<u>18</u>	<u>22</u>	<u>26</u>	
Cash and Management Cost/Cwt	\$ 13.98	\$ 11.26	\$ 9.75	\$ 8.78	\$ 8.13	
Investment Cost/Cwt	.91	.66	.51	.42	.35	
Total Cost/Cwt	14.89	11.92	10.26	9.20	8.48	
Total Cost/Acre	\$148.94	\$166.85	\$184.65	\$202.48	\$220.39	

BASIS OF COST STUDY -- KIDNEY BEANS

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

Kidney beans are sometimes "double cropped" following barley. However, in this study, they were considered as a single crop (following grain). 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 \$2.00 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, 1967 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.
7. Sample costs per hundred at varying yields are shown on page 2. These figures show how the costs per hundred decrease as yields increase.

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 (material + application of 60 lbs P_2O_5 /Acre amount to \$7.75 per acre) 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.

4.

EQUIPMENT LIST

Item	Total Cost	Annual Use (acres)	Cost Per Acre	Life (yrs.)	Depreciation	Interest
Crawler Tractor,						
50-60 H.P. Diesel	\$15,000	640	\$23.44	15	\$1.56	\$.70
Wheel Tractor,						
40 - 50 H.P. Diesel	8,000	640	12.50	15	.83	.38
Disk 13 ft. offset	2,500	640	3.91	15	.26	.12
Chisel 12 ft.	1,000	640	1.56	15	.10	.05
Float 12 x 24	400	300	1.33	10	.13	.04
Cultivator 4-row	2,000	300	6.67	15	.44	.20
Ditcher 4 ft.	800	300	2.67	15	.18	.08
Planter 4 row	800	300	2.67	10	.27	.08
Roller smizer	500	300	1.67	15	.11	.05
Sprayer 4 row	1,250	640	1.95	10	.20	.06
Truck 1½ Ton	6,000	640	9.38	15	.62	.28
Water Tank & Pump (1500 gal)	800	640	1.25	10	.12	.04
Bean Cutters 4 row	600	150	4.02	15	.27	.12
Disk 12 ft Tandem	1,000	640	1.56	15	.10	.05
Spike Tooth Harrow 30 ft.	1,000	640	1.56	10	.16	.05
Fuel Storage	500	640	.78	15	.05	.02
Plow 5-14"	1,000	300	3.33	15	.22	.10
Grader (Used)	250	300	.83	15	.05	.02
Pickup	3,000	640	4.69	10	.47	.14
Shredder 6 ft.	1,000	300	3.33	10	.33	.10
Siphon tubes 100, 2"	125	300	.42	10	.04	.01
200, 1½"	200	300	.67	10	.07	.02
Total	\$47,725		\$90.19		\$6.58	\$2.61

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