EBB3-DB-19

2019 Costs and Returns Estimate

Southcentral Idaho: Magic Valley

Commercial Dry Beans

Ashlee Westerhold



Introduction to Costs & Returns Estimates

The University of Idaho Extension produces crop costs and returns estimates every other year. The overall goal of this project is to provide the Idaho agricultural industry with an unbiased and consistently calculated estimate of the cost of producing various crops and to track the change in production costs per acre and per unit over time.

The University of Idaho's costs and returns estimates are based on economic costs, not just accounting costs. All resources are valued at a market rate or "opportunity cost". Input prices are taken from the U of I's annual survey of agricultural supply companies. The selling price is a historical average, not a current year's price. Production practices are based on data from growers, crop consultants, and extension personnel throughout Idaho. Although production practices may be similar for individual farms, each farm has a unique set of resources with different levels of productivity, different production problems, and therefore different costs. Farm size, crop rotation, age and type of equipment, and the quality and intensity of management are all crucial factors that influence costs. The cost of production estimates show the typical or representative production costs by region based on documented production practices. These production costs are not area averages, rather they are based on model farms for four areas of the state.

University of Idaho costs and returns estimates can be used as a management tool to help producers in three ways:

- 1. Templates. Excel spreadsheets have been created by the University of Idaho to make enterprise budgeting and record keeping an easy task. You can start by substituting our costs and returns estimates with your own numbers. You can also enter them in the "Your Cost" column.
- 2. **Marketing.** Estimating production costs on a per acre or per unit basis can help you calculate your farm's break-even prices. Knowing your break-even price to cover operating costs and total costs can help with contract negotiations and selling on the open market.
- 3. **Benchmarks.** The University of Idaho costs and returns estimates are based on a typical or model farm and are calculated annually using consistent methodology. You can use these estimates as benchmarks by comparing your own total costs or specific cost categories to our estimates. This is a good way to find strengths and weaknesses in your production practices.

It's important to remember, just because your production costs are similar to our estimates, that isn't necessarily a good thing. Our model farms are also typically unprofitable! Average producers usually don't make an economic profit (which includes opportunity costs and non-cash costs such as depreciation). Being profitable requires fine-tuned management and a competitive advantage that the average producer doesn't have. (Being average is not okay in farming)





Southcentral Idaho: Magic Valley

Commercial Dry Beans

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Background and Assumptions

The University of Idaho's costs and returns estimates are based on economic costs, not accounting costs. All resources are valued at a market rate or "opportunity cost". Input prices are based on data collected annually by the University of Idaho from agricultural supply companies. The selling price for the commodity is an historical average, not a current year's forecast price. The cost estimate shown here is typical for growing commercial dry beans under irrigation in the Magic Valley of southcentral Idaho. Production practices are based on data from farmers, crop consultants, and extension personnel. These aren't University of Idaho recommendations. Production practices most closely represent those in Cassia, Minidoka, Jerome, Gooding, and Twin Falls counties. Although production practices may be similar for individual farms, each farm has a unique set of resources with different levels of productivity, different production problems, and therefore different costs. Farm size, crop rotation, age and type of equipment, and the quality and intensity of management are all crucial factors that influence production costs.

The Model Farm

This costs and returns estimate models a 2,200-acre farm with 150 acres in dry beans, 550 acres in potatoes, 550 acres in sugarbeets, 400 acres in corn or alfalfa, and 550 acres in grain.

The farm uses a center pivot irrigation system and surface water delivered to the farm from an irrigation district. The irrigation district charges a flat fee per acre for water. Irrigation power use is based only on pressurization (no lift). Power costs per acre-inch of water applied are calculated using 2019 Idaho Power Schedule 24 Agricultural Irrigation Service rates.

Production Practices

Dry bean acreage is plowed in the fall and roller harrowed twice in the spring before planting. Beans are cultivated twice during the growing season. A custom operator is used for all harvest operations. Beans are

cut and windrowed in early September and left to dry for approximately 2 weeks before they are combined. They are then hauled to the warehouse to be cleaned and stored, and eventually sold through the bean warehouse. A cost for these warehouse services is included in the "Other" cost category.

All fertilizer is custom applied in the spring. A two-way tank mix herbicide is applied before planting and incorporated with the second roller harrow field operation. Beans are planted in 22-inch row spacing. Although an insecticide or fungicide may be needed in some years, none is included because treatment is infrequent and unpredictable. Dry beans receive 17 inches of water during the growing season; 2 inches applied pre-plant in May, 4 inches in June, 6 inches in July and 5 inches in August. Two inches applied prior to fall tillage are also credited to the dry beans for a total of 19 inches.

Machinery

Equipment used to produce irrigated dry beans is shown in Tables 4 and 5. Table 4 lists equipment and their hourly operating and ownership costs, while Table 5 lists the equipment and their annual ownership costs. Machinery ownership cost (capital recovery) is based on 75% of the replacement cost of a new piece of equipment, except for trucks. Truck prices are for a used vehicle with a new bed. Capital recovery combines depreciation and interest into a single value. To keep machinery prices current between years in which a comprehensive survey is conducted, machinery prices are adjusted using USDA's Farm Machinery Prices Paid Index. Equipment prices are collected approximately every five years.

The University of Idaho uses the budget generator program *Budget Planner* from the University of California-Davis to produce the various tables shown in this publication. Machinery operating and ownership costs are calculated based on engineering equations in





this program. Machinery operating costs include fuel, lubricants and repairs.

Labor and Management

The cost of labor used in this publication includes a base wage, plus a percentage to account for various payroll taxes (FICA, SUTA & FUTA), and workman's compensation, as well as benefits such as paid vacation/personal leave days, health insurance and bonuses. Labor is classified by the type of work performed. Labor classifications, labor rates and payroll overhead are shown on the following page.

Labor Values

Labor	Base	Payroll	Effective
Class	Rate	Overhead	Rate
General Farm Labor	\$15.25	15%	\$17.55
Truck Drivers	\$15.25	15%	\$17.55
Equipment	\$18.00	25%	\$22.50
Operators			
Irrigation Labor			
Set Move: HL & WL	\$17.30	30%	\$22.50
Continuous Move:	\$18.00	25%	\$22.50
CP & L			

Set Move includes: handlines and wheellines Continuous Move includes: center pivots and linear move Payroll overhead for set move systems includes housing

Based on the speed, width and overall field efficiency, *Budget Planner* calculates equipment operator labor hours for all field operations except those performed on a custom basis. Custom operations are listed separately. General farm labor accounts for extra field labor used during planting or harvest. A management fee based on approximately 5% of the total production costs is included. Prior to 2019, the basis of the 5% charge was expected revenue.

Capital, Land and Overhead Costs

Interest on operating capital is charged from the time an input is applied until harvest and is calculated at a nominal rate of 7.00 percent. Interest on intermediate term capital, primarily equipment, is calculated using a nominal rate of 6.75 percent. A general overhead charge, calculated at approximately 2.5 percent of operating expenses, is included to cover unallocated whole-farm costs such as office expenses, legal and accounting fees, cell phones, internet service and utilities. Irrigation power is not included as part of general farm utilities.

Land rent is based on a one-year cash lease for dry beans and covers the irrigation system ownership costs (depreciation, interest, and insurance). Since charges for irrigation water, repairs and power costs are listed separately, land rent may appear low because land owners pay some or even all these expenses in many cash leases.

Budget Format

In addition to the Background and Assumption pages, this publication has six tables presenting a variety of cost and returns information.

Table 1 shows both expected revenue, based on a specified yield and price, and expenses. Expenses are broken into two main categories: operating and ownership. Operating expenses are those that typically vary with the level of production and involve inputs that are used in a single production cycle. Ownership expenses include a systematic cost recovery over the useful life for inputs used in the production process that have a useful life of more than one year. Machinery and land fall into this category. Operating inputs are organized by category. In addition to the cost per unit and cost per acre for each input, a total cost is given for each category. Table 1 also gives a total of all operating, ownership and total costs per acre, as well as these same categories on a yield basis (per bushel, cwt, ton, etc.).

<u>Table 2</u> has most of the same cost information presented in Table 1 but the data is organized by operation for both pre-harvest and harvest costs. Operations can define a single activity, such as seed hauling, or multiple activities as in the case of tillage. The quantity of labor is shown for each operation. The cash costs per acre for labor, machinery costs, materials and custom are also specified. Cash overhead expenses are listed separately as are the non-cash overhead.

<u>Table 3</u> is a monthly cash flow of expenses based on when the operation occurs and when inputs are applied. Field operations are classified as pre-harvest, harvest and post-harvest.

<u>Table 4</u> lists the equipment used to produce this crop and the costs per hour to operate this equipment. Total annual hours of use for the current crop and for all crops on the farm is also shown.

<u>Table 5</u> lists the purchase price and salvage value of equipment used to produce this crop, as well annual capital recovery and cash overhead expenses.

<u>Table 6</u> provides a ranging analysis, sometime referred to as a sensitivity analysis. It shows how the costs and returns per acre will vary as the yield and/or price ranges above and below the base values from Table 1.

Authors

Ashlee Westerhold is a University of Idaho Extension agricultural economist.

Disclaimer

The practices and chemicals specified in the publication are not recommendations. Always read and follow the directions printed on the pesticide label. Due to constantly changing pesticide laws and labels, some pesticides may have been cancelled or had certain uses prohibited. The use of trade names for various products simplifies presentation of this material and should not be considered an endorsement, nor is any criticism implied of similar products not mentioned.

SOUTHCENTRAL IDAHO

EBB3-DB-19

TABLE 1. COSTS AND RETURNS PER ACRE TO PRODUCE DRY PINTO BEANS

	Quantity/	T T 24	Price or	Value or	Your
CD OGG DETENDING	Acre	Unit	Cost/Unit	Cost/Acre	Cost
GROSS RETURNS	26.00		26.00	676.00	
Pinto Beans	26.00	cwt	26.00	676.00	
TOTAL GROSS RETURNS	26.00	cwt		676.00	
OPERATING COSTS					
Seed:				45.00	
Dry Bean Seed - Pinto	100.00	lb	0.45	45.00	
Fertilizer:				58.80	
Dry Nitrogen	40.00	lb	0.40	16.00	
Dry P2O5	50.00	lb	0.38	19.00	
Zinc	5.00	lb	2.90	14.50	
K2O	30.00	lb	0.31	9.30	
Pesticide:				38.13	
Sonalan HFP	2.50	pint	6.50	16.25	
Eptam 7E	3.50	pint	6.25	21.88	
Custom:				83.45	
Custom Fertilize: 0 - 400 lbs	1.00	acre	7.25	7.25	
Custom Cut/Windrow	1.00	acre	32.00	32.00	
Custom Combine - Dry Beans	26.00	cwt	1.70	44.20	
Irrigation:				94.43	
Irrigation Power - CP	19.00	ac-in	1.94	36.86	
Water Assessment	1.00	acre	47.50	47.50	
Irrigation Repairs - CP	19.00	ac-in	0.53	10.07	
Other:				64.38	
Crop Insurance	1.00	acre	22.00	22.00	
Bean Cleaning and Storage Charge	26.00	cwt	1.55	40.30	
Dry Bean Assessment Fee	26.00	cwt	0.08	2.08	
Labor				68.47	
Equipment Operator Labor	2.05	hrs	22.50	46.11	
Irrigation Labor: CP	0.76	hrs	22.50	17.10	
General Farm Labor	0.30	hrs	17.55	5.27	
Machinery				54.98	
Fuel-Gas	2.10	gal	3.25	6.83	
Fuel-Diesel	9.18	gal	3.00	27.55	
Fuel-Road Diesel	0.14	gal	3.50	0.48	
Lube				5.23	
Machinery Repair				14.90	
Interest on Operating Capital @ 7.00%				13.49	
TOTAL OPERATING COSTS/ACRE				521.14	
TOTAL OPERATING COSTS/CWT				20.04	
NET RETURNS ABOVE OPERATING COSTS	· · · · · · · · · · · · · · · · · · ·			154.86	

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EBB3-DB-19

TABLE 1. CONTINUED

	Quantity/ Acre	Unit	Price or Cost/Unit	Value or Cost/Acre	Your Cost
CASH OVERHEAD COSTS					
General Overhead				13.00	
Land Rent				275.00	
Management Fee				42.00	
Property Taxes				0.00	
Property Insurance				1.71	
Investment Repairs				0.00	
TOTAL CASH OVERHEAD COSTS/ACRE				331.71	
TOTAL CASH OVERHEAD COSTS/CWT				12.76	
TOTAL CASH COSTS/ACRE				852.84	
TOTAL CASH COSTS/CWT				32.80	
NET RETURNS ABOVE CASH COSTS				-176.84	
NON-CASH OVERHEAD COSTS (Capital Recovery)					
Equipment				61.06	
TOTAL NON-CASH OVERHEAD COSTS/ACRE				61.06	
TOTAL NON-CASH OVERHEAD COSTS/CWT				2.35	
TOTAL COST/ACRE				913.90	
TOTAL COST/CWT				35.15	
NET RETURNS ABOVE TOTAL COST				-237.90	

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EBB3-DB-19

TABLE 2. COSTS PER ACRE TO PRODUCE DRY PINTO BEANS

	Your Cost
Preharvest: Irrigation 0.00 17.10 0.00 0.00 36.86 0.00 53.96 Tillage 0.32 8.74 10.54 5.96 0.00 0.00 25.23 Crop Insurance 0.00 0.00 0.00 0.00 22.00 0.00 22.00 Irrigation Water Assessments 0.00 0.00 0.00 0.00 47.50 0.00 47.50 Irrigation Repair 0.00 0.00 0.00 0.00 10.07 0.00 10.07 Applying Fertilizer 0.00 0.00 0.00 0.00 58.80 7.25 66.05 Harrow 0.09 2.53 2.82 1.95 0.00 0.00 7.30 Spray & Incorp. 0.09 2.53 2.82 2.10 38.13 0.00 45.58 Seed Hauling 0.03 0.90 0.11 0.09 0.00 0.00 1.09 Plant 0.16 9.71 4.29 4.38 45.00 <t< td=""><td>Cost</td></t<>	Cost
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Fuel Truck Use 0.02 0.59 0.19 0.08 0.00 0.00 0.85	
TOTAL PREHARVEST COSTS 1.71 68.47 34.86 20.12 258.36 7.25 389.06	
Harvest:	
Cut and Windrow Beans 0.00 0.00 0.00 0.00 32.00 32.00	
Custom Combine 0.00 0.00 0.00 0.00 44.20 44.20	
Assessments 0.00 0.00 0.00 42.38 0.00 42.38	
TOTAL HARVEST COSTS 0.00 0.00 0.00 42.38 76.20 118.58	
Interest on Operating Capital at 7.00% 13.49	
TOTAL OPERATING COSTS/ACRE 1.71 68.47 34.86 20.12 300.74 83.45 521.14	

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EBB3-DB-19

TABLE 2. CONTINUED

	Operation _	ation Cash and Labor Costs per Acre									
	Time	Labor	Fuel	Lube	Material	Custom/	Total	Your			
Operation	(Hrs/A)	Cost		&Repairs	Cost	Rent	Cost	Cost			
CASH OVERHEAD:											
General Overhead							13.00				
Land Rent							275.00				
Management Fee							42.00				
Property Taxes							0.00				
Property Insurance							1.71				
Investment Repairs							0.00				
TOTAL CASH OVERHEAD COSTS/ACRE							331.71				
TOTAL CASH COSTS/ACRE							852.84				
NON-CASH OVERHEAD:		Per Producing		Annual	Cost						
		Acre	_	Capital Re	ecovery						
Equipment		603.53		61.06			61.06				
TOTAL NON-CASH OVERHEAD COSTS		603.53		61.06			61.06				
TOTAL COSTS/ACRE							913.90				

SOUTHCENTRAL IDAHO

EBB3-DB-19

TABLE 3. MONTHLY COSTS PER ACRE TO PRODUCE DRY PINTO BEANS

	SEP 18	OCT 18	NOV 18	DEC 18	JAN 19	FEB 19	MAR 19	APR 19	MAY 19	JUN 19	JUL 19	AUG 19	SEP 19	Total
	16	16	10	10	17	17	17	19	19	19	19	19	19	
Preharvest: Irrigation	5.68								5.68	11.36	17.04	14.20		53.96
Tillage	5.00	25.23							5.00	11.50	17.04	14.20		25.23
Crop Insurance		23.23						22.00						22.00
Irrigation Water Assessments								47.50						47.50
Irrigation Repair								10.07						10.07
Applying Fertilizer									66.05					66.05
Harrow									7.30					7.30
Spray & Incorp.									45.58					45.58
Seed Hauling									1.09					1.09
Plant									63.38					63.38
Cultivate										8.27	8.27			16.54
General Pickup Use	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	25.78
4-Wheeler Use	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	2.88
Service Truck Use	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.84
Fuel Truck Use	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.85
TOTAL PREHARVEST COSTS	8.02	27.57	2.34	2.34	2.34	2.34	2.34	81.91	191.42	21.96	27.64	16.54	2.34	389.06
Harvest:														
Cut and Windrow Beans													32.00	32.00
Custom Combine													44.20	44.20
Assessments													42.38	42.38
TOTAL HARVEST COSTS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	118.58	118.58
Interest on Operating Capital @7.00%	0.05	0.21	0.22	0.23	0.25	0.26	0.28	0.75	1.87	2.00	2.16	2.26	2.96	13.49
TOTAL OPERATING COSTS/ACRE	8.06	27.78	2.56	2.57	2.58	2.60	2.61	82.66	193.29	23.96	29.80	18.79	123.88	521.14
CASH OVERHEAD														
General Overhead	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	13.00
Land Rent														275.00
Management Fee	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	42.00
Property Taxes														0.00
Property Insurance								1.71						1.71
Investment Repairs	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
TOTAL CASH OVERHEAD COSTS	4.23	4.23	4.23	4.23	4.23	4.23	4.23	5.94	4.23	4.23	4.23	4.23	4.23	331.71
TOTAL CASH COSTS/ACRE	12.29	32.01	6.79	6.80	6.81	6.83	6.84	88.60	197.52	28.19	34.03	23.02	128.11	852.84

SOUTHCENTRAL IDAHO

EBB3-DB-19

TABLE 4. HOURLY EQUIPMENT COSTS

		Dry Pinto Beans	Total		Cash Ov	erhead		Operating		
		Hours	Hours	Capital	Insur-		Lube&		Total	Total
Yr	Description	Used	Used	Recovery	ance	Taxes	Repairs	Fuel	Oper.	Costs/Hr.
19	4-wheeler	15	150	4.29	0.12	0.00	0.74	1.08	1.82	6.23
19	Cultivator: 12R 22	35	75	19.25	0.51	0.00	2.23	0.00	2.23	21.99
19	Moldboard Plow 4b	49	180	7.86	0.18	0.00	4.66	0.00	4.66	12.70
19	Pickup 1 - 3/4 ton	38	750	9.33	0.17	0.00	3.70	10.82	14.52	24.02
19	Pickup 2 - 3/4 ton	38	750	9.33	0.17	0.00	3.70	10.82	14.52	24.02
19	Planter - 12R 22"	25	125	37.70	0.92	0.00	17.49	0.00	17.49	56.11
19	Roller Harrow 20'	28	100	47.82	1.26	0.00	9.59	0.00	9.59	58.67
19	Sprayer - 30'	14	150	3.14	0.07	0.00	1.64	0.00	1.64	4.85
19	Tractor - 160hp	27	350	31.02	0.98	0.00	8.25	23.70	31.95	63.95
19	Tractor - 185hp	70	400	30.56	0.96	0.00	10.15	27.39	37.54	69.06
19	Tractor - 200hp	53	500	26.05	0.82	0.00	12.49	29.61	42.10	68.98
19	Truck 1P 10-Wheeler	5	370	21.60	0.61	0.00	2.66	3.15	5.81	28.02
19	Pickup 3 - 3/4 ton	18	325	13.27	0.34	0.00	3.70	10.82	14.52	28.14
19	Service Truck	3	80	41.85	1.24	0.00	3.16	8.75	11.91	55.00
19	Fuel Truck	3	80	52.26	1.52	0.00	3.61	8.75	12.36	66.14

SOUTHCENTRAL IDAHO

EBB3-DB-19

TABLE 5. WHOLE FARM ANNUAL EQUIPMENT, INVESTMENT, AND BUSINESS OVERHEAD COSTS

ANNUAL EQUIPMENT COSTS

						Cash Ove	rhead		
			Yrs	Salvage	Capital	Insur-			
Yr	Description	Price	Life	Value	Recovery	ance	Taxes	Total	
19	4-wheeler	6,000.00	10	1,772.31	714.62	19.43	0.00	734.05	
19	Cultivator: 12R 22	15,400.00	15	1,478.50	1,604.26	42.20	0.00	1,646.45	
19	Moldboard Plow 4b	12,300.00	10	2,175.15	1,571.76	36.19	0.00	1,607.95	
19	Pickup 1 - 3/4 ton	42,000.00	5	13,750.00	7,771.98	139.38	0.00	7,911.36	
19	Pickup 2 - 3/4 ton	42,000.00	5	13,750.00	7,771.98	139.38	0.00	7,911.36	
19	Planter - 12R 22"	45,000.00	12	6,232.80	5,236.76	128.08	0.00	5,364.84	
19	Roller Harrow 20'	51,000.00	15	4,896.33	5,312.80	139.74	0.00	5,452.54	
19	Sprayer - 30'	4,100.00	10	725.05	523.92	12.06	0.00	535.98	
19	Tractor - 160hp	135,000.00	20	17,322.05	12,062.30	380.81	0.00	12,443.10	
19	Tractor - 185hp	152,000.00	20	19,503.35	13,581.25	428.76	0.00	14,010.01	
19	Tractor - 200hp	162,000.00	20	20,786.46	14,474.76	456.97	0.00	14,931.72	
19	Truck 1P 10-Wheeler	97,000.00	20	4,000.00	8,878.70	252.50	0.00	9,131.20	
19	Pickup 3 - 3/4 ton	42,000.00	12	7,500.00	4,792.18	123.75	0.00	4,915.93	
19	Service Truck	41,000.00	20	3,000.00	3,720.03	110.00	0.00	3,830.03	
19	Fuel Truck	51,000.00	20	3,000.00	4,645.70	135.00	0.00	4,780.70	
	TOTAL	897,800.00	-	119,891.99	92,663.00	2,544.23	0.00	95,207.23	
	90% of New Cost*	808,020.00	-	107,902.80	83,396.70	2,289.81	0.00	85,686.51	

^{*}Used to reflect a mix of new and used equipment

ANNUAL INVESTMENT COSTS

					Cash Ove				
Description	Price	Yrs Life	Salvage Value	Capital Recovery	Insur- ance	Taxes	Repairs	Total	
INVESTMENT									
TOTAL INVESTMENT	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	

ANNUAL BUSINESS OVERHEAD COSTS

	Units/		Price/	Total
Description	Farm	Unit	Unit	Cost
General Overhead	150.00	acre	13	1,950.00
Land Rent	150.00	acre	275	41,250.00
Management Fee	150.00	acre	42	6,300.00

SOUTHCENTRAL IDAHO

EBB3-DB-19

TABLE 6. RANGING ANALYSIS - DRY PINTO BEANS

COSTS PER ACRE AND PER CWT AT VARYING YIELDS TO PRODUCE DRY PINTO BEANS

_	YIELD(CWT)									
	22.00	23.00	24.00	25.00	26.00	27.00	28.00			
OPERATING COSTS/ACRE:										
Preharvest	389.06	389.06	389.06	389.06	389.06	389.06	389.06			
Harvest	108.19	111.65	115.12	118.58	122.04	125.51	128.97			
Interest on Operating Capital @ 7.00%	13.43	13.45	13.47	13.49	13.52	13.54	13.56			
TOTAL OPERATING COSTS/ACRE	510.69	514.17	517.65	521.14	524.62	528.10	531.59			
TOTAL OPERATING COSTS/CWT	23.21	22.36	21.57	20.85	20.18	19.56	18.99			
CASH OVERHEAD COSTS/ACRE	331.71	331.71	331.71	331.71	331.71	331.71	331.71			
TOTAL CASH COSTS/ACRE	842.39	845.88	849.36	852.84	856.33	859.81	863.29			
TOTAL CASH COSTS/CWT	38.29	36.78	35.39	34.11	32.94	31.84	30.83			
NON-CASH OVERHEAD COSTS/ACRE	61.06	61.06	61.06	61.06	61.06	61.06	61.06			
TOTAL COSTS/ACRE	903.45	906.94	910.42	913.90	917.39	920.87	924.35			
TOTAL COSTS/CWT	41.07	39.43	37.93	36.56	35.28	34.11	33.01			

Net Return Per Acre Above Operating Costs For Dry Pinto Beans

PRICE (\$/cwt)	YIELD (cwt/acre)										
Pinto Beans	22.00	23.00	24.00	25.00	26.00	27.00	28.00				
26.00	61.31	83.83	106.35	128.86	151.38	173.90	196.41				
28.00	105.31	129.83	154.35	178.86	203.38	227.90	252.41				
30.00	149.31	175.83	202.35	228.86	255.38	281.90	308.41				
32.00	193.31	221.83	250.35	278.86	307.38	335.90	364.41				
34.00	237.31	267.83	298.35	328.86	359.38	389.90	420.41				
36.00	281.31	313.83	346.35	378.86	411.38	443.90	476.41				
38.00	325.31	359.83	394.35	428.86	463.38	497.90	532.41				

Net Return Per Acre Above Cash Costs For Dry Pinto Beans

PRICE (\$/cwt) Pinto Beans	YIELD (cwt/acre)								
	22.00	23.00	24.00	25.00	26.00	27.00	28.00		
26.00	-270.39	-247.88	-225.36	-202.84	-180.33	-157.81	-135.29		
28.00	-226.39	-201.88	-177.36	-152.84	-128.33	-103.81	-79.29		
30.00	-182.39	-155.88	-129.36	-102.84	-76.33	-49.81	-23.29		
32.00	-138.39	-109.88	-81.36	-52.84	-24.33	4.19	32.71		
34.00	-94.39	-63.88	-33.36	-2.84	27.67	58.19	88.71		
36.00	-50.39	-17.88	14.64	47.16	79.67	112.19	144.71		
38.00	-6.39	28.12	62.64	97.16	131.67	166.19	200.71		

SOUTHCENTRAL IDAHO

EBB3-DB-19

TABLE 6. RANGING ANALYSIS CONTINUED

Net Return Per Acre Above Total Costs For Dry Pinto Beans

PRICE (\$/cwt)	YIELD (cwt/acre)								
Pinto Beans	22.00	23.00	24.00	25.00	26.00	27.00	28.00		
26.00	-331.45	-308.94	-286.42	-263.90	-241.39	-218.87	-196.35		
28.00	-287.45	-262.94	-238.42	-213.90	-189.39	-164.87	-140.35		
30.00	-243.45	-216.94	-190.42	-163.90	-137.39	-110.87	-84.35		
32.00	-199.45	-170.94	-142.42	-113.90	-85.39	-56.87	-28.35		
34.00	-155.45	-124.94	-94.42	-63.90	-33.39	-2.87	27.65		
36.00	-111.45	-78.94	-46.42	-13.90	18.61	51.13	83.65		
38.00	-67.45	-32.94	1.58	36.10	70.61	105.13	139.65		