

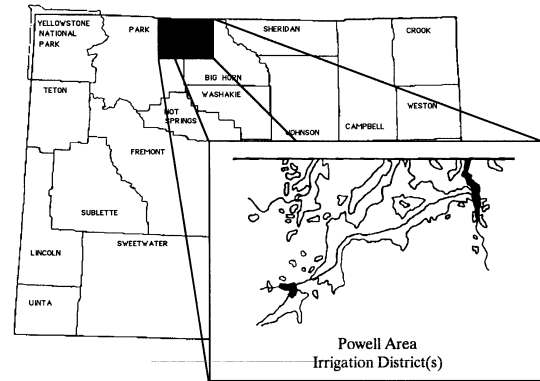
# Crop Enterprise Budget

## Dry Beans, Powell Area

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MP-70.3R

University of Wyoming - April, 1995



The enterprise budget presented in this report estimates typical costs and returns for dry bean production in the Powell area of Wyoming. It should only be used as a guide; it is not representative of any particular farm. The major assumptions used in this budget are presented below.

### LAND

The budget is based on a 600 acre farm, with 90 acres of dry beans each year. Other enterprises included on this farm are: malting barley, 230 acres; alfalfa establishment, 10 acres; alfalfa hay, 30 acres; and sugar beets, 240 acres. The farm operator owns 200 acres and leases 400 acres. Owned land is valued at \$900 per acre and leased land is rented on a crop share basis. A one-third share of gross revenue is paid to the land owner. In turn, the land owner pays for one-third of the fertilizer and crop insurance for the crop. The land owner is also responsible for the costs associated with land, water and chemical for weed control on ditches and roads.

### LABOR

Labor on this farm is provided by the operator and two full-time employees. All labor, including operator labor, is valued at \$5.50 per hour. However, operator labor is a non-cash cost. Some part-time labor may be used on the farm for labor intensive operations like harvest.

### CAPITAL

The operator provides 75% of the long term capital and 20% of the operating capital for this enterprise. Twenty-five percent of the long term capital is borrowed at an interest rate of 9.58% APR (Annual Percentage Rate). Eighty percent of the

operating capital is borrowed at an interest rate of 9.92% APR. The interest rates used here are for short term planning. Real interest rates (interest rates adjusted for expected inflation) should be used for accurate long-term planning.

### MACHINERY, EQUIPMENT, AND BUILDINGS

A complete list of the machinery, equipment, and buildings used in this enterprise and the associated values are provided in Table 1. All resources are assumed to be half depreciated. Estimated operating and ownership costs are given in Table 2. Table 2 lists only the resources used in this enterprise. Other resources used on the farm are not included. However, the reader should note that the resources listed in Tables 1 and 2 may also be used in other enterprises on the farm.

### OPERATIONS

Operations related to production of the dry bean crop are listed in chronological order in the enterprise budget. The ground is plowed and roller harrowed in the fall. Beans are planted in late May and irrigated as soon as possible after planting.

Harvest is typically started in early September using a bean cutter and windrower. The dry bean yield assumed in the budget is 19.3 cwt (sacks) per acre. Beans are delivered to local bean handling facilities at harvest time for sale or storage. The price at harvest determines whether the farmer sells or stores the beans.

### ENTERPRISE BUDGET

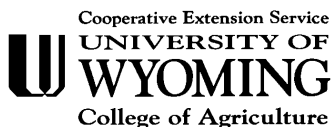
Economic costs and returns of dry bean production are summarized by operation in the enterprise budget. Costs are broken down by stage

of production. General overhead has been calculated at 5% of all cash costs, while operator management is calculated at 10%.

Costs and returns for the crop share-lease arrangement are also summarized in the budget. Costs paid in whole or in part by the land owner are listed in the third column from the right. The second column from the right describes the tenant's share of the appropriate cost and return items. The far right column has been provided to calculate changes from this base budget for your operation.

## SUMMARY

Gross income for the dry bean enterprise is estimated at \$367.46 per acre. Total variable costs are estimated at \$260.96 per acre, with total fixed costs at \$165.92 per acre. The total of all costs for dry beans is estimated at \$426.88 per acre, leaving a net projected return of (\$59.42) per acre. The net projected returns for the share-lease arrangement are (\$13.75) per acre for the landowner and (\$45.67) per acre for the tenant.



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# Dry Beans

## Economic Costs and Returns Dry Beans - Powell Area 90 Acre Enterprise

RETURNS SECTION -----				Owner- Operator 100%	Land- owner 33%	Tenant 67%
GROSS INCOME Description	Quantity	Unit	\$/Unit	Total	Total	Total
=====	=====	=====	=====	=====	=====	=====
DRY BEANS	19.00	cwt	19.34	\$367.46	\$122.47	\$244.99
=====	=====	=====	=====	=====	=====	=====
Total GROSS Income				\$367.46	\$122.47	\$244.99

VARIABLE COSTS SECTION			----- M a t e r i a l s -----					Materials		
VARIABLE COST Description	LABOR	Dollars per Acre MACHINERY	Description	# Units Per Acre	Unit Type	\$/unit	Total Cost Per Acre	Owner- Operator	Land- owner	Tenant
=====										
**ANNUAL**										
METAL SHOP								2.14	----	2.14
MACHINE SHED								0.28	----	0.28
TRAILER HOUSE								3.17	----	3.17
FENCES								0.03	----	0.03
1/2 TON PICKUP	1.80	1.18						2.98	----	2.98
1/2 TON - 4 X 4 PICKUP	1.80	1.20						3.00	----	3.00
3/4 TON PICKUP	1.80	1.24						3.04	----	3.04
MINI PICKUP	1.80	0.78						2.58	----	2.58
LOADER WORK	0.20	0.23						0.43	----	0.43
GENERAL OVERHEAD								10.09	----	10.09
OPERATOR MANAGEMENT								20.18	----	20.18
-----										
Total ANNUAL								\$47.92	\$0.00	\$47.92
**PREPLANT-FALL**										
PLOW	Operation	2.02	5.69					7.71	----	7.71
ROLLER HARROW	Operation	1.01	1.90					2.91	----	2.91
-----										
Total PREPLANT-FALL								\$10.62	\$0.00	\$10.62
**PREPLANT-SPRING**										
SPREAD FERTILIZER	Operation	0.59	0.32	11-52-0	0.048 ton	291.00	25.42	26.33	8.47	17.86
				34-0-0	0.058 ton	197.50				
ROLLER HARROW	Operation	0.76	1.62					2.38	----	2.38
LEVEL	Operation	1.01	2.42					3.43	----	3.43
INCORPORATE CHEM	Operation	1.73	3.75	SONALAN	0.250 gal	33.20	8.30	13.78	----	13.78
HAUL SPRAY WATER	Operation	0.14	0.18					0.32	----	0.32
ROLLER HARROW	Operation	0.76	1.62					2.38	----	2.38
-----										
Total PREPLANT-SPRING								\$48.62	\$8.47	\$40.15
**PLANT**										
BED GROUND	Operation	1.21	2.09					3.30	----	3.30
CROP INSURANCE BEANS								25.56	8.52	17.04
HAUL BEAN SEED	Operation	0.15	0.14					0.29	----	0.29
PLANT BEANS	Operation	1.42	2.04	BEAN SEED	0.750 cwt	32.50	24.38	27.84	----	27.84
-----										
Total PLANT								\$56.99	\$8.52	\$48.47
**GROW BEANS**										
OPEN DITCHES	Operation	0.13	0.12					0.25	----	0.25
PULL ENDS	Operation	0.18	0.11					0.29	----	0.29
IRRIGATE BEANS	Operation	6.06	0.00	CANVAS DAMS	1.000 acre	0.50	2.66	8.72	2.16	6.56
				CONCRETE DITCH		1.69				
				DIRT DITCH		0.19				
				GATED PIPE		0.28				
SPIKE HARROW	Operation	1.42	0.89					2.31	----	2.31
SPRAY DITCHES	Operation	0.08	0.02	CURTAIL	0.005 gal	35.38	0.18	0.28	0.18	0.10
CLOSE DITCHES	Operation	0.13	0.12					0.25	----	0.25
CULTIVATE 4.0A/H	Operation	1.36	2.57					3.93	----	3.93
CULTIVATE 1.5A/H	Operation	0.47	0.35					0.82	----	0.82
WEED BEANS	LABOR							15.00	----	15.00
CORRUGATE	Operation	1.51	1.38					2.89	----	2.89
OPEN DITCHES	Operation	0.13	0.12					0.25	----	0.25
PULL ENDS	Operation	0.18	0.11					0.29	----	0.29

## Dry Beans

VARIABLE COSTS SECTION -----										
				----- M a t e r i a l s -----			Materials			
VARIABLE COST	Description	Dollars per Acre		Description	# Units	Unit	Total Cost	Owner-	Land-	Tenant
		LABOR	MACHINERY		Per Acre	Type	Per Acre	Operator	owner	
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
IRRIGATE BEANS	Operation	2.76	0.00	CONCRETE DITCH			1.69	2.16	4.92	2.16
				DIRT DITCH			0.19			2.76
				GATED PIPE			0.28			
IRRIGATE BEANS	Operation	2.76	0.00	CONCRETE DITCH			1.69	2.16	4.92	2.16
				DIRT DITCH			0.19			2.76
				GATED PIPE			0.28			
SPRAY DITCHES	Operation	0.08	0.02	CURTAIN	0.005	gal	35.38	0.18	0.28	0.18
IRRIGATE BEANS	Operation	2.76	0.00	CONCRETE DITCH			1.69	2.16	4.92	2.16
				DIRT DITCH			0.19			2.76
				GATED PIPE			0.28			
IRRIGATE BEANS	Operation	2.76	0.00	CONCRETE DITCH			1.69	2.16	4.92	2.16
				DIRT DITCH			0.19			2.76
				GATED PIPE			0.28			
IRRIGATE BEANS	Operation	2.76	0.00	CONCRETE DITCH			1.69	2.16	4.92	2.16
				DIRT DITCH			0.19			2.76
				GATED PIPE			0.28			
IRRIGATE BEANS	Operation	2.76	0.00	CONCRETE DITCH			1.69	2.16	4.92	2.16
				DIRT DITCH			0.19			2.76
				GATED PIPE			0.28			
IRRIGATE BEANS	Operation	2.76	0.00	CONCRETE DITCH			1.69	2.16	4.92	2.16
				DIRT DITCH			0.19			2.76
				GATED PIPE			0.28			
Total GROW BEANS								\$70.00	\$17.64	\$52.36
**HARVEST**										
CLOSE DITCHES	Operation	0.13	0.12					0.25	----	0.25
CUT AND RODWEED	Operation	1.34	1.87					3.21	----	3.21
WINDROW BEANS	Operation	1.57	1.03					2.60	----	2.60
THRESH W/ PICKUP	Operation	1.01	4.59					5.60	----	5.60
HAUL BEANS 2TN#1	Operation	0.56	0.53					1.09	----	1.09
HAUL BEANS 2TN#2	Operation	0.56	0.54					1.10	----	1.10
HAUL BEANS TDM#1	Operation	0.56	0.53					1.09	----	1.09
HAUL BEANS TDM#2	Operation	0.56	0.53					1.09	----	1.09
Total HARVEST								\$16.03	\$0.00	\$16.03
**POST-HARVEST**										
FIELD CULTIVATE	Operation	1.01	1.59					2.60	----	2.60
Total POST-HARVEST								\$2.60	\$0.00	\$2.60
Operating Interest								8.18	----	8.18
Total VARIABLE COST								\$260.96	\$34.63	\$226.33
GROSS INCOME minus VARIABLE COST								\$106.50	\$87.84	\$18.66

FIXED COSTS SECTION -----				
FIXED COST	Description	Unit	Owner- Operator	Land- owner
=====	=====	=====	=====	=====
Machinery and Equipment:				
	Taxes	Acre	2.37	----
	Insurance	Acre	5.09	----
	Interest	Acre	30.73	----
	Depreciation	Acre	26.14	----
Buildings and Improvments:				
	Taxes	Acre	0.78	----
	Insurance	Acre	1.01	----
	Interest	Acre	9.51	----
	Depreciation	Acre	3.91	----

## Dry Beans

FIXED COSTS SECTION -----				
FIXED COST Description	Unit	Owner- Operator	Land- owner	Tenant
=====	=====	=====	=====	=====
Irrigation:				
Taxes	Acre	0.33	0.33	----
Insurance	Acre	0.66	0.66	----
Interest	Acre	6.82	6.82	----
Depreciation	Acre	3.76	3.76	----
Land:				
Taxes	Acre	5.50	5.50	----
Interest	Acre	69.30	69.30	----
=====	=====	=====	=====	=====
Total FIXED Cost		\$165.92	\$101.59	\$64.33
-----				
Total of ALL Cost		\$426.88	\$136.22	\$290.66
+++++				
NET PROJECTED RETURNS		(\$59.42)	(\$13.75)	(\$45.67)
+++++				

TABLE 1. Machinery, Equipment, and Building Value and Use Assumptions

Resource Name	1990 List Price	List Price in Year Acquired	Current Market Value	Salvage Value	Useful Life Years	Useful Life Hr or Mi	Remaining Life Hr or Mi	Total Defined Annual Use
=====	=====	=====	=====	=====	=====	=====	=====	=====
125 HP TRACTOR #1	\$62,822	\$44,958	\$22,774	\$11,240	12	4,488 hr	2,244 hr	374 hr
125 HP TRACTOR #2	62,822	44,958	22,774	11,240	12	5,364 hr	2,682 hr	447 hr
140 HP TRACTOR	68,008	50,505	26,416	12,627	12	4,956 hr	2,478 hr	413 hr
250 CC ATV	3,140	1,989	905	588	10	140 hr	70 hr	14 hr
80 HP TRACTOR	35,433	27,436	13,469	5,806	14	4,508 hr	2,254 hr	322 hr
COMBINE 150 BU	95,012	62,515	29,104	9,477	18	2,016 hr	1,008 hr	112 hr
ATV BOOM SPRAYER	2,300	1,932	879	674	8	112 hr	56 hr	14 hr
BEAN CUTTER 6-ROW	3,997	4,315	1,740	654	18	360 hr	180 hr	20 hr
BEAN WINDROWER 8-ROW	6,119	5,910	2,690	1,746	10	200 hr	100 hr	20 hr
BEDDER 12-ROW	6,350	6,023	3,365	1,779	10	660 hr	330 hr	66 hr
CORRUGATOR 6-ROW	3,271	2,587	1,177	764	10	830 hr	415 hr	83 hr
CULTIVATOR 12-RO	10,347	8,319	6,950	2,457	10	1,470 hr	735 hr	147 hr
CULTIVATOR 6-ROW	6,298	3,157	2,600	933	10	430 hr	215 hr	43 hr
DITCHER V-TYPE 3-POINT	3,550	2,758	1,195	690	12	216 hr	108 hr	18 hr
END PULLER 3-ROW	1,175	628	250	157	12	276 hr	138 hr	23 hr
FIELD CULTIVATOR18 FT	5,358	4,090	2,425	1,023	12	576 hr	288 hr	48 hr
FRONT LOADER 2-TON	7,323	5,333	2,950	1,575	10	200 hr	100 hr	20 hr
LEVELER 3-POINT 16 FT	9,160	6,732	5,326	1,683	12	1,152 hr	576 hr	96 hr
PLANTER 12-ROW	13,642	8,505	4,500	2,968	8	528 hr	264 hr	66 hr
PLOW 2-WAY 4-18'S	9,093	9,685	4,450	3,380	8	880 hr	440 hr	110 hr
REAR BLADE 8 FT	1,090	721	525	180	12	216 hr	108 hr	18 hr
RODWEEDER 12 FT	1,500	2,041	950	366	16	320 hr	160 hr	20 hr
ROLLER HARROW	15,132	14,415	6,350	5,944	6	1,062 hr	531 hr	177 hr
SPIKE HARROW 24 FT	2,469	1,506	985	193	20	360 hr	180 hr	18 hr
SPRAYER SADL TNK20 FT	2,125	1,785	812	623	8	760 hr	380 hr	95 hr
NURSE TANK 1000 GAL	1,019	1,019	464	301	10	1,160 hr	580 hr	116 hr
1/2 TON PICKUP 2WD	12,950	7,647	3,650	1,912	12	60,000 mi	30,000 mi	5,000 mi
1/2 TON PICKUP 4WD	17,400	10,151	8,725	2,538	12	60,000 mi	30,000 mi	5,000 mi
2-TON TRUCK #1	38,500	25,111	13,650	3,807	18	83,700 mi	41,850 mi	4,650 mi
2-TON TRUCK #2	38,500	25,111	13,650	3,807	18	81,000 mi	40,500 mi	4,500 mi
3/4 TON PICKUP 2WD	14,950	8,917	4,250	2,229	12	60,000 mi	30,000 mi	5,000 mi
MINI PICKUP	9,070	6,196	2,463	1,549	12	60,000 mi	30,000 mi	5,000 mi
TANDEM TRUCK #1	73,570	49,954	21,500	7,573	18	80,424 mi	40,212 mi	4,468 mi
TANDEM TRUCK #2	73,570	49,954	21,500	7,573	18	80,424 mi	40,212 mi	4,468 mi

# Dry Beans

TABLE 2. Machinery, Equipment, and Building Cost Calculations

RESOURCE COST PER UNIT OF USE													
		-----Variable-----				-----Fixed-----		ENTERPRISE -----					
		Fuel and Lube	Operation Labor & Inputs	Repair and Maint.	Hourly Lease	Deprec. and Interest	Taxes and Insurance	TOTAL COST	Resource Use per Acre	Resource Costs per Acre-----			
Machine/Vehicle		Unit								Variable	Fixed	TOTAL	
125 HP TRACTOR	#1	\$/Hr	\$5.56	\$0.00	\$3.05	\$0.00	\$6.93	\$0.91	\$16.45	0.9662	\$8.32	\$7.58	\$15.90
125 HP TRACTOR	#2	\$/Hr	5.56	0.00	3.33	0.00	5.80	0.76	15.45	0.6649	5.91	4.36	10.27
140 HP TRACTOR		\$/Hr	6.23	0.00	3.60	0.00	7.31	0.96	18.10	0.6429	6.32	5.32	11.64
250 CC ATV		\$/Hr	1.10	0.00	0.02	0.00	7.37	0.97	9.46	0.0222	0.02	0.19	0.21
80 HP TRACTOR		\$/Hr	3.56	0.00	1.85	0.00	4.57	0.63	10.61	0.8722	4.72	4.54	9.26
COMBINE 150 BU		\$/Hr	6.94	0.00	20.63	0.00	26.58	3.90	58.05	0.1667	4.60	5.08	9.68
ATV BOOM SPRAYER		\$/Hr	0.00	0.00	0.70	0.00	8.45	0.94	10.09	0.0222	0.02	0.21	0.23
BEAN CUTTER	6-ROW	\$/Hr	0.00	0.00	0.51	0.00	8.89	1.31	10.71	0.2222	0.11	2.27	2.38
BEAN WINDROWER	8-ROW	\$/Hr	0.00	0.00	0.50	0.00	17.17	2.02	19.69	0.2222	0.11	4.26	4.37
BEDDER	12-ROW	\$/Hr	0.00	0.00	0.96	0.00	6.75	0.77	8.48	0.2000	0.19	1.50	1.69
CORRUGATOR 6-ROW		\$/Hr	0.00	0.00	0.52	0.00	1.81	0.21	2.54	0.2500	0.13	0.51	0.64
CULTIVATOR 12-RO		\$/Hr	0.00	0.00	2.96	0.00	6.47	0.71	10.14	0.2250	0.67	1.62	2.29
CULTIVATOR 6-ROW		\$/Hr	0.00	0.00	0.33	0.00	8.27	0.91	9.51	0.0667	0.02	0.61	0.63
DITCHER V-TYPE	3-POINT	\$/Hr	0.00	0.00	0.30	0.00	7.96	1.00	9.26	0.0360	0.01	0.32	0.33
END PULLER	3-ROW	\$/Hr	0.00	0.00	0.04	0.00	1.29	0.16	1.49	0.0500	0.00	0.07	0.07
FIELD CULTIVATOR	18 FT	\$/Hr	0.00	0.00	1.08	0.00	6.21	0.76	8.05	0.1429	0.15	1.00	1.15
FRONT LOADER	2-TON	\$/Hr	0.00	0.00	0.59	0.00	19.27	2.21	22.07	0.0333	0.02	0.72	0.74
LEVELER 3-POINT	16 FT	\$/Hr	0.00	0.00	2.70	0.00	6.94	0.83	10.47	0.1667	0.45	1.30	1.75
PLANTER	12-ROW	\$/Hr	0.00	0.00	2.73	0.00	9.55	1.02	13.30	0.2000	0.55	2.11	2.66
PLOW 2-WAY	4-18'S	\$/Hr	0.00	0.00	4.27	0.00	5.46	0.61	10.34	0.3333	1.42	2.02	3.44
REAR BLADE	8 FT	\$/Hr	0.00	0.00	0.08	0.00	3.63	0.44	4.15	0.0360	0.00	0.15	0.15
RODWEEDER	12 FT	\$/Hr	0.00	0.00	0.21	0.00	5.12	0.71	6.04	0.2222	0.05	1.30	1.35
ROLLER HARROW		\$/Hr	0.00	0.00	2.60	0.00	4.91	0.54	8.05	0.5358	1.39	2.92	4.31
SPIKE HARROW	24 FT	\$/Hr	0.00	0.00	0.33	0.00	5.35	0.82	6.50	0.2000	0.07	1.23	1.30
SPRAYER SADL TNK	20 FT	\$/Hr	0.00	0.00	1.38	0.00	1.15	0.13	2.66	0.2857	0.39	0.37	0.76
NURSE TANK	1000 GAL	\$/Hr	0.00	0.00	0.15	0.00	1.04	0.06	1.25	0.3200	0.05	0.35	0.40
1/2 TON PICKUP	2WD	\$/Mi	0.09	0.00	0.05	0.00	0.15	0.03	0.32	8.4000	1.18	1.51	2.69
1/2 TON PICKUP	4WD	\$/Mi	0.09	0.00	0.05	0.00	0.40	0.05	0.59	8.4000	1.18	3.78	4.96
2-TON TRUCK	#1	\$/Mi	0.22	0.00	0.19	0.00	0.54	0.06	1.01	1.6200	0.66	0.97	1.63
2-TON TRUCK	#2	\$/Mi	0.22	0.00	0.19	0.00	0.55	0.07	1.03	1.6500	0.68	1.02	1.70
3/4 TON PICKUP	2WD	\$/Mi	0.09	0.00	0.06	0.00	0.17	0.04	0.36	8.4000	1.26	1.76	3.02
MINI PICKUP		\$/Mi	0.06	0.00	0.03	0.00	0.10	0.02	0.21	8.4000	0.76	1.01	1.77
TANDEM TRUCK	#1	\$/Mi	0.16	0.00	0.25	0.00	0.86	0.09	1.36	1.3000	0.53	1.24	1.77
TANDEM TRUCK	#2	\$/Mi	0.16	0.00	0.25	0.00	0.86	0.09	1.36	1.3000	0.53	1.24	1.77