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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 consistent calculated estimate of the cost of producing various crops and to track the change in production costs p acre and per unit over time.

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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 enter budgeting and record keeping an easy task. You can start by substituting our costs and retu estimates with your own numbers. You can also enter them in the ^ z } µ Œ _ } } o µ u v X
2. Marketing. Estimating production costs on a per acre or per unit basis can help you calculate Ç } µ Œ (Œ u break-even prices. Knowing your break-even price to cover operating costs and tota 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 estimat benchmar

¢KŜ ¦yΛØŜNăλúè 2ŦLŘI·K2ℚă Ö2ăűă I·yŘ NŜűdzNyã ŜăűλY I·űŜă are based on economic costs, not accounting costs. All NŜă2dzNŎŜă I·NŜ ØI·fdzŜŘ I·ú I· Y I·NJ⌈ŜúNJI·ûŜ 2NJ á2LJLJ2NúdzyΛűè Ö2ăűε¢ LyΓLJdzú LJNJλÔŜă I·NŜ ōI·ăŜŘ 2y˘ŘI· yŔ Ŝú I·ú ŏ ⌋ Ď Ğ 2 ’ Ř

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.

The cost of labor used in this publication includes a base wage, plus a percentage to account for various payroll ΰΙ·ÈŜă

annual hours of use for the current crop and for all crops on the farm is also shown.

Table 5

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SOUTHCENTRAL IDAHO

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SOUTHCENTRAL IDAHO

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TABLE 1. CONTINUED

	Quantity/Area	Unit		
CASH OVERHEAD COSTS				
General Overhead			15.00	
Land Management Fee			275.00	
Property Tax			50.00	
Property Insurance			0.00	
Investment Repair			1.52	
TOTAL CASH OVERHEAD COST/SPACE			341.52	
TOTAL CASH OVERHEAD COST/BU			1.71	
TOTAL CASH COST/SPACE			978.65	
TOTAL CASH COST/BU			4.89	
NET RETURNS ABOVE CASH COSTS			-78.65	
NON-CASH OVERHEAD COSTS (Capital Recovery)			54.65	
TOTAL NON-CASH OVERHEAD COST/SPACE			54.65	
TOTAL NON-CASH OVERHEAD COST/BU			0.27	
TOTAL COST/SPACE			1,033.30	
TOTAL COST/BU			5.17	
NET RETURNS ABOVE TOTAL COSTS			-133.30	

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SOUTHERN IDAHO

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TABLE 2. COSTS PER ACRE TO PRODUCE FIELD CORN

Operation	Operation Cost per Acre							Labor Hours per Acre	
	Custom	Chemical	Fertilizer	Irrigation	Machinery	Labor	Total	Labor (Hr/A)	Labor Cost
Preharvest:									
Irrigation Water									
Tillage								0.30	8.06
Hauling and Spreading Manure			0.00	0.00	0.00	0.00	0.00	36.00	36.00
Crop Insurance	0.00	0.00	0.00	0.00	20.00	0.00	20.00		
Irrigation									
Irrigation									
Applying Fertilizer									
Seeding and Hauling									0.0
Planting & Applying Inoculant									
Applying Herbicides									
Cultivating								0.12	3.17
Chemigation									
General Preharvest									
4-Wheeler Use	0.13	3.60	0.14	0.17	0.00	0.00	3.91		
Service and Fuel Truck								0.02	0.59
TOTAL PREHARVEST COST	1.67	105.57	29.66	17.04	342.54	43.25	538.06		
Harvest:									
Custom Combine								0.00	0.00
Crop Hauling								0.00	0.00
TOTAL HARVEST COST	0.00	0.00	0.00	0.00	0.00	78.00	78.00		
Interest on Operating Capital							21.08		

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SOUTHCENTRAL IDAHO

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TABLE 2. CONTINUED

Operation	Operation Type	Change in Labor Cost per Area			Annual Labor Cost
		Per Produced Unit	Capacity	Equipment	
CASH OVERHEAD:					
General Overhead					15.00
Land Rent					275.00
Management Fee					50.00
Property Tax					0.00
Property Insurance					1.52
Investment Repair					0.00
TOTAL CASH OVERHEAD COST/ACRE					341.52
TOTAL CASH COST/ACRE					978.65
NON-CASH OVERHEAD:		Per Produced Unit			
		Area Equipment	Capacity		
TOTAL NON-CASH OVERHEAD COST		535.68	54.65		54.65
TOTAL COST/ACRE					1,033.30

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TABLE 3. MONTHLY COSTS PER ACRE TO PRODUCE FIELD CORN

	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	OCT 19	Total	
Preharvest:																
Irrigation									5.68	17.04	22.72	44.62	17.04		112.78	
Tillage									7.30	16.70					24.00	
Hauling and Spreading Manure				36.00											36.00	
Crop Insurance								20.00							20.00	
Irrigation Water Assessment								47.50							47.50	
Irrigation Repairs								16.96							16.96	
Applying Fertilizer									52.15						52.15	
Seed and Haul									1.09						1.09	
Plant & Apply Inoculant									150.14						150.14	d
Applying Herbicide									10.28	10.28					20.57	
Cultivate									8.27						8.27	
Chemigation											12.20				12.20	
General Pickup Use																
4-Wheeler Use	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	3.91	
Service Truck Use																
Fuel Tax										0.06	0.06	0.06	0.06	0.06	0.06	0.06
TOTAL PREHARVEST COST	60.98	2.60	2.60	2.60	2.60	2.60	87.06	237.51	29.92	37.52	47.22	19.64	2.60	538.06		
Harvest:																
Custom Combine														42.00	42.00	
Crop Haul														36.00	36.00	
TOTAL HARVEST COST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	78.00	78.00		
Interest on Operating																
			0.40	0.42	0.43	0.45	0.95	2.34	2.51	2.73	3.01	3.12	3.59	21.08		
TOTAL OPERATING COST/ACRE	61.33	2.97	2.99	3.00	3.02	3.03	3.05	88.01	239.85	32.44	40.25	50.23	22.76	84.19	637.13	
CASH OVERHEAD																
General Overhead			1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	15.00
Land Rent															275.00	
Management Fee	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	50.00	
Property Tax															0.00	
Property Insurance								1.52							1.52	

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

ANNUAL EQUIPMENT COSTS

Yr	Der	i	Yr	Cap	Ch Overhead i	pt	i
19	Ch	i			elPlow 20'	37,000.00	15 3,552.2
19	Ch	15 2,955.3,955.3820 208.175.00	3,955.				

TABLE 6. RANGING ANALYSIS CONTINUED

Net Return Per Acre Above Total Cost For Fi

PICE ($/lb)	YIELD (lb/acre)						
Corn	150.00	155.00	160.00	165.00	170.00	175.00	180.00
3.75	-470.80	-452.05	-433.30	-414.55	-395.80	-377.05	-358.30
4.00	-433.30	-413.30	-393.30	-373.30	-353.30	-333.30	-313.30
4.25	-395.80	-374.55	-353.30	-332.05	-310.80	-289.55	-268.30
4.50	-358.30	-335.80	-313.30	-290.80	-268.30	-245.80	-223.30
4.75	-320.80	-297.05	-273.30	-249.55	-225.80	-202.05	-178.30
5.00	-283.30	-258.30	-233.30	-208.30	-183.30	-158.30	-133.30
5.25	-245.80	-219.55	-193.30	-167.05	-140.80	-114.55	-88.30