

Enterprise Budgets Series: 1 of 3 Crop and Livestock Enterprise Budgets

What Are They and Why Do Producers Need Them?

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Chile Field, Deming, NM. 2020. (NMSU photo by Josh Bachman)

WHAT IS AN ENTERPRISE BUDGET?

An enterprise budget has been defined as “the basic building block of costs and returns of growing crops or raising livestock” by the New Mexico State University (NMSU) Cooperative Extension Service (NMSU, 2011). Enterprise budgets generally represent typical farming or ranching situations for a specific region. NMSU’s enterprise budgets are associated with a particular county within the state.

Each enterprise budget represents only one crop or livestock production activity and is calculated on the same per unit basis, such as per acre, so producers can easily compare multiple enterprises they may be operating. For example, a producer could grow wheat and sorghum so a budget for each crop can be developed. Enterprise budgets typically include detailed listings of the physical resources and inputs required for production, such as land, labor, fertilizer, fuel, or machinery, and the costs of those inputs and resources.

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THE NEED FOR BUDGETS

Producers need to be able to estimate returns and costs associated with their farming and ranching operations. Enterprise budgets allow them to estimate potential returns and the money they will need to pay for inputs required to grow their crops and raise their livestock. The difference between revenues and costs can be used to approximate the net returns that a producer might expect for a particular enterprise. To producers, it is better to estimate returns and costs before planting their crops. In 1907, NMSU had already recognized the need for the budget by introducing a course entitled “Farm Accounts,” which stated that “a producer must know whether the producer is losing or gaining money as a result of his/her operations, not only as a whole but each crop and herd or individual of that herd must be made to answer searching questions of profit or loss.”

WHY ARE ENTERPRISE BUDGETS IMPORTANT?

Knowing Costs and Returns

A detailed accounting of costs and returns allows a producer the opportunity to identify potential areas that need additional management consideration. For example, on the revenue side, an enterprise budget could be used to identify prices or yields needed to meet a targeted net return, e.g., “break-even.” Alternatively, on the cost side, the budget can allow the producer to identify inputs where costs should be more carefully examined.

Farm Planning Tool

Producers often look for ways to increase their income by introducing new crops or developing new livestock operations. Exogenous factors such as market forces, climate changes, and government policy provide impetus for change. In such cases, published budgets will assist producers in exploring new production possibilities. Budgets can help producers estimate potential costs and returns for new crops

or livestock operations. For example, a producer with traditionally grown crops such as chile, cotton, wheat, or alfalfa may consider planting pecans on their farm. The investment will be huge, and before planting pecans, the producer should have a good idea about how much it will cost and what they might expect in terms of revenues. An enterprise pecan budget can help.

Evaluate Farm Performance

Using published enterprise budgets, producers can compare their farming performance to other producers in their county if the budgets with multiple producers’ performances are developed on average. New Mexico budgets have developed a “typical” operation with “above-average” management. They are not developed using averages, so producers need to be careful about comparing operations. However, U.S. Department of Agriculture budgets allow producers to look at averages. If producers find where they are performing, such as average, above, or below performance, then they have an opportunity to change their farming practices to achieve the best performance by reducing cost items and increasing their yields or find the best marketing route to give the best price of their products.

Data for Special Events

Budgets are also basic data sources for compensating producers’ incomes in case of special events, such as natural disasters, liquidating farms, accidents. State governments, including the state legislature, lenders, insurance companies, real estate, bankers, and food processors, also find a need for crop and livestock budgets. These farm-supporting institutions benefit from the detailed knowledge of farm costs and returns so that producers know how they are doing in their business. For example, crop insurance is one of the important financial incomes to producers in case of natural disasters such as severe drought, flood, or wildfire. Crop

insurance companies would pay accurate insurance premiums to producers when a natural disaster damaged a specific crop. Financial institutions and appraisers may be interested in budgets for compensation producers.

Example of Enterprise Budget

Appendix 1, page 4, presents an example of the published budgets developed by the NMSU Cooperative Extension Service. In part 2 of the series, we will explain how to interpret the budget items in the table.

If a producer wants to know about detailed enterprise budget information, please visit the website

<https://costsandreturns.nmsu.edu>

and should contact an enterprise budget specialist by emailing agcon@nmsu.edu phone or by calling 575-646-3215.

REFERENCES

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APPENDIX 1

CENTRAL REGION MEDIUM COW/CALF BUDGET 2013

	BREED HERD SIZE CULL RATE	100 15%	COW to BULL	20	CALF CROP PERCENT ¹ REPLACEMENT HEIFER'S KEPT	85% 15
VALUE OF PRODUCTION						
	QUANTITY	WEIGHT	PRICE²	VALUE	VALUE PER COW	
STEER CALVES	43	515	\$1.47	\$32,175	\$321.75	_____
HEIFER CALVES	28	495	\$1.39	\$18,921	\$189.21	_____
CULL COWS	30	900	\$0.70	\$18,900	\$189.00	_____
CULL BULLS	1	1200	\$0.85	\$1,020	\$10.20	_____
FEE HUNTING	1			<u>\$5,000</u>	\$50.00	_____
TOTAL	101			\$76,016	\$760.16	_____
VARIABLE COSTS						
1. FEED COSTS	UNITS	QUANTITY/PERCENT	PRICE	COST	VALUE PER COW	
	TON	28.00	\$250	\$7,000	\$70.00	_____
HAY	AUY	30.0%	\$43.32	\$0	\$0.00	_____
STATE	AUY	40.0%	\$21.60	\$2,160	\$21.60	_____
FEDERAL LEASE	AUY	30.0%	\$0.00	\$0	\$0.00	_____
PRIVATE(Owned)	AUY	0.0%	\$0.00	\$0	\$0.00	_____
PRIVATE(Leased Grazing)	TON	4.02	\$300	\$1,205	\$12.05	_____
SALT & MINERAL	TON	15.00	\$485	\$7,275	\$72.75	_____
PROTEIN SUPP	TON	0.00	\$0	<u>\$0</u>	<u>\$0.00</u>	_____
OTHER						_____
TOTAL				\$17,640	\$176.40	_____
2. OTHER VARIABLE COSTS				COST		
VET AND MEDICINE				\$1,540	\$15.40	_____
LIVESTOCK HAULING				\$509	\$5.09	_____
HIRED LABOR				\$1,500	\$15.00	_____
OPERATING COSTS-EQUIP & MACH				\$1,419	\$14.19	_____
OPERATING COSTS-VEHICLE				\$2,128	\$21.28	_____
RANCH MAINTENANCE				\$2,480	\$24.80	_____
BEEF CHECKOFF				\$70	\$0.70	_____
PURCHASED LIVESTOCK				\$6,000	\$60.00	_____
TOTAL				\$15,646	\$156.46	_____
3. INTEREST ON VARIABLE COSTS						
SUM OF VARIABLE COSTS X MONTHS BORROWED						
X INTEREST RATE PER MONTH						
ANNUAL INTEREST RATE				6.00%		
NUMBER OF MONTHS BORROWED				6	VALUE PER COW	
				\$999	\$9.99	_____
TOTAL				\$34,284	\$342.84	_____
OWNERSHIP COSTS				\$41,732	\$417.32	_____
CASH COSTS	Annual Capital Recovery⁴ (At Replacement Value):			Represents 65% Asset Ownership⁵ VALUE PER COW NEW VALUE		
Taxes & Insurance				\$5,624	\$56.24	_____
Overhead				\$3,000	\$30.00	_____
Total				\$8,624	\$86.24	_____
NON CASH COSTS						
Purchased Livestock				\$3,485	\$34.85	_____
Machinery & Equipment				\$5,491	\$54.91	_____
Housing & Improvements				\$6,366	\$63.66	_____
Interest on Retained Livestock ⁶				\$7,618	\$76.18	_____
Management & Operation Labor (6% of gross returns)				\$4,561	\$45.61	_____
Total				\$27,521	\$275.21	_____
TOTAL FIXED COSTS				\$36,145	\$361.45	_____
TOTAL CASH AND VARIABLE COSTS				\$42,908	\$429.08	_____
TOTAL COSTS				\$70,429	\$704.29	_____
RETURN ABOVE TOTAL CASH COSTS				\$33,108	\$331.08	_____
RETURN ABOVE TOTAL COSTS				\$5,587	\$55.87	_____
BREAKEVEN CALCULATIONS						
	VARIABLE COSTS	TOTAL COSTS				
REQUIRED AVG. CALF PRICES CASH COST (cwt)	\$79.87	\$99.96				
REQUIRED AVG. CALF PRICES TOTAL COSTS(cwt)	\$79.87	\$164.07				

1) Calf crop is defined as the actual number of calves sold divided, by the total number of cows (assuming all cows were exposed).

2) Prices represent 2013 price projections from Cattle Fax, Doanes reports for New Mexico feeder cattle cash prices.

3) Market prices include commissions, brand inspections, beef council, yardage, feed, and insurance

4) Annual capital recovery is the method of calculating depreciation and interest recommended by the National Task Force on Commodity Costs and Returns Measurement Methods.

5) The 35% reduction in asset values which represent a mix of new and used machinery.

6) Interest on average investment.