

Enterprise Budgeting

Quick Notes...

An enterprise budget is a listing of all income and expenses associated with a specific enterprise.

Use of an enterprise budget:

- comparison of competing enterprises.
- calculating returns above variable or total costs.
- analyzing break-even price and yields.
- comparison of production techniques.

One of the most basic and important production decisions is choosing the combination of products or enterprises to produce. An enterprise is defined as a single crop or livestock commodity that actually produces a marketable product. Some examples of different enterprises are:

1. Cow/Calf
2. Feeder Cattle
3. Sheep
4. Corn for Grain
5. Corn for Silage
6. Alfalfa Hay

What you produce determines the profitability of the business. Enterprises are the basic

building blocks for a farm plan. By analyzing revenues and expenses associated with individual enterprises you can determine which enterprises might be expanded and those that should be cut back or eliminated. A manager may also want to compare profitability of one production technique with another technique (e.g. minimum till and conventional tillage practices). Choose enterprises which meet the goals and objectives of the farm/ranch family.

An enterprise budget is a listing of all estimated income and expenses associated with a specific enterprise to provide an estimate of its profitability. A budget can be developed for each existing or potential enterprise in a farm or ranch plan. Several budgets could be developed for a single budget to represent alternative combinations of inputs and outputs. Each budget should be developed on the basis of a small common unit such as one acre of corn, wheat, hay, etc. or one head of livestock. This permits comparison of the profit for alternative and competing enterprises. Great care should be taken when preparing the budgets. The assumptions require much information, thought, and analysis.

Enterprise budgets can be organized and presented in several different formats, but they typically contain three sections:

1) income/receipts; 2) variable or operating expenses; and 3) fixed expenses.

How To Develop An Enterprise Budget

The first step is to estimate total production (output or yield) and expected output price. The estimated yields and prices should be what you expect under normal conditions. Be as realistic as possible.

The second step is to estimate variable costs. Variable costs are just what they sound like - they vary with the amount of product you produce. These are the out-of-pocket costs that must be incurred if the enterprise is produced or grown. Some examples of variable costs are: hired labor; repairs; feed; supplies; vet. medicine; fuel; seed; etc.

The third step is to assess fixed costs. Fixed costs will occur and will stay about the same no matter how much you produce, or, in most cases whether or not you produce at all. Some examples of fixed costs are: depreciation; taxes; insurance; etc. At times the proration of such charges are quite difficult, particularly when more than one crop enterprise is involved. Land charges are generally based on one of three acceptable methods: 1) interest opportunity based on current value of land; 2) owner rental income; or 3) typical cash rent charge (market rent).

The last step is calculating net receipts. Net receipts represent that income which is left for the farmer/rancher and family to live on, pay debt, invest, or save.

Break-Even Analysis

Break-even analysis is a useful tool in enterprise analysis. The break-even point occurs when total receipts equal total costs. Break-even analysis can help you answer questions like: "What are the break-even prices at various yields?" and, similarly, "What are break-even yields at given prices?" The break-even formulas are:

Break-even Yield = Total Costs divided by Total Production (Yield)

Break-even Sale Price = Total Costs divided by Sale Price

Through a study of combinations of break-even prices, the farm/ranch manager can form reasonable expectations of changes necessary to obtain a price and yield combination that will cover projected total costs.

The biggest limitation to enterprise budgeting is a lack of information. These budgets deal with future actions and it is difficult to make accurate estimates regarding future markets, input prices, yields, etc. Historical data provides a primary estimate to establish initial levels of budget input data. Utilize the most accurate information obtainable to complete an enterprise budget. Estimates of prices, costs, yields, etc. will be imperfect; however, decisions must be made on the best estimates available. Failure to budget due to insufficient or imperfect data accomplishes nothing.

Example Enterprise Budget for Corn Production (1 Acre)

Item	Value per acre
Income:	
150 bushels at \$4.00 per bushel.	\$600.00
Variable costs:	
Seed	\$30.08
Fertilizer and lime	77.25
Chemicals	23.48
Machinery fuel and repairs	17.75
Irrigation expense	20.00
Custom Harvest Expense	39.50
Labor at \$6 per hour	42.00
Miscellaneous	5.00
Interest on variable costs (10% for 6 months)	12.75
Total variable costs.	\$267.81
Income above variable costs.	\$332.19
Fixed costs:	
Machinery depreciation, interest, taxes, and insurance . . .	\$39.46
Total fixed costs.	\$ 39.46
Total costs.	\$307.27
Estimated profit.	\$292.73

Example Enterprise Budget for Cow/Calf Production (One Head)*

Item	Value per acre
Income:	
Steer calf (0.45 hd at 560 lbs at .68)	\$171.36
Heifer calf (0.35 hd at 540 lbs at .62)	117.18
Cull cow (0.15 hd at 1000 lbs at .40)	60.00
Total	\$348.54
Variable costs:	
Purchased Feed	\$ 25.00
Pasture Lease	25.00
Crop Residue.	7.50
Hay (1.5T x \$60/ton).	90.00
Federal Lease	60.00
Veterinary and medicine.	15.75
Repairs - fences, buildings, equipment	23.05
Machinery expense	4.50
Hauling and marketing.	7.70
Labor.	30.00
Miscellaneous.	5.00
Interest on variable costs (10% for 6 months).	14.67
Total variable costs.	\$308.18
Income above variable costs.	\$ 40.36
Fixed costs:	
Insurance.	\$ 15.55
Depreciation - bull.	12.00
Depreciation - fences, buildings, equipment.	23.30
Interest on breeding stock.	76.40
Interest on fences, buildings, equipment.	22.61
Total fixed costs.	\$149.86
Total cost.	\$458.04
Estimated profit (loss).	\$109.50

*Assumes a 90 percent calf crop, 15 percent of herd replaced each year with raised replacement heifers.

- Sources:
- 1) Business Management in Agriculture - Bart Eleveld, Oregon State University and Richard Carkner, Washington State University.
 - 2) Identifying Costs of Production - Norm Dalsted, Colorado State University.
 - 3) Farm Management - Ronald D. Kay, McGraw Hill Book Co.

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