

11 Key Management Decisions Made Easier Using the Agricultural Budget Calculator (ABC)

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The Agricultural Budget Calculator (ABC) is a free online program to aid you in developing farm enterprise budgets. The program can be accessed at <https://agbudget.unl.edu/>. Online and in-person training sessions can be accessed at <https://cap.unl.edu/abc>. The base ABC program guides you in developing economic and cash enterprise budgets. Once developed, ABC can use the enterprise budget data to create several reports that can be useful for decision-making. In this article, we identify 11 questions you may have that ABC can assist with.

1. *What price do I need to receive for my crop to cover my operating costs? To cover my cash costs? To cover my total costs of production?*

After specifying the crop, ABC prompts you in identifying your field operations and the machinery/equipment and operating inputs used in each field operation. Labor, fuel, depreciation, investment charges, land, real estate taxes, etc., are identified so that all operating and ownership costs are accounted for. An economic report (including opportunity costs such as owner labor and investment) and a cash report can be printed. Each includes the breakeven cost of operation that must be obtained to cover operating, ownership, and total costs of production. These break-even numbers will give the farmer an indication of his/her marketing targets. **Bonus:** the sensitivity section allows you to specify up to a 100% increase and decrease in breakeven prices or breakeven yields on either an economic or cash expense basis.

2. *How do I allocate my whole-farm overhead costs to my enterprises so I can have a more accurate break-even figure?*

It is easy to overlook farm overhead expenses when determining break-even costs on an enterprise basis because of the time involved in compiling them and the often perplexing job of allocating those costs by enterprise. ABC allows you to simply estimate a cost per acre for each enterprise or to identifying each overhead cost (accounting, legal, office, utilities, etc.). Any proportion of each overhead expense can be automatically allocated effortlessly to individual enterprises based on number of acres or percentage of total revenue created by each enterprise. Alternatively, you can allocate each overhead category, however you choose, to your enterprise budgets with ABC keeping track of the dollars remaining to be allocated.

3. *Should I purchase the equipment and pay the operating costs to do a farming operation OR should I have it done by a custom operator?*

ABC prompts you to input relevant data (e.g., price and salvage value of the machinery and equipment, labor, fuel use, field efficiency, cost of capital, etc.) and then returns the cost of operation on a per acre basis. ABC uses agricultural engineering formulas to estimate many of the input values if you do not have the data readily at hand. The total cost per acre can then be compared with a custom rate to see which decision will save you the most money. **Bonus:** you can easily print the operating and ownership costs per acre for each piece of machinery and equipment used in the enterprise budgets.

4. *How much will my expected returns vary with changes in my projected yield or price?*

As part of your sensitivity analysis, ABC develops a table indicating expected net returns as commodity yield and/or price increases or decreases, in 5% increments, up to a 25% change. Negative expected returns are backgrounded in red to give you a visual picture of the impact of price and yield risk.

5. *How can I easily compare a base crop enterprise with alternative crop enterprises to see what prices and yields are required to match the net return?*

In the report/analysis section of ABC, you can compare a base crop with up to four alternative crop enterprises to see what crop yield or commodity price is required to equate the net income of each alternative crop enterprise with the base crop.

6. *How can I easily create a list of inputs I need to purchase for the upcoming production season?*

After your enterprise budgets have been created in ABC, you can easily print out a list of all inputs and quantities required for the next production season and the projected total cost of each input.

7. *Can ABC help me plan my monthly labor requirements and costs?*

Using data from your enterprise budgets, ABC can be used to print a monthly labor requirement table by farming operation. The table will include each employee you have identified, the projected number of hours worked each month on each enterprise, and the cost of that labor.

8. *Can I weigh my financial risks associated with potential lower prices, a crop loss or disaster from enterprise budgeting?*

A risk analysis module is built into the ABC program that provides an opportunity to view yield or price risk exposure values for corn and soybean production in Nebraska, in combination with crop insurance coverage levels, including historical data provided by crop reporting district. Additional crops will be added here as data becomes available.

As an example, if an enterprise budget for corn is prepared using a 180-bushel yield with returns showing a positive per acre net return of \$200, the risk module will allow you to enter “what if’s”, varying the yield or price along with various crop insurance levels. If only 100 bushel is raised with a selected 75% crop insurance coverage level, with additional marketing estimates added in, ABC provides an evaluation of the change in per acre and total projected net revenue for the crop enterprise. This ABC program feature also provides a look at how various crop insurance levels can cover a percentage of revenue losses based on price risk for corn or soybeans for the budget year.

9. *What does the marginal productivity of my crop yield need to be to make it profitable to add one more unit of fertilizer?*

We will shortly have the option to create a marginal productivity table within ABC that will show you the marginal yield increase needed to profitably add one more unit of fertilizer at various fertilizer and commodity prices

10. *I need a cash flow statement to determine my borrowing needs and to provide cash need information for my marketing plan. Can ABC help with that?*

A cash needs report will be soon available based on when inputs are used in your production cycle. You will be able to identify in ABC when you plan to purchase those inputs or identify if they are already in inventory. After adjustments as to when cash is expected to be received and spent, a cash flow statement is ready for management decision making and loan procurement. **Bonus:** a projected profit and loss (P&L) statement can also be generated combining farm enterprises. With the addition of a soon-to-be-completed livestock enterprise budgeting module, a cash flow and projected P&L statement can be made all-inclusive for the whole farm or ranch.

11. *Can I easily check the sensitivity of input price changes to the projected net income of each enterprise and identify how input price changes favor one enterprise over another?*

Plans are to include the opportunity for you to examine the impact of input price increases or decreases and see how those fluctuations affect the relative profitability of each enterprise.

The Agricultural Budget Calculator program is designed to be a user-friendly enterprise budgeting tool and more. It works well now for crop enterprise budgeting, including some the analysis or decision-making tools already operational. As its development continues with the addition of more analysis features, the ABC acronym as well as its title could be updated to ABCD, to better portray it as an Ag Budget Calculator for Decision-making. We're interested in your feedback on ABC. Stay tuned for more and the addition of the livestock enterprise budgeting component.

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