Enterprise Budgets for Small Farms

OK. So what are enterprise budgets exactly?!

Good question! Enterprise budgets are a **farm business management tool** which project the costs and returns of a specific activity (ie: growing a vegetable crop or raising livestock) over a specified period of time (typically annually).

[WATCH: Enterprise Budgets Webinar (April 14, 2017)]

They are both a **physical** and **financial** plan for raising and selling a crop or livestock enterprise. As a physical plan, enterprise budgets list types and quantities of production inputs and track crop yields. From a financial perspective, they also assign costs to inputs related to producing that crop and track revenue generated by each.

These enterprise budgets are **economic budgets** (rather than cash budgets) which incorporate both monetary costs and 'perceived' non-cash costs, or opportunity costs, into the expenses of raising any particular crop. Opportunity costs are essentially the cost of using a resource based on what it could have earned if it had been used for the next best alternative. For example, you buy a tractor for $10K, your opportunity cost would be the investment income that amount of money could have generated if you had purchased bonds with it instead. Or, your wages foregone by working on your own farm rather than earning an income working on a neighbour's farm.

These budgets have three main components: **Revenue, Variable Costs & Fixed Costs** which interrelate to determine **Net Returns** or the profitability of any given crop or livestock enterprise or *Net Return = Total Revenue – Total Cost.*

Here's a brief primer on where this data is coming from.

Revenue: this is earned income for goods or services sold off your farm.

Revenue = (Average price of the product) x (Total marketable product yield for the year)

Variable Costs: these costs are related to inputs that change with your level of production in the short term (ex: seeds, labour, soil amendments, etc.)

Variable Costs = (Average unit cost of an input) x (Total quantity used for the year)

Fixed Costs: these cost are associated with inputs that do not change based on level of production; aka: fixed assets which have a useful life of longer than 1 year (ex: cost of buildings, land, tractor, etc.). Since fixed costs are often incurred as a lump-sum cost, they have to be amortized into an annual cost which essentially distributes the cost of the tractor over its useful life. To estimate annual fixed cost for an asset you add the depreciation expense and interest expense, where depreciation measures the loss of value of an asset over time and interest measures the interest paid on loans or the opportunity cost from an alternate investment.

Annual Fixed Cost = Depreciation Expense + Interest Expense

Depreciation Expense = (Purchase Price – Trade in Value) / Useful Life Years

Interest Expense = (Current Interest Rate) x (Depreciation Expense)

While the enterprise budgets take care of these calculations it is still helpful to know what's going on behind the scenes.

Most of a farmer's fixed assets are shared between crops or enterprises within a single farm. This means that once annual fixed cost is estimated for a fixed asset, such as a tractor, the cost then needs to be allocated between the various farm enterprises that require its use – which the enterprise budgets allow you to manage with ease.

I'm with ya. Now, how am I supposed to use enterprise budgets to guide business decisions?

Basically, by using these enterprise budgets, farmers should be able to assess the profitability of individual crops within their diversified farm. More so, they are a powerful management tool that can help you make strategic decisions for your business. Here are a few ways they can support your planning and decision making:

Financing: you can include enterprise budgets in a business plan to support your financial projections or they can provide a credible financial basis to obtain financing to implement infrastructure / development projects.

Pricing: Once you use enterprise budgets to help you determine the cost of production, you can confidently set a retail price for each crop that includes a percentage of markup that (ideally) allows for an income to the farmer.

Production Practices: These budgets allow you to determine where key costs (labour, tractor, etc.) are occurring and by identifying these costly inputs you can make informed decisions to alter specific production practices to be more efficient. Additionally, these budgets enable you to benchmark your specific enterprise against the regional average production cost for SW British Columbia. If you find that your enterprise is less profitable than the benchmark and you can to consider changing your production practice to produce this enterprise more efficiently.

Product Mix: Enterprise budgets give you a way to compare profitability and labour use among your various crops or enterprises (ie: apples to oranges / arugula to onions). With this comparative knowledge, you can change up how much of each enterprise to produce or reallocate resources to more profitable crops / livestock.

Bonus points for using these budgets to find your **Break Even Analysis** for your farm in start up or to calculate the break even point on a new equipment purchase. Double bonus points if you use them to run **'What If' Analyses** for best and worst case financial scenarios.

Sweet! Where can I learn more & download these enterprise budgets?

Kwantlen Polytechinc University's Institute for Sustainable Food Systems has created 20 crop and 4 livestock enterprise budgets for anyone to download and use for their farm.

You can find all of the files here: http://www.kpu.ca/isfs/enterprise-budgets

Start by reading through the **'User Guide'** to better understand how to use the static (PDF) and dynamic (Excel) for vegetable vs livestock enterprises. Think you've got it? Get them downloaded and crack open those spreadsheets!

Wait. How do I use them though? These excel spreadsheets look pretty complicated…

Let's back up a minute. To start with, good **Record Keeping** is the foundation for any enterprise budget. You'll want to track you and your employees time spent on your farm on a per crop basis. You'll need to use all of your expense and sales data from the season as well (which I'm sure you're keeping as a part of your good bookkeeping and financial management practices).

There is a detailed level of information that you need to maintain for these enterprise budgets to provide meaningful data. Are you willing to commit to that level of record keeping? It doesn't have to be a monumental task that you tackle all at once, rather, consider integrating this farm business management tool into your planning over the course of a few years. In the first year, choose 3-5 of your highest (or lowest) earning crops that you will plan to keep data on for the season and once the season is over, dig into your records to create your enterprise budgets from there. In the following year select the another 3-5 crops to run an enterprise analysis on. See? Not so overwhelming!

On the technical side of using these dynamic enterprise budgets, each is pre-populated with the regional data for a specified crop/ livestock as raised in SW British Columbia. Once you choose a crop or livestock enterprise to analyze, you will work your way through each sheet within the workbook entering data specific to your farm operation – the spreadsheets are setup to perform all the calculations for you. Here's a quick cheat sheet for which cells you should enter data into:

Yellow shaded cells – Enter your own numbers.

Green shaded cells – Contain built-in formulas that should not be altered.

Grey shaded cells – Summations or titles, and should not be altered.

For a more in-depth 'How To,' Ermias demonstrates entering data into a vegetable enterprise budget starting at the 1 hour mark in the webinar recording.

Who developed this awesome farm business management tool?

Researchers at the Institute for Sustainable Food Systems (ISFS) at Kwantlen Polytechnic University Richmond campus worked with local farmers to develop this set of enterprise budgets. The team that worked on this project was Ermias Afeworki, Wallapak Polasub, Caroline Chiu and Dr. Kent Mullinix.

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