Introduction
An enterprise budget provides the best means to evaluate the potential profitability for a given enterprise or farm income source. Developing an enterprise budget allows an operator to identify typical costs, both variable and fixed, and probable returns associated with the production and marketing of a product.

The enterprise budget spreadsheet, “Corn Production Pershing County, Nevada - 2013,” estimates the typical income and costs of producing dented corn in Pershing County, Nev., (specifically in the Lovelock Valley area). It should be used as a guide to estimate costs and returns for corn production with conventional tillage and anhydrous ammonia as the nitrogen source.

Categories or items most often used in enterprise budgets are income/receipts, and variable and fixed costs. Income/receipt values are calculated from estimated production levels and expected prices to be received from the product produced. The cost components vary among operators and often are unique to each farming situation. This can make it difficult to determine which cost components should be considered for a given decision. All are included in the attached enterprise budget so operators can determine which are applicable to their situation and select them accordingly.

Variable costs change directly with the crop grown and the number of acres produced. Variable costs include fuel, oil, repairs, fertilizer, chemicals, custom work, over-head and interest on operating capital (Hinman, 1990).

Fixed costs include machinery/equipment costs, taxes and land charges. Management fees are normally included as a fixed cost. Since the cost of management for the enterprise remains the same, regardless of the enterprise production level, it is considered to be “fixed” (Hinman, 1990).

Total costs are calculated by adding variable and fixed costs. The goal of the operation should be to earn a profit above total costs every year.

Assumptions
Production data was gathered from on-farm corn production research conducted in the Lovelock Valley in 2012. The following assumptions refer to the Excel spreadsheet, “Corn Production Pershing County, Nevada - 2013.” Materials and practices may not be applicable to all situations, as management and cultural practices often vary among growers within the region.

Land and Irrigation
This budget is based on a farm consisting of 1,000 total acres. Flood irrigation is the primary irrigation system and costs $27.32 per acre per year for members of
the Pershing County Water Conservation District.

**Production**
Yield production was estimated at 150, 175, 200 and 217, which was the yield average of 2012 test plots, bushels per acre. The excel spreadsheet allows users to input their expected yields.

**Seed Costs**
Seed costs were adjusted for planting rates of 28,000, 32,000, 34,000 and 34,500 seeds per acre. Seed price is based on traited (genetically modified) seed corn with 80,000 kernels per bag and includes seed treatment (seeds treated for disease/insect pest control) at low levels.

**Fertilizer Costs**
The fertilizer amounts and costs utilized in the spreadsheet assume only maintenance application of fertilizer needed in a corn-alfalfa rotation. Nitrogen application was based on an expected yield of 200 bushels per acre. Fertilizer prices vary over time and by areas. It is recommended that producers check with local suppliers for current prices.

**Chemical Application/Costs**
The following chemical application and costs were calculated for standard application rates as determined by the weed pressure present in the research test plots.

One post-emergence application:
- 2,4,-D - at a rate of 16 ounces per acre per application.
- Glyphosate - at a rate of 40 ounces per acre per application.

**Machinery/Equipment and Fuel/Repair Costs**
Machinery cost estimates, fuel estimates and cost calculations are based on information from the "Farm Machinery Cost Estimates." See the reference online at: http://faculty.apec.umn.edu/wlazarus/documents/machdata.pdf.

The machinery and equipment charge (cost per acre) is equal to the machinery cost (new cost) assuming an eight- or 16-year useful life and using straight-line depreciation, 6 percent interest on average value, 0.5 percent insurance cost on average value and 1 percent housing cost on average value. Salvage values are based on the American Society of Agricultural Engineers (ASAE) formulas. Machines are all assumed to be new and in the first year of use (except for pickup trucks). Fuel calculations are based on the fuel requirements for each implement and the tractor, multiplied by the number of times the implement was used per year. Lubrication costs are assumed to be 10 percent of fuel costs (Williams, 2011).

**Other Variable Costs**
Miscellaneous costs include the following: other supplies, utilities, soil tests, small tools and crop insurance.

Interest on capital is calculated for six months at a 6 percent interest rate.

**Custom Hire**
Custom hire charges on the spreadsheet include the cost of planting and harvesting the crop. These costs will vary among growers within the region. The publication, "Custom Rates for Agricultural Operations 2010-2011, University of Idaho, Bulletin 729," (http://www.cals.uidaho.edu/edcomm/pdf/BUL/BUL0729.pdf) may help producers estimate how much they should be charged or paid for specific agricultural services.

**Fixed Costs**
The following fixed costs are reflected in this budget: labor, land and management.
**Labor Costs**
Part or all of the labor cost may be a variable cost if paid labor varies with acres farmed. It is a fixed cost if labor costs do not change with acres farmed. Labor costs are calculated at a rate of $10.00 per hour, but may be adjusted to specific areas.

**Land Costs**
While the owner-operator obviously will not experience a land rental cost, the cost represents the minimum returns the owner-operator must have to justify growing this crop on the land him/herself. This net rent return represents the income the owner-operator forgoes by producing this crop him/herself rather than renting to a tenant who produces the crop (Hinman, 1990).

**Management Charge**
If a consulting firm or other entity is being used to help with management decisions, then this expense would be reflected in the management charge. If the owner-operator is making management decisions, then the owner-operator should be receiving additional compensation over the average labor charge.

**Discussion**
"By understanding the basic concepts and formats of an enterprise budget, a producer is better able to analyze short- and long-run fiscal impacts and evaluate profitability, as changes in break-even prices occur due to input cost and market pressures. Using enterprise budgets developed by the University of Nevada Cooperative Extension provides producers with a tool to evaluate current and potential profit centers in their agricultural operation" (Riggs, Curtis, Harris, 2005).

Click on this link to access the interactive spreadsheet, [Corn Production Pershing County, Nevada - 2013](http://example.com).

The attached excel spreadsheet, “Pershing County Corn Production Budget – 2013,” was formatted after the Ohio State University Extension’s, “Corn Production Budget - 2012,” (Ward and Sulc, 2011) with permission of the author. (via email, 3/14/2012)

**References**


Budgets in Agricultural Operations, University of Nevada Cooperative Extension Special
Publication 05-12.