

Description of Wisconsin Fresh Market Vegetable Budgets April 2008

Introduction

There are 1480 farms covering 24,883 acres that produce fresh market vegetables in Wisconsin (Census of Agriculture, 2002). There is an average of 16.8 acres per fresh market vegetable farm. These farms produced fresh market vegetables with a value of \$26,533,000 in 2005 (National Agricultural Statistics Service, 2006).

The Wisconsin fresh market vegetable budgets were prepared using the Agriculture Budget Calculation Software (ABCS). This program allows the user to enter the tasks involved in production along with the inputs required by each task. For example, the sweet corn planting task requires the inputs of sweet corn seed and starter fertilizer.

The ABCS program calculates the costs associated with using tractors, implements, and durables. The costs calculated are energy use, labor, repairs, ownership interest cost, and a depreciation charge.

There are 23 fresh market vegetable budgets in this data set. These fresh market vegetable budgets include the following: asparagus, beet, broccoli, Brussels sprouts, cabbage, cauliflower, cucumbers, eggplant, garlic, honeydew melon, leek, muskmelon, onion, peas, Bell pepper, pumpkin, salad greens, snapbean, summer squash, sweet corn, tomato, watermelon, and winter squash. For the purpose of allocating overhead expenses, each fresh market vegetable budget is allocated 0.73 acres (16.8 acres per fresh market vegetable farm divided by 23 fresh market vegetable budgets).

Fresh market vegetable returns can vary, sometimes considerably, by region, farm, and marketing situation. These budgets are best used as a “side-by-side” comparison tool to analyze financial costs and benefits for producing different fresh market vegetables.

Since there is no estimate of business overhead included in the budgets, users of the budgets should consider the expenses for office supplies, telephones, accounting, legal fees, business trips, income taxes, and liability insurance.

Each of the fresh market vegetable budgets contains the following: costs and returns, a risk analysis (value of production less total costs as price and yield vary), a sensitivity analysis (break-even yields as price and total costs vary), and machinery expenses.

Product Values and Yields

Vegetable values were obtained from the National Agricultural Statistics Service’s annual vegetables summaries. The annual values from 2000 to 2007 were used to obtain the average values used in the budgets. Where possible, the value for Wisconsin was used. In other cases, the United States value was used.

Product Values and Yields (Cont.)

The yields for asparagus, snap beans, Brussels sprouts, cauliflower, eggplant, garlic, honeydew melon, Bell pepper, pumpkin, summer squash, winter squash, and tomato were based on Wisconsin fresh market vegetable yield data. The yields for the other vegetables were obtained from the 2000 to 2007 National Agricultural Statistics Service's annual vegetables summaries. Where possible, the yield for Wisconsin was used. In other cases, the United States yield was used.

Inputs

Fertilizer and pesticide prices for 2008 were obtained from farm supply dealers in Wisconsin. Fertilizer and pesticide rates followed University of Wisconsin-Extension recommendations.

The 2008 seed prices used in the budgets were the average of prices from three national companies that sell commercial vegetable seeds. Planting rates followed University of Wisconsin-Extension recommendations.

Farm Machinery

Farm machinery prices for 2008 were from "Farm Machinery Cost Estimates for 2007" (University of Minnesota Extension Publication). Other prices were obtained from Market Farm Implement of Friedens, Pennsylvania.

Labor Rates

National Agricultural Statistics Service's "Farm Labor" reports were used to obtain some hourly rates.

Other Rates

The 2008 rates used for diesel fuel, gasoline, and LP gas were summer cost projections made by the United States Energy Information Administration. Rates for electricity were obtained from Wisconsin sources.

A marketing charge of 40 hours at \$10.00 per hour was included in all budgets.

All vegetable budgets include a land charge of \$72.00 per acre and a management charge of 6% of gross income.

A 30 ft X 30 ft shop and equipment storage building valued at \$27,900 was included in all budgets.

A half ton, 300 HP pickup truck valued at a purchase price of \$20,875 was included in all budgets. A mileage charge of 500 miles at \$0.505 per mile was included in each budget to estimate costs for use on the farm and transport of the product to market.

Other Rates (Cont.)

The labor hours per acre for hand harvesting of the fresh market vegetables were obtained from fresh market vegetable budgets from various states. These states include California, Kentucky, Mississippi, Missouri, Ohio, Oregon, and Virginia. Average hours per acre for hand harvesting were usually used.

The tomato budget includes a charge of \$76.13 per acre (0.13 acres per hour) for hand plant staking.

The cauliflower budget includes a charge of \$168.30 per acre (0.12 acres per hour) for hand leaf binding of cauliflower heads for blanching.

An 8 ft X 4.5 ft utility trailer pulled by a 25 HP tractor was included in all budgets. The utility trailer had 12, 1.9 bushel harvest crates used for placing the harvested products into for transport back to the farm and to the market site.

A 8 ft X 14 ft cooler valued at \$15,696 was included in the budgets for asparagus, beets, broccoli, Brussels sprouts, cabbage, cauliflower, leek, onion, peas, salad greens, and sweet corn. There were 8.03 acres allocated to overhead in the budgets for the use of the cooler.

Most of the vegetable budgets include a 2-row cultivator used two times for weed control.

A trickle irrigation system covering one acre with an annualized valued of \$935 was included in the eggplant, Bell pepper, and tomato budgets.

A traveling gun irrigation system was included in the sweetcorn budget. The traveling gun irrigator was valued at \$5,540 and the irrigation well and pump was valued at \$26,500.

Vegetable Transplant Production

Vegetable transplants were produced on the farm for broccoli, cabbage, cauliflower, eggplant, Bell pepper, leeks, onion, and tomato. Some of the costs associated with the production of the vegetable transplants are as follows:

1. The hand set seeding of transplant trays was calculated at 15 minutes of labor per tray for filling the inserts with soil media, planting the seeds into the inserts, and placing them in the greenhouse.
2. The hand watering of transplant trays was calculated at 0.75 hours per watering or fertilization.
3. The cold hardening watering of transplant trays was calculated at 0.75 hours per watering.

A 30 ft X 48 ft greenhouse valued at \$17,438 was included in these budgets. There were 6.57 acres allocated to overhead in the budgets for the greenhouse use.

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Ken Barnett, April 2008

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