

## **Methodological Overview**

This report presents estimated costs of production for 11 vegetable crops produced in one or more of 8 producing areas in Florida for the 1997-98 season. In all, 27 crop-area combinations are included. The cost budgets were constructed using a computerized budget generator program, AGSYS. Technical coefficients used in constructing the budgets were obtained by consultation with individual growers, county agents, and IFAS researchers. The input prices used in conjunction with the technical coefficients were obtained by survey and correspondence with farm suppliers and growers in each of the areas in which production costs are reported.

The budgets presented in this report are intended to reflect the cost of production incurred when production practices that are considered typical for any given crop in a given area are followed. What constitutes a typical production practice for each crop was defined by a consensus of opinion between IFAS personnel and various producers in each production area. It should be emphasized that cost estimates resulting from this process should not be considered as representing the average cost of production in a statistical sense nor should they be considered as necessarily relating to recommended production practices. The intent of these cost budgets is to establish a benchmark within the range of actual costs that could be expected to produce the crop.

Eight budgets reflecting double-crop production practices are included in this year's Cost of Production: Manatee/Ruskin spring tomatoes, Manatee/Ruskin fall watermelons, Southwest spring tomatoes and peppers, Southwest fall cucumbers and watermelons, Palm Beach area spring eggplant and pepper. Double-crop production refers to the practice of planting a "following" crop directly into the plastic mulch-covered beds used to produce an initial crop to utilize residual inputs from the preceding crop. Most commonly, tomatoes or peppers are followed by cucumbers or watermelons but other combinations may occur. The combination of crops produced is generally determined by grower preference. This system of farming is practiced in an effort to recover costs incurred in the production of the initial crop and reduce cost of production of the second crop. Actual production practices for the initial crop, either tomatoes or peppers, are affected very little when double-cropping is used. However, production of the subsequent crop is affected significantly relative to growing the crop independently.

It should be noted that pre-cooling charges no longer appear in a number of budgets. Response from industry reviewers has indicated that these charges are incurred by the buyer, are not included in F.O.B. values, and therefore should not be presented in production budgets. Other changes to note are that supervisory or management labor expense is now reported in fixed costs rather than included with variable labor costs. Also, land rent has been adjusted to reflect net acreage as best possible.

For each crop contained in this report there are four tables that present various types of information. Two tables for each crop are included in the text. The first reports estimated cost of production per acre and per unit, and the second reports estimated net returns for various price and yield combination activity, and a breakdown of fixed and variable machinery and implement costs.

The net return range analyses provide information on how sensitive the estimated net return for any crop is to variations in either yield per acre or price per unit. For each crop, net returns are estimated for 25 price and yield combinations. The ranges for both price and yield are intended to be broad enough to include the actual season average prices and yields obtained by growers in any given area. The following algorithm is used to estimate net returns per acre for twenty-five price yield combinations.

$$\text{Net Return Per Acre} = \text{TR} - [\text{TPC} + (\text{HC} * \text{Y}_j)]$$

where;

TR = total revenue ( $P_j * Y_j$ ) per acre.

TPC = total preharvest cost per acre.

HC = per unit harvest cost.

$P_j$  = range analysis price 1 to 5 per unit.

$Y_j$  = range analysis yield 1 to 5 per acre.

The appendix tables detail costs for both labor input and various types of machinery and implements. For labor, the estimated hours per acre required to perform an operation, or total man hours per acre where specific operations cannot be itemized, and the cost per acre are delineated. Machinery costs are reported for tractors, implements, and a miscellaneous category. The total hours used per acre and estimated fixed and variable costs per acre are reported for each machine or implement.

Fixed machinery costs include interest cost, taxes, insurance, and depreciation. Variable machinery cost include the cost of fuel, oil, and repair and maintenance. Both fixed and variable machinery costs are calculated on the basis of hours of use per acre for each machine or implement. It should be noted that tractor driver labor is not included in the variable cost of machinery, but reported as “tractor labor” in the labor cost table.

**Please make note that due to confidentiality concerns, budget reports for celery and sweet corn grown in the Central Florida and Everglades areas have been discontinued. Questions regarding this decision may be addressed to the authors.**

Finally, in some cases, the total cost figures for various subcategories will not exactly equal the sum of individual cost components due to rounding errors. In all cases, this difference is no more than a few cents.