

paring fruit for packing, packing, loading the fruit into a rail car or highway truck and selling the packed product. In this broad sense the solution is beyond the scope of the study here reported. Although parts of this study are devoted to illustrating how the picking, packing and selling processes can be combined, the major emphasis is on the operation of the fresh fruit packinghouses—especially the determination of cost associated with “efficient” operation and the relationship between these costs and packinghouse size.

The specific objectives of this study are to determine (1) the estimated savings available to the Florida citrus industry if packinghouses shifted from the conventional field box automatic dump method to a bulk handling method without changing scale of operation, (2) the cost relationship of a single-unit packinghouse (a packinghouse having only one complete packing unit) and a two-unit packinghouse (a packinghouse with two completely independent packing units) and (3) economies which might result from packinghouse consolidation and expansion.

## METHOD OF STUDY

### LOGICAL FRAMEWORK FOR CITRUS PACKINGHOUSE STUDY

Packinghouse operations may be divided into two general categories: (1) picking and hauling operations and (2) packing operations. These two categories are independent with reference to rates of output and hours of operation, but they are interdependent with respect to the work methods employed. For example, if the packinghouse is designed to handle fruit in field boxes, it would not be feasible to use bulk handling methods to transport the fruit from the tree to the plant.

Variations in the volume of fruit picked and hauled by an individual firm are achieved primarily by varying the rate of output per hour. Since citrus fruit must be dry when picked in order to keep mold and decay at a minimum, picking generally does not start until after the morning dew has dried—usually between 9:00 and 10:00 o'clock in the morning. Moreover, picking normally stops around 4:30 or 5:00 o'clock in the afternoon. This means that picking is limited to six or seven hours daily. To increase daily volume picked, then, requires increases in output per hour.

Increasing the rate of output per hour in picking and hauling might be accomplished by having workers pick faster and