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PROCEDURES FOR ESTIMATING COSTS AND RETURNS
FOR SUGAR BEETS AND OTHER ROW CROPS

Central New York

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Introduction

Farmers considering sugar beets as a new crop on their farms must individually decide how this enterprise will fit into their businesses. Neighboring farmers with similar physical resources may well come to different conclusions because of their respective abilities with row crops, their present crop and livestock enterprises, and their willingness to innovate and take risks.

Purpose

This statement provides some of the data and procedures which farmers may use in figuring out how sugar beets will fit into their own operations. Every situation will be somewhat different. It is not the intention of this report to develop "typical" or "average" cost and returns statements for some of the common row crops grown in Central New York. Yet, some costs and returns estimates are presented in a companion statement, A. E. Ext. 326, to indicate more fully the common items which must be estimated to develop a cost and returns statement for an individual crop or to compare crops on an individual farm.

Methods of Estimating Costs and Returns

There is more than one way to look at costs and returns. None is clearly best. As a result it may be helpful at the outset to consider some of the alternative ways of figuring the difference between costs and returns following the blank form (Table 1) which may be used in making estimates for your own situation.

Gross returns per acre for a crop depend on only two items:- the yield per acre and the price received. The estimates made for yield and price will have a big effect on the final result one gets in looking at an individual crop or making comparisons between crops. Past experience on yields and prices received are usually the best guides to use in making estimates for the future.

Costs may be divided conveniently into two general groups -- direct costs and indirect costs. Direct costs are those which are paid for in cash or out-of-pocket and specifically used for an individual crop. It is easy to estimate direct costs in most cases. Seed, fertilizer, and spray materials are examples of direct costs which most farmers can figure for the crops they grow without much trouble.

The difference between gross returns and direct costs is the return a farmer has left to pay for the use of his land, equipment, other capital, regular labor and management. It is the cash difference left to cover all indirect costs, the ones not so easily allocated directly to each enterprise. If a flat charge is deducted for the use of land, equivalent to a rental charge, then one has a return for the use of equipment, other capital, regular labor, and management. These two different estimates of net returns reflect what a given crop is contributing per acre to cover the fixed and unallocated costs which every farmer has but does not commonly divide up among his productive enterprises.

Table 1. ESTIMATES OF COSTS AND RETURNS
PER ACRE FOR ROW CROPS

	Sugar beets	Dry beans	Corn for grain	
	<u>Per acre</u>			
<u>Gross Returns</u>				
Yield	_____	_____	_____	_____
Price	_____	_____	_____	_____
Gross return/acre	=====	=====	=====	=====
<u>Direct Costs</u>				
Seed	_____	_____	_____	_____
Fertilizer	_____	_____	_____	_____
Insect spray	_____	_____	_____	_____
Herbicide	_____	_____	_____	_____
Thinning labor	_____	_____	_____	_____
Drying	_____	_____	_____	_____
	_____	_____	_____	_____
Total Direct Costs	=====	=====	=====	=====
<u>Return to land, equipment, other capital, regular labor and operator's management</u>	_____	_____	_____	_____
Land charge (-)	=====	=====	=====	=====
<u>Return to equipment, other capital, regular labor and operator's management</u>	_____	_____	_____	_____

Table 1.
(Cont.)

ESTIMATES OF COSTS AND RETURNS
PER ACRE FOR ROW CROPS

	Sugar beets	Dry beans	Corn for grain	
				<u>Per acre</u>
<u>Indirect Costs</u>				
Growing:				
Labor	_____	_____	_____	_____
Tractor	_____	_____	_____	_____
Equipment and other power	_____	_____	_____	_____
All other	_____	_____	_____	_____
Harvesting:				
Labor	_____	_____	_____	_____
Tractor, truck, auto	_____	_____	_____	_____
Equipment	_____	_____	_____	_____
All other	_____	_____	_____	_____
Total Indirect Costs	=====	=====	=====	=====
<u>Return to equipment, other capital, regular labor and operator's management</u> (From previous page)	_____	_____	_____	_____
Total Indirect Costs (-)	=====	=====	=====	=====
<u>Return to risk and man- agement</u>	_____	_____	_____	_____

To get an estimate of net returns to risk and management, costs associated with using tractors and trucks, planting equipment, harvesters and the like, as well as time spent by the operator and his regular hired help, and the miscellaneous farm costs such as telephone, electricity, farm share of the car, must be estimated.

Estimates of indirect costs are difficult to make. If they were easy and straight-forward most farmers could report how much he makes or loses on each of his enterprises. Here we must rely on our best judgment as to what is likely to occur or what others have estimated their indirect costs to be^{1/}.

The major indirect cost items for growing and harvesting a crop are listed in the second part of table 1. In some cases these may be direct cost items. For example, if custom harvesting or hauling is used, this is a direct cost and can be quickly estimated. Time spent in fitting, planting, and cultivating an acre can be figured reasonably well and then charged at a standard rate per hour. Other items must be figured individually using your own experience or cost estimates made in formal studies.

A return to risk and management may be calculated by subtracting indirect costs from the return to equipment, other capital, regular labor and operator's management. This difference is sometimes thought of as profit or final net return. If other estimates have been correct and indirect costs reasonably allocated, this figure provides a good basis for comparing profitability of different crops. If all crops considered have been treated with similar methods, their relative ranking should be helpful even if the final dollar figures are not necessarily "correct".

In reviewing a set of costs and returns estimates for your own situation ask yourself these questions:

(1) Is the yield figure I used realistic? How much variation has there been around this figure recently? How likely am I to get this yield? Is it above average for the area and by how much?

(2) Where did the price I used come from? Is it an average based on experience? How likely is this price to be stable or rise and fall rapidly? Have I been too optimistic or conservative?

(3) Have I included all the obvious out-of-pocket items in the list of direct costs? Do the figures look right?

(4) How do my indirect cost figures compare with other estimates? Why are they different?

(5) Is the final net return figure different than expected? What is a reasonable range to put around this figure if yields or prices are somewhat different?

^{1/} Stanton, B. F., "A Comparison of Cost and Return Statements for Sugar Beets," A. E. Ext. 321, June 1964.

Stanton, B. F., "Some Estimates of Costs and Returns for Sugar Beets Compared With Other Row Crops," A. E. Ext. 326, August 1964.