

**FARMING MORE EFFICIENTLY** 

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In an extension meeting, the speaker concluded his presentation with the observation that farmers me going to have to be more efficient in order to survive into the next century.

One person in the audience indicated that he had heard the same pitch for the past 30 years, and he just didn't know what else he could possibly do to be any more

We hear a lot about "efficiency," but in many cases there seems to be a lot of confusion as to what it

#### **Productivity**

We can see that the state average corn yields have risen, and milk production per cow has also risen dramatically in the last 20 years.

Some people will say: "Look how much more efficient our farmers have become!"

Unfortunately, this statement could well be at best a half truth. Measures of productivity do indicate some improvement in the efficiency of the use of the acres, the cows, the sows, etc., but taken alone, they cannot be relied upon to indicate much about the survivability of the business.

# Labor, Feed, Reproductive Efficiency

Other measures can indicate strengths and weaknesses which are important to consider as measures of efficiency. "Pounds of milk per person" and "income per person" can indicate something about labor productivity.

"Pounds of feed per pound of pork (poultry, etc.)" and "livestock sales per \$100 of feed fed" are very valuable feed efficiency measures. "Pigs farrowed per sow per year" and "calving interval" are reliable indicators of reproductive efficiency. However, none of these tell the whole story.

## Financial Efficiency

Unfortunately, it is not how much income we have, but how much of that income we have left after we pay the expenses which determines the profitability of an enterprise.

Measures like "income above feed cost" are a step in the right direction. "Cost of producing a hundredweight of milk" (provided that all the necessary adjustment factors can be identified) can be a very reliable guide to efficiency.

A good enterprise analysis should measure financial efficiency in at least three different ways: per unit of production, per unit of labor, and per dollar invested. Each one is important, and all are necessary. They should not be based on gross income, but on a margin-after-cost figure.

Let's look at a simplified example of how we can do this.

# **Gross Margin Analysis**

If we take a crop income per acre of \$300 and subtract variable costs of \$200, we have an enterprise gross profit margin of \$100 per acre.

This figure can be calculated for all crop enterprises on the farm to compare their efficiency per acre.

### Per Unit Of Labor

Suppose the above enterprise used five hours of labor per acre. Dividing the gross margin of \$100 per acre by the 5 hours of labor gives us a gross margin per person hour of \$20 for the enterprise.

Comparing all enterprises by this measure can give us a valid financial indicator of labor productivity for each of them.

#### Per Dollar Invested

Capital efficiency is a vital measure to examine. If this crop enterprise requires a capital investment of \$200 per acre (for machinery,

storage, etc.), then dividing the gross margin of \$100 by the \$200 investment gives us a gross margin per \$1 invested of \$0.50.

# Interpretation

These gross margin figures give us measuring sticks by which we can compare the efficiency of one enterprise relative to others.

In this simplified form, they do not give us the "bottom line" of the business. But they do indicate the gross margin contribution.

If we look at the example crop and assume that there are 100 acres of it, then there is an enterprise gross margin of \$10,000. Out of this, \$4,000 might be required to cover enterprise-fixed costs of machinery replacement, etc.

If \$10 per hour is needed to cover family living/labor, then that takes out another \$5,000. This

leaves \$1,000 as the enterprise contribution to farm overheads.

# Improve Efficiency

Theoretically, the efficiency of this enterprise can be impoved in several different ways:

• Increase the gross margin by reducing variable costs, or increase the income, or both.

• Reduce labor required for the production process.

· Reduce the investment overheads for the enterprise, or spread the same investment over more

These suggestions are not very helpful to a farm operation which is locked into a specific farming system.

I hope that next time we can look at some specific practices which could improve efficiency on

# State Board Protects Farms, Requests Change

HARRISBURG (Dauphin Co.) - The Pennsylvania Agricultural Land Preservation Board has approved easement purchases for six farms in five counties, protecting 936 acres of prime farmland from development.

At its meeting Thursday, the board also approved a motion to request a change in legislation to change the deadline for county farm purchase recommendations to Dec. 31 of each year from the current Nov. 12.

"Considering farms for easement purchase is a long process, and it takes a lot of work," said State Agriculture Secretary and Board Chairman Boyd E. Wolff. "We'd like to give counties every opportunity to get farms into this important program."

Under the Farmland Protection Program, which began in 1989, the state and counties purchase development rights to guarantee that their farms will remain as

agricultural land. Individual landowners apply to county Agricultural Land Preservation Boards.

If approved for possible easement purchase, the county boards may request state funding participation. Counties participate in easement purchases and may purchase easements outright themselves.

Board members voted to ask key legislators to amend existing law so that counties can submit easement purchases through the month of December. Current language requires that funding be set aside only for easement purchases that actually have been finalized. That means that in a calendar year, counties could submit only those purchases that were complete in November so that they could be approved by the board at its December meeting.

Changes in the law would permit carmarking funds for applications received by the Department of Agriculture and signed by the landowner and county affected. Such a change will provide funding to many counties unable to meet shorter deadlines.

Following are the properties approved, listed by county, owner, township, acreage and purchase

 Adams — Robert J. and Darlene B. Dayhoff, Mount Joy. Township, 125 acres, \$187,920.

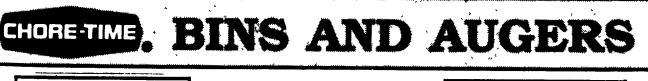
• Centre — R. Jay Summers, Ferguson Township, 188 acres, \$159,973.

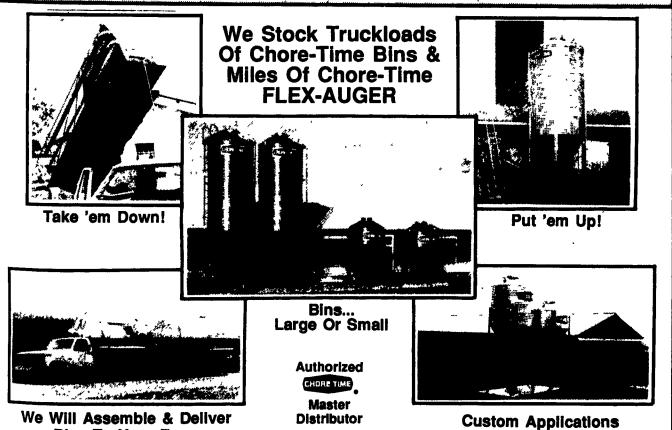
• Lancaster — Dennis J., James H., and Joyce E. Drager, East Donegal Township, 110 acres, \$433,000.

 Lebanon — Guy T. and Carol E. Harnish, North Cornwall Township, 90 acres, \$192,274.

• Lebanon — Dennis E. and Sharon L. Wampler, South Annville Township, 140 acres, \$294,000.

• Westmoreland — Gilbert Hutter and Family, Mt. Pleasant Township, 282 acres, \$564,870.





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