

ECONOMICS OF GROWING SUGAR BEETS

By: Russell Howes <sup>1/</sup>

I have spent 23 years in the Saginaw Valley area of Michigan; for ten years as a vocational agricultural teacher, eight years as a County Agricultural Agent and as a District Farm Management Agent for five years. During this period of time, I have become very interested in the production of sugarbeets.

I got first hand experience in raising sugarbeets on untilled land back about 1951. Our Future Farmer chapter at Merrill had a sugarbeet contract and raised some good sugarbeets but it started to rain in the fall so the only way we harvested any sugarbeets was by a horse lifter and piling beets on a wagon to haul out of the field. We sank in mud clear up to our knees. We almost gave up on sugarbeets; but, instead I persuaded the school to tile the land by saying they had to have drainage for their football field. The next time we raised beets we had real good results and less trouble. I have been economically interested in the sugarbeet ever since. There is nothing like making some money on the raising of a crop to ease the pain of production.

In my work as a District Farm Management Agent for Michigan State University Cooperative Extension Service, I had occasion to study many Saginaw Valley Farms. Part of my management work was to return Business Analysis reports to farmers and to talk to them about possible changes for more profit. Whenever I visited a farm that was raising sugarbeets to capacity (that is, around 25%) I found they seemed to have better returns or profits. I decided to make a special study to see if my theory was correct. I, also, wanted to compare farms with sugarbeets in the rotation with other cash grain farms. Here are the results I obtained by studying Telfarm records.

Telfarm is a management oriented record program that now has around 1500 farmers enrolled. It has been in operation since 1964. The farms that included sugarbeets in their rotation from 1964 through 1967 had the following returns:

	Rate Earned - 17% Sugarbeets			
	1964	1965	1966	1967
Labor Income	\$6,329	(\$ 523)	\$3,869	\$9,493
Rate Earned	5.2%	3.2%	5.8%	8.5%

The following results were obtained on cash grain farms during the same period:

	Rate Earned - Cash Grain Farms			
	1964	1965	1966	1967
Labor Income	\$6,097	\$1,121	\$3,008	\$1,138
Rate Earned	11.2%	3.8%	5.4%	2.1%

<sup>1/</sup>District Farm Management Agent  
Michigan State University  
Cooperative Extension Service

Cash grain farms did fairly well in 1964, but have had four bad years since then. In contrast to this, you will notice the farms with sugarbeets in their rotation had rising returns during 1966 and 1967 in contrast to the cash grain farms with falling returns. We do not, as yet, have the results for 1968, but my best sense tells me that with 90¢ corn and \$1.00 wheat and an average yield of sugarbeets of nearly 20 tons, the cash grain farmers had another bad year and the farmers with sugarbeets did much better. I would not need to be an economist to figure this out. You know nature gave us the five senses of taste, smell, sight, hearing and touch. The other two senses we need in order to exist are horse sense and common sense. Both of these senses tell me that sugarbeet farmers did better in 1968 than did cash grain farmers.

Here is what happened to 44 large sugarbeet farmers in 1966:

	Rate Earned - 1966 (Large)	
	<u>25% Sugarbeets</u>	<u>17% Sugarbeets</u>
Labor Income	\$7,350	\$4,283
Rate Earned	7.8%	5.8%

Notice that the farms with 25% sugarbeets in the rotation made \$3,067 more labor income and had a 2% higher return on investment. These are very significant differences.

Here are some of the other differences in organization that showed up in these 14 top farms in comparison to the whole 44 farms in the sample.

1. The 14 farms had less tillable acres and less investment (358 acres compared to 442 acres or a difference of 84 acres) (\$235,182 compared to \$280,568 or a difference of \$45,386).
2. These farms had less total expense but more expense per tillable acre. They were farming less acres but spent more per acre. (\$117.19 to \$104.36 or a difference of \$12.83).
3. These farms produced more gross value per acre. (\$22.92). This difference may sound small per acre but multiply it by 358 acres and you have over \$8,000.
4. These 14 farms had a \$3100 higher labor-management income; they had a higher net income (about \$1300) and generally made more money out of farming than did the average Saginaw Valley farmer.

In thinking over the above reasons why these 14 farmers made more money out of farming, I came to the conclusion that it might be good horse sense to study what they did so I checked over these farms very intensively and came to these conclusions. Here are some good Success Prescriptions. A good doctor diagnoses what is wrong with a person and then writes a

prescription to cure the ailments. Here are a few prescriptions for farming success:

1. Adequate Size -

A farm must be well balanced to make maximum use of labor and equipment. I found that these farms had low labor and machinery cost per acre. They still had size enough to do the job of making a good living for a farm family. This will now take 350 to 450 acres with one-quarter sugarbeets in the rotations.

2. Adequate Resources -

It takes a lot of capital to run one of these modern farms. First of all, 400 acres of land in the Saginaw Valley is worth \$250,000 or more plus it takes a \$60,000 machinery and equipment investment. Now, you are ready to go get your short term capital for producing crops. This is another large investment. It should be close to a full time job just to manage this huge investment but the owner also does a lot of the work. These farmers should cultivate excellent relations with the bankers. They will see them quite often.

3. High Crop Value -

Everyone of these farms got top yields of crops. They realize that there are so many fixed costs in farming that you are working a large percent of the time to cover these costs. It is just the extra \$20 per acre that makes the profit. Choose as high a value crop as possible and then use all known good production practices to get top yields and returns.

4. Top Yields -

These 14 farmers had better yields of all crops:

	<u>41 Saginaw Valley Farms</u>	<u>14 High Sugarbeet Farms</u>
Corn	80 bu.	87 bu.
Beans	21 bu.	25 bu.
Wheat	53 bu.	56 bu.
Sugarbeets	15.7 tons	16.1 tons

This extra production per acre was worth about \$10 per acre average or would make a difference of \$3500 on 350 acres.

5. Seek the Best Markets -

These farmers raised some certified seed and some other contract crops to obtain the best possible market. Farmers are going to have to seek better markets for their products. A very insignificant difference in market price makes or breaks profits.

Let's figure this out for a 400 acre farm raising 100 acres of each crop:

<u>Crop</u>	<u>Acres</u>	<u>Yield</u>	<u>Bushels</u>	<u>Dollars</u>
Corn	100 A. x	100 bu. =	10,000 x 10¢ =	\$1000
Beans	100 A. x	30 bu. =	3,000 x 20¢ =	\$ 600
Wheat	100 A. x	60 bu. =	6,000 x 20¢ =	\$1200
Sugarbeets	100 A. x	20 T. =	2,000Tx 50¢ =	<u>\$1000</u>
Total difference				\$3800

This would be \$3800 difference in profits.

#### 6. Control Costs -

These farms kept costs under control. They spent money where it was needed such as for seed and fertilizer and kept costs down on machinery and equipment investment and also on labor.

Remember that the manager of a modern large farm is making decisions for the commitment of one-half million dollars in resources. These had better be wise decisions. Wise decisions cannot be made without adequate records. A doctor does not prescribe for a patient without consulting his references and records. A wise farmer keeps the best possible complete records so he knows what each crop is doing for him. He then uses these records for management decisions to increase his income. His records are the backbone of his business. The successful farmer of today must be an excellent farm manager so he knows how to take the ingredients of land, labor, and capital investments and put them together in the right proportions so as to run a successful farm business.

#### Literature Cited:

- Agricultural Economics Report No. 86 - November 1967  
"High Sugarbeet Acreage Analysis Study of Telfarm  
Cooperators For 1966"
- Agricultural Economics Report No. 98 - September 1968  
"Business Analysis Summary For Saginaw Valley Cash  
Crop Farms, 1967"
- Agricultural Economics Report No. 99 - September 1968  
"Business Analysis Summary For Cash Grain Farms, 1967"