March, 1962 A. E. Ext. 190

SUGAR BEETS IN NEW YORK STATE ?

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Why Goods are Produced in Certain Areas

The farmers in an area should, and generally do, produce those things which, everything considered, will bring them the greatest returns for their time after paying for other factors of production. The farmers themselves can control the physical conditions on their farms to only a limited extent, but neither they nor their neighbors can control the major economic and physical factors. These, to a great extent, determine what crops are most suited to an area. The farm operator, if he is to be successful, must adjust to economic and physical conditions and take advantage of such as are in his favor. In general economic terms, those products are produced in an area which have the greatest economic advantage or least economic disadvantage.

Freight rates and location of centers of population have much to do with the decision of what will be produced where. Fluid milk is produced near markets because it is bulky, i.e., has low value relative to its volume and/or weight, and is perishable. Hay is not perishable but is extremely bulky and hence also is produced near the point of consumption. Although sugar beets are bulky and perishable, the sugar is relatively high valued and not very perishable. It therefore tends to be produced in areas distant from consuming centers and shipped into the major markets.

Generally those crops which have limited areas of production, either because of climate or bulkiness and perishability, have an advantage and will be produced in those areas. Producing areas distant from markets of necessity produce things which have high value relative to weight and/or volume and are not very perishable.

In the last analysis therefore, what a farmer produces depends on the alternative opportunities afforded him, and farmers in an area will move to the production of those crops which are the most profitable. Thus the crux of whether or not a crop ought to be produced depends on the returns from that crop to the factors of production compared with other crops.

Sugar beet production in the West is largely the result of lack of other more favorable alternatives. The distance from market precludes production of bulky, perishable products such as fluid milk for any except a local market. Eggs and potatoes have been exported but only in limited quantities with high quality for a premium price. With the problems of potato surpluses, farmers have been encouraged to shift to beets in both Idaho and Minnesota as a less but next profitable use of resources.

California with high yields of long-season irrigated beets averaging more than 20 tons per acre has also been encouraged to shift into beets as a well paying enterprise. Again location relative to market has been important.

In Michigan and Ohio the beets have shifted to those areas where high yields can be obtained. They have not been able to compete elsewhere in the State.

Sugar Consumption and Production

Sugar consumption for all purposes in the United States over the past 30 years has been remarkably stable. The average for the five years 1955 to 59 was 103 pounds of raw sugar per person. The total consumption was 9,181,000 tons. Of this, domestic producers, cane and beet, supplied about 53½ per cent.

This sugar was ordered under the provisions of the Sugar Act as extended by Congress from year to year. Two purposes of the Sugar Act are:

1. to manage supply of this inelastic product to avoid depressing surpluses on the U. S. market and obtain prices "fair to both producers and consumers".

2. to promote export trade of the United States.

The current Act expires June 30, 1962

A proposal was prepared by the sugar industry for the present Congress for a new Act to cover a five-year period and made public in February, 1962. The five-year period instead of one-year acts previously passed is an attempt to get greater stability in the industry. The provisions are based on a 9,700,000 tons estimated consumption for 1962.

This would come from:

Sugar Beets	2,665,000 Tons
Native cane (Fla. & La.)	900,000 Tons
Hawaii	1,150,000 Tons
Puerto Rico	1,200,000 Tons
Virgin Isles	5,000 Tons
Foreign	Balance

This amounts to 61 per cent of the sugar from domestic production, a big increase over the previous 53½ per cent.

There is a 150,000 ton per year growth factor of which 67½ per cent would be from domestic sources. Of this domestic allocation 75 per cent would be allocated to beet sugar production.

The proposal has allocations made of all the acreage for sugar beets except 20,000 per year for new growers and increases in acreage for small producers. There is no certainty that this entire acreage would be made available for establishing a new plant.

Status of the Industry

The history of the beet sugar industry is not one of overwhelming success. It is as large as it is because we elect to permit it to be by means of quotas and tariffs. These place United States sugar prices 2 to 2½ cents above world prices. Even with this protection there have been built in the United States only 4 new factories since the World War II, while 25 have been abandoned. There are currently 63 in operation.

There has been extreme variation in beet acreage and sugar production. There was a 10-year decline during and after the war. During the recent 6 years the acreage has increased with most of the increase in the irrigated West and the Red River Valley. Ohio has a 27 per cent and Michigan a 4 per cent increase. The United States acreage as a whole is up from the 1949 to 50 level by 22 per cent (table 1).

Michigan and Ohio Production

In reviewing the sugar beet industry, Michigan and Ohio beet production has been studied since those states are the two "beet" states nearest New York and have more similarity of climatic and locational conditions than any other sugar beet producing states.

Table 1. Sugar Beet Acreage in the United States

State	Acreage Harvested (000)				
	1949-50	1958	1959	1960	1961*
Ohio	18	22	22	22	22
Michigan	66	71	74	68	72
Wisconsin	9	9	6	6	6
Minnesota	62	73	71	81	97
North Dakota	32	38	34	42	47
South Dakota	5	6	6	6	9
Nebraska	54	61	64	69	78
Kansas	6	8	8	9	10
Montana	52	56	53	61	65
Idaho	76	87	88	95	119
Wyoming	34	38	38	42	52
Colorado	123	142	143	155	167
Utah	29	32	31	32	24
Washington	27	34	34	38	55
Oregon	17	19	19	20	21
California	174	188	208	208	238
Other	6	6	6	6	6
Total U. S.	788	889	905	960	1,088

* USDA Reports
Source: Beet Sugar Handbook, Western Beet Sugar Producers, May, 1961

Location of Areas of Production

In Michigan and Ohio the acreages have been retreating from many areas into those with soils particularly suited to sugar beet production. There are no factories in central, western and southern Michigan where once they were numerous. Ohio has seen a similar retreat and retrenchment in area of production.

Sugar beets are particular about soils. The soils now growing sugar beets in Michigan and Ohio are the deep lake-laid clay loams. They are level, easy to work but most are tile drained. There are almost no stones. These soils are some of the most productive in the entire United States.

The competing crops are white navy beans and corn in Michigan and soy beans and corn in Ohio. Crop yields per acre in these areas are: corn, 80 to 100 bushels; wheat, 40 to 50 bushels; white beans, 25 to 30 bushels. There is little livestock on farms in the beet growing areas. Some vegetables are produced.

Number of Sugar Factories

In Michigan 22 factories have been started, but only 5 remain (table 2). Four of these are operated by Michigan Sugar Company. These of course are located in the same areas in which the sugar beets are grown.

None of the Michigan plants give evidence of great profits. Moody's Industrial Manual, 1961, reported that the Michigan Sugar Company had not paid a dividend on its common stock since 1925 and was $7.40 in arrears on its preferred stock dividends as of September 21, 1960.

In a progressive prosperous industry an expansion of the industry can be expected. Michigan sugar beet companies have not expanded, nor have they made capital investments to modernize plants. Only Monitor Sugar Company has done any appreciable amount of modernization, and since this company is a division of Robert Gage Coal Company ascertaining the true facts on profit is difficult.

Table 2. Michigan Sugar Plants

Year opened for operation	City
1838	White Pigeon
1898	Bay City
1899	Holland
	Kalamazoo
	Benton Harbor
	BAY CITY*
	Alma
	West Bay City
	CAIRO*
1900	Marine City
1901	Lansing
	Saginaw
1902	CARROLLTON*
	Mt. Clemens
	CROSSWELL*
	SEBEWAING*
1903	Menominee
	Owosso
	East Tawas
1905	Blissfield
1906	Charlevoix
1920	Mt. Pleasant

* Still operating
Source: Beet Sugar Handbook, Western Beet Sugar Producers, May, 1961

Ohio factories are better off. Four plants have been started; three are still in operation (table 3). Two of the three factories are owned by Great Western Sugar which also makes it difficult to ascertain their real profit status.

Table 3. Ohio Sugar Plants

Year opened for operation	City
1900	FREMONT*
1911	FINDLAY*
1912	Toledo
1912	OTTOWA*

* Still operating
Source: Beet Sugar Handbook, Western Beet Sugar Producers, May, 1961

Factory Operations

A sugar factory, which will involve an investment of about $16,000,000 and can be used for no other purpose, will ordinarily be operated 100-150 days per year. Slicing is from October to January, since after January the sugar content of the beets declines rapidly. It is estimated that the loss after January 15 amounts to 1 pound of sugar per ton of beets per day. With an initiate recovery rate of only 250 pounds per ton, the loss becomes serious quickly.

The ordinary full-time labor force is from 40 to 75 people. During the "campaign" the factory will use from 300 to 400 people. Unless this fits with slack periods for some other industry, a peak demand for labor results with subsequent idleness for all except the few regular employees. The farm labor cannot ordinarily be used in the sugar factory because, during the early part of the "campaign", it is busy harvesting the crop.

A modern plant will slice 3,000 to 4,000 tons of beets per day. For a plant of 3,000 ton capacity about 30,000 acres of beets are required. (3,000 tons per day X 125 days = 375,000 tons; 12 tons per acre X 31,500 acres = 378,000 tons).

Acreage of Sugar Beets

The acreage of sugar beets in both Michigan and Ohio is down from the late 1930's but has increased somewhat in the last 10 years (table 4). The variation from year to year has been extreme.

California and Minnesota have shown striking increases in acreages. They too have had extreme variations from year to year.

There has been no great demand from the farmers for beet acreage in either Michigan or Ohio. Although each of the companies has several field men who spend several months in the winter and spring selling farmers on the growing of sugar beets, allotments have not been met. In Michigan there has been only 1 year in the 6 years 1955 to 60 that its acreage allotment was planted. Ohio, however, had plantings of less than the acreage allotment in only 2 of the 6 years.

Table 4. Acreage of Sugar Beets Planted
Various States
(1,000 acres)

Year	Acres			
	Michigan	Ohio	California	Minnesota
1937	86	29	146	28
1938	128	53	180	38
1939	125	51	172	38
1940	123	45	182	38
1941	100	41	137	30
1942	140	51	183	36
1943	60	21	83	28
1944	69	17	77	27
1945	92	24	104	35
1946	106	29	150	41
1947	84	26	181	41
1948	63	14	163	41
1949	96	31	165	49
1950	121	30	219	64
1951	66	14	154	60
1952	55	14	158	62
1953	56	16	195	69
1954	77	18	204	76
1955	64	19	171	66
1956	70	19	184	67
1957	74	21	207	75
1958	77	23	214	73
1959	78	23	206	74
1960	70	24	216	*

* Not reported
Source: Beet Sugar Handbook, Western Beet Sugar Producers, May, 1961

In neither state has the acreage harvested equaled the allotment in any year in the 6 years and in neither state in 1961, when no acreage allotments limited production, was there any appreciable expansion of the sugar beet plantings (table 5).

Table 5. Acres of Sugar Beets
Michigan and Ohio, 1955-60

Year	Michigan Acres (000)		Ohio Acres (000)	
	Allotted	Harvested	Allotted	Harvested
1955	81.4	60.1	20.2	18.0
1956	77.8	63.4	20.4	16.3
1957	83.3	70.0	22.7	21.9
1958	76.4	71.4	22.5	21.9
1959	78.2	74.0	22.2	21.7
1960	83.3	67.9	23.7	22.4
1961	*	72.2**	*	21.6**

* No allotment
** USDA Reports
Source: Beet Sugar Handbook, Western Beet Sugar Producers, May, 1961

Sugar Beet Yields

Except in the irrigated areas and in Ohio and Michigan where sugar beets have gone off the poorer land, there have been only very moderate increases in beet yields. The changes in Colorado are typical of the irrigated areas. Minnesota yields and changes in yields are typical of the non-irrigated production.

Table 6. Tons of Sugar Beets Produced Per Acre
Various States

Year	Michigan	Ohio	California	Colorado	Minnesota
1937	7.2	5.8	12.9	12.5	10.0
1938	8.2	7.2	12.9	14.6	10.0
1939	8.6	7.8	16.4	10.7	9.3
1940	9.1	9.2	16.8	14.9	9.5
1941	10.8	11.1	16.0	14.7	10.6
1942	9.8	12.4	13.8	12.1	11.2
1943	6.3	6.1	15.4	12.2	8.8
1944	8.8	8.9	16.9	12.2	10.8
1945	8.1	9.9	16.9	12.1	9.5
1946	8.5	9.0	17.1	12.5	10.7
1947	6.7	7.2	18.0	15.2	8.7
1948	8.8	12.3	16.5	13.3	10.8
1949	9.7	10.5	18.5	16.0	10.2
1950	10.4	12.4	19.1	14.9	8.8
1951	11.3	10.0	18.4	15.3	11.2
1952	10.7	11.1	18.3	17.2	9.3
1953	11.8	13.0	19.7	16.9	10.5
1954	12.0	16.2	21.8	14.4	11.2
1955	14.7	15.5	20.3	15.9	12.0
1956	11.0	12.2	20.6	15.7	12.0
1957	13.0	13.2	22.3	17.7	12.7
1958	15.6	14.1	19.0	16.7	12.1
1959	17.5	16.4	23.4	17.0	12.4
1960	13.9	14.6	20.3	17.8	12.6
1961*	16.3	14.2	19.3	14.7	13.0

* USDA Reports
Source: Beet Sugar Handbook, Western Beet Sugar Producers, May, 1961

Location of Acreage Relative to Factories

Because of their bulkiness, sugar beets cannot economically be hauled very far. Most of the production for a plant should be within a 10-mile radius, and little production should be beyond a 20-mile radius. Two-thirds of three-fourths of the beets for the Sebawaing factory in Michigan come from a radius of 10 miles of the plant. In producing areas the beets are usually hauled to the plant by truck at a cost of $1.00 to $2.50 per ton, if hired.

In some areas sugar beets are grown as far as 100 miles away. These are usually loaded on railroad cars and shipped to the factory. They, therefore, have extra handling and freight costs which are sometimes borne entirely by the farmer but are sometimes shared by the company. These costs may run as high as $3.50 to $4.00 per ton.

Costs of Production

In both Ohio and Michigan cost studies are in progress and will be completed later this year.

Estimates by Hoglund and Cook[1/] put the cost for a 15-ton crop of beets in the Saginaw-Thumb area at $129.25 per acre for 1956.

The Farm Economics and Statistics Branch, Ontario Department of Agriculture, Toronto, Ontario set an estimate of $131.76 for a 13.9 ton yield of beets in 1960 in the Canadian Peninsula area.

The costs of production and all financing of the growing costs are generally borne by the farmer although some companies furnish credit at 6 per cent interest for seed, fertilizer, growing labor and harvesting and hauling.

Labor and Equipment on the Farm

The land preparation and fertilizing equipment for beets is the same as that used for most field crops. The planter is an ordinary corn and bean planter fitted with special plates. The beet cultivator is an ordinary mounted, vegetable cultivator.

Much hand labor has been eliminated from sugar beet production. The exception to this, in both Ohio and Michigan, is the labor for thinning and weeding beets. This comes in late May, June and early July. Monogerm seed and precision planting can help eliminate the need for migrant labor for thinning although precision planting has not been perfected yet. Weeding is more difficult. Sprays could control grasses but broadleaved weeds cannot be controlled chemically because beets themselves are broadleaved. The cost of spraying for grasses has been $4.50 to $5.00 per acre. This has not reduced the weeding cost because chemicals now used do not control all weed pests.

The Michigan sugar beet labor comes from Texas and Mexico and is brought in by the beet sugar companies and the canning associations. It is used in other crops in other seasons. The costs are shared by the two groups.

1/ Agricultural Economics 545, C. R. Hoglund and R. L. Cook, Rev. Oct. 1956, Michigan State University.

The custom rate for thinning and weeding, often contracted with the Mexican or Texas families, is about $23 per acre (thinning, $13.00; first hoeing, $5.50; second hoeing, $4.50). Actual costs in Michigan for thinning as determined by growers were $13.40 on 5,592 acres in 1960 and $12.22 on 7,330 acres in 1961. An average of 0.8 acres is thinned per day per worker. The average number of acres thinned during the thinning season per worker is about 12 with earnings being about $11.20 per day.

The harvesting is done by any of several types of beet combines. The combine is owned by an individual, and usually the owners do custom work at $20 to $25 per acre to help defray costs of ownership. A beet harvester costs from $4,000 to $5,000 and has an annual cost of $800 to $1,000. When operating costs for labor and power are added, 75 to 100 acres must be harvested to justify the ownership of a harvesting machine.

Prices of Sugar Beets

The price the farmer received for sugar beets is based on the prices received from sale of sugar and the by-products, pulp and molasses. There is a contractual agreement which binds the grower tightly; however, generally the provisions of the contract are not enforced as a matter of maintaining good will in an industry where producers' good will is essential. Under the contract the pricing is spelled out. The farmer may be paid on the sugar content of his beets or the average content of all of the beets delivered by all growers. He receives an advance of about three-fourths of the value of the beets at harvest time or shortly thereafter but does not receive the full payment until the sugar, pulp and syrup are sold.

One of the complaints of those in the sugar beet industry of Michigan is that the area is subject to dumping of sugar from both the western beet and the eastern cane sources. The low sugar beet prices of Michigan and Ohio compared with California and Minnesota in 1958 and 1959 would indicate that this is true (table 7).

During the war sugar beet prices rose, remained high until the early 50's and have fallen since. They are variable from year to year. In the last few years the price to the grower is down in all beet areas.

Table 7. Returns Per Ton of Beets to Grower (Including Sugar Act Payments)

Year	Michigan	Ohio	California	Minnesota
1939	$ 7.41	$ 7.76	$ 6.99	$ 5.62
1940	8.19	8.88	6.90	6.68
1941	9.17	9.23	8.10	7.54
1942	10.03	8.97	9.66	8.50
1943	13.54	14.36	12.97	11.74
1944	14.78	14.61	13.33	13.04
1945	13.94	14.45	13.20	12.24
1946	16.61	16.45	13.77	13.13
1947	16.03	16.03	14.84	13.58
1948	16.29	14.93	12.65	13.78
1949	14.26	13.98	13.63	14.22
1950	14.19	13.98	13.18	13.64
1951	14.93	15.19	14.01	13.74
1952	15.88	15.29	14.78	15.43
1953	15.29	14.66	13.60	13.92
1954	12.39	11.40	13.17	12.91
1955	13.53	11.99	13.03	13.51
1956	15.43	15.07	13.58	14.58
1957	13.38	12.56	13.26	12.78
1958	13.43	13.14	13.72	13.99
1959	11.01	11.21	13.75	12.41

Source: Beet Sugar Handbook, Western Beet Sugar Producers, May, 1961

Implication for a New York Industry

The general considerations made and the particular references to Michigan and Ohio presented here are cursory. The $16,000,000 that might be invested in a new factory, the $1,500,000 which would be required of farmers for harvesting equipment, the additional investment for new planters and planter adapters, and perhaps $4,000,000 that might be spent in growing beets are outlays that should not be made without reasonable assurance that they can be recovered. Before any sizeable amount is spent on a project of the magnitude of establishing a beet industry, a more thorough study is in order.

On three previous occasions investment was made in beet sugar factories in New York. These were in Rome, 1897 to 1899; Binghamton, 1898 to 1902; and Lyons, 1900 to 1909. These business disappeared with so little trace that it is difficult even to find records. All of these were good-sized plants for their day, but they could not obtain the acreage of beets needed to have returns large enough to warrant the using up of the sunk capital. The plants were moved out of the State. Michigan and Ohio have had factories closed in recent years in areas with at least as good a beet potential as that for the proposed New York area. These failures alone should be warning that a careful look at

the economics of production in New York should be made. The possibility of getting acreage enough to support a factory is in itself dubious. There are probably 80,000 acres within a radius of 20 miles of Auburn on which beets might be grown. Experience in other areas indicates that it is economically unsound to haul this bulky crop much beyond 20 miles to a factory. If a 6-year rotation is followed with 1 year in 6 in beets, there would only be about 13,000 acres of beet land available within the economically desirable range of the factory. A 4-year rotation would make perhaps 20,000 acres available but is shorter than is desirable. Furthermore, this land is already committed to dairy and cash crop farming. Beet production would have to be sufficiently profitable to attract this land from these enterprises.

In Michigan and Ohio the acreage has retreated off land as good or better than that proposed for beets in New York and has moved onto the best land in each of the states. The areas of those states where beets are now grown and can compete have average yields of about 15 tons of sugar beets per acre. Their corn yields are 80 to 100 bushels and wheat produces 40 to 50 bushels. In the New York area corn yields are 50 to 80 bushels and wheat produces 30 to 40 bushels per acre. There is no current information on farm beet yields for the area, but with this kind of grain production it would seem that about 11 or 12 tons per acre is likely. Maine trials produced yields of 16 tons of beets on plots and 8 to 9 tons on field trials.

Based on experience in Michigan and Ohio, cost estimates for New York (table 8, 9 and 10) indicate that the break-even point for sugar beets in this State might be 10 to 11 tons per acre. If yields of beets are only that high, the crop would appear to be too marginal to be likely to attract many growers.

In view of this, almost any of the grain crops, except oats, provides at least as much prospect for profits as do sugar beets. The greatest future competition for beets in the area will probably be milk production. This has been profitable and has been expanding. It can be expected to continue to expand as farmers in less favored areas of New York State find it better to move into other activities.

Even in the good beet areas of both Michigan and Ohio sugar beet acreage is not in great demand by farmers. Each company has its field men who have as one of their principal duties the signing up of acreage. This takes real selling, and the fieldmen in both states have failed to get enough acreage to meet the acreage quotas in every year from 1955 to 1960. In 1961 when there was no acreage restriction, the number of acres planted did not increase appreciably.

Table 8. Estimated Cost For Growing Sugar Beets, New York, 1962

Yield per acre	Growing Cost									
	Land	Labor to grow	Block thin hoe	Tractor	Equip.	Fertilizer and lime	Seed	Over-head	Acreage losses prorated	Total
Tons	$20.00 per acre	6 hrs/A @ $1.50	$23.00/A* thin @ $13.00 hoe @ $ 5.50 hoe @ $ 4.50	4.5 hrs/A @ $1.30	$6.00/A	Fertilizer $1.50 /ton of beets plus lime 0.50/acre	$2.00/A	6% of other costs	7% of other costs	
8	$20.00	$9.00	$23.00	$5.85	$6.00	$12.50	$2.00	$4.70	$5.81	$88.86
9	20.00	9.00	23.00	5.85	6.00	14.00	2.00	4.79	5.92	90.56
10	20.00	9.00	23.00	5.85	6.00	15.50	2.00	4.88	6.04	92.27
11	20.00	9.00	23.00	5.85	6.00	17.00	2.00	4.97	6.15	93.97
12	20.00	9.00	23.00	5.85	6.00	18.50	2.00	5.06	6.26	95.67
13	20.00	9.00	23.00	5.85	6.00	20.00	2.00	5.15	6.37	97.37
14	20.00	9.00	23.00	5.85	6.00	21.50	2.00	5.24	6.48	99.07
15	20.00	9.00	23.00	5.85	6.00	23.00	2.00	5.33	6.59	100.77
16	20.00	9.00	23.00	5.85	6.00	24.50	2.00	5.42	6.70	102.47

* Probably too low for New York's stoney soils.

Table 9. Estimated Cost For Harvesting Sugar Beets, New York, 1962

Yield per acre	Harvesting Cost			
	Digging	Hauling	Over-head	Total
Tons	@ $2.00 /ton	@ $1.60 /ton	6% of other costs	
8	$16.00	$12.80	$1.73	$30.53
9	18.00	14.40	1.94	34.34
10	20.00	16.00	2.16	38.16
11	22.00	17.60	2.38	41.98
12	24.00	19.20	2.59	45.79
13	26.00	20.80	2.81	49.61
14	28.00	22.40	3.02	53.42
15	30.00	24.00	3.24	57.24
16	32.00	25.60	3.46	61.06

Table 10. Estimated Cost and Returns For Sugar Beets, New York, 1962

Yield per acre	Growing Cost	Harvesting Cost	Total Cost	Returns	Profit
Tons				@ $13.00 /ton	
8	$ 88.86	$30.53	$119.39	$104.00	$-15.39
9	90.56	34.34	124.90	117.00	- 7.90
10	92.27	38.16	130.43	130.00	- 0.43
11	93.97	41.98	135.95	143.00	7.05
12	95.67	45.79	141.46	156.00	14.54
13	97.37	49.61	146.98	169.00	24.02
14	99.07	53.42	152.49	182.00	29.51
15	100.77	57.24	158.01	195.00	36.99
16	102.47	61.06	163.53	208.00	44.47

Yet another problem is that of labor. The peak factory requirements from September to January make the factories less than desirable in an area which needs a full-time, year-around industry. The farmers, too, are faced with peak requirements which call for a special kind of migrant labor in late May, June and early July. Developments of monogerm seed and precision planting will help, but without weed control the migrant problem persists. There is no doubt but what chemical control of weeds will come, but as of now, no satisfactory chemical control is known for many of the weeds which vex beet growers, and thus migrant help is still necessary.

As if these problems were not enough, sugar beets are among the more risky crops for farmers to grow. Yields vary greatly from year to year. From 3 to as much as 20 per cent of the acreage planted each year is not harvested. For individual farmer, of course, the proportion of abandonment can be much greater.

Still another disadvantage for New York is the lack of grower experience. Sugar beets, more than most crops, require skill in production. Much of this, in old areas of production, is accumulated by farmers after years of growing the crop. It can be learned otherwise but often expensively. New York farmers have no experience growing beets and no nearby neighbors to learn from.

Price-wise also, New York cannot expect an advantage. The entire State is adjacent to the eastern seaboard via the ports, canals and seaway system. Beet sugar could expect stiff competition from everywhere. It might also suffer from sugar dumping.

It is questionable if the sugar beet industry can be successfully introduced into the State. Consider:

1. the warning of Michigan and Ohio trends in production,
2. the lack of prospect of a cost of production advantage for New York growers,
3. the even less prospect of a sugar price advantage for the State,
4. the presence in the area of a number of alternative enterprises for farmers which give better profits than sugar beets,
5. a very dubious prospect of enough acreage to support a factory,
6. an equally dubious prospect of an acreage allotment, and
7. the risks and disadvantages attendant on the introduction of any new enterprise.