



REPORT OF FEASIBILITY STUDY TASK FORCE  
FOR MARIETTA TRUCK GROWERS ASSOCIATION

Prepared by

Charles Ingraham  
Eugene Cravens  
Warren Lee

W. M. Brooks  
Harold Racer  
Robert Yoder  
E. C. Wittmeyer

REPORT OF FEASIBILITY STUDY TASK FORCE FOR  
MARIETTA TRUCK GROWERS ASSOCIATION

An estimated 143,860 people live within a radius of 10 miles of Marietta; 623,403 people live within a radius of 50 miles, and 32,851,817 within a radius of 250 miles. These consumers attract vegetables from many distant areas via modern transportation.

The Marietta area has long been noted for its vegetable production. Traditionally the production of vegetables in this area has been directed toward early spring and/or early summer production. The labor used for the growing, harvesting and packing operations has come from local sources.

CENSUS AND OTHER INFORMATION

The total acreage of vegetables produced in the seven county area declined from 2188 acres in 1965 to 1686 acres in 1969 according to the 1969 U. S. Census. Sales of vegetables for Washington County was \$394,861 in 1965 and \$407,832 in 1969 according to the census.

Listed below (for Marietta Area) are the latest (1964) U. S. Census of Agriculture figures listed according to county:

VEGETABLES (SWEET CORN & MELONS) HARVESTED FOR SALE

<u>Ohio Counties</u>	<u>Acres</u>		<u>Sales</u>	
	1964	1969	1964	1969
Meigs	1064	856	\$492,780	\$469,377
Gallia	124	13	31,609	5,404
Washington	839	635	394,861	407,832
Morgan	52	17	15,440	9,857
Guernsey	16	55	3,777	12,197
Muskingum	92	98	26,308	28,905
Noble	1	12	250	4,398
TOTAL	2188	1686	\$965,025	\$937,821

VEGETABLES HARVESTED FOR SALE, 1964

<u>West Virginia Counties</u>	<u>Acres</u>	<u>Sales</u>
Pleasant	118	\$24,000
Wood	42	21,784
Mason	168	24,159
Jackson	18	4,785
TOTAL	341	\$74,728

In Ohio, the major problem for a produce packing and marketing organization is usually the lack of a sufficiently large and concentrated acreage to supply the volume needed for efficient operation. A corollary problem is the ready availability of many truckers and other buyers who often offer, for any one week, a more desirable market outlet than that offered through the packing house. In the Marietta area, both of these problems exist for the vegetable products grown and handled.

In 1969, there were 635 acres in vegetables in Washington County with a farm value of \$407,000. If it is assumed that three-fourths of these vegetables were of the items handled by Marietta Truck Growers, this would amount to approximately \$300,000. If we further assume that approximately one-third of this volume was produced by growers who did not, and would not, belong to the association, this would mean a volume potential of about \$200,000 from Washington County to be marketed through the Cooperative. This volume would not be great enough to support an efficient packing and sales operation.

Washington County: Cash Receipts-Vegetables and Fruits		
<u>Year</u>	<u>Dollar</u>	<u>% of Total Agr Income</u>
1940	\$ 519,000	23
1945	1,232,000	21
1950	717,000	11
1955	976,000	16
1960	1,081,000	19
1965	971,000	17

WASHINGTON COUNTY - VEGETABLES		
<u>Year</u>	<u>Acres Harvested</u>	<u>Value</u>
1930	2338	\$778,396
1940	1602	196,356
1950	1540	413,841
1960	1132	411,448

Nearly 40 different kinds of vegetables are grown in Ohio. Most of these vegetables can also be grown in the Marietta area. Some of the vegetables that are currently being produced in the area that might offer some possibility for expanded production are: peppers, summer squash, sweet corn, and melons (primarily muskmelons). Of course, the increased

production of these crops would depend on the marketing potential. Vegetable crops that might be produced as fall harvested crops might include cauliflower and greens. The yields we might expect per acre under Marietta are conditions would be 10,500 pounds of cauliflower and 8,000 pounds of spinach.

Serious consideration should be given to a modern production and marketing approach to a number of crops. For example, sweet corn, with the Marietta Truck Growers determining the variety and planting dates for each member. Marietta Truck Growers owning special production and harvesting equipment. Marietta Truck Growers establishing modern handling equipment such as hydrocooling storage and packaging equipment.

Most of the fresh produce grown in the Marietta area is harvested by hand. Due to the local terrain and relatively small fields most of the fields could not feasibly be harvested mechanically, even if machines were available. Exceptions are sweet corn and potatoes at the present time. High harvest labor costs may make it necessary to discontinue the production of some crops. Harvest labor that is utilized has historically been high school boys and girls and other local labor. After school starts in the fall, harvest labor is at a premium.

#### Potato Situation

Potato growers in the greater Marietta area have some advantages since this is one of the earliest potato harvest areas in Ohio. The area would be considered in the early summer (July and early August) and the late summer (second half of August and September) seasons as classified by the U. S. Department of Agriculture.

According to the 1969 Agricultural Census<sup>1/</sup>, the Ohio potato acreage has decreased in the southeastern area.

<u>County</u>	<u>1964</u>		<u>1969</u>	
	<u>Acres</u>	<u>Production (cwt.)</u>	<u>Acres</u>	<u>Production (cwt.)</u>
Meigs	33	4,468	11	1,398
Washington	214	29,075	186	30,679
Gallia	14	3,323	4	
Morgan	145	19,253	98	19,378
Guernsey	1	350	22	1,772
Muskingum	188	41,796	224	29,246
Noble	7	827	34	2,536
	<u>602</u>	<u>99,092</u>	<u>579</u>	<u>85,009</u>

Considering local markets only, the production of potatoes could increase in the area since the present production is less than 25 percent

<sup>1/</sup> 1969 Census of Agriculture, Ohio, U. S. Department of Commerce, Bureau of Census.

of the potatoes consumed (fresh only) in the 50-mile radius of Marietta. According to the data presented in other parts of this report, over 600,000 people live within the 50-mile radius. On the basis of present per capita consumption figures (120 pounds) per person<sup>2/</sup>, a population of 600,000 would consume about 708,000 cwt. per year. Admittedly about one-half of these potatoes would be in the processed form, but even with the consumption of processed potatoes, fresh potatoes needed in this area could exceed 350,000 cwt. In addition to this market, there are other market possibilities over a much greater area since better highways have been built.

Even if potato production increases in the area, it is doubtful if this will benefit the members of the Marietta Truck Growers Association since most of these potatoes would be sold through brokers or the Ohio Potato Growers Association.

The future development of the potato industry in the area will depend greatly on finding better varieties for the area, development of cultural practices for higher yields, and increased emphasis on better harvesting and handling procedures to minimize grade defects. Potato chippers have expressed interest in purchasing more potatoes from this region, but in view of the current problem and future developments of reconstituted chips as being developed by Procter and Gamble Co., for example, careful consideration must be given to this possible market. The development of new varieties which can be stored at temperatures below 40 degrees F has brought new dimensions to the potato chip industry. In the 1950's and 1960's, when chip buyers were particularly interested in this region, the potato supply was usually inadequate during the summer harvest season.

If the Marietta Truck Growers Association decided to expand the roadside market phase of the business, then more potatoes would be needed, but it is doubtful at this time if this volume (potatoes) would have much effect on the industry in the area. If the retail and wholesale functions were to be expanded, stored potatoes might be hauled to Cleveland and Pittsburg during the off season. Thus providing a two-way haul of potatoes to market and return produce for Marietta Truck Growers retail and wholesale markets.

Plans have been made for the field testing of twelve early varieties on the Huck farm for 1972. Consideration could be given to making available to potato growers the complete information on the new practice of pre-cooling potatoes.

In summary, the potato industry could expand considerable in this area, but the expansion will depend greatly on new techniques to help growers increase yields in the area and new marketing techniques and procedures. More research and extension activities are needed if the industry is to expand.

---

<sup>2/</sup> NFS-137, National Food Situation, Economic Research Service, U. S. Department of Agriculture, August 1972.

Expanding the production of potatoes in the area will have little benefit for the Marietta Truck Growers Association unless the organization makes a major change in market activities.

### Vegetable Production

There appears to be two major factors that must be considered; one is the disease problem that is associated with areas that have for many years produced vegetables such as the Oak Grove area; the second is the labor situation. New labor regulations are also a factor.

The disease problem is one that has been worked at by Marietta producers and chemical companies for sometime, but in that area where vegetables are raised as the primary crop--irrigated, and so forth, it does appear to be a carry over of disease that is not a problem in other less concentrated vegetable production areas. Less concentrated vegetable production sections in the Marietta area do not have this unique disease problem.

In view of current technical knowledge, the lack of disease control indicates either insufficient research efforts, or lack of adequate knowledge, or improper use of disease control methods by growers. There are indications of future increased research on production and marketing problems peculiar to the Marietta area. There are also indications that extension education programs on vegetable production, disease control, or marketing in the Marietta area will be receiving additional emphasis in the future.

Possibly the situation in the Marietta area may be similar to that predicted for Florida in the "Dare" Report. This is a report by the Institute of Food and Agricultural Science, University of Florida a few years ago. This report said that because of the critical labor shortage facing Florida agriculture over the next ten years, crops not yielding to mechanical harvesting will be so expensive that they will become luxury items and be dropped from the average diet. Furthermore, any crop that can't be mechanically harvested by 1980 will probably be replaced by one that can, or by a synthetic food according to this report.

It is doubtful that such a drastic prediction should be made for the Marietta area. However, it is necessary that labor returns be increased. This can be done with the increased use of harvesting aids, labor replacement practices and related ideas.

The part-time vegetable grower is also a factor. Many of these are family farms where the major portion of the family income is from other than vegetables, in many cases the major source of income is off the farm. Tomatoes appear to be the most important crop in this situation. Many of these small (one acre or less) plots are grown in the heavier upland soils. Labor is provided by the family and the plot may be moved to new

ground each year, thus, overcoming two of the problems mentioned above, labor and disease. It appears that for the most part, the part-time producers pack their own tomatoes and sell them to truckers who pick up the vegetables at the farm and haul them to a populated area, and markets them as Marietta tomatoes. In contrast to the tomatoes marketed by the Marietta Truck Growers, these are not inspected or officially graded. Truckers and buyers base their farm price a few cents above the Marietta Truck Growers net farm price. The part-time producer has no marketing cost and uses his own labor to process and pack the tomatoes. This price advantage gives the trucker an opportunity to put "Marietta" tomatoes on the market with a price advantage in competition with Marietta Truck Growers.

This competition can depress prices for all "Marietta" tomatoes. To the part-time farmer, this direct sale is a good deal. He does not have to belong to the Marietta Truck Growers Association, he does not have to haul his ungraded tomatoes to Marietta, he can use his own labor to pack, he can pack his own grade, he can buy used baskets, he can buy his baskets and supplies from the Trucker that takes his tomatoes.

The Trucker can move Marietta area tomatoes at a price below that of association tomatoes, sell baskets and other production and packaging supplies, and in some instances may pay the producer after he has been paid for the product in the market. The lowering of grade standards for Pioneer Brand from U. S. No. 1 to Ohio Commercial is of questionable value, in that it tends to lower the long run quality image of products marketed. This adjustment permitted Marietta Truck Growers members to produce for market a tomato product of lower quality than the competition outside their area and thus Marietta Truck Growers may have earned a reputation in the market for low quality tomatoes. Uniformity of pack can be improved by standardization of variety, closer attention to harvest maturity and care in handling and improved precooling.

#### Marketing Contract

It appears that the directors of the Marietta Truck Growers should reexamine their enforcement policy in respect to their contract. The contract says "the provisions of this agreement shall be in full force--" and "The Grower must deliver to the association all cabbage, tomatoes, cucumbers and peppers grown on land owned or controlled by said growers unless exemption is made from this requirement by the Board of Directors". The association appears to have found itself in the position of selling what its members wanted to sell, when they wanted to sell it through the association. The history of cooperative marketing is filled with obituaries of organizations that have attempted to market the produce of members who used the cooperative when they wanted to sell and deliver what they wanted to deliver, when they wanted to deliver. The limited production capabilities of the Marietta Truck Growers members would indicate that the association should have 100% of the members wholesale production, and that members production should be produce that would contribute to efficient operations of the firm.

### Present Facilities

The packing plant is located in an old building that includes five contiguous structures in downtown Marietta, Ohio. Although total floor space is adequate, the building layout is very inefficient and is generally not well adapted for their operations. Three of the structures (office, packing, and crate storage) are sound structures. If, in fact, the present building lies in the right-of-way of a proposed state highway, relocation is the only feasible alternative for continued operation.

There is some doubt that the "proposed" Highway will in fact follow the announced route. There is some question if the proposed highway will materialize. The report from the highway department said that the site of the Marietta Truck Growers was "not required but needed". A second report was that land would not be purchased before 1975. Permission to remodel or build must be obtained from the city of Marietta under section 55.1101.

Land in the vicinity of the Marietta Truck Growers plant that is owned by the B & O Railroad has been offered for sale. Service by B & O was discontinued several years ago. A civic group has offered to purchase some land in the area for a parking lot. If this materializes, it could improve retail prospects of the Marietta Truck Growers.

The leadership in the city of Marietta appears to have little interest or concern in the future of the Marietta Truck Growers Association.

### Financial Situation

Although no formal appraisals have been made, it is estimated that the present structure could be sold for approximately \$100,000. In addition, the Association's Lowell plant is presently up for sale (asking price \$45,000). Liquidation of both facilities should provide between \$130,000 to \$150,000. The balance needed to complete the expansion program (\$100-\$130,000) would presumably be borrowed from the Louisville Bank for Cooperatives. Their loans are normally amortized over a maximum term of ten years; repayable in equal installments of principal plus interest on the unpaid balance. A seven percent interest rate is believed to be a reasonable estimate (including service fees and purchase of "C" stock in the bank). Thus, payments for each \$100,000 borrowed would be \$17,000 the first year, declining at the rate of \$700 per year to \$10,700 in the 19th year.

It is estimated that remodeling the present structure to provide cold storage space, grading and packing space, retail and wholesale vegetable space and other necessary facilities would cost approximately \$100,000. A low profile steel building could be built across the lot using the main office structure and grading structure, the new structure could be back from Second Street far enough.



The approximate cost estimates for new facilities are as follows:

	<u>New</u>	<u>Remodeled<sup>3/</sup></u>
Land - 14 acres @ \$5,500	\$ 77,000	\$ -0-
Building - 22,000 sq. ft. @ \$7	154,000	100,000
Packing Equipment & Misc.	30,000	30,000
Total Estimated Cost	<u>\$261,000</u>	<u>\$130,000</u>

It should be emphasized that the above are estimated costs.

### Financial Projections

Net cash income was set equal to the amount needed to service loans of \$100,000, \$150,000, and \$200,000. It was assumed that the loan would be repaid over ten years in equal annual installments which would amortize principle and interest at seven percent per annum. An attempt was then made to project sales and cash expenses which would generate the minimum net cash income needed for debt servicing.

Sales projection were based on the assumption that there would be only a modest increase in produce sales, compared to the 1965-1970 period. Expenses would be expected to increase somewhat. However, the increased efficiency of a new or remodeled facility should result in a lower ratio of cash expenses to sales, compared to the present situation. The gross margin on supply sales was assumed to be four to six percent higher than the current eleven percent margin. In general, the assumptions regarding sales, expenses, and margins are probably very optimistic.

If the above assumptions are in the ball park, the projections suggest that in order to service a \$100,000 loan, Marietta Truck Growers Association would have to increase net cash income by at least \$14,500 over the 1965-1970 average, and by nearly \$21,300 over 1970. In order to achieve this objective, supply sales would have to be about double the 1970 volume. Similar performance standards can be derived for the larger loan amounts.

These projections should be interpreted as performance goals which must be met and not as a prediction of what performance may be if a remodeling or new construction program is undertaken.

### General Situation

Mechanization, industrialization, and improved transportation have each contributed to the present situation. The general attitude of the growers in the area has tended to perpetuate the problems. For the most part, growers were reluctant to travel to statewide meetings or other production areas to learn new techniques. Many members were too "busy" to accept responsibilities on statewide committees to develop better educational and research programs for the entire industry. However, several growers in the area have tried to carry these leadership responsibilities.

<sup>3/</sup> Estimates only by Ingraham

The directors are attempting to establish a clear current objective for their firm. This study should provide information for their deliberation, study and exploration to determine the firm's objective. After the objective has been determined, the board must devote time to the establishment of goals. Policies must then be established.

In our dynamic competitive economy the place for the independent local cooperative is most limited. Many cooperatives established since the Marietta Truck Growers have grown and extended their services by one means or the other. Those in the farm supply business have expanded their operations to the point where jointly they own basic supply facilities. Two major competitors of Marietta Truck Growers, Southern States and Landmark, own together with other cooperatives basic fertilizer facilities. Cooperatives such as Marietta Truck Growers handling non-cooperative materials have a similar effect as non-members of Marietta Truck Growers producing and selling tomatoes.

Marietta Truck Growers board of directors and officers have demands made on them that similar size cooperatives association together in larger firms do not have. Examples are monthly financial reports, retirement programs, product analyses, credit and credit source, etc. Thus, there is an increased demand for director involvement; to study data collection, fact analyses, etc.; standard establishment for sound policy discussions.

There is nothing in the recent financial history of the Truck Growers Association on which to base a recommendation to undertake an expansion program which could cost a quarter of a million dollars. It is apparent that some alternative other than continuing the status quo will have to be considered. Two of their problems continuing the status quo will have to be considered. Two of their problems are:

- 1) Sales volume
- 2) Outdated facilities

### SUMMARY

The first alternative to determine is future production to be followed by members and potential members of Marietta Truck Growers. To better utilize the skills of the growers in the area it might be desirable for the growers who currently produce their own vegetable transplants to expand this phase of their production. This could include the production of annual flower plants as well as vegetable transplants. Producing these transplants, often referred to as bedding plants, would require additional labor during the late winter and early spring months. It is also a very intensive type of production during the late winter and early spring. If the building of homes continues to expand the demand for such products will certainly continue to grow. In most operations that produce annual plants for sale, about 25 percent are vegetable plants and the other 75 percent are flowering plants. If growers in the area are not interested in producing these transplants, possibly a source for these plants can be located in another part of the state. However, the demand for high quality plants has been so great that even with increased production the demand has at times exceeded production.

Vegetables that will grow in the Marietta area are nearly unlimited; however, certain crops as previously mentioned will certainly provide the greatest chance for success. Some of the practices already in use by the Association and others that appear appropriate for consideration by the directors follow:

1. Increase production in Washington County. For various reasons the trend in vegetable production in Washington County has been downward, not upward. However, there is some indication that added land with vegetable production capability will become available in the near future. If vegetable production appears feasible and more profitable than other uses of this land, it is probable that production and marketing will increase. Additional information is needed to determine why vegetable production has declined and whether an increase is likely in the future.
2. Handle greater percentage of the acreage in area. Since this decision by each grower is a voluntary one, the increased percentage of all production through out the association will depend on an improved image of the advantages of the Association. In other words, a lower packing charge and a higher sales price for association products than for that of the competition would attract new acreage.

The improving of market quality through improved handling, through the provision of adequate refrigeration and of improved grading and packing equipment should make possible a premium price for Association products.

3. Expand area served. Expand production area serviced by Association to include adjoining counties in Ohio and West Virginia. It is assumed that the Association has already attempted this means of increasing volume. However, it is desirable for this group to evaluate what it can offer to growers in these adjacent areas and to determine whether additional attempts should be made to get this acreage into the packinghouse. Consideration would need to be given to the extra costs of hauling to the packinghouse versus the cost reduction possible in the packinghouse and the possible added returns from centralized sales.
4. Pack and sell additional products. The Association packs and sells primarily tomatoes, cabbage, cucumbers, and green peppers. Since a large acreage of other vegetables exists, it would appear logical to investigate the possibility of expanding the Association's volume through adding other vegetables. Undoubtedly, this was done at sometime in the past and may not apply today. The relative advantages in selling a complete line today may outweigh the disadvantages of arranging for packing and sale of the different additional crops.
5. Sales of additional products. Still another means of increasing sales volume is the addition of products not produced by farmers in the area and/or of produce when local production is not in season. This alternative is already being used to some extent and appears to offer a means of increasing sales volume and of extending the useful season of use, employees, and facilities. A thorough analysis should be made of the costs and benefits that have resulted from this operation. A further analysis should be made of the potential of this type of operation and how it will fit with the present and an expanded packinghouse--produce--marketing operation.

The trend in the United States has been toward larger farms where more mechanizations can be utilized. The farm size and topography in the area may not be suitable for large-scale mechanization at this time. Growers in the area are handicapped due to the lack of research information on new varieties (cultivators). A variety which does well in central Ohio may be worthless in the Marietta area.

The directors of the Marietta Truck Growers Association have tried to include growers from nearby areas but for one reason or another these surrounding growers have shown little interest in having a strong marketing organization in the area. This problem continues to exist.

There are indications that there are opportunities for the Association to expand into the wholesale and retail fruit and vegetables business. Each of these businesses must be operated 52 weeks a year. Each of these new ventures would require full time employees and equipment in addition to that required for the seasonal production now handled.

A recent study of roadside marketing points out: For markets with the larger sales, a substantially greater proportion of total<sup>4/</sup> products sold were comprised of vegetables and "other food" products. For the large markets, as well as for the more profitable markets, more hours of family labor were used, although family labor comprised a smaller proportion of the labor supply than in the other markets.

On the average, all market size groups showed a positive return to management. High sales did not necessarily insure high profit. However, markets with a larger volume of sales returned more to the owner than those with smaller gross sales.

Several differences were apparent when high profit markets were compared with low profit markets. First, total sales and sales per dollar invested were higher among the high profit than low profit markets. Second, apples and peaches accounted for a greater portion of fruit sales among the high profit markets. Third, high profit markets sold meats and cheeses as well as fruits and vegetables and low profit markets did not sell meats and cheeses. Fourth, vegetables made up a much smaller proportion of total sales in the five high profit markets than in the five low profit markets. Fifth, retail margins were greater among the high profit markets and prices charged for fruit were higher in the high profit markets than low profit markets. This different pricing policy in the high profit markets appears to be the most significant single factor other than volume of sales in explaining the difference in profits or losses. This emphasizes the fact that profits from farm retailing are not automatic but occur only when adequate management is applied to the market operation.

The following alternatives are offered to the board of directors of the Marietta Truck Growers Association for their consideration:

1. Liquidate the firm.
2. Combine operations with similar cooperative firms either by consolidations, mergers or acquisition.
3. Expand operations to include other fruit and vegetable producers.
4. Expand vegetable production to a point that will make present type of operation profitable by one or more of the following tactics
  - a. Expand to include vegetable producers in other areas.
  - b. Necessary research and educational programs in the production and marketing of vegetables.
  - c. Board training to permit them to more effectively discharge their responsibilities.
  - d. Advertise Marietta vegetables in consuming market.
  - e. Update and enforce marketing contract.
  - f. Improve quality of product marketed.
  - g. Economically increase efficiency of operation.
  - h. Membership provide necessary capital.

<sup>4/</sup> Hurdham, Bruce & M.E. Cravens, A Business Analysis of 17 Farm Roadside Markets, Res. Bul. 1003, OARDC, Dec. 1967

5. Expand by offering more farm supplies.
6. Concentrate on retail and wholesale business and get out of farm supply business.
7. Expand (operation to include) retail fruit and vegetable business.
8. Expand operation to include garden store.
9. Expand wholesale area served to supply all retail outlets in the area with fruits, vegetables, lawn and garden supplies, etc.
10. Any combination of 2 to 9.
11. Change your name.

If Marietta Truck Growers directors elect to keep the firm in business, they must provide the leadership to motivate their members, directors, and managers to take advantage of Extension and OARDC opportunities. The directors must provide the resources necessary for a director training program, a management development program, and member involvement in educational programs in marketing and production.