



# **Marketing Challenge in Oklahoma's Produce Industry: Grower Perspective**

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In the 1980s, Oklahomans saw a decline in their agricultural industry. Low prices for traditional agricultural commodities, combined with rising costs for inputs and farm equipment, caused financial problems for many Oklahoma farmers and ranchers. Some turned to horticultural production to supplement their farm incomes. Fruit and vegetable production involves risk and requires intensive management. Farmers must not only know how to grow horticultural commodities but also know how to market them. In fact, the decision on what marketing channel to use should be made before the crops are even planted.

In November 1988, surveys designed to identify perceived marketing inefficiencies were sent to 687 produce growers throughout Oklahoma. The producers' names were obtained from the Oklahoma Department of Agriculture. From those 687 mailed, 119 were returned with usable data, resulting in an 18.4 percent response rate. This fact sheet contains the results from the survey of produce growers in Oklahoma.

## **Structural Characteristics**

Traditionally, Oklahoma farmers have produced grains and raised livestock; horticultural production is relatively new to Oklahoma. Although a few respondents reported they had been growing produce for more than 30 years, over 35 percent of the respondents had less than five years of experience in fruit and vegetable production. The 1987 Census of Agriculture reported the average size of Oklahoma produce farms increased between 1982 and 1987; however, most fruit and vegetable enterprises in the state are still relatively small. A majority (56 percent) of survey participants have horticultural operations which are five acres or less.

Approximately 78 percent of the respondents were sole proprietors, 13 percent were in partnerships, and 9 percent were involved in corporate ownerships. Survey results show over one-half (52 percent) of them operate on a part-time basis. It has been argued that being a part-time operator or being heavily involved in other work could limit the time a farmer has to contribute to his fruit and vegetable project on a large scale basis. This could have an effect on his ability to develop into a successful large volume supplier.

The production of fruits and vegetables can be highly profitable for growers because such crops generally provide higher returns per acre than the traditional Oklahoma crops. Fruit and vegetable production requires a relatively high level

of operation and marketing expertise. Growers must realize the risk associated with insects, weather, and disease, and they must also understand the marketing practices involved.

Information concerning the growing and selling of horticultural commodities can be obtained from a variety of sources. A majority of the surveyed growers used some type of informative material to help them run their operations. These ranged from state Extension personnel, fact sheets, and grower publications to other producers' inputs and textbooks. It is recommended that a farmer use production information from area sources as it will contain data that will pertain to local conditions and limitations.

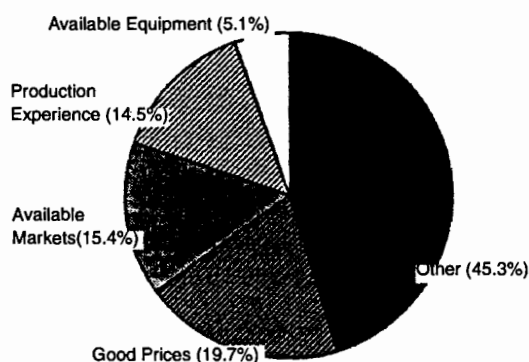
## **Production Motives**

Although financial support is a major reason for growing fruits and vegetables, there are many other explanations that producers have for participating in the horticultural industry. Production motives for producer respondents included good prices (20 percent), available markets (15 percent), production experience (15 percent), and available equipment (5 percent). Interestingly, a couple of respondents reported they grow fruits and vegetables because it creates a use for the excess nitrates that are filtered from the water used in their catfish operations. Other reasons cited for growing produce included extra income, family consumption, available land, and hobby or personal interest. Figure 1 depicts farmers' motives for growing fruits and vegetables.

## **Marketing Practices**

Marketing is a series of business activities that facilitates the exchange of a product between producers and consumers. Fruit and vegetable markets are different from the grain and livestock markets to which many Oklahoma farmers are accustomed. The first decision made by a producer is the type of marketing outlet to employ. There are two general ways in which a grower may sell his product: direct or indirect. In direct marketing, the producer deals directly with the end-user. Examples of direct marketing outlets are farmers' markets, roadside stands, and pick-your-own operations. These outlets require a wide variety of good quality produce; post-harvest services are generally not demanded by the consumers. If indirect marketing is employed, the producer sells his goods to a buyer who may either sell them to an end-user or another

**Figure 1. Primary Reason for Growing Fruits and Vegetables.**



Source: 1989 Oklahoma Fruit and Vegetable Growers' Survey

indirect marketing outlet. Indirect markets include processors, cooperatives, brokers/wholesalers, retail outlets, and terminal markets. These buyers, in addition to demanding high quality produce, require product uniformity, specific packaging, grading, and large volume deliveries.

Because many Oklahoma, produce enterprises are small in size and for other economic and market accessibility reasons, direct marketing was the more popular form of distribution, used by 55percent of the survey respondents. Table 1 shows the outlets used by grower respondents. Farmers' markets were the most frequently used as 24percent of the growers reported selling their crops through this type of outlet. Sixteen percent of the respondents sold produce at roadside stands, and an additional 16percent utilized brokers/wholesalers. Processors and terminal markets were the least used, accounting for 5percent and 0.5percent of the producers. Processors may not be popular because they are located a long way from enterprises, according to survey results. Terminal markets may not be used by many Oklahoma producers because they are located in the large urban areas of Dallas, Kansas City, and Houston. Twenty-three percent of the respondents marketed their crops through "other" outlets. Some sold produce at their place of employment, some sold to neighbors, and others donated their crops to the underprivileged in their communities.

**Table 1. Marketing Outlets Used by Fruit and Vegetable Producers**

Outlet	Percentage of Respondents
Farmers' Market (D)	24.3
Roadside Stand (D)	16.9
Broker/Wholesaler (I)	16.3
Pick-your-own (D)	13.9
Grocery/restaurant (I)	10.7
Processor (I)	5.1
Terminal Market (I)	0.5
Other	12.3

NOTE: (D) = Direct outlet (I) = Indirect outlet  
 The respondents could choose more than one answer.  
 The responses have been weighted so that percentages add to 100 percent

SOURCE: 1989 Oklahoma Fruit and Vegetable Growers' Survey

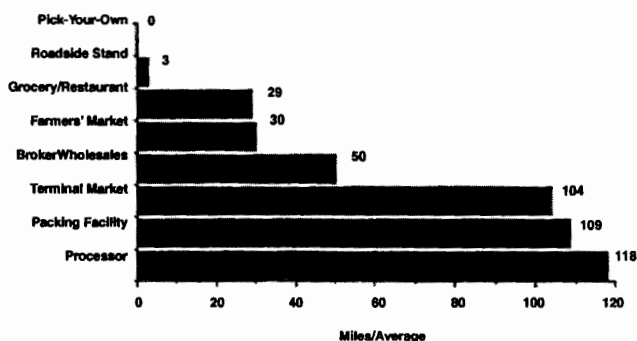
## Distance from Markets and Transportation Means

As mentioned earlier, most produce operations in Oklahoma are not very large in size. Small producers tend to encounter problems with indirect-marketing because they cannot individually satisfy large volume demands. Indirect markets are also not easily accessible to them. Survey results showed that direct marketing outlets are, on the average, closer to respondents' farms than are the indirect ones. Average distances (in miles) from respondents' operations to specific markets are shown in Figure 2. The longest distance commodities traveled was 800 miles to a processing plant. Terminal markets were also a long distance from some enterprises with the farthest being 410 miles away. Long distance travel can increase the chance of internal damage from transportation stress which tends to decrease the shelf life of product. Average miles traveled to processors and terminal markets were high. Miles traveled were low to roadside stands and, of course, to pick-your-own operations where the marketing outlet is on-site.

The survey asked what type of vehicle was used to transport produce to its place of sale. Most (62percent) of the respondents took their goods to market in pickup trucks while one-ton or two-ton trucks were used by 13percent of the growers. Some growers took their produce to outlets in private cars or station wagons. These have a limited amount of space but are generally suitable for small producers. A few used refrigerated vehicles; these were used for long-distance hauls or for going to indirect markets as some outlets require transportation under such conditions. Trailers, vans, and eighteen-wheelers were also used to ship fruits and vegetables to selling locations. Figure 3 shows the means of transportation used by grower respondents when taking their produce to markets.

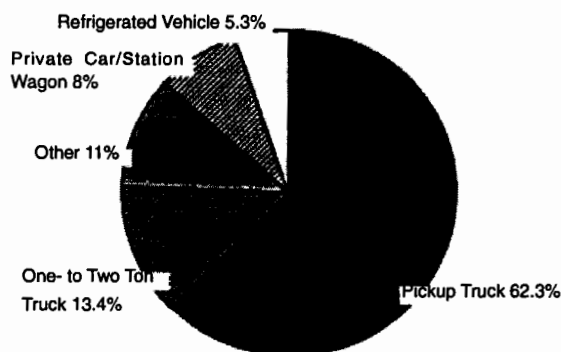
Respondents were asked how far the nearest packing facility was from their farms, regardless of whether they used it. The average distance was 109 miles and the longest was 700 miles. Some growers felt that there are not enough packing facilities in Oklahoma and they believe more plants need to be established throughout the state. It was frequently mentioned that such a facility would be of interest to growers if it paid prices that were comparable to those which are currently received.

**Figure 2. Average Distance from Fruit and Vegetable Enterprise to the Marketing Outlet.**



Source: 1989 Oklahoma Fruit and Vegetable Growers' Survey

**Figure 3. Type of Vehicle Used to Transport Produce in Oklahoma**



Note: The respondents could choose more than one answer. The answers have been weighted so that percentages add to 100%.

Source: Oklahoma Fruit and Vegetable Growers' Survey, November 1988

### Pricing Practices

Prices paid for produce were important to growers. In the survey, 16percent felt that price was the most important factor they considered when deciding where to sell their goods. The price paid to a producer differs by market, and the respondents perceived direct markets as paying better prices than indirect outlets. Farmers' markets, roadside stands, and pick-your-own operations were the most popular with the prices they paid for produce. Supermarkets and restaurants tended to pay farmers well for their crops, but this was not the case for terminal markets and processors. An explanation for the price variation may be that indirect marketing outlets are aiming to profit from resale; therefore, they may not be willing to pay retail prices for the produce. Those employing direct marketing, however, can charge retail prices and reap profits from the absence of middlemen.

Factors considered in the growers' pricing decisions were numerous, but prices charged by others were the most popular; 55percent reported it as being a very important factor in their pricing decisions. Cost of production plus markup was a fac-

**Table 2. Factors used in Pricing Decisions by Producers, Ranked by the Degree of Importance.**

Factors	No Importance	Minor Importance	Major Importance
Prices Charged by Others	10.1	20.2	54.6
Prices Charged by Local Supermarkets	21.0	21.0	42.8
Price Quote for Market News Reports	40.3	20.2	16.0
Prices Charged by Prominent Grower	20.2	26.9	36.9
Cost of Production Plus Mark-up	10.9	19.3	50.4
Time of Day	58.0	11.8	5.9
Inflation Adjusted Last Year's Price	40.3	25.2	9.2
Other	4.2	0.0	5.9

NOTE: Percentages do not add up to 100percent since respondents may give equal importance to more than one factor.

SOURCE: 1989 Oklahoma Fruit and Vegetable Growers' Survey

tor of major importance in pricing decisions for 50percent of the respondents. The mark-up percentage may vary but the total price should not exceed the amount that local grocery stores charge, and, if feasible, may even be lower in order to attract customers. A factor that was not considered significant was the time of day at market as 58percent reported it held no importance in their pricing decisions. Price quotes in Market News Reports and last year's price adjusted for inflation were also considered irrelevant in the respondents' decisions concerning what to charge for their crops. Table 2 shows how growers ranked certain factors when deciding what prices to charge.

### Decisions on Quantity Marketed and Outlets Employed

Producer respondents ranked the importance of specific factors they may use when deciding on the quantity to take to market. Most of these factors pertained to direct marketing because with indirect marketing, the volume specifications are usually included in the contract. Crop maturity was of major importance to 59percent of the growers. This is understandable given the perishability of most fruits and vegetables. Weather conditions and estimated sales for a particular day were of major importance to 43percent and 40percent of the growers, respectively, when they decided on the quantity of goods to take to market. The number of customers likely to be at market, which ties in with estimated sales, was reported to be of major importance to 38percent of the respondents. Availability of harvest labor was of little significance in decisions concerning the amount of produce to market, which suggests that farmers' operations are not large enough to require extra help or that producers have well established relationships with harvest crews. The length of time one wished to stay at market also had little impact on the amount of goods taken to be sold. Factors affecting the growers' decisions on the quantity of produce to be taken to direct outlets are shown in Table 3.

In addition to good prices, there are other criteria that producers consider when deciding on where to sell their crops. One-half of the survey respondents reported that the most important factor to them was that an outlet be a reliable, consistent market every year. An outlet that buys large quantities was considered to be the most important factor for 11percent of the growers when it came to deciding where to sell crops. Other important factors included selling to local markets who pay cash and to markets that are conveniently located for the farmer. "Finding any market" was a response given by a few growers which suggests that some producers are finding it difficult to sell their crops. An outlet that furnishes harvesting and trucking equipment was not on anyone's list of most important factors considered when deciding where to sell produce. Outlets that provide technical assistance were not much more popular, which suggests that growers feel confident operating their enterprises and they are receiving all the information they need.

### Promotional Efforts

Producers feel that promotion on Oklahoma grown fruits and vegetables needs to be increased. Over one-fourth of the respondents did not participate in advertising. This is understandable if they are employing indirect marketing because

**Table 3. Importance Factors Used in Decisions on Quantity Taken to a Direct Outlet on a Particular Day.**

Factors	No Importance	Minor Importance	Major Importance
Estimated Sales that Day	13.4	11.8	39.5
Weather Conditions	8.4	14.3	42.9
Availability of Harvest			
Labor	21.8	10.1	29.4
Crop Maturity	6.7	6.7	58.9
Number of Customers			
Likely to be at Market	11.8	10.9	37.8
Length of Time One Plans to Stay at Market in One Day	22.7	7.6	26.9
Other	0.8	0.0	1.7

PLEASE NOTE: Percentages do not add up to 100 percent since respondents may give equal importance to more than one factor.  
SOURCE: 1989 Oklahoma Fruit and Vegetable Growers' Survey

it does not require much emphasis on advertising. Direct marketing, however, calls for promotion. It is needed not only to attract new customers but also to inform returning ones on what is currently available.

Newspapers, mail-flyers, and signs or billboards can be effective and affordable promotional tactics. Almost 26 percent of the respondents used newspaper advertisements to promote their operations, and signs and billboards were used by 18 percent of the growers. Traditional methods of advertising, namely radio and television, can also be effective, but they can be costly. About 6 percent of the respondents employed the radio as a means of advertising while only one percent used television. Word-of-mouth is a commonly used method of advertising. It cannot be easily measured or controlled, but it is very effective and comes at no cost to the farmer. Advertisements should contain the location of the outlet, the hours of business, and the produce currently for sale.

Grower respondents requested that advertising be subsidized because they cannot afford to do it individually. One way to promote direct markets would be to educate the public about privately produced commodities. There seems

to be a misconception that commercially produced fruits and vegetables are superior to those produced privately. It can be argued, however, that "home-grown" produce is tastier because it is picked at or near maturity and is not stored for long periods of time or transported over long distances as are commercially produced goods.

### Issues Concerning Farmers' Markets

Direct markets have been commonly used by small volume producers in Oklahoma. Roadside stands and pick-your-own operations are generally operated by an individual farmer so there are no problems with member cooperation. However, with farmers' markets, where participants can exceed 20, conformity is a requisite for success. They must be properly governed and all members must be cooperative. This may not be the case in some Oklahoma farmers' markets. Grower respondents found that some farmers' markets are dominated by cliques, rent is often too high, and in some cases, the markets have a reputation for having low quality, over-priced produce. Suggestions from our respondents concerning support for new farmers' markets include only allowing participants' produce, allowing no shipped-in commodities to be sold at the market, and coordinating hours to meet consumers' demands.

### Summary

According to the 1987 Census of Agriculture, the number of Oklahoma produce farms increased 8 percent between 1982 and 1987. It is obvious that Oklahoma producers are interested in seeing their operations and the fruit and vegetable industry expand even further. With new technology continually being introduced to agricultural production, growing fruits and vegetables becomes less laborious and crop yields increase with comparable amounts of inputs! Marketing, however, seems to become more complicated as new practices and outlets are introduced. Producers must understand selling functions in the horticultural industry and realize what buyers expect of them in order to have successful fruit and vegetable enterprises.

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