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Marketing Challenge in Oklahoma's Produce Industry: Buyer Perspective

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In order to identify marketing inefficiencies in Oklahoma's produce industry, in February 1989, a survey pertaining to purchasing practices was sent to 2,000 randomly chosen produce buyers in Oklahoma. The buyers included Oklahoma wholesale buyers, brokers, retail outlets, and food service institutions such as schools and hospitals. From those 2,000 mailed, 231 were returned with usable data, constituting in a response rate of 11.5%. In addition to the buyers' survey, telephone and personal interviews were conducted with Oklahoma produce wholesalers to identify problems unique to this segment of the marketing channel. Large wholesale-retail organizations have become dominant buyers in the fresh fruit and vegetable industry. They usually buy from established large volume sellers, and this creates a market access barrier for small volume producers (Brooker, et al.) This fact sheet contains the results from the questionnaires.

There are two basic types of produce marketing: direct and indirect. With direct outlets, such as farmers' markets and roadside stands, the producer deals directly with the consumer. Indirect marketing requires that producers deal with middlemen rather than the end-users. Indirect outlets include large volume buyers such as wholesale distributors, brokers, and processors and small volume buyers such as grocery stores, hospitals, restaurants, and hotels. Respondents of these surveys were affiliated with indirect marketing outlets, and included grocery stores/supermarkets (33%), restaurants (30%), hospitals/nursing homes (24%), wholesale distributors (5%), hotels/resorts (2%), schools (2%), brokers (2%), and "other" buyers (2%).

Buyers' Requirements

The buyers' survey asked respondents to identify the most important factor they considered when purchasing fruits and vegetables. Table 1 lists the criteria that buyer respondents considered to be the most significant in their buying decisions. Quality ranked very high; "consistency of quality" was the most important criterion for 67% of the buyers. Almost 12% considered price to be the most important factor in their purchasing decisions. Year-round availability, which was perceived by buyer respondents as a major problem with Oklahoma growers, was the most important factor to 8% in their purchasing decisions. Promotional appeal and dependable deliveries were also considered to be important

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Table 1. The most important factor that buyers consider when purchasing fruits and vegetables

| | Percentage of |
|-----------------------------------------|---------------|
| Criteria | Respondents |
| Consistency of Quality Year-round | 43.7 |
| Consistency of Quality Over Long Period | 23.5 |
| Price | 11.5 |
| Year-round Availability | 7.7 |
| Promotion Appeal | 3.3 |
| Dependable Deliveries | 2.7 |
| Shelf Life | 2.7 |
| Dependable Volume of Supply | 1.1 |
| Size Uniformity | 1,1 |
| Convenience | 0.5 |
| Organically Grown | 0.5 |
| Service | 0 |
| Packaging | 0 |
| Other | 1. 7 |

Source: 1989 Oklahoma Fruit and Vegetable Buyers Survey

factors to some buyers as was shelf life, which suggests that farmers may want to harvest crops a few days before maturity in order to extend the shelf life of commodities. Transportation in a refrigerated vehicle and pre-cooling to remove field heat will also help to maintain and protect the shelf life and, thus, quality of most horticultural products.

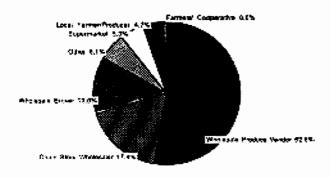
Organically grown produce was considered to be important in purchasing decisions of only two buyers, and convenience was not significant in respondents' buying decisions, which indicates that buyers are willing to go out of their way to receive high quality produce from reliable supply sources. Service and packaging were not ranked as the most important criteria by any buyer respondents. An explanation for this may be the type of buyers who participated in the survey. Wholesalers, processors, and terminal markets, who generally require size uniformity and special packaging, accounted for only a small percentage of the respondents.

Wholesale survey participants reported that size uniformity and packaging were important to them. Quality was of utmost importance to these large buyers, and in general, they dealt only with vendors who were able to deliver graded, uniform, appropriately packaged, high quality commodities.

Supply Sources

Suppliers for respondents were numerous and diverse, but the most popular outlet was the wholesale produce vendor who sold to 53% of the buyers. Respondents also relied upon chainstore wholesalers (17%), wholesale brokers (13%), supermarkets (5%), and local farmers (5%) as supply sources. Farmers' cooperatives were not used much; they only sold goods to 1% of the respondents. Figure 1 shows the sources of produce supplies for Oklahoma buyer respondents.

The survey asked buyers if they had ever purchased produce from local growers or growers' cooperatives but had stopped doing so. A few respondents fit into that category and cited reasons such as a lack of year-round availability, overripe produce, and inconsistent quality for ceasing to buy from those sources. Some reported they no longer made purchases from local producers because the vendors stopped calling at their business locations.



Note: The respondents could choose more than one answer. The answers have been weighted so that percentages add to 100%. Source: 1989 Oklahoma Fruit and Vegetable Buyers' Survey.

Figure 1. Sources of Produce Supples

Some supermarkets and restaurants mentioned they would prefer to buy from local producers, but the quality of some commodities is lower than that of produce grown in other states. Therefore, based on the responses, quality must be improved in order for the Oklahoma fruit and vegetable industry to gain new buyers, and thus, expand.

Quality Control and Price Issues

Quality is considered to be a very important factor in buyers' purchasing decisions. If bad quality produce is delivered, it can either be accepted under certain conditions or rejected. Most of the buyer respondents (72%) handled such a problem by refusing to accept the shipments. Marketing agreements were used by 14% of the buyers to settle quality discordances, and 7% offered a price for the goods according to their level of quality.

It is highly recommended that vendors take precautions to ensure that only good quality produce is delivered. Overripe goods must be disposed of and a vendor should remember that transportation can damage the condition of fruits and vegetables, so caution must be taken when packaging and loading the goods and taking them to the buyer. Some buyers reported they control the quality of produce delivered to

them by immediately finding another supplier if produce is of unacceptable quality.

Another factor of importance to both buyers and sellers is price. With direct marketing, the grower sets prices at or near those of local supermarkets or area competition. Indirect outlets aim to profit from resale; therefore, they may not be willing to pay prices comparable with those of retail outlets. When asked how the prices they paid for produce were set, 45% of the respondents said they were decided upon by a broker/distributor. Respondents added that although a broker or producer usually sets the final price, major factors influencing this decision are supply and demand. Regional market prices were used as a base for prices paid by 17% of the buyers, and 14% paid prices that were set by growers. Supermarket prices were another base for the amount that vendors (9%) placed on their commodities. Prices paid by competitors and Dallas Terminal Market prices were not very significant to respondents as only 6% reported these sources were used as a base for produce prices. Over 9% of the survey participants said they paid prices calculated by other means, including current and projected supply and demand.

In the interviews with wholesalers, price was seldom mentioned as an important factor in their purchasing decisions. However, high quality, size uniformity, and appropriate packaging were very important to respondents, and they seemed willing to pay for such qualities. Prices were mostly arrived at through bargaining vendors in different areas across the nation. Supply also played a role in pricing decisions.

Oklahoma produce prices seem to be competitive with those of other areas. Although 39% of the buyer respondents did not know how Oklahoma prices compared with those of other states, 32% felt they were generally comparable with prices of fruits and vegetables in other places. Only 6% felt prices for horticultural commodities were more expensive in Oklahoma than in other states, and 23% reported prices were generally lower in Oklahoma.

The fact that over one-third of the respondents did not know how Oklahoma prices compared with other states' prices may be explained by several factors. Almost 24% of the respondents do not buy Oklahoma grown goods. These buyers may have well-established relationships with vendors in other states and therefore are not aware of Oklahoma produce prices. For the 76% of the respondents who buy Oklahoma grown fruits and vegetables, an explanation may be that buyers have committed themselves to purchasing only Oklahoma grown produce and do not follow prices of goods grown in other areas.

Of the buyers who purchase fruits and vegetables from Oklahoma growers, 35% reported their purchases have increased in the past three years. Only 12% have decreased their purchases of Oklahoma grown produce, and 53% said they bought the same amount in 1988 as they did in 1986.

Buyers' Expectations

In order to increase purchases of Oklahoma grown produce in the future, incentives must be given to buyers. Buyer respondents were asked what types of post-harvest services they would expect if they were to buy produce directly from local producers or producers' cooperatives. The most popular services were bulk or standard pack (19%), direct delivery

(14%), grading (13%), and transportation in a refrigerated truck (11%). Direct Delivery and a refrigerated truck both lower the likelihood of decreased quality due to transportation stress, and they may help to protect the shelf life of certain commodities. Cold storage, controlled atmosphere storage, and pre-cooling, including vacuum cooling and icing, were also services that buyers would prefer, provided they were to purchase goods from Oklahoma growers or their cooperatives. These services will also contribute to a longer shelf life for the fruits and vegetables. Other services mentioned by respondents were conventional truck, consumer pack, palletization, and prewashing and slicing. Table 2 shows the post-harvest services that buyer respondents would expect if they were to purchase produce from Oklahoma growers or their cooperatives.

A question was asked concerning buyers' willingness to purchase Oklahoma produce if it were equal in quality, availability, and price to non-locally grown fruits and vegetables. Most of the respondents (73%) said they would be more willing to buy Oklahoma goods under the assumption and 27% said they would be as willing to buy.

Table 2. Types of Post-Harvest Services Oklahoma Buyers would expect Local Producers or their Cooperatives to Provide.

| Service | Weighted Percentage |
|-------------------------------|------------------------|
| Bulk or Standard Pack | 18.9 |
| Direct Delivery | 14.6 |
| Grading | 12.9 |
| Refrigerated Truck | 11.4 |
| Controlled Atmosphere Storage | 8.5 |
| Cold Storage | 7.2 |
| Pre-cooling | 4.6 |
| Conventional Truck | 4.0 |
| Vacuum Cooling | 2.9 |
| Pre-Washing and Slicing | 2.7 |
| Consumer Pack | 2.6 |
| Icing | 2.5 |
| Frozen Pack | 2.2 |
| Pre-Processing | 1.8 |
| Palletization | 1.6 |
| Other | 1.6 |

Note: The respondents could choose more than one answer. The responses have been weighted so that percentages add to 100%. Source: 1989 Oklahoma Fruit and Vegetable Buyers' Survey.

Promotional Efforts

Currently, 24% of the buyers promote Oklahoma produce. They do it mainly through the use of slogans such as "Oklahoma grown" on store signs and in newspaper advertisements, and through the Oklahoma Department of Agriculture, Food, and Forestry program, "Our Best to You - Made in Oklahoma." Food service institutions also use promotional tactics, including serving larger portions of Oklahoma grown produce and offering dinners such as "The Oklahoma Meal," which consists solely of goods produced in this state. One-third of the respondents are planning to advertise locally

grown fruits and vegetables in the future, which will please Oklahoma growers who feel that more promotion is needed if the state's horticultural industry is to expand.

Advantages and Disadvantages of Buying Oklahoma Produce

Oklahoma fruit and vegetable buyers are supportive of their state's economy and its well-being. In a question pertaining to the advantages of purchasing Oklahoma grown produce, many respondents alluded to the fact that it helped the economy of the state. Consumers are also supportive as buyer respondents reported extra retail sales came about as a result of "Grown in Oklahoma" advertising slogans. Other advantages of purchasing Oklahoma produce include freshness, good prices, low shipping costs, and high quality.

Some respondents had contradictory views and cited disadvantages such as high prices, low quality, low volume, unsteady supplies, and lack of variety. Ease of purchase, which refers to ways in which buyers' transaction costs can be minimized or reduced, is often used in purchasing decisions. If a buyer is able to purchase several varieties of produce in large volumes from a grower in another state, he will likely do so rather than buy one variety from several sources in Oklahoma. The variety problem is difficult to solve because it is not economically feasible to grow certain fruits and vegetables in Oklahoma. The quantity problem, however, may be satisfied through the establishment of cooperatives where farmers pool their produce and thus, can sell it in bulk amounts. Other disadvantages of buying Oklahoma produce included a scarcity of post-harvest services such as pre-cooling and grading, and a lack of quality control. It is very important that a seller makes sure his/her produce is of good quality every time he/she delivers it as one bad haul could hinder the possibility of future sales.

Recommendations

In general, it seems that buyers are willing to purchase Oklahoma produce if it satisfies their needs. Oklahoma farmers possess the knowledge and skills to successfully grow horticultural commodities; however, there is room for improvement in the marketing area of the Oklahoma fruit and vegetable industry. Growers participating in indirect marketing should be familiar with the national produce market (prices, marketing alternatives, and requirements) in order to know where to sell their crops and secure fair prices for them. Moreover, vendors need to have more than one or two varieties to sell, their products must be consistently high in quality, and reputations as reliable supply sources should be established. Promoting the fact that goods are grown in Oklahoma also seems to help sales. One buyer reported almost anything with "Oklahoma grown" on its sale sign moves twice as fast as other goods. A broker wrote, "It is great to consider a 'Buy Oklahoma' program, but sellers will have to compete in a market place that is very price/quality/convenience oriented." Therefore, if Oklahoma produce vendors wish to compete on a large scale basis, they should be knowledgeable about the marketing outlets which they employ.

The Oklahoma fruit and vegetable industry has room to expand, but marketing inefficiencies need to be eliminated. A respectable reputation must be gained by growers in order to establish relationships with buyers. Sellers should provide a variety of good quality produce at reasonable prices. They must be dependable with their deliveries and meet all of their buyers' requirements. As one buyer put it: "The best type of vendor is one who calls year-round, quotes market prices, delivers at a designated time, and guarantees his product." This is a good example for Oklahoma fruit and vegetable vendors who are participating in indirect marketing to follow.

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