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# **Agricultural Producer Attitudes Towards Doing Business With Wholesale Food Buyer Groups in the Cleveland, Ohio Vicinity**

by

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## **Introduction**

In February 1987, a three year project entitled "It's Fresher From Ohio" was begun by the Ohio Cooperative Extension Service to facilitate, through educational efforts, the marketing of fresh local agricultural products in the Cleveland, Ohio Metropolitan area.

To provide guidance to the "It's Fresher From Ohio" project, two research studies were conducted to determine the attitudes and perceptions of members of the Cleveland food distribution system on the marketing of local products.

The initial study, conducted in 1988, provided insight into the purchasing habits of Cleveland wholesale buyers of fresh agricultural products. Commission house, produce purveyor, grocery store and restaurant buyers were surveyed on the quantity and origin of select products and

on their perceptions of barriers in purchasing locally.

It was found that surveyed buyers purchased little of the studied fresh products locally. Buyers cited lack of uniform packaging and grading, low quality as it relates to shelf life, and not knowing producers as barriers. However, buyers were interested in purchasing locally and there appeared to be little strong negative attitude toward local producers.

Given this interest and attitude, a second study, reported in this paper, was conducted to determine producer sales activity in the Northeast Ohio food distribution system (Cleveland and those counties adjacent to it) and to determine if producer attitudes were preventing more products from being sold.

## Objective

The purpose of this study was to gain insight into how fruit and vegetable producers perceive the desirability of doing business with local wholesale buyer groups.

## Methodology

### *Population*

The target population was fruit and vegetable producers in the six counties in Ohio, in and adjacent to Cuyahoga County (Cleveland). County Agricultural Extension Agents' fruit and vegetable mailing lists were used in their entirety to establish and identify the population. The entire population of 393 producers was surveyed.

### *Instrumentation*

The data collection instrument was an original mail questionnaire developed by the researchers. The questionnaire was reviewed and modified by a panel of agricultural evaluation experts to determine content validity. In addition, a field test was also conducted using ten fruit and vegetable producers from a county close to, but not included in, the study population.

Likert-like scales were utilized to measure producers' attitudes toward doing business with various buyer groups (Mueller, 1986). The scale items included questions on worker courtesy, phone courtesy, physical layout, bill payment, profitability, interest in purchasing locally, trustworthiness, grading standards, packaging requirements, cooling standards, producers' comfort in approaching buyers and quantities needed by buyer groups.

Each of the 12 scale items had four possible responses: strongly agree, agree, disagree and strongly disagree. Statements were assigned scores of one to four. Positive statements were weighted from one (strongly disagree) to four (strongly agree). Negative statements were weighted inversely from one (strongly agree) to four (strongly disagree).

Higher scale scores were defined as being more positive toward a buyer group. Likert-type items were assumed to produce scores using an interval scale of measurement one to four (Adams, Fagot and Robinson, 1965).

Reliability measures using Cronbach's alpha for the summated scales were determined after data collection but before analysis. Resulting scales produced Cronbach's alphas ranging from .52 to .72.

### *Data Collection*

Data were collected during April-June 1989 following the Dillman procedure for mail questionnaire administration in order to receive maximum response rate (Dillman, 1978). Three mailings were done. A total usable data sample of 212 (54%) was obtained.

In order to account for non-respondent error, an assumption was made that late respondents are most likely non-respondents (Miller, Smith 1983). A series of t tests compared scores of early and late respondents on all summated scales. No significant differences were found, thus allowing the data to be extrapolated to the entire surveyed population.

### *Analysis of Data*

Descriptive statistics such as frequencies, percentages, means and variability were used to summarize the data. Differences between groups on selected variables were determined using the t test and Analysis of Variance. The Scheffe test was the post hoc test used in the Analysis of Variance to identify significant difference between specific groups.

An alpha level of .05 was set *a priori* for all inferential statistical tests. The total population surveyed was assumed to be a sample of all population represented through time, thus inferential statistics were deemed appropriate for this study.

## Results

A demographic summary of the respondents suggested that 17 percent of the survey respon-

dents were age 35 and below. Thirty-three percent were between the ages of 36 and 50, 26 percent between 51 and 65 and 24 percent over 65. Eighty-six percent of the respondents were male.

The majority of fruit and vegetable producers (56%) had gross annual dollar sales under \$10,000. Fourteen percent had gross dollar sales between \$10,000 and \$40,000, 14 percent between \$40,000 and \$100,000 and 16 percent over \$100,000.

The data were analyzed using a Scheffe test in an effort to find attitudinal differences that could be attributed to either age or gross dollar sales in the population. Only one statistically significant difference was found. This minor difference related to producers who have under \$10,000 in gross sales and those who have between \$10,000 and \$40,000 in gross sales. Those who sold \$10,000 to \$40,000 had a significantly more positive attitude toward selling to independent groceries. However, these \$10,000 to \$40,000 producers were not significantly more positive than those who sold \$40,000 to \$100,000 or those who sold over \$100,000. In addition, the differences in attitude between those who sold \$10,000 and under and those who sold between \$10,000 and \$40,000 occurred only in reference to independent grocery stores and not to other buyer groups.

The Likert-type scale on which the producers' attitudes toward buyer groups were measured ranged from one (strongly disagree) to four (strongly agree). The midpoint or neutral rating was 2.5. Mean scores for all producers were: commission houses, 2.65; produce purveyors, 2.65; supermarket chains, 2.68; restaurants, 2.70 and independent grocery stores, 2.76. These scores indicate that producers were neither strongly positive or negative toward doing business with the various buyer groups.

Scores also did not indicate a major difference in producer attitude between buyer groups.

Producers were asked if in a normal year they sold to various buyer groups. Producers were separated into two groups according to

whether or not they sold to each buyer group. It was found that those producers who sold to each buyer group were significantly more positive than those who did not sell (Table 1).

One interesting finding was that the greatest number of producers in this study have had experience in selling to independent groceries. Thirty percent of all fruit and vegetable producers have had experience in selling to these buyers. Twenty percent have experience in selling to commission houses, 19 percent have sold to produce purveyors, 16 percent have sold to restaurants, and 15 percent to supermarket chains (Table 2).

Producers who indicated they do not sell to the various buyer groups in this study were asked if they had an interest in selling to any of these groups. Twenty-nine percent indicated an interest in selling to produce purveyors, 20 percent were interested in selling to restaurants, 24 percent to independent groceries, 21 percent to supermarket chains and 19 percent to commission houses (Table 3).

### Conclusions and Implications

This study has shown that producers possess no overwhelming attitudinal barriers that would prohibit increased sales to wholesale buyer groups in Cleveland. As a group, producers do not have strongly positive or negative attitudes about the buyer groups. They are, in fact, somewhat neutral.

Buyer groups were viewed similarly by producers. There seemed to be no strong preference towards doing business with one buyer group over another. However, more producers indicated experience in selling to independent groceries than to any other studied buyer group.

Approximately 20 to 30 percent of the producers not doing business with each of the studied buyer groups indicated an interest in selling to those groups. Given that producers possess no strong negative or positive attitudes towards doing business with the various buyer groups, and that 20 to 30 percent of the producers express interest in selling to those groups, there appears to be an untapped reservoir of producers available

TABLE 1

SUMMARY OF t TESTS OF PRODUCER PERCEIVED DESIRABILITY OF DOING BUSINESS; COMPARING LOCAL FRUIT AND VEGETABLE PRODUCERS WHO SELL vs. DO NOT SELL TO VARIOUS BUYER GROUPS IN THE CLEVELAND, OHIO AREA.

BUYER GROUPS	PRODUCER GROUPS	N	*MEAN	STANDARD DEVIATION	STANDARD ERROR	**t VALUE	DEGREE OF FREEDOM	2 TAIL PROBABILITY
Commission Houses	Sellers	27	33.33	3.55	0.68	3.23	116	*** 0.002
	Non-Sellers	91	31.21	2.82	0.30			
Produce Purveyors	Sellers	27	33.44	3.06	0.59	3.27	107	*** 0.001
	Non-Sellers	82	31.32	2.89	0.32			
Supermarket Chains	Sellers	24	33.96	4.07	0.83	3.25	109	*** 0.002
	Non-Sellers	87	31.69	2.68	0.29			
Independent Groceries	Sellers	51	35.26	3.43	0.48	6.24	120	*** 0.000
	Non-Sellers	71	31.66	2.84	0.34			
Restaurants	Sellers	25	33.88	3.99	0.80	2.33	109	*** 0.022
	Non-Sellers	86	32.07	3.25	0.35			

\* POSSIBLE RANGE OF SCORES IS 12-48.

\*\* POOLED VARIANCE USED: F VALUES = 1.58, 1.12, 2.30, 1.46, 1.51 CONSECUTIVELY

\*\*\*  $p < 0.05$

TABLE 2

SUMMARY OF FREQUENCIES AND PERCENTAGES OF LOCAL PRODUCERS WHO SELL AND DO NOT SELL TO BUYER GROUPS IN THE CLEVELAND, OHIO AREA.

Producers	Commission Houses		Produce Purveyors		Supermarket Chains		Independent Groceries		Restaurants	
	n	%	n	%	n	%	n	%	n	%
Sellers	41	(20%)	38	(19%)	30	(15%)	60	(30%)	32	(16%)
Non-Sellers	163	(80%)	164	(81%)	173	(85%)	140	(70%)	170	(84%)

TABLE 3

SUMMARY OF FREQUENCIES AND PERCENTAGES OF LOCAL PRODUCES WHO DO NOT CURRENTLY SELL TO CLEVELAND, OHIO AREA BUYER GROUPS BY THEIR INTEREST OR LACK OF INTEREST IN SELLING TO THESE GROUPS.

PRODUCERS INTEREST IN SELLING	COMMISSION HOUSES		PRODUCE PURVEYORS		SUPERMARKET CHAINS		INDEPENDENT GROCERIES		RESTAURANTS	
	n	%	n	%	n	%	n	%	n	%
yes	31	(19%)	49	(29%)	36	(21%)	35	(24%)	47	(27%)
no	131	(81%)	122	(71%)	138	(79%)	114	(76%)	125	(73%)

and interested in doing business with the buyer groups.

A previous study (Drake, James 1988) found that Cleveland area wholesale buyers were receptive to purchasing locally produced fruits and vegetables and would buy if they were uniformly packaged, graded and fresh. The study described in this paper has shown that producers feel somewhat neutral about dealing with buyers. Therefore, it can be concluded that there are no buyer or producer attitudinal reasons that would prevent, or are preventing more locally grown product from entering the Cleveland market.

If in fact there are barriers, they are not attitudinal in nature, but are related to other market factors. One possibility was uncovered in the current study. Producers did not have a dramatically different attitude toward the various buyer groups, yet substantially more producers routinely sell to independent grocers. If attitudinal differences were important one would expect a more equal distribution of sales. Part of the explanation for frequencies of sales to independent grocery stores could be transportation costs. There are an abundance of independent grocery stores in Northeast Ohio. Rural fruit and vegetable producers would more likely be near an independent grocer than any of the other buyer groups.

The survey instrument asked whether or not the producers sold to each buyer group in a "normal" year. Presumably producers who do sell in a "normal" year have experience to draw on in answering the attitudinal questions. Conversely, the producers who did not sell in a "normal" year would have no, or at least very little, personal experience on which to draw in answering the attitudinal questions. Their answers would necessarily be based on rumor and hearsay. In this study these groups were separated in order to gauge buyer "reputation" as opposed to buyer "record." Producers with experience in selling to the various buyer groups were significantly more positive toward doing business with these buyers than producers who did not have experience. Therefore, it can be concluded, wholesale buyers conduct business in a way which agricultural producers find desirable and at least maintains, if not improves, business relations.

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