

AN ASSESSMENT OF BUYING PREFERENCES  
EXHIBITED BY IMPORTERS AS PERCEIVED  
BY OKLAHOMA VALUE-ADDED FOOD  
PRODUCT EXPORTERS

By

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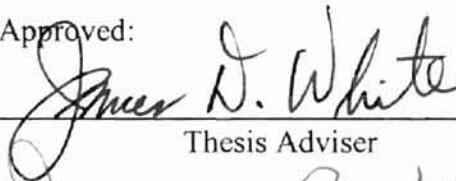
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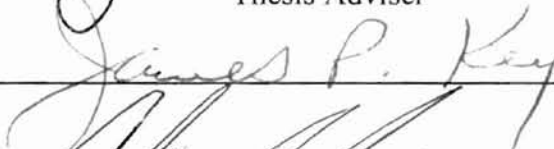
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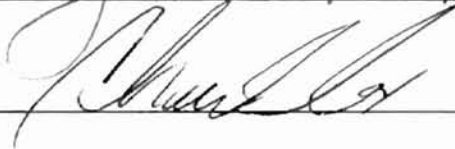
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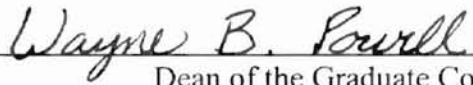
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## CHAPTER I

### INTRODUCTION

Oklahoma has long been known for the diligent farmer tending his wheat and cattle. While this image is still accurate, it has been changed and enhanced in order to meet changes in technologies and communications. Dunham (1993) remarks that the farm value of commodities have remained constant for the past ten years. The price spread of food products at retail however, have continued to rise. This price spread can be identified with the assembling, processing and distributing costs or added value to raw farm products. As the farming capabilities have changed the Oklahoma farmer has changed with them. Oklahoma now boasts a wide variety of value-added products and alternative crops in addition to the standard crops (Clark, 1997)

International food markets have developed in all regions of the world. In order to compete internationally value-added food producers in Oklahoma must research the potential for their company to go international. In B. Charlet's (1990) research of Oklahoma value-added product companies it was determined important that value-added firms have long term contribution to exporting and international trade. This commitment should be incorporated as part of the firm's mission statement. With help from the Oklahoma Department of Agriculture value-added food and agricultural producers can take part in food shows through the "Better buy Oklahoma" logo. Through the program

companies can reach target markets in a cost effective and efficient manner. These shows can take Oklahoma value-added food producer to markets around the world

Across the United States agricultural export trends have been shifting from bulk commodities to high-value food products (Greene, 1994). The added services processing agricultural products increases the price spread from the farm value to the retail market. In order for Oklahoma producers and processor to reclaim part of this increase in value they must be part of the value-adding process. As markets change, hundreds of Oklahoma agricultural producers need information that will help them with their marketing efforts. Identifying structural characteristics, marketing activities, and food safety requirements of potential importing countries will enhance Oklahoma agricultural producers' opportunities for continued growth in the economy (Suter, 1996).

### Statement of Problem

With the marketability of agricultural products moving from bulk to value-added or high-value food products, Oklahoma's producers are in a state of adaptation. Structural characteristics, size, and inadequate marketing strategies associated with current food processing firms presents problems for state exportation. Corporate farming and industrial processing companies are taking over the agriculture markets because of the ability to quickly adapt to changing markets. Smaller Oklahoman owned companies are losing business. These individually owned Oklahoma companies are how Oklahoma developed a heritage and history as a strong agricultural state. Now with the development of value-added food and agriculture markets around the world Oklahomans need the technology and insight to grow with exports. However, there is little information from

Oklahoma's value-added food producers to use in the appraisal of needs for importers of agricultural value-added food products. With an assessment of the buying preferences exhibited by importers as perceived by Oklahoma value-added food product exporters information can be collected and developed into educational opportunities for growth for Oklahoma producers.

### Rationale of Study

Because of new technologies and communication capabilities around the world smaller businesses have more opportunities for international trade. In addition to Oklahoma's bulk food products, agriculture, and food producers are finding niche products that also have the potential for international markets. As these value-added and high-value food products are introduced to world markets some become a success and some fail. Therefore, a study to determine the buying preferences of value-added food importers, as perceived by food exporters, was deemed necessary.

### Purpose of Study

The purpose of this study was to determine customers buying preferences of agriculture and food product importers as perceived by Oklahoma Value-Added Food and Agricultural Product Exporters.

### Objectives

1. Determine selected characteristics of value-added food exporters in Oklahoma
2. Determine selected characteristics of food importers as perceived by value-added food exporters.
3. Determine information sources concerning potential export markets as perceived by value-added food exporters.
4. Determine buying preferences of food importers as perceived by value-added food exporters.

### Scope of Study

The scope of this study included agriculture and food product processors and distributors in Oklahoma as listed in the 1996-1997 Oklahoma food and Agricultural Product Directory and the Oklahoma Agricultural Products Export Directory

### Assumptions

The assumption was made that the respondents answered the questions honestly, accurately, and to the best of their knowledge

### Definitions of Terms

As used in this study, the following terms are defined

Bulk products - Unprocessed and unpackaged grains, oilseeds, and other agriculture products.

Consumer food products - Products primarily shipped for consumption in the retail market and food service industries (Greene, 1994).

High-value - Term given to a group of agricultural products with value added through processing, or because they require special handling or shipping (Greene, 1994).

Intermediate commodities - Those that had been partially process or those used as inputs on the farm or used by food manufacturers (Greene, 1994).

Price spread - The difference between the farm value and the retail price.

Value-added foods - Food products where value has been added due to processing or packaging.

## CHAPTER II

### REVIEW OF LITERATURE

#### Introduction

The purpose of this chapter was to present an overview of related literature that identifies a number of factors relevant to this study. The presentation of this review was divided into four major areas, and a summary to facilitate clarity and organization. The areas were: (1) market opportunities, (2) Oklahoma food and agricultural exports, (3) U.S. food and agricultural exports, and (4) customer preferences.

#### Market Opportunities

Value-added agricultural and food producers are in a prime time to expand their businesses into international trade. However, there are many considerations to be analyzed prior to jumping into the export business, and the opportunities continue to grow.

The first step to a successful exporting business is getting a commitment from the owners and operators to research the possibilities of exporting the companies product or products. Setting goals for international trade in the company helps successful exporters maintain or increase the company's international exposure. Goals such as dollars of sales

from exporting should be set. Less sale oriented and/or beginner exporter goals could include determining customers needs, broadening company exposure in new markets, and gathering information about other companies products. Building the company's moral and international interests helps keep the companies international trade a vital part of their success (Kennedy, 1997).

Once the company has decided to move to international exports, marketing the company's products becomes more specific. There are additional cost to shipping into other countries. Tariffs and duties may be a cost that was not anticipated. These will change from country to country, and maybe within the same country. Transportation will be another expense. Shipping into Canada or even South America will be less expensive and take less time actually getting the products to market. When shipping to the Pacific Rim these costs will be much higher. In a research report from the University of Kentucky in 1992 by Salvacruz, they predicted that a country's U.S. agricultural import growth rate will decline by 0.002 percent for every kilometer that it is farther away from the United States, assuming all other variables are held constant. Therefore, distance is an important consideration.

Market size of the exporting company may also be a determining factor in the success of an exporter when looking for new markets. A 1997, study by Kennedy at Oklahoma State University showed that the value-added product exporter should stay in a similar size market. Importers like the reliability of working with similar size companies. Investigating the economic stability and growth potential is also a key in exporting success. Macroeconomic variables about the importing country can also

predict the growth rate of U.S. agricultural exports in other countries markets (Salvacruz, 1992).

Culture also has a profound impact on the way consumers perceive others and how they behave. Cultures are known as a nation's character. It is not a characteristic of individuals, but of a large number of persons conditioned by similar backgrounds, education, and life experiences (Kale, 1992). Making products acceptable in certain cultures may involve removing certain seasonings and/or colorings. In the U.S. packaging is done at a minimum, however in some international markets customers look for bright colors and elaborate designs as buying points. When working with international companies it is important to know their customs. However, it is not possible to know all international markets customs, that is where product brokers and agencies of the U.S. government or Oklahoma Department of Agriculture come into the companies marketing scheme.

### Oklahoma Food and Agriculture Exports

Oklahoma Department of Agriculture designed a program in the late 1980's, "Oklahoma Value-added Agriculture Export Improvement Program", to better understand how the state could increase exports from the value-added industry sector. There were more than 400 companies that processed and marketed value-added agricultural products at the time (Charlet, 1990). Today, "Better buy Oklahoma" is a common phrase when discussing Oklahoma food products. The Oklahoma Department of Agriculture initiated it. This marketing program identified to the consumer products

made by Oklahoma companies. A directory developed by the Market Development Service was also mailed to grocery stores and restaurants around the state. This listed all the food and agricultural producers that were registered in the "Better buy Oklahoma" program. With these methods of advertising the Market Development Service of Oklahoma hoped to promote Oklahoma products around the state, as well as nationally.

As the trends of United States exports move from bulk commodities to value-added products, Oklahoma producers are changing their marketing strategies. A study of value-added foods in the Mid-South region (Suter, 1996) helped identify structural characteristics, marketing activities and food safety requirements for the growth of Oklahoma agricultural products.

The food processing industry in Oklahoma consists of only a small portion of the U.S. total food processing activity, less than one percent including both value-added products and employment. However, Oklahoma had been one of many farm states in which research had indicated potential for growth in food processing activities. Oklahoma is located centrally with good transportation routes which were identified as helpers to promote the growth of Oklahoma's markets (Suter, 1996). Structural characteristics, size, and inadequate marketing strategies associated with current food processing firms in Oklahoma presented problems for state exportation. With the completion of the Food Processing Research and Technology Center at Oklahoma State University in Stillwater some of these problems have started being addressed.

A benefit to Oklahoma value-added exporting is Interstate 35. It is like North America's main street and it divides Oklahoma in half. When the North American

Free Trade Act (NAFTA) was passed it created the largest single free trade market in the world providing Oklahoma's value-added exporters with an easy access to trade routes. In 1996 Oklahoma exported \$177.9 million worth of goods to Mexico and \$690.8 million to Canada. However, this was part of a decrease between 1992 and 1996, of about five percent. This is because there are still certain kinds of documentation and transportation challenges that need to be resolved (Alford, 1998).

The market for value-added products is very competitive. Smaller companies must promote their products with unique and distinctive characteristics, and capitalize on their quality service capabilities. Exporters should not assume one marketing technique could be applied to a variety of country situations (Charlet, 1990). Cultural difference, different languages, governmental trade restrictions, and financial limitations are just a few of the everyday hindrances to foreign trade. International market development coordinators are experienced in getting around these barriers and opening communications between Oklahoma sellers and foreign buyers (Clark, 1997)

The Oklahoma Department of Agriculture has contracted with associates from Ringe Marketing Services, an established marketing agency in Hong Kong, to market Oklahoma agriculture products in Hong Kong and South China. Oklahoma food products are in high demand, including meat, poultry, vegetable oils, animal feeds, live animals, seeds, snack foods, nursery products, cotton and peanuts. These efforts and others by State Universities and government agencies support goals to find new markets for Oklahoma's value-added products (Clark, 1997).

### United States Food and Agricultural Exports

Agriculture exports for the U.S. have had to offset the trade deficit for nonagricultural products for many years. Net U.S. agricultural exports have been positive since 1959. Food grains, feed grains and oil crops have made up the bulk of the exports, since 1977. The U.S. food processing industry showed a positive trade balance for the first time in ten years in 1992 (Food, 1994). Fifty-three percent of the total U.S. exports consisted of these products (Lee, 1994).

Recently the United States had become one of the largest exporters of value-added agricultural products. Since 1986, world trade in high-value agricultural exports had reached record highs each year (Krause, 1995). Approximately \$116 billion were added to raw food products by processing and manufacturing firms in 1992 (Suter, 1996). A principal factor causing a drop in bulk export commodities and an increase in value-added products was the improvement of commodity production in importing countries. (Lee, 1991)

As countries around the world have improved their farming capabilities they have become less dependent on others for bulk farm products. When countries become more independent their national income level rises. Growing incomes worldwide, changing demographic factors, and technological improvements in transportation and product handling are credited for the rising demand for value-added food exports (Krause, 1995).

Traditional international trade theory states that trade will take place only if the price of the goods imported is less than the cost of goods produced locally. However today, this is not always the case. With global market and communications being what

they are it has created a more competitive concept (Kennedy, 1997). Products from one distributor can be produced for a specific market. This distributor should know the culture, any new market information, and what the buyers of a market are looking for, along with what the competitors are promoting. This information keeps the distributor on top of desired markets.

More than 50 percent of the U.S. agricultural exports went to developed countries. The exports to these countries were mostly high-value agricultural products. Also, the products were very close substitutes for each other in terms of factor inputs and consumption. Thus, a considerable part of U.S. agricultural trade with these countries was intra-industry trade (Lee, 1994).

The concentration of U.S. consumer food exports had been to Canada, Japan, the European Union, and Hong Kong. They made up about three-fourths of the exports. However, these markets have slowed. Since 1990, Mexico and the Pacific Rim were the fastest growing importers. Shipments of consumer goods to the Pacific Rim, excluding Japan, rose 19 percent. Growth had also continued in Hong Kong, South Korea, and Taiwan. The strongest were in Southeast Asia. Increases of 44, 32, and 19 percent have been reported for Indonesia, Thailand, and Malaysia since 1990. Some of the largest consumer product increases had been for fruit, vegetables, and red meats (Greene, 1994).

### Customer Preferences

Food processors would benefit if they could understand criteria the targeted international buyers used when deciding to purchase or not. This also reduces wasteful research spending and providing services that are unwanted by international buyers. Any company should learn as much as possible about the tariff rates and regulations, consumer habits, and importers purchasing habits as possible (Kennedy, 1997).

Markets in developing countries were opening for value-added importation. As incomes increase, not only does total food consumption increase, but consumers seek greater variety in their diet (Harrison, 1992).

Communicating with international trade partners is one of the challenges of value-added agricultural products marketing. Common business practices in the United States may not be proper etiquette with international customers. Personal relationships with importing businesses can be the success or failure of an exporting endeavor.

Many developing foreign countries have the same concerns as the United States when it comes to food quality and safety. With aging population around the world citizens are looking for food to facilitate the health conscious population. Foods high in fiber and low in cholesterol are very important. The U.S. processed food industry usually has a higher salt content that foreign customers are not accustomed to eating. This is not only a health issue but also a culture adjustment that needs to be made.

Convenience foods have also had growing demand. Approximately 80 percent of food products sent to China in 1997 were frozen foods. Snack food products made up 30

to 40 percent of the desired imports. The people of the foreign countries were willing to pay a little extra for the conveniences.

### Summary

Oklahoma value-added agricultural food product exporters are in a competitive market of increasing economic value of farm products. Value adding combines labor, machinery, energy, and technologies to convert bulky farm products into packaged palatable foods.

Understanding the needs and wants of importing countries is key to the development of exporting markets for Oklahoma as well as the United States. Consumer oriented sector studies are done in developed countries, such as Japan. To identify market potential in the countries information about ingredients and labeling requirements can be provided by the US Food Service Agency (FSA). In 1998 a \$250 investment could get a food product company a menu of services provided by the FSA. They can provide information about packaging, ingredients, and market potential and provide a competitive review of your products in designated markets. This is where the companies goals and priorities come in, to allocate moneys to go into research for exporting.

Oklahoma food and agricultural product exports have been on the rise. With timely accurate market information, producers, processors and others in agribusiness industries can continue to make wise marketing decision

## CHAPTER III

### METHODOLOGY

The purpose of this chapter was to describe the methods and procedures used to conduct the study of customer preferences of agricultural and food product imports as perceived by Oklahoma value-added food exporters.

In order to accomplish the purpose it was necessary to establish a purpose and set forth specific objectives, determine a population and develop a survey instrument which would acquire the information needed to fulfill the study objectives. Specific objectives of the study were:

- Determine selected characteristics of value-added food exporters in Oklahoma
- Determine selected characteristics of food importers as perceived by value-added food exporters
- Determine information sources concerning potential export markets as perceived by value-added food exporters
- Determine buying preferences of food importers as perceived by value-added food exporters.

### Institutional Review Board (IRB)

Federal regulations and Oklahoma State University policy require review and approval of all research studies that involve human subjects before investigators can begin their research. The Oklahoma State University Office of University Research Services (IRB) conducts this review to protect the rights and welfare of human subjects involved in biomedical and behavioral research. In compliance with the aforementioned policy, this study received the proper surveillance and was granted permission to proceed. This research was assigned the following research project number: AG-99-013. A copy of the IRB approval form is resented at the end of this document in Appendix A

### Population

The purposive sample for this study consisted of 100 agricultural product and food processors in Oklahoma. The study population was determined from a combination of current directories (1997) published by the Oklahoma Department of Agriculture located in Oklahoma City. The directories included “The Oklahoma Agricultural Products Export Directory” and “Oklahoma Food and Agricultural Product Directory- Better Buy Oklahoma”

Of the 100 surveys mailed, 11 were returned completed indicating a 11 percent return rate. Therefore, since potential participants were purposefully selected because of their involvement in the processing and/or exporting of value-added food and agricultural products, this study group was referred to as a purposive sample, in which the potential respondents were pre-selected.

### Design of the Instrument

A mailed questionnaire was determined to be the most appropriate tool to satisfy the objectives of the study. Developing questions for the instrument which would complete the objectives began with reviewing surveys of similar studies. The researcher compiled questions related to the demographics of exporters, information sources concerning potential export markets and perceived buying preferences of food importers.

A draft copy of the instrument was reviewed by ten faculty in various departments in the College of Agricultural Sciences and Natural Resources and Human Environmental Sciences at Oklahoma State University. The departments represented were Agricultural Economics, Animal Science, Horticulture, Cooperative Extension-Family and Consumer Sciences, and Food & Agricultural Products Research & Technology Center (Appendix C). After reviewing the draft, revisions suggested by the expert faculty panel were implemented and the instrument was developed into booklet form (Appendix D) for mailing. Forty-six closed response items and two open-ended questions for written comments were compiled.

Sections one through four included closed response items. The respondents were asked to identify or rank the responses. In the items that were to be ranked, the respondents were asked to use 1, 2, 3 ..., with 1 being the most frequently used. Responses to these questions were analyzed by determining the frequency and the ranking number of items selected.

The first section of questions were relative to the demographics of the exporter in Oklahoma. This included the location of the firm, number of employees, years of establishment, type of products handled, and experiences in exporting.

In the section two of the questionnaire the demographics of food importers as perceived by the exporters was recorded. Information about the geographic area where products are exported was included. The demographics of the consumers of products, such as age, income range, education were gathered in section two of the survey instrument. The product trend and methods of purchasing of the export products was also examined.

In section three of the survey the food producers were asked to rank the use of information sources concerning potential export markets. They were asked to ranked state and federal government agency services for exporting information as well as associations, publications, and electronic export trade information services.

Buying preferences of food importers qualities were ranked in section four of the survey. The food producers and processors were asked to rank the qualities that they perceived to be desirable by importers. Also the type of products preferred concerning raw agricultural products. Then the questions were broken down into preferred types of value-added food products. Exporters were asked to respond to only the questions that were related to the products of their firm.

Finally in section five of the survey instrument two open-ended questions were included for written comments. The exporters were asked to comment on why they believed importers chose raw products or value-added products, and any additional comments were requested in this section. The additional comment are quoted in Appendix F.

When designing the questionnaire, it was realized that there was potential need for a follow-up. Therefore the questionnaires were coded in order for non-respondents to

be contacted. Ten percent of the non-respondents were telephoned and asked to respond to the demographic portion of the questionnaire. Only the researcher had access to these codes for the use of follow-up. The codes were destroyed after the telephone surveys were conducted.

Nominal scales and ordinal scales were used to describe and quantify data derived from forced response items. Orlich et al., (1975) described the use of nominal and ordinal scales in reporting and presenting findings in a similar study.

Nominal Scales - One type of forced response question represents nominal or a "naming" scale. The response categories of a nominal item are basically non-numerical in their relationship. This scale identifies rather than measures. Questions representing a nominal scale are usually designed to gather factual information about respondents or item categories (p.37).

Ordinal Scales - The ordinal scale represents a type of forced response question and is generally used to gather both factual information and respondents' opinions. The ordinal scale indicates a rank order relationship among the response categories of a question; however it does not reveal the magnitude of difference between categories or intervals (p.38.39)

Runyon-Haber (1971) in describing frequency distributions using nominal scales stated "no order is assumed to underlie nominally scaled variables. Thus, the various categories can be represented in any order you choose" (p.31). In addressing the use of ordinal scale variables Runyon-Haber (1971) characterized the management of data "in treating

it the same way as nominally scaled variables except that the categories should be placed in their naturally occurring order" (p.33).

Runyon-Harber (1971) further alluding to the use of ordinal scales and existing relationships when one moves into the next higher level of measurement explained.

We encounter variables which the classes do represent an ordered series of relationships. Thus, the classes in ordinal scales are not only different from one another but stand in some kind of relation to one another (p. 14).

To further explain data summarization Hoshmand (1988) emphasized:

We can use class intervals to condense the data. Class intervals are non-overlapping contiguous intervals selected arbitrarily in such a way that each value in the set of data can be placed in one, and only one, of the intervals. The number of intervals depends on the number of observations described (p.18).

### Collection of Data

The researcher decided the mail questionnaire was the best approach for data collection. The large population to be studied made the mail questionnaire the most feasible. One hundred questionnaires were mailed by U.S. mail February, 1999. The packets included a cover letter (Appendix B) that described the purpose of the study, one coded questionnaire and a self-addressed stamped envelop for the return of the survey. The producers were advised that all questions were voluntary.

The codes on the questionnaires were used to do a follow-up two weeks after the initial mailing. Ten percent of the non-respondents were contacted by phone and asked to respond to the demographic question of the questionnaire (Appendix E).

Eleven percent of the questionnaires were returned. Nine producers were contacted by phone and participated in the demographic portion of the study.

### Data Analysis

The data collected in the study population of Oklahoma value-added food processors and agricultural producers was analyzed using descriptive statistics. The descriptive statistics used to analyze the data included, percentages and frequency distributions, as well as overall ranks. Hoshmand (1988) in his treatment of descriptive statistics stated:

agricultural scientist and managers alike collect data for decision making purposes. Mostly, the data are obtained from samples and are usually unorganized. To make a decision from an unorganized set of data is very difficult. It is therefore necessary to condense large sets of data into an ordered array. An ordered array is a listing of sampled observations from the smallest value to the largest (p.16)

Hoshmand (1988) emphasized the benefits of frequency distributions, stating,

The data can be presented in a frequency distribution, which involves grouped data that can be easily visualized. Frequency distributions give both the value for the observations and their frequency of occurrence (p.18).

In their "Guide To Sensible Surveys" Orlich et al. (1975) stressed the value of utilizing percentages in summarizing data.

Respondent counting provides a summary of the tabulated frequency for which each category indicated. Frequency data can be converted to percentages indicating the number of respondents who marked a particular category in relationship to the total number of respondents. Percentages are usually calculated for nominal, some ordinal and interval items (p. 108).

Orlich et al. (1975) in illustrating how to report ranked item stated

Some ranked items are also commonly analyzed by mean. To compute the average preference for a particular category a separate mean score must be calculated. For example, we assign a weighted value to each first place preference, to each second, to each third, to each fourth, etc. (p. 113-114).

Van Dalen (1966) in addressing the effectiveness of rank-order scales emphasized

Rather than rating subjects, objects, products, or attributes on an absolute scale, a rank-order scale compares them to one another. This technique is especially useful for handling in a quantitative manner data that have not been precisely differentiated. Rank-order scales, therefore, usually give a more reliable measure at the extremes of the scale than in the central portion (p. 320).

In reviewing Van Dalen's (1966) recommendations concerning the utility of rank-order scale, numerical values were assigned in order to determine

differences and calculate an overall rank/mean rank by summing the values for the ranks assigned to each possible statement and dividing ( $\div$ ) by the total number of responses. The numerical values established for calculating overall ranks for this study were: one(1) - first, two (2) - second, three (3) - third, four (4) - fourth, five (5) - fifth, six (6) - sixth, etc.

## CHAPTER IV

### PRESENTATION AND ANALYSIS OF DATA

The purpose of this chapter was to present data describing the perceptions of Oklahoma value-added food and agriculture products processors and exporters concerning perceived customer buying preferences of agricultural and food products. A mail survey was conducted of Oklahoma food and agricultural product processors and exporters. The study participants responses dealt with: Demographics of Exporters, Demographics of Food Importers, Information Sources Concerning Potential Export Markets, and Buying Preferences of Food Importers. A follow-up telephone survey was conducted to determine the demographics of 10 percent of the non-respondent. Their inputs were consolidated with the respondents' Demographics of Exporters. Data were organized to correspond with the objectives of the assessment.

The purpose of this study was to determine customers buying preferences of agriculture and food product importers as perceived by Oklahoma value-added food and agricultural product exporters. In order to accomplish the purpose of the study, the following objectives were established.

1. Determine selected characteristics of value-added food exporters in Oklahoma.
2. Determine selected characteristics of food importers as perceived by value-added food exporters.

3. Determine information sources concerning potential export markets as perceived by value-added food exporters.
4. Determine buying preferences of food importers as perceived by value-added food exporters.

### Population

The purposive sample for this study consisted of 100 agricultural product and food processors in Oklahoma. The study population was determined from a combination of current directories (1997) published by the Oklahoma Department of Agriculture located in Oklahoma City. The directories included “The Oklahoma Agricultural Products Export Directory” and “Oklahoma Food and Agricultural Product Directory-Better Buy Oklahoma”.

Of the 100 surveys mailed, 11 were returned completed indicating a 11 percent return rate. Therefore, since potential participants were purposefully selected because of their involvement in the processing and/or exporting of value-added food and agricultural products, this study group was referred to as a purposive sample, in which the potential respondents were pre-selected.

### Findings of the Study

The finding of this study were derived from the survey instrument developed and administered during the 1999 spring semester. Information compiled from the study was dichotomized into sections to provide an organized approach to the analysis of the data.

1. Demographics of Exporters.

2. Perceived Demographics of Importers.
3. Information Sources Concerning Potential Export markets.
4. Buying Preferences of Food Importers.
5. Comments and Suggestions/Observations (Appendix E).

### Demographics of Exporters

Tables I through XI were developed to show selected demographic information. The data shown in Table I described the geographic location of respondents in Oklahoma where exported products are produced. Slightly more than 33 percent of the respondents were located in Northeast Oklahoma, while 8.34 percent in the Southeast, 33.3 percent were in the Southwest, while 25 percent revealed "Central" Oklahoma as the location where their products were produced.

TABLE I

A Distribution Of Study Respondents by Geographic Location In Oklahoma

Geographic Location	Frequency (N=12)	Percentage (%)
Northeast	4	33.33
Northwest	-	-
Southeast	1	8.34
Southwest	4	33.33
Central	3	25.00
Total	12	100.00

The data in Table II illustrates the length of time current firms had been established. Seven (43.75%) of the firms had been established 41 years or more, while firms established less than 5 years and 6 to 10 years included 12.5 percent of the respondents respectively. Three (18.75%) firms had been established 11 to 20 years. However, 6.25 percent of the firms had been established 21 to 30 years and 31 to 40 years respectively.

TABLE II  
A Distribution Of Study Respondents By Number Of Years The  
Current Firms Had Been In Business

Length of Time Years	Frequency (N=16)	Percentage (%)
0 to 5	2	12.5
6 to 10	2	12.5
11 to 20	3	18.75
21 to 30	1	6.25
31 to 40	1	6.25
41 or more	7	43.75
Total	16	100.0

The data in Table III showed the number of employees of the firms. Seven (46.67%) represented firms with 25 or less employees. Three respondents represent one (6.67%) firm each indicated they employed 51 to 75, 76 to 100, and 101 to 125 employees respectively. Five (33.33%) of responding businesses with 126 employees or more represented over 33 percent of the total respondents participating in this study.

TABLE III  
A Distribution Of The Study Respondents  
By The Number Of Employees At The Firm

Employees	Frequency (N=15)	Percent (%)
25 or less	7	46.67
26 - 50	-	-
51- 75	1	6.67
75 - 100	1	6.67
101- 125	1	6.67
126 or more	5	33.33

The data in Table IV illustrated the diversity of commodities processed by Oklahoma food and agriculture product exporters that the agricultural products and/or commodities processed by the respondents varied. Among the respondents, meat producers were largest group with about 35 percent. The “other” category involved 17.65 percent, with respondent listing honey, seasonings, ostrich products, beverages, candies, and popcorn seed as “other” agricultural products/commodities processed. Oil seed processing involved 17.65 percent of the respondents, while processed fruit, wheat, and vegetable commodities included 5.88 percent of the total respondents of processed agricultural products respectfully.

TABLE IV  
A Distribution Of Firms By The Type Of Business Organization And  
Food And Agricultural Products Processed

Business Organization of Firms and Type of Products Processed	Frequency (N=11)	Percentage (%)
Corporate	6	54.55
Meats (4)		
Feed Grains (1)		
Oil Seeds (2)		
Vegetables (1)		
Fruit (1)		
Wheat (1)		
"Other" (1)		
Mid-Size Operations.	1	9.09
Feed Grains (1)		
Oil Seeds (1)		
Privately Owned/Small:	4	36.36
Meat (1)		
Honey (1)		
Popcorn seed (1)		
Ostrich (1)		
Total	11	100.00

The data in Table V demonstrates the percentage of the raw products/commodities purchased by the responding firms. Over twelve percent of the firms produced the raw products themselves, while 50 percent of the firms purchased 91 to 100 percent of the raw products used. The remaining 37.5 percent of the responding firms represented were distributed from one to ninety percent

The data in Table VI represented the percentage of raw products/commodities produced in Oklahoma used by the respondents firms. Slightly over 14 percent of the firms represented used 0 to 10 percent and 91 to 100 percent of Oklahoma produced products respectively. More than 21 percent of the firms represented 11 to 20 percent and 21 to 30 percent used Oklahoma produced products respectively. Of four (28.56%) firms representing; 31 to 90 percent of the raw products/commodities they used were produced in Oklahoma.

TABLE V  
A Distribution Of The Responding Firms By The Percentage Of Raw  
Products/Commodities Purchased

Percentage of Products/ Commodities Purchased	Frequency (N=16)	Percent (%)
0	2	12.50
1 to 10	1	6.25
11 to 20	1	6.25
21 to 30	-	-
31 to 40	1	6.25
41 to 50	-	-
51 to 60	1	6.25
61 to 70	1	6.25
71 to 80	-	-
81 to 90	1	6.25
91 to 100	8	50.00
Total	16	100

TABLE VI

A Distribution Of Firms By The Percentage Of Raw Products/Commodities Produced In Oklahoma

Percentage of Products/ Commodities Produced	Frequency (N=14)	Percent (%)
0 to10	2	14.29
11 to 20	3	21.43
21 to 30	3	21.43
31 to 40	1	7.14
41 to 50	-	-
51 to 60	1	7.14
61 to 70	-	-
71 to 80	1	7.14
81 to 90	1	7.14
91 to 100	2	14.29
Total	14	100.00

When the respondent agriculture product and food producers were asked if they exported; eight (47.06%) of the respondents answered “yes”, leaving nine (52.94%) answering “no”. Of those who said “yes”, the data in Table VIII showed how long they had been exporting. Three (37.50%) businesses had been exporting five years or less, while one (12.50%) firm had been exporting 6 to 10 years, and two (25.00%) had 21 to 25 years exporting experience. In addition, two (25.00%) firms represented in this study had 26 or more years of exporting experience.

TABLE VII

A Distribution Of Whether Or Not The Firms Represented By Respondents Exported Either Processed Food Or Agricultural Products

	Frequency (N=8)	Percentage (%)
Yes	8	47.06
No	9	52.94
Total	17	100

TABLE VIII

A Distribution Of Firms Represented By Years Of Exporting Experience

Years	Frequency (N=8)	Percentage (%)
5or less	3	37.50
6 to 10	1	12.50
11 to 15	-	-
16 to 20	-	-
21 to 25	2	25.00
25 or more	2	25.00
Total	8	100.00

The data in Table IX shows the purpose of export involvement of the responding firms. Expanding profit potential had the highest frequency at 5 (71.43%). Four firms chose opportunity to expand the business (57.14%) and maximum return on investment (57.14%), respectfully, as the next most popular choice for export involvement. Optimum use of available labor and facilities and economic development for the community each were chosen three times (42.86%).

TABLE IX

A Distribution Of The Study Respondents On The  
Purpose For Export Involvement

Purpose of Exporting	Frequency (N=7)	Percentage (%)
Expand Profit Potential	5	71.43
Optimum use of available labor & facilities	3	42.86
Economic Development for Community	3	42.86
Opportunity to expand the business	4	57.14
Maximum return on investment	4	57.14

Value-added products was perceived to be the preferred products by the five (71.42%) responding agriculture product and food producers. Raw products was chosen by 2 firms (28.58%) percent.

The data shown in Table X represents the packaging preferences of the Oklahoma agriculture product and food producer respondents used when marketing their exports. Five (50.00%) firms represented packaged in Oklahoma, while one (10.00%) firm sold its products prior to packaging. However, two (20.00%) firms had their export products packaged out of state, while two (20.00%) other firms used a combination of packaging in Oklahoma, selling prior to packaging and packaging their products out of state.

TABLE X

A Distribution Of Firms Represented By Packaging Preferences  
Of Export Products

Packaging Preferences	Frequency (N=10)	Percentage (%)
In Oklahoma	5	50.00
Sell before	1	10.00
Out of state	2	20.00
All of the above	2	20.00
Total	10	100.00

The data in Table XI describes how price was determine for products that were exported by the firms represented in this study. Six (67.67%) firms set their own price, while three (33.33%) sold their exports based on market value.

TABLE XI

A Distribution Of Firms Represented By Method Of Price  
Determination For Exported Products

Price Establishing Method	Frequency (N=9)	Percent (%)
Firm Set Price	6	67.67
Market Value	3	33.33
Producer Associations	-	-
Total	9	100.00

### Demographics of Food Importers

The demographics of food importers survey questions were designed to show the characteristics of importers as perceived by the responding Oklahoma value-added food and agricultural product exporters.

The data in Table XII indicated the age groups for which export products were targeted. As the data suggests adults were the most frequent target market. Fifty-five percent of the respondents indicated adults were their number one market. Children and Teens were targeted consumer groups by 18 percent of the study respondents respectively, while nine percent suggested they produced products for all age groups.

TABLE XII  
A Distribution Of Study Respondents By The Age Group  
Of Targeted Consumers

Age Group	Frequency (N=11)	Percent (%)
Adults	6	54.54
Teens	2	18.18
Children	2	18.18
All Ages	1	9.10
Total	11	100.00

Income ranges of consumers using Oklahoma food and agriculture products as perceived by exporters was describe relative to the importing country's standards. The data in Table XIII revealed one of the survey respondents indicated value-added exports were consumed by the upper middle class, and raw products were purchased by the lower middle class. Income ranges among consumers revealed the upper middle class ranked the highest in the use of imported food and agricultural products, followed by the lower

middle class by the respondents in this study. Three (17.65%) respondents indicated the wealthy were the primary income group targeted for their products, while two (11.76%) indicated they targeted all income classes for marketing their products.

TABLE XIII

A Distribution Of Consumers As Perceived By Study Respondents Using Imported Food And Agricultural Products By Income Range

Income Range	Frequency (N=17)	Percent (%)
Upper Middle Class	8	47.06
Lower Middle Class	4	23.53
Wealthy	3	17.65
All Classes	2	11.76
Poverty	-	-
Total	17	100

The perceived level of formal education among consumers using the respondents products was described in Table XIV. Of the 15 responses to this survey question, one (6.67%) respondent indicated no formal education, while one (6.67%) stated elementary education as the primary level of education consuming their products. Three (20.0%) respondents indicated consumers with a high school education were their primary customers. Two (13.33%) indicated their products were consumed by people with a graduate level education. The largest group of respondents, four (26.67%), indicated their consumers were college educated, while another four (26.67%) revealed their products were oriented toward all groups regardless of educational level.

TABLE XIV

A Distribution Of Consumers As Perceived By Study Respondents Using Imported Food And Agricultural Products By Level Of Formal Education

Education	Frequency (N=15)	Percent (%)
No Formal	1	6.67
Elementary	1	6.67
High School	3	20.00
Trade School	-	-
College	4	26.67
Graduate	2	13.33
All Levels	4	26.67
Total	15	100.01

The survey data concerning product trends preferred by consumers showed that most consumers preferred value-added food products, 67 percent. Twenty-two percent indicated raw products were preferred. One respondent indicated that both value-added and raw products were preferred by consumers.

TABLE XV

A Distribution Of Perceived Consumer Product Preferences By Product Characteristics

Product Characteristics	Frequency (N=9)	Percent (%)
Value-added Food Products	6	66.67
Raw Products	2	22.22
Both Value-added and Raw Products	1	11.11
Total	9	100.00

The data shown in Table XVI reveled the methods used by exporters to enable importers to purchase their products. Four (33.34%) respondents indicated purchasing direct from the exporter was primary method of getting products to foreign consumers. Three (25.00%) exporters indicated that their products were purchased by foreign consumers from local distributor, while three (25.00%) indicated they used a broker to move their products to foreign consumers. One (8.33%) respondent indicated he/she used all available methods for moving product(s) to foreign consumers, while one (8.33%) respondent, used an export trader to get his product(s) into the hands of consumers.

TABLE XVI

A Distribution Of Respondents By The Method Used To Move Product(s) To Foreign Consumers

Method of Moving Product(s) to Consumers	Frequency (N=12)	Percentage (%)
Direct from Exporter	4	33.34
Local Distributor	3	25.00
Broker	3	25.00
Export Trade Representative	1	8.33
All Methods	1	8.33
Total	12	100.00

### Information Sources Concerning Potential Export Markets

Survey questions were designed to show where Oklahoma value-added food and agriculture products exporters get information about exporting their products.

The data in Table XVII exhibits respondent's rankings of Federal agencies concerning the availability of information and frequency of use concerning potential export markets. The data showed the Foreign Agriculture Service to be the best source of export information available. The State Department was the second leading agency used as a source for export information, while the Trade Information Center was ranked third as an information source and was the most frequent source cited.

TABLE XVII

A Distribution Of Respondents' Ranking Of Information Sources Concerning  
Potential Export Markets By Federal Agencies

Federal Agencies	<u>Frequency of Ratings</u>					Sum of Rankings	Mean Rank	Overall Rank
	First	Second	Third	Fourth	Fifth			
Foreign Agriculture Service (USDA)	4	1	-	1	2	20	2.5	1
State Department (US) Trade Information Center (USA-Trade)	2	3	-	-	3	23	2.88	2
	1	-	6	-	1	24	3.0	3
International Trade Administration (Dept. of Commerce)	1	3	-	1	3	26	3.25	4
The Export Hot Line (USA-XPORT)	-	-	-	1	7	39	4.88	5

The data in Table XVIII showed the State Government agencies which responding product exporters look to for information about export markets. The Oklahoma Department of Agriculture was the agency that was used most frequently and ranked the highest. The Oklahoma State Department of Commerce ranked as the second most common agency used and second most frequent. Few of the respondents ranked more than three agencies.

The data in Table XIX indicated the rank and frequency of trade and export associations used by study respondents. The data showed that few trade and export associations were contacted by Oklahoma value-added food and agriculture exporters. The most frequently used information source was the Southern United State Trade Association (SUSTA).

Table XVIII

A Distribution Of Respondents' Rankings Of Information Sources Concerning Potential  
Export Markets By State Agencies

State Agencies	<u>Frequency of Ratings</u>					Sum of Rankings	Mean Rank	Overall Rank
	First	Second	Third	Fourth	Fifth			
Oklahoma Dept. of Agriculture	7	-	-	-	1	12	1.5	1
Oklahoma Dept. of Commerce	-	2	3	1	2	17	2.13	2
Center for Int'l Trade Development	-	2	1	-	5	32	4.0	4
Food & Agricultural Products Research & Technology Center (OSU)	-	3	-	-	5	31	3.88	3
Oklahoma Cooperative Extension Service	-	-	1	-	7	38	4.75	5

TABLE XIX

A Distribution Of Respondents' Rankings Of Information Sources Concerning Potential Export Markets By Trade And Export Associations

Trade & Export Association(s)	<u>Frequency of Ratings</u>						Sum of Rankings	Mean Rank	Overall Rank
	First	Second	Third	Fourth	Fifth	Sixth			
Southern United States Trade Assoc. (SUSTA)	4	1	-	-	-	3	24	3.0	1
National Assoc. of State Dept. of Agriculture	-	1	-	-	-	7	44	5.5	3
American Assoc. of Exporter & Importers	-	-	-	-	-	8	48	6.0	5
Small Business Administration (SBA)	-	-	-	-	-	8	48	6.0	5
Western United States Trade Assoc. (WUSTA)	-	1	-	-	-	7	44	5.5	3
State Chamber of Commerce (Oklahoma)	1	-	1	-	-	6	39	4.88	2

Survey question number four describing trade and export publications used as sources of information revealed few food processors used these publications. Three respondents indicated that they used the *Ag Exporter* as a reference, as well as *OSU Extension Fact Sheets* for export marketing information. One respondent used "*Export Briefs*" (AIMS) and one indicated they used "other" publication sources.

When asked to rank the electronic and web site export trade areas used for sources of information only one respondent used these methods. The source they indicated was "*Buyer Alert Program: (AIMS)*". There were no responses to the private services for trade and export assistance used as sources of information.

### Buying Preference of Food Importers

This section of the Oklahoma Value-added Food Product Exporters Survey described the buying preferences of food importers as perceived by the Oklahoma food and agriculture product exporters. Questions one, two and three asked respondents to rank desirable characteristics of value-added food imports, importance of product attributes, and primary preferences concerning raw agricultural products. Questions four to twenty-two asked study participants to respond only to items concerning product items preferred by their international customers.

The data in Table XX illustrated the rankings of quality characteristics of value-added food imports producers perceived to be desirable by importers. The respondents ranked price as the characteristic they perceived importers felt was the most important. Ranking second among respondent perception was quality of the products being imported, while availability of the product(s) ranked third. One of the respondents

remarked that the “closeness to the importers taste and cooking preference” was a quality which affected desirability of a product.

The data in Table XXI portrays the importance of product attributes deemed desirable by importers as perceived by food exporters. Flavor was the product attribute selected most frequently, and freshness and shelf-life were also selected as desirable product attributes. Safety was another attribute selected. Again, one respondent indicated “closeness to importers taste and cooking preference” was the most important attribute of desirability by importers.

The data in Table XXII illustrated the rankings of three respondents concerning the primary preferences involving raw agricultural products. All three respondents ranked meat first. Dairy and grain products were ranked second by the respondents

TABLE XX

A Distribution Of Respondents' Ranking Of Food Importers Buying Preferences  
By Desirable Product Characteristics

Product Characteristics	<u>Respondents' Ratings</u>						Sum of Rankings	Mean Rank	Overall Rank
	First	Second	Third	Fourth	Fifth	Sixth			
Price	5	2	1	-	-	-	12	1.5	1
Quality	2	6	-	-	-	-	14	1.75	2
Availability	-	-	4	3	-	1	30	3.75	3
Quantity	1	-	1	2	2	2	34	4.25	4
Brand Names	-	-	1	1	2	4	41	5.13	5
"Taste and Cooking Preference"	-	-	1	-	-	7	45	5.63	6

TABLE XXI

A Distribution Of Respondents' Ranking Of Food Importers Buying  
Preferences By Desirable Food And Product Attributes

Food/Product Attributes	<u>Respondents' Rating</u>								Sum of Rankings	Mean Rank	Overall Rank
	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth			
Freshness	2	1	3	-	-	-	-	2	29	3.63	2
Shelf-Life	2	3	-	-	1	-	-	2	29	3.63	2
Flavor	1	2	3	1	-	-	-	1	26	3.25	1
Safety	1	-	-	3	-	1	1	2	42	5.25	4
Packaging	-	1	1	1	2	-	1	2	42	5.25	4
Nutrition	-	-	-	1	-	2	2	3	54	6.75	6
Ready to Serve	-	-	-	-	2	2	1	4	54	6.75	6
"Taste & Cooking Preference"	-	-	1	-	-	-	-	7	59	7.38	8

TABLE XXII

A Distribution Of Respondents' Ranking Of Perceived Customer Choice(s) Concerning  
Raw Agricultural Product By Primary Preferences

Primary Preference	<u>Respondents' Ratings</u>						Sum of Rankings	Mean Rank	Overall Rank
	First	Second	Third	Fourth	Fifth	Sixth			
Raw Agricultural Products:									
Meat	3	-	-	-	-	2	15	3.00	1
Dairy Products	-	1	1	-	-	3	23	4.6	2
Fruit	-	-	-	1	1	3	27	5.4	4
Grain	-	1	1	-	-	3	23	4.6	2
Vegetables	-	-	-	-	1	4	29	5.8	6
Livestock Feed-stuffs	-	-	-	1	-	4	28	5.6	5

The data in Table XXIII and Table XXIV revealed the responses by the value-added food and agriculture product study participants. They were asked to respond to specific product items preferred by their international customers. Only customer preferred types of foods produced by study respondents were reported in this chapter. The complete value-added food product survey is in Appendix C. The preferred type of oil or oil products selected by the respondent were corn oil and sunflower oil. Sweeteners preferred by consumers of the responding producers were sorghum, honey, cane molasses, and two respondents selected corn syrup.

When asked about the preferred value-added meat products, the respondents indicated fresh chilled meats were customer preferable. Frozen and cured/smoked meats were alternative options. Regarding fresh chilled meat, the respondents felt their importers/customers preferred retail cuts and boxed products verses whole carcass and wholesale cuts. Preferences associated with processed meat products included hot dogs and sausage. Table XXIII shows the preferences concerning kinds of meat products preferred. Beef and pork products ranked the highest among the respondents.

One respondent perceived that importers of fresh fruits and vegetables preferred them in bulk. The kinds of fruits preferred by this respondents international consumers were: peaches, apples, apricots, plums, grapes, and strawberries. This same processor/producer also had customers who imported pecans and indicated the importers preferred the pecans in bulk, shelled and selected.

Buying preferences concerning kinds of condiments and fruit spreads revealed two producer/respondents indicating that their international customers imported these products.

TABLE XXIII

A Distribution Of Respondents' Rankings Concerning Perceived Customer Preference(s) By Kind Of Meat Products

Kind of Meat Products	<u>Respondents' Ratings</u>						Sum of Rankings	Mean Rank	Overall Rank
	First	Second	Third	Fourth	Fifth	Sixth			
Pork	1	2	-	-	-	-	5	1.67	1
Beef	2	-	1	-	-	-	5	1.67	1
Poultry	-	1	2	-	-	-	8	2.67	3
Fish	-	-	-	2	-	1	14	4.67	4
Lamb	-	-	-	1	1	1	15	5.0	5
Goat	-	-	-	-	-	3	18	6.0	6

TABLE XXIV

A Distribution Of Respondents' Ranking Concerning Perceived Customer Preference(s) By Kinds Of Condiments And Fruit Spreads

Condiments & Fruit Spreads	<u>Respondents' Rankings</u>		Sum of Rankings	Mean Rank	Overall Rank
	First	Second			
Spices	1	1	3	1.5	1
Bar-B-Q	1	1	3	1.5	1
Mayonnaise	1	1	3	1.5	1
Salsa	1	1	3	1.5	1
Mustard	-	2	4	2	5
Marmalade	1	1	3	1.5	2
Jams	1	1	3	1.5	2
"other"	1	1	3	1.5	2
Jelly	-	2	4	2	4
Preserves	-	2	4	2	4

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

##### Introduction

The purpose of this chapter was to present the summary, major findings, conclusions, and recommendations which was conducted to determine the focus of Oklahoma Value-Added Food and Agricultural Product Exporters and their perceived buying preferences of their customers. All the information in this chapter is based on the data collected from the respondents and information gathered in the review of literature.

##### Purpose of the Study

The purpose of this study was to determine customers buying preferences of agriculture and food product importers as perceived by Oklahoma Value-Added Food and Agricultural Product Exporters.

### Objectives

In order to accomplish the purpose of the study, the following objectives were established:

1. Determine selected characteristics of value-added food exporters in Oklahoma.
2. Determine selected characteristics of food importers as perceived by value-added food exporters.
3. Determine information sources concerning potential export markets as perceived by value-added food exporters.
4. Determine buying preferences of food importers as perceived by value-added food exporters.

### Population

The purposive sample for this study consisted of 100 agricultural product and food processors in Oklahoma. The study population was determined from a combination of current directories (1997) published by the Oklahoma Department of Agriculture located in Oklahoma City. The directories included "The Oklahoma Agricultural Products Export Directory" and "Oklahoma Food and Agricultural Product Directory-Better Buy Oklahoma".

Of the 100 surveys mailed, 11 were returned completed indicating a 11 percent return rate. Therefore, since potential participants were purposefully selected because of their involvement in the processing and/or exporting of value-added food and agricultural

products, this study group was referred to as a purposive sample, in which the potential respondents were pre-selected.

#### Design and Conduct of the Study

A mail questionnaire for data collection was used to conduct the survey. The large population to be study made the mail questionnaire most feasible.

A four-part survey was mailed to both current value-added food exporters and potential value-added food exporters. The food processor and agricultural product exporter population was determined from the "Oklahoma Department of Agriculture's Publications "Better Buy Oklahoma" and Oklahoma Agricultural Products Export Directory". Ten percent of the non-respondents were telephoned and asked to respond to the Exporter Demographic portion of the questionnaire.

Part I of the survey addressed 12 items concerning the demographics of exporters. These questions gathered information about the location, time of establishment, number of employees, and products the firms produced. The producers were also asked if they were exporting and if yes how long, and the purpose of export involvement. Nominal and interval scales were used in the data gathering for this part of the survey. Non-respondents (10%) were telephoned and asked only the twelve survey items dealing with exporter demographics.

The second portion of the survey included six (6) items designed to acquire information concerning exporters perceptions of food and agricultural product importers. These were characteristics the food exporters observed among customers purchasing their products. Geographic locations, and customer/consumer demographics were gathered in this section. Nominal scales were used to ascertain data in this section.

Part III addressed information sources concerning potential export markets. respondents were asked to address six (6) issues ranking frequency of use by their firm. Ordinal scales were used to gather the ranked data.

Both nominal scales and ordinal scales were used in Part Four of the Value-Added and Agricultural Product study. Respondents were asked to rank perceived buying preferences and indicate the type of value-added products preferred by their international customer. The final section of the survey allowed the respondent to write additional comments and suggestions or observations about value-added food product exporting.

### Major Findings of the Study

Demographics of Exporters. Almost 44 percent of the study respondents were involved with exporting firms which had been in business 41 years or more, while more than 18 percent had been involved in exporting endeavors from 11 to 20 years. Firms with 25 or less employees made up over 46 percent of the food exporters responding to this study, while businesses with 126 or more employees represented more than 33 percent of the respondents.

Over 35 percent of the exporting firms represented in this study were involved in meat processing, while more than 17 percent of the respondents were representatives of either oil seed or "other" processors respectively. Fifty percent of the firms represented in this study purchased from 91 to 100 percent of the products they processed for exporting. Almost 36 percent of the firms represented in this study produced more than 50 percent of the product processed for export in Oklahoma. Fifty percent of the firms

represented in this study had ten years or less involvement as exporters. More than 71 percent of firms represented in this study indicated they were involved in exporting to “expand profit potential.”

Fifty percent of the firms represented in this study packaged their own products in state prior to shipping. In addition, over two-thirds of the businesses involved in this study established the value for the items and/or products which they sold.

Demographics of Food Importers. The information from the respondents indicated that the area with the perceived highest market potential was the Pacific Rim and Mexico. This also corresponded with the review of literature which revealed these were the fastest growing areas during the last eight years.

The data showed almost 55 percent of the exporters represented in this study oriented the products they produce toward adult markets overseas. Slightly over 18 percent of the export markets represented in this study targeted exports toward specific markets involving either teenagers or children. Over 60 percent of the respondents in this study indicated their markets were oriented toward middle class customers overseas. In addition, 60 percent of the exporters in this study revealed their markets and products were developed to appeal to individuals with a high school education or higher. Furthermore, over 66 percent of the respondents indicated they perceived their customers preferred value-added products versus only 22 percent preferring raw products. Slightly over one-third of study respondents indicated it was their perception that most of their customers purchased food and agricultural products “Direct From the Exporter”, while

25 percent of the respondents reported their customers purchased products from “Local Distributors” or “Brokers” respectively in overseas locations.

Information Sources Concerning Potential Export Markets. Data from the responding agricultural product and food product processor/producers showed the federal agencies most often contacted for information concerning export markets were the Foreign Agriculture Service and the US State Department. At the state level, the Oklahoma Department of Agricultural and the Oklahoma Department of Commerce were the state agencies most frequently contacted for export market information. In addition, trade associations most frequently contacted by respondents in this study revealed the Southern United States Trade Association (SUSTA) was by far the most helpful and provided quality information. The *Ag Exporter*, *OSU Extension Fact Sheets*, and “*Export Briefs*” seemed to be the most popular export market publications among respondents in this study.

Buying Preferences of Food Importers. Respondents in this study indicated the product characteristic first considered by importers was price of the product. This corresponds to the information in the review of literature that indicated prices increased as distance increased. Tariffs and taxes were also considerations in setting price. Quality of the product was a close second as a consideration of food importers/customers. Availability and quantity of the products were also qualities that value-added food exporters perceived to be desirable characteristics for importers.

The product attribute perceived to be most desirable to importers as perceived by respondents was flavor. Freshness and shelf-life were also considered important attributes to foreign consumers as perceived by exporters. In addition, safety was another attribute customers seem to consider in regard to preference.

With regard to customer preferences of raw agricultural products, the respondents indicated meat was by far the most preferred followed by dairy products and grain. Respondents' ranking revealed product preferences included meat, dairy products and grain in that order. On the other hand, "pork and beef" were equally popular with the respondents' overseas customers and both ranked first in perceived consumer preference for "Kinds of Meat".

Consumer preferred value-added meat products were fresh chilled products. According to the respondents' rankings, value-added exporters felt the international consumers preferred retail cuts and boxed products, over carcasses or wholesale cuts.

Only one respondent had international consumers who imported fresh fruits and vegetables, and preferred them in bulk. Two respondents had consumers who were interested in condiments and fruit spreads.

## Conclusions

The following conclusions were based on the major findings of this study

- 1 It was apparent any conclusions developed were limited to the firms represented in this study
- 2 It was apparent the firms represented in this study have been established in food and agricultural product processing for 21 years or more

3. It was further concluded that the firms represented in this study were either small or large with few medium size businesses.

4. It was apparent from the major findings the typical Oklahoma firm represented in this study was involved in the processing of meat, oil seeds, other and feed grains.

5. In addition, it was rather apparent the firms represented in this study were equally divided between groups with 21 or more years or 10 years or less export experience.

6. It was apparent from the findings, most firms in this study "see" exporting as a way of "expanding their profit potential".

7. The firms represented in this study seem to package their products prior to shipment.

8. It was interesting to note the firms represented in this study seem to target their products to markets oriented toward the "adult" customer who is "middle class" and has a "high school" education or better

9. It was apparent, the respondents in this study believe value-added products have the qualities and characteristics preferred by foreign customers.

10. It was apparent from the findings the Foreign Agriculture Service (FAS) and the Oklahoma Department of Agriculture provide helpful and quality information for export clientele and seem rather popular with the respondents participating in this study.

11. In addition, the Southern United States Trade Association (SUSTA) was the most popular trade association with this group of respondents

12. According to the respondents in this study, both price and quality are important characteristics to consumers in foreign markets

13. It was apparent “flavor”, “freshness”, and “shelf-life” were the primary attributes considered by foreign customers represented in this study.

14. It was apparent from study findings the respondents believed that meat was the most popular raw product, while both pork and beef products were equally in demand by their foreign customers.

### Recommendations

The following recommendations were based on the review of literature, findings, and conclusions of this study.

1. The Oklahoma Department of Agriculture develop an up-to-date and accurate directory of value-added food and agriculture product exporters to disseminate information more effectively and efficiently.

2. Since education is the mission of the Oklahoma Cooperative Extension Service (OCES), directories of information sources and new fact sheets addressing export marketing should be developed to better serve Oklahoma food processors and producers.

3. Since education has such a large impact on the success of most export operations, Oklahoma export service providers should design/develop the necessary informational materials, videos and educational programming to inform potential and existing exporters of the availability of potential markets, impact of cultural differences in trade negotiations, and food product preferences of foreign buyers

### Recommendations for Further Research

It is the author's opinion that further research could be conducted to retrieve further information concerning exporting value-added food and agricultural products by Oklahoma producers and processors.

1. A qualitative study addressing observed international customers and consumers food product preferences and food exporters' perceptions of what they could do to expand markets and enhance market share.
2. Conduct a study of Oklahoma export service providers to determine how to better educate beginning exporters and deliver cutting edge information to existing exporting firms.

## SELECTED BIBLIOGRAPHY

- Alford, T., (April 1998). 'River of Trade' rising slowly. Oklahoma Living The Town and Country Advocate, Vol. 48, No.6, 16-17.
- Charlet, B., Henneberry K. (October 1990). Oklahoma's value-added agricultural export industry: An analysis of export market activities. Agricultural Experiment Station, Division of Agricultural Sciences and Natural Resources, Oklahoma State University. 792, 1-41.
- Clark, M., (1997). Better buy Oklahoma. Agricultural Market Development Oklahoma. [Http://www.oklaosf.state.ok.us:80/](http://www.oklaosf.state.ok.us:80/).
- Dunham, D., (August, 1993). Food Cost Review. Commodity Economics Division. Economic Research Served U.S. Department of Agricultural Economics Report. No 696.
- Food Marketing Review, 1992-93, (April, 1994). Commodity Economics Division. Economic Research Service, U.S. Dept. of Agriculture. Agricultural Economics Report No. 678.
- Greene, J., (1994). High-value food products boost agricultural exports. Food Review, 17(3), 18-22
- Harrison, J., (1992). "High-value products boost farm exports." Farm line. Washington DC: Economic Research Service, U.S. Department of Agriculture
- Hoshmand, A.R., (1988). Statistical Methods For Agricultural Sciences. Portland. Timber Press.
- Kale, H.S., Barns, J W. (First quarter, 1992). Understanding the domain of Crass-National buyer-seller Interactions. Journal of International Business Studies.
- Kennedy, S.M. (December 1997). Importers buying preferences towards small to mid-size food product exporters. Oklahoma State University. 1-63.
- Kerlinger, F.N., (1973). Foundations Of Behavioral Research. Chicago. Holt, Rinehart and Winston.

- Krause, J.H., Wilson, W.W., & Dooley F.J., (1995). The impact of demographic factors on the global demand for value-added wheat products. Journal of International Food and Agricultural business Marketing, 7(3), 3-13.
- Lee, C., & Robinson, M. (May, 1994). "Factor intensity and the changing commodity composition of U.S. agricultural trade." U.S. Department of Agriculture, Econ. Res. Svc., Agricultural Economic Report. No.683
- Lee, J., Henneberry, D., & Pyles, D., (1991). An analysis of value-added agricultural exports to middle-income developing countries: The case of wheat and beef products. Southern Journal of Agricultural Economics, 23(2 ), 141-154.
- Orlich, D.C., Clark, P.A., Fagan, N.M. and Rust, G.A. (1975). Guide To Sensible Surveys. Olympia: Washington State Commission for Vocational Education.
- Runyon, R.P. and Huber, A., (1971). Fundamentals of Behavioral Statistics. Reading, Addison-Wesley Publishing Co.
- Salvacruz, J.C., Reed, M.R., Mather, D., (1992). Research Reports: Food Demand in other countries - Market Assessment Models for U.S. Agricultural Exports. Journal of Food Distribution Research, 23(1), 119-125.
- Suter, D., & Henneberry, S.R., (1996). Mid-South region's value-added food industry: An analysis of fruit and vegetable processors. Journal of International Food and Agribusiness Marketing, 8(1), 33-54.
- Van Dalen, D.B. (1966). Understanding Educational Research NewYork: McGraw-Hill

## APPENDIXES

APPENDIX A  
INSTITUTIONAL REVIEW BOARD APPROVAL

OKLAHOMA STATE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD

DATE: 01-28-99

IRB #: AG-99-013

**Proposal Title: AN ASSESSMENT OF BUYING PREFERENCES EXHIBITED  
BY IMPORTERS AS PERCEIVED BY OKLAHOMA VALUE-ADDED FOOD  
PRODUCT EXPORTERS**

**Principal Investigator(s): James White, Melanie Sumter**

**Reviewed and Processed as: Exempt**

**Approval Status Recommended by Reviewer(s): Approved**

---

Signature:



Date: February 10, 1999

Carol Olson, Director of University Research Compliance  
cc: Melanie Sumter

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

APPENDIX B  
COVER LETTER

## OKLAHOMA STATE UNIVERSITY



Division of Agricultural Sciences and Natural Resources  
 Department of Agricultural Education, Communications  
 and 4-H Youth Development  
 448 Agriculture Hall  
 Stillwater, Oklahoma 74078-6031  
 405-744-8036, FAX 405-744-5176

February 26, 1999

Dear Oklahoma Food Exporter:

We are in the process of conducting a descriptive study concerning the export potential for Oklahoma value-added food products. As you know, Oklahoma has long been known for the quality of agriculture commodities and food products we produce. With new technology and communication capabilities, Oklahoma agriculture producers and food processors can expand into a wide variety of value-added products, alternative crops and markets.

The purpose of this study was to determine customer preference concerning agriculture and food product imports as perceived by Oklahoma value-added food exporters. This information as well as the potential for new Oklahoma export markets is economically important for both agricultural producers and food processors.

Please take about 20 minutes and complete the survey. A stamped envelope addressed to Melanie D. Sumter, 1015 West 5th, Stillwater, OK, 74074, is provided for your convenience.

We appreciate your willingness to share your perspectives and insight. Please rest assured that your responses will be strictly confidential and the coding of the survey instrument is done only for the purpose of providing follow-up to non-respondents. Data from this survey will only be reported in the aggregate. No individual responses will be able to be identified as a result. During the time the study is being conducted, I will be the only person having access to the raw data. All records and information will be stored in a secure filing system. After completion of the study, all raw data and correspondence will be destroyed. In addition, participation is strictly voluntary; refusal to participate will involve no penalty or loss of benefits to which you may be entitled.

If you have questions, you may contact me at the Natural Resources Conservation Service office in Claremore (918) 341-0536 or call Dr. James White at (405) 744-8143 in Stillwater.

Sincerely,

Melanie D. Sumter  
 Graduate Student  
 Oklahoma State University

James D. White  
 Professor and Thesis Adviser  
 Department of Agricultural Education, Communications  
 & 4-H Youth Development

David M. Henneberry  
 Member of Graduate Committee  
 Agricultural Economics

James P. Key  
 Member of Graduate Committee  
 Agricultural Education



APPENDIX C  
SURVEY INSTRUMENT REVIEW TEAM

## Survey Review Team

## “Oklahoma Value-added Food Product Exporters Survey”

Linda Byford	- FAPRTC
Renee’ Daugherty	- Extension FCS
David Henneberry	- AGECE
Stewart Kennedy	- FAPRTC
Dean McCraw	- HORT
Jim Osborn	- Int’l Ag Programs
Michelle Oteremba	- FAPRTC
Fred Ray	- ANSI

APPENDIX D  
SURVEY INSTRUMENT

Oklahoma State University

Oklahoma Value-Added Food  
Product Exporters Survey



Agriculture Education,  
Communications, and 4-H Youth  
Development  
September, 1998

The purpose of this study is to determine the buying preferences of food importers as perceived by Oklahoma value-added product exporters. The findings of this study will be used to determine needs of value-added food product exporters concerning the marketing of their products. Thank you for participating in this study. To help us complete this study as quickly as possible, we ask that you please return this survey by February 20, 1999.

### *I. Demographics of Exporters*

- 1) Geographic location in Oklahoma where exported products are produced:
 

<input type="checkbox"/> Northeast	<input type="checkbox"/> Southeast
<input type="checkbox"/> Northwest	<input type="checkbox"/> Southwest
- 2) Length of time current firm has been established
 

<input type="checkbox"/> 0 - 5 years	<input type="checkbox"/> 21 - 30 years
<input type="checkbox"/> 6 - 10 years	<input type="checkbox"/> 31 - 40 years
<input type="checkbox"/> 11 - 20 years	<input type="checkbox"/> 41 years or more
- 3) Number of Employees
 

<input type="checkbox"/> 25 or less	<input type="checkbox"/> 76 - 100
<input type="checkbox"/> 26 - 50	<input type="checkbox"/> 101 - 125
<input type="checkbox"/> 51 - 75	<input type="checkbox"/> 126 or more
- 4) Agricultural Products/Commodities Processed (check all that apply):
 

<input type="checkbox"/> Dairy	<input type="checkbox"/> Oil seeds
<input type="checkbox"/> Feed grains	<input type="checkbox"/> Vegetables
<input type="checkbox"/> Fruits	<input type="checkbox"/> Wheat
<input type="checkbox"/> Meats	<input type="checkbox"/> Other _____
- 5) What percentage of the raw products/commodities used by your firm do you purchase?
 

<input type="checkbox"/> I produce the raw products	
<input type="checkbox"/> 0 - 10% purchased	<input type="checkbox"/> 51 - 60% purchased
<input type="checkbox"/> 11 - 20% purchased	<input type="checkbox"/> 61 - 70% purchased
<input type="checkbox"/> 21 - 30% purchased	<input type="checkbox"/> 71 - 80% purchased
<input type="checkbox"/> 31 - 40% purchased	<input type="checkbox"/> 81 - 90% purchased
<input type="checkbox"/> 41 - 50% purchased	<input type="checkbox"/> 91 - 100% purchased
- 6) What percentage of the raw products/commodities used by your firm is produced in Oklahoma?
 

<input type="checkbox"/> 0 - 10%	<input type="checkbox"/> 51 - 60%
<input type="checkbox"/> 11 - 20%	<input type="checkbox"/> 61 - 70%
<input type="checkbox"/> 21 - 30%	<input type="checkbox"/> 71 - 80%
<input type="checkbox"/> 31 - 40%	<input type="checkbox"/> 81 - 90%
<input type="checkbox"/> 41 - 50%	<input type="checkbox"/> 91 - 100%

## Oklahoma State University Value-added

## Food Product Survey

7) Do you EXPORT the products/commodities your firm processes?

☐ Yes ☐ No

8) Experience in exporting.

☐ 5 years or less ☐ 16 - 20 years  
☐ 6 - 10 years ☐ 21 - 25 years  
☐ 11-15 years ☐ 26 years or more

9) Purpose for Export involvement:

☐ Expand profit potential  
☐ Optimum use of available labor and facilities  
☐ Economic Development for Community  
☐ Opportunity to expand the business  
☐ Maximum return on investment

10) Do your IMPORTERS prefer

☐ Raw products ☐ Value added products

11) If you EXPORT value-added products, does your firm:

☐ Package, in Oklahoma ☐ All of the above  
☐ Sell before packaging ☐ other \_\_\_\_\_  
☐ Package, out of state

12) Price is determined for products EXPORTED by:

☐ Your firm setting the price ☐ Market value  
☐ Producer association (example: AMPI) ☐ Other \_\_\_\_\_

### II. Demographics of Food Importers:

(What characteristics have you observed among consumers using your products?)

Check all that apply on the following questions.

1) Geographic area in which your product is marketed.

☐ Africa ☐ Europe ☐ Pacific Rim  
☐ Canada ☐ Former Soviet Union ☐ South America  
☐ Caribbean ☐ Mexico ☐ South Asia  
☐ Central America ☐ Middle East

2) Age group for which your product(s) is targeted

☐ Children ☐ Teens ☐ Adults

3) Income Range of consumers using your products

(Levels relative to their countries standards)

☐ Poverty ☐ Upper Middle Class  
☐ Lower Middle Class ☐ Wealthy

4) Education of consumers using your products

☐ No formal education ☐ Trade School  
☐ Elementary education ☐ College  
☐ High School ☐ Graduate Education

5) Product Trends preferred by consumers:

☐ Value-added Food Products  
☐ Raw Food Products

6) Method(s) of Purchasing your Product:

☐ Direct from exporter (you) ☐ Broker  
☐ Local Distributor ☐ Other \_\_\_\_\_

### III. Information Sources Concerning Potential Export Markets

1) Rank Federal government Agencies by frequency of use

(1, 2, 3..., 1 being the most used)

\_\_\_ Foreign Agriculture Service - USDA  
 \_\_\_ Trade Information Center (USA-Trade)  
 \_\_\_ State Department (U.S.)  
 \_\_\_ International Trade Administration (ITA) - Dept. of Commerce  
 \_\_\_ The Export Hot line (USA-XPORT)  
 \_\_\_ Other \_\_\_\_\_

2) Rank State Governmental Agencies by frequency of use

(1, 2, 3 ..., 1 being the most used)

\_\_\_ Oklahoma State Department of Agriculture  
 \_\_\_ Oklahoma State Department of Commerce  
 \_\_\_ Center for International Trade Development - OSU  
 \_\_\_ Oklahoma Food & Agri. Products Research & Technology Center - OSU  
 \_\_\_ Oklahoma Cooperative Extension Service

## Oklahoma State University Value-added

## Food Product Survey

### 3) Rank Trade & Export Associations by frequency of use

(1, 2, 3, ..., 1 being the most used)

- ☐ Southern United States Trade Association (SUSTA)
- ☐ National Association of State Departments of Agriculture
- ☐ American Association of Exporters and Importers
- ☐ Small Business Foundation
- ☐ Western U.S. Agricultural Trade Association (WUSATA)
- ☐ State Chamber of Commerce (Oklahoma)
- ☐ Other \_\_\_\_\_

### 4) Rank trade & export publications you use as sources of information:

(1, 2, 3, ..., 1 being the most used)

- ☐ OSU Extension Fact sheets
- ☐ Business America
- ☐ "Export Briefs" (AIMS)
- ☐ "Contacts" (AIMS)
- ☐ Ag Exporter
- ☐ Trade Point USA
- ☐ Other \_\_\_\_\_

### 5) Rank the following electronic and web site export trade areas you use as a source of information? (1, 2, 3, ..., 1 being the most used)

- ☐ "Buyer Alert Program" (AIMS)
- ☐ Cyber Trade Center
- ☐ Tradexpress
- ☐ NAFTAnet
- ☐ Miami Trade Web
- ☐ Other \_\_\_\_\_

### 6) Rank the following private services for trade and export assistance you use as a sources of information? (1, 2, 3, ..., 1 being the most used)

- ☐ Export Services, Inc.
- ☐ Yang's International Corp (YIC)
- ☐ Export Link
- ☐ James A. Whitley International, Inc.
- ☐ National Export Offer Service
- ☐ Other \_\_\_\_\_

### IV. Buying Preferences of Food Importers:

#### 1) Rank the qualities of value-added food imports you perceived to be desirable by importers. (1, 2, 3, ..., 1 being the most used)

- ☐ Quality
- ☐ Availability
- ☐ Brand name
- ☐ Quantity
- ☐ Price
- ☐ Other \_\_\_\_\_

#### 2) Rank the importance of product attributes you perceived to be desirable by importers (1, 2, 3, ..., 1 being the most used)

- ☐ Freshness
- ☐ Flavor
- ☐ Safety
- ☐ Ready to serve
- ☐ Shelf-life
- ☐ Nutrition
- ☐ Packaging
- ☐ Other \_\_\_\_\_

#### 3) Rank primary preferences concerning raw agricultural product(s) imports (1, 2, 3, ..., 1 being the most used)

- ☐ Meat
- ☐ Dairy
- ☐ Other \_\_\_\_\_
- ☐ Fruit
- ☐ Grain
- ☐ Vegetables
- ☐ Livestock Feed-stuffs

Beginning with item # 4; please respond only to the items concerning products preferred by your international customers.

Mark all that apply

#### 4) Preferred type of value-added DAIRY product(s):

- ☐ Whole Milk
- ☐ Yogurt
- ☐ Butter
- ☐ Low-Fat Milk
- ☐ Sour Cream
- ☐ Ice Cream
- ☐ Condensed/Evaporated Milk
- ☐ Processed American Cheese
- ☐ Other \_\_\_\_\_

#### 5) Preferred type of value-added GRAIN/BREAD product(s):

- ☐ White Bread
- ☐ Refrigerated/Frozen
- ☐ Specialty Bread
- ☐ Wheat Flour
- ☐ Corn Meal
- ☐ Other \_\_\_\_\_

#### 6) Preferred type of value-added OILS and OIL product(s)

- ☐ Corn Oil
- ☐ Solid Shortening
- ☐ Other \_\_\_\_\_
- ☐ Sunflower Oil
- ☐ Margarine
- ☐ Aerosol Non-Stick

#### 7) Preferred type of value-added WHOLE GRAIN BREAKFAST food product(s):

- ☐ Hot Cereals
- ☐ Cold Cereals
- ☐ Breakfast bar
- ☐ Other \_\_\_\_\_

# Oklahoma State University Value-added

# Food Product Survey

## 8) Preferred type of value-added SWEETENER(s)

- ☐ White Cane Sugar    ☐ Honey    ☐ Brown Cane Sugar  
☐ Sorghum    ☐ Beet Sugar    ☐ Cane Molasses  
☐ Corn Syrup    ☐ Maple Syrup    ☐ Other \_\_\_\_\_

## 9) MEAT and MEAT product(s) preference

- ☐ Fresh Chilled    ☐ Frozen  
☐ Canned    ☐ Cured & Smoked  
☐ Other \_\_\_\_\_

## 10) Preference concerning delivery of FRESH CHILLED MEAT

- ☐ Whole Carcass    ☐ Wholesale Cuts  
☐ Retail cuts    ☐ Boxed Products (vacuum sealed)  
☐ Other \_\_\_\_\_

## 11) Preference concerning PROCESSED MEATS

- ☐ Sausage    ☐ Hot-dogs    ☐ Hams  
☐ Beef sticks    ☐ Jerky    ☐ Other \_\_\_\_\_

## 12) Please Rank preferences concerning kinds of MEAT products

- \_\_\_ Poultry    \_\_\_ Pork    \_\_\_ Beef  
 \_\_\_ Lamb    \_\_\_ Fish    \_\_\_ Goat

## 13) Please rank preferences concerning FRUITS & VEGETABLES

- \_\_\_ Fresh    \_\_\_ Frozen    \_\_\_ Dry  
 \_\_\_ Canned    \_\_\_ Other \_\_\_\_\_

## 14) Preference concerning delivery of FRESH FRUITS & VEGETABLES

- ☐ Bulk    ☐ Packaged ready for home use  
☐ Other \_\_\_\_\_

*In questions 15 - 21, please rank only those products exported by your firm*

## 15) Preference(s) concerning kinds of FRUITS

- \_\_\_ Peaches    \_\_\_ Apples    \_\_\_ Apricots    \_\_\_ Plums  
 \_\_\_ Watermelons    \_\_\_ Grapes    \_\_\_ Honeydew    \_\_\_ Cantaloupes  
 \_\_\_ Strawberries    \_\_\_ Raisins    \_\_\_ Other \_\_\_\_\_

## 16) Preference(s) concerning kinds of VEGETABLES

- \_\_\_ Sweet corn    \_\_\_ Green beans    \_\_\_ Sweet peas  
 \_\_\_ Cow peas    \_\_\_ Okra    \_\_\_ Squash  
 \_\_\_ Tomatoes    \_\_\_ Potatoes    \_\_\_ Pumpkins  
 \_\_\_ Lima beans    \_\_\_ Beets    \_\_\_ Cucumbers  
 \_\_\_ Asparagus    \_\_\_ Lettuce    \_\_\_ Cabbage  
 \_\_\_ Mushrooms    \_\_\_ Pinto beans    \_\_\_ Hot peppers  
 \_\_\_ Green peppers (sweet)    \_\_\_ Carrots    \_\_\_ Broccoli  
 \_\_\_ Onions    \_\_\_ Cauliflower    \_\_\_ Other \_\_\_\_\_

## 17) Preference(s) concerning kinds of NUTS

- \_\_\_ Pecans    \_\_\_ Walnuts    \_\_\_ Brazil  
 \_\_\_ Almonds    \_\_\_ Peanuts    \_\_\_ Cashews  
 \_\_\_ Hazel    \_\_\_ Chestnuts    \_\_\_ Other \_\_\_\_\_

## 18) Preference(s) concerning how nuts are processed

- \_\_\_ In shell    \_\_\_ Salted  
 \_\_\_ Boiled    \_\_\_ Frozen (shelled & selected)  
 \_\_\_ Canned    \_\_\_ Other \_\_\_\_\_

## 19) Preference(s) concerning delivery of nuts

- \_\_\_ Bulk in shell    \_\_\_ Bulk, shelled & selected  
 \_\_\_ Packaged ready for home use    \_\_\_ Other \_\_\_\_\_

## 20) Preference(s) concerning kinds of CONDIMENTS

- \_\_\_ Mustard    \_\_\_ Relish  
 \_\_\_ Spices    \_\_\_ Mayonnaise  
 \_\_\_ Bar-B-Q sauce    \_\_\_ Salsa  
 \_\_\_ Ketchup    \_\_\_ Other \_\_\_\_\_

## 21) Preference(s) concerning kinds of FRUIT SPREADS

- \_\_\_ Jelly    \_\_\_ Preserves    \_\_\_ Jam  
 \_\_\_ Marmalade    \_\_\_ Other \_\_\_\_\_

## 22) Preference(s) concerning kinds of SNACK FOODS

- \_\_\_ Corn/potato chips    \_\_\_ Packaged crackers  
 \_\_\_ Packaged Cakes    \_\_\_ Puddings  
 \_\_\_ Other \_\_\_\_\_

*V. Additional Comments and Suggestions/Observations:*

1) Why do you believe your importers chose raw products or value-added products?

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2) Other Comments

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*Thank you for your time!*

APPENDIX E  
FOLLOW-UP TELEPHONE SURVEY

Purpose for Export involvement:

- ☐ Expand profit potential
- ☐ Optimum use of available labor and facilities
- ☐ Economic Development for Community
- ☐ Opportunity to expand the business
- ☐ Maximum return on investment

Do your IMPORTERS prefer:

- ☐ Raw products
- ☐ Value added products

If you EXPORT value-added products, does your firm:

- ☐ Package, in Oklahoma
- ☐ All of the above
- ☐ Sell before packaging
- ☐ other \_\_\_\_\_
- ☐ Package, out of state

Price is determined for products EXPORTED by:

- ☐ Your firm setting the price
- ☐ Market value
- ☐ Producer association (example: AMPI)
- ☐ Other \_\_\_\_\_

## APPENDIX F

### RESPONDENTS COMMENTS, SUGGESTIONS, OBSERVATIONS

**Why do you believe your importers chose raw products or value-added product?**

“Primarily – price. Secondly – many value added products don’t match local tastes or cooking requirements.”

“They are trying to improve their own value added manufacturing.”

“They do not have the facilities to effectively & profitably process and package products in raw material form.”

**Other Comments:**

“Come visit our plants. Further information.”

“We raise fallow deer and sell venison, keep bees and sell honey. We don’t have enough based on experience.”

“Our company has not exported yet, but we would like to. Shelf-life is one of the problems.”

## VITA

Melanie Dawn Sumter

Candidate for the Degree of

Master of Science

Thesis: AN ASSESSMENT OF BUYING PREFERENCES EXHIBITED BY  
IMPORTERS AS PRECEIVED BY OKLAHOMA VALUE-ADDED FOOD  
PRODUCT EXPORTERS

Major Field: Agricultural Education

Biographical:

Personal Data: Born in Claremore, Oklahoma on September 25, 1972, the  
daughter of Omer and Carol Sumter.

Education: Graduated from Claremore High School, Claremore, Oklahoma in  
May, 1991; received a Bachelor of Science degree in Animal Science from  
Oklahoma State University, Stillwater, Oklahoma in May of 1995.  
Completed the requirements for the Master of Science degree with a  
major in Agricultural Education at Oklahoma State University, Stillwater,  
Oklahoma in May of 2000.

Professional Experience: Soil Conservationist , United States Department of  
Agriculture-Natural Resources Conservation Service, Claremore,  
Oklahoma Field Office July 1997 to September 1999; Buffalo, Oklahoma  
Field Office October 1999 to December 1999; Stillwater Milling  
Company, August 1996 to July 1997, AmeriCorp Conservation Education  
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Professional Memberships: Soil and Water Conservation Society and Society for  
Range Management.