Oklahoma Pecan Export Promotion Program



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Introduction

To attract economic growth and industry to Oklahoma, promotional campaigns have espoused the state's abundant natural resources. Well known as a leader in the production of wheat, cattle and oil, Oklahoma is less recognized for a host of other commodities and processed products. For example, Oklahoma is generally considered as one of the top six pecan producing states in the U.S. (Table 1 and Figure 1). Pecans also rank among Oklahoma's top 20 principal agricultural crops and livestock production. In Oklahoma, native pecans compose approximately 90 percent of the production, and efforts to market these pecans usually emphasize their natural flavor.

The promotion and advertising of farm commodities as a means of boosting consumer food demand (foreign and domestic) has gained considerable support from both U.S. public and private sources over the past couple of decades. The continued development and expansion of international markets in particular has been singled out as being one of the keys to improving the profitability of American agriculture. prospects for increased international trade are growing in those developing countries where personal incomes are rising, and population growth rates are two to three times greater than that of the U.S. In developed countries, the demand for food is influenced by knowledgeable sophisticated consumers who select purchases that reflect their discriminating tastes and emerging lifestyle changes. In these countries, surplus food supplies from the U.S. have been meeting tough competition recently as the demand for more specialized food products is gaining momentum. Herein lies the challenge to American agricultural producers and processors. exporting success will depend not only upon the appropriate selection of niche markets within targeted countries but also a producer's willingness to adapt their products to the preferences of the foreign consumer.

A joint pecan marketing effort was initiated by the Oklahoma State University Division of Agricultural Sciences and Natural Resources, the Center for International Trade Development (CITD) and the Oklahoma Department of Agriculture (DOA). The primary goal of this project was to successfully promote and profitably export Oklahoma native pecans. In

Table 1: In-Shell Pecan Production Data for Oklahoma and the U.S.

Year	Oklahoma Production (1000 lbs)	U.S. Production (1000 lbs)	Oklahoma Share of U.S. Production	Rank
1970	8500	155100	5.48%	6
1971	19000	246200	7.72%	5
1972	4200	183100	2.29%	6 5 8
1973	28000	275700	10.16%	4
1974	2500	137100	1.82%	7
1975	20000	246800	8.10%	5
1976	2300	103100	2.23%	5 8
1977	13500	236600	5.71%	6
1978	10000	249900	4.00%	4
1979	10000	210600	4.75%	4 5 8 3
1980	3500	183500	1.91%	8
1981	47000	339000	13.86%	3
1982	5000	218600	2.29%	6
1983	8000	270000	2.96%	6 3
1984	25000	232400	10.76%	3
1985	10000	244400	4.09%	6
1986	15000	272700	5.50%	6
1987	12000	262200	4.58%	6
1988	47000	308000	15.26%	3
1989	9000	250500	3.59%	7
1990	5000	205000	2.44%	6

USDA, Agricultural Statistics 1990. U.S. Government Printing Office, Washington D.C., 1991. Source:

Oklahoma U.S.

Figure 1: In-Shell Pecan Production: Oklahoma and U.S.

1991 is an estimated figure. Source: USDA, Agricultural Statistics 1990, U.S. Government Printing Office, Washington D.C., 1991.

addition, the creators wanted to provide a demonstration case that would serve as a model for the pecan industry as well as for other potential exporters of "value-added" agricultural products. Because the Samuel Roberts Noble Foundation in Ardmore, Oklahoma, has traditionally been a leader in progressive agricultural applications, and due to the fact that they represent a significant source of the Oklahoma pecan supply, they were singled out as the leading candidate to operationalize an international pecan marketing plan.

This publication summarizes the activities of the "Oklahoma Pecan Export Promotion Program" from its inception to the eventual establishment of a permanent marketing entity for the export promotion and sale of pecans. Information on the U.S. pecan industry and the current status of U.S. pecan exports is included in this publication along with a historical perspective of early efforts to market pecans internationally. In 1988, a market research study concluded that viable export opportunities exist for Oklahoma pecans. As a result, an international marketing plan for pecans was developed. Presented in this text are the activities associated with the implementation of this marketing plan with special emphasis given to the importance of market analysis, planning, preparation and the follow-up stages of international promotion.

Facts About Pecans

Pecan production in the U.S. is centered in the south and southwestern regions, stretching from North Carolina to southern California. The lead producing states are Georgia (averaging more than 30 percent of the annual production), Louisiana, Texas, New Mexico and Alabama (Table 2). Pecans are classified as a "high value" agricultural product, meaning that even though they are traded as a commodity, on a per unit basis, they are a relatively expensive food item.

When comparing native and improved pecan varieties, to many, the native is considered to have better flavor primarily because of its higher oil content. They generally grow wild along river banks, creeks and dry stream beds. Improved varieties are referred to as papershells because of their thinner shell. The kernels are generally larger than those of native pecans and they yield a higher percentage of kernels. Pecan

Table 2: Pecan Production in Leading Pecan Producing States
(All pecans, including native, seedling and improved varieties)

	1988 1,000 lbs.	1989 1,000 lbs.	1990 1000 lbs.
Alabama	10,000	22,000	5,000
Arkansas	3,000	1,000	250
California	2,200	2,000	2,800
Florida	6,000	7,000	3,600
Georgia	110,000	85,000	65,000
Louisiana	22,000	14,000	6,000
Mississippi	10,000	8,500	2,200
New Mexico	26,000	29,000	34,000
North Carolina	5,500	700	400
Oklahoma	47,000	9.000	5.000
South Carolina	6,500	1,000	500
Texas	60,000	55,000	60,000
Other States/1	,	16,300	20,250
United States	308,200	250,500	205,000

1/ AZ, KS, MO, and TN beginning with the 1989 crop.

Source: USDA, Agricultural Marketing Service, Fruit & Vegetable Division and Cooperating State Departments of Agriculture, Pecan Marketing Summary 1990 Crop, September, 1991.

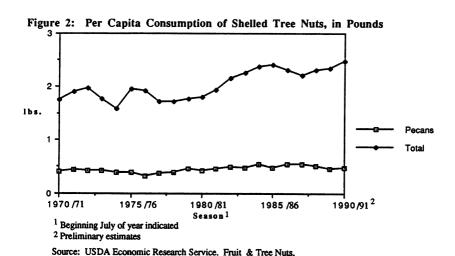
growers have invested considerable time and money into producing improved varieties by grafting, budding, top working, pollinating and spraying. A price comparison between Oklahoma in-shell native and improved pecan varieties shows that the native in-shell price averages out to be approximately 60 percent of the improved varieties (Oklahoma DOA). Native pecans are more difficult to shell and their "shell-out" quantities are generally smaller than those of improved varieties. This accounts for much of the price discrepancy.

The pecan harvest in the U.S. begins in the fall, usually after the first frost, and generally ends in January. For larger operations, mechanical tree shakers and harvesters have been developed to collect the pecans. After the nuts are gathered, they are sold and transported to commercial shellers where they are washed, cracked, shelled, graded, dried and packaged for sale at wholesale and retail outlets. Many smaller producers prefer to utilize direct market outlets such as roadside stands and farmer's markets as a means of retailing their product.

Because of the high fat content of pecans, they must be either refrigerated or frozen immediately after the shelling process. Refrigerated, they maintain their freshness for

approximately four to six months; frozen, they will keep indefinitely, which makes pecans readily available 12 months of the year. A major advantage of pecans is that they can be thawed and refrozen many times without compromising their quality. Researchers have been looking at ways to extract the oil from pecans so the nuts can be stored without refrigeration. Preliminary analysis shows that pecan oil has a composition similar to that of olive oil, which is marketed as a "healthy" alternative to other cooking oils. The quality of in-shell pecans can be preserved for approximately 90 days without refrigeration. However, for best results, they should be stored in paper or burlap bags, which allows the moisture to escape, and stored in a cool, dark, dry place.

Domestic consumption of all tree nuts in the U.S. is less than two and one half pounds per year (Figure 2). Of that total, pecans and walnuts share almost identical consumption rates of approximately a half-pound per year. In 1990, almonds surpassed that of both pecans and walnuts, totalling almost 30 percent of all tree nut consumption. Consumption of all other nuts including hazelnuts, macadamias and pistachios is considerably less and makes up the difference. The highest consumption rate for pecans occurs during the Thanksgiving and Christmas holiday seasons. Pecans are used as an ingredient in a variety of bakery and confectionery products. They also are roasted, spiced and mixed with other nuts and served



Situation and Outlook Yearbook, TFS-254, August 1990.

as a snack food. Nutritionally, they are rich in potassium, calcium, carbohydrates, Vitamin A and protein.

Exports of U.S. Pecans

Pecan exports from the U.S. fluctuate from year to year (Table 3). This irregularity in pecan exports is attributed primarily to pricing variability, inconsistent supplies, and, until recently, the lack of a continuous international promotion effort. For the 1990 calendar year, the total value of U.S. shelled pecan exports was in excess of 23 million dollars (Table 4), of which less than one percent was attributed to Oklahoma production (Oklahoma DOA, 1990). The greatest import demand for pecans occurs in well developed nations with high per capita incomes, positive economic growth and favorable trade conditions. Demand is further strengthened when consumers in importing countries develop a penchant for bakery, confectionery and other snack food products that can incorporate pecans in the ingredient mix.

Throughout the 1980's, Canada had the reputation as being the largest volume importer of shelled pecans from the U.S. (Table 5). In recent years, the European market, the United Kingdom, the Netherlands, France and the Federal Republic of Germany have been the top importers of U.S. shelled pecans. Other countries such as Belgium, Luxembourg, Switzerland, Italy and the Scandinavian nations (Denmark, Norway, Sweden, and Finland) also import pecans, but on a limited and more sporadic basis. Among Asian countries, Japan is the only one that has consistently imported pecans from the U.S.

Pecans, indigenous to the U.S., are now cultivated in Mexico, Australia, South Africa, and Israel as well. As a result, competition between these countries and the U.S. for pecan exports to Europe has escalated. Because the growing season in the southern hemisphere is opposite that of the U.S., the Australians are in the enviable position of being able to supply freshly harvested pecans to European countries throughout the summer months, thus capitalizing on fall holiday production timetables.

A major drawback to pecan exports is that their taste and uses are relatively unknown in many foreign countries. There-

Table 3: U.S. Tree Nut Exports: Volume

Calendar Year	Shelled Pecans Metric Tons	Shelled Almonds Metric Tons	Shelled Walnuts Metric Tons	Total Tree Nuts/1 Metric Tons	Annual % Change in Total Exports
1978	1.165	59,884	3,760	100,541	
1979	1,063	53,892	2,980	99,200	01
1980	1,413	80,976	4,916	148.278	+ .49
1981	1,559	70,336	4,330	138,096	06
1982	1,237	67.248	11.123	113,295	18
1983	1,023	57,438	12,063	92,129	19
1984	754	79,120	17,206	123,517	+ .34
1985	594	129,431	20,633	178,957	+ .45
1986	758	102,180	23,745	183.011	+ .02
1987	1.058	92,842	20,500	178,219	03
1988	1,640	141,254	25,982	231,762	+ .30
1989	1,630	124,893	14,938	218,847	06
1990	4,232	154,319	11,780	256,273	+ .17

/1 excluding prepared nuts

Source: USDA, Economic Research Service, Fruit & Tree Nuts, Situation and Outlook Report Yearbook, TFS-258, August 1991.

Table 4: U.S. Tree Nut Exports: Value

Calendar Year	Shelled Pecans 1,000 dollars	Shelled Almonds 1,000 dollars	Shelled Walnuts 1,000 dollars	Total Tree Nuts/1 1,000 dollars	Annual % Change in Total Exports
1978 1979	3,930 3,605	173,107 222,777	11,866 11,708	248,587 304,394	+ .22
1979	5,603 5.410	334,285	14,795	458.232	+ .51
1981	7,063	234,882	14,633	368,620	20
1982	5,404	171,250	14,375	294,962	20
1983	4,251	166,010	13,646	252,940	14
1984	2,704	238,632	15,834	332,008	+ .31
1985	2,536	309,917	17,181	423,086	+ .27
1986	3,298	299,271	22,058	436,834	+ .03
1987	4,487	334,289	22,884	499,619	+ .14
1988	5,949	437,703	25,747	605,139	+ .21
1989	6,834	377,308	34,260	573,027	05
1990	23,093	451,056	38,735	678,910	+ .18

/1 excluding prepared nuts

USDA, Economic Research Service, Fruit & Tree Nuts, Situation and Outlook Source:

Report Yearbook, TFS-258, August 1991.

fore, their limited export success has been dependent upon international promotion efforts that have included consumer awareness and product education. In the past, consumers in Europe and Canada have been exposed primarily to in-shell pecans that have been dyed red for the retail market. Often their price exceeds that of their competitors (walnuts, hazelnuts, peanuts), and in many cases, the quality of the shelled kernels are less desirable as a result of inadequate handling and storage conditions. Overcoming image and product distribution obstacles must be addressed as pecan exporting continues to develop.

Primarily because of its close proximity to the U.S., Mexico is the largest supplier of in-shell pecans to the U.S. Commercial shellers are strategically positioned along the U.S. border to receive in-shell pecan supplies from Mexico, and once the pecans are shelled, the distinction between U.S. pecans and Mexican pecans becomes obscured. Therefore, U.S. supply tabulations often include a percentage of Mexican production

Table 5: Exports of Shelled Pecans from the U.S. by Selected Country of Destination: In Pounds

	1987	1988	1989	1990/1
North America				
Canada	1,137,574	1,355,829	3,933,066	7,004,014
Mexico	421,079	244,711	286,598	119,048
Europe	,	,		,
Ünited Kingdom	293,212	434,306	815,702	981,047
Netherlands	392,419	396,828	641,539	654,766
France	28,660	66,138	291,007	778,224
Fed. Rep. of Germany	97,002	130,071	88,184	176,368
Belgium-Luxemborg	39,683	•	44,092	48,501
Switzerland	63,933	30,864	,	,
Italy	,	4,409	2,205	2,205
Scandanavian Countries	147,709	189,595	167,550	147,708
Asia	- · · · · · · · ·	,	207,000	,
Japan	198,414	132,276	200,619	357,145
Australia	46,297	187,391	108,025	83,775
Total World	2,907,871	3,368,627	7,076,767	10,835,610

1/ Estimated

Source: USDA, Agricultural Marketing Service, Fruit & Vegetable Division and Cooperating State Departments of Agriculture, Pecan Marketing Summary 1990 Crop, Federal-State Market News Service, September 1991.

as well. Mexico is a large producer of native and improved pecan varieties, and reports indicate that an increase in production is expected throughout the 1990s as new pecan acreages mature. In the proposed U.S.- Mexico free trade agreement, pecans are one of 19 commodities targeted to move relatively duty free across the border. Because pecan production is concentrated in a few countries, most well-developed countries have imposed little or no tariff on their imports. However, some countries remain protectionistic by imposing tariffs or ad valorem taxes on pecan imports.

Early Efforts to Market Oklahoma Pecans Internationally

In the U.S., the Department of Agriculture, Foreign Agricultural Service (USDA-FAS) has the lead in administering the government role in foreign market development and promotion of agricultural products and commodities. In addition to their established network of agricultural officers positioned in U.S. embassies throughout the world, the FAS has recently opened 15 Agricultural Trade Offices (ATO), 13 of which are in developing countries. Designed with the implicit goal of promoting U.S. food and agricultural products, these offices support foreign market development by sponsoring and participating in exhibitions and trade shows. Historically, the FAS has also provided support funds to more than 50 agricultural commodity organizations. These organizations or cooperators work in tandem with the FAS to identify, develop and expand international trade opportunities through a variety of activities. However, little attention in the form of public or private funding has been earmarked for pecans until recently.

In the early 1970s, a pecan sheller and producer from eastern Oklahoma traveled to Japan to investigate the market for pecans. This initiative was sponsored in part by the Oklahoma Pecan Growers Association. As a result of his participation in an international food show, a Japanese importer with representatives in the U.S. was contracted to market pecans in Japan. A variety of value-added pecan products were shipped from Oklahoma to the Japanese importer to illustrate the use of pecans in bakery and other confectionery items. As a result of this relationship, and another that was made with a private Japanese businessman,

one container of packaged pecans was shipped to Japan. However, because pecans were not well known in Japan, the process of retailing the container shipment became an almost overwhelming task for the importer.

In addition to the confusion about the usage of pecans at the time this relationship was initiated, there was also little warehouse and cold storage available in Japan to maintain the freshness and facilitate the distribution of pecan supplies. Japanese consumers were familiar with walnuts and almonds, which were sold at considerably lower prices, but were unaware of the uses and taste of pecans. Thus, price competitiveness, along with quality supplies and product awareness were cited as major stumbling blocks to an effective international promotion of pecans. Also, less obvious at that time was the industry's inability as a cohesive unit to recognize the implications of a successful international marketing campaign. To create a continuous demand for a more expensive product, funding for market promotion campaigns and account servicing was needed. Since neither federal or state monies were available, the effort soon dissolved.

In the mid 1980s, another producer and sheller, this time from New Mexico, traveled to Europe as part of a National Pecan Marketing Council initiative. Working in conjunction with the FAS, this initiative instituted a plan to market pecans in West Germany and the United Kingdom. In areas where marketing efforts were intense, an increase in pecan sales was documented. However, in 1986, this effort was abandoned due to funding limitations.

In the 1990 Farm Bill, a new pecan research and promotion plan has been approved by the Federated Pecan Growers and all state associations. The plan authorizes the collection of an assessment (a half-cent per pound initially, and not to exceed two cents). This funding will be used to research the expansion of markets (including international) and the promotion of sales. Proponents of the plan are optimistic that a coordinated national campaign will boost the demand for pecans and increase consumption. Research proposals to improve packaging and distribution efficiency also have been included. The plan, however, will not monitor and regulate the supply of pecans. Implementation of this plan is scheduled to begin with the 1992 pecan crop.

Proposal to Develop International Markets

In the fall of 1988, the OSU agriculture division, in cooperation with the CITD, the Noble Foundation and the Oklahoma DOA, initiated a proposal for the research and development of international markets for Oklahoma pecans. The impetus for exploring international markets for pecans was influenced by two key factors: one being that U.S. pecan supplies are projected to increase throughout the 1990s, and the other, the fact that domestic consumption levels in the U.S. have remained relatively stable over the past 20 years. U.S. pecan production has fluctuated dramatically since 1970, with the most pronounced shifts occurring in the mid-1970s (Figure 1). However, in the long run, the trend suggests an overall increase in production, with the expectation that supplies will continue to expand in the 1990s. Without the development of additional markets for pecans, these supply increases, coupled with a constant consumer demand, could have a potentially disastrous impact on U.S. producers.

The first priority of the research team was a market research report entitled "A Study of the Global Market for Pecans." Co-authored by Tommy Eshleman and David Henneberry of the OSU Department of Agricultural Economics, the report focused on three major geographical regions of the world, which included the Pacific Rim (encompassing Australia and New Zealand), the Arabian Peninsula and Western Europe. Within these regions, a total of twenty countries were analyzed to estimate the import potential for pecans and other value-added food items.

In each country, the demand for high-value food products was analyzed by looking at such factors as population and economic growth, per capita income, and current trade policy. The distribution and transportation infrastructures of the various countries were also explored. Accessibility to major population centers from point-of-entry locations was viewed as an important factor in the exporter's ability to maintain competitive prices. As a result, those countries with international airports and seaports located relatively close to distribution centers were believed to have added potential.

Countries were also differentiated according to their traditional methods of retailing food. For example, in Japan, the complexity of the distribution system makes it almost prohibi-

tive for exporters to gain access to retail and commercial markets unless they are able to tap into the resources of a Japanese trading company. This process is simplified in other countries where independent wholesalers, agents and food brokers can be contacted directly to assist exporters in the positioning of their food products in the marketplace.

The structure of retail food outlets in the host country was also studied. In some countries, several large grocery chains dominated the retail trade whereas in others, such as Japan, smaller "mom and pop" operations were more prevalent. Life style trends and consumer preferences for food items were also used as a distinguishing factor in qualifying whether or not a country would be a potential importer. In most European countries, consumer demand is strong for bakery, confectionery items, and health foods. Therefore, promoting pecans as a food ingredient was thought to be a viable marketing strategy for the European community. In Japan, it was discovered that gift packages containing high-value food products such as nuts and jams were a popular item. Taking advantage of this and other similar market niche opportunities was also considered to have positive ramifications.

Marketing Plan Implementation

From a theoretical viewpoint, the study concluded that viable export opportunities exist for Oklahoma pecans. However, at the time of the report, pecan exports were not emerging as a significant source of revenue for Oklahoma. In the spring of 1989, a marketing proposal was submitted to the Noble Foundation wherein they were challenged with the task of developing foreign markets for pecans with the expectation that long-term trade relationships would result. The Noble Foundation accepted the proposal and Dan Childs, an agricultural economist with the Foundation, was appointed as the key individual responsible for implementing the plan. In addition, the Noble Foundation was willing to devote a majority of their pecan production to the project.

A three-fold marketing plan was accepted which included a demand verification stage, a short-term effort to produce initial sales through international trade show participation, and the creation of a network through which pecans could be exported on a continuing basis. For the first year, the goal was to ship one container load (approximately 24,000 lbs.) of shelled pecans. The efforts of the Noble Foundation exceeded this expectation: three container loads of native pecans were shipped in 1990.

In the demand verification stage, visits to six countries (West Germany, the U.K. Japan, Hong Kong or Taiwan, Saudi Arabia and the United Arab Emirates) were proposed. The purpose of these trips was to confirm the international market potential for pecans as was suggested in the "Global Market for Pecans" study. In February, 1990, Childs participated in a pecan sales mission trip to Europe sponsored by the Southern U.S. Trade Association (SUSTA). The following September, he toured Korea, Japan and Hong Kong on a similar fact finding tour. In addition, the Noble Foundation, along with Childs, participated in eight international food shows (Table 6) beginning with the FOODEX show in Tokyo (March, 1989), and ending with the National Association of State Departments of Agriculture (NASDA) show in Las Vegas (April, 1991).

Table 6: Trade Shows and Sales Missions Attended by the Noble Foundation as Part of the Pecan Export Promotion Project

Date	Location	Trade Show
March 1989	Tokyo, Japan	Foodex
April 1989	Montreal, Canada	SSA
May 1989	Boston, Massachusettes	NASDA
October 1989	Cologne, West Germany	ANGUA (with stops in Italy and UK)
February 1990	Sales Mission	SUSTA (UK, Holland, W Germany)
March 1990	Tokyo, Japan	Foodex
August 1990	Vancouver, Canada	
September 1990	Sales Mission	(Korea, Japan, Hong Kong)
October 1990	Paris, France	SIAL (with stops in UK and London)
April 1991	Las Vegas, Nevada	NASDA
October 1991	Seoul, Korea	Supermarket 1991

Dan Childs, Agricultural Economist, Noble Foundation, Ardmore, Oklahoma, Source:

December 1991.

Demand Verification Visits

Participants in the first trade mission, sponsored by SUSTA, included several pecan suppliers and a trade marketing specialist from the South Carolina Department of Agriculture. The purpose of this trade mission was to seek out and evaluate potential marketing opportunities for U.S. pecans in West Germany, the Netherlands and the United Kingdom. The first step in the advance planning stages of this effort began about three months prior to the departure date and consisted of initial contacts with the U.S. embassy in each country. Each of the ATO's, in turn, was able to pre-arrange meetings with traders, importers and foreign officials in their country. As a result of these contacts, an agenda was formulated which included scheduled meetings with traders, importers and foreign officials in each country.

Upon their arrival, the trade team met with embassy officials and others to discuss the marketplace and evaluate their respective opportunities for trade. Country-specific statistics, including income, demographics and nut import trends were made available to the trade team. In some



In the first pecan trade mission, sponsored by SUSTA, participants toured a variety of retail outlets such as this European nut shop, where pecans are a unique item.

locations, tours and additional meetings were scheduled to supermarkets, nut shops, bakeries and dairy manufacturers, which helped the members visualize the marketplace. It also allowed them the opportunity to analyze alternative marketing strategies for pecan promotions. In West Germany, arrangements were also made for the trade team to attend a large candy and confectionery trade show in Cologne.

After the tour, the trade team summarized their perception of the import potential for pecans. The consensus was that in West Germany, the potential was minimal because Australia had already positioned itself as an established supplier of pecans by capitalizing on the marketing window needs of the candy and confectionery industry. However, in the Netherlands and the United Kingdom, the future expansion of pecan exports was believed to be promising, providing additional promotion efforts, including programs for increasing consumer awareness and education, were implemented. In the Netherlands, it was learned that approximately 90 percent of the pecans were purchased for use in snack items (nuts, bars etc.), whereas in the United Kingdom, the bulk of imported pecans were incorporated into bakery and other confectionery items. As efforts to promote pecans continue in these two countries, the beneficial implications of this and other similar information becomes increasingly noteworthy. In all three countries, walnuts and hazelnuts were the primary competitor of pecans. Australia, Israel and South Africa were considered as the major competitive suppliers of pecans to the European market.

International Trade Show Participation

Participation in international trade shows is thought to be one of the most cost effective and expedient means of gaining access to foreign buyers and agents. The Noble Foundation, with the assistance of the Oklahoma Department of Agriculture, Oklahoma State University and several other governmental agencies, outlined an international trade show schedule that attempted to concentrate on those markets identified by the "Global Market for Pecans" study. A variety of goals and objectives substantiated this effort, the most obvious of which was a short-term effort to generate sales. Trade shows can be thought of as a forum for testing a product's acceptability.



A schedule of international trade shows, such as this one held in Japan in 1990, provided opportunities for retailers to take measure of competitors and to analyze markets. They also are an effective short-term way to generate sales.

They are also opportunities for exhibitors to critically assess their competitors and analyze alternative methods for marketing their product. This project incorporated these goals as well as the task of ferreting out credible import agents and distributors.

Once an agenda for trade show participation was outlined, the Noble Foundation made the commitment to spend considerable time and a substantial monetary investment to make the plan operational. Advance planning, including the development of promotional literature, product samples and foreign price schedules, was one important component. Also, contacts with the U.S. embassies, Agricultural Trade Officers, import brokers and other potential buyers and clients were made six to twelve weeks prior to the show to jump start the process. Frequently, a firm's inability to document sales from trade show participation is a result of inadequate planning and failure to maintain and strengthen relationships that are initiated at trade shows. However, the Noble Foundation's persistence in following-up on leads after the show epitomizes their success. After each trade show, additional time was allocated in the host country to personally follow up on potential clients, and upon their return to the states, responses were routinely sent to all trade show inquiries.

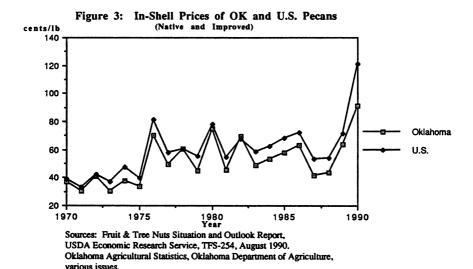
Price Quote Formulation

Foreign buyers expect complete and accurate pricing information, and have little patience with suppliers who are unable to provide a cost, insurance and freight (CIF) price quote. The Noble Foundation contacted several international freight forwarders to provide assistance in computing insurance and freight charges. After experimenting with a variety of options, they also were able to present buyers with carton size and weight dimensions cases per ocean container pallet, and shipping weights.

To establish an initial base price for their product, the first step taken by the Noble Foundation was to determine a value for the different shelled pecan sizes. Setting a price for the pecans depended on whether the order (or interest) was for whole kernels, halves or pecan pieces. The price included the commodity value, various domestic handling, shelling and distribution charges, as well as a percent for profit. Costs for inland transportation, ocean or air freight, insurance, forwarding fees and a margin for risk were added according to export country destination. If the weight of the total shipment was 3000 pounds or less, the Noble Foundation considered air freight as a cost-effective means of international transport; for larger orders, they preferred ocean vessels. International insurance could be calculated as low as two to five cents per pound. The Noble Foundation discovered that most of the variation in price quotes occurred from either a shift in the value of pecans or changes in the cost of freight.

Like wheat, corn, citrus and other agricultural commodities, price fluctuations for in-shell pecans are closely related to climatic changes which impact harvest supplies and market demand. Pecan prices are particularly sensitive during the harvest months, which range from mid-November through January in Oklahoma, and can vary on a daily basis. However, as a rule, prices at the beginning of the harvest are generally higher than those recorded at the end of the season. They also tend to increase prior to the Thanksgiving and Christmas holidays. In Oklahoma, prices for in-shell pecans (native and improved) tend to be slightly lower than the average U.S. price (Figure 3).

Occasionally, the USDA will overestimate the projected crop harvest and prices will remain strong, and even post



increases throughout the season. One such example was the 1990 U.S. pecan crop, which was estimated in September to be approximately 280 million pounds. Because the actual harvest was only 205 million pounds, in-shell pecan prices (native and improved) continued to rise throughout the season, averaging 121 cents per pound, which set a new record. In the spring of 1991, the Noble Foundation quoted a price for shelled native pecan halves at \$4.35 per pound for delivery to Hong Kong. This price, which is substantially different from the USDA's 1990 average of 121 cents per pound, reflects many of the value-added processes (shelling, packaging, transportation, handling, insurance and freight) associated with exporting.

Pricing a product whose reaction to seasonal growing conditions is as volatile as pecans required extra effort by the Noble Foundation. In their effort to market pecans internationally, they were targeting not only the foreign retail market, but also commercial candy, confectionery and bakery manufacturers who depend on consistent supplies of quality inputs for their processing. As such, the Noble Foundation spent a considerable amount of their marketing efforts educating potential buyers on the behavior of the pecan market.

Once a potential customer expressed an initial interest in pecans, the buyer and the Noble Foundation would spend as much as 10-12 months communicating and establishing a

working business relationship. As part of this communication process, the Noble Foundation found it advantageous to regularly update their clients on the pecan market. Understanding the cyclical nature of pecan supplies and prices was thought to benefit manufacturers as they planned the timing and allocation of their monetary resources to production processes.

Literature Development

Product brochures and other informational literature are an important aspect of the total international promotion package because they give a quick mental picture of the company and its product. After trade shows, they serve as a reminder and a point of reference for potential buyers. Many foreign buyers and consumers are interested to learn about a company's history as well as its financial solvency. Therefore, product literature that includes this type of information has a unique appeal to foreign buyers.

After attending their first international trade show, the Noble Foundation recognized the need for promotional literature that would illustrate the flexibility and uses of pecans to potential buyers. Because of the growing global interest in the nutritional quality of foods, they also felt it would be timely to analyze and print the nutritional composition of pecans in the literature. As a result, they contracted with an independent laboratory to analyze pecans for their nutritional value.

A wide range of options exist for formatting and developing product literature. Hiring a food stylist and printing color photos is one such option that can enhance a product's image. The Noble Foundation produced a tri-fold color brochure which included several photos illustrating pecan varieties, their uses and natural growing environment. A recipe for pecan pie, a traditional American dessert, and the pecan nutritional analysis were also printed in the inside cover. One of their Japanese clients translated a one-page summary of the pecan story which the Noble Foundation reprinted and inserted into the brochure on an as-needed basis. They coordinated an informational sheet on "How to Keep Pecans Fresh" with the OSU College of Home Economics which also was added.

Product Samples

The Noble Foundation achieved their optimum method for displaying and packaging pecan samples after a considerable amount of 'trial and error' experimentation. Initially, at trade shows, potential buyers were offered pecan samples spooned from a large bowl positioned on the booth table top. successive shows, a "bubble server" was used which enabled potential customers to tip the rotating glass globe and receive their sample serving. This "bubble server" was also positioned on the booth table top. Finally, a tray of miniature dixie cups filled with pecan halves/pieces was employed. This method proved the most successful, as it allowed the trade show exhibitor to walk out from behind the booth, mingle with the crowd, and offer samples to prospective buyers. The Noble Foundation found that depending only on those prospects who approached the booth often precluded the introduction of other potentially viable customers. Mingling with attendees within a 50 to 100 foot radius of the booth often generated interest from those who might have otherwise bypassed the pecan display.

Packaged pecan samples also were given to potential customers to serve as a reminder of the product in the days following the show. The dilemma of packaging design was somewhat unique to the Noble Foundation, as they were faced with a dual marketing assignment; one, to promote pecans as a high-value, consumer-ready product, and two, to market pecans as an ingredient to the commercial baking and confectionery industry. Their goal was to design a sample package that would cater to the needs of both markets.

The Noble Foundation experimented with a variety of packaging combinations before deciding on a four-ounce foil-backed, nitrogen-filled pack with a top printed label detailing the pecan kernel size. Replacing oxygen with nitrogen in the packets helps to prolong the shelf life of pecans. This model replaced a clear cellophane package that had peel-off labels. After analyzing a number of packaging alternatives, the Noble Foundation determined that size was a determining factor in the overall presentation. A package small enough to fit into a brief case was selected because of its ease of mobility. At trade shows, buyers collect a multitude of product samples and companion literature. Products packaged in a compact, easily

transportable unit with clearly affixed labels were thought to be those viewed most favorably in the days following the show.

In addition to experimenting with methods for the display and packaging of pecan samples, the Noble Foundation addressed the task of preparing bulk shipments for export. Pecans are most commonly exported as shelled varieties; i.e. whole, halves, pieces, therefore, they needed to be prepared for shipment in such a manner that they would arrive at their final destination in an acceptable condition and in quantity allotments that are easy to handle. For their export shipments, the Noble Foundation used 30-pound cartons filled with either vacuum-packed or loosely-packed pecans. A plastic liner was inserted into the loosely packaged cartons in cooler seasons to enhance sanitation and act as a cushion against damage. In the summer months, plastic liners could not be used because the heat causes the pecans to condensate, promoting mold growth. To fill one ocean container, 800 of the 30-pound cartons, weighing a total of 12 tons were required.

Scheduling Planning and Preparation Time

As a rule, four to six months are needed to adequately organize and prepare for a trade show. Determining the appropriate number of product samples to send, contacting country officials to schedule appointments with potential buyers, studying cultural protocols, and arranging a personal travel itinerary are only a few tasks Dan Childs managed before each departure. Working with an established set of trade show objectives. Childs was able to coordinate a schedule that helped him accomplish many of the Noble Foundation's predetermined goals. Their number one priority was sales. However, testing the foreign markets for pecan acceptability and analyzing the innovative marketing strategies of the competition was also believed to have beneficial implications. In addition, the Noble Foundation perceived trade show participation as a means of ferreting out import agents and other trading companies that would be willing to actively handle and promote Oklahoma pecans in the future.

Preparing product samples for trade shows can be a tedious and oftentimes confusing process. For the Noble Foundation, this procedure was simplified somewhat by the fact that they participated in trade shows sponsored by U.S.,

state and/or federal agencies. These included the Oklahoma DOA, the USDA, FAS, and SUSTA. The cost of exhibiting with these agencies is generally inclusive of sample product shipments, customs clearance, booth rental and other provisions. Nonetheless, it was the Noble Foundation's responsibility to ensure that their pecan samples were properly packaged with the appropriate certificates, labels and invoices. Government agencies usually enforce a weight limit on product samples which determines the number of samples each company can send.

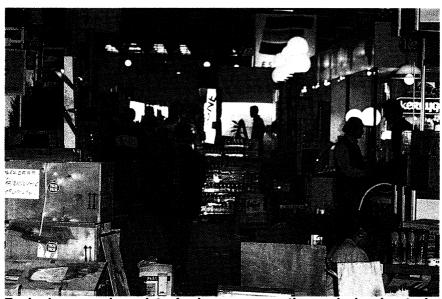
On an as-needed basis, the Noble Foundation contacted freight forwarders after trade shows when additional product samples were requested. They also dealt with freight forwarders when they sold an order of pecans. Referred to as the exporter's "travel agent", freight forwarders are not only familiar with the import rules and regulations of foreign countries, but also with all the documentation associated with international trade. Services provided by freight forwarders range from packaging products for shipping and reviewing letters of credit, to arranging for customs clearance in the import country. The costs associated with freight forwarders are legitimate expenses, and are added directly to the price quotes foreign buyers receive. For pecans, the minimum documentation for an international shipment is a certificate of origin, a commercial invoice and a phytosanitary certificate. The latter, stating that the product is essentially free from pests and plant diseases, is required for plants and unmanufactured plant products.

Prior to each trade show, Childs would routinely contact the Agricultural Officer in the host country. These officers, which are generally housed in the U.S. embassy, would provide information related to the country's marketing infrastructure and current consumer trends. In addition, they supplied a reputable list of wholesale and commercial food brokers. Utilizing this information, Childs was able to schedule appointments with potential importers prior to his departure. In addition to the Agricultural Officers, Childs networked with other state and federal agencies to seek names and addresses of potential buyers. For example, in the summer of 1990, the OSU Agricultural Economics Department hosted an intern from France. Childs was able to meet her while she was in Oklahoma, and contracted her services as an interpreter for

the October, 1990, SIAL International Food Show in Paris. The intern also sent Childs a current telephone listing of food brokers in and around Paris.

Flight and hotel accommodations were made by Childs well in advance of each trade mission and show. For trade shows, Childs invariably scheduled additional days before and after the event. He used this time to ensure the safe arrival of the pecan samples and to meet with potential buyers. Although it is the participating agency's responsibility to set up the booth, Childs liked to be on hand to lend assistance when needed. He also used the days prior to the show to familiarize himself with the convention arena and its surroundings. On several occasions, Childs made arrangements to have an interpreter present in the booth. Early arrival allowed him ample time to meet and establish a working relationship with his interpreter.

In full swing, trade shows are a kaleidoscope of activity. The pace is hectic, and the activities associated with the show can be physically and mentally exhausting. Successful trade show participation is a continual trial and error process and has no bona fide prescription for success. For the trade show



Trade shows require a lot of advance preparation and planning to be successful. Although it is the participating agency's responsibility to set up the booth, participants are encouraged to arrive early to lend assistance and to become familiar with the area.

experience to be a positive one, Childs learned early that organization and advance preparation are necessary prerequisites. Trade show exhibitors are responsible not only for overseeing the safekeeping of their product samples and booth space, but also for their personal appearance and presentation. Before traveling, Childs spent considerable time researching the foreign country and learning the appropriate cultural protocols. For assistance, he contacted the Oklahoma DOA and other state agencies and universities. What he found to be especially useful were country "Culturegrams." Written for the international traveler, these four to five page country profiles are designed to aid in the understanding of foreign culture and the communication process. They include demographic and economic information; they also discuss the customs, courtesies, attitudes and lifestyles of the native peoples. "Culturegrams" are available at the OSU Department of International Programs.

A directory of company names and product listings is available to all trade show exhibitors. Childs regularly consulted his directory to identify companies that might have an interest in pecans. In periods when the booth traffic was slow, Childs visited these exhibitors in an attempt to assess their interest. According to Childs, there is no substitute for an active, assertive promotional effort at trade shows. Individual methods of promotion vary, but the importance of an active campaign cannot be overstated. Staying within the confines of the booth throughout the show does not constitute an active effort. The exchange of business cards was one aspect of the campaign. For trade shows in the Pacific Rim, the Noble Foundation printed dual language business cards. Childs made a habit of categorizing and inserting the business cards he collected into a three-ring binder. After the show, they were kept on his desk for easy referral.

Packing the proper attire for trade show participation also merits attention. Efforts to secure a passport and other travel documentation were initiated two to three months in advance of the first trip. The importance of packing "light" and taking comfortable shoes must be emphasized as well. Long hours on the trade show floor are made somewhat more bearable if the exhibitor is wearing comfortable footwear. Baggage for the return home is made lighter by the fact that much or all of the literature and product samples have been distributed. In the

U.S., we tend to take for granted the availability of modern conveniences. Childs reminds the traveler to consider taking an electrical adapter and other amenities that would facilitate their stay in the foreign country.

Budgeting

The Noble Foundation was willing to commit a sizeable budget to this project for a period of three years. The budget was an integral component of the original project proposal. An outline of the projected costs gave the management an idea of the investment magnitude and the expected results. The Noble Foundation is a non-profit organization that regularly conducts research and shares its technical expertise with the Oklahoma agricultural community. The monies appropriated to this proposal were consistent with this spirit. The expected results were perceived to have beneficial implications for all facets of the Oklahoma pecan industry.

A variety of activities were incorporated into the budget. Included were travel for demand verification, international trade show participation, and promotional literature and packaging development. Because the Noble Foundation participated in U.S. government sponsored trade shows, they were able to minimize some of their costs. The booth rental ranged from \$500 to \$700, and was normally shared with two to three other Oklahoma exhibitors. Plane tickets averaged between \$1200 and \$1500, depending upon the location, and hotel and meal costs were approximately \$150 per night. Additional costs were incurred for interpreters. These ranged from \$100 to \$300 per day. The costs associated with shipping product samples to the international trade shows were subsidized by the sponsoring agencies. The Noble Foundation did expend a considerable amount for the development of packaging and product literature. However, the literature, developed for overseas marketing, has had numerous domestic applications as well. To summarize, the price of a ten-day to two-week stint at an international trade show for the Noble Foundation averaged between \$3500 to \$4000.

Follow-up

At the end of each trade show, all the trade leads were reviewed and evaluated according to their perceived potential. The trade show trips were purposefully scheduled to allow Childs to remain in the host country for several additional days with the specific goal of scheduling appointments and visiting buyers at their place of business. As an illustration, Childs recalled the 1989 Foodex Trade Show in Japan. The show ended on Saturday; on Sunday he went through his leads and selected what he believed were the ten best prospects. By Monday noon, he had contacted each prospect for an appointment, and along with an interpreter, he was able to meet with all ten contacts in a four-day period.

In retrospect, his preference would be to schedule no more than two appointments per day, particularly if they were introductory sessions. He found that locating offices and meeting appointment timetables for the first time in a large, fast-paced, international city such as Tokyo could be stressful, even with the assistance of a local interpreter and guide. In addition, he surmised that initial appointments were probably better serviced in a relaxed atmosphere with generous time allotments.

Of the ten buyers, one was a sugar importer with a number of wholesale customers in the ice cream, confectionery, and bakery industries. For more than a year the Noble Foundation



A country's culture is key to creating successful marketing relationships. Dan Childs, third from left, back row, met with this family, who are engaged in the food importing business, following the 1989 Foodex Trade Show in Japan. His efforts resulted in the development of a pound cake using U.S. pecans.

maintained a dialogue with this importer via the fax machine. In their correspondence, the importer asked questions about pecan consumption and usage, nutritional composition, pricing and supplies. The pecans piqued the curiosity of the importer as well as his clients to the extent that they experimented with and developed a product using pecans. The end result was an elaborately packaged two-pound product similar to the American pound cake retailing for approximately \$30 in U.S. currency. An engraved card detailing the development of the cake and describing the Oklahoma native pecan is enclosed with each cake.

According to the Noble Foundation, the cake is unique in its flavor and texture because it was designed to appeal to the Japanese consumer. Thus far, the importer has been pleased with the retail success of the cake, and continues to research additional ways to incorporate pecans into traditional Japanese food fare. The Noble Foundation's success with this importer resulted in several cartons of pecans being shipped from the U.S. to Japan since the spring of 1990. It is hopeful that additional sales will result as more new products and innovative uses for pecans are developed.

Upon returning home from trade shows, thank-you letters were routinely sent out to not only those buyers that were personally approached, but also to all potential clients who visited the trade show booth. Here, the significance of having a fax machine to facilitate the correspondence and communication process cannot be overemphasized. Moreover, the success story discussed in this text is a testament to the importance of international trade show follow-up. Of the ten buyers solicited after the 1989 Foodex show, the one recognized as having the least potential initially by the Noble Foundation was the sugar importer. However, because the Noble Foundation maintained correspondence with this buyer and continued to respond to questions in an expeditious manner, the results are a confirmation to the benefits of a skillfully managed follow-up.

Conclusion

At the end of three years, the Noble Foundation, OSU, and the Oklahoma DOA were pleased with the project's outcome and direction. Childs participated in eight international trade shows, two trade missions and held numerous private meetings with importers around the globe. In short, a network of importers and distribution outlets had been constructed, and the groundwork had been laid for continued international pecan sales. Since legalities prohibit the Noble Foundation from operating as an income generating business, in mid-1990, they began looking for a private entity that would continue to build upon their efforts. In the summer of 1991, an international trading company in Tulsa assumed control of the "International Pecan Marketing Project". Childs traveled with a representative from the trading company to the Supermarket Food Show in Seoul, Korea (October, 1991), in attempt to smooth the transition. Recognizing the delicate nature of "passing the torch" from one representative to another, the Noble Foundation encouraged this joint expedition. The Noble Foundation will continue to consult with the trading company in the future as requested.

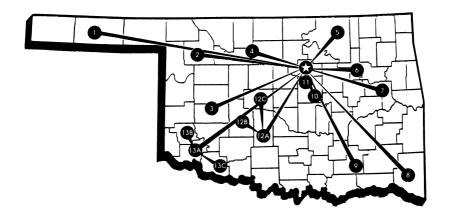
The accomplishments of the "Oklahoma Pecan Export Promotion" are a positive reflection of the efforts put forth by the Noble Foundation, OSU, the Oklahoma DOA and others. The Noble Foundation methodically followed the steps outlined in the marketing proposal, which included travel for demand verification and trade show participation. At the same time, they also remained flexible. They were willing to continually evaluate their activities and adjust their operational methods when necessary. While there are no guaranteed prescriptions for international trade success, the efforts enumerated in this text are intended to serve as a practical guide for agricultural processors and producers who are preparing to enter international markets.

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THE OKLAHOMA AGRICULTURAL EXPERIMENT STATION

SYSTEM COVERS THE STATE



- MAIN STATION Stillwater and Lake Carl Blackwell
- 1. Panhandle Research Station Goodwell
- 2. Southern Great Plains Field Station Woodward
- 3. Marvin Klemme Range Research Station Bessie
- 4. North Central Research Station Lahoma
- 5. Pawhuska Research Station Pawhuska
- 6. Vegetable Research Station Bixby
- 7. Eastern Research Station Haskell
- 8. Kiamichi Forestry Research Station Idabel
- 9. Wes Watkins Agricultural Research and Extension Center Lane
- 10. Pecan Research Station Sparks
- 11. Agronomy Research Station Perkins Fruit Research Station — Perkins **CENTRAL RESEARCH COMPLEX:**
- 12A. South Central Research Station, Headquarters Chickasha
- 12B. Caddo Research Station Ft. Cobb
- 12C. Forage and Livestock Research Laboratory El Reno SOUTHWEST RESEARCH COMPLEX:
- 13A. Irrigation Research Station, Headquarters Altus
- 13B. Sandyland Research Station Mangum
- 13C. Southwest Agronomy Research Station Tipton

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