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Export Behavior of Louisiana Agribusiness Firms

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Foreword

The United States is a party to several trading blocks, including the North American Free Trade Agreement, and is a signatory to the General Agreement on Tariffs and Trade. The impact of the new trading environment on the agribusiness sector depends on the business activities of individual firms. A survey of agribusiness firms was undertaken to gather information on their exporting experience and plans. The responses of exporters and non-exporters are presented. The likelihood of exporting increased with the size of a firm, both in terms of employee numbers an annual sales. The survey showed that for the majority of firms, exports accounted for less than 10% of total sales and that only a small number of companies had used government programs intended to aid exporters. These results indicate that agribusiness firms could benefit from programs that educate them on sources of export assistance.

Acknowledgements

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Karol W. Hughes, P. Lynn Kennedy, and Albert Ortego[1]

Introduction

Louisiana's location, combined with its endowment of a rich natural resource base, places the state in a unique position in international markets as it enters the twenty-first century. The current political environment finds the United States as a party to several trading blocks, including the North American Free Trade Agreement (NAFTA), as well as being a signatory to the General Agreement on Tariffs and Trade (GATT) and the resulting World Trade Organization. As a result, the potential increase in world trade of agricultural products will affect Louisiana as a producer, processor, transporter, and consumer of agricultural products.

Estimation of the impact of trade liberalization on Louisiana and assistance to help it compete in the new trade environment, requires an accurate assessment of Louisiana's current position in agricultural trade. Information of this type will aid agribusiness firms as they prepare to take advantage of expanding export opportunities. Combined with knowledge of potential markets and export regulations, this will allow agribusiness firms to develop competitive strategies and take advantage of the new trade policies.

If Louisiana agribusiness exporters are to successfully compete in this arena, they require knowledge and access to various sources of information that can give them a competitive edge. In view of this need, a survey was conducted to gain insights into the behavior of Louisiana agribusinesses. This survey was originally intended for use in planning a workshop for agribusiness exporters. The survey is used here to examine possible implications of firm behavior and to identify the most relevant needs of Louisiana agribusiness exporters. The paper first reviews the composition of exports for agricultural and related goods important to Louisiana. Second, the potential impacts of various trade agreements, in particular NAFTA, are discussed. Next, the survey of current and

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potential Louisiana agribusiness exporters is reviewed. Finally, the results of this survey are discussed along with its implications for enhancing the ability of Louisiana agribusiness exporters to develop strategic plans for the twenty-first century.

Agricultural Export Situation

The United States (U.S.) had $513 billion in total exports in 1994 of which 9% was accounted for by agricultural products (Figure 1). Although total agricultural exports increased 58% from 1985 to 1994, agriculture's share of total exports declined as nonagricultural exports grew by 130% over the same period (USDA, 1995). In addition to traditional agricultural commodities, exports of related agricultural goods, such as fertilizers, chemicals, and farm machinery, accounted for several billion dollars of exports (Figure 2). Exports of forestry products, such as pulp, paper, and plywood, were valued at $18.6 billion (Dept. of Commerce, 1995).

The top importers of U.S. agricultural products have changed slightly since the mid-1980s.

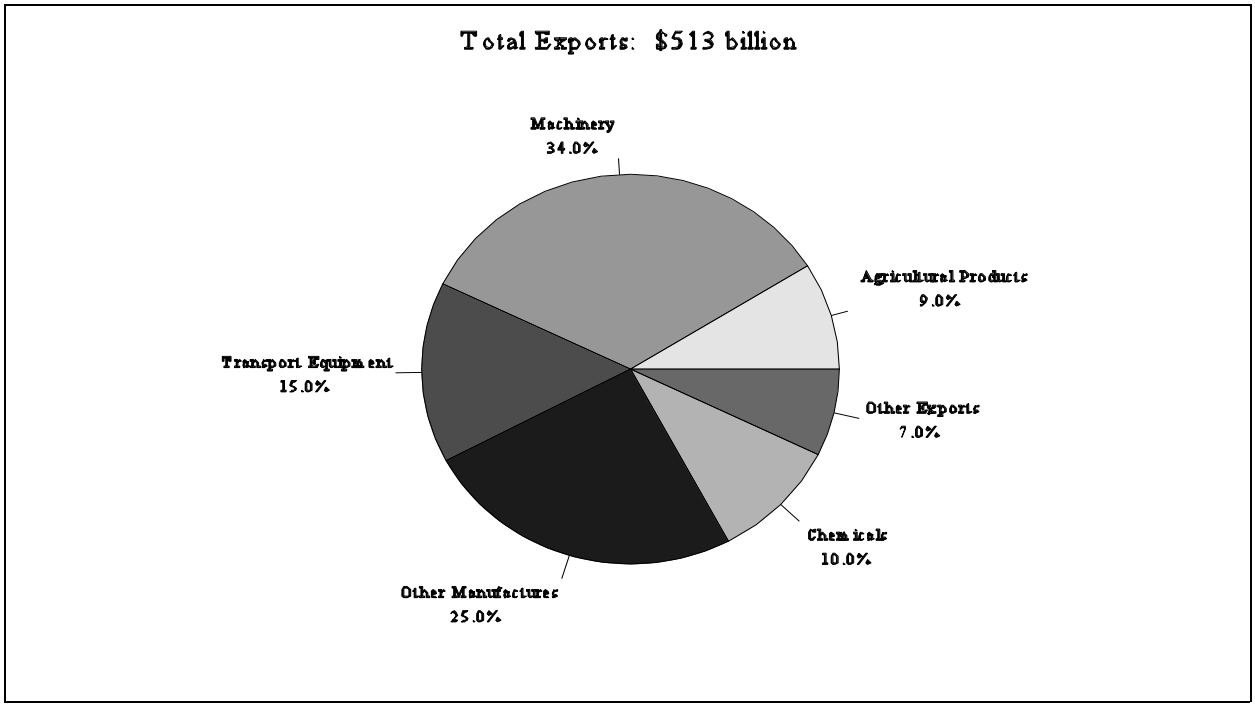

Figure 1. Composition of U.S. Exports, 1994.
Source: U.S. Dept of Commerce, 1995

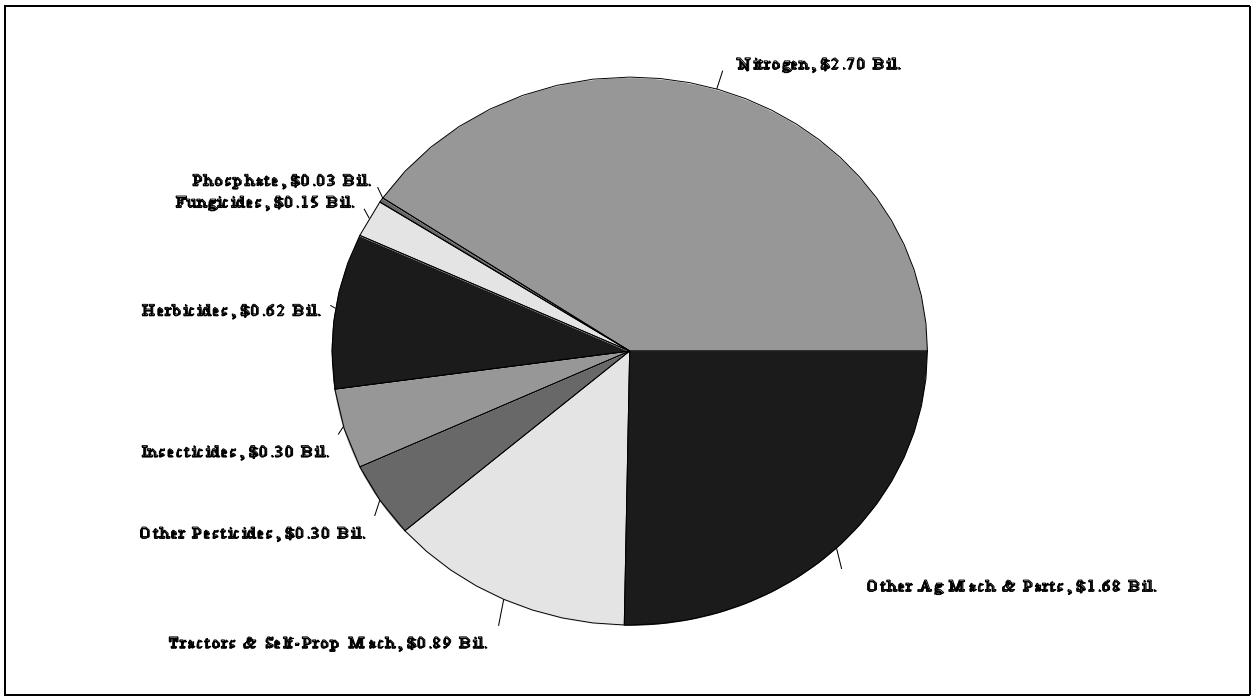

Figure 2. U.S. Exports of Selected Agricultural Related Products, 1994.
Source: USDA, 1995

Japan continues to be, by far, the largest single importer of U.S. agricultural products. However, other countries making up the list of top destinations have shifted (Appendix Tables A.1 and A.2). Exports to Canada and Mexico increased significantly and they now rank directly behind Japan. Although European countries are still major buyers of U.S. agricultural products, there has been less growth, and even decline, in the value of their imports compared to Asian buyers and the NAFTA trading partners.

Grains and feeds are the most important agricultural commodity export group in terms of value with over $13.5 billion in exports in 1994 (USDA, 1995). Together, unmilled wheat and corn accounted for nearly $8 billion of those exports. Other major agricultural exports are horticultural products, a variety of animal products, and oilseeds, especially soybeans (Figure 3). Appendix Tables A.3-A.9 present major importers of selected commodities based on volume. The top ten importers of cotton, corn, and soybeans accounted for over 80% of U.S. exports of those products. Eighty-one percent of meat exports (not poultry) were concentrated in five countries, with the subgroup beef and veal having a 96% concentration in five countries. Other exports, e.g., rice and wheat, were less concentrated with 65% or less of exports going to the top ten importers. For

Louisiana, rice, cotton, and soybeans were the most important export commodities with exports, based on Louisiana's share of U.S. production, valued at $150 million, $204 million, and $55 million, respectively, in 1994 (Table 1).

Another reason exports are of concern to Louisiana involves the state's geographic position

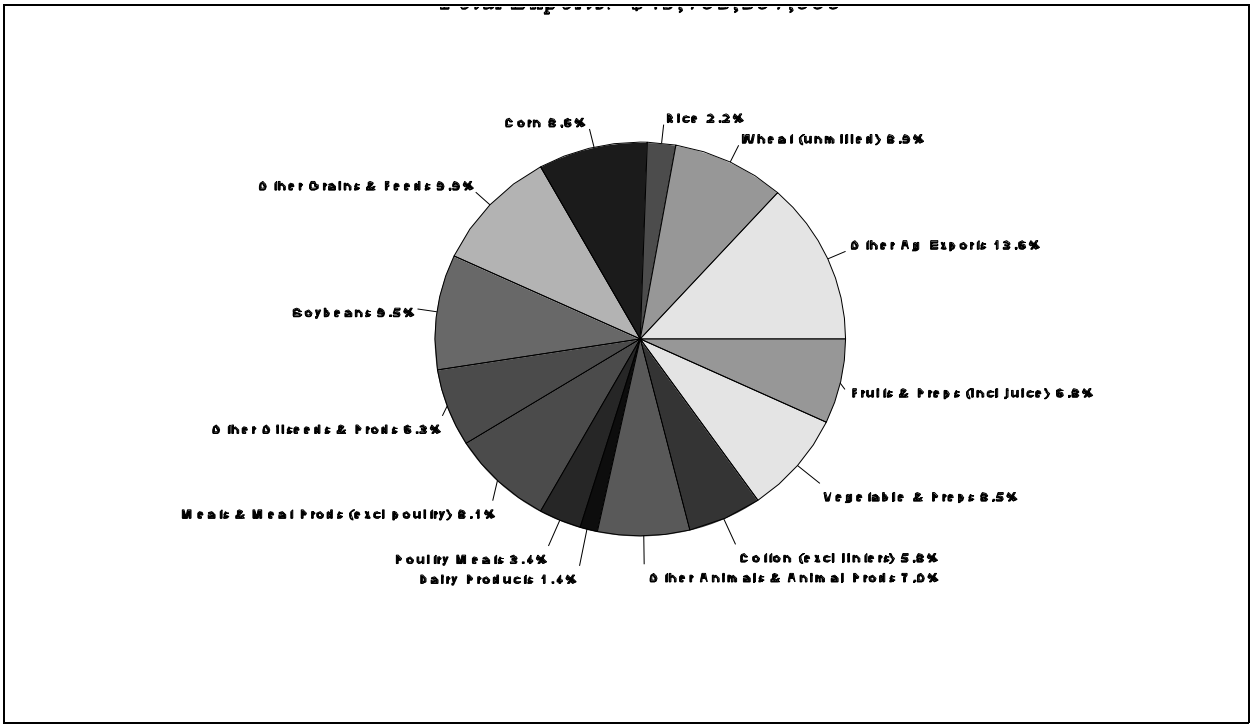

Figure 3. Composition of U.S. Agricultural Exports, 1994.
Source: USDA, 1995

and its deep water ports. Situated on the Gulf of Mexico, with transportation connections by rail and inland waterways, Louisiana is in an excellent position to export to the Caribbean Basin and Latin America. In 1989, Louisiana ports handled 51.5% of U.S. grain exports (National Ports and Waterways Institute, 1995) primarily due to grains barged down the Mississippi River from the Midwest. Grain exports are not limited to any particular region of the world.

In addition, Louisiana ports handle containerized shipments, which are important to other agribusiness sectors. Puerto Rico, North Europe, and South and Central America are the primary

Table 1. Value of Selected Louisiana Commodity Exports.

Year and Commodity	Production		LA Share	Value of U.S. Exports	Value of LA Exports
	U.S.	LA			
				- - - - 1,000 dollars - - - -	
1993					
Wheat (1,000 bu)	2,402,055	2,375	0.10%	4,664,369	4,612
Rice (1,000 cwt)	156,110	24,108	15.44%	769,385	118,816
Corn (1,000 bu)	6,336,470	19,950	0.31%	4,220,396	13,288
Cotton (1,000 bales)	16,134	1,105	6.85%	1,527,601	104,626
Soybeans (1,000 bu)	1,870,958	31,200	1.67%	4,598,673	76,687
1994					
Wheat (1,000 bu)	2,320,610	2,590	0.11%	4,053,991	4,525
Rice (1,000 cwt)	197,779	29,448	14.89%	1,008,426	150,148
Corn (1,000 bu)	10,103,030	35,190	0.35%	3,935,901	13,709
Cotton (1,000 bales)	19,622	1,512	7.71%	2,653,120	204,440
Soybeans (1,000 bu)	2,558,317	32,480	1.27%	4,330,427	54,978

Source: USDA-NASS, 1995 and USDA, various issues.

regions serviced by Louisiana ports in the containerized trade. It is estimated that 20-30% of Louisiana's containerized exports to Puerto Rico are from the state (forest products and chemicals) with, perhaps, a higher percentage for the North European trade (National Ports and Waterways Institute, 1995). The National Ports and Waterways Institute at Louisiana State University has stated "the trade with Mexico has the most promising growth potential" (p. IX-37). If shipping services by water improve between Louisiana and Mexico, Louisiana agribusinesses might enhance their locational advantage.

Agricultural Trade Agreements

Recent developments in the international trade arena, particularly in agriculture, have changed the rules and regulations under which Louisiana agribusiness firms must operate. Foremost among these developments is the new environment agribusiness firms face as a result of the passages

of the NAFTA (Grennes, et al., 1991) and the Uruguay Round's agricultural agreement within the GATT (Josling, et al., 1994). Given Louisiana's geographic proximity with respect to Mexico, it seems logical that policy changes resulting from NAFTA will significantly impact the state.

The intent of NAFTA is the creation of a free trade area that, at this point, includes Canada, Mexico, and the United States (Barichello, et al., 1991). As a result, barriers to trade among the three countries will eventually be removed, allowing a freer flow of goods and services within one of the largest trading blocks in the world. This is especially significant when agricultural support, when measured as producer subsidy equivalents[2], averaged 35% for Canada, 23% for the U.S., and 21% for Mexico during 1982-92 (Nelson, et al. 1995). The removal of trade barriers and government created market distortions is designed to increase the efficiency of the market by enabling goods and services to be provided in accordance with the comparative advantages of each country.

At first glance, several NAFTA winners and losers can be identified. For a country that exports a product, decreased barriers to trade will increase product prices. This benefits the producer through higher product prices and increased incentive to produce. At the same time, consumers are hurt as they must pay a higher price and most likely will consume less of the product. When examined from the viewpoint of the importing country, the removal of trade barriers will have the opposite effect: lowering product prices, benefiting the consumer, and hurting the producer.

The effect of NAFTA on individual firms clearly depends on their business activities. This is especially true for agribusiness firms. Impacts on producers, processors, distributors, and consumers will vary according to such factors as whether a product is imported or exported, whether inputs are imported or exported, the level of protection prior to NAFTA, policies of other non-NAFTA countries, and each group's ability to adapt to the new environment.

A survey of agribusinesses in Louisiana was carried out by the Department of Agricultural Economics and Agribusiness in 1992. The purpose of that study was to present an overview of the agricultural and aquacultural industries and the products considered to have the greatest export potential, specifically to Japan (Dept. of Ag. Econ. & Agribusiness, 1992). Little information,

[2]A percentage of the value of agricultural gross receipts that can be attributed to the aggregated effect of different agricultural policies. It can be positive or negative.

however, was gathered on business characteristics. In order to determine how NAFTA and other trade agreements may affect the Louisiana agribusiness sector, a more recent survey was conducted focusing on the experience and exporting plans of agribusiness firms located in Louisiana. The mail survey was administered to agribusiness firms ranging from food processors to chemical plants to cabinet makers. This survey contained separate questions for firms that were currently exporting versus those that were not.

Exporters were asked a series of questions about their exporting experience. These questions were intended to determine the level of involvement of Louisiana agricultural exporters in the exporting process, how they conduct business in export markets, and what they believe are their major exporting barriers. Questions for non-exporters concerned their attitudes toward exporting and plans for the future. Other questions, asked of both exporters and non-exporters, were used to gather general information about the responding firms and to differentiate responses by firm size.

Survey Results

A total of 113 usable surveys were returned of the 728 surveys delivered. Table 2 identifies the agricultural products of the responding firms. Fifty-eight of the respondents produce processed packaged food, 27 produce bulk food and/or feed, 7 produce equipment, and 29 produce other non-food items.[3] Fifty businesses indicated they export while the other 63 did not.

Two questions were used to differentiate businesses by size. The first question asked for the number of full-time equivalent employees working for the firm. The other, an optional question, asked the firms to indicate their three-year average annual sales from a list of groupings. The number of employees working for the firms varied widely. This is not unexpected given the different types of products, business structures, and stages of business development represented. Table 3 shows the employee groupings of 103 firms. Ten of the 113 businesses either did not respond to this question or gave a range, perhaps reflecting the seasonal nature of the business and its work force. The table also includes a breakdown by exporter status.

[3]Several firms indicated that they produce more than one type of product. As a result, the responses do not sum to 113.

Table 2. Agricultural Products of Responding Firms.

Product	Total Firms	Exporters	Non-Exporters
Processed Packaged Food	58	22	36
Bulk Food and/or Feed	27	13	14
Equipment	7	7	0
Other Non-food Items	29	13	16

Source: Louisiana Agribusiness Export Survey, 1995.

Table 3. Firm Size by Number of Employees.

Number of Employees	Total Firms	Exporters	Non-Exporters
1 to 10 employees	37	9	28
11 to 25 employees	24	11	13
26 to 50 employees	19	10	9
51 to 75 employees	6	3	3
76 to 100 employees	8	6	2
More than 100 employees	9	8	1

Source: Louisiana Agribusiness Export Survey, 1995.

The responding firms were generally small in terms of the number of employees. Not surprisingly, the proportion of firms that export tends to increase with the size of the firm. The relationship between the number of employees and exporting can be clearly seen in Figure 4.

The second, optional, question regarding company size requested a three-year average of total annual sales (Table 4). Eleven firms did not answer this question. When company size is

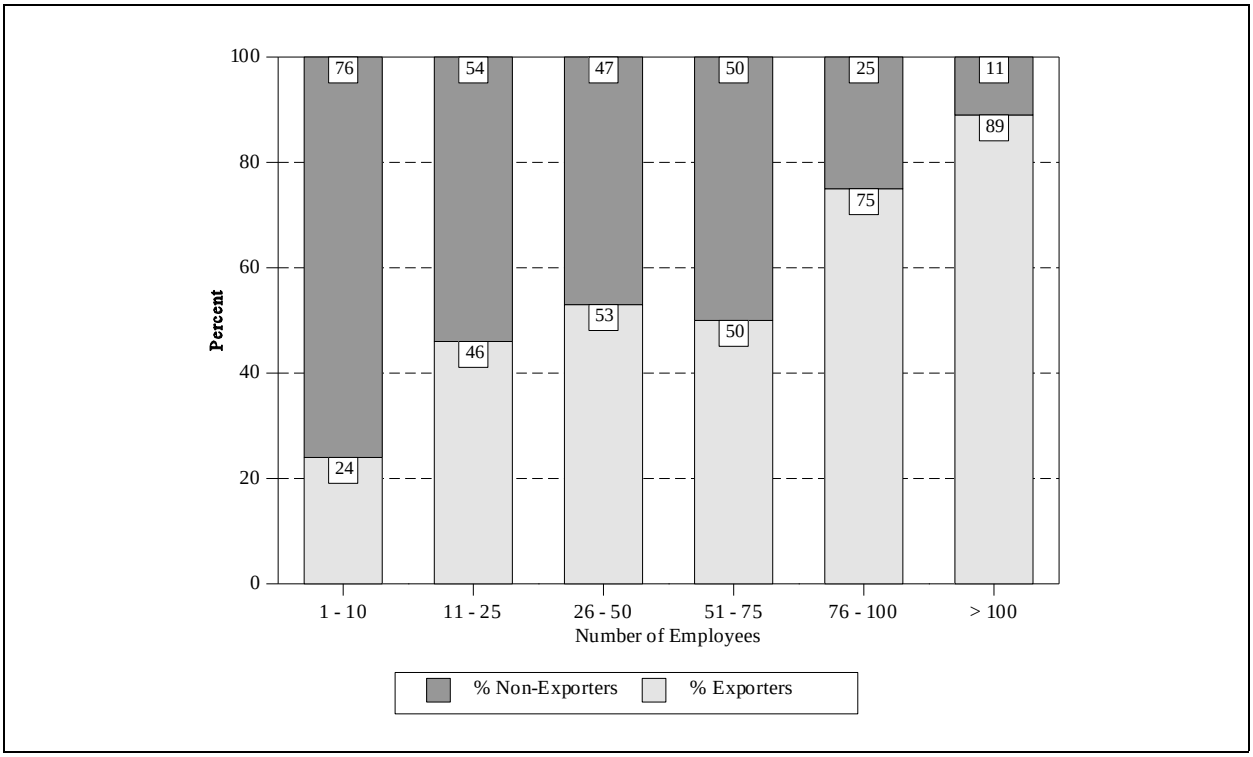

Figure 4. Percent Exporters & Non-Exporters Within Employee Categories.
Source: Louisiana Agribusiness Export Survey, 1995.

measured by sales, the relationship between company size and exporting appears less clear, especially in the middle sales categories. However, as when company size was measured by employee numbers, exporting tends to be positively correlated with the size of the firm. Figure 5 shows the percentage of firms that export in each sales category. Figure 6 gives a side-by-side comparison of firm size when measured both by the number of employees and average annual sales.

A final question asked of both exporters and non-exporters was whether the businesses had ever received or sought any export assistance from a state or federal agency. Seventeen of the 113 respondents said that they had. The businesses listed the Louisiana Department of Agriculture and Forestry, the United States Department of Agriculture (USDA), the Foreign Agricultural Service, the Department of Commerce, and the Southern U.S. Trade Association (SUSTA) as sources of assistance. The exact nature of the aid is unclear and several of the large firms (over $10 million in

Table 4. Company Size by Average Annual Sales.

Average Annual Sales	Total Firms	Exporters	Non-Exporters
Less than $500,000	25	3	22
$ 500,000 - $1,000,000	13	3	10
$1,000,000 - $2,500,000	17	9	8
$2,500,000 - $6,000,000	23	11	12
$6,000,000 - $10,000,000	4	2	2
More than $10,000,000	20	14	6

Source: Louisiana Agribusiness Export Survey, 1995.

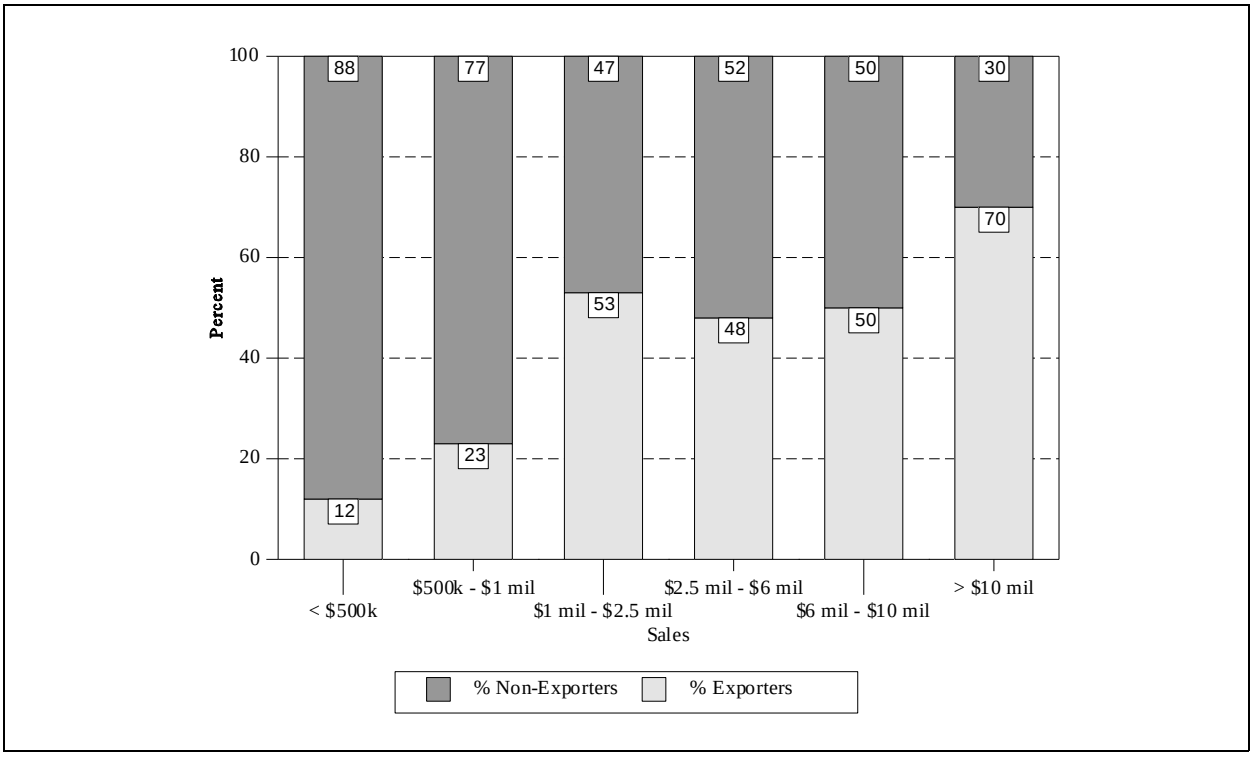

Figure 5. Percent Exporters & Non-Exporters Within Sales Categories.
Source: Louisiana Agribusiness Export Survey, 1995.

annual sales) interpreted the question to include commodity programs, such as the Export Enhancement Program (EEP).

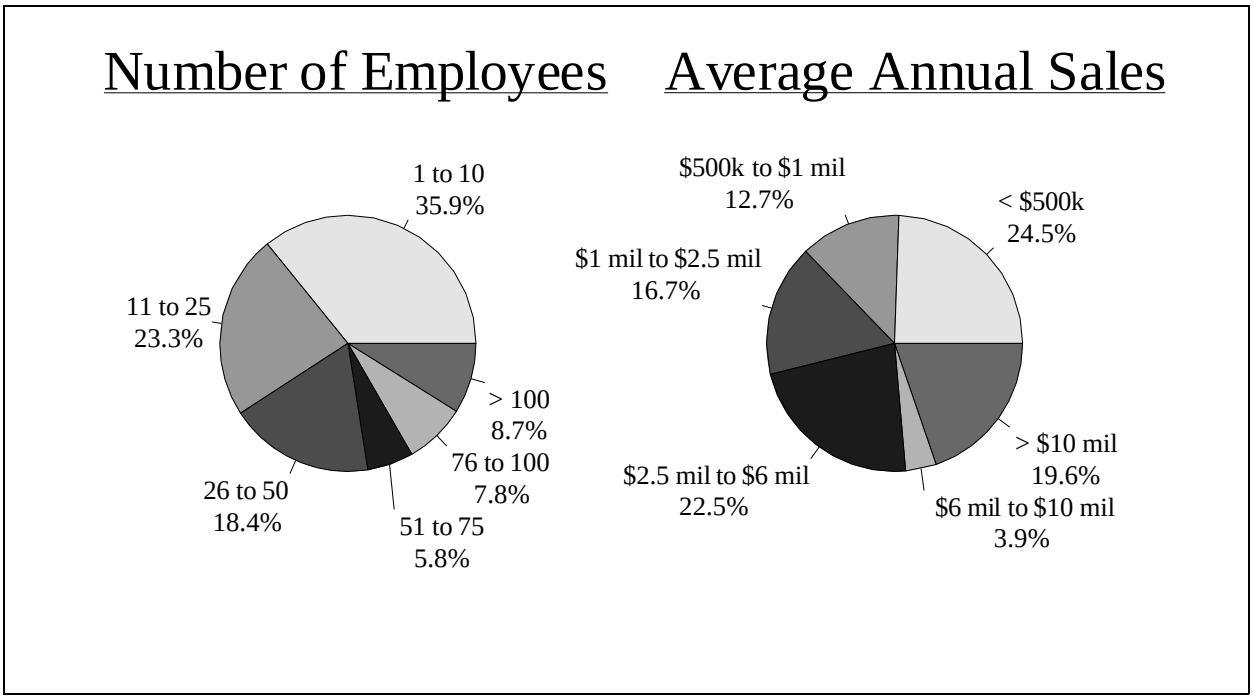

Figure 6. Firm Size by Number of Employees and Average Annual Sales Categories.
Source: Louisiana Agribusiness Export Survey, 1995.

Exporter Results

To learn how dependent Louisiana exporters are on foreign markets, businesses were asked to estimate the proportion of their annual sales attributed to exports over the last three years. This percentage ranged from less than 1 percent to 100 percent. Figure 7 shows the distribution of firms categorized by the proportion of average annual sales represented by exports. Three businesses did not respond to this question and one gave a range that did not fall into any single category. Although a majority of the exporters have less than 10 percent of their sales coming from exports, many businesses depend heavily on export markets.

In addition, exporters were asked to indicate the number of years they had exported to given regions and countries: Mexico, Canada, Latin America and the Caribbean, Asia, Africa, Europe, and Oceania. As with the percentage of export sales, the number of years of exporting experience ranged widely, from 1 year to 125 years (Table 5). The Latin American and Caribbean region was

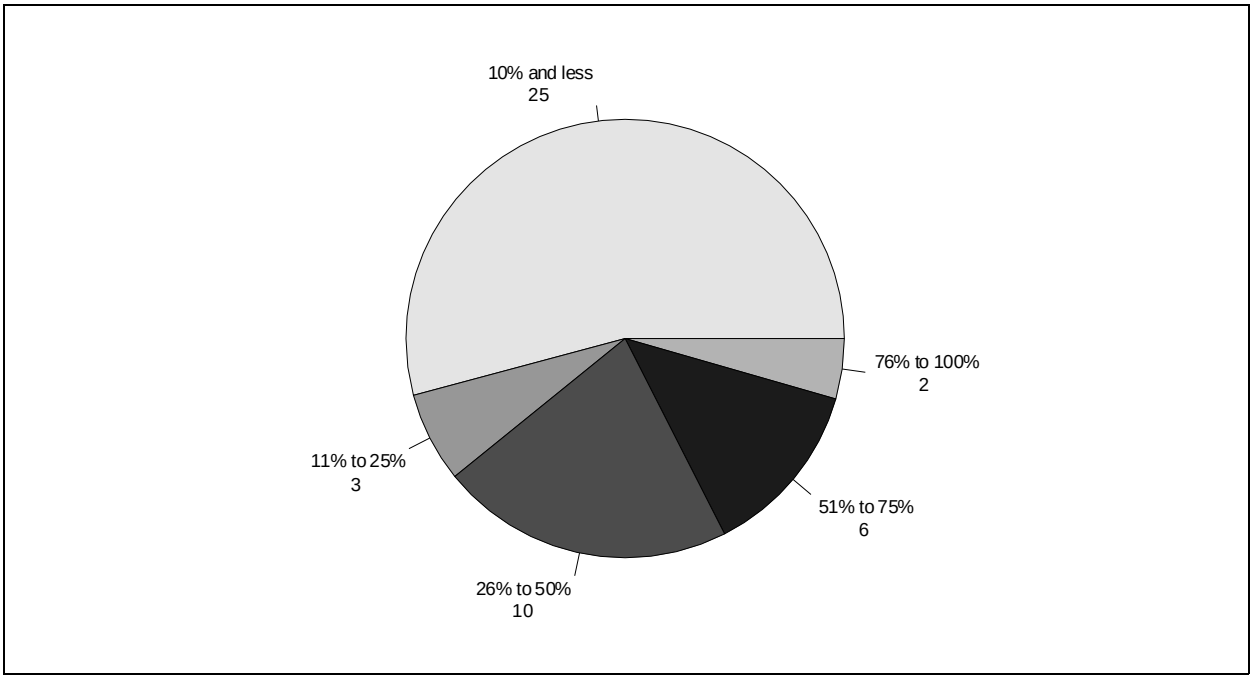

Figure 7. Distribution of Exporters by Export Sales as a Percentage of Total Sales.
Source: Louisiana Agribusiness Export Survey, 1995.

mentioned most often with 34 exporters indicating exports to that region, closely followed by Mexico with 33 exporters. The other regions were also represented (with the number of businesses indicating exports in parentheses): Asia (26), Europe (21), Canada (20), Africa (17), and Oceania (4). One firm was responsible for all instances of 51 years and greater of exporting. Responses also indicate exporters concentrated on Mexico and Asia as new markets in the five years previous to the survey. Fifteen exporters had exported to Mexico for five years or less, and 14 had exported to Asia during the same time frame.

Exporters' methods of working with existing customers and finding new ones were addressed. Table 6 shows how the 50 exporters work with foreign customers. Exporters generally utilized more than one method both for existing and new customers. An exporter's own U.S. sales office was most often used both for dealing with existing foreign customers (39 responses) and for finding new customers in foreign markets (34). A U.S. broker or exporter was the second most common means to work with existing foreign customers (23), followed by a broker or importer

Table 5. Number of Firms Exporting to Each Region, by Years of Experience.

Years Exporting	Mexico	Canada	Latin America & Caribbean	Asia	Africa	Europe	Oceania
5 or less	15	7	8	14	6	7	1
6 to 20	10	7	16	5	6	8	1
21 to 50	4	3	4	4	3	3	1
51 to 100	--	--	1	--	--	--	--
more than 100	1	1	--	--	--	1	--
Unknown	3	2	5	3	2	2	1
Total	33	20	34	26	17	21	4

Note: The unknown category refers to firms that indicated exports to a region, but did not specify the number of years.
Source: Louisiana Agribusiness Export Survey, 1995.

overseas (20). These methods were also important for finding new foreign customers (19 for a U.S. broker or exporter and 18 for a broker or importer overseas). However, a direct request from a buyer (which was not a choice in the case of existing customers) was the second most common way to find new customers (28). Of the two businesses that indicated other methods of finding new customers, one attends trade shows and the other uses travel.

Exporters were asked to specify the difficulties or obstacles they encounter when exporting from a list of possible problem areas. The problems and exporter responses are given in Table 7. Communications (or language) was the problem area specified most often, with 25 responses. Transportation costs and trade barriers followed with 23 and 21 businesses, respectively, indicating these areas are a problem. Locating potential markets (18 responses), complicated documentation (16), unfamiliar foreign trade procedures (13), and determining preferences or altering product for foreign markets (12) were other obstacles encountered in international marketing. Four exporters

Table 6. Methods of Customer Service and Discovery.

Method	Existing Customers	New Customers
Own U.S. Sales Office	39	34
Direct Request from Foreign Buyer	--	28
U.S. Broker or Exporter	23	19
Overseas Broker or Importer	20	18
Government or Trade Association Publications	--	11
Branch Office Overseas	5	7
Government Representative Overseas	--	4
Other	--	2

-- Not Applicable
Source: Louisiana Agribusiness Export Survey, 1995.

gave other obstacles. They were payment terms, service, educating the foreign buyer on U.S. specifications, and credit

The exporting firms were also questioned on how they expect their export activities to change as a result of the passage of NAFTA. Nineteen firms indicated they expect exports to increase to their existing markets, 14 think exports will increase to new markets, 9 expect no change in their export activities, and 21 firms said they are not sure. Seven firms expect to increase exports in both existing and new markets. None of the firms expect competition from other countries to increase. There appears, however, to be some uncertainty concerning this question. Four firms expect exports to increase, but also indicated they are not sure how NAFTA will affect them.

Table 7. Difficulties or Obstacles Encountered by Exporting Firms.

Communications (language)	25
Transportation costs	23
Trade barriers (e.g. tariffs, quotas)	21
Locating potential markets	18
Complicated documentation	16
Unfamiliar foreign trade procedures	13
Determining preferences or altering product for foreign markets (such as package type and size)	12
Company size and capital	11
Insufficient financial return	6

Source: Louisiana Agribusiness Export Survey, 1995.

Non-Exporter Results

Non-exporters were surveyed regarding their past exporting experience. Nine of the 63 non-exporters had exported in the past. The reasons they no longer export include problems in locating potential markets, the wish to concentrate on domestic market development, determining preferences or altering their product for foreign markets, insufficient financial return, unfamiliar foreign trade procedures, complicated documentation, company size and capital, and trade barriers.

Non-exporting firms' interest in exporting was closely divided with 30 saying they were interested in exporting versus 33 that were not. Twelve of the interested firms stated they would like to export to a specific region or country. The areas these firms mentioned most often were the Americas (primarily Mexico) and Europe (with Spain, Germany, England, Netherlands, and France mentioned specifically). The Middle East, Japan, Asia, Australia, and New Zealand were also mentioned.

Sixty firms responded to a question on the affect of NAFTA on their interest in exporting. Of those firms, 26 indicated passage of NAFTA had influenced their interest while the other 34 firms

indicated it had not. Firms not interested in exporting indicated several reasons for not wanting to get into exporting: they wish to concentrate on domestic market development, their company size and capital, and their volume of production. Two sugar-related businesses mentioned that current law restricts exportation of their product and one business stated it can market everything it produces locally.

The firms interested in exporting were asked how they plan to find customers in foreign markets. Table 8 lists the alternatives given to them and their responses. A U.S. broker or exporter was the top choice, with 19 firms planning to use this method for finding foreign customers. Other methods were government or trade association publication (14 responses), a broker or importer overseas (13), a direct request from a foreign buyer (11), the company's U.S. sales office (8), and a government representative overseas (8). In addition to the choices given in the survey, one respondent plans to get assistance from similar businesses that have exporting experience and another mentioned The U.S. Enterprise for the Americas Initiative.

Table 8. Non-Exporters Planned Methods of Finding Foreign Customers.

A U.S. broker or exporter	19
Government or trade association publications	14
A broker or importer overseas	13
Direct request from a foreign buyer	11
The company's U.S. sales office	8
A government representative overseas	8

Source: Louisiana Agribusiness Export Survey, 1995.

Summary and Implications

The results of this survey provide several useful implications regarding the types of information and resources current and potential agribusiness exporters will find useful in exporting their products or services. Two key points stand out. First, firms with more employees tend to be more likely to export. Second, firms with more sales tend to be more likely to export. These results are not surprising given the likelihood that larger firms tend to have more resources available for the development of export markets and the establishment of a foreign market base.

The majority of exporting firms had exports that accounted for less than 10% of their total sales. This statistic is especially relevant when viewed with respect to the resources a firm is willing to devote to exports. Medium to large size firms may not feel a separate export department or division is necessary when exports compose less than 10% of sales. This is perhaps even more important when considering the behavior of small firms. Small companies, especially, would likely benefit from access to public or private agencies that provide export services to aid in the performance of activities that a smaller company may not be able or willing to perform on its own.

The survey leads to the question of whether businesses are aware of government resources available to them or if they choose to not exploit that resource. A very small number of companies take advantage of various government services or have the opportunity to have a branch office overseas. In contrast, a larger number of firms use their own domestic sales office, get direct requests from importers, or use foreign or domestic brokers to identify potential foreign customers. This trend is consistent for both current and potential exporters and indicates more effort should be made to provide information about the government programs that are available to assist firms with exporting.

Comparisons of the intended methods of non-exporters for finding new customers with those of experienced exporters provided some interesting differences. Experienced exporters rely on their own U.S. sales offices and direct requests while potential exporters plan to use a U.S. broker or exporter and government and trade association publications. It is often recommended to small firms and new exporters that they consider working through an intermediary when making their first overtures into exporting (Rosson and Ruppel, 1991). Intermediaries, such as brokers and importers overseas, can be used for their familiarity with market demand, the processes involved in exporting, and the marketing channels they may have in place. The exporter does not have to be

knowledgeable of all aspects of exporting. From this point, new exporters can learn, make contacts, and build an export volume before taking over more of the responsibilities themselves. The survey results suggest this may be the way some Louisiana firms are operating. It appears that inexperienced exporters plan to use outside assistance to find customers in foreign markets while experienced exporters are more likely to work through their own sales offices to find customers and to deal with existing customers.

The top six responses identifying barriers to trade include four that result from a lack of familiarity with foreign markets or that are involved with initial fixed export costs. These are communications, identification of markets, export documentation, and trade procedures. Once again, several of the problems specified as key barriers to trade can be solved through existing public and private organizations. The other two problems most often indicated involve price differentials between foreign and domestic products resulting from political trade barriers and transportation costs.

The expansion of a firm's sales base through the use of foreign markets can be a daunting task in light of the various intricacies involved with exporting compared to the relative ease of concentrating on the local domestic market. Particular differences in conducting business with foreign customers include; increased time involved in developing contracts that are valid in other countries, increased credit risk, and the uncertainty and higher costs of international transportation.

Although these obstacles may appear rather formidable when a company is considering marketing its products internationally, the benefits of trade often outweigh the costs. Alternatives exist that greatly reduce the risk of exporting and provide significant assistance. For example, various organizations can provide assistance to firms, both large and small, in conducting export activities. Examples are the Louisiana Trade Office in Mexico, the USDA, the Louisiana Department of Agriculture and Forestry, and the Southern U.S. Trade Association in New Orleans. These public agencies, in addition to others, provide advice and technical assistance in developing export contacts. On the other hand, several private firms and organizations, such as banks, freight companies, and the World Trade Center, provide assistance in the various legal, credit, and transportation services necessary to export successfully.

Louisiana agribusiness firms produce a wide variety of products that are being, and could be, successfully marketed on an international level. The survey indicates that larger firms tend to focus

on exports to a greater extent than smaller firms. Given the various problems and concerns of current and potential exporters, a program is needed to provide agribusiness firms with information regarding means to minimize risk in foreign markets. In addition, identification of various firms and agencies that provide export assistance would be of benefit. The dissemination and use of this information by the agribusiness community would reduce the overall costs of exporting, and ultimately allow the industry to reap greater rewards by taking advantage of international demand for its products.

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Appendix Table A.1. Total Agricultural Exports: Country Rankings, 1985 and 1986.

1985		Dollars (‘000)	1986		Dollars (‘000)
	World	29,041,460		World	26,046,345
1	Japan	5,409,105	1	Japan	5,106,464
2	USSR	1,923,480	2	Netherlands	2,068,588
3	Netherlands	1,868,889	3	Canada	1,547,058
4	Canada	1,621,802	4	S. Korea	1,292,711
5	Mexico	1,439,302	5	Taiwan	1,164,307
6	S. Korea	1,412,795	6	Mexico	1,074,173
7	Taiwan	1,230,863	7	Germany, Fed Rep	1,042,218
8	Germany, Fed Rep	944,296	8	Egypt	804,957
9	Egypt	891,425	9	Italy	719,699
10	Spain	837,252	10	Spain	700,755
Other Regions					
	Central America	361,853		Central America	336,186
	Caribbean	763,661		Caribbean	773,689
	South America	1,659,289		South America	1,455,419
	Developed	14,493,227		Developed	14,175,892
	Less Developed	11,988,312		Less Developed	10,722,717

Source: USDA, 1995

Appendix Table A.2. Total Agricultural Exports: Country Rankings, 1993 and 1994.

1993		Dollars	1994		Dollars
		(‘000)			(‘000)
	World	42,608,001		World	45,703,807
1	Japan	8,738,740	1	Japan	9,267,826
2	Canada	5,271,240	2	Canada	5,504,110
3	Mexico	3,602,927	3	Mexico	4,513,024
4	Taiwan	2,043,068	4	Korea, Rep of	2,329,827
5	Korea, Rep of	1,932,106	5	Taiwan	2,144,591
6	Netherlands	1,702,438	6	Netherlands	1,707,525
7	Russia	1,272,505	7	Hong Kong	1,233,275
8	Germany	1,070,868	8	China	1,080,366
9	United Kingdom	944,533	9	Germany	1,051,626
10	Hong Kong	875,347	10	United Kingdom	946,280
11	Spain	781,721	11	Egypt	871,523
12	Egypt	660,942	12	Spain	861,748
13	Italy	600,486	13	Russia	637,889
14	France	593,443	14	Algeria	595,301
15	Algeria	516,201	15	Philippines	566,647
Other Regions					
	Caribbean	1,016,472		Caribbean	996,921
	Central America	712,738		Central America	752,137
	South America	1,461,060		South America	1,772,769
	Developed	22,330,685		Developed	23,165,412
	Developing	18,128,907		Developing	20,438,322

Source: USDA, 1995

Appendix Table A.3. Corn Exports: Country Rankings, 1993 and 1994.

1993		MT	1994		MT
	World	40,045,911		World	35,645,041
1	Japan	14,664,131	1	Japan	12,075,301
2	Taiwan	5,325,997	2	Taiwan	4,966,513
3	Russia	4,289,789	3	Mexico	3,054,111
4	Egypt	1,908,633	4	Korea, Rep of	2,414,801
5	Algeria	1,200,115	5	Egypt	1,601,193
6	Spain	1,122,537	6	Algeria	1,346,797
7	Saudi Arabia	845,168	7	Spain	1,218,406
8	Poland	831,139	8	Saudi Arabia	838,172
9	Canada	815,461	9	Canada	807,000
10	Venezuela	762,334	10	Venezuela	727,649
Other Regions					
	Central America	768,740		Central America	898,548
	Caribbean	984,770		Caribbean	840,935
	South America	1,636,298		South America	2,395,998
	Mexico	288,681			
	Developed	18,043,328		Developed	15,214,008
	Developing	16,841,158		Developing	20,272,583

Source: USDA, 1995

Appendix Table A.4. Rice Exports: Country Rankings, 1993 and 1994.

1993		MT	1994		MT
	World	2,774,693		World	2,983,219
1	Mexico	256,335	1	Japan	490,879
2	Saudi Arabia	205,607	2	Brazil	343,084
3	Iran	201,494	3	Mexico	254,407
4	Turkey	178,460	4	Saudi Arabia	176,215
5	Canada	150,716	5	Netherlands	146,059
6	Haiti	135,679	6	Canada	139,716
7	Rep S Africa	128,726	7	Turkey	119,020
8	Netherlands	123,431	8	Rep S Africa	109,312
9	Senegal	103,654	9	Haiti	88,576
10	Ivory Coast	87,590	10	Peru	70,480
Other Regions					
	Central America	104,749		Central America	118,060
	Caribbean	268,023		Caribbean	189,145
	South America	87,873		South America	479,254
	Developed	822,862		Developed	1,236,683
	Developing	1,839,582		Developing	1,730,213

Source: USDA, 1995

Appendix Table A.5. Wheat Exports: Country Rankings, 1993 and 1994.

1993		MT	1994		MT
	World	35,622,534		World	30,532,735
1	Japan	3,247,411	1	Egypt	5,157,922
2	China	2,717,399	2	Japan	3,268,325
3	Egypt	2,458,069	3	Philippines	2,015,797
4	Russia	2,144,622	4	China	1,913,484
5	Morocco	2,093,013	5	Pakistan	1,831,041
6	Philippines	1,611,230	6	Korea, Rep of	1,505,061
7	Korea, Rep of	1,513,340	7	Algeria	1,091,061
8	Algeria	1,338,755	8	Bangladesh	939,971
9	Nigeria	1,218,060	9	Taiwan	823,717
10	Pakistan	1,184,997	10	Sri Lanka	733,481
Other Regions					
	Central America	879,350		Central America	858,040
	Caribbean	510,127		Caribbean	313,641
	South America	2,183,176		South America	1,347,458
	Mexico	966,965		Mexico	625,079
	Developed	5,200,474		Developed	4,754,294
	Developing	23,568,649		Developing	22,285,100

Source: USDA, 1995

Appendix Table A.6. Soybeans Exports: Country Rankings, 1993 and 1994.

1993		MT	1994		MT
	World	19,423,260		World	18,071,789
1	Japan	4,050,565	1	Japan	3,349,093
2	Netherlands	2,981,064	2	Netherlands	3,062,863
3	Taiwan	2,335,320	3	Mexico	2,073,116
4	Mexico	1,758,386	4	Taiwan	1,827,112
5	Spain	1,176,046	5	Spain	1,179,694
6	Korea, Rep of	1,011,163	6	Korea, Rep of	925,154
7	Germany	939,876	7	Germany	822,068
8	Belgium	779,013	8	Brazil	620,637
	& Luxembourg		9	Belgium	531,907
9	Italy	695,842		& Luxembourg	
10	Indonesia	446,051	10	Italy	505,424
Other Regions					
	Central America	152,236		Central America	141,782
	Caribbean	198,603		Caribbean	178,247
	South America	208,494		South America	839,429
	Canada	229,772		Canada	23,984
	Developed	12,704,697		Developed	11,140,297
	Developing	6,555,185		Developing	6,898,350

Source: USDA, 1995

Appendix Table A.7. Cotton Exports: Country Rankings. 1993 and 1994.

1993		MT	1994		MT
	World	1,139,782		World	1,745,723
1	Korea, Rep of	217,693	1	China	400,641
2	Japan	175,384	2	Japan	212,566
3	Mexico	146,011	3	Korea, Rep of	212,538
4	Indonesia	106,604	4	Indonesia	162,811
5	Brazil	65,245	5	Mexico	126,475
6	Taiwan	62,875	6	Hong Kong	85,028
7	Canada	36,214	7	Thailand	78,744
8	Thailand	33,302	8	Taiwan	78,121
9	Philippines	27,739	9	Brazil	59,033
10	Italy	26,556	10	Canada	39,752
Other Regions					
	Central America	22,856		Central America	30,437
	Caribbean	224		Caribbean	111
	South America	99,138		South America	105,013
	Developed	297,829		Developed	321,549
	Developing	838,183		Developing	1,015,674

Source: USDA, 1995

Appendix Table A.8. Meats and Meat Products Exports: Country Rankings, 1993 and 1994.

1993		MT	1994		MT
	World	1,169,008		World	1,406,499
1	Japan	455,376	1	Japan	480,708
2	Mexico	274,896	2	Mexico	346,788
3	Canada	137,637	3	Canada	167,304
4	Korea, Rep of	56,022	4	Korea, Rep of	82,362
5	Taiwan	30,674	5	Indonesia	67,277
Other Regions					
	Caribbean	16,205		Caribbean	14,904
	Central America	4,290		Central America	4,263
	South America	21,164		South America	13,057
	Developed	643,804		Developed	704,886
	Developing	498,719		Developing	657,970

Note: Excludes poultry.
Source: USDA, 1995

Appendix Table A.9. Beef and Veal Exports: Country Rankings, 1993 and 1994

1993		MT	1994		MT
	World	425,221		World	531,019
1	Japan	237,626	1	Japan	274,181
2	Canada	83,843	2	Canada	96,379
3	Mexico	39,444	3	Mexico	72,340
4	Korea, Rep of	38,551	4	Korea, Rep of	60,055
5	Hong Kong	4,420	5	Taiwan	5,479
Other Regions					
	Caribbean	4,112		Caribbean	3,902
	Central America	1,165		Central America	673
	South America	1,383		South America	1,122
	Developed	326,000		Developed	375,749
	Developing	98,826		Developing	153,495

Source: USDA, 1995