THE IMPORTANCE OF EXPORT MARKETS TO GEORGIA AGRIBUSINESS

—Opportunities and Limitations

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This paper briefly traces the flow of economic benefits associated with agricultural exports, and examines the impact of the 1980s drop in exports on Southeastern agriculture and agribusiness firms. Particular emphasis is focused on the apparent cause of the decline in exports and on the forces that must be confronted to achieve improvement in the movement of U.S. agricultural products onto foreign markets.

American agricultural exports entered an era of expansion in the 1970s that was spectacular and unprecedented. The value of these exports, about $7 billion in 1970, increased in each of the next eleven fiscal years reaching $43.8 billion in 1981. However, after these years of growth, agricultural exports decreased sharply in 1982 and 1983.

While much of the growth in the value of agricultural exports reflected price increases, real growth did occur as the quantities exported more than doubled during the period. Exports of commodities important to the southeastern economy, such as peanuts, corn, soybeans, wheat, cotton and poultry meat, grew impressively in volume. Table 1 shows this growth during the latter years of the era.

Agricultural exports benefit both the farm and nonfarm sectors of the economy by generating increased employment, income, and purchasing power. Farmers' purchases of fuel, fertilizer, and other inputs needed to produce export commodities stimulate additional economic activity in the manufacturing, trade, and transportation (agribusiness) sectors. Thus, the processing and marketing of agricultural commodities for the international market generates economic activity in the U.S. similar to that of domestic consumer sales.

THE MULTIPLIER EFFECT OF EXPORTS

Multiplier effects (also referred to as ripple effects) occur wherever goods and services are bought or sold. Expenditures of economic units, (firm or household) creates additional or indirect spending. The total multiplier effect of an initial expenditure is the evenutal total spending.

The estimated additional output stimulated by agricultural exports in the United States during 1979 was shared by other sectors of the economy as follows: farm, 25 percent; food processing, 8 percent; trade and transportation, 9 percent; other manufacturers, 31 percent; and other services 27 percent (Schluter 1980). Table 2 documents the impact of these estimates on Georgia's economic output for various sectors of the state's economy.

This analysis indicated that 75 percent of the additional economic activity generated by Georgia's agricultural exports accrues to various nonfarm sectors of the economy. The impact is widely dispersed in the trade, transportation, manufacturing, and service industries.

AGRICULTURAL EXPORTS AND INCOME

All the economic activity produced by agricultural exports is not direct income. There are production and processing costs associated with the agricultural output which must be considered.

The farm sector receives most of the income from agricultural exports; however, the revenue generated is widely dispersed. Schluter estimated that this income was shared by various sectors of the economy as follows: farm, 42.6 percent; food processing, 6.3 percent; trade and transportation, 16.5 percent; other manufacturers, 15.8 percent; other services, 18.8 percent. Table 3 employs these categories to estimate the recent gross income by sectors from Georgia's agricultural exports.

While there is little question about the wide spread economic impact of agricultural exports, it is also evident that there is considerable economic instability inherent in these exports. The year-to-year instability of agricultural exports and their impact on incomes in other sectors of the economy is apparent from Table 3. In 1980, for example, income in each of the sectors was up more than one-third compared to 1979. Conversely, income in each of the sectors was off by 23 percent in 1981, compared to 1980, as a result of the decline in overall value of the state's share of agricultural exports. Nevertheless Georgia's share of agricultural exports rebounded 22 percent in 1982 compared to 1981.

The variation in annual export volumes may be related to numerous domestic and foreign factors. These factors are sometimes difficult to trace because a time lag is usually involved before the income from export sales flows through the economy. For example, production of several major export crops (particularly soybeans and peanuts) fell sharply because of drought in 1980. This caused a substantial drop in Georgia's exports in 1981 resulting in a decline of export related income and employment. In addition to year-to-year variations in exports, it now

appears that the U.S. has entered an era of declining agricultural exports. This will create adjustment problems for farmers, and the agribusiness sector of the economy.

The value of American agricultural exports was $39.0 billion in fiscal year 1982 -- a decrease of 10.7 percent from the peak year of 1981. Agricultural exports to Japan alone decreased by $1 billion, the large decline being mainly in feed grain and oilseed shipments. A decrease in three other major markets also contributed to the 1982 decline. Exports to Mexico were off by $1.2 billion and combined exports to South Korea and the Peoples Republic of China were down by $846 million compared to the previous year.

The decline in U.S. agricultural exports continued during fiscal 1983 (that ended in September) with the final estimate expected to be about $34.8 billion, or 11 percent less than 1982. This would be the lowest total value of exports since 1979. Preliminary estimates show the physical volume of exports during 1983 having decreased 8 percent to 144.8 million metric tons - the smallest volume in four years. There is widespread agreement that three major factors strongly contributed to the decrease in agricultural exports during the early 1980s. These are: 1) recession in the world economy resulted in weak demand for U.S. exports, 2) The strong U.S. dollar in world currency markets make U.S. exports relatively expensive to foreign buyers, and 3) Good crop years in much of the world with strong competition from foreign producers.

The export decline of the early 1980s may or may not have been the beginning of a trend. In the case of a down trend, there are serious implications for the entire agricultural sector of the economy. Production of corn, soybeans, and wheat expanded in Georgia as exports expanded during the 1970s (Table 4). It is not an overstatement to suggest that the increased Georgia farm output was primarily for export markets.

AGRICULTURAL EXPORTS AND REGIONAL COMPARATIVE ADVANTAGE

Exports are vital to the economic well-being of U.S. wheat, soybean, sorghum, rice and cotton farmers since over 50 percent of domestic production of these commodities is exported. Exports of tobacco, corn and peanuts account for about 38, 36 and 27 percent, respectively, of U.S. production. When prices of these commodities declined due to reduced export demand, the agribusiness sectors were confronted with lower net income. Although decreases in net income are widely dispersed through American agriculture, regional production cost data suggest that Georgia's agricultural economy is disportionally adversely impacted from a long term drop in agricultural exports.

Variable cost for producing soybeans in the Southeast and Delta regions are higher than in the North Central Regions of the U.S. This is attributed to lower yields and increased costs due to disease and insect control (McArthur, p. 14; and Senate Committee on Agriculture, pp. 51-56). Soybean prices fell from mid July 1981 through 1982, due partly to a decline in export demand; thus, farmers in the Southeast barely covered their costs of production. Southeastern production costs for corn, sorghum and soft red winter wheat are also higher than in the major producing regions and hence, producers may face similar net return situations as with soybeans.

In poultry production, cost differences favor the Southeast over the Midwest, North Atlantic, and West Coast regions (Jones, pp. 16-22). Poultry meat and egg exports are more profitable to Southeastern firms than firms in other areas. However, competition from foreign producers in international markets and lowered consumption in several countries has reduced export opportunities for poultry products.

Peanut production costs in the Southwest were 24 percent higher per unit than the Southeast in 1981. However, Southeastern peanut production costs may have been higher than in the Virginia and North Carolina region during this period (Committee on Agriculture, pp. 62-64).

Regional returns from peanuts differ because peanut prices vary for the different varieties produced in the three peanut regions as well as supply and demand factors. Furthermore, prices paid to farmers reflect the division of peanuts into quota and additional peanuts, with additional peanuts being destined primarily for the export market. If the world market for peanuts declines, prices offered by shellers for additional peanuts will likely also fall. Farmers would subsequently receive less income since there is no difference in the cost of production for additional versus quota peanuts.

Tobacco produced in the Southeast also finds its way into the international market. Buyers from West Germany, the United Kingdom and Japan purchase flue-cured tobacco for manufacturing cigarettes. When the export market is strong, prices paid to farmers are higher than the support price. During periods of weak foreign demand, tobacco prices fall to the support level which may be at or below the average cost of production.

U.S. AGRICULTURAL EXPORT LIMITATIONS

Considering the competitive position of the Southeast, the future of exports is critically important to farmers and agribusiness firms of the area. With this in view, close scrutiny of limitations currently facing U.S. agricultural exports is merited. The nature of these limitations, their expected durations and the U.S. responses to them, are of particular interest to the agribusiness community.

A depressed world economy constrains U.S. agricultural exports. The major limitation is the lower growth rates in the industrialized countries, foreign exchange problems in developing countries and slow export growth and credit constraints in centrally planned

economies (World Agriculture, p. 3). Each of these limitations has a different impact on the demand for U.S. agricultural products depending on the various groups' share of the market. In 1982, developed countries received 54 precent of U.S. agricultural exports, less developed countries 35 percent and centrally planned economies received the balance of about 11 percent (Export Markets Decline, p. 6).

The Developed Country Markets

Recent data from the Organization for Economic Cooperation and Development (OECD) indicates that economic conditions in the industrialized countries of Canada, Japan, and Western Europe are improving (Roberson, p. 19). Interest rates have dropped from the levels of the previous two years. This may encourage production, investment, government expenditures and consumption. Nevertheless, unemployment remains high in Europe. Economic growth in West Germany, the Netherlands, and Japan remains slow and this tempers the demand for U.S. farm products. Increased consumer spending for food and other items could be expected to accompany strong economic recovery.

The increase in the value of the U.S. dollar from 1981 through 1983 contributed to higher foreign prices for U.S. agricultural exports even though U.S. farm prices have declined. In some commodities, however, the decline in U.S. prices has been greater than the rise in the value of the dollar, hence, foreign countries could have purchased the same amount of commodities with less local currency. For example, the U.S. price of soybeans at Gulf ports declined 8.9 percent from January 1982 to January 1983. However, the Gulf port price of soybeans converted to yen was 5.7 percent lower for the same period even though the dollar appreciated against the yen by 3.4 percent (Dollar, p. 61). Japanese purchases of soybeans were up 1.6 percent in the calendar year 1982 over 1981 reaching 4.1 million metric tons (FATUS, May/June 1983, p. 18).

The Developing Countries

The decline in demand for U.S. agricultural exports in developing countries can be explained by their economic conditions such as slow economic growth, low commodity prices, depreciated currencies and large foreign debts (World Agriculture, pp. 5-6). South Korea, Taiwan, Nigeria, Venezuela, and Mexico are examples of countries where weakness in the economies of the primary industrialized nations has resulted in a drop in export sales of developing countries. In turn this has slowed domestic growth and reduced the demand for imported products. Sales of U.S. agricultural commodities to developing country markets have fallen significantly in the last two years.

U.S. exports of feed grains to Mexico decreased to 1.7 million tons in 1982, a decline of 78 percent from the peak year of 1980 when 7.5 million metric tons were exported (FATUS, May/June 1983, p. 18). Exports of U.S. soybeans to Mexico fell by 69 percent during the same period. Agricultural exports to Mexico and other developing countries are not expected to recover to their 1980 levels without an improvement in the world economy.

Many developing countries experienced a decrease in the purchasing power of local currencies relative to the U.S. dollar during 1980-83. "In 1981, African currencies as a whole, depreciated 29 percent against the dollar; Latin American currencies, 18 percent; and Asian, 14 percent" (World Agriculture, June 1982, p. 6). Currency depreciations have made imports from the U.S. more expensive in developing countries, consequently these countries cannot be expected to return as large markets for U. S. agricultural commodities until their exports recover, industrial countries reschedule LDCs external debts, or until special arrangements, such as P. L. 480 or GSM 102 are made for financing their imports.

The Centrally Planned Economies

In the centrally planned countries, economic conditions were not conducive to agricultural imports from the U.S. during 1980-83. In Eastern Europe, domestic production has decreased and financing problems have limited the ability of many countries' to import feed grains and protein meals for their domestic livestock industry. Wheat and flour, feed grains, cotton, soybeans, and oil cake and meal have been the primary agricultural imports from the U.S. to Eastern Europe and the U.S.S.R. With the exception of cotton, these imports have contributed to the expansions of poultry, pork and livestock production in Eastern Europe. With the signing of a new long-term sales agreement with the U.S.S.R. in July 1983, the U.S. may regain a share of the Soviet market that it lost as result of the 1980 embargo. It is not likely that the U.S. will see growth in East European markets comparable to that from 1977 through 1979 until world economic conditions and foreign exchange earnings improve.

Major U.S. agricultural exports to the People's Republic of China (PRC) are wheat, feed grains, cotton and soybeans. Wheat exports to the PRC were nonexistent in 1977, but by calendar year 1981 had reached 7.4 million metric tons. However, trade with the PRC may fluctuate widely depending upon economic and political decisions governing East-West relations.

Additional Constraints to U.S. Agricultural Trade

The U.S. faces additional export trade constraints. Although grains continue to account for the bulk of U.S.S.R. spending for U.S. agricultural products, competitors such as Argentina, Canada, and the European Community captured 30, 26 and 13 percent market share, respectively, of Soviet grain purchases

in 1982-83 (Agricultural Outlook, July 1983, p. 21). During the partial embargo, the Soviet Union negotiated long-term grain and oilseeds agreements with Argentina, Canada and Brazil. The European Community has also benefited from the diversification of Soviet grain and oilseeds purchases. The new US-USSR grain agreement signed in July 1983 will provide the U.S. with a share of the Soviet's projected annual grain imports of 30 million tons, but the U.S. will not regain its former dominance unless unusual conditions arise in competing countries.

The U.S. is also competing with the European Community (EC) in expanding agricultural exports through subsidy programs. The U.S. stimulates exports through P.L. 480, Title I sales for local currency and Title II donations. The Commodity Credit Corporation (CCC) program assists exporters with an Export Credit Guarantee Program (GSM-102) and a new Blended Export Credit Enhancement program. These CCC programs help U.S. exporters and importers in foreign countries by reducing the cost of borrowing money to finance U.S. exports and by reducing the risk of extending credit to foreign buyers.

The Export Credit Guarantee Program provides protection against nonpayment by foreign banks without distinction between commercial and noncommercial reasons. The blended credit program combines the use of payment guarantees under GSM-102 along with interest-free financing under the Export Credit Sales Program (GSM-5). Exporters of commodities to Mexico will be the main beneficiaries of the two programs in fiscal year 1983 with more than $1.2 billion allocated to that destination alone.

U.S. agricultural exports assisted through CCC programs reached $1.6 billion in 1982. The principal commodities exported included wheat, corn, cotton, soybeans, grain sorghum, sunflower seeds and soybean oil. The GSM-102 program is intended to help exporters meet competition from other countries and increase commercial exports. The major beneficiaries of the GSM-102 program include Mexico, South Korea, Portugal, Brazil, Peru, Morocco, Egypt, and Iraq.

Total CCC credits may reach $5 billion for all destinations in 1983 (USDA, FAS, Notice to Exporters, August 1983). These programs make it possible for U.S. exporters to meet some of the competition from the EC's export subsidy program and other trade arrangements.

The Common Agricultural Policy (CAP) of the EC uses export subsidies to make up the difference between world market prices for wheat, barley, broilers and other commodities that receive price supports in Europe. For example, export restitutions for mid-September 1983 were about $37 per metric ton for wheat and $192 a metric ton for broilers. Furthermore, the EC proposes to tax the consumption of oils and fats within the Community and to limit the importation of corn gluten feed. If these measures are adopted, U.S. sales of soybeans, soybean meal and corn will decline in the EC which is the largest single regional market for these products. Prices would fall in the U.S. and farm income would decline.

There are other aspects of this trade conflict that have an impact on Southeastern farmers and agribusinessmen. While CAP's export restitutions cut sales in third country markets, the variable import levy on wheat, barley, corn, sorghum and broilers raises the cost of these products to European importers and in some cases effectively exclude U.S. products from the market. Broilers are a prime example of a product effectively excluded from the EC market. When the EC became a net exporter of broilers, U.S. producers lost markets in third country markets.

Another area where U.S. agricultural exports may be limited is in the value-added markets. The EC's program of creating employment results in the importation of raw agricultural commodities and the export of processed or value-added products. The EC imports raw soybeans and exports soybean oil and meal to third countries. Horticultural and tropical products including tree nuts, fruit and vegetable juices, preserved fruit, wine and crude vegetable materials are the EC's most important value-added export products. Dairy, livestock and poultry products are the EC's second largest value-added export product group (Table 5).

The leading U.S. value-added export group was the dairy, livestock, and poultry products. If other trading countries promote agricultural self-sufficiency and employment, the U.S. could lose some of its markets. Creating domestic employment in the agribusiness sector should be an important objective of U.S. agricultural policy, especially during recessionary times. However, the U.S. export channels are oriented toward handling more raw commodities than processed products. Furthermore, importing countries often place higher import taxes on processed products than raw commodities.

SUMMARY

American agricultural exports expanded dramatically in real terms during the 1970s era. Products produced by Georgia farmers shared in this expansion with substantial benefits accruing to the state's economy. World economic conditions have slowed this growth rate and could dampen the benefits of international trade for the Southeastern economy.

Georgia's farm exports were valued at $706.4 million in 1982. After applying the multiplier effects, this export volume generated an estimated $1.4 billion economic activity in Georgia. This additional output of approximately $741.6 million was shared as follows: the farm sector, $185 million; food processing $59 million; trade and transportation, $67 million; other manufacturers, $230 million; and other services, $200 million.

This $706.4 million in agricultural exports represented income to wage earners, profits, and taxes to various sectors of the economy. It is estimated that $301 million went to the farm sector, $45 million to food processing, $117 million to trade and transportation, $112 million to other manufacturers, and $132 million to other services.

Changes in the world trade environment have brought about a downturn in agricultural exports since 1981 and the benefits of international trade to the Southeastern economy have been reduced. As a partial result, the regional agricultural economy has been weak.

Major constraints to benefits of agricultural exports are found in world economic conditions, trade barriers in importing countries and loss of sales to competitors with long-term agreements, signed with the centrally planned countries. The U.S. has responded to these losses by expanding credit programs so that countries can import American farm products at lower costs and by concluding sales agreements with major importing countries.

The future level of U.S. agricultural exports and resulting benefits to farmers and agribusiness firms are heavily dependent on the future success of the U.S. response to existing constraints on international trade.

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(1) Average variable costs of soybean production in the Southeast were $4.39 per bushel based on an average yield of 23.2 bushels per acre in 1981 (Senate Committee on Agriculture, p. 56). However, the average post harvest price for soybeans in Georgia was only $5.96 per bushels in December 1981 (Crop Reporting Board, p. 50). These low returns per bushel did not leave much revenue to cover the remaining fixed cost of production.

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Table 1. Volume and Average Annual Change in Volume of Selected U.S. Agricultural Exports, Fiscal Years 1975-1982

Commodity	Volume								Average Annual Change
	1975	1976	1977	1978	1979	1980	1981	1982	1975-1982
	thousand metric tons								percent
Beef and veal[a]	17	36	39	54	57	59	69	82	+25
Cattle hides[b]	21,757	24,731	25,976	24,024	24,611	20,188	19,345	22,184	+ 1
Corn	28,822	43,126	42,454	49,112	53,897	61,417	59,368	49,609	+ 9
Cotton, raw	727	980	1,316	1,317	1,341	1,986	1,210	1,487	+15
Grain sorghum	5,362	5,789	6,225	5,392	5,222	8,199	7,702	6,290	+ 5
Peanuts[c]	202	137	272	354	385	352	154	217	+12
Pork	80	127	126	104	101	85	10	82	- 5
Poultry meats	85	155	194	194	208	320	395	315	+24
Soybeans[d]	15,853	20,106	19,975	26,134	27,252	32,228	26,860	32,685	+12
Tobacco[e]	263	267	290	273	287	283	252	254	-0.1
Wheat[d]	30,405	31,127	25,384	33,627	32,984	37,625	44,015	46,180	+ 7

a. Production in carcass weights for beef, pork, and poultry.
b. Cattle hides in thousand pieces.
c. Shelled basis, includes peanuts for oilstock.
d. Exports include products.
e. Unmanufactured tobacco -- export weight after cleaning and sorting.

Sources: U.S. Department of Agriculture, U.S. Foreign Agricultural Trade Statistical Report, Fiscal Years 1975-1982 (1982).

Table 2. The Impact of Agricultural Exports on the Output of Various Sectors of Georgia's Economy, 1975-1982

Year	Additional Output in the Economy[b]	Sector and Share[a] Farm (25%)	Food Processing (8%)	Trade and Transportation (9%)	Other Manufacturers (31%)	Other Services (27%)
	$ million					
1975	476.5	119.1	38.1	42.9	147.7	128.7
1976	406.7	101.7	32.5	36.6	126.1	109.8
1977	501.9	125.5	40.2	45.2	155.6	135.5
1978	454.5	113.6	36.4	40.9	140.9	122.7
1979	581.7	145.4	46.5	52.4	180.3	157.1
1980	791.1	197.8	63.3	71.2	245.2	213.6
1981	606.7	151.7	48.5	54.6	188.1	163.8
1982	741.7	185.4	59.3	66.7	229.9	200.3

a. Not all of the impact of agricultural exports is captured by firms in Georgia. Research has shown that the 22% of purchases by agricultural supply firms was imported from other states or nations. This certainly would have generated income and employment not reflected in the figures presented for Georgia. By the same token, Georgia's firms produce inputs for production of commodities in other states destined for the international market. It is beyond the scope of this report to include these estimates of the value of inputs purchased outside of the state, but this analysis can be found in Leon Langley, Jr. "An Input-Output Analysis of Georgia's Agribusiness Industry." Unpublished master's thesis, University of Georgia, 1972.
b. This table uses the higher multiplier value (2.05) developed by Schulter where the total economic activity from exports is divided between $1 in direct income and 1.05 was generated in various sectors of the economy.

Table 3. Estimated Gross Income Generated in Various Sectors of the Economy by Georgia's Agricultural Exports, 1975-1982

Year	Value of Agricultural Exports	Sector and Share: Farm[a] (42.6%)	Food Processing (6.3%)	Trade and Transportation (16.5%)	Other Manufacturers (15.8%)	Other Service (18.8%)
	$ million					
1975	453.8	193.3	28.6	74.9	71.7	85.3
1976	387.3	165.0	24.4	63.9	61.2	72.8
1977	478.0	203.0	30.1	78.9	75.5	89.9
1978	432.9	184.4	27.3	71.4	68.4	81.4
1979	554.0	236.0	34.9	91.4	87.5	104.2
1980	753.4	321.0	47.5	124.3	119.0	141.6
1981	577.8	246.1	36.4	95.3	91.3	108.6
1982	706.4	300.9	44.5	116.6	111.6	132.8

a. While the income generated by agricultural exports may appear impressive in some years, there may be very little attributed to profits for the farm sector. Gross income includes money for wages, profits, taxes, and other production expenses. Even though farm profits have been low in years, profits would have been lower without foreign trade.

Table 4. Indexes of Georgia Harvested Acres and U.S. Export Quantities of Five Major Crops, 1968-1981

Year	SOYBEANS: Georgia Harvested Acres	SOYBEANS: Exports Beans	SOYBEANS: Exports Oilcake & Meal	CORN: Georgia Harvested Acres	CORN: Exports	WHEAT: Georgia Harvested Acres	WHEAT: Exports	PEANUTS: Georgia Harvested Acres	PEANUTS: Exports	FLUECURED TOBACCO: Georgia Harvested Acres	FLUECURED TOBACCO: Exports
	Index (1968 = 100)										
1968	100	100	100	100	100	100	100	100	100	100	100
1969	98	106	105	102	85	70	76	101	125	106	88
1970	116	166	139	100	97	86	93	102	268	117	85
1971	146	160	157	107	82	179	105	103	507	105	96
1972	163	149	131	95	128	128	97	103	484	101	78
1973	220	175	164	107	203	101	196	103	658	107	86
1974	227	205	191	120	199	138	146	104	688	128	97
1975	283	156	148	120	185	124	159	105	400	133	89
1976	212	205	177	138	277	106	163	106	729	121	85
1977	266	206	157	64	273	92	133	106	885	116	90
1978	410	268	211	96	316	110	176	106	936	109	83
1979	512	275	228	99	346	161	173	106	930	94	91
1980	522	324	273	83	395	550	197	103	877	98	90
1981	532			88		982		114	350	98	

Sources: Georgia Agricultural Facts, 1973, 1978, 1982 Editions; U.S. Agricultural trade Statistical Report, Fiscal Year 1979, 1980, 1981; Agricultural Statistics, 1982.

Table 5. European Economic Community (EEC) and United States (USA) Value-Added Agricultural Exports, 1981

	EEC	USA
	$ billion	
Grain and feed	3.19	2.70
Oilseeds	1.47	2.79
Dairy, livestock & poultry	6.88	3.45
Horticultural & tropical prod.	8.12	3.14
Cotton, Tobacco and seeds	0.66	1.29
Total	20.32	13.37

Source: Michael J. Dwyer, "The European Community: Strong U.S. Competitor in Value-Added Markets." Foreign Agriculture 21:14-17, August 1983.