U.S. to South Africa
Agricultural Transportation

An Overview of U.S. Agricultural Shipment to South Africa:
Agricultural Ocean Transportation Data

Introduction

The Republic of South Africa has historically been one of the United States' trade allies. Despite the continued depreciation in the value of rand compared to the U.S. dollar and given the fact that South Africa is self-sufficient in most primary goods (except wheat, oilseeds, and rice), long-term opportunities exist in the South African market for resourceful exporters with niche products. There are significant agricultural and nonagricultural trade flows between the United States and South Africa. "The United

States is a major supplier of agricultural products to South Africa, contributing 11.7 percent of its imports in 1999," (Foreign Agricultural Service (FAS), Global Agriculture Information Network (GAIN) Report, October 11, 2000). In the same year, the value of U.S. agricultural, fish, and forestry exports to South Africa totaled $196.1 million, down from $324.9 million in 1996. The decline in U.S. exports was attributed mainly to a fall in the exchange value of rand to dollar. In 2000, the United States accounted for 9.6 percent of South Africa's imports. The total value of U.S. agricultural, fish, and forestry exports to South Africa totaled $188.57 million, down $7.53 million from a year earlier (FAS, Bulk, Intermediate, and Consumer-Oriented Agricultural Products (BICO) report).

While South Africa's imposition of provisional antidumping duties on U.S. poultry meat has effectively cut off U.S. chicken meat shipments to the country, the removal of phytosanitary restrictions on U.S. corn imports into certain areas of South Africa in early 2000 was a welcome relief to U.S. exporters. In addition, a restrictive tolerance on noxious seeds in wheat and other grains, though under review, has been relaxed (FAS, GAIN Report, August 22, 2000). In a formula-induced adjustment, the import duty on wheat and wheat flour was reduced on January 12, 2001. The United States is one of the major suppliers of wheat and rice to South Africa (FAS, GAIN Report, October 11, 2000).

In view of the above, this report explores the opportunity for facilitating improved trade between the United States and South Africa by providing relevant information on the ocean transportation of agricultural products between the United States and South Africa to current and potential exporters in the United States and importers in South Africa.

More detailed descriptions of U.S. agricultural shipments to South Africa follow.

U.S. Agricultural Shipments to South Africa

Agricultural products are shipped in two different ways: in bulk, usually grains, and by container, usually higher valued products like poultry and other products.

Bulk Grain Shipments:

Despite the fact that South Africa has traditionally been seen as a corn exporter, its role in this capacity is diminishing (FAS, GAIN report, February 7, 2001). There has been a decrease in production due to the collapse of the Control Board system and the introduction of the free market. During 1998 and 1999, South Africa imported corn into its coastal areas when it was economically reasonable and feasible to do so. South Africa imported 624,000 tons of wheat from October 1999 to September 2000. The GAIN report not only suggests that imports during the 2000/2001 season may reach 420,000 tons, increasing to 450,000 in 2001/2002, but that the U.S. market share rose slightly to about 20 percent in 1999. "Preliminary data indicated that the U.S. share rose again in 2000,"

according to the report. A similar picture was painted in the rice market where preliminary data indicated that the United States increased its market share in 2000. During 1998 and 1999, the United States was the third largest exporter of rice to South Africa behind Thailand and India.

In 2000, grain shipments (including rice) represented 78 percent of total tons of bulk agricultural products shipped to South Africa. Other products shipped in 2000 included poultry, animal feed, bread and cereals, vegetables, and grocery products. Grain shipments represented 89 and 58 percent, respectively, of total bulk shipments in 1999 and 1998. Competition, the absence of government regulation, and usually an individual contract for each shipment characterized the market for bulk carriers. The rates are quoted in dollars per ton, and there is usually one carrier per trip. U.S. Gulf ports served as the point of origin for 82 percent of grain (bulk) traffic to South Africa, with Gramercy representing 30 percent and New Orleans representing 23 percent of the traffic. Seventy percent of the grain exported from the United States was destined for Durban ports, while 28 percent was destined for Cape Town ports. It is relatively cheaper to ship grains from U.S. ports to South Africa than to most African countries. This may be due to better infrastructure and operating efficiency of South African ports compared to other African countries. Rates for transporting bulk grain and wheat products from U.S. ports to South Africa compared with those to other foreign destinations are shown in table 1.

Table 1. Ocean freight rate(s) for bulk shipment of grain products from U.S. Gulf ports to selected foreign destinations

Commodity	Destination	Quantity*** (metric ton)	Rate ($/metric ton)	Date****
Heavy grain*	Continent (Europe)	55,883	12.06	July 01
Heavy grain	South Africa	40,642	16.73	Jan. 00
Heavy grain	Tunisia (North Africa)	25,401	18.70	July 01
Grains**	Rotterdam (Europe)	25,401	17.72	June 01
Wheat	Lagos (West Africa)	25,401	16.24	Aug. 01
Wheat	Tunisia (North Africa)	25,401	17.72	Sept. 01
Wheat	Egypt (North Africa)	60,000	15.50	May 01
Wheat	Casablanca (North Africa)	30,421	19.44	June 01

(Source: Maritime Research, Inc., NY)
***Heavy grain=corn, maize, soybeans, sorghum**

***Quantities of 20,000-30,000 metric tons (handy size) are usually shipped at a higher rate than quantities of 50,000-60,000 metric tons (Panamax)
****Most recent shipment date reporting a transport rate

Containerized Shipments:

Table 2 lists the top 10 agricultural commodities shipped in containers from the United States to South Africa for calendar years 1998-2000.

The overall containerized trades between the United States and South Africa fell from 7,446 20-foot equivalent units (TEU) in 1998 to 4,978 TEUs in 2000. During the same period, the value of U.S. agricultural, fish, and forestry exports to South Africa declined from $217.81 to $188.57 million. As mentioned earlier, the decrease in U.S. exports was attributed mainly to the decline in the value of the South African rand relative to the U.S. dollar. The value of the South African rand fell approximately 30 percent from 5.53 rand per dollar in 1998 to an average of 7.2 rand per dollar in September 2000. Around the same time, the value of U.S. agricultural, fish, and forestry exports to South Africa fell 13.4 percent. Over the same period, the volume of containerized shipments from the United States to South Africa declined by 33 percent. Other factors that may be responsible for the decline in U.S. exports include various restrictive trade policies imposed by South Africa, especially the provisional antidumping duties on U.S. poultry meat.

Table 2. Top 10 agricultural commodities, 1998-2000

Rank	Commodity (1998)	TEU*	% of total	Commodity (1999)	TEU	% of total	Commodity (2000)	TEU	% of total
1	Poultry	3,361	45	Poultry	2,327	46	Poultry	1,996	40
2	Animal feed	811	11	Animal feed	848	17	Animal feed	511	10
3	Grocery products	555	7	Soybeans & products	438	9	Soybeans & products	423	9
4	Soybeans & products	530	7	Grocery products	345	7	Grocery products	413	8
5	Vegetables	288	4	Nonalcoholic beverages	109	2	Seeds & bulbs	265	5
6	Cigarettes	276	4	Tobacco	108	2	Vegetables	253	5
7	Canned fish	230	3	Meat	93	2	Meat	216	4
8	Nonalcoholic beverages	195	3	Field seed & bulbs	79	2	Whiskey	110	2
9	Meat	180	2	Whiskey	78	2	Tobacco	109	2
10	Whiskey	125	2	Frozen fish	67	1	Nonalcoholic beverages	90	2

	Other ag. products	895	12	Other ag. products	523	10	Other ag. products	592	13
	Total	7,446	100		5,015	100		4,978	100

(Source: PIERS, Journal of Commerce, NY)

***TEU=20-foot equivalent unit**

Despite increasing domestic production and pressure from local producers against importation, South Africa still imports a considerable amount of poultry products to supplement its protein consumption. This reflects the changing consumption habit in South Africa where there has been a shift toward poultry meat consumption. The per capita consumption of poultry meat surpassed beef consumption between 1990 and 1995 and all other meat consumption during the last 5 years. While per capita consumption of beef fell from 17.82 kilograms (kg) during 1985-1990 to 17.00 kg during 1990-1995 and 10.40 kg during 1995-2000, poultry consumption grew from 15.98 kg during 1985-1990 to 17.25 kg during 1990-1995 and 17.97 kg during 1995-2000. Per capita beef consumption is projected to rise to 14.49 kg during 2010-2015, while poultry consumption is projected to rise to 24.25 kg per person during the same period.

During 1998-2000, poultry was the largest U.S. containerized product exported to South Africa, representing 45, 46, and 40 percent of the total TEUs exported in 1998, 1999, and 2000 (table 2). In 1999, the United States supplied about 33 percent of South Africa's poultry imports on a weight basis. However, the U.S. share of the import market fell to 25 percent in 2000 as a result of antidumping duties against U.S. leg quarters. Containerized poultry shipments have been following the general agricultural trade pattern between the United States and South Africa due to factors mentioned earlier. Poultry shipments from the United States to South Africa fell from 3,361 TEUs in 1998 to 1,996 TEUs in 2000. The value of U.S. poultry meat exports to South Africa fell from $29.73 in 1998 to $11.55 million in 2000. These represent 41 and 61 percent reductions, respectively, in the volume and value of the poultry shipments during 1998-2000.

Other significant products exported to South Africa during this period included animal feed, soybeans and products, grocery products, field seeds and bulbs, vegetables, meat, whiskey, tobacco, canned fish, cigarettes, and nonalcoholic beverages.

Major Shipping Lines in the U.S.-South Africa Trades:

Competition among the top shipping lines serving the U.S.-South Africa agricultural trade during 1998-2000 are shown in table 3. In 2000, Mediterranean replaced Safbank as the top shipping line to South Africa, accounting for 26 percent of the total shipments. Maersk/Sea Land followed closely, with 25 percent of the total shipments. Safbank was third, accounting for 17 percent of the total shipments. Jockeying among the top three shipping lines during the 2 previous years shows that there has been intense competition among the three shippers. Competition among the shipping lines is good for exporters if it leads to better services and a consequent reduction in rates. Other shippers in 2000

included Lykes, P&O/Ned Lloyd, Zim Container, and Evergreen Line.

Table 3. Three lines jockeying for first position

Rank	Shipping line (1998)	TEU	% mkt. share	Shipping line (1999)	TEU	% mkt. share	Shipping line (2000)	TEU	% mkt share
1	Safbank	2,128	28	Safbank	1,364	27	Mediterranean	1,281	26
2	Mediterranean	1,988	27	Mediterranean	1,326	26	Maersk Sealand	1,246	25
3	Maersk	1,581	21	Lykes	1,180	24	Safbank	843	17
4	Lykes	1,019	14	Maersk	598	12	Lykes	596	12
5	P&O Nedlloyd	678	9	P&O Nedlloyd	202	4	P&O Nedlloyd	548	11
6	Other firms	52	1	Zim Container	100	2	Zim Container	316	6
7				Maersk Sealand	96	2	Evergreen	42	1
8				Other firms	149	3	Other frims	106	2
	Total	7,446	100	Total	5,015	100	Total	4,978	100

(Source: PIERS, Journal of Commerce, New York).

Major U.S. Ports in the U.S.-South Africa Trades:

Table 4 contains a list of major originating ports in the U.S.-South Africa trade, most originating from the Atlantic Coast. In 2000, 81 percent of the shipments originated from the Atlantic Coast, led by New York with 30 percent of total shipments. New York was followed by Charleston and Savannah, with 20 and 12 percent of total shipments. In 1999, Atlantic ports originated a combined 81 percent of agricultural shipments destined for South Africa, led by Charleston with 30 percent of the total. New York and Newport News originated 16 and 13 percent of total shipments.

Table 4. Major U.S. ports: U.S.–South Africa agricultural trade, 1998-2000

Rank	1998	Share	1999	Share	2000	Share
1	Charleston	47%	Charleston	30%	New York	30%
2	New York	16%	New York	16%	Charleston	20%
3	Newport News	11%	Newport News	13%	Savannah	12%
4	Savannah	10%	Savannah	13%	Norfolk	8%
5	Norfolk	4%	New Orleans	9%	Newport News	7%
6	Baltimore	4%	Baltimore	6%	Houston	6%
7	New Orleans	3%	Houston	3%	Baltimore	4%
8	Houston	3%	Norfolk	3%	New Orleans	3%
9	Other	2%	Other	7%	Other	10%
	Total	**100%**	**Total**	**100%**	**Total**	**100%**

(Source: PIERS, Journal of Commerce, New York)

Transshipment Ports:

Although most goods were shipped directly from the United States to South Africa during 1998-2000, the decline in the levels of trade between the two countries has led to an increase in the amount of transshipped products. Transshipped products are shipped to another foreign port(s) before being shipped to their final destination. This is usually done by the shippers to minimize cost, especially when the amount of shipments is small. The share of transshipped goods has been increasing over the years, from 24-25 percent in 1998/99 to 31 percent in 2000. Most goods are transshipped via Rotterdam in Europe or Singapore in Southeast Asia (table 5).

Table 5. Major transshipment ports: U.S.–South Africa agricultural trade, 1998-2000

Rank	1998	Share	1999	Share	2000	Share
1	Rotterdam	26%	Freeport	35%	Freeport	25%
2	Singapore	25%	Singapore	15%	Rotterdam	22%
3	Algeciras	21%	Algeciras	15%	Haifa	19%
4	Freeport	16%	Haifa	9%	Singapore	9%
5	Bremerhaven	5%	Rotterdam	8%	Antwerp	5%
6	Felixstowe	4%	Bremerhaven	4%	Punta Manzani	3%
7	Other	3%	Antwerp	3%	Other	17%
			Other	11%		
	Total	100%	Total	100%	Total	100 %

(Source: PIERS, Journal of Commerce, New York)

Receiving Ports:

During the past 3 years, Durban ports received the largest number of shipments, accounting for 55, 49, and 50 percent of the total shipments in 2000, 1999, and 1998 (table 6). Cape Town ports received the second largest shipments within the last 3 years, accounting for 34, 42, and 41 percent in 2000, 1999, and 1998. Other main receiving ports within the last 3 years included Johannesburg, Port Elizabeth, and Rustenburg.

Table 6. Major South African receiving ports: U.S.–South African agricultural trade, 1998-2000

Rank	1998	Share	1999	Share	2000	Share

1	Durban	50%	Durban	49%	Durban	55%
2	Cape Town	41%	Cape Town	42%	Cape Town	34%
3	Johannesburg	5%	Johannesburg	6%	Johannesburg	9%
4	Rustenburg	2%	Rustenburg	2%	Pt. Elizabeth	1%
2	Other	2%	Other	1%	Other	1%

(Source: PIERS, Journal of Commerce, New York)

Cost Analysis:

It costs relatively less to ship either bulk or container shipments to South Africa than to most African countries. This is partly due to the large volume of trade that exists between the United States and Republic of South Africa. The availability of modern infrastructure and the operational efficiency of the South African ports are also major determinants of the lower cost of transporting goods from the United States to South Africa when compared to other African countries. It costs less to ship either a refrigerated or a dry container to South Africa than to Nigeria in West Africa or Tanzania in East Africa. It costs about $5,325 per 40-equivalent unit in total freight charges (including surcharges) to ship frozen poultry/foodstuffs to Cape Town, South Africa (table 7). It costs about $6,315 and $9,215 to ship the same item to Dar es Salaam, Tanzania, and Lagos, Nigeria. While it costs about $2,760 per TEU in total freight charges to ship grain, feed, or oilseeds to Cape Town, South Africa, it costs $2,750-$3,065 per TEU to ship similar items to Dar es Salaam, Tanzania, and $4,615 to Lagos, Nigeria. (table 8).

There are several ways in which exporters can manage container services and costs, including improving service contracts; taking advantage of shippers' association networks; and obtaining market information through the U.S. Department of Agriculture's *Grain Transportation Report*, *Ocean Freight Rate Bulletin*, *Directory of Freight Forwarders*, and other industry information sources.

Table 7. Rates for shipping frozen poultry/foodstuffs* from Atlantic ports (Charleston or Baltimore) to:

Shipping Line	Al Iskanda-riyah, Egypt	Cape Town, South Africa	Johannes-burg, South Africa	Dar es Salaam, Tanzania	Lagos, Nigeria	Rotterdam, Netherlands	Date
Maersk Sealand	$5,725	$5,325**		$6,315	$9,215	$4,923*** $5,619	5/30/01 7/5/01
Mediterranean			$5,325				7/5/01

Hapag Lloyd						$4,644	7/5/01
Cosco						$3,400	7/5/01
Evergreen						$3,300	7/5/01
Hanjin						$4,402	7/5/01

Source: Ocean Carrier individual Web sites and Etransport.com
***Refrigerated, 40-foot container, YY service, 21 metric tons.**
****Rate is for the U.S.-South African Conference, of which Maersk Sealand is a member.**
*****Rate is for the Transatlantic Conference, of which Maersk Sealand is a member.**

Table 8. Rates for shipping grain, feed, or oilseeds* from Atlantic ports (Charleston or Baltimore) to:

Shipping Line	Al Iskanda-riyah, Egypt	Cape Town, South Africa	Johannes-burg, South Africa	Dar es Salaam, Tanzania	Lagos, Nigeria	Rotterdam, Netherlands	Date
Maersk Sealand	$2,045	$2,760**		$3,065	$4,615	$2,302***	5/30/01
Mediterranean			$3,460			$3,460	7/5/01
Hapag Lloyd							
Cosco							
Evergreen						$980	7/5/01
Hanjin							
Lykes			$2,710	$2,750			7/5/01

Source: Ocean Carrier individual Web sites and Etransport.com

***Dry stow, 20 foot container, YY service, 20 metric tons.**
****Rate is for the U.S.-South African Conference, of which Maersk Sealand is a member.**
*****Rate is for the Transatlantic Conference, of which Maersk Sealand is a member.**

Future Market Prospects:

Despite the recent economic slowdown and unfavorable dollar/rand exchange rate resulting in high import prices for U.S. products, the South African market presents long-term opportunities for exporters of higher valued products such as processed and consumer-oriented products (snack foods and processed fruits and vegetables), tree nuts, animal food, soybean meal, and forest products including hardwood lumber and panel

products (FAS, GAIN Report, October 11, 2000). The growing number of affluent consumers and the increasing purchasing power of a larger sector of the population, especially the black sector, have created increasing demand for imported food products (upscale prepared foods and consumer-ready products). South Africa is a middle-income developing country with a per capita gross domestic income of $6,900 in 1999, which is one of the largest in Africa. It also has a well developed financial sector and a stock exchange that ranks among the 10 largest in the world (The World Fact Book).

South Africa symbolizes the gateway to Southern Africa and presents modern infrastructures such as well developed communication, energy, and transport sectors that support an efficient distribution of goods to major urban centers throughout the region. South Africa's location provides easy access to the countries comprising the Southern African Development Community (SADC), the islands off Africa's east coast, and even the Gulf States and India (FAS, GAIN Report, October 31, 2001). SADC, with a population of about 185 million people and a combined gross domestic product of $161.5 billion, represents a significant growing market for U.S. trade and investment. In 1998, U.S. exports to SADC countries totaled approximately $4.4 billion.

Therefore, U.S. suppliers should continue to seek interaction with the South African importers and consumers of processed food products through events such as trade shows, trade missions, and in-store promotions in an effort to increase U.S. exports to the country.

Although South Africa is an exporter of corn, it imports corn, along with wheat and rice, into the coastal areas when high domestic prices and transport costs make it cheaper to do so. Despite the fact that South Africa is a viable economy compared to most African countries, similar growth and adjustment that will improve trade in those countries will also improve trade in South Africa. One of those factors is the regulatory change in the United States that protects confidential service contracts and, hence, facilitates negotiation of service contracts. Other factors that may improve trade or reduce the cost of containerized shipment include improvements in delivery service (just-in-time delivery), improved product safety and security, refrigerated product, and identity-preserved grain.

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