

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

# AN ANYLYSES OF THE US IMPORT MARKET FOR ROSES WITH SPECIFIC REFERENCES TO OPPORTUNITIES FOR SOUTH AFRICA

André van der Vyver Directorate Marketing, Department of Agriculture, Pretoria

**Uittreksel** 

'n Ontleding van die VSA invoer mark vir rose met spesifieke verwysing na geleenthede vir Suid-Afrika

VSA invoere van snyrose het geleidelik verhoog oor die laaste twee dekades vanaf 1 miljoen stingels in 1970 tot 'n rekord 314 miljoen stingels in 1988. Die drie belangrikste tipes kommersiële rose is "sweethearts" of miniatuur rosies, intermediêre rose en "hybrid tea" rose. Feitlik alle ingevoerde rose is van die "hybrid tea" tipe. In 1988 het meer as 85 persent van ingevoerde rose die VSA binnegekom deur Miami gevolg deur Houston en New York. In 1990 was 74 persent van alle ingevoerde rose afkomstig vanaf Colombia. Pryse van snyrose wissel na gelang van hulle fisiese eienskappe byvoorbeeld lengte, varsheid en kleur asook vraag en aanbod. SA kan alleenlik snyblomme uitvoer via SAL na New York vir moontlike verkope op die New York Groothandel Blommemark. Die enkele belangrikste eienskap met die verkope van rose is kwaliteit. Selfs in die swakste moontlike scenario waar SA se rose slegs pryse behaal ekwivalent aan die van Colombiese rose, dit wil sê die laagste op die mark, word daar nogsteeds 'n bevredigende winsmarge behaal.

#### Abstract

US imports of cut roses have increased steadily over the last two decades, from less than 1 million stems in 1970 to a record 314 million stems in 1988. The three commercially most important types are the sweethearts or miniatures, the intermediates and the hybrid tea roses. Almost all import are of the hybrid tea type. In 1988, more than 87 percent of US imports of cut roses entered through Miami followed by Houston and New York. In 1990, 74 percent of all imported roses orginated in Colombia. Prices of cut roses vary according to their physical characteristics e.g. length, freshness and colour, as well as supply and demand. SA can only export cut flowers via SAA to New York for likely sale on the New York Flower Wholesale Market. The single strongest point in selling roses is quality. Even in the worse case scenario where SA roses will still fetch prices equivalent to that of Columbian roses, the lowest on the market. The profit margin appears to be sufficient.

# 1. Introduction

In July of 1991 the United States (US) abolished the sanctions which had been imposed on the imports of South African (SA) agricultural products. This raised the question: What apportunities exist for SA agriculture exports after a prolonged absence from the US market. This article attempts to analyse the US import market for cut roses with the objective of providing a clear indication of its potential for SA exporters and what will be required to develop the market. For more detailed background information see Van der Vyver (1992a and 1992b).

This case study is structured as follows: It starts with a overview of the US cut rose industry which includes general information regarding production and trade patterns. This is followed by an analyses based on the four marketing tools that form the marketing mix namely: product, place (or distribution), price and promotion. A conclusion on the export potential ends the report.

#### 2. Overview

US production and imports of fresh cut roses have risen in recent years as a result of growth in consumer demand. The US has been a net importer of roses since the late 1970's (USITC, 1989). The US trade deficit for roses has increased steadily since then as the demand for US rose exports remained flat or declined owing to increased export competition, primarily from Colombia,

while the demand for imported roses has increased dramatically. Canada is the only significant export market for US roses. The US supply of fresh cut-roses has increased gradually over the last decade, ranging from 462 million to 565 million stems in 1988 (see Table 1). Imports of fresh cut-roses by the US have increased steadily over the last two decades, from less than 1 million stems in 1970 to a record 314 million stems in 1988.

(Information contained in sections 3 and 4 was summarised mainly from a US International Trade Commission Study investigation conducted in April 1989.)

#### 3. Product

Roses are members of the Rosaceae family; at least 100 species and thousands of varieties are known to exist. The three commercially most important types of these relatively expensive flowers are the sweethearts or miniatures, the intermediates and the hybrid tea roses (USITC, 1989). Roses can be almost any colour with red, white, pink, yellow, orange, lavender, or intermediate shades or tints being the most common. As fresh-cut flowers, roses may last 3-7 days indoors, depending on the variety and environmental factors such as temperature and care. It is possible to double the vase life of a rose when floral preservatives are used. Nearly all roses grown commercially in the US (and elsewhere in the world) for fresh-cut rose production are produced in greenhouses, because rose plants are more exacting in

Table 1: Roses: quality & value of production, supply and consumption by type, 1984 & 1988

rable 1. Roses, quality to value of production, supply and consumption by type, 1904 to 1900								
Type & Year	US Production	Imports	Exports	Total & Consumption	Per capita	US Share of Market		
	1	Stems	Percent					
Hybrid Tea								
1984	354	156	9	501	2,12	68,8		
1988	441	313	4	750	3,05	58,2		
Sweetheart								
1984	108	3	2	109	0,46	97,5		
1988	125	1	1	125	0,51	99,4		
All								
1984	462	159	12	610	2,58	73,9		
1988	. 565	314	5	874	3,56	64,1		

Source: USDA-ERS, 1990

their light, temperature, and moisture requirements than most other flowers. Field-grown roses lack the quality and durability needed by most wholesalers and retail florists and are usually intended for local consumption.

Fresh roses, after being cut, are then taken to a packing shed to be cooled down as soon as possible. Prior to or after cooling, the roses are graded by stem length, quality and colour. Roses are generally bunched in groups of twenty-five and then placed in water or a preservative solution. They also may be placed dry in the cooler (after they have been hydrated) until they are packed for shipping. Roses may be held in coolers for several weeks. For shipping, fresh-cut roses are placed dry in shipping containers. Depending on the distance that the roses will be shipped, the container may be insulated (to prevent cold damage) and/or packets containing ice may be added.

Naturally, like most agricultural products, certain phytosanitary restrictions apply to the importation of roses. A import permit is required. According to officials from USDA-APHIS, the main objective of the permit is to specifically bring the regulations to the attention of the exporters and importers. Roses should be free of all types of insects and will be inspected at the port of entry.

## 4. Distribution

The demands of distribution and marketing are the same for imported or domestic flowers. Most fresh-cut roses move from the growers to the wholesaler (or importer) to the retailer and finally to the consumer. In recent years, grower-shippers have moved from marketing only their own flowers, to also marketing flowers from other growers. The objective is to expand their product-line so that they can offer a full line of cut flowers. This enables them to compete with traditional wholesalers who carry a full line of fresh-cut flowers. Retail florist shops, mass-merchandising outlets and street vendors are generally the points at which fresh-cut roses are sold to the public. Sales from the last two points are on the increase.

Importers of fresh-cut roses normally enter the distribution channel at the same level as the grower or growershipper, meaning they might sell to wholesalers or retailers, depending on the size of their operations.

Data on the imports of fresh-cut roses by US customs districts provide a general indication of the concentration of US imports. Customs district entry points, however, are not the final destinations. In 1988, more than 87 percent of US imports of all fresh cut roses entered through Miami. These roses are then shipped throughout the US with the bulk going to wholesalers in the US market. Nearly all of these imports are from South and Central America (USDA-AMS, 1990).

The New York City customs district is the third largest entry point, after Miami and Houston, for fresh-cut rose shipments, accounting for over 2 percent of all entries in 1988. It is believed that almost all the imports arriving at the New York City customs district are consumed within the greater New York City metropolitan area. The vast majority are from West European countries and the Mediterranean region.

Colombia dominates the import market for roses (USDA-AMS, 1990). In 1990, 74 percent of all imported roses originated in Colombia. Any competition in the US or elsewhere should therefore at least be aware of the strength of the Colombian rose industry (USITC, 1989): The rose-growing areas in Colombia enjoys a moderate climate, with daytime temperatures ranging from the low to deep twenties during most of the year. Colombia also has clear, sunny days, a prerequisite for growing roses. Although most roses in Colombia are grown in greenhouses, their structures do not require heat and are used only to protect the plants from rain and pests. Colombia produces primarily red hybrid tea roses of the Visa variety. They are however, in the process of perfecting and increasing their production of non-red varieties to accommodate a changing US demand. On average, the industry produces 15 blooms per plant per year in 1987. The average wage rate in Colombia is about US \$5-6 a day.

# 5. Price

Prices of fresh-cut roses in the US vary according to their physical characteristics as well as supply and demand. Physical characteristics refer to stem length, colour, type and appearance. Higher prices are generally obtained for long stems, the red colour, the hybrid tea varieties, and for fresher-looking roses. Higher prices are also generally received for US locally grown roses, owing to a perceived superior quality compared to non-local roses. This quality premium is a function of the time that elapses between cutting a rose and making it available for sale.

The market price for fresh-cut roses is especially sensitive to changes in quantitative demand. The demand for roses in the US is high at Easter (beginning April), Mother's Day (May 10), Memorial Day (May 27), Thanksgiving (November 28), Hanukkah (December), Christmas and Valentine's Day (February 14). Prices are low and stable during the US summer as a result of low demand.

Prices for fresh-cut roses are also affected by the way they are sold. Three different ways exist (USITC, 1989): Standing order sales - this is when sales are made at fixed prices with the quantities varying, depending on the purchasing demand. Spot market sales - usually take place in a market. Price, quantity and payment are concluded right on the spot. Consignment purchases are made by risk-avoiding wholesalers and retailers who purchase roses on commission only. Owing to the short lifespan of fresh-cut roses, many US wholesalers prefer to purchase on consignment. This allows them to receive a commission for the roses they sell and to return or dispose of the perished or unsold ones. The commission ranges from approximately 10 to 27 percent of the f.o.b. price. Wholesalers often also charge a box-handling fee of approximately \$10 a box. Most roses imported from Colombia are sold on consignment.

Due to the high perishability of cut flowers, the only way South Africa can possibly export roses is through air transportation on South African Airways (SAA). SAA, which offers a direct service between Johannesburg (Jan Smuts Airport) and New York (John F. Kennedy Airport) is currently the only airline which flies direct between South Africa and the United States. Should South African roses be exported, the most logical market for them would be the New York Flower Wholesale market, which is a very suitable market. It is a large import market, especially in comparision to potential South African exports. It is extensively used by other importers, mainly from Europe, and therefore suitably organized and equipped to handle a highly perishable commodity such as cut flowers.

#### 6. Promotion

Exporting a highly perishable commodity such as roses requires some exceptional promotional skills. Once roses have left the grower's warehouse, they must be sold in a matter of hours. When demand is low or when there is an oversupply of roses, the price can drop substantially. Against this background, selling a product to a wholesaler severely limits the promotional options available to the exporter.

The single strongest sales point in selling roses and other cut flowers, is quality. If harvested and stored correctly, the grower can withhold roses for several weeks (US-ITC, 1989) before putting them up for sale. However, once the roses leave the grower, they have a limited lifespan. Research conducted by FloraCulture International (1991) quantified the relationships. Table 2 shows the details.

Locally-produced roses in the US receive a considerable premium, 30 percent and more (USITC, 1989) over

imported roses from Colombia. The reason is that buyers on all levels have the perception that the US roses are much fresher than imported ones from Colombia. Although this is not always true it is a problem which exists with certain consignments or importers. Grower Talks (1989) reports that in an effort to prevent cocaine smuggling from Colombia, border inspections are stricter than usual. It is a three-hour flight from Bogota to Miami. The inspection process at the Miami Airport alone often causes a 12-hour delay for cut flower imports. Airport inspections are time-consuming for Miami importers, slowing down the movement of shipments. In 1989 cut-flowers were commonly one week to 10 days old by the time they left Miami, destined for wholesalers nationwide.

Even though the import-inspection process in Miami is being improved on all the time, delays still exist. It remains true that the age of a rose, which translates into quality, is critical. US import procedures are under pressure by increasing complains that many times when imported flowers are sold to consumers, they are frequently of inferior quality. This is not always immediately evident, but the moment the consumer displays them at room temperature, their heads droop. Many US producers, through the Floral Trade Council, are strongly in favour of displaying the name of the country of origin on roses and other cutflowers (Machtel, 1991).

According to industry sources, quality is repeatedly identified as the most important sales point. Supermarket Floral (1989) states that, although price is important to both retailers and consumers, longevity may be even more important. For retailers shelflife is crucial. Wright (1989) writes that the wholesaler should implement routines and practices that will ensure that roses can perform. The first important step is to ensure that roses are bought that have not already been subjected to poor handling. Carmichael (1990) reported that, according to retailers and suppliers, the best way to sell roses was to keep good quality roses.

Should South African exporters therefore consider exporting to the New York market, it is crucial that in the first place a top quality rose is produced and harvested for export. Second, roses should be treated with great care so as to bring about as little quality deterioration as possible.

Even though South Africa is much further away from New York in distance, timewise it does not take any longer to reach the market than flowers from South America do. Most imported flowers from South America are trucked from Miami to New York, because it is more cost-effective. This takes approximately 24 hours and more. At the same time, locally-produced flowers are often trucked from the West Coast which can take anything from 2½ - 3 days. The time taken for transporting roses from the production area to the market is often less significant in terms of quality than delays caused by customs inspection and proper storage before and during transportation.

Another important promotional point that should be taken into account by producers and exporters is the changing demand for different colours of roses. The choice of colour determines who buys roses for whom. According to Supermarket Floral (1989), men have traditionally bought red roses for women, but this is changing. Although red is still the biggest seller, both men and women now buy all colours available: yellow, pink, peach, white and lavender. More and more women are buying roses for themselves, but also for men.

Table 2: Loss of quality in cut flowers due to distribution

Product	Total loss of quality	Maximum vase life at the beginning of distribution	Remaining vase life after distribution	
Rose	29%	15 days	10,7 days	
Carnation	15%	11 days	9,4 days	
Tulip	47%	10 days	5,3 days	

Source: FloraCulture International, 1991



Figure 1: Rose information tag Source: Roses Inc., 1991

Pink is the most popular after red, followed by white, yellow and peach. USITC (1989) reports that during their survey they found that one reason buyers prefer US grown roses (except for quality aspects) is the wider range of colours, including different shades of red. However, the Colombia growers, who mainly export red roses, also recognised this change and are in the process of producing a wide variety of colours.

South Africa produces a wide variety of colours. By being aware of the lastest trends in consumer preference it might be easier to find a niche market for one's product. Product brand names are still largely unheard of in the rose industry. However, from the information above it would probably be realistic to say that in the near future, quality growers will use brand names to differentiate their products from those of competitors. Already, Roses Inc., as part of a promotional campaign to increase consumer awareness of roses, is supplying a small colour information tag (see Figure 1), which retailers attach to the stem of a rose. If they have faith in a quality product, any producer, including South African exporters, can use brand names most effectively.

South African exporters should pay close attention to promotional campaigns such as the one launched by Roses Inc. By using the logo in Figure 2, Roses Inc. reports that, from 1989 to 1990, dollar volume sales is

Printed in U.S.A. - ROSES INC Give These Roses Your Personal Touch ARRANGEMENTS... Add water with floral preservative upon receipt and refill daily to keep vase full. Display in cool area away from drafts and direct sun. **CUT ROSES...** Keep roses cool before...and after ... arranging. Remove leaves that will be under water Use a floral preservative according to package Use clean, deep container, Before arranging, hold stems under water and cut 1" off stem while submerged. IF A ROSE SHOULD WILT... Remove from arrangement. Recut stem under water, and submerge the entire rose in warm water. It should revive in 2 hours. ABOUT YOUR WATER - Avoid if possible use of water from a home or Commercial water U.S. or Canadian grown

up 22 percent and rose stem sales are up 11,6 percent.

## 7. Conclusion

Several factors are important in determining whether South Africa can profitably export roses to the US. Of these the Most important are the production and marketing costs. Taschner (1992) compiled production costs as listed in Table 3. Taschner (1992) estimated that between 170 and 250 blooms per m² can be produced per annum. International Floriculture Trade Statistics (1991) estimated this figure to be 200 blooms per m² per annum for African countries. Based on this figure the production cost per rose is 10,8 cents. Two minor adjustments have to be made. The one is a slight increase due to insufficient packaging costs listed in Table 3. When packaging for the export market the figure listed under wrapping material (i.e. R5 000) will not cover the cost. This figure will be closer to R30 000, which will result in an increase, of 1,25 cents per rose. The other adjustment is a slight decrease since most operations are larger than one hectare and can therefore spread their fixed costs more effectively over a larger production volume.

In addition to operating costs, a production unit also has other significant costs that have to be taken into account, namely depreciation, interest and repayment of capital. Since these costs can differ considerably between operations, different approach has been used in that the

Table 3: Annual operating expenditure on 1 hectare of roses

ITEM	R
Administrative person	20 000
Labour (20 persons @ 12 months by R300)	72 000
Overtime pay for picking on weekends	18 000
Fertilizer (10 months @ R2 000)	20 000
Spray chemicals (10 months @ R3 000)	30 000
Cost & Running of delivery vehicle	20 000
Telephone and fax	3 600
Electricity (borehole, pump and coolroom)	18 000
Maintenance and repair	10 000
Wrapping material	5 000
	R216 000

Source: Taschner, 1992

Table 4: Potential profit margin f.o.b. Jan Smuts airport for export roses sold in the new york flower wholesale market

Rose price by origin	California	New England	Colombia	Europe
Estimated average price - NY	80,0	95,0	40,0	120,0
Oct - Apr (US cents) Minus Agents' Market costs (22,5%) (US cents)	18,0	24,4	9,0	27,0
	62,0	70,6	31,0	93,0
Price in Rand (\$1 = R2,90)	179,8	204,7	89,9	269,7
Minus: Import duty* (SA cents)	3,2	3,2	3,2	3,2
Minus: Airfreight cost (SA cents)	14,9	14,9	14,9	14,9
Profit f.o.b. Jan Smuts (SA cents)	161,7	186,6	71,8	251,9

The 8% import duty is based on a R0,40 declared value f.o.b. Jan Smuts airport which is the approximate value in SA and differs significantly form NY prices due to risk, etc.

analysis will only attempt to determine the profit margin after operational costs have been deducted. Each operation will then have to decide whether this is sufficient to cover the fixed costs, given its own financial structure. Van Wyk (1992), manager and co-owner of Soleil, a export rose operation, is of the opinion that most rose producers would be more than satisfied if they could average a f.o.b. Jan Smuts sales price of 50 - 60 cents per rose. This implies that even for producers who are highly leveraged in terms of debt and whose operational efficiency would only be considered average, this price should be adequate.

The South African Airways (1992) quoted the following airfreight prices for cut flowers between Jan Smuts and J.F. Kennedy airports:

Less than 100 kg R7,13/kg 100 - 250 kg R5,96/kg 250 - 500 kg R5,46/kg

Although no standard carton is being used for exporting roses, the average cost of a carton is between R4,50 and R5,00. It will weigh approximately 8 kg and contain about 320 roses. Based on this information the airfreight cost, excluding the cost of the carton, is approximately 17,8 cents, 14,9 cents and 13,7 cents per rose, depend-

ing on the total weight of roses loaded on board. This price includes loading and unloading at the airport of departure and of arrival. Other costs that has to be taken into account is the cost of the import agent who receives the roses at J.F. Kennedy airport, delivers them to and sells them in the New York Flower Wholesaler market. Gordon (1992), special representative of the USDA-Agriculture Marketing Service, estimates the agents' mark-up cost as between 15-30 percent. Finally there is also a import duty of 8 percent f.o.b. Jan Smuts payable when entering the US.

The following calculation can now be made to determine the profit margin. However, it is difficult to accurately estimate which price South African roses will fetch in the New York market. It can, however, be concluded beforehand that, based on discussions with various US specialists there should be no reason why South African roses could not compete with locally-produced roses or even in some cases with roses imported from Europe. The prices obtained by these roses are significantly higher than for those obtained for Colombian roses. Table 4 depicts the situation.

Based on these calculations there should be no doubt that a substantial profit margin remains after all operational costs have been taken into account.



Figure 2: Rose promotional logo Source: Roses Inc., 1991

Even in the worst case scenario where SA roses only fetch prices equivalent to that of Colombian roses, the profit margin appears to be sufficient. Van Wyk (1992) also says that although several factors could influence the exports of SA roses, none are critical. Factors such as suitable soil, water, site, climate, etc. present no significant problems. Neither do diseases that can present a problem for the export of agricultural products (see chapter 5) appear to be a problem in the rose industry. Problems that do however exist include:

- Financial Security: The attitude of most potential producers is that they are not prepared to take the risk in setting up a rose-production enterprise. Export agents again are also not prepared to commit themselves in terms of purchasing agreements and prices unless they can see the quality of the roses the producer produces for export.
- Knowledge: Few South African producers have sufficient knowledge of cut roses.
- Competition: The development of cut roses industries in other developing countries such as Zimbabwe, Kenya and Turkey presents a bigger threat to South Africa than existing industries in Western countries.

In conclusion it could therefore be said that the export potential for cut roses to the US is high and worth pursuing. Not only could cut roses earn valuable foreign exchange for South Africa, but it could simultaneously address other local problems such as unemployment (cut roses are labour-intensive), the diversification of agriculture, etc.

#### References

CARMICHAEL, O. (1990). Roses Should Generate Year Round Profits. Produce Businees, April 1990.

FLORACULTURE INTERNATIONAL. (1991). How much quality is lost? FloraCulture International, January.

GORDAN, E. (1992). Unpublished Information USDA Agricultural Marketing Service - January 1992.

GROWER TALKS. (1989). October 31.

INTERNATIONALFLORICULTURETRADESTATISTICS. (1991). Pathfast Publishing. UK.

MACHTEL, DF. (1991). Telephonic interview. December 12, 1991 Executive Director, Flower Trade Council.

NEW YORK STATE DEPARTMENT OF AGRICULTURE. (1991). New York City Ornamental Crops, Wholesale Market Prices - 1990. May 1991.

ROSES INC. (1991). Unpublished information.

SOUTH AFRICAN AIRWAYS. (1992). Unpublished information. April 30, 1992.

SUPERMARKET FLORAL. (1989). Roses are red. Supermarket Floral, August 31, 1989.

TASCHNER, L. (1992). Living with roses. Pretoria.

USDA-AMS. (1990). Marketing California Ornamental Crops 1990. California Department of Food and Agriculture Market News Branch.

USDA-ERS. (1990). Floriculture and Environmental Horticultural Products - A Production and Marketing Statistical Review 1960-88. USDA Economic Research Service. September 1990.

USITC. (1989). Competive Conditions in the US and World Markets for Fresh Cut Roses. US International Trade Commission, Pub. No. 2178. April 1989.

VAN DER VYVER, A. (1992a). An analyses of the US import market for agricultural products with special reference to opportunities for South Africa. Unpublished Ph.D dissertation. University of Pretoria. May 1992.

VAN DER VYVER, A. (1992b). An analyses of the US apple import market with special reference to opportunities for South Africa. Unpublished article. June 1992.

VAN WYK, PH. (1992). Personal interview. Managing Director SOLEIL. 23 April 1992. Pretoria.

WRIGHT, RM. (1989). The Wholesale Role in Successful Rose Marketing. Link Magazine. October 1989.