CHAPTER 3

THE INTERNATIONAL FLOWER MARKET

3.1 Introduction

Flowers have important symbolic and decorative functions in cultures and traditions throughout the world and have long been cultivated for use at religious ceremonies and social events. The development of commercial production and trade in cut flowers, however, has been driven largely by the consumption habits of wealthier people in the urban centres of the more developed countries, and the adoption of similar consumption patterns among the growing middle classes in developed countries (ACIAR, 1996).

This chapter contains a four-part overview of the international environment in which the South African flower industry operates. First there is a short overview of the world flower industry. Second, there are profiles of countries such as Zimbabwe, Malawi, Zambia, Kenya and Uganda, which are regarded as South Africa's major competitors in the world flower market. The third part focuses on the Western European markets. The fourth and final part gives a profile of the Australian flower industry, which is regarded both as a potential competitor and as a potential market. The overview provides a basis for the analysis appearing in Chapter 5.

3.2 The world flower industry

World floricultural production is valued at more than \$16 billion at the farm gate and is estimated to cover more than 189 000 hectares (Wessels, 1998). The Netherlands, USA and Japan dominate world flower production and not only account for nearly 50% of the global production value, but also cover more than 20% of the production area. The major types of flowers produced are the traditional flowers such as roses, chrysanthemums, carnations, orchids, lilies, tulips and gypsophila (James, 1996). Floriculture is also an emerging high-value industry in sub-Saharan African economies such as Zimbabwe, Kenya and South Africa (Wessels, 1998). Flower production is becoming globalised and tends to locate where there are out-of-season or low-cost factor advantages, such as in Southern Africa or South America, at the expense of established high-technology producer countries like the Netherlands. The

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recent lifting of sanctions against South Africa has particular relevance for Australia's floricultural producers in the European, USA and Asian markets (Karingal Consultants, 1997).

3.2.1 World flower trade

Cut flowers are the most important and globally the most widely traded floricultural product, valued at R23,67 billion (farm gate) in 1995 (Niederwieser, et al., 1997). The world's main flower exporter is the Netherlands which exports flowers valued at R8,4 billion. This is more than half of total world flower exports valued at R15 billion. The second-largest exporter is Colombia, exporting flowers valued at \$2,3 billion; Israel is third (\$203 million) and Kenya fourth (\$136 million). Table 3.1 lists the top 20 flower-exporting countries and also the value of exports for 1996 (IFTS, 1997).

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Table 3.1: Flower exports to main world markets by source country (1996)

	Source country	\$ CIF (1996)
	World	3 518 679 000
1	Netherlands	1 980 540 000
2	Colombia	539 611 000
3	Israel	158 842 000
4	Ecuador	121 452 000
5	Kenya	106 140 000
6	Italy	80 199 000
7	Thailand	61 142 000
8	Spain	55 987 000
9	Zimbabwe	53 679 000
10	France	32 095 000
11	New Zealand	29 380 000
12	Costa Rica	23 691 000
13	Germany	22 644 000
14	Mexico	21 873 000
15	Bel/Lux	19 724 000
16	Australia	17 904 000
17	Turkey	15 121 000
18	Singapore	14 837 000
19	India	14 204 000
20	South Africa	13 357 000

Source: IFTS, 1997

3.2.2 World flower consumption

Consumption expenditure is centred on three northern hemisphere locations, namely the EU, North America and Japan, each with purchases of flowers amounting to about \$8 billion in 1990. Italy and Germany are also relatively large markets with consumption of around \$5 billion and \$4 billion respectively. Western Europe accounts for over half of world consumption of cut flowers (ACIAR, 1996).

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The global flower and ornamental market is currently estimated at \$59,4 billion and is projected to increase continuously as the world population shifts from rural to urban areas and consumer wealth grows. According to Karingal Consultants (1996), the world cut flower markets are currently growing at a rate of 6% - 9% per annum. It is therefore expected that developing economies, e.g. Taiwan, Korea, Singapore, Eastern Europe, Argentina and Mexico, may become increasingly important as users of flower products (Niederwieser, et al., 1997).

Traditional flowers such as roses, chrysanthemums and carnations have dominated consumption in the major markets. However, markets with more developed taste and higher per capita consumption expenditure, such as Japan and the Netherlands, have shown greater interest in other types of flowers, such as South African and Australian indigenous flowers (ACIAR, 1996). In 1990 South African and Australian native flowers were estimated to account for wholesale sales of \$400 million or about 1% of world wholesale value (Karingal Consultants, 1997).

A 1995 study (FCH, 1996) of 24 countries ranked Switzerland in first place with a per capita consumption expenditure of \$ 143,12; Germany was ranked sixth with a per capita consumption of just over \$ 74,35; the Netherlands seventh with \$ 63,25; Japan eighth; Britain fifteenth and the USA thirteenth. In 1997 Australia's per capita consumption expenditure on flowers was estimated at between \$ 14 and \$ 17 per annum (Karingal Consultants, 1997). South Africa has a per capita consumption of approximately \$ 1,17 (R3,04) per annum and is ranked last (see 2.2 above). A complete list of per capita consumption statistics is given in Table 2.1.

3.3 Major international competitors

Zimbabwe, Zambia and Malawi are among South Africa's greatest rivals on both the local and European markets. South African growers have expressed concern, since policy (the Lomé Convention) favouring these countries prevents equitable competition and induces foreign investors to invest in Zimbabwe, Zambia or Malawi rather than in South Africa. Consequently it is crucial for South African growers to take note of the structure of the industry. This section discusses the structure of floriculture in other Southern African countries (excluding South Africa). The general structure of the floriculture industry includes

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growers of cut flowers, grower-based sector organisations and a network of local and foreign firms supplying production input, technical advice and export marketing services. The section also contains an analysis of the sales performance of and development opportunities for cut-flower exports, a description of the established infrastructure and of the competitiveness of the respective industries, prospects for future development and lastly of constraints and solutions.

3.3.1 Zimbabwe

Growers

Zimbabwe is one of the most promising flower-producing countries in the developing world. This country has a fairly long experience with and a good reputation for exporting quality flowers. In Zimbabwe most growers of cut flowers are commercial farmers with experience in growing tobacco and other irrigated crops. Tobacco farmers can adapt relatively easily to floriculture because of the similarities between tobacco and floriculture. These similarities include the following:

- Great attention to detail
- Selective harvesting by hand
- Complex post-harvest sorting
- Grading and treatment
- Experience with auction sales
- Awareness of the importance of maintaining a strong reputation with buyers

An increasing number of Zimbabwean cut-flower growers are urban professionals and business people. Most growers of cut flowers in Zimbabwe are located within 150 kilometres of Harare. The industry in Zimbabwe has attracted some large corporate investors; for example Royal Dutch Shell is engaged in a joint venture with some of the most successful floriculture operations in Zimbabwe.

Trade

Table 3.2 illustrates the importance and growth of the Zimbabwean flower industry. One of the important trends is the increase in exports to the Netherlands, rising from \$36 393 000 in 1995 to \$37 343 000 in 1996. Exports to Germany increased from \$5 331 000 to \$6 219 000 over the same period. Other large countries importing flowers from Zimbabwe are the UK, Italy, France and Sweden.

Table 3.2: Total flower exports from Zimbabwe (\$1000)

Country	1995	1996
France	362	323
Belg-Lux	360	50
The Netherlands	36 393	37 343
Germany	5331	6 219
Italy	826	818
UK	3 852	3 875
Sweden		324
Switzerland	3 540	4 153
USA	626	705
Japan	316	156

Source: IFTS, 1997

Commodity associations

In Zimbabwe, the Horticultural Promotion Council (HPC) is an independent body established by growers in 1986 for the purpose of organising airfreight and expanding the horticultural industry. The HPC is funded by a "voluntary" 0.5% levy on the value of horticultural exports by its members. Though HPC membership is not mandatory, growers must become members in order to receive a farming license that entitles them to an exemption from the 12.5% sales tax on purchased inputs. The HPC's charter gives it broad responsibilities for providing many essential support services to the industry, but its limited resources can only support a staff of two professionals who direct most of their efforts toward organising air freight and collecting basic industry statistics. Another organisation the Export Flower Growers Association of Zimbabwe (EFGAZ) was formed in 1991 as a separate and more specialised association of cut flower growers within the HPC. EFGAZ aims to provide greater structure and organisation for the floriculture industry - one that is initiated and established by growers for growers - to discourage the government from attempting to impose an industry structure on the growers, e.g. proposals (since withdrawn) for parastatals such as the Horticulture Promotion Authority or the Horticulture Promotion Board.

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Competitiveness

Zimbabwe has become the largest, strongest and most complete floriculture export industry in the Southern African region. Zimbabwe has relatively long experience and a good reputation for exporting quality flowers and being up to date with the latest European fashions. The sector has now reached a critical mass, which will lead to self-sustaining growth in the future. Of all Southern African countries, Zimbabwe has the most export growers, the widest dispersion of growers, the largest assortment of products and the greatest concentration of firms offering support services to growers. In this way Zimbabwe has become the engine of regional growth in floriculture and a model for imitation by neighbouring countries (Malter *et al.*, 1996).

For a typical rose farm in Zimbabwe the capital and operating costs amounts to $$29.64/m^2$ and $$30.50/m^2$ respectively. The costs is similar to that of a typical rose farm in Zambia, marginally lower than one in Kenya and higher than one in Uganda (see Table 3.8 and 3.9) (White, 1996).

The capital costs (Table 3.3) are based on 3-hectare metal-framed greenhouses with infrastructure for a 6-hectare project. The project has capital costs of \$941 700 (\$31.39 / square metre). The annual operating costs (Table 3.4) of \$748 000 in year 1 (\$ 24.93/m²) inclusive of air freight costs and \$915 000 (\$30.5/m²) in full production and inclusive of air freight costs. The project include a small senior management expense but excluding travel costs to Europe. An Analysis of annual operating costs are shown in Table 3.3.

Table 3.3: Zambia / Zimbabwe 3ha rose farm – capital costs

	Write off	Costs	Annual
	Period (years)	\$	write off
	(years)	10 000	φ
Land	10		12 000
Greenhouses	10	180 000	12 000
Irrigation & pumps	10	52 000	5 230
Buildings	20	106 000	5 300
Other tech. Materials	5	14 800	2 960
Tools, Office equip	3	6 200	2 067
Plastic	er. Of the 164	30 000	7 500
Generator	10	16200	1 620
Communication equip	5	8 500	1 700
Plant materials	5	344 500	68 900
Cool areas	10	60 000	6 000
2 nd hand vehicles	3	70 000	23 333
Land preparation	6	42 500	7 083
Total	e florege sur-	940700	143693

Table 3.4: Zambia/ Zimbabwe 3ha rose farm – annual costs (%)

Air freight and marketing (Air freight \$ 2.35/kg)	opera on 61
Labour costs inclusive of management costs	7.6
Depreciation	16.1
Bank interest	2.6
Production inputs	5.2
Energy / fuel	0.9
Others	6.6
Total	100

Source: ABN AMRO BANK, Netherlands

Infrastructure Even though Zimbabwe's flower export industry is booming they still have significant infrastructure deficiencies in telecommunications. Many Zimbabwean growers, even those just outside of Harare, still do not have access to a private telephone/fax line, which prevents them from communication directly and easily with agents in Harare or buyers overseas. Each of the marketing groups in Zimbabwe has to rely on radio communications to contact growers. Local industry organisations EFGAZ and HPC have discussed the possibility of linking growers with some type of electronic mail system, but this will also require that each grower have a private telephone line. This is a critical issue, as it is

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impossible to respond to rapidly changing market conditions in a dynamic, information-intensive global industry without efficient and reliable communications.(Maharaj *et al.*, 1995; Malter *et al.*, 1996; White, 1996)

3.3.2 Zambia

Growers

Most of the investors in floriculture in Zambia are urban-based business people. Most have invested in floriculture strictly as a business venture, which has given the sector in Zambia a more business-like character. Of the 16 floriculture projects in Zambia in 1995, only two were owned by black African businessmen and a third had a black African as a partner; all the rest were owned by entrepreneurs of European or Asian descent, most of whom were either natives of long-time residents of Zambia or immigrants from Zimbabwe, South Africa, Kenya, or Europe. Some larger growers are considering out-grower schemes involving smaller-scale black African farmers, but such schemes are considered more promising for vegetables than for flowers. All of the existing floriculture projects are located around Lusaka. The industrial giant in India, TATA has shown increased interest in Zambia by adding roses and summer flowers to its agribusiness operations in Zambia. The Commonwealth Development Corporation is also investing in the Zambian cut flower industry by buying one of the largest cut flower (and vegetable) farms in Zambia.

Trade

Zambia has the potential to be one of the main competitors on the international markets. This potential is evident in the growth of exports to the Netherlands between 1995 and 1996, which increased from \$4 995 000 to \$7 232 000. Exports to Germany, the second largest export destination for Zambian flowers increased from \$376 000 in 1995 to \$391 000. Zambia also export to Italy, UK, France, Belgium and Sweden (Table 3.5).

Table 3.5: Total flower exports from Zambia (\$'000)

Country	1995	1996
France	41	30
Belg-Lux and the second block to be and the second block to be a second	gauss - by h	20
Nehterlands Company Company	4995	7232
Germany Combined Concellant to the land	376	391
Italy where exclusively priented-toward poses and	29	278
UK hamilan is though some Zambian growers are trys	199	160
Sweden The Sweden Zambia's Capital and operation	COSUS ELC. IN	4

Source: IFTS, 1997

Commodity associations

The Zambian Export Growers Association (ZEGA) was founded in 1988 to help promote the development of fresh horticultural exports from Zambia and consists of two parts: the ZEGA association (of growers) and ZEGA Limited, and organisation, which engage in commercial activities on behalf of the growers. Although ZAGA Ltd. Is fullfilling a supporting role growers are experiancing the following problems with ZEGA:

- ZEGA is importing bulk production inputs for the growers but the expansion of the sector makes it difficult to reach agreements on input purchases.
- ZEGA has the financial responsibility of operating the cold-storage facility (many times the size needed by the industry) at the airport financed by the European Investment Bank.
- Growers are also experiancing problems with ZEGA's Charter flight bookings.

 ZEGA is currently chaired by a prominent rose grower and controlled by current flower grower/exporters.

Grower-based sector institutions provide certain essential services to the floriculture industry. In Zimbabwe and Zambia, new groups have organised to specifically represent cut flower growers for example the Export Flower Growers Association of Zimbabwe - EFGAZ or even crop-specific subgroups of cut flower growers for example the Zimbabwe Protea Growers Association. There are also independent statutory organisations, such as Zimtrade in Zimbabwe, which conduct trade promotion activities (e.g. participating in trade fairs) for floriculture and other export industries and co-ordinate their efforts with floriculture sector institutions (Malter, et al., 1996).

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Competitiveness

Zambia has been a somewhat later entrant to floriculture, beginning its takeoff only in the past two to three years, but has been able to begin on a relatively high and sophisticated level. Zambia is trying to emulate Zimbabwe's success, but will lag somewhat behind in the foreseeable future. Zambia's floriculture sector is much less diversified than Zimbabwe's, being almost exclusively oriented toward roses and marketing almost exclusively via the Dutch auctions, though some Zambian growers are trying to change this trend. As mentioned before Zimbabwe and Zambia's capital and operating costs are more or less the same at \$29.64/m² and \$30.50/m² respectively (see Table 3.3 and 3.4). (Maharaj et al., 1995; Malter et al., 1996; White, 1996)

3.3.3 Malawi

Growers

In Malawi, two exporting cut flower projects were initiated as a business venture, with the largest one being backed by overseas investors. Both projects are near Lilongwe, even though other areas of Malawi have better climatic conditions for floriculture production. Overseas interest in Malawi came in the form of EDESA (the Swiss development bank) a major banker of the largest rose farm in Malawi

(Maharaj et al., 1995; Malter, et al., 1996).

Trade

Exports statistics (Table 3.6) shows that the Netherlands is Malawi's largest export destination with exports valued at \$2 352 000 in 1996, second are Germany with \$934 000 in 1996 and the UK with \$40 000.

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Table 3.6: Total flower exports from Malawi (\$'000)

Country	1995	1996
Netherlands	2574	2352
Germany	The pasc repeals	934
UK Tahiy when production reach on average above	or all all also and trans	40
Total	2574	3326

Source: IFTS, 1997

CompetitivenessMalawi appears to have few chances at present to develop floriculture exports beyond their current level. Even though Malawi have good climatic conditions for floricultural production too many necessary factors are missing. Factors such as a well developed infrastructure, research and development resources, and a strong input supplier base is absent. It seems as if Malawi will continue to lag further behind its neighbours in the foreseeable future. The few existing producers seem resigned to supplying lower quality products to the lower-quality segment of the market (Malter et al., 1996).

3.3.4 Kenya

Horticulture in Kenya is a vitally important industry. Kenya is an agricultural country and depend on agricultural exports to earn foreign exchange. Cut flowers are more than 50% (1991) of the total Free on Board (FOB) value of fresh horticultural produce. Kenya is also a powerful player on the international scene being the third largest flower exporter to Germany (the largest importing country in the world) in 1995 with exports valued at \$24 115 000 but in 1996 exports decreased to \$16 463 000. Kenya was also the second largest flower exporter to the Netherlands, exporting \$60 979 000 worth of flowers in 1995 and \$69 311 000 in 1996. Kenya is the trend setter in Africa as far as flower production and exports are concerned. (IFTS, 1997; Maharaj et al., 1995)

Production

In 1995 Kenya had 1329.4 hectares of land reserved for the production of about 25 000 tons of cut flowers and cut foliage. The Kenyan production season are illustrated in Figure 3.1 and represent the quantity produced in metric tons. The season peaks between October and February when production reach on average about 3 000 metric tons. There has also been a more consistent year round supply of flowers in resent years. This is visible in the increasing trend (from 1992 to 1994) in production during Kenya's off season (IFTS - Export Statistics, Horticultural Crops Development Authority Kenya, 1996).

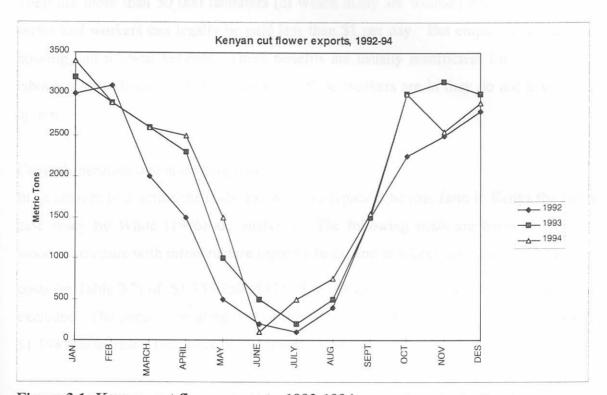


Figure 3.1: Kenyan cut flower exports, 1992-1994

Source: International Floriculture Quarterly report, volume 5 no. 2 in IFTS, 1996

During high season one farm alone dispatched 5 plane loads of flowers per week while a transport firm ships another 12 plane loads. An example to illustrate the investment in Kenya is that of Sulmac, a flower company owned by Unilever, the Giant Anglo-Dutch multinational. Sulmac exports well over 250 million stems (8000 tons) each year and had a turnover of over 20 million pounds sterling in 1991. In 1992 seven growers had above 10 hectares under flower production and three of them having their own handling facilities at Jomo Kenyatta International Airport.

Inputs

The costs of plants from Europe even if propagated locally include a royalties payment of 50% (excluding the transport cost to Kenya). For example, if you buy a rose plant of \$1,20, half of that price is royalties and you still have to pay the price of flying it to Kenya.

Fertilisers, chemicals, fuels, consultants, growers and expatriate managers are inputs that all have to be imported at extremely high costs. The only local input is labour. The developed countries are trying to shift their production because of the low price of land and labour. Their are more than 30 000 labourers (of which many are woman) employed in the flower sector and workers can legally be paid less than \$1 per day. But employers usually supply housing and medical benefits. These benefits are usually insufficient for the needs of the labourers. But because of the poverty trap these workers are in they do not have any other option.

Capital operating and marketing costs

In an attempt to describe the costs involved in a typical 3 ha rose farm in Kenya the following case study by White (1996) are analysed. The following costs are based on a 3-hectare wooden structure with infrastructure capacity to expand to 6 hectares. The project has capital costs (in Table 3.7) of \$1 137 750 (\$37 925/m² of greenhouse area). Office set up costs are excluded. The annual operating cost of this project are \$1 134 000 (\$37,8/m) in year 1 and \$1 198 000 in year 2 (inclusive of air freight costs).

The estimated Marketing costs of a Kenyan producer exporting via the Dutch auctions can be summed up as follow:

- Air freight are +/- 50% of the wholesale price. the freight rate have dropped the past three years from \$2,15 per Kg (1993) to \$1,70 per Kg (1996)
- Commission of 10% to the middle man in Europe.
- Auction costs: 6% commission, and 1,5% for advertising, handling, preparing and other. (IFTS, 1996; Maharaj *et al.*, 1995; White, 1996).

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Growers

Most of the farms belong to foreign owners that have experience in the flower business. Approximately 50% of the 45 flower companies are owned by Dutch, German, United States and Swiss investors. 35% of the other farms are owned by white Kenyans and only 3% belong to black Kenyans. (International trade statistics, 1996; Maharaj *et al.*, 1995).

Table 3.7: Kenyan 3ha rose farm- Capital Costs

	Write off	Cost(\$)	Annual
	period		Write
	(years)		off(\$)
Land		125 000	
Greenhouses	15	105 000	10 500
Irrigation & Pumps	10	76 150	7 650
Buildings	20	119 000	5 950
Other tech materials	5	22 800	4 560
Tools & office equip	3	13 700	4 567
Plastic	4	30 000	7 500
Generator	10	16 200	1 620
Communic equip	5	11 900	2 380
Plant materials	111115	344 000	68 800
Cool Area	10	74 000	7 400
2nd hand vehicles	3	74 000	24 667
Land preperation	6	126 000	21 000
TOTAL		1 137 750	166 558

Source: ABN AMRO BANK, Netherlands.

The role of government

According to Mr. Waithaka the technical services manager of the Horticultural Development Crops Authority, the Kenyan government is involved in the following activities:

- The implementation of a research programme and advisory service for small scale growers.
- Construction of a cold storage facility at Nairobi airport.

- To release government funds for the improvement of the road from one of the key production areas (Naivasha) to Nairobi airport.
- In 1991 the army bulldozed 40 acres of tropical forest to make way for a rose plantation. (Maharaj *et al.*, 1995)

Illegal business practices

Trade in cut flowers has not made any substantial contribution via taxes. As early as 1977 the Nairobi Times published a report accusing horticultural exporters of defrauding the Kenyan Central Bank by failing to declare their full profits and thus depriving the country of tax revenue. This have not changed since, and it is estimated that horticultural traders had cheated the country of 500 million shillings since they began business in Kenya. The cut flower sector is simply too modern for governments to monitor and too much a part of the current culture of international business, which defies the control of any government. (Maharaj et al., 1995)

Trade

The largest export destination for Kenyan flowers are the Netherlands with exports valued at \$69 311 000 in 1996. Germany is the second largest destination with exports that decreased from \$24 046 000 in 1995 to \$16 463 000 in 1996. Exports to the UK have increased from \$10 485 000 in 1995 to \$13 545 000 in 1996. A more detailed description of the Kenyan trade statistics can be found in Table 3.8.

Table 3.8: Total flower exports from Kenya (\$'000)

1995	1996
393	1203
166	242
60979	69311
24046	16463
277	769
10485	13545
136	43
33	77
	1653
2932	3247
23	14
589	776
100059	107343
	393 166 60979 24046 277 10485 136 33 2932 23 589

Source: IFTS, 1997

3.3.5 Uganda

Uganda is a country with the potential to grow to an important producer for the international market. The Ugandan rose industry started in 1993 and has grown to more than \$10 million in gross sales in 1996. The Ministry of Trade has challenged rose growers to expand the industry to \$60 million and 200 ha in the year 2000 which will cause Uganda to have a 3% share in the European rose market. This expectation may seem a bit too ambitious but according to Clive Drew of the Agribusiness Development Centre, the rose growers are capable to reach this target (Galinsky, 1996; White, 1996).

Production

In 1996 the rose industry in Uganda consisted of 12 farms on about 40 ha, producing varieties like, First Red, Frisco, Prophyta, Konfetti and Souvenir. Growers harvest flowers daily during a nine month production season from September to May (Galinsky 1996).

Marketing

During the production season growers harvest flowers on a daily basis and export it three to four times per week from Entebbe to Europe on several air lines including, Sabena, Alliance Airways, Air France and British Airways. Air rates average about \$1,77 per kilogram.

Most Ugandan exporters market their roses through the Dutch auctions because of the large number of buyers to which the roses are exposed. Another advantage is the speedy, guaranteed payment of the Dutch auction system. On average Ugandan roses receive below average auction prices for their roses. Another marketing channel is direct sales to importers or supermarkets with the advantage of higher possible returns and the disadvantage of higher risk of client dissatisfaction resulting in no payment (Galinsky, 1996; White, 1996).

Government support

Currently the Ugandan rose growers are earning a substantial sum of hard currency which widen the governments tax base. Further more it have created 300 new jobs in rural areas decreasing the rate of urbanisation. Another positive contribution is the fact that 85% of the employees are women which will increase the welfare of the rural family where the woman usually are the head of the household.

If Uganda can reach the \$60 million or 200 ha mark in the year 2000, Uganda will produce +/- 270 million stems per year at a value of \$37 million and employ more than 9000 people. According to Clive Drew this will only be possible with investment in the industry from private and government sources in the order of \$60-\$80 million. (Galinsky 1996)

Competitiveness

Uganda's comparative advantage lies in short- to medium-stem roses which is in high demand by European and UK supermarkets. The relatively hot climate cause the buds to be relatively small and small buds goes together with shorter stems. Even though long stems are capable of higher prices per stem, the short stemmed rose's yield per square meter is much higher and the freight cost per stem is much lower. These two factors more than makeup for the lower price per stem. Uganda is capable to produce shorter stemmed varieties at lower cost than Kenya.

Other factors that increase the competitiveness of Uganda includes (a) a stable political and economic climate for the past 11 years are boosting investment confidence in the Ugandan flower industry, (b) inexpensive and fertile land, (c) a tropical climate at high altitudes, (d) available water, (e) low cost labour, capital and freight, and (f) a supportive government and international community.

According to White (1996) Uganda also shows a comparative advantage as far as capital and operating costs are concerned. When capital costs (Table 3.9) are compared, the Netherlands are the most expensive with \$108/m², Kenya, Zambia and Zimbabwe showed a capital cost of just below \$30/m² while capital cost in Uganda are estimated at \$27,68/m²

Table 3.9: Rose farm - capital cost

Country	\$/m ²
Kenya	29,56
Zambia/Zimbabwe	29,64
Uganda	27,68
Netherlands	108,50

Source: White, (1996)

The comparison of annual operating costs is shown in Table 3.10 It is evident that Uganda, in both region A and region B has got a comparative advantage as far as operating costs are concerned.

Table 3.10: Rose Farm Annual Operating Cost (\$/m²)

Country	\$/m ²
Kenya	39,93
Zambia/Zimbabwe	30,50
Uganda A	28,12
Uganda B	22,68
Netherlands	50,70

Source: White, (1996)

Constraints

Several constraints can be identified that have to be dealt with in order to reveal Uganda's full potential. The following factors stand in the way of expansion of Uganda's rose industry: (a) Inadequate power supplies, (b) contradictory government policies on capital imports, (c) banks are unfamiliar with agricultural lending, (d) lack of local technical expertise, (e) poor post harvest handling techniques and (f) a lack of cold storage and handling facilities at the airport. A natural constraint is the high rainfall and high humidity which is highly favourable for development of mildews and other fungal diseases (Galinsky, 1996; White, 1996).

Trade statistics

The main export destination for Ugandan flowers is the Netherlands with exports valued at \$2 181 000 in 1995 and \$3 226 000 in 1996. Germany is the second largest market for Ugandan flowers with exports increasing from \$381 000 in 1995 to \$471 000 in 1996. Other export markets include France Sweden, Belgium, Italy, the UK and Switzerland. More Ugandan flower export figures are given in Table 3.11.

Table 3.11: Total flower exports from Uganda (\$'000)

1995	1996
	92
	1
2 181	3 226
381	471
- , 4 (- 2	5
	3
	137
1107 131	75
	4 010
	2 181

Source: IFTS, 1997

3.4 Major international markets for cut flowers

The Western European markets are the main destination for export flowers from South Africa. For South Africa it will be important to be aware of the structure of these markets, to identify opportunities for expansion. In this section aspects like demand and supply, consumer preferences, the trade structure, competition, prices, promotion, market access and market opportunities, are discussed for Germany, France, United Kingdom, and the Netherlands.

3.4.1 Germany

Demand and Supply

Germany is the largest import market in the world, in 1996 Germany imported flowers valued at \$1.8 Billion. Germany's per capita consumption of flowers is the sixth highest in the world with R173.76 for 1995 (FCH, 1996). Total imports into Germany have shown a steady increase during recent years. Germany imported flowers from 26 countries in 1990 and 34 countries in 1994. Germany's major suppliers are mentioned below:

- The Netherlands is the largest supplier of cut flowers with an import market share of about 86%.
- Italy is the second largest supplier with an import market share of 5.2% in 1994 which decreased to 3.2% in 1995.
- Israel and Colombia is the third and fourth largest supplier, with both less than 2% of total imports in 1994.
- South Africa exports proteas and various summer flowers, some of which are produced in Swaziland. Germany is South Africa's largest flower export destination.

(AIPH, 1995; Bjarke, 1997; The Flower Council of Holland, 1995; IFTS, 1997)

Consumer Preferences

German consumers buy flowers and plants all year round. However, consumption shows seasonal variation. Demand declines considerably during May-Sept., and rises substantially during the holiday and festivals such as:

- St. Valentine's day,
- Easter week and the preceding week,
- Mother's Day (the second Sunday in May),
- All Saints day (1 November),
- Sunday for the Commemoration of the Dead (second half of November) and

- Christmas.

The Centrale Marketinggesellschsft der Deutschen Agrarwirtschaft (CMA) (1991) conducted a survey on the types of flowers that had been purchased. The following was revealed:

Roses	18.0%
Carnations	11.9%
Tulips	7.8%
Orchids	4.9%
Chrysanthemums	3.2%
Other cut flowers	7.9%
Mixed bunches	38.3%
Arrangements	8.0%

Reports suggest that, with the exemption of roses, there is a tendency for the share of traditional flowers in the total consumption to decline. Consumers are apparently looking for an ever-wider selection of flowers. The colour preferred tends to be in softer shades such as pink and lilac (SMFCFWE, 1996).

Trade Structure

Retail Trade:

Projections, based on the CMA survey indicate that traditional florist, is expected to decrease its share in the trade structure from a estimated 64% in 1990 to an estimated 57% in 1996. However, Multiple food assortment (like supermarkets and chain stores), trade is expected to increase its share from 11% to 15% during the same period.

Terminal Markets:

The number and importance of terminal markets have declined with increased competition from direct sales to florist shops by large number of Netherlands exporters and German secondary wholesaler / importers.

Producer Owned Auction Markets:

There are four producer owned auction markets in Germany under the same management. All four auctions operate a Dutch style clock system. They have the advantage (to countries with lower quality cut flowers) of often accepting lower quality than the Dutch auctions.

Import and Wholesale Trade:

There are an estimated 2 000 wholesalers of cut flowers in Germany, many of these companies import flowers directly from the Netherlands. Traditionally importers will buy on a fixed price basis with prices established weekly or monthly (SMFCFWE, 1996).

Competition

Foreign suppliers are mainly competing with fresh flowers from the Netherlands and with very high quality. New suppliers in other developing countries will also have to compete with established exporters in developing countries. Kenya, for example, has a well-organised import distribution network in Germany.

Prices

As in all countries, there can be wide variations in prices which do not always reflect quality. Thus, many small exporters report that Germany is both a highly competitive market and not always a high priced market. An advantage of supplying one or more of the German auctions is that it provides access to accurate price information. Since Germany, as most Western European countries, has a high stable demand throughout the year, prices will vary less than in the United States, where demand is lower but with a big increase in demand during the festive periods.

Promotion

Limited advertising is undertaken by the Deutche Blumenwerbung GmbH, (DBG), an organisation financed by the domestic flower industry and by public funds. All domestic flower producers are obliged by law to contribute to DGB an amount related to production. Flower producers in the Netherlands also grant considerable amounts to DBG. The organisation carries out market research and advertising campaigns, in addition to providing point-of-sale materials (SMFCFWE, 1996).

Market Opportunities

Germany remains the largest market for cut flowers in the world with as much as 38% of world's imports in 1994. However, competition is increasing, as well and there is currently, with the exception of the peak holiday periods, no shortage of supplies. Market opportunities exist for foreign producers who are able to take advantage of better weather conditions and lower production costs in their countries of origin, especially during the European winter

season. However, they would be well advised to establish close contacts with reputable importers before commencing production for export to this market.

The small German auctions may be considered as potential outlets since they are generally interested in importing directly from developing countries and to compete with the much larger auctions in the Netherlands. German auctions have the advantage of accepting lower quality flowers than the Dutch auctions (SMFCFWE, 1996).

3.4.2 France

Demand and Supply

In 1991 France was, the third biggest importer of flowers in the world, after Germany and the United States. France is also a large producer of flowers. The main species grown in 1990 in terms of area were: Gladioli (492 ha), roses (420 ha), carnations (142 ha), tulips (142 ha) and chrysanthemums (140 ha) in total +/-1336ha are cultivated in France. *The Flower Council of Holland, (1995)* has estimated the per capita consumption of France's consumers were R115.84 in 1995 and estimated to be R146.61 in 2000 (Table 2.1).

Total imports have increased at a high rate during recent years, making France not only the third largest import market in the world but also a very dynamic import market for the following countries:

- The Netherlands, share of total imports to France was 87,4% in 1990 and 89,2% (\$226 815 000) in 1994 imports increased by 32% in 1995 and a further 4% in 1996. It offers a wide range of species and varieties, speedy delivery excellent service and usually a high and consistent quality.
- Belgium and Luxembourg, is the second largest importer with imports valued at \$7 751 000 in 1994 increasing to \$13 063 000 in 1995 and decreasing to \$12 959 000 in 1996 (AIPH, 1995; IFTS, 1997).

One of the features of French trade is the large size of the rose imports, which almost doubled during the period 1989 - 1994. France is the leading producer of rose plants in the world, but is steadily producing less roses and importing more. In 1994 imports into France were 12 times that to exports in terms of value. South Africa exported cut flowers valued at \$2 394 000 to France in 1994 (Table 2.3).

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Consumer Preference

The rose is the most popular flower in France followed by the tulip, the carnation and the chrysanthemums. There is a growing demand for a wider range of flowers, including summer flowers and the tropical flowers, in particular anthurium. Red is the most popular colour for roses with an estimated 55% to 60% of the market, followed by pastel shades (30-35%), white (5%) and yellow (5%) (SMFCFWE, 1996).

Trade Structure

The Retail Trade: The traditional florist shop, of which there are around 10 000 is estimated to have a 50% market share. In France the street and market vendors are more important than in other Western European country and probably account for as much as 20% of total flower sales. However a consumer survey in 1989 showed that only 14% of all flower purchases in France had been made in supermarkets which is probably one of the main reasons why flower consumption in France is relatively low (AIPH, 1995).

Import and Wholesale Trade: France has a few very large flower importers, mainly in Paris and Nice. They handle a considerable proportion of imports from developing countries. These importers distribute their products primarily to other wholesales, rarely dealing with retailers other than the larger food stores. Few retailers import direct; the exceptions are supermarket chain stores which are increasing their participation in the import trade. The wholesale trade plays a dominant role in the distribution of the cut flowers and foliage in France. Wholesalers handle most imports of cut flowers and decorative cut foliage (SMFCFWE, 1996).

Competition and Prices

Given France's close links with the Netherlands, competition is intense. The prices closely follow the prices of the Dutch auction. As in other countries, there are peaks during festivals. These sometimes also occur during different periods from those in other European countries. For instance, Mother's Day in France, (and Sweden), is last Sunday in May and not early or mid May as in most countries and Father's Day is in June.

Market Access

France is an EU member country and is not restricted by quantitative restrictions on imports of cut flowers. Requirements with regards to quality, grading and packaging are similar to those in the Netherlands. In France the market based import wholesalers require flowers to be well open and the larger importers are more interested in obtaining flowers which are in bud with the maximum possible vase life.

Market Opportunities

In a large and expanding import market there will always be opportunities for efficient producers and exporters. However, France is a particularly difficult country for exporters in far away countries like South Africa. This is mainly due to the dominant position of the Netherlands, which had a 90% share of the import market for flowers in 1993. Dutch growers/exporters consider France almost at their home market where flowers can be transported by truck and often by water systems, everywhere (SMFCFWE, 1996).

3.4.3 United Kingdom

The United Kingdom (UK) is the fourth-largest import market for cut flowers in the world after Germany, the United States of America and France. The UK is a very dynamic market where total imports increased by as much as 73% from 1987 to 1993. Although the per capita consumption of floricultural products is increasing rapidly, it is still comparatively low in the UK (Table 2.1). The 1995 figures for flowers showed that annual per capita consumption in the UK was R76,02 in 1993, declining to R68,78 in 1995 and is projected to rise to R83,26 in 2000 (FCH, 1995).

The following countries export large quantities of floricultural products to the UK:

- The Netherlands is the major supplier with 70% of the value and 65% of volume of all such imports in 1993.
- Colombia supplied 12,7% of total value and 14,2% of total volume of imports in 1993.
- Israel provided 6,2% of the total value of imports and 3,7% of total volume in 1992.
- Other, Turkey, followed by Spain, the United States and Italy (AIPH, 1995).

Distribution structure

Retail trade - The retail market in the UK is still dominated by about 5 000 florist shops, but their share of the market is decreasing from around 50% in 1989 to well below 40% in 1995. As is the case in other countries, supermarkets are becoming increasingly important. The estimated market share of the supermarkets increased from 5% to 15% in 1990. By 1995 it probably increased to over 20%. Greengrocers have traditionally sold cut flowers along with their usual range of fresh fruit and vegetables. Their market share is estimated at 10% and has remained constant during recent years. Market Stalls/Street Traders are estimated to account for about 10% - 15% of the UK's flower sales (SWFCFWE, 1996).

Wholesale trade - In recent years the role of the wholesale markets has shown some decline. There are several areas of wholesale trade. Firstly, as regards flower markets, the only specialist flower market in the UK is at New Covent Garden Market. The volume of flower sales has been increasing annually to £53 million in 1988 and to £79,6 million in 1994. It is estimated that around 50% of all sales in the New Covent Garden Market are of Dutch flowers.

Secondly, there are importing wholesalers. These companies operate primarily from outside the wholesale markets and invariably have extensive cold storage and repackaging facilities. The market-based importer probably still provides the best channel for the new exporter, given the often highly specific requirements of the non-market importers and the fact that problems can, and do, occur with early consignments from new suppliers. On the wholesale markets, cut flowers from UK producers have traditionally been sold on commission at rates ranging roughly from 10% to 15%. This is in contrast to imported cut flowers, which are normally purchased at an agreed price. Even when flowers are purchased at a firm price, there may still be deductions for handling and transport. It is essential for suppliers to establish precise trading terms and above all to assess the credit status of their importers. The terms of payment for imports are commonly 28 days.

Thirdly, there are the secondary wholesalers/distributors in the area of wholesale trade. These companies buy mainly from the major importing companies and increasingly from the Dutch auction import/export businesses. They offer delivery services to retailers and prepare bouquets for sale to garages (forecourt sales) and supermarkets.

Fourthly there are the van salesmen, where there has recently been some growth. These traders are usually small businesses buying direct from producers and wholesale markets in the UK or increasingly from the auctions in the Netherlands.

The fifth group is the flower packer importing wholesalers. There is a small but growing number of flower packers whose businesses are founded primarily on imported flowers. It is these companies who are at the forefront of bouquet sales to the supermarkets and multiple stores. Some of these companies have established UK flower production businesses. For example, Zwetlots, a large UK flower producer, is a major importer of flowers from Carmel (an Israeli company) and supplier of bouquets to the supermarkets. Lingarden, the UK's largest bulb-producing co-operative, packs UK flowers and is also a major importer and distributor (SMFCFWE, 1996).

Consumer preferences

Even though red carnations are still the most popular flower in the UK, they are losing ground to the rapidly rising popularity of the white carnation. Chrysanthemums and roses (red and pink shades) are also still very popular. Tulips and narcissus are seasonally important and lilies, gypsophila and alstroemeria are all reported to be gaining in popularity. However, there is a low demand for the minor species.

The UK wholesaler can import (from the Dutch auctions) small quantities of specific varieties, colours and quality to meet any demand. For exporters, this implies that where the minor species are concerned, the risks of over-supplying the market can be considerable.

The overall trend favours pastel shades and seasonal demand also has a strong influence on colour: white in Easter, winter and Christmas; red, yellow, pastel shades and softer colours in spring and the bronzes and yellows in autumn.

The level of consumption varies between seasons. In spring the demand peaks from March to May, and is highest at Easter, which falls either in March or in April. The elevated demand in May is closely linked to Mother's Day. In autumn the total demand declines but the demand for roses becomes relatively high, and chrysanthemum sales are also greatest in autumn. In winter there is a further decline in demand, but it picks up again at Christmas. There are large

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increases in flower trade on St Valentine's Day. Carnation sales remain fairly constant throughout the year.

Importers' requirements

Quality and grading: It is generally accepted that the UK is inclined to accept lower quality flowers than many other European markets, such as Switzerland, the Netherlands and Germany, but the UK is much stricter than the markets in for example the United States of America and Hong Kong.

Competition: With its efficient air connections, the UK receives regular consignments of cut flowers from all over the world. In addition, there are seldom supply shortages because of its proximity to the Dutch auctions.

Prices: UK prices closely follow the pattern of the Netherlands auctions. In general, wholesale prices are between 15% and 20% higher than the auction prices.

Market access

The UK has no quantitative restrictions on imports of flowers. As far as regulations on labelling are concerned, there are no statutory labelling requirements but it is recommended that EU standards should be adhered to.

Most flower imports require a phytosanitary certificate. The requirements are subject to changes and amendments and are currently being reviewed by the EU. Exporters would be well advised to check with the importers to establish the current situation before producing flowers for export.

Market opportunities

The per capita consumption (Table 2.1) of cut flowers and pot plants in the UK is recognised as one of the lowest in Europe. There has been optimism about greater demand, however, since the establishment of the Flowers and Plants Association. For the first time, this association has made available a budget for media advertising. The entry of supermarkets and chain stores into cut flower marketing also offers good prospects for a significant expansion in the market for flowers in the UK.

The performance of specific flowers

During the period from 1989 to 1994 imports of roses increased by 65%, but during 1994 there was no increase in rose imports. Prospects are not promising for suppliers of chrysanthemums from developing countries. The key to market entry is a competitive freight rate (SMFCFWE, 1996).

3.4.4 The Netherlands

The Netherlands is the largest producer of cut flowers in the world. It is also the largest exporter and had as much as 63,9% of total world exports in 1994 (CIF values). The Netherlands is also the fifth-largest importer of cut flowers in the world. The per capita consumption of cut flowers in the Netherlands was R152,04 in 1993, R 170,14 in 1995 and it is estimated this will rise to R184,62 in 2000 (see Table 2.1) (the Flower Council of Holland, 1995).

Total imports increased by 63% during 1989 - 1994 and this market is therefore a dynamic import market with the following countries as major importers:

- Israel is the leading source of flower imports to the Netherlands. Imports from Israel are also increasing by between 8% and 10% per annum.
- Kenya. Kenyan exports increased dramatically from \$48 037 000 in 1994 to \$60 979 000 in 1995 and \$69 796 000 in 1996.
- Zimbabwe. Between 1994 and 1995 Zimbabwean exports to the Netherlands increased by 37% to \$36 393 000. Zimbabwe seemed able to maintain this high level of exports in 1996 with exports valued at \$37 669 000.
- Spain was the second-biggest source of flower imports to the Netherlands in 1993, but dropped to third place in 1994 and fourth in 1995 and 1996.
- *Colombia* is the fifth most important source of imports as it is one of the leading world suppliers of standard carnations (see Table 2, Annex 1) (AIPH, 1995; IFTS, 1997).

Distribution structure

There are probably as many as 10 000 different retail outlets in the Netherlands. The retail market is characterised by the wide variety of outlets and the importance of street and market

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traders. These traders have low overheads and can therefore trade at lower prices than florist shops. They are also often on prime sites, thus encouraging impulse buying.

There are no wholesale markets of the kind normally found in other Western European countries. Practically all locally produced flowers and the majority of pot plants are sold through the auctions.

With a few exceptions, producers are committed to supplying their entire production to a designated auction. The auction sells and guarantees payment (within seven days), provides packaging materials and rents out loading trolleys. In return, the producer pays a commission of between 4,7% and 8% of the sales prices. The wide range of flowers of many different varieties and qualities on offer enables buyers to make speedy purchases for export purposes. The auction centres have offices for wholesale, export, road transport and airline companies, research establishments and banking facilities. In addition, many major buyers have offices and packing facilities in the auction building complex, enabling them to repack goods and to prepare bouquets and bunches to the specific requirements of customers worldwide. There is a total of seven flower auctions under the Federation of Dutch Flower Auctions (VBN). The three largest auctioneers, Aalsmeer (VBA), Naaldwijk (Westland) and Rijnsburg (Flora) account for 95% of total cut flower auction sales. The auctions give developing countries a point of entry into the Dutch market. However, they have stringent quality standards and these organisations will only grant an import licence to a supplier if they are satisfied that quality is of a satisfactory standard and continuity of supply can be maintained. The auctions set annual maximum quotas for imports. The quotas are usually increased every year. For example, the Aalsmeer auction established a ceiling of 300 million stems in 1985 and increased it to over 400 million stems in 1992 including 130 million stems for roses, 135 million stems for spray and 55 million stems for standard carnations, 40 million stems for gypsophila, 14 million stems for alstroemeria and 9 million stems for asters. No ceiling was set for imports of chrysanthemums. In addition to preparing flowers for auction, all flowers are inspected prior to sale and each consignment is given an inspection code. The various codes are as follows:

```
No remarks = 0;
Flower not perfect / damaged = 1;
Supply phase incorrect = 2;
Sorting unequal lengths = 3;
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Stalk, limp, curved = 4;
Foliage deviations = 5;
Pests: aphids, red spider, trips, etc. = 6;
Fungi: botrytis, mildew, etc. = 7;
Growth deviations = 8;
```

Warning code = 9.

A product may be given a combination of two codes if there is more than one defect. If there are more than two defects the product may be withdrawn from the auction. These quality standards are constantly under review and rose imports are now subject to a mandatory bacterial count of the basal stem. A high bacterial count signifies a reduced vase life. In circumstances where products are in oversupply, which was often the case during 1991/92, it is not uncommon for buyers only to buy products with nil defects, or at worst only very minor defects. The presence of a serious defect could easily reduce prices by up to 50% and a minor defect by 5% - 10% (SMFCFWE, 1996).

The import trade - Most imports are bought at the auctions but there are also traditional importers buying directly from foreign suppliers. The Dutch auctions are becoming increasingly important as outlets for imports. The reason is that although the exporters may not obtain the highest prices, they will be fair and payment will be made quickly. In practice, most importing companies also participate actively in the export trade as well as in the domestic trade. Importers will also buying on auction and on their premises will offer their customers a complete range of services, including bunching, the preparation of bouquets and repacking. Their customers include retail florists, supermarkets and wholesalers. Many importers will also place imported flowers on the auction. In these circumstances the supplier will pay all the auction charges as well as the importer's commission charges. Though this may appear to be an unnecessary additional cost to the exporter of consistently high-quality flowers (i.e. an extra commission charge), the importer may well be in a position to sell privately a consignment which may have been heavily discounted for defects by the auction inspectors. The majority of imports are bought on a fixed-price basis by importers. It is, however, increasingly common for importers to trade on a consignment basis and charge a usual commission of 10% (SMFCFWE, 1996).

Consumer preferences

Consumption throughout the year is fairly consistent and a large proportion of purchases is made on impulse. Peak sales occur on occasions such as Mother's Day (the second Sunday in May), Easter, Christmas and Valentine's Day. The main preference in the Netherlands is for roses, followed by chrysanthemums and carnations.

Competition

The Netherlands has the largest and most efficient flower and plant producers in the world. These producers have access to the most advanced technical and research services. The large and efficient auctions have the greatest concentration of these products in the world. Quality standards are exceptionally high and the market has no place for products of lower quality. This does not suggest that it offers no opportunities to new suppliers, but it does emphasise that quality is of great importance (SMFCFWE, 1996).

Prices

Market forces dictate the price. Up-to-date price information can be obtained from the auctions and, for selected flowers of special interest to developing countries, from the ITC Market News Service, (MNS). Prices can vary widely, from one day to the next and from one quality grade to another. A weekly periodical, the *Vakblad voor de Bloemisterij*, provides information on markets and auction prices.

Promotion

The Netherlands conducts domestic and worldwide promotional campaigns for flowers and plants. These campaigns are co-ordinated by the Marketing Group for Floricultural Products comprising members of the Produktscap voor Siergewassen (the commodity board for floricultural products), the Board of Floricultural Wholesalers, the Federation of Dutch Flower Auctions and the Flower Council of Holland (Bloemenbureau Holland). The group is funded by contributions from horticulturists and the trade. A number of annual trade fairs are held, including several of relevance to potential exporters. The National Professional Flower Exhibitions, held in Aalsmeer in November, disseminate marketing and technical information about the cut flower and pot plant industries. NTV, the horticultural trade fair, is held at Bleiswijk in February and is aimed primarily at promoting the latest technical developments; it also provides some marketing information. The Westland Plant Exhibition held in March

and September at the Westland auction provides a forum for importers and exporters (Seminar on marketing fruits and cut flowers to Western Europe, 1996).

Market opportunities

The market for imported flowers has expanded rapidly in recent years. The Netherlands is a particularly important market for exporters in developing countries, because in 1994 these countries contributed close to 29% of Dutch imports and this share is increasing. The following factors hinder opportunities:

- Competition is strong and expected to become stronger.
- The Netherlands has some of the largest and most efficient producers of cut flowers in the
 world. Located as they are near to the auctions they are in a position to supply and offer
 flowers of the highest standard of quality.
- Supplies come from many other countries, especially Israel, where the quality standards are also high.
- Unless quality standards are maintained at a very high level, long-term prospects are limited.
- Prices are likely to continue to decline in real terms.
- Unless exporters can eliminate flowers of inconsistent quality, they will not have direct access to the auctions in future.

The major advantages of the auction system, in addition to fast and reliable payment procedures, are the unbiased quality reports on all consignments. However, the risks of marketing in the Netherlands can be high for those producers unable to maintain uniformly high quality and consistent grading.

The importance of specific flowers

Roses are the most popular flowers in the Netherlands, but only just over 8% of demand is met through imports (1994). Imports are increasing at a very high rate; volume increased more than three times during the five-year period from 1989 to 1994. Around 90% of all roses are imported by the auctioneers. Two-thirds of these imports are of the small flowered varieties and only one-third the large flowered roses. Auction imports of the large flowered varieties increased by 20% from 1993 to 1994, while imports of the small flowered varieties increased only marginally. Between 80% and 90% of all imports occur during the European

winter (1 November to 31 May). Major sources of imports are Israel, Kenya and Zimbabwe. In 1993, Ecuador was the fourth-largest source of imports during the winter period. In the expanding Dutch rose import market, there are clearly opportunities for producers in Malaysia and South Africa during the winter period, particularly from December to the end of February. Before starting production for export, the exporter should bear in mind that the rose is a delicate flower, requiring careful treatment and handling. Distant suppliers are vulnerable to quality problems if delivery is delayed or if the roses are subjected to high temperatures in transit. Given the heavy price discounting for any quality defects and a well-supplied market, the Netherlands presents large risks to all but high-quality, low-cost producers.

The chrysanthemum is the second most important flower in the Netherlands markets. Only an estimated 1% is imported, mainly from Israel and Zimbabwe and only from December to February. Chrysanthemums have a high volume and low weight which usually entails high freight rates, making this relatively cheap flower uncompetitive when transported from a remote location.

Carnations are extremely important in the international flower trade. The total imports in 1993 of 582 million stems represent approximately 50% of total Dutch auction sales. Approximately 80% of imports are of the spray varieties and 20% standard varieties. It should be noted that in 1995 the split between the two changed to 75% spray varieties and 25% standard varieties. The market prospects are not easy to define. The following factors should be taken into consideration: (a) Import demand is increasing as local Dutch production is decreasing, (b) supply is increasing faster than demand as more and more countries produce carnations for export, (c) reports indicate considerable increases in Spanish production and (d) downward pressure on prices. Market opportunities do exist, although it will become increasingly difficult for non-European producers to gain access to this market. There will always be room for the best producers, with high-quality flowers at competitive prices. It is vital for producers in South Africa to obtain reasonable airfreight rates.

Many different species of summer flowers are produced in the Netherlands, both under glass and in the open. In addition there are significant imports of several species. However, the total supply of many of these species is small and consequently these flowers are vulnerable to oversupply.

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The opportunities for tropical flowers are extremely limited. Competition is keen from local producers, from orchid growers in Thailand and from anthurium growers in Jamaica and Mauritius (SMFCFWE, 1996).

Production costs

A comparative analysis (White, 1996) of Uganda, the Netherlands, Kenya, Zambia and Zimbabwe estimated the operating and capital costs of a one-hectare rose farm in the Netherlands. Table 3.12 gives the estimated minimum capital costs of building a modern rose farm in the Netherlands.

Table 3.12: The Netherlands: Capital costs of 1-hectare rose farm

Item	\$	
Glasshouse (basic structure) Venlo design	400 000	
Boiler heating and pipework	160 000	
Computer control / thermal screens	90 000	
Hydroponics / substrate equipment	80 000	
Lighting	200 000	
Rose plants	155 000	
Total	1 085 000	

Source: White, 1996.

Using the standard production costs prepared by the Netherlands Ministry of agriculture, the annual operating costs of an average producer in the Netherlands, excluding greenhouse depreciation of \$38.75/m² and depreciation and interest costs of \$12.0/m², amount to a total of \$50.75/m². At these costs the producer will lose money unless he achieves high yields of high quality. Table 3.13 presents the annual operating costs of a rose farm in the Netherlands:

Table 3.13: The Netherlands rose farm - annual costs (%)

\$	\$/m ²
560 000	56
180 000	18
22 000	2,2
95 000	9,5
14 000	1,4
25 000	2,5
45 500	4,55
120 000	12
507 500	50,7
	560 000 180 000 22 000 95 000 14 000 25 000 45 500 120 000

Source: White, 1996

3.5 The Australian flower industry

3.5.1 Introduction

Australia was included in this study because the rivalry between the South African and Australian flower industries has intensified in recent years. This competitive interaction is seen firstly in the fact that both Australia and South Africa can produce a wide variety of increasingly popular native flower varieties and compete for market share in the large world markets such as the EU, Japan and the USA. Secondly, Australia is probably South Africa's largest and fastest-growing market and Australia's second-largest supplier. South Africa exported large quantities of roses, carnations and chrysanthemums valued at R2,5 million to Australia in 1996. This increased by more than 220% to R5,5 million in 1997 (FECA, 1997). The rest of this section will discuss factors such as production, marketing and trade.

3.5.2 Production

There are 26 major flower-producing countries in the world. Total production by the top 15 countries accounts for a consumption of cut flowers amounting to \$33 billion (1996). By comparison, Australian floricultural production comprises less than 1% of world flower trade (Karingal Consultants; 1997). Domestic production is estimated to be valued at R918 million at the farm gate and R1190 million at the retail level. Although these projections do not appear to be based on any published detailed survey work, these values are quoted by industry

experts in various publications (Karingal Consultants; 1997; ACIAR, 1996; Lewis et al., 1997).

The Australian cut flower industry can be regarded as consisting of two broad subindustries – one involved in growing and harvesting Australian native flowers and the other in producing the traditional temperate flowers, mostly exotic, that dominate commercial production and consumption throughout the world (ACIAR, 1996).

3.5.2.1 Wildflowers

The wildflower industry in Australia is significantly export-oriented. Western Australia and Queensland are the main production areas (FECA, 1996). The wildflower industry in Australia includes Australian native flower species and South African proteaceae species. The Australian native flowers grown or picked exclusively for the fresh flower export market include Australian waxflower, kangaroo paw, banksia, waratah, snowflower and boronia. The South African proteas grown in Australia consist of pincushions, sylvan red, safari sunset and protea pink ice which form the basis of Australia's protea plantations (James, 1996).

Native Australian flowers are produced in many other countries in the world and the estimated size of Australian native flower production worldwide is estimated at R1,3 billion (wholesale). Australia produces wildflowers worth about R284 million. In world terms, Australian production of Australian native flowers and exotic proteas comprises only 10% of world production, although industry sources suggest that Australia produces about 30% of world waxflower production (FECA, 1996).

3.5.2.2 Traditional flowers

The vast majority (about 90%) of flowers grown in Australia are traditional flowers such as roses, carnations, orchids, lilies, statice, alstroemeria, lisianthus, calla lily, tulips, freesias and gypsophila. They are grown primarily to service the domestic market and to a lesser extent, the export sector

At present, most traditional flowers are grown in Victoria, New South Wales (NSW) and Tasmania. Victoria is the largest producer state in value terms, followed by Queensland, NSW and Tasmania. Growers tend to locate close to the major markets. Most of the growers

depend on longstanding ties with overseas breeders and technology suppliers in the Netherlands, USA and Japan (James, 1996).

Australia is beginning to face import competition from low-cost growers in Africa and Asia who are extensively involved in greenhouse production.

There is a tendency by authors to ignore the fact that about 90% of the Australian flower industry consists of traditional flower production and consumption, yet no real attempt has been made to make information available to producers and marketers.

3.5.3 Domestic marketing

As mentioned previously, the domestic market in Australia is dominated by traditional flowers such as roses, chrysanthemums, carnations and orchids.

The distribution structure of the Australian flower industry consists of the following elements: there are 2 600 flower growers in Australia and 7% of production is exported by 100 exporters. The remaining 93% and additional imports from 15 importing firms are distributed through several distribution channels to reach the consumer. The rest of the marketing structure includes wholesalers, central markets, 2 300 florists, 4 500 fruit and vegetable shops, 900 hawkers, 1 450 supermarkets and 9 000 other retailers. This situation is illustrated below in Figure 3.2. The relative importance of each element in the distribution channel is indicated by a percentage.

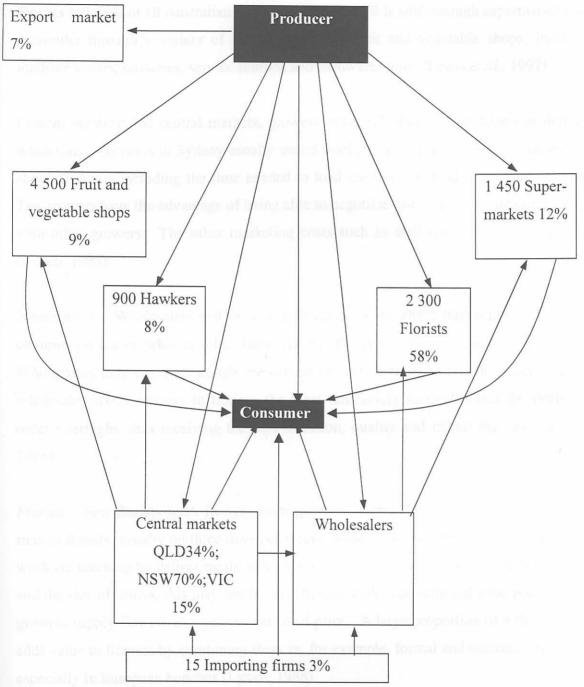


Figure 3.2: Flowchart of the relative importance of different distribution channels in the Australian market. Source: Lewis et al., 1997

There is no single strong central market for cut flowers in Australia. Growers distribute flowers directly to local outlets, through metropolitan and regional flower markets (as grower vendors or through agents) or to independent wholesalers. Central markets in Brisbane, Sydney and Melbourne handle 34%, 70% and 18% respectively of all flowers from their respective states.

Florists sell 58% of all Australian flowers, of which 12% is sold through supermarkets and the remainder through a variety of outlets, including fruit and vegetable shops, hawkers and roadside sellers, nurseries, service stations and hardware stores (Lewis *et al.*, 1997).

Central markets: At central markets, growers either sell their own products or deliver to a wholesaler. Growers in Sydney usually attend markets three days a week, which would take about 20 hours including the time needed to load the truck, unload at the markets and sell. The growers have the advantage of being able to negotiate prices directly and compare quality with other growers. The other marketing costs such as stall rental are comparatively low (Lynch, 1988).

Wholesalers: Wholesalers sell on consignment as a merchant transaction or claim a flat commission fee on what is sold. However, the flat commission fee is becoming very rare. Wholesalers may operate through the central market or from a separate warehouse. If the wholesaler offers delivery to florists, the most satisfactory method is that the florist should order overnight, thus receiving the best selection, quality and colour the next day (Lynch, 1988).

Florists: Few florists fetch flowers from growers' farms. Therefore growers have delivery runs to florists, usually on three days per week. Most growers state that at least 15 hours per week are taken up by delivering directly to florists. In terms of the number of florists serviced and the size of orders, this may not be an efficient method of selling if time is costed. Many growers supply flowers at a year-round fixed price. A large proportion of a florists business adds value to flowers by combining them in, for example, formal and informal arrangements, especially in European bunches (Lynch, 1988).

Supermarkets: This is a sales area that has been steadily increasing as it follows overseas trends. In the USA a large percentage of flowers are sold through supermarkets. It is usual that one wholesaler per state supplies supermarket chains. Presentation is improving dramatically and competitive pricing should ensure that flower purchases become a more routine event for consumers (Lynch, 1988).

Dealers: Dealers usually collect flowers from growers' farms and deliver to outer metropolitan or country florists (Lynch, 1988).

Fruit shops: Fruit shops rely mainly on impulse buyers. They usually have low quality flowers displayed in front of the shop where they are exposed to heat, direct sunlight and car exhaust fumes; and usually keep better-quality more expensive flowers in a cool room (Lynch, 1988).

Roadside sellers: Roadside sellers rely on impulse buying and supply lower quality flowers at lower prices. In terms of most council by-laws, roadside selling is illegal but tolerated. The prices of flowers sold in this way, have remained static (Lynch, 1988).

3.5.4 Exports

Australian flower exports have grown rapidly over the past few years, from A\$2,9 million in 1980/81 to A\$30.1million in 1995/96 (Table 3.14).

Table 3.14: Australian flower exports

Year	A\$(FOB)	%Change
1980/81	2 900 000	6,1
1982/83	2 600 000	-3,33
1984/85	3 500 000	34,61
1986/87	7 400 000	111,42
1988/89	14 500 000	95,94
1990/91	17 600 000	21,37
1992/93	23 100 000	31,25
1993/94	25 700 000	11,25
1994/95	26 600 000	3,5
1995/96	30 100 000	13,15

Source: ABS

Australia's main export destinations are Japan, USA and the Netherlands, absorbing approximately 48%, 15% and 10% respectively of total exports in 1996. This is illustrated in Table 3.15.

Table 3.15: Major export markets

MAJOR MARKETS FOR AUSTRALIAN FLOWERS				
Country	Value A\$m	%	Volume (mt)	9%
Japan	14,43	47,81	1928	44,13
USA	4,61	15,28	699	16,00
The Netherlands	3,16	10,48	456	10,43
Germany	2,24	7,43	352	8,05
Canada	0,97	3,24	430	9,84
Switzerland	0,92	3,07	114	2,60
Hong Kong	0,81	2,68	216	4,94
Italy	0,64	2,15	121	2,77
Taiwan	0.64	2,15	66	1,51
Singapore	0,34	1,15	48	1,09
New Zealand	0,24	0,80	18	0,41
Malaysia	0,23	0,78	40	0,91

Source: ABS

Australia is the fifth-largest exporter of cut flowers into Japan. After a 17% increase in exports to Japan from 1994 to 1995, there was a 10% decline between 1995 and 1996. Australian cut flower exports to Japan were valued at \$10 335 000 in 1994, \$12 086 000 in 1995 and \$10 895 000 in 1996. Australia is the eleventh-largest exporter of cut flowers into the USA. Exports of Australian cut flowers to the USA decreased by 11% from \$4 227 000 in 1994 to \$3 783 000 in 1995 and decreased a further 1% to \$3 728 000 in 1996. Australian exports to the Netherlands also decreased over the last couple of years. Exports valued at \$1 289 000 in 1994 decreased to \$1 283 000 in 1995 and decreased by a further 14% to \$1 107 000 in 1996. This situation is illustrated in Figure 3.3 below (IFTS, 1997).

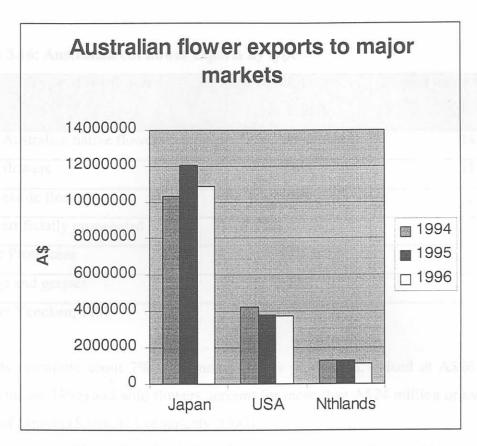


Figure 3.3: Australian flower exports to major markets

Source: IFTS, 1997

When analysing Australia's export statistics it is evident that Australia's exports are increasing (ABS, various years). However, decreases in exports to major countries have occurred in recent years (IFTS, 1997). This might be an indication that Australian flower exporters are starting to move away from the major export markets such as Japan, the USA and the Netherlands, and are finding more lucrative markets elsewhere.

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Table 3.16: Australian cut flower exports by type

Type of cut flower	% of total exports in 1995/6	Export value (1995/6) A\$	
Fresh Australian native flowers	49%	14 749 000	
Dried flowers	38%	11 438 000	
Fresh exotic flowers	9%	2 709 000	
Fresh artificially propagated orchids	2%	602 000	
Exotic Proteaceae	1%	302 000	
Foliage and grasses	1%	302 000	

Source: Yencken, 1997

Exports constitute about 7% of domestic flower production, valued at A\$26,67 million in 1996 (James, 1996) and wild flowers account for more than A\$24 million or over 90% of the value of exports (Karingal Consultants, 1993).

Fresh and dried flowers

The value of Australian exports of fresh flowers (excluding orchids) to major final destinations more than doubled from A\$7,8 million (f.o.b.) in 1990/91 to A\$15.9 million in 1992/93, but fell markedly to A\$12 million in 1993/94 and to A\$10,4 million in 1994/95. According to the Japan Tariff Association, in 1991 Australia exported 1 053 tonnes of fresh cut flowers to Japan, valued at ¥1 280 million (JTA, 1991-1995). In 1995 the figures were 1 302 tonnes valued at ¥1 108 million. The average return per kg for fresh cut flowers exported to Japan fell markedly over this period. It is clear that Australia's flower exporters achieved increased exports at the expense of price (Lewis et al., 1997).

The value of Australian exports of dried flowers (excluding orchids) to major final destinations increased by more than 120% from A\$6,5 million (f.o.b.) in 1990/91 to A\$14,3 million in 1994/95. Therefore in 1994/95 the value of dried flower exports greatly exceeded that of fresh flower exports. Japan was once again the main export destination, accounting for approximately 42% of the total value. Japanese flower imports trebled in value from A\$2 million (f.o.b.) in 1990/91 to A\$6,1 million in 1994/95. Other major countries of final destination are the United States, Germany and the Netherlands

Export forecasts

Even though there are decreases in exports to Australia's major markets, the Flower Export Council of Australia (FECA) still believe that the overseas demand for Australian floricultural products is increasing. The five-year forecast for increased exports by region is illustrated in Table 3.17 and shows that all major markets are expected to grow

Table 3.17: Forecasted demand increase for Australian floricultural products

Region	Forecasted demand increase per annum		
North Asia	9%		
South Asia	15%		
Europe	6%		
North America	8%		
Other markets	10%		

Source: FECA, 1996

Predictions of strong demand have been received from the Japan Cut Flower Importer Association (JCIA) for the next decade and this leads Australian flower exporters to believe that exports to Japan can be increased from \$30 million in 1996 to \$40 million in 2000 (FECA, 1996).

3.5.5 Imports

Flower imports still supply a very small percentage of the market in Australia. In 1996 Australia imported flowers to the value of A\$6 million, increasing by 25% to A\$8 million in 1997. The exact statistics appear in Table 3.18 (ABS, 1996-1997). The major import products are roses, chrysanthemums, orchids and tulips. These are sourced mainly from Zimbabwe, South Africa, Singapore, Malaysia, Mauritius and Thailand (ABS, 1996-1997). The role of the Netherlands as a main source is declining as countries such as Zimbabwe and South Africa become more important sources, primarily of roses and chrysanthemums, while tropical orchids are the major imports from Singapore, Malaysia and Thailand (James, 1996).

Table 3.18: Flowers imported into Australia

Country	\$m 1996	\$m 1997	Tonnes 1996	Tonnes 1997
Zimbabwe	1 540 492	2 040 320	143 464	205 695
South Africa	733 793	1 609 242	68 662	149 868
Malaysia	890 877	1 061 263	120 815	157 185
Singapore	755 451	894 740	81 534	134 748
Mauritius	677 422	685 321	39 254	40 043
Thailand	166 548	168 352	2 673	31 872
Other	1 197 592	1 527 409	97 798	146 756
Total	59 62 175	7 986 647	578 257	866 167

Source: ABS, 1998

3.6 Conclusion

This chapter contains an overview of the international environment in which the South African flower industry operates. A short overview of the world flower industry, profiles of South Africa's major competitors in the world flower market, the Western European markets and a profile of the Australian flower industry, which is regarded both as a potential competitor and as a potential market will provide a basis for the analysis appearing in Chapter 5.