Nomadic nature of floriculture in East Africa

MSc by dissertation

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Nomadic nature of floriculture in East Africa

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Abstract

Floriculture tends to move from one place to another, in this dissertation referred to as nomadism. The moving from one place to another is caused by finding the optimal circumstances for production of flowers and floricultural propagation material. Objective of this research is to identify the suggested nomadic nature, the reasons and problems raised by this for all stakeholders and possible solutions. The Netherlands flower auctions are the main sales channel for roses in the Netherlands with a share of 58% of the total amount of imported roses. Major import countries for the auctions is Kenya, while Ethiopia shows high growth rates since 2003. Zimbabwe and Israel have dropped in exports to the Netherlands. As for cutting production developing countries are raising quickly due to lower costs, more suitable climate, opposite season and spreading risks. Kenya was the first African country with high production. In this research Kenya, Ethiopia, Zimbabwe, Uganda, Tanzania, South Africa and Israel are given a closer look. A field research was done by interviews with several stakeholders and by a questionnaire per e-mail to 'foreign' growers in Ethiopia and Kenya. Main reasons for starting a company in Ethiopia (57%) and Kenya (60%) are climate and costs. Overall conclusions are that floriculture is nomadic, with the amounts exported from various countries changing over time. Cut flower growers themselves do not show a nomadic nature. (Multinational) breeding and propagation companies more often do show a nomadic nature. Floriculture has shown to have a key role in sustainable development in a country and enhances emancipation. A challenge for

these countries is to become more independent from foreign knowledge. Education or capacity building is a key factor for success in this.

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ACP	African, Caribbean and Pacific Group of States
AIDS	Acquired Immuno-Deficiency Syndrome
AIPH	International Association of Horticultural Producers
CBI	Centre for the Promotion of Imports from developing countries
CBS	Centraal Bureau voor de Statistiek (Netherlands Statistical Office)
CEO	Chief Executive Officer
DAC	Development Assistance Committee
EAF	East African Flowers
EARO	Ethiopian Agricultural Research Organization
EHPEA	Ethiopian Horticulture Producers Exporters Association
EPA	Economic Partnership Agreement
EPC	Export Promotion Council (Kenya)
EU	European Union
Eurostat	Statistical Office of the European Communities
FAO	Food and Agricultural Organisation (division of the United Nations)
GNP	Gross National Product
GTIS	Global Trade Information Services
HCDA	Horticultural Crops Development Authority (Kenya)
HPC	Horticultural Promotion Council
KARI	Kenya Agricultural Research Institute
KePHIS	Kenya Plant Health Inspectorate Service
KFC	Kenya Flower Council
KSh	Kenyan Shilling (KSh 100.79 = € 1.00 (March 2008))
KLM	Royal Dutch Airlines
LCD	Least Developed Countries

MoTI	Ethiopian Ministry of Trade and Industry
MPS	certification programme in floricultural sector
MVO	Social Responsible Entrepreneurship
PSOM	Program for Co-operation with Emerging Markets
SSA	Sub Saharan Africa
TAHA	Tanzania Association of Horticulture
TFA	TeleFlower Auction
UFEA	Uganda Flower Exporters Association
UK	United Kingdom
UPOV	International Union for the Protection of New Varieties of Plants
USA	United States of America
US$	United States Dollar (US$ 1.00 = € 1.55 (March 2008))
USITC	United States International Trade Commission
VAT	Value Added Tax
VBA	Verenigde Bloemenveilingen Aalsmeer (Flower Auction Aalsmeer)
VBN	Vereniging van Bloemenveilingen in Nederland (Dutch Flower Auctions Association)
VON	Veiling Oost Nederland (Flower Auction East Netherlands)
WTO	World Trade Organization
WUR-LEI	Agricultural Economic Institute of Wageningen University and Research

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This thesis would not have been possible without the support of many people. First of all I would like the show my appreciation to my employer HAS Den Bosch University of Applied Sciences. The management, colleagues and students of the Green Business School supported me in time, means and inspiration.

The second group of people I'd like to thank are my supervisors. I was fortunate to have three of them from different back grounds but all interested in Africa. Main supervisor was Chris Bishop, lecturer at Writtle College. Assisting supervisors were Jan Mantel, former head of the International Office of HAS Den Bosch, and Jos Leeters, lecturer at Hogeschool van Hall-Larenstein and consultant for CBI. The three of them inspired me to look further than the obvious.

The field research was only possible because growers and other stakeholders in floriculture were willing to contribute. I hope the conclusions and recommendations will help the growers and other stakeholders in further sustainable development of their business. I want to mention especially the personal help of the Agricultural counsellor of the Netherlands embassy in Nairobi.

Last, but certainly not least, I would like to thank especially my husband Jos and my daughters for their support. They have kept the family life going, so I had the chance to finish my MSc at last. I would thus like to dedicate this thesis to Marjolein, Mariska, Jorinde and Mathilde. I hope they will be as proud of their future work some day as I am of this dissertation today.

1 Introduction and problem statement

Floriculture is a major player in agricultural production worldwide. Consumption of flowers is mostly in the wealthy parts of the world, generally the northern hemisphere. Production of the flowers used to be close to the market, since flowers are perishable. Production has moved to southern regions because production in the northern hemisphere has grown to be difficult due to costs, lack of space and suboptimal growing conditions while the transport from other regions on the other end has become a lesser obstacle. At first south European countries like Spain and Portugal were attractive, as well as Israel. Later on production for the European market has shifted mainly to Africa. In general a north-south connection can be found in international production and consumption, so South America is major supplier for USA and Canada and Africa is major supplier for EU.

Floriculture seems to have a nomadic nature, growers seeking the most profitable place for their production. In general this means moving to places where the circumstances are most favourable for their production. These circumstances can be climate and other cultivation factors (production of cuttings in the southern hemisphere), costs (labour and energy costs are extremely high in the Netherlands), preventing limiting factors like space or regulations, political and social instability (Zimbabwe), safety issues (Kenya at present), proximity to the market or personal circumstances. For instance flower production has moved from Israel towards Africa due to political problems and lack of water. The latest movement of floriculture is towards Ethiopia, which makes Ethiopia booming business over the last five years.

This dissertation will address several subjects related to nomadism in floriculture. This chapter is a general introduction to the dissertation. Chapter 2 gives a general introduction on floriculture, sales of flowers and figures of imported products. This will prove the increasing importance of the import in flower sales, roses in particular, as well as the significant role of the Dutch flower auctions. Also the production and export of cuttings is addressed. Roses and cuttings are produced differently and the companies, markets and demands are quite different. Both types of products are referred to in the field research. In chapter 3 the main flower exporting countries are identified through auction supply in recent years and a decade before. Top exporting countries like Kenya, Ethiopia and Tanzania are discussed, as well as the development in Zimbabwe and Israel. Israel is included as non-East African country for being the (former) major non-European supplier of the Netherlands auctions. In chapter 4 addresses the remaining issues found during desk research, classified by strengthening and weakening influences for the sector in developing countries in floriculture. In chapter 5 the methodology of the research is explained. In chapter 6 the results of two surveys in Ethiopia and Kenya are presented and discussed. In chapter 7 the results of the literature review and surveys are discussed. Chapter 8 will give conclusions and recommendations.

Four case studies can be found in appendix 1, a list of Sub-Saharan countries (appendix 2), the questionnaire sent to Ethiopia (appendix 3) and Kenya (appendix 4) as well as the list of responding companies (appendix 5).

The references from horticultural magazines like Vakblad voor de Bloemisterij are often referred to by year of publication (issue) page number.

Problem statement

By moving from one country to another, looking for more beneficial circumstances, growers seem to ignore the economic and social impact. What are the ways for a country to preserve the floricultural industry, either by holding growers in the country or to prepare local people to manage a farm?

Objectives of the research

Identify the postulated nomadic nature of floricultural growers, the reasons and problems raised by this for all stakeholders and possible solutions for the countries involved. These solutions can both be keeping the growers in place or capacity building to continue business.

Research questions:

- What is nomadic behaviour?
- Why do growers tend to move from one place to another?
- Where is this nomadic behaviour observed?
- Which are the repercussions?
- From the point of view of the country:
    - How to prevent growers from moving out?
    - What remains after the growers are gone and how to use the resources?
- From the point of view of the growers:
    - What is necessary to remain in the same place?
    - Participation in sustainable development for the country.

2 Floriculture: sector, auction and imports

In this chapter floriculture is briefly introduced. The importance of different produce on flower auctions and the role of imports is discussed. Apart from a focus on cut flowers in general developments in roses and cuttings are highlighted. The development of exports in various countries is shown as an introduction to chapter 3.

2.1 Introduction

Floriculture is the horticultural sector in which the propagation, production and wholesale/retail distribution of cut flowers and foliage, pot plants (flowering and non-flowering), bedding plants and herbaceous perennials is gathered (Poincelot, 2004). A significant part of floriculture involves meeting seasonal markets, for example bedding plants in springtime, poinsettia for Christmas and potted chrysanthemums for All Souls' Day. The main destination of the produce is decoration of house and garden, decoration of for example special occasions and serving as a gift on several occasions.

Floricultural products are grown either in protective structures like greenhouses or in open fields. The production method and place are chosen depending on the type and needs of the product, its final destination and economic considerations. For instance perennials have a final destination in the garden, so grown in a greenhouse they might be too ‘soft’ to survive a winter in the garden when planted straight from the greenhouse environment in the garden. From the economic perspective it is too expensive to grow them in a protective structure since the final quality reached in the field is good enough for the purpose.

2.2 Netherlands flower auctions

In the Netherlands approximately 82% of the floricultural produce is sold through the auctions (CBI, 2007). The floricultural auctions are united in the VBN (Dutch Flower Auctions Association). The total amount of produce sold through the VBN-auctions in 2007 was 12.6 billion pieces, amounting to 4.2 billion euro. The most important flower auction in the Netherlands until 1 January 2008 were FloraHolland (55.3% of all floricultural produce at VBN-auctions) and the VBA (42.1% of all produce), now merged in FloraHolland (97.4% of market share). The remaining two smaller auctions (Vleuten and VON) also merged 1 January 2008 under the name Plantion and have a more regional function with their joined 2.6% of the total amount of produce. The turn-over of 4.2 billion euro at VBN-auctions is spread over cut flowers (61.3%), pot plants (31.1%) and garden plants (7.6%) (Vakblad 21a, 2008). The range of products at the auction is wide (Plate 2.1).

Plate 2.1 Supply of cut flowers at FloraHolland in Naaldwijk on 3. October 2006 (picture I. van Meggelen).

Focussing on cut flowers as the main group the turn-over can be divided in to Netherlands production and imports (Table 2.1). The auctions handles 60% of the flowers imported to the Netherlands. The import share of developing countries in imports by the Netherlands with 78% is by far the largest in the EU (CBI, 2007). Notable the difference in percentage supply sold, which shows more imported produce is withdrawn from the market than Netherlands produce. Another significant remark is the difference in price. On average imported products are sold at lower prices than Netherlands products. The main reasons are the quality of the Netherlands produce, the freshness, the wider range comprising a number of specialised high priced products. As for the quality and freshness, deterioration during transport affects imported flowers severely (CBI, 2007).

Table 2.1 Cut flowers. Turn-over, supply, share sold supply and average price of Netherlands production and imports at VBN-auctions in 2007 (source: Meggelen, 2008).

	Turnover (million €)	In- or decrease to 2006 (%)	Supply (million pieces)	In- or decrease to 2006 (%)	% supply sold	Price 2007 (€/piece)
Netherlands production	1,984	+0.7	7,832	-1.7	99.4	0.25
Imports	564	+6.2	3,541	+3.2	98.7	0.16
Total	2,548	+1.9	11,373	-0.2	99.2	0.23

In Table 2.2 the main products sold at the VBN-auctions are shown in ranking of supply. Since prices have a major influence on the turn-over and the main focus in this dissertation is the production the top 10 is arranged by supply in million pieces. As can be found from Table 2.1 on average 99.2% of all supply is being sold, only 0.8% is withdrawn from the market.

Table 2.2 Top 10 cut flowers in supply at the VBN-auctions with their turn-over, supply, share sold supply and prices in 2007 (source: Meggelen, 2008).

		Turnover (million €)	In- or decrease to 2006 (%)	Supply (million pieces)	In- or decrease to 2006 (%)	% supply sold	Price 2007 (€/piece)
1.	Rosa	795	+4.9	3,337	-0.3	99.2	0.24
2.	Tulipa	205	-8.2	1,469	-3.4	99.4	0.14
3.	Chrysanthemum indicum. Spray	296	-1.4	1,314	-0.3	99.5	0.23
4.	Gerbera	126	+3.2	840	+10.9	98.4	0.15
5.	Lilium	171	+2.7	380	+4.0	99.7	0.45
6.	Freesia	56	+1.8	340	-7.4	99.9	0.17
7.	Alstroemeria	39	-1.3	245	-0.3	99.6	0.16
8.	Hypericum	30	+3.6	191	+11.7	99.6	0.16
9.	Dianthus	28	+2.8	190	-12.6	98.1	0.15
10.	Gypsophila	31	-6.2	180	+2.9	97.6	0.18

Of the imports 98.7% of the supply is sold and 1.3% is withdrawn from the market (Table 2.1). Compared to sales of local produce from imports more supply is withdrawn. However the average price of imports and local production is. The imports of cut flowers in to the Netherlands is dominated by roses, which account for 54.7% of all imported produce. Moreover 58.0% of all roses sold at VBN-auctions are produced outside the Netherlands.

Table 2.3 Top 10 import flowers in supply at the VBN-auctions with their turn-over, supply, share sold supply and prices in 2007 (source: Meggelen, 2008).

		Turnover (million €)	In- or decrease to 2006 (%)	Supply (million pieces)	In- or decrease to 2006(%)	% supply sold	Price 2007 (€/piece)
1.	Rosa	298	+13.7	1,938	+6.4	98.9	0.16
2.	Gypsophila	30	-4.5	173	+5.2	97.6	0.18
3.	Hypericum	26	+0.7	166	+12.7	99.7	0.16
4.	Dianthus	15	+9.4	120	-8.9	97.1	0.13
5.	Solidago	10	-9.9	78	-10.9	98.7	0.13
6.	Ruscus	5	+6.9	62	+0.1	99.4	0.09
7.	Anemone	5	+27.1	57	+29.7	99.0	0.09
8.	Ranunculus	7	+4.0	55	+13.8	98.9	0.12
9.	Ornithogalum	8	+14.7	54	+11.8	99.4	0.15
10.	Chamelaucium	8	-12.0	50	-14.5	97.9	0.15

2.3 Imports at the auctions

Sales of imported flowers at the auctions were allowed in the 1970's as a supplement on the Netherlands assortment. The main idea was to provide traders a full assortment of cut flowers of good quality throughout the year. During winter at the time it was difficult to have a good quality in Netherlands production, especially since application of the knowledge on supplemental light in the Netherlands was still low and costs of energy where high. Of course growers, the owners of the auctions, feared imports to compete their produce. Products at that time mainly were imported from Spain, Portugal and Israel, grown by local growers. In 1976 the VBN board discussed this matter again and concluded: "given the fact that imports of cut flowers in European EU is actually taking place, it is sensible to auction third country cut flowers; as long as the import flowers are a supplement to the own assortment and the supply of import flowers is within reasonable limits. Under no circumstances the auctioning may lead to disturbance of price making on the own or other auctions." The basic idea was that overall supply during all seasons would bring the Netherlands produce an optimal

profit as well. Limiting the amounts at the auctions to a certain quantum was refused, since Israel and many other exporting countries, were well able to find distribution in West-Europe themselves. EU import tariffs for Mediterranean countries of 17% in winter and 24% in summer were cut down in seven years when Spain and Portugal entered the EU in 1986 (Plantenberg, 1987).

During the 1990's as costs grew higher, space got scarce and labour was expensive and less available, Dutch growers started to relocate part of their production to other countries in southern Europe or Africa. In 1994 growers forced to auctions to restrict imports, enabled to do so by the fact that they are the owners of the auctions. It took until September 1996 for the auctions to let go of this import restrictions again (Vakblad, 1997(06)).

In 1994 the Tele Flower Auction (TFA) in Amstelveen started. Parent company of TFA is East African Flowers (EAF), agent of many African growers. Until the restraining of imports in 1994 EAF sold all imported produce at the auction clock of VBN-auctions. Through the restrictions on imports at the VBN-auctions some major producers in Kenya, Tanzania and Malawi changed to TFA for their European sales. This influenced the auction figures a lot, for instance at the time the world's major limonium producer Oserian left the VBN-auctions. After releasing the restrictions on import only part of the African growers returned to the VBN-auctions. These were mainly companies related to the originally German investment group EDESA, mostly with roses (Vakblad, 1997(45)). The effect of the restrictive measure of the auctions are clear in Figure 2.1 and 2.2.

Producers in Africa send their produce to the Netherlands auctions for several reasons. The main reason is an on average higher price, after deducting the debtor's risks. Other mentioned reasons are fast transfer of the money without risks and being able to deliver when the product is ready instead of delivering fixed amounts according agreements. Most African growers are also too small to have a strong position in negotiations with European chains (Vakblad, 1997 (36)).

To give an historic view on the development of imports the supply of cut flowers from Netherlands origin and imports at the VBN-auctions are depicted in Figure 2.1. The imports as part of the total supply at VBN-auctions can be derived from the data used for Figure 2.1 and expressed in a percentage. In Figure 2.2 this percentage is shown, growing from 14% in 1990/1991 to 31% in 2007. The dip in 1995 is explained by the restricting import policy of the VBN-auctions at the time. In 1996 the auctions opened their doors wide again for import flowers, resulting in an immense growth of the share of imports in the supply of flowers at the auctions (Vakblad, 1997 (43)).

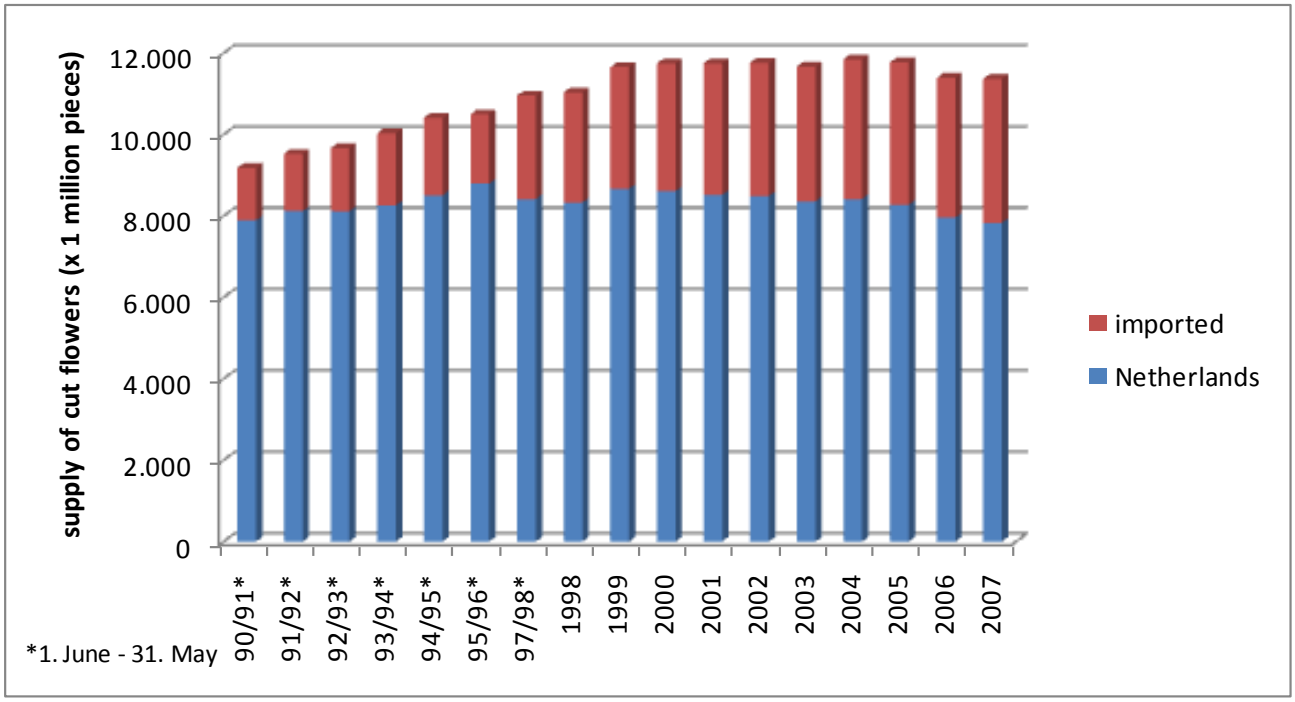


Figure 2.1 Supply of cut flowers in million pieces at VBN-auctions since 1990 and their origin (source VBN).

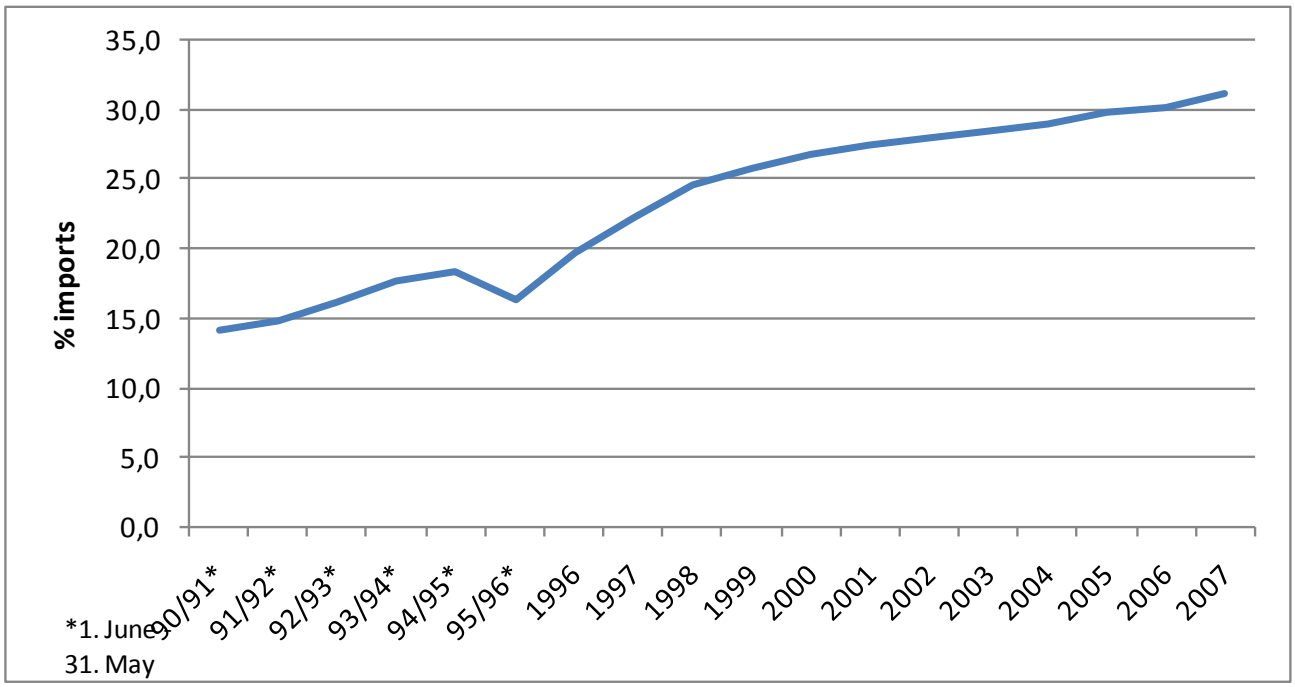


Figure 2.2 Percentage of imports in total supply of cut flowers at the VBN-auctions since 1990 (VBN; Vakblad, various years).

2.4 Roses

Since roses are the major import flowers a closer look is taken at the sales of roses at the VBN-auctions since 1990. Roses can be divided in three groups:

Hybrid Tea (big size budded roses, stem length over 80 cm), sweethearts (small size budded roses, stem length 35 – 50 cm), spray roses (more than one small budded flower per stem). At present sweethearts are increasingly replaced by so called intermediates, a flower size between Hybrid Tea and sweetheart. In the statistics they cannot be found separately, but are mostly integrated in sweethearts.

In 2007 the total amount of 3.3 billion roses was sold, in which Hybrid Tea accounted for 73%, sweethearts 25% and spray roses 2% (Meggelen, 2008(21a)). In this research in taking only Hybrid Tea and sweethearts in account for they account for 98% of all roses sold at the flower auctions.

In Figure 2.3 sales of Hybrid Tea are projected. Throughout the years sales in pieces have risen, while imports have taken an increasing share of the supply (Meggelen, Staalkaart, 1997-2008).

In Figure 2.4 the sales of sweetheart roses are presented that show a decline in total supply since 2000. Even more impressive is the fact that imports have almost completely taken over supply from the Netherlands production (Meggelen, Staalkaart, 1997-2008).

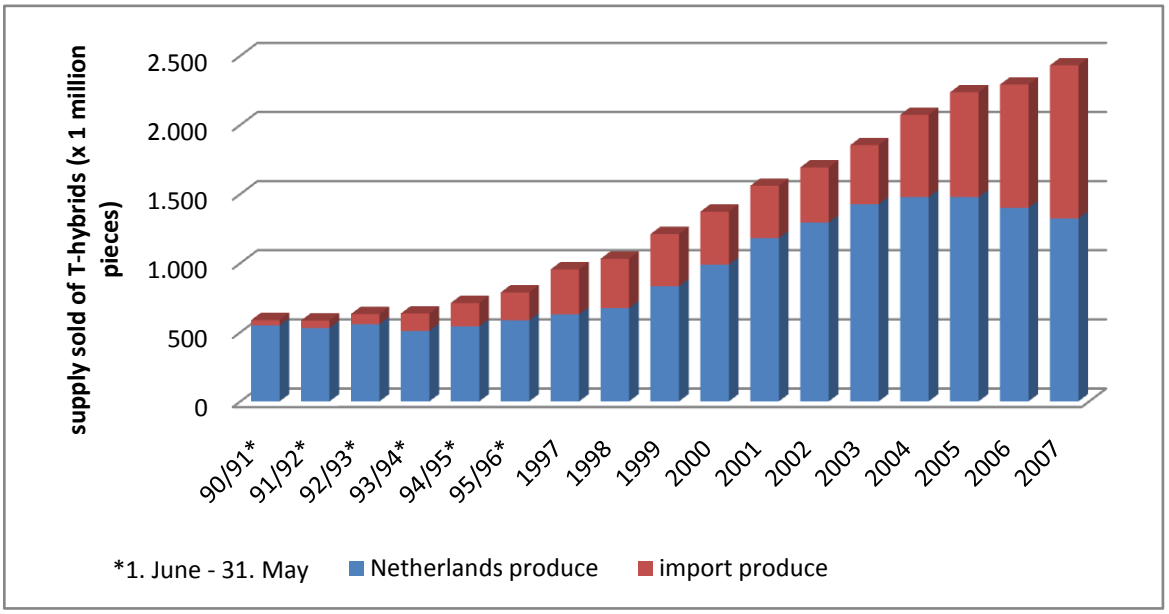


Figure 2.3 Sold supply of Hybrid Tea roses at VBN-auctions since 1990, indicating Netherlands produce, imports and total amount of pieces sold (VBN).

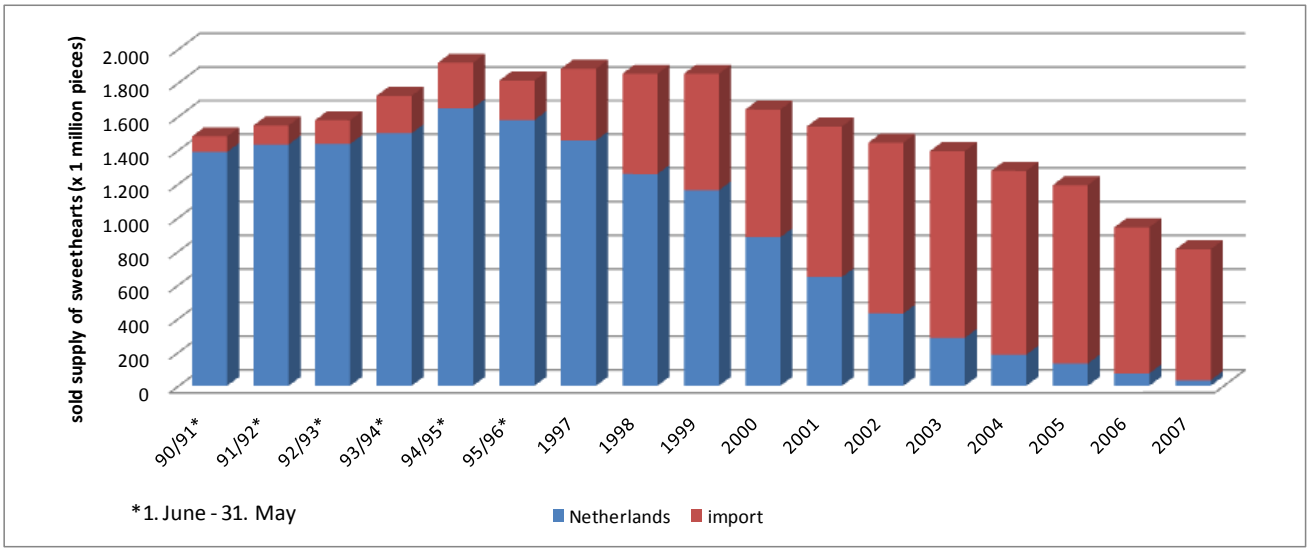


Figure 2.4 Sold supply of sweetheart roses at VBN-auctions since 1990, indicating Netherlands produce, imports and total amount of pieces sold (VBN).

The imports of roses in the Netherlands of the eight major foreign countries is indicated in Figure 2.5. It is clear that Kenya is by far the biggest supplier of roses in the Netherlands. To be able to clearly determine the movements of countries with rose exports below 500 million stem in Figure 2.6 Kenya is excluded from the data. This figure shows the immense growth of Ethiopian exports, as well as the decrease of Zimbabwe and stable growth of the imports of Uganda and stable imports from Zambia (CBS, 2008).

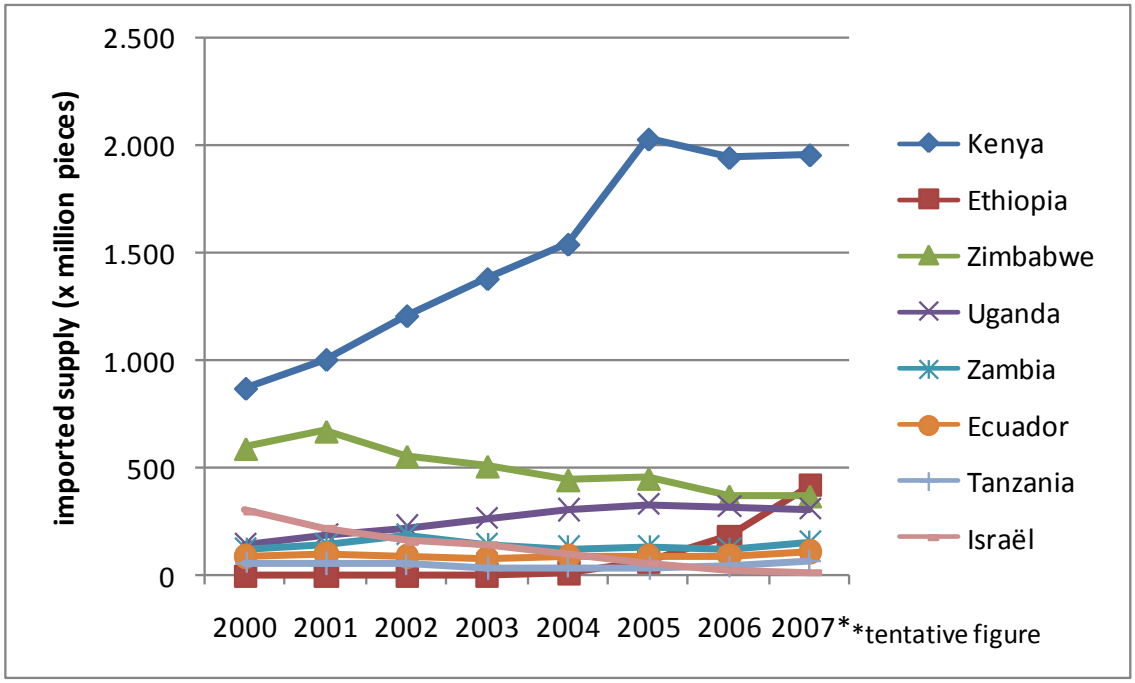


Figure 2.5 Amount of imported stems of roses in the Netherlands for the eight most important countries. (source: CBS, 2008)

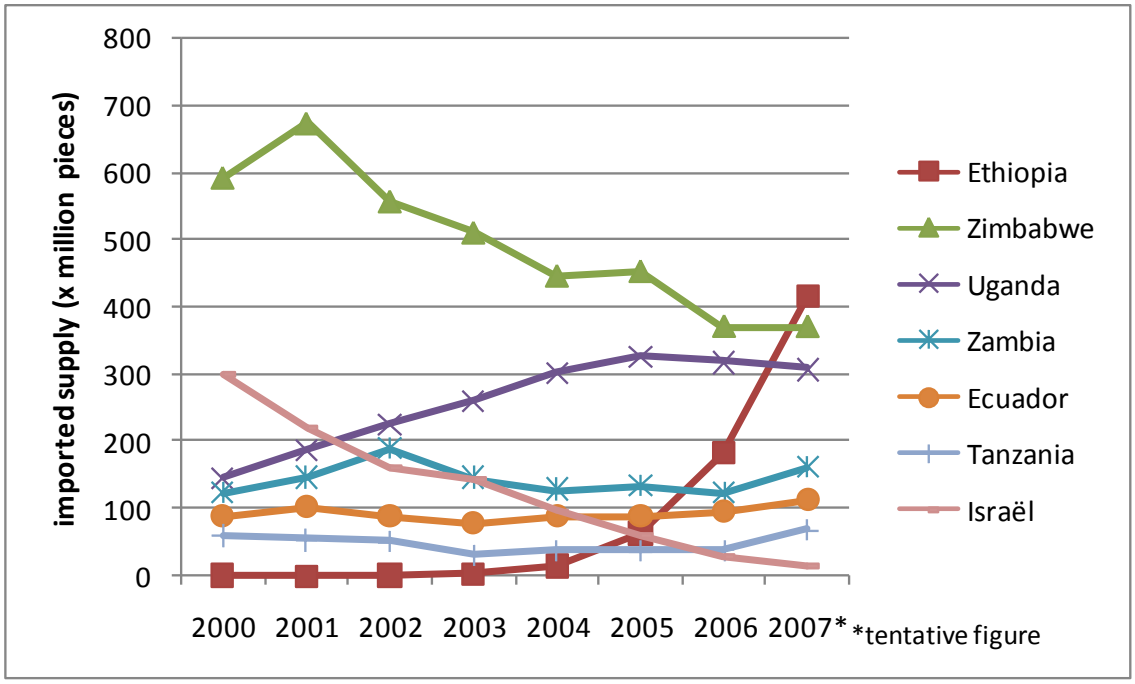


Figure 2.6 Amount of imported stems of roses in the Netherlands for the seven most important countries excluding Kenya. (source: CBS, 2008)

To identify the usefulness of data from VBN-auctions a comparison was made for the import supply in the Netherlands in total and the figures of VBN for the year 2006 (sources CBS and VBN). In Figure 2.7 is shown that for Kenya, Ethiopia, Tanzania and Israël the auction is still the most important channel for sales, other countries have more direct exports through wholesalers, importers or TeleFlower Auction (TFA). The percentage of roses sold through the VBN-auctions for the selected countries is 58% in 2006. The sales though the auction in 2002 were 61% for the same selected countries, proving that the direct sales are increasing.

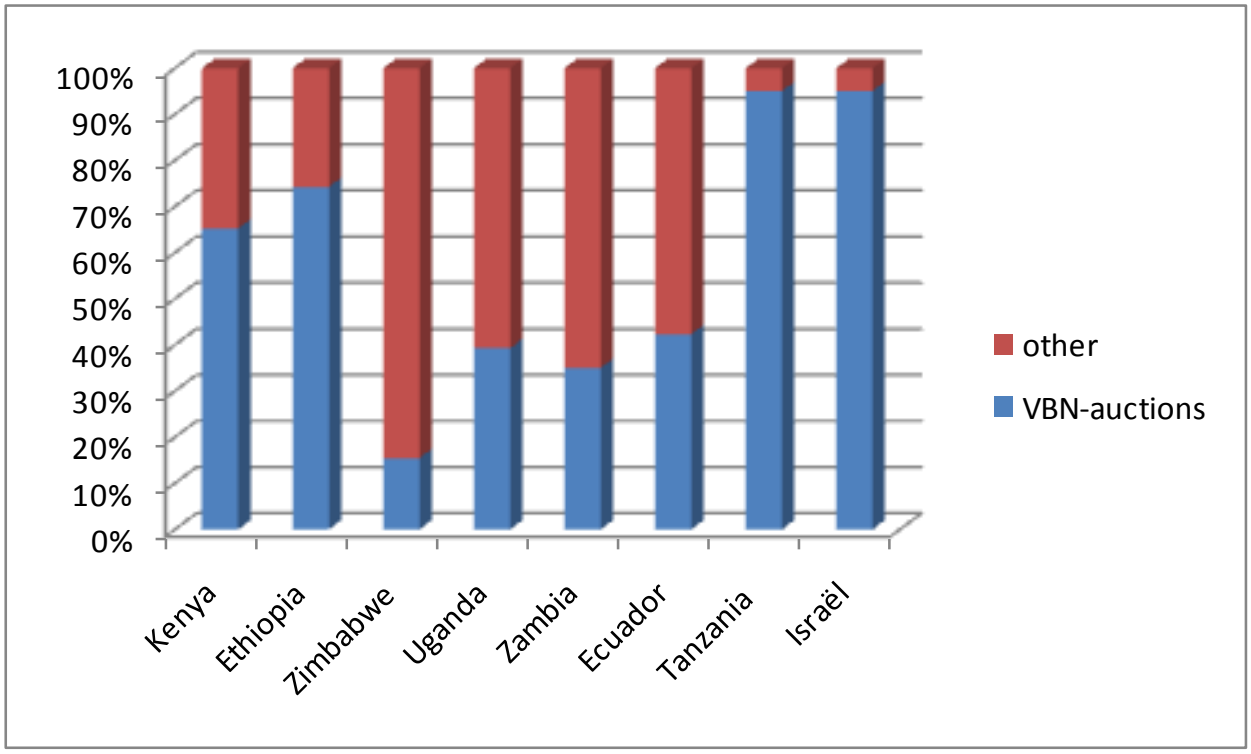


Figure 2.7 Percentage of imported roses sold through VBN-auctions in 2006 for the main supplying countries.

Since comparison of CBS-figures on imports of roses in the Netherlands and VBN-auctions figures on sold import roses show that 58% were sold through VBN-auctions, trends in production in different countries are identied through the better available VBN-figures.

In Figure 2.8 the main supplying countries for imports of roses are shown in the time span of 1986 to 1995. Clear is that Israël is a major supplier, and Kenya and Zimbabwe were raising quickly in production. Due to changing systems of registration and no publication of formal figures by VBN there no figures of rose imports per country could be found between 1995 and 2002.

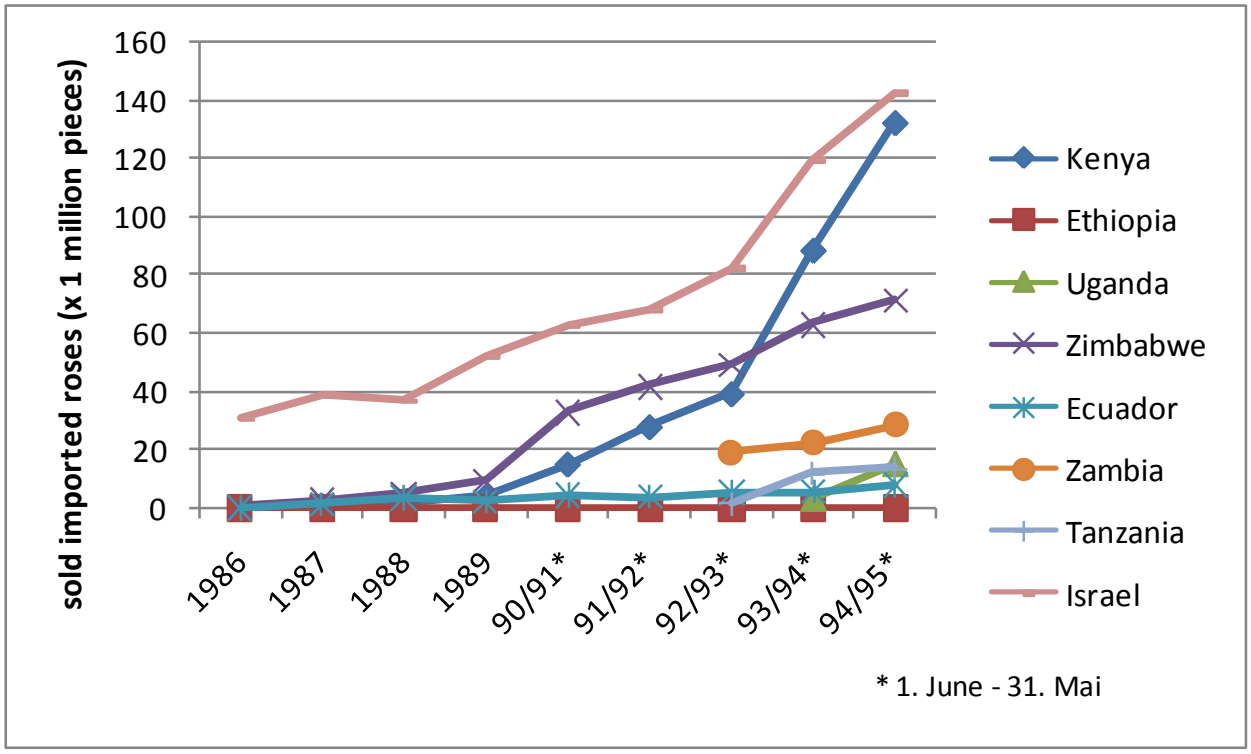


Figure 2.8 Sold imported roses at VBN auctions (x 1 million pieces) from different countries in different years.

In Figure 2.9 the recent situation since 2002 is illustrated, in which Kenya has come to full power, while Israël and Zimbabwe clearly lost their importance in imports of roses in the Netherlands. Reasons are various and are discussed in chapter 3. Since Kenya has clearly a unique position, Figure 2.10 is the present situation with Kenya left out. This enable a clear view on the developments of the remaining countries. Clear is that Ethiopia is rising quickly, and Tanzania and Zambia show developments that deserve a closer look.

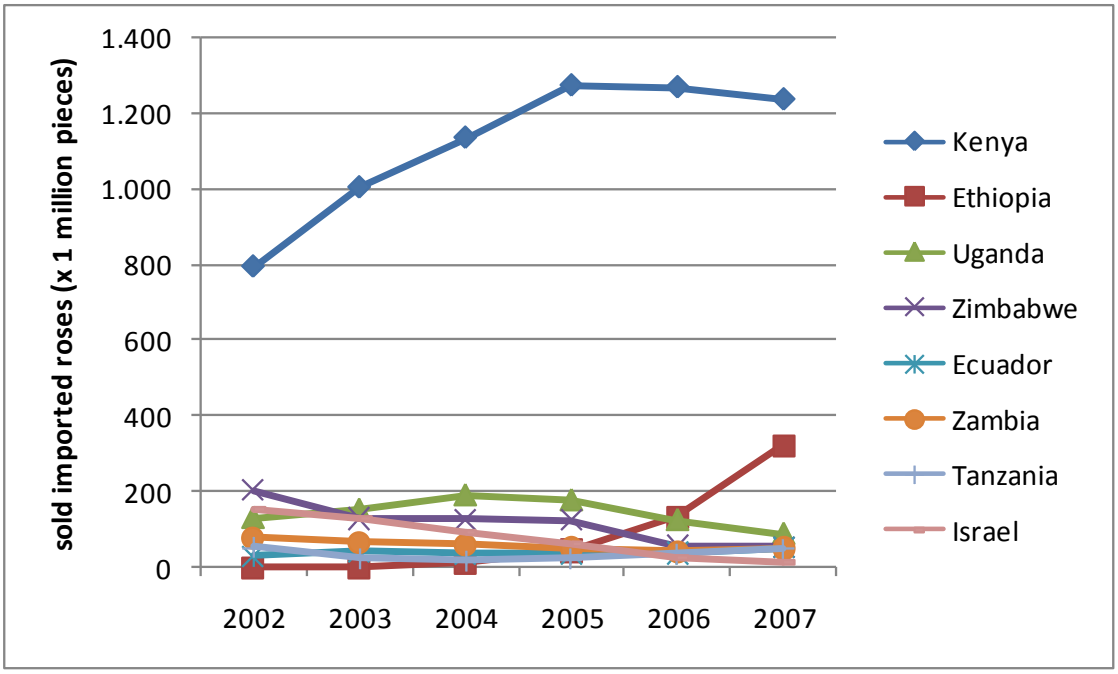


Figure 2.9 Sold imported roses at VBN auctions (x 1 million pieces) from different countries in different years.

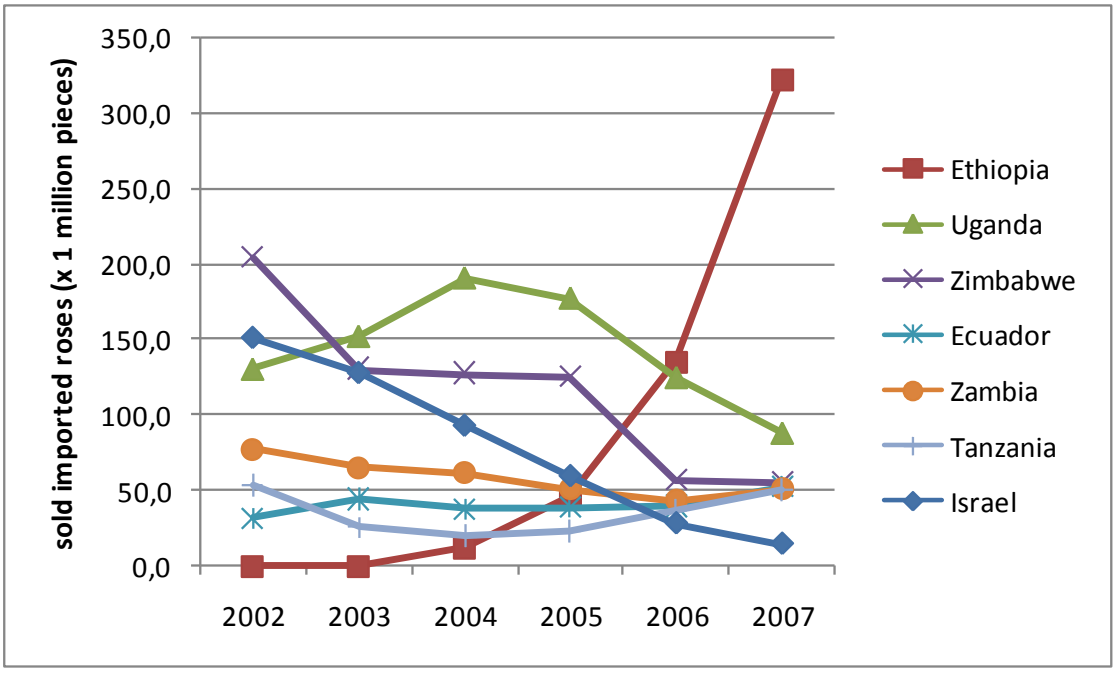


Figure 2.10 Sold imported roses at VBN-auctions (x 1 million pieces) from different countries in different year, excluding Kenya.

Conclusions on roses

- In this thesis Hybrid Tea and sweetheart roses are taken in account for being 98% of the roses sold at the Netherlands auctions
- Of all imported roses 58% are sold through the VBN-auctions, justifying analysis of VBN-figures for this thesis
- The percentage drop from 61% (2002) to 58% (2006) for auction sales as percentage of total rose imports indicates that direct sales have increased.
- Sales of Hybrid Tea at the VBN-auctions show a steady growth, imports taking over partly from Netherlands production (Figure 2.3).
- Sales of sweethearts have dropped since 1999, imports have taken over almost completely from Netherlands production (Figure 2.4).
- Major import country for the Netherlands and VBN-auctions is Kenya (Figure 2.5). Ethiopia shows high growth rates, while Zimbabwe and Israel have dropped in exports to the Netherlands (Figure 2.6).

2.5 Production and export of cuttings.

A considerable import flow consists of cut flower and pot plant young plant material like chrysanthemum cuttings. Many leading cut flower as well as pot plant breeders and propagators are located in the Netherlands, including Deliflor, Fides, Dekker, Royal van Zanten, Preesman, Florist de Kwakel, Olij Roses, Terra Nigra, Corn. Bak, Bartels Stek, Beekenkamp, Florensis, HilverdaKooij, Schoneveld. Many of these breeding and propagating companies shift the production of these cuttings to their own propagation facilities or outsource to subsidiaries in developing countries. Netherlands growers are more and more looking for opportunities to lower their production costs. An important part of this is lowering the costs of young plant material. Subsequently more and more young plant material is imported from countries which offer low labour and land costs. In developing countries where cuttings are produced in a more suitable climate, light intensity and opposite season or no difference in seasons are favourable as well. The total demand for young plant material from Netherlands growers is estimated to be the largest in the EU. This estimation is based on data for production of finished plants in the Netherlands, since demand for young plant material is directly related to the production of finished plants. This is particularly the case for products like chrysanthemum and several garden plants (CBI, 2007).

Developing countries play a significant role in import of young plant material by the Netherlands. The share of developing countries in the total imports value of young plant material was 71% in 2006. The leading developing country suppliers were Costa Rica (14%), China (12%) and Kenya (9%). For unrooted cuttings the share of developing countries was 87%, a value of € 67.8 million in 2006. In Table 3.4 the

percentages of the leading suppliers of unrooted cuttings in the Netherlands are presented for 2006. Note that export of cuttings from Kenya, Uganda and Tanzania are mainly produced at subsidiaries of Netherlands companies as explained before (CBI, 2007).

Table 2.4 Leading suppliers of unrooted cuttings to the Netherlands, share in imported value in 2006 (source CBI).

	Share in supply
Intra EU	
Spain	2%
Belgium	1%
Denmark	1%
Extra EU	
Israel	6%
South Korea	1%
Taiwan	1%
Developing countries	
Kenya	19%
China	18%
Uganda	13%
Tanzania	9%
Brazil	8%
Costa Rica	5%
South Africa	5%

Kenya showed a severe increase at the end of the last century, followed by Uganda and Tanzania while lately Ethiopia is rising quickly. Israel and Zimbabwe have a stable export of unrooted cuttings to the Netherlands (Figure 2.11).

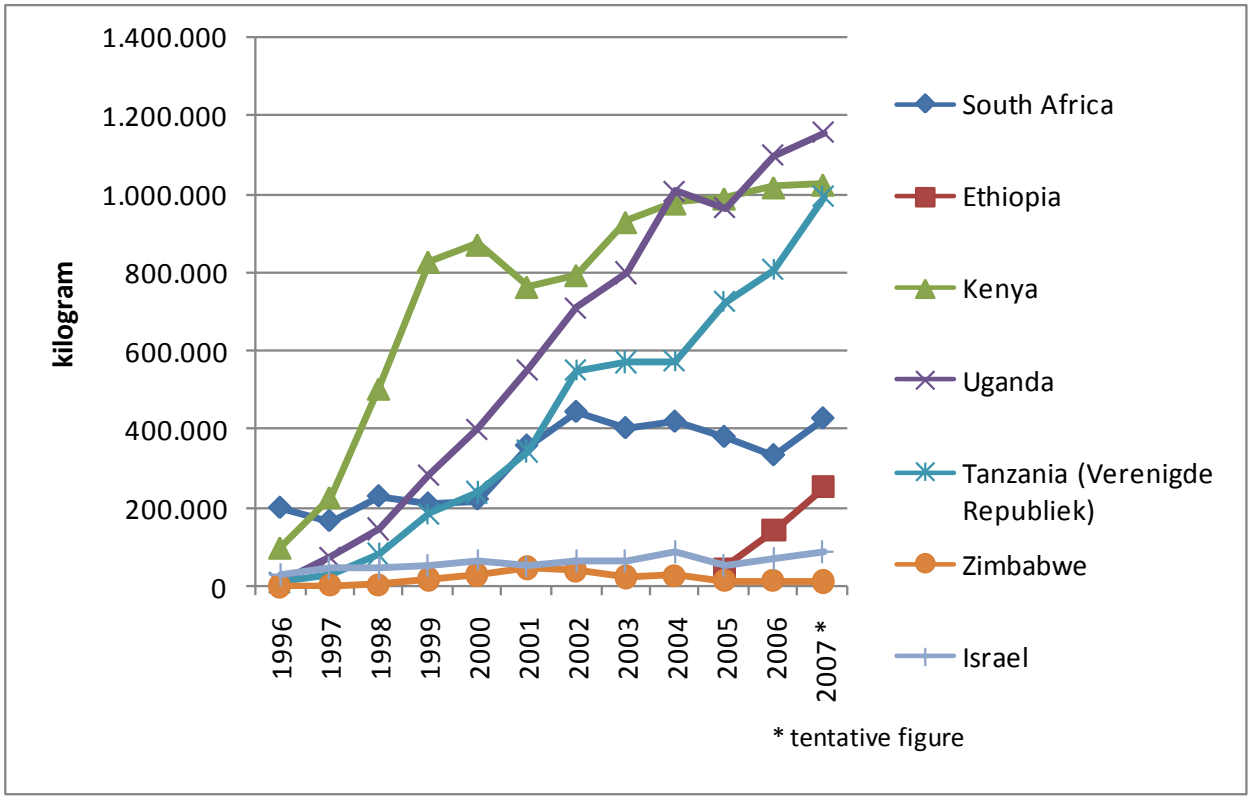


Figure 2.11 Import of unrooted cuttings in the Netherlands since 1996 (source: CBS).

Propagators exporting young plant material to the Netherlands have to comply EU legislation, requirements of the Dutch government as well as requirements of trading partners (growers in this case). These requirements are based on environmental, consumer health and safety and social concerns (CBI, Dec. 2007).

To select a country some basic needs should be met. Propagator Fides (personal communication with CEO R. le Clerc, 2007) uses a checklist to evaluate a country for its fitness for production:

1. Logistics has to be fine (at least three flights a week to Europe, city does not matter).
2. Good infrastructure regarding power supply and quality of roads

3. Skilled employees, specially able to read, write and ability to count.
4. Political stability and calm, uneventful

An extensive interview with the CEO of Fides on their strategy in different countries can be found in Appendix 1, chapter 1.

Plate 2.2 shows the labour intensive harvesting of chrysanthemum cutting at a farm in Kenya.

Plate 2.2 Harvesting chrysanthemum cuttings at Deliflor in Kenya (I. van Meggelen, December 2003).

Conclusions on cuttings

- Cutting production in developing countries is rising quickly due to lower costs, more suitable climate, opposite season and spreading risks.
- Kenya was the first SSA country with high production, Uganda and Tanzania followed quickly and Ethiopia is the new hotspot.
- Mainly Netherlands (or European) propagators have their own production sites in Africa, sometimes it is outsourced to local companies always under supervision of the outsourcing company.

3 Main production countries in floriculture in Africa

This chapter will focus on the African countries with importance in the floricultural sector as well as Israel. Israel was the main flower exporting country outside Europe for a long time and Israeli horticultural specialists are still competitors of the Netherlands specialists.

Facts and figures are presented, as well as other relevant information of the various countries. Research was done by desk research and interviews. Focus of the information is on the start, development and continuation of floriculture in a country.

3.1 Introduction East African Countries

The global export of flowers accounted for US$ 2.4 billion in 2005, an increase of 41% compared to 2001 (US$ 1.7 billion) (Gehkte, 2007). East African countries are part of Sub-Saharan Africa (SSA) countries (Appendix 2). SSA accounted over 21% of the global export of cut flowers in 2005 (US$ 520 million), where the share was 18% in 2001. The total increase of exports during the period 2001 – 2005 was 65%. Colombia was the leading exporter of cut flowers with a share of 28%, followed by SSA countries (21%), Ecuador (14%) and the Netherlands (12%). (Gehkte, 2007) The exports are south-north orientated, so the majority shipped from Colombia and Ecuador go to in the United States, while the African flowers are transported mainly to Europe (99% in 2005). Of the SSA countries Kenya is by far the largest exporter with a share of 69% in SSA-exports of US$ 520 million. Other important exporters in 2005 are Zimbabwe (9%), Uganda (6%) and South Africa (6%) (Gehrte, 2007).

3.2 Kenya

The population of Kenya accounts 36.9 million people, with a yearly increase of 2.8%. 42% of the population is under 15 years of age. The GNP (gross national product) is US$ 1,600. Unemployment rates in Kenya are 40%. Agriculture accounts for approximately 75% of the employment (www.cia.gov/evd). Horticulture in Kenya takes approximately 250,000 hectares, which is 10% of the farming land. With that share it is second runner up in agriculture after dairy and production of maize and beans. Of the produced fruits and vegetables 95% was consumed locally (Wijnands, 2003). Kenya is still leading producer of cut flowers to the EU, supplying 31% of the total export to the market. Horticulture contributes 12.8% of the 24% that agriculture contributes to the Gross National Product (GNP) according the secretary of the Workers Right Watch (Njoroge, 2006). The export of horticultural products from Kenya had a value of US$ 873.7 million in 2007, a share of 20.7% in the total Kenyan export value of US$ 4,229.8 million. The value of floriculture was US$ 662.4 million in 2007 (EPC, 2008). 100,000 people are employed directly and 500,000 in related services in Kenyan floriculture industry (PT Kenya, 2006). Naivasha alone has more than 37 flower farms with an estimated workforce of over 40,000 people (Njoroge, 2006).

3.2.1 History and development

The first flower exports from Kenya appeared in AIPH statistics in 1970 with a value of US$ 0.1 million. This value increased rapidly to US$ 7.2 million in 1976. At that time the assortment was, in small quantities, alstroemeria, moleculla, statice, chrysanthemums and roses (Hörmann, 1978). Kenya has become a significant player in the floricultural sector since the decade of the 1980’s. By the end of the eighties horticultural exports have risen in importance to be the fourth largest source of foreign

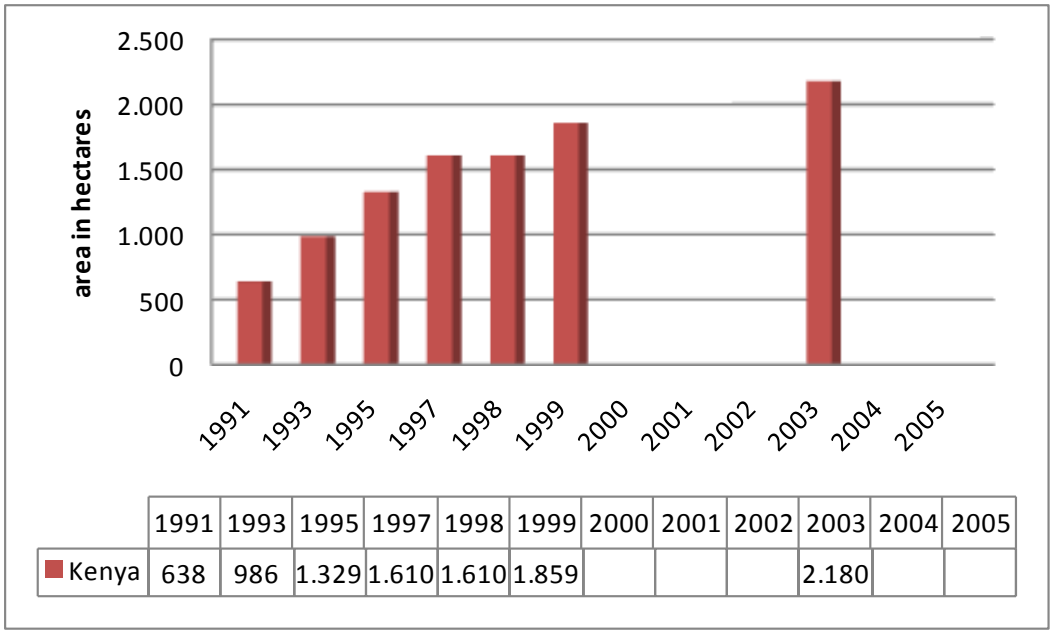
exchange after coffee, tourism and tea. Constraints were felt at both the production level (rising of costs of inputs of especially fertilizers and other agrochemicals) and marketing level (freight costs). Apart from that, marketing intelligence was not well developed, so changing demands of consumers was a problem (Gathee, 1991). The horticultural sector (flowers, vegetables and fruits) had grown 80% since 1995. At the time 60,000 Kenyans worked on flower farms, twice the amount of workers in Netherlands floriculture. Not only western enterprises invested, but also Kenyan politicians with help of western managers (Heselmans, 2000).

In world shares the Kenyan flower production is modest. The annual growth rate in flower production quantity however was 13% in a time span of twenty years and in production value even 15% (Wijnands et al, 2006).

3.2.2 Production areas

The area used for floriculture production increased steadily, even though figures are not available for all the years (Figure 3.1) Meanwhile floriculture is significant in Kenyan economics being runner up in export earnings only leaving tea as more important. Through the rapid development of the industry Kenya surpassed Israel as largest foreign supplier at the Dutch flower auctions. The construction of a modern cargo facility near Nairobi airport contributed to this success (Gehrte, 2007). During the years 2002 to 2004 growers decided to expand due to the low dollar exchange rate, which lowered their freight costs considerably (Vakblad, 2003 (51/52)). At present Kenya has about 140 flower farms with a total area of 2,180 hectares. The average farm size is 10 to 20 hectares, but even farm sizes of 250 hectares can be

found. The 25% biggest nurseries account for 75% of the total Kenyan flower exports (PT Kenya, 2006).



	1991	1993	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005
Kenya	638	986	1.329	1.610	1.610	1.859				2.180		

Figure 3.1 Area of floriculture in Kenya.

Main production areas in Kenya are Naivasha, Kiambu, Athi River, Thika and Nakuru, all approximately 100 km north and northwest of Nairobi (Plate3.1). In these areas little economic activities were taking place before the floriculture started off (PT Kenya, 2006). The area near Lake Naivasha is the most important area for rose production in Kenya. It is situated at approximately 1,890 m altitude and located 80 km northwest of Nairobi. Lake Naivasha provides irrigation water to 800 hectares of floriculture (Ammerlaan, 2005).

Plate 3.1 Map of Kenya with indication of main production areas Naivasha (1), Athi River (2), Thika (3)and Nakuru (4)(source: www.state.gov; fit by author).

Some Netherlands companies have started in Kenya by themselves, some started in joint ventures. Many Dutch managers are contracted by investors in Kenya. The share in production value of pure Netherlands companies is estimated at 10 to 15%. In about 30% of the total production a Dutch entrepreneur is involved. Sales through the Netherlands takes a share of 60 to 70%. Dutch are often more experienced in cultivation and professional skills compared to East African people. Compared to the Israeli active in East Africa the Dutch share their knowledge easier. The comparative advantage to the English is the lack of burden of the colonial past (Silvis, 2002).

3.2.3 Imports and exports

Horticultural produce was exported from the Netherlands to Kenya. (Figure 3.2) Clear is that mainly starting material is exported, and little amounts of cut flowers or pot plants (PT Kenya, 2006). In general this starting material is used as stock plants for

cutting production of chrysanthemum, roses etc. Main reason to start with material from the Netherlands is found to the Elite certifying system. Within this quality system Extra Elite (EE) material must be used for stock plants to produce Elite material that European growers will use for the production of cut flowers for the market. Another reason to use Dutch propagation material can found in the fact that many breeders are based in the Netherlands or elsewhere in Europe with an office in the Netherlands.

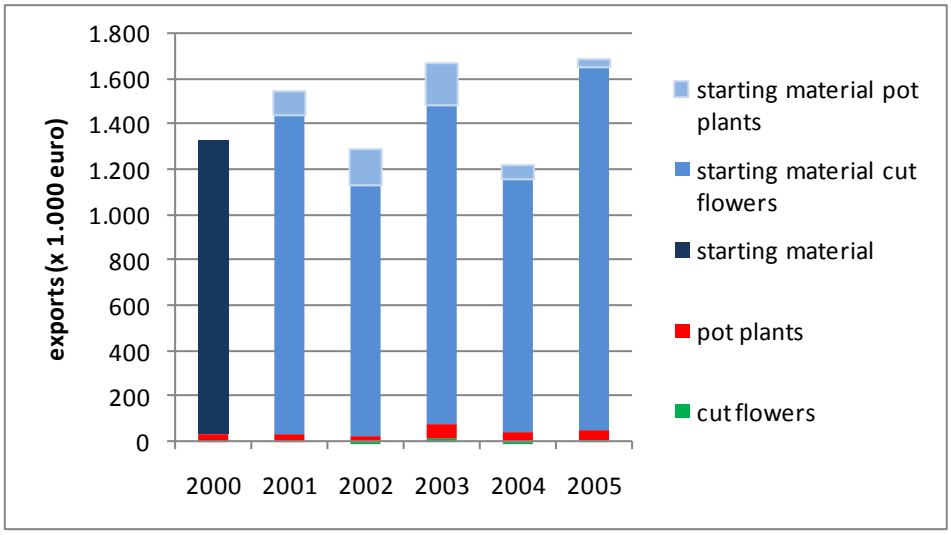


Figure 3.2 Exports from the Netherlands to Kenya (x € 1,000) from 2000-2005 (source HBAG).

The exports of rooted and unrooted cuttings from Kenya to the Netherlands has been rising during the 1990's. (Figure 3.3) Clearly more unrooted than rooted cuttings are transported, large amount of which are chrysanthemum cuttings. The total amount in kilogram is quite stable with variation between 800 and 1,000 tonnes (CBS). The export of cut flowers to the Netherlands has been rising as well, principally for roses. (Figure 3.4)

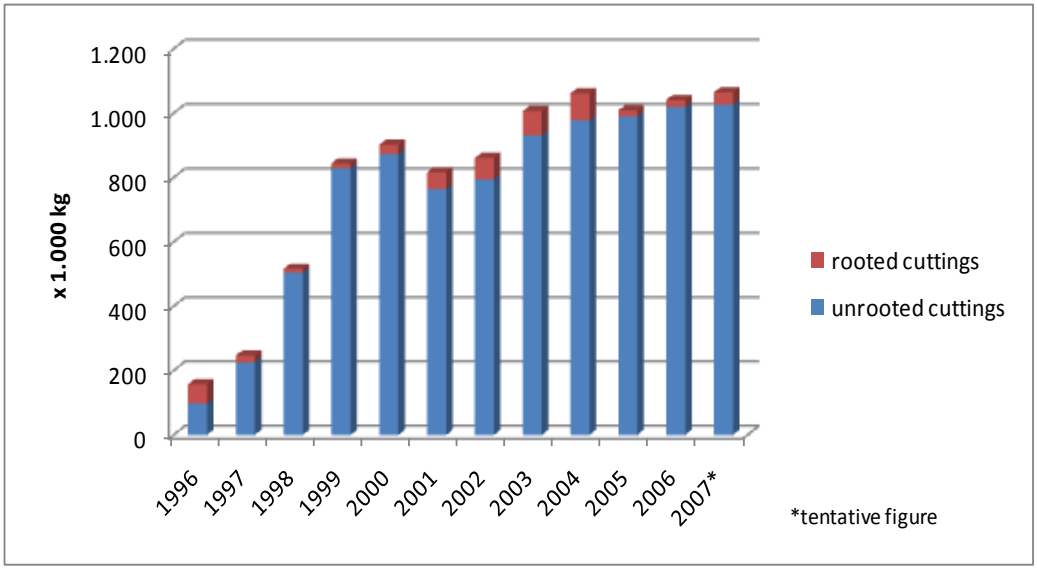


Figure 3.3 Exports of rooted and unrooted cuttings from Kenya to the Netherlands from 1996 until 2007 in kg (x 1,000) (source CBS).

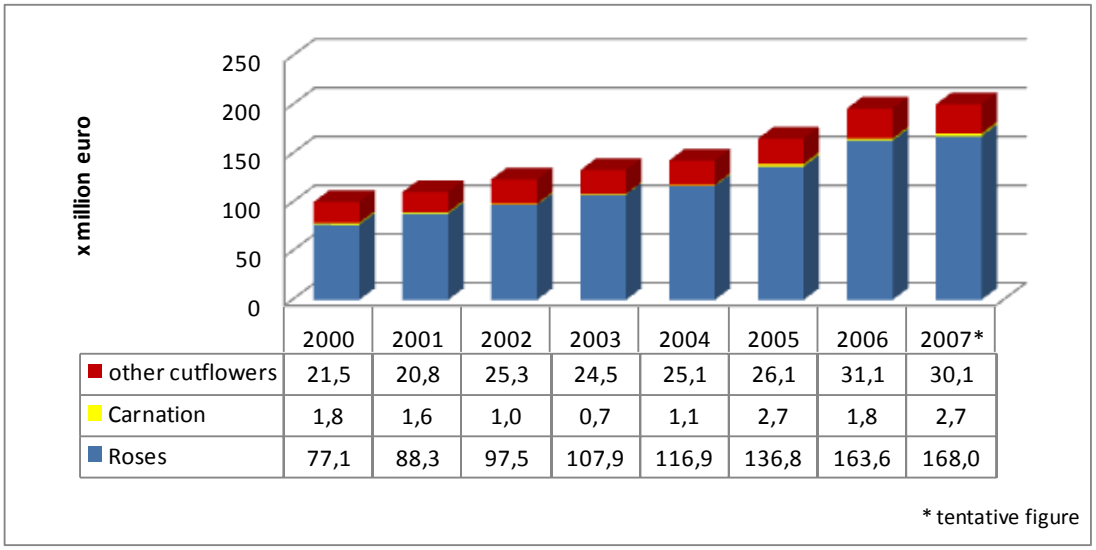


Figure 3.4 Value of imports of cut flowers from Kenya to the Netherlands from 2000 until 2007 in million euro (source CBS).

3.2.4 Present and future situation

From the produced cut flowers and foliage in Kenya 90% is destined for exports. The remaining 10% is sold by street vendors and florists in urban areas like Nairobi and

Mombasa. The export flowers are mostly shipped by commercial airlines. Recently sea shipment is developing in order to reduce the costs of transportation (Gehrte, 2007).

About 70% of the production is rose. In area rose is taking approximately 1,680 hectares of the 2,180 hectares. However still the diversification in Kenya is more than in other SSA-countries. Altogether more than fifty types of flowers are grown commercially. Apart from roses major products are alstroemeria, zantedeschia, carnation, hypericum, gypsophila, eustoma and statice. In the exports 70 to 75% is accounted for by roses, about 10% mixed bouquets and about 3% carnations (Gehrte, 2007).

Restraint at present is a slightly rising cost price over the last few years. Solutions are found in scaling up, cultivation measures and biological control (chemicals are relatively expensive). Labour costs however have gone down because the Kenyan shilling is linked with the US$, which has a weak position at present. Threats for the floriculture in Kenya are lower wages and improved infrastructure offered by other SSA countries (Gehrte, 2007). Modernization is increasingly important and many of the wooden greenhouse structures are replaced by steel structures (PT Kenya, 2006). Important issue in Kenya is always safety. High jacking and robbery are often discussed among growers, especially in the time when they had to collect the salaries of the employees at the bank in cash. During one of these robberies, on 3. March 2005, a Dutch grower was killed near Naivasha. Due to increase of flower production over the last decade criminals expected to find money, so growers had to take safety measures to protect their properties and avoid travelling by night (Vakblad, 2005 (10)).

3.3 Ethiopia

Ethiopia has a population of 76.5 million people and an annual growth rate of 2.3%. 43% of the population is under 15 years of age. The GNP per capita is estimated at US$ 700 in 2007, with a growth rate of 9.8% (www.cia.gov/evd). Flower exports are reported to be about US$ 125 million in 2007, increasing every year. According to the Ethiopian Ministry of Trade and Industry (MoTI) the total export value in the Ethiopian fiscal year 2007-2008 was US$ 1.5 billion. Coffee accounted for US$ 525.2 million, oil seeds being runner up with US$ 221.1 million, cereals with US$ 141.6 million and flower in fourth position with US$ 111.7 (approximately 7.4% of the total export value) (Capital, 2008). The Ethiopian fiscal year is from approximately 8. July until 7. July next year due to the used Julian calendar.

3.3.1 History and development

In 1998 Golden Rose, a private firm that is majority-owned by UK-based Rina Investment, was the first and largest rose farm to start (Eads, 2006). The cut flower farms in Ethiopia rose in number from three in 2001 to 32 in 2005 at an estimated area of 150 hectares. This number included fifteen foreign owned enterprises, originating from the Netherlands, Germany, India and Israel (Gehkte, 2007). According the Ministry of Trade and Industry (MoTI) at the start of the last Ethiopian fiscal year (8. July 2006) an area of 645 hectares was covered by flower production. At the end of the fiscal year (7. July 2007) the coverage was 801.6 hectares (633.8 ha roses, 114 ha summer flowers and 53.8 ha cutting production) (personal communication G. Westenbrink). More than 80,000 jobs have been created in or around 77 flower farm companies. The share of females in the workforce is 80%. Women are preferred for flower being fragile and needed careful handling which is

illustrated by Plate 3.2. Some charities complain that workers are underpaid. Their wages are around US$ 1 a day in a country where 80 percent of the population lives on less than US$ 2 a day. Unemployment in urban areas is almost 21 percent.

Plate 3.2 Women are preferred in the work in floriculture since they are acting more careful in handling the produce (I. van Meggelen, ET Highland Flora, January 2007).

3.3.2 Production areas

Production is located mostly in the higher parts of Ethiopia at altitudes of 1,600 to 2,200 m above sea level, in a circle of 50 to 100 km around the capital Addis Ababa where the main airport is located. Apart from this the east-part of the country, both northwest and southwest, is suitable for rose cultivation. Some areas are not suitable for having insufficient water availability or a non-optimal climate. Main production areas in Ethiopia are Holeta (2,400 m altitude), Ziway (1,642 m), Debre Zeit (1,800 m) and Sebeta (2,100 m) (Plate 3.3). (Ammerlaan, 2005)

Plate 3.3 Map of Ethiopia with indication of main production areas Holeta (1), Debre Zeit (2) and Ziway (3) (source: www.state.gov; fit by author).

In a study in 2005 different aspects of Ethiopia are listed. Advantages of Ethiopia are high irradiation due to location near the equator as well as cool climate and more even precipitation compared to other countries in the region. However a low relative humidity causes less pressure of diseases. Bureaucracy sometimes is a bottle neck for starting entrepreneurs and the infrastructure is still poor in most parts of the country (PT Ethiopië, 2005). Example of bureaucracy are the time consuming procedures to obtain licences to start a nursery. According to one grower during the flight back from Addis to Amsterdam in June 2005 he had to pass many bureaus to get the required stamps on the papers, and every time new appointments had to be made and long explanations to the responsible people were necessary. It took him over two years to finally get started. And even if the required stamps and signatures are put on paper,

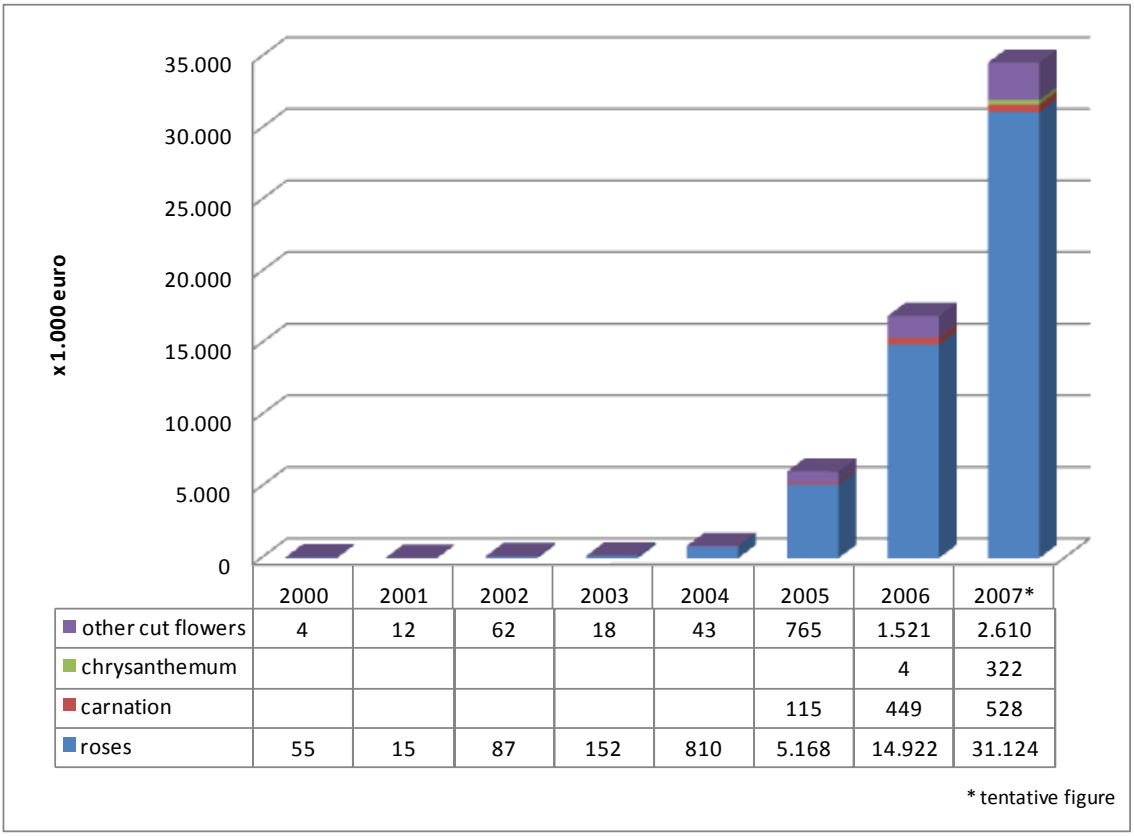
still the local authorities have to be cooperative. (PT Ethiopië, 2005) Sher Agencies had long lasting meetings with seniors of local tribes for instance to convince them of the right location of the hospital that Sher was investing in. Barnhoorn was however in a more favourable position for acquiring the necessary permits since the government invited him to start investing in Ethiopia (see appendix 1 chapter 2).

As for infrastructure there has been noticeable improvement over the last few years. Many sites with road constructions can be observed, extending highways from Addis to the different regions where horticulture is being developed. Also the telephone network used to be limited to Ethionet, and never until the last visit paid to Addis Ababa in January 2007 roaming was possible for foreign mobiles. At that time however this was still limited to Addis Ababa.

The government supports the sector by offering low-rent loans and no import duty for necessities for production. Also land and labour is cheap. Airfreight costs to for instance Amsterdam are 25% lower than from Kenya. Unfortunately the air freight capacity is a problem (PT Ethiopië, 2005). The lower air freight costs are applicable if distance and government subsidies are taken in account. However, due to lack of air freight capacity, lack of south bound cargo and the monopoly of Ethiopian Airlines at Bole Airport freight costs are actually equal compared to Kenya. Sher Agencies confirms that the air freight costs from Kenya and Ethiopia are almost the same in April 2008, being US$ 2 per kilogram (€ 1.25 per kilogram). After negotiations with the authorities Sher acquired permission in the summer of 2008 to fly their own charters from Addis Ababa (Vakblad, 2008 (31)).

3.3.3 Exports

The export from Ethiopia to the Netherlands in cut flowers has grown rapidly (Figure 3.5). In 2000 the total exports amounted for € 59,000 according to CBS, of which € 55,000 was roses and the rest other types of cut flowers (hypericum, gypsophila). In 2007 the exports until including September already amounted for € 21.5 million, thus showing immense growth even compared with € 14.9 million in the full year 2006. For 2008 assumptions are made that the export of flowers to Europe, Asia and the Middle East may rise to US$ 186 million. Kassahun Mammo, executive director of the association EHPEA estimates that floriculture exports in 2007 valued US$ 125 million (Flowerweb, 29. March 2008).



	2000	2001	2002	2003	2004	2005	2006	2007*
other cut flowers	4	12	62	18	43	765	1.521	2.610
chrysanthemum							4	322
carnation						115	449	528
roses	55	15	87	152	810	5.168	14.922	31.124

Figure 3.5 Export value in euro (x 1,000) from Ethiopia to the Netherlands from 2000 until 2007. (source CBS)

The export of cuttings is more recent than the export of cut flowers. Several European breeders and propagators of chrysanthemum, bedding plants and pot plants started a branch in Ethiopia for cutting production for European growers. In the CBS statistics exports of cuttings can be found as of 2005. The same high growth as observed for cut flowers can be seen, with figures of 2007 exceeding the year 2006 by far (Figure 3.6).

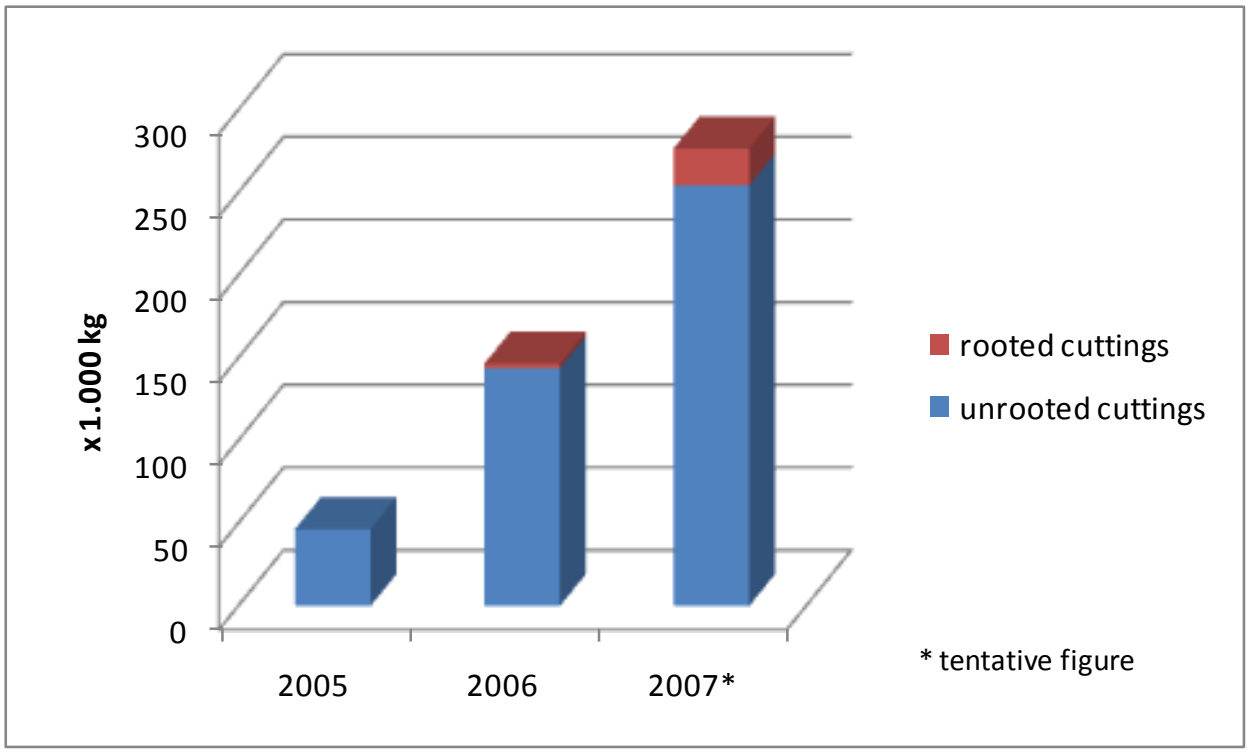


Figure 3.6 Export of unrooted and rooted cuttings in kg (x 1,000) from Ethiopia to the Netherlands since 2005.

3.3.4 Present and future situation

In the monthly update of USAID of November 2007 the Chairman of EHPEA, Tsegaye Abebe, is quoted in quantifying the ambitious targets for the horticultural industry in the next five years. "Annual export sales of US$ 1.4 billion by 2012, employing 1.5 million people, engaging 50,000 small-scale growers, with 450 hectares under flower production and 750 hectares dedicated to fruit and vegetables."

While flowers account for only 1% of Ethiopia's GDP they are one of the most visible signs of a fast-growing economy that is becoming less reliant on its traditional coffee exports. By next year (2009) flower could account for 10 percent of Ethiopia's exports. Coffee, its traditional cash crop, makes up for 40 percent. In five years time Tsegaye thinks flowers will catch up with coffee.

Latest development is flower shops springing up in Addis Ababa, so the development of a local market. Special detail by the way is that the name of the capital Addis Ababa means "New Flower" in Amharc language (Malone, 2008). In 2003 there was no local market at all, one of the concerns expressed even by students of Mekelle University at the time. In 2008 it turns out that some Ethiopians have even started to celebrate Valentine's Day (Malone. 2008).

3.4 Zimbabwe

The population of Zimbabwe accounts for 12.3 million people, with an annual growth rate of 0.6%. 37% of the population is below 15 years of age. The GNP per capita for 2007 is estimated at US$ 500 with a growth rate of -6% (so decrease). The unemployment rate in 2007 is 80%. The total export value of Zimbabwe in 2007 is estimated at US$ 1.52 billion (www.cia.gov/evd).

3.4.1 History and development

Zimbabwe developed rapidly in the late 1990s as well and became second runner up in 2000 at the Dutch auctions (behind Kenya and Israel). Since that time the productivity was reduced by political instability and governmental mismanagement in the country, resulting in a reduction 60% in floriculture industry, lowering exports by one-third (Gehrte, 2007).

During the UNCTAD conference of October 2000 the director of the Horticultural Promotion Council of Zimbabwe gave a presentation on the growth and development of the horticultural sector in Zimbabwe. Floriculture at that time accounted for 64% of the total value of horticultural exports and 27% by volume. Zimbabwe was second largest exporter in Africa, second amongst ACP exporters and fifth biggest provider to the EU. Exports had a season from mid September until late May, channelled through the Dutch auctions, to the UK, France, South Africa and the USA, with possible expansion to the Far East and Australia. The rose-exports had a peak in supply from October until April and approximately 86% is channelled to the Dutch auctions and another 6% to South Africa. Exports of roses had risen 21% annually during the nineties. Production area of roses at the time was 400 hectares. Difficulties that needed to be addressed were the fragmented industry (over 250 growers involved with an average farm size of 4 hectares) and global competition with particularly Kenya, Israel and Colombia. Other concerns were high interest rates, rising inflation, high duties on inputs and insecurity from land reform (Heri, 2000). This land reform became the major backlash.

Land reform policy

Until 2002 the floricultural production grew steadily in Zimbabwe. The produce was known for the wide assortment and good quality, a reputation that still counts. The government of Robert Mugabe started a land reform program in which a fair share of the land should be handed over to the black Zimbabwean people by the white land owners. Since this did not work out well the government started to actively expropriate in 2002 (PT Zimbabwe, 2006). On the list of companies to be expropriated

were approximately 50% of the flower farms. It involved mainly large mixed farms with apart from flower production also tobacco and maize. At of the end of June 2002 more than 100 flower farms had to stop their activities. The period allowed to move out was 45 days after notification by the government. Within another 45 days after stopping activities the owners had to leave their home at the farm. The companies need to remain intact and no compensation is paid (Vakblad, 2002 (24)). Since the black owners had no experience in farm management the fields were untilled. This lead to rise of unemployment and famine. In 2001 the area of floriculture was 1,800 ha, reducing to 1,300 ha in 2004. The amount of growers has diminished quickly too, from 270 in 2001 to 180 in 2004. In 2006 the Mugabe government pleads for white growers to return. The production on the agricultural and horticultural farms almost stopped and unemployment raised severely (PT Zimbabwe, 2006).

Half of the approximately 250 growers in Zimbabwe was expropriated. Due to lack of compensation expelled growers lost their whole investment and many of them lack finance to make a new start. By the end of 2003 eleven of them were located in South Africa, four started a company in Zambia and two in Mozambique. Other Zimbabwean growers were orienting themselves in Ethiopia at that time. Some of the growers in Zimbabwe started a partnership with entrepreneurs originating of Africa (see Chapter 4.1.5). The auctions are willing to do the sales for these companies. From the farms overtaken illegally the auctions refuse to receive the supply, since they feel obliged to the expelled growers with whom they shared a long term relationship (Vakblad 2003 (48)). The imports from Zimbabwe remain declining in the successive years due to

mismanagement of farms, sky-high inflation and scarcity of elementary products like food and fuel (Vakblad, 2006 (30)).

The Horticultural Promotion Council (HPC) states that foreign currency earnings have dropped from US$ 142.7 million in 1999 to about US$ 85 million per year over the last five years. In 2006 the country exported about 6,500 tonnes of vegetables, down from 15,000 tonnes in 1999 (www.allAfrica.com, 2007).

3.4.2 Production areas

Main products on the 1300 ha are summer flowers (800 ha), protea (300 ha) and roses (200 ha). About 70% of the Zimbabwean growers implemented MPS in their farm management. The production is spread throughout the country, except for the south. Main regions are around Harare, Mazowe/Glendale, Beatrice, Chegutu, Kadoma, Kwekwe, Gweru, Karoi, Tengwe, Ruwa, Goromonzi, Marondera and the highlands in the east (Plate 3.4). (PT Zimbabwe, 2006)

Plate 3.4 Map of Zimbabwe with indication of main production areas Harare (1), Beatrice (2), Chegutu (3), Kadoma (4), Kwekwe (5), Gweru (6) Karoi (7) and Marondera (8). (source: www.state.gov; fit by author)

3.4.3 Export

The amount of unrooted and rooted cuttings exported from Zimbabwe to the Netherlands showed a prosperous development until 2002. After this the decline in exports is clear (Figure 3.7). A similar shape of the export curve of cut flowers (in value however) can be observed (Figure 3.8).

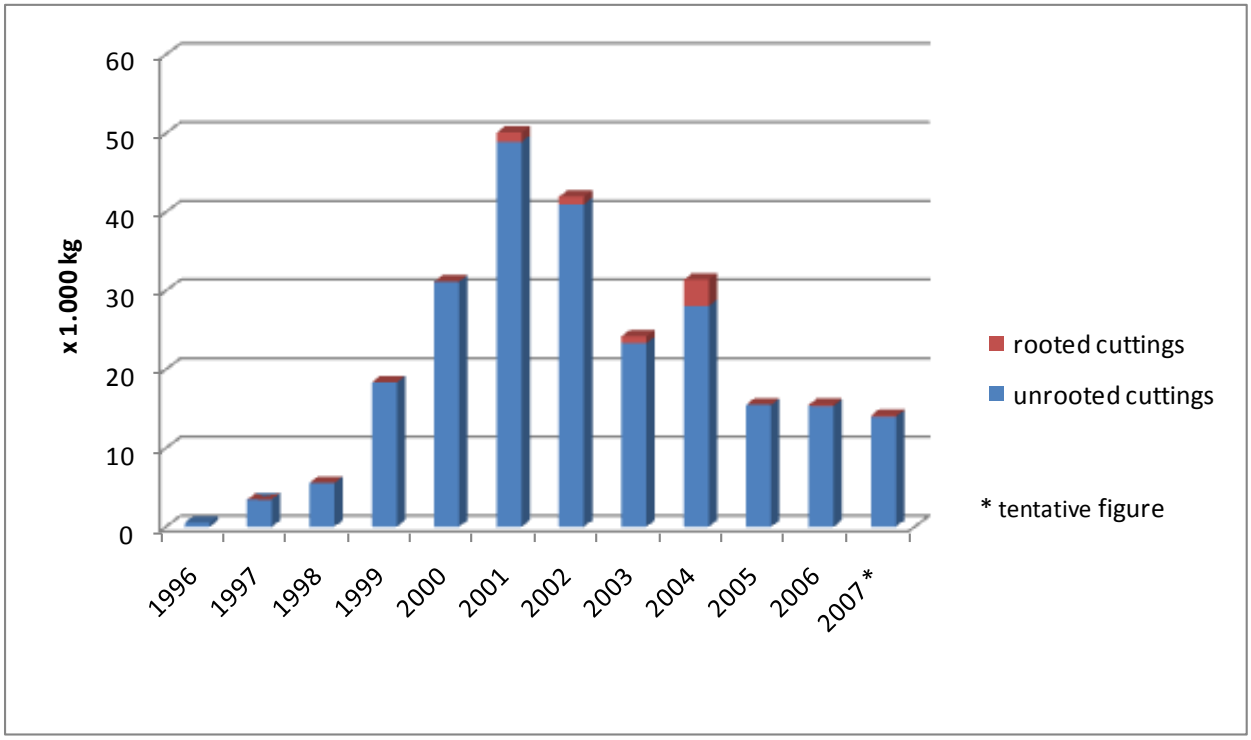
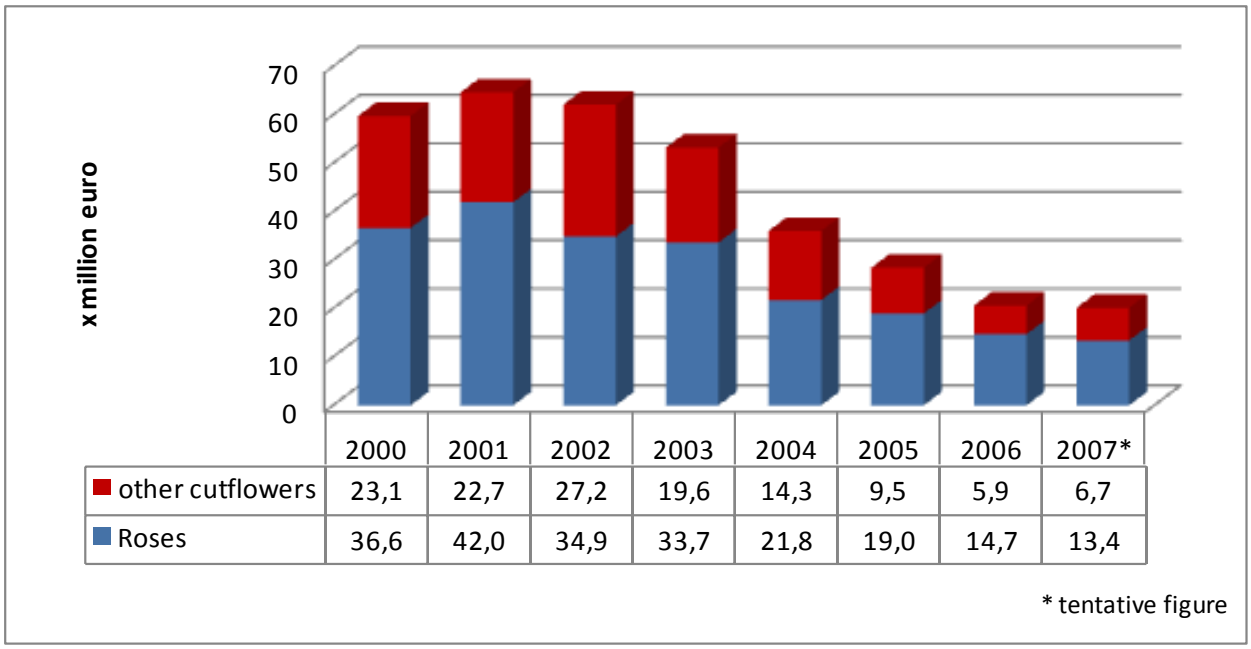


Figure 3.7 Exports of unrooted and rooted cuttings from Zimbabwe to the Netherlands in the period 1996 until including 2007 in tons (source CBS).



	2000	2001	2002	2003	2004	2005	2006	2007*
other cutflowers	23,1	22,7	27,2	19,6	14,3	9,5	5,9	6,7
Roses	36,6	42,0	34,9	33,7	21,8	19,0	14,7	13,4

Figure 3.8 Value of exports of roses and other cut flowers from Zimbabwe to the Netherlands from 2000 until including 2007 in million euro. (source CBS)

3.4.4 Present and future situation

The future developments are difficult to predict. The situation has not yet been settled and export value and volume are still decreasing. Exports is mostly with destination the Netherlands (85%), other destinations are UK, Germany, South Africa and Australia. From all the exports of Zimbabwe to Europe 94% goes through the Netherlands. Main product is rose (PT Zimbabwe, 2006).

3.5 Uganda

Uganda has a population of 30.2 million people and a growth rate of 3.6% on the population. The GNP was US$ 1,100 (estimated 2007), and the growth rate of the GNP over 6% in 2004. Over 50% of the population is under 15 years old. The export value of Uganda in 2007 is estimated at US$ 1.626 billion (www.cia.gov/evd). The export value of floriculture is US$ 27 million, which means 1.7% of the total exports of Uganda.

3.5.1 History and development

The idea of starting in floriculture, more specific rose production, was copied from neighbour Kenya. At the start intermediate roses were chosen, since this was common in Kenya. The twenty-four hours temperature in Uganda is higher however than in Kenya, mainly due to higher night temperatures. Due to this the country was inappropriate for cultivars susceptible for botrytis, which led to quality problems in the exports. As a result many companies bankrupted. In 1999 new investments started, mainly by local businessman from Indian origin. Experts were hired abroad, and an appropriate assortment was chosen for the climate conditions (Vakblad, 2001 (46)).

Exports from Uganda started in 1993 with roses and foliage. The area in production in 2004 is 180 hectares. Sweetheart roses account for 80% of this and cutting production (mainly chrysanthemum) for 15%. Other products are gerbera and anthurium. Production is taking place in (plastic) greenhouses since the heavy rains easily might damage the crop (PT Uganda, 2005).

3.5.2 Production areas

Main production areas are around Lake Victoria, Kampala and Entebbe (Plate 3.5). These areas are approximately two hour drive from the airport. The higher growing areas in the west are a five hour drive from the airport. Expansion is expected near Entebbe, but also in East Uganda since at higher altitudes bigger roses can been grown. The airport has a good infrastructure with cold stores available (PT Uganda, 2005). The nineteen commercial farms account for approximately 240 hectares and employ 6,000 people, mostly women. The expectations are to have 10,000 Ugandan people employed in the floriculture industry in 2007. Strengths of Uganda are the soil and cool climate. The two rainy seasons per year provide ample irrigation water (Gehrte, 2007). Almost all growers are member of the Uganda Flower Exporters Association (UFEA). This organization facilitates airfreight issues, training and certifying (PT Uganda, 2005). By uniting in an organisation growers have a stronger position in negotiations with authorities, but also easier access to projects to develop the industry. Nearly all management in the Uganda industry originates from abroad, the Netherlands, Israel as well as Kenya (Wijnands, 2003).

Plate 3.5 Map of Uganda with indication of main production area Entebbe (1) (source: www.state.gov; fit by author)

3.5.3 Exports

The export value of horticultural produce from Uganda was quadrupled from 1995 to 2002 from US$ 10 million to US$ 40 million. The floricultural and vegetable/fruit sector accounted for US$ 20 million. According to UFEA approximately 60% of the exported cut flowers are destined to the flower auctions, 40% is direct sales. Of the cut flowers exported to Europe in 2004 97% is flown to the Netherlands, and the remaining 3% to the UK (PT Uganda, 2005). The share of auction sales has gone down to 39% as far as roses are involved (Figure 2.7).

The exports of rooted cuttings are insignificant, but the quick raise of the Ugandan cutting production can noticed (Figure 3.9).

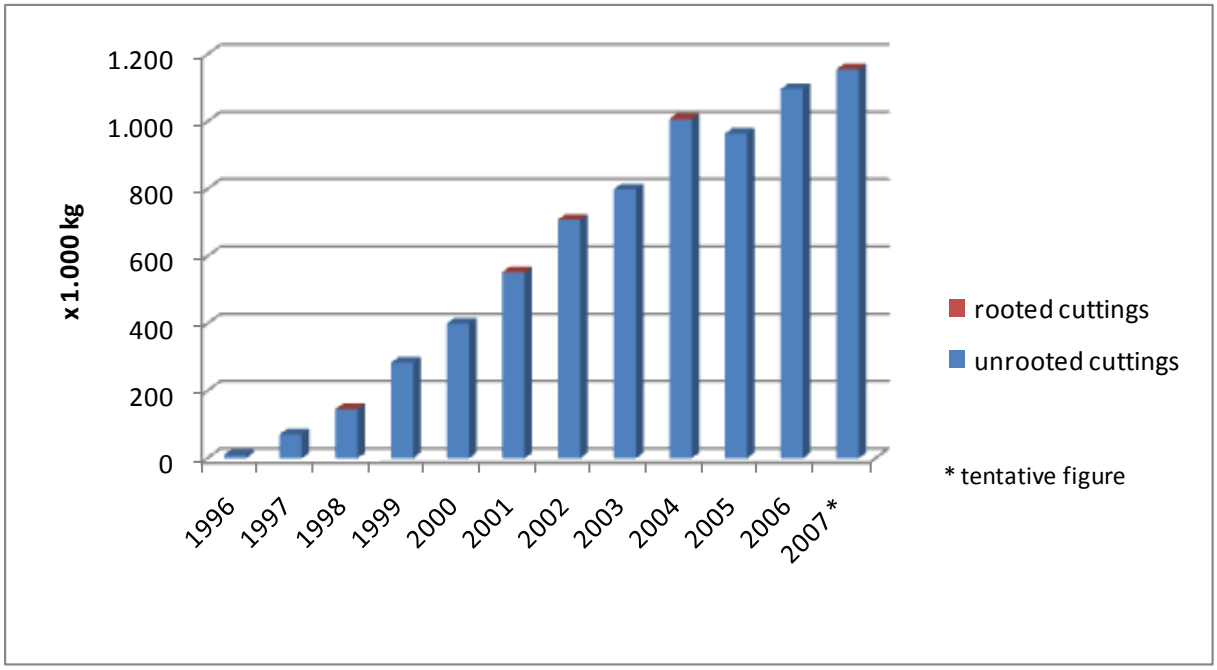
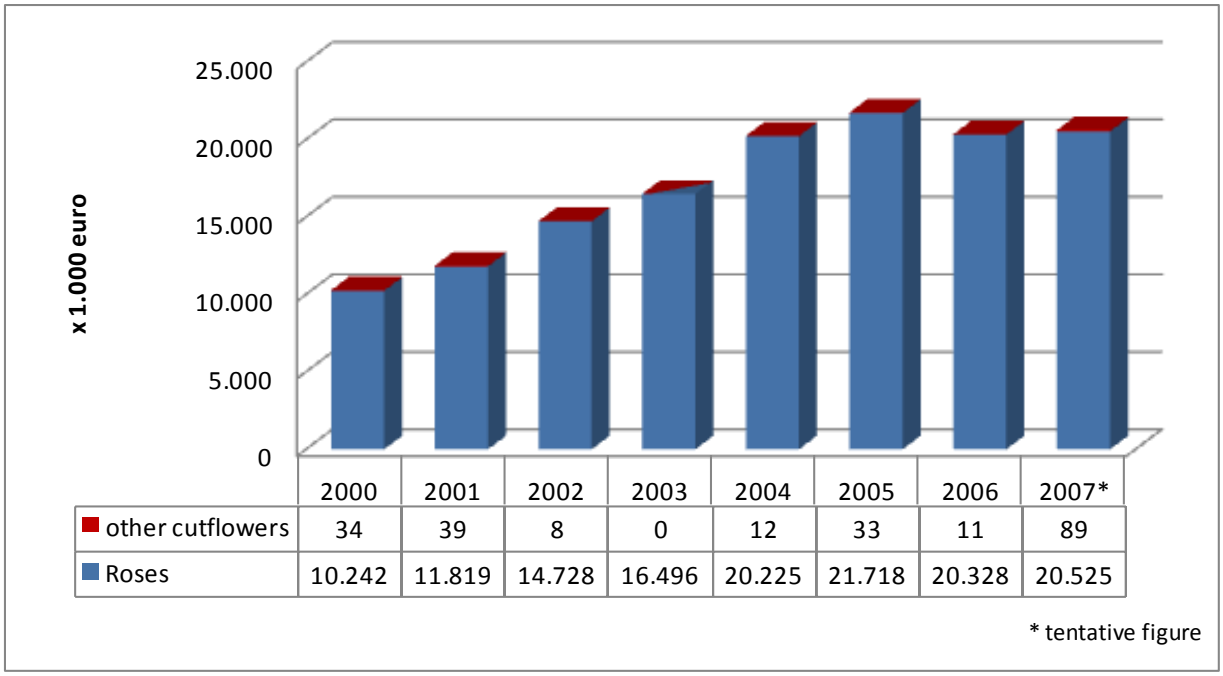


Figure 3.9 Exports of unrooted and rooted cuttings from Uganda to the Netherlands in the period 1996 until including 2007 in kg (source CBS).

The development of exports of roses and other cut flowers to the Netherlands since 2000 was rising and seems stable since 2005 (Figure 3.10). In 2003 the area of rose production was estimated at 140 hectares on the seventeen active rose farms. Expectations at the time were that more expansion would take place over the years. The assortment includes mainly sweetheart roses, although adequate intermediate varieties are being looked for. Due to the warmer climate the buds will be smaller however than in other countries. Despite low prices the growers can make good results through the high yields (approximately 350 stems per m^2 a year) and the low transportation costs per stem. Three-quarter of the roses is sent to the Netherlands, the remaining quarter is exported directly to Germany and United Kingdom. In 2002 the costs of phytosanitary inspections were bothering the growers since they had to be paid per stem. An attempt was made to export through an own sales office avoiding

the Netherlands, but as the Plant Protection Service changed the costs this initiative was left (Vakblad, 2003 (51/52)).



	2000	2001	2002	2003	2004	2005	2006	2007*
other cutflowers	34	39	8	0	12	33	11	89
Roses	10.242	11.819	14.728	16.496	20.225	21.718	20.328	20.525

Figure 3.10 Value of exports of roses and other cut flowers from Uganda to the Netherlands from 2000 until including 2007 in euro (x 1,000). (source CBS)

3.5.4 Present and future situation

In 2006 flower export earnings dropped by 22% as can be noticed in Figure 3.10 as a slight drop of exports to the Netherlands as well. The drop was from US$ 25 million in 2005 to US$ 27 million due to unfavourable weather, a hailstorm in March that ravaged two flower farms with approximately 20 hectares. Another 20 hectares was lost due to the closing down of two farms due to financial constraints. Other constraints in Uganda's competitiveness on the European market are lack of new investments and high power- and production costs. Frequent power breakdowns lower the quality of the flowers and maturity time of chrysanthemum cuttings, but also increase costs of doing business since growers have to switch to using generators,

according to the in 2007 new executive director of UFEA Juliet Musoke (www.newvision.co.ug, 2007).

3.6 Tanzania

Tanzania has a population of 39.3 million people and an annual growth of 2.1%. 44% of the population is under 15 years of age. The GNP per capita is US$ 1,100 with a growth rate of 6.9% estimated for 2007. The total export value of Tanzania in 2007 is estimated at US$ 2.227 billion (www.cia.gov/evd).

3.6.1 History and development

Flower production in Tanzania is still immature. Approximately ten growers are growing flowers on 120 hectares. About 80% of the cultivated area is under rose production, the rest is production of cuttings. Restraints are the low education of workers, export that is organized through the Kenyan airport and lack of a clear vision. Since the number of growers is limited the TAHA (Tanzania Association of Horticulture) has restricted means.

3.6.2 Production areas

Main regions for production are Arusha and Mosi, near to the Kenyan border (Plate 3.6). Thus it appears to be an extension of the Kenyan production area. Apart from roses some summer flowers like hypericum, eustoma and celosia are grown in Tanzania (PT Tanzania, 2005).

Plate 3.6 Map of Tanzania with indication of main production areas Arusha (1) and Mosi (2) (source: www.state.gov; fit by author)

3.6.3 Exports

Main restraint in Tanzania is the infra structure. In 2005 it was still cheaper to transport by road to Nairobi. Meanwhile the airport is sophisticated enough for cut flowers, but amounts are too low. Mainly cuttings are handled at the Tanzanian airport. Approximately 75% of all exported flowers has destination the Netherlands. Of all exports to the EU 74.1% was destined to the Netherlands, the remainder for Germany (24.7%) and UK (1.1%) (PT Tanzania, 2005).

In the exports of unrooted and rooted cuttings from Tanzania to the Netherlands the development in amounts, as well as the rise of exports of rooted cuttings in the years 2006 and 2007, can be observed (Figure 3.11). The exports of roses and other cut flowers from Tanzania to the Netherlands shows a stable situation until, while in 2003

an enormous drop appears (Figure 3.12). As of 2003 a slight recovery from this drop can be seen, whereas 2007 turns out to be a more successful year than 2002. Cause of the drop in exports might be that transportation by van to Nairobi was practiced since transportation was cheaper and more reliable that way. Possibly the export figures thus appear in Kenyan statistics.

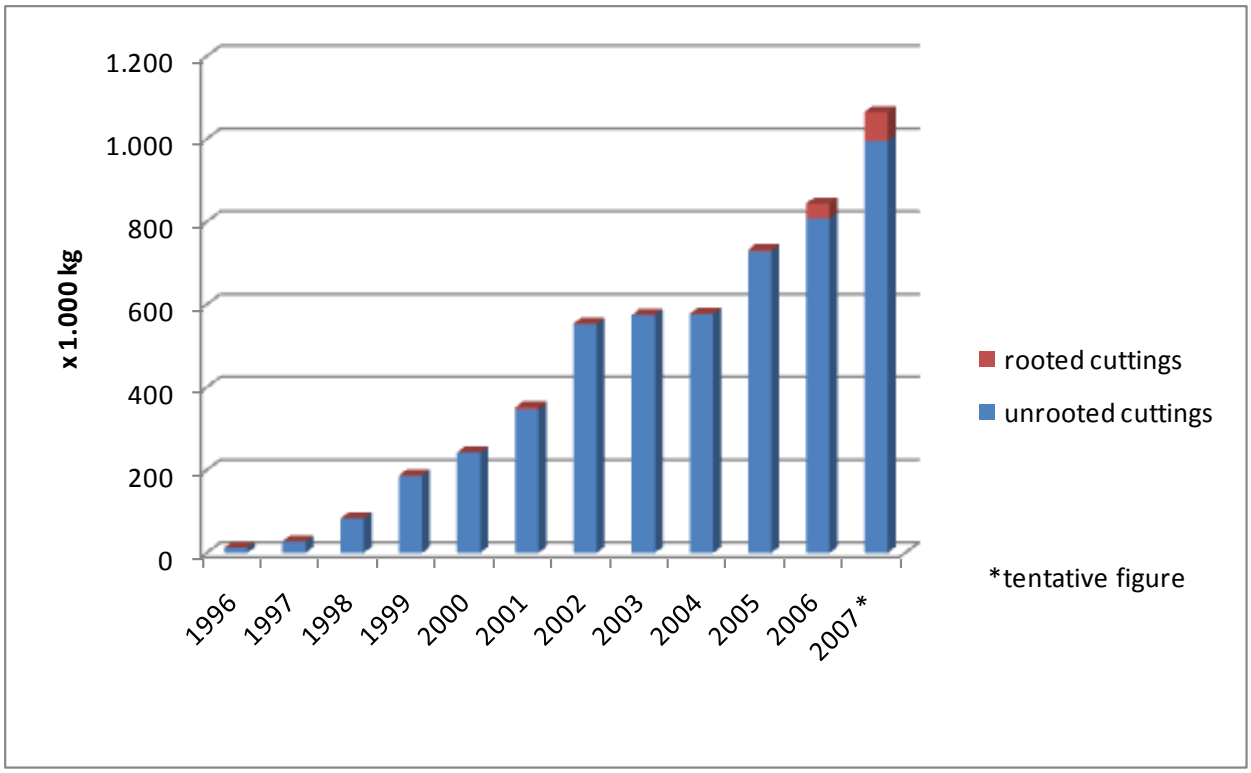


Figure 3.11 Exports of unrooted and rooted cuttings from Tanzania to the Netherlands in the period 1996 until including 2007 in kg (x 1,000) (source CBS).

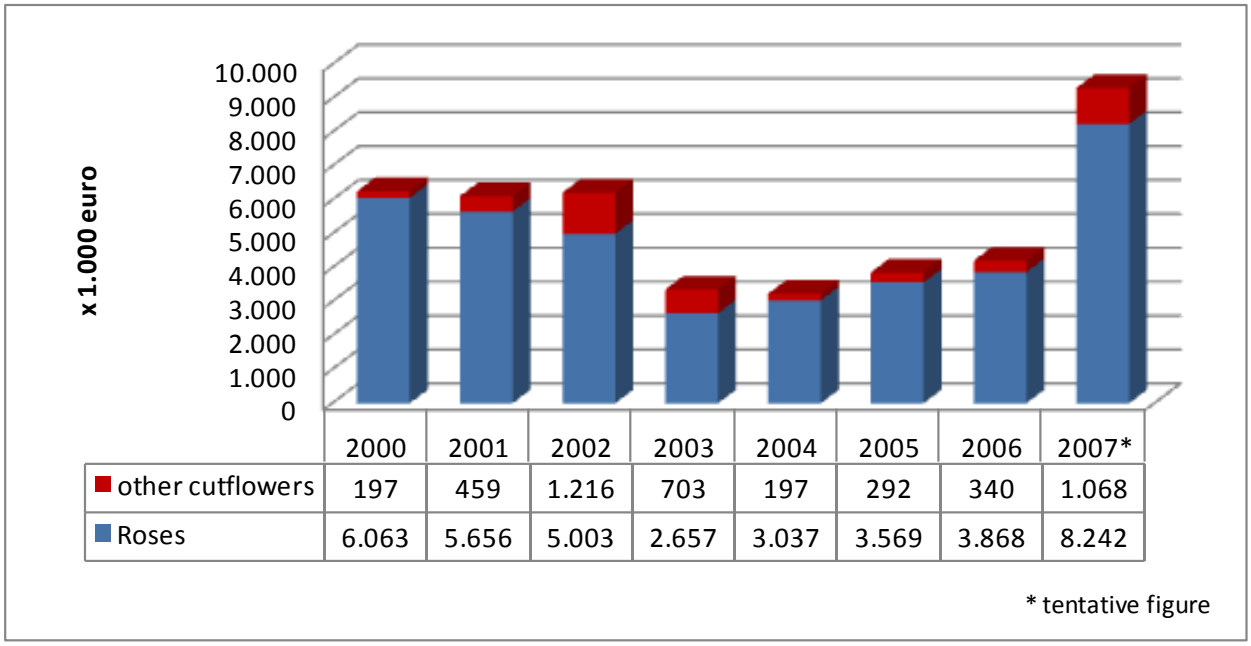


Figure 3.12 Value of exports of roses and other cut flowers from Tanzania to the Netherlands from 2000 until including 2007 in million euro (source CBS).

3.7 South Africa

South Africa has a population of 44 million people with an annual growth rate of minus 0.5% (so decrease of population). Only 29.1% of the population is under 15 years of age. The unemployment rate is estimated at 24.1% in 2007. The GNP per capita is estimated at US$ 10,600 in 2007, with a growth rate of 5%. The total export value of South Africa in 2007 is estimated at US$ 76.27 billion (www.cia.gov/evd).

3.7.1 History and development

The cut flower and plant industry in South Africa consists of 900 to 1,000 companies on 1,050 hectares in 2004. Of these growers a high percentage is Dutch. This enhances the professionalism of the production. Striking detail is that South Africa has a auction since 1945 through which 60 to 70% of the local produce is sold. Of the area of 1,050 hectares approximately 80 hectares is rose production. The production value

of South African floriculture accounted for approximately € 68 million in 2001 (PT Zuid Afrika, 2006).

Main product in South Africa is the national flower protea, of which 40% is harvested in the wild and the other 60% cultivated. Major regions for protea cultivation can be found in Western Cape, Eastern Cape, Kwazulu-Natal, Mpumalanga and Gauteng. Protea belongs to the segment of 'fynbos', to which leucospermum also belongs. South Africa is a major producer of 'fynbos' with a share of 60% in production. Apart from this 'fynbos' more traditional cut flowers are grown like rose, chrysanthemum, carnation, gladiolus, lilies, eustoma, limonium and gypsophila.

3.7.2 Production areas

Most companies with cut flowers can be found nearby big cities and airports, principally Johannesburg, Cape Town and Durban (Plate 3.7). The exports of cut flowers accounted for US$ 25 million in 2005, an increase of 60% to 2001 (Gehrte, 2007 and PT Zuid Afrika, 2006).

Plate 3.7 Map of South Africa with indication of main production areas for traditional cut flowers Johannesburg (1), Cape Town (2) and Durban (3) (source: www.state.gov; fit by author).

3.7.3 Export

The export of cuttings from South Africa to the Netherlands in the 1990's involved both unrooted and rooted cutting. After 1999 mainly unrooted cuttings are exported, while amount have risen considerably (Figure 3.13). In the export for cut flowers from South Africa to the Netherlands roses are relatively insignificant compared to other cut flowers like protea and orchids (Figure 3.14).

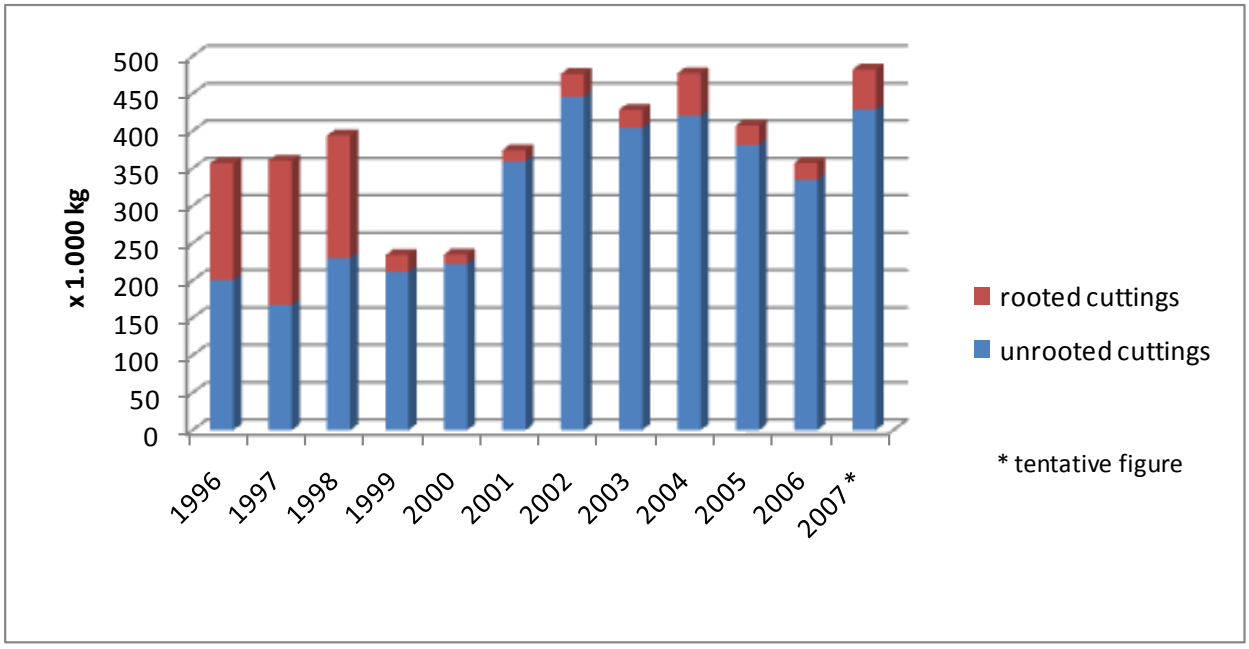
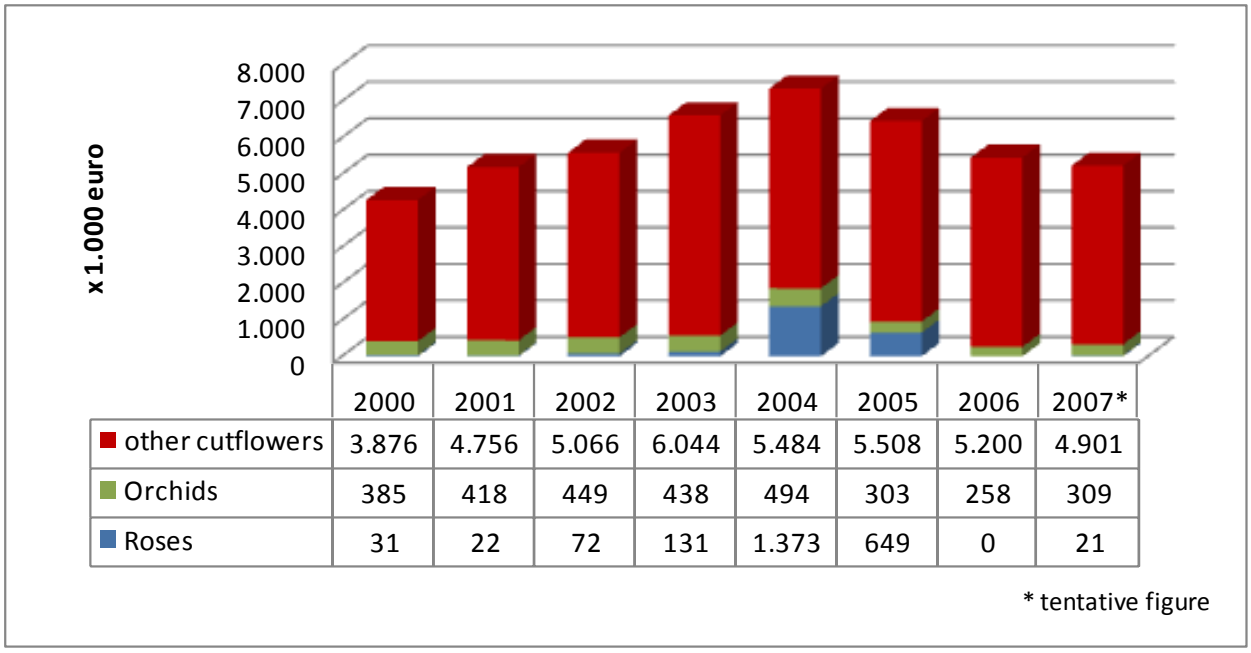


Figure 3.13 Exports of unrooted and rooted cuttings from South Africa to the Netherlands in the period 1996 until including 2007 in tons (source CBS).



	2000	2001	2002	2003	2004	2005	2006	2007*
other cutflowers	3.876	4.756	5.066	6.044	5.484	5.508	5.200	4.901
Orchids	385	418	449	438	494	303	258	309
Roses	31	22	72	131	1.373	649	0	21

Figure 3.14 Value of exports of roses and other cut flowers from South Africa to the Netherlands from 2000 until including 2007 in million euro (source CBS).

3.7.4 Present and future situation

Basic conditions for entrepreneurs in South Africa are good: low labour costs, unlimited land and labour available and a good infrastructure. Apart from this opposite season to Europe, but the same time zone which makes doing business easier. The production value of South African floriculture accounted for approximately € 68 million in 2001 (PT Zuid Afrika, 2006).

South African growers are becoming more professional and export-oriented. Restraint for the exports remains high freight costs, limited freight capacity and poor handling. Approximately 45% of the production is exported, mainly to Europe. In Europe 71% of the supply was received in the Netherlands, 17% in UK, 9% in Germany and 1% in both Portugal and France (PT Zuid Afrika, 2006).

3.8 Israel

Israel has a population of 6.4 million people and an annual growth rate of 1.2% in 2007. The per capital GNP is estimated at US$ 28,800 with a growth rate of 5.1%. The unemployment rate is 7.6%. The total export value of Israel in 2007 is estimated to be US$ 50.24 billion (www.cia.gov/evd).

3.8.1 History and development

Israel was founded in 1948 and agriculture and horticulture were major sectors at the time. At present this position is for high-tech, for the turbulent growth of this sector. Kibbutz, communal farm, was the settlement for immigrants coming to Israel with almost no means. Nowadays Israeli can stand on their own feet and kibbutz has lost its importance. The only other place where agriculture can be found are the mosjavim since all land belongs to the state and no agriculture is allowed elsewhere than in

kibbutz or mosjavim. Mosjavim is a settlement founded by the state where families, often new immigrants, can start their own companies. Floriculture in Israel was rising in the seventies and now almost all floriculture can be found in mosjavim. Average farm size at present is 1.8 hectares, but companies of 10 or more hectares can be found as well. The scaling up is necessary to generate a family income. Flower Board was the only exporter of the flowers and was financed by the growers. Apart from taking care of export and sales they also searched for new opportunities for growers. Shortly before the millennium the Flower Board was dismantled for being monopolist. Less performing growers had to end their business when new grower associations took over, but also because of rising foreign competition on the market. At first the competition hid carnations, later on rose production. The Flower Board suggested starting summer flower production during the Dutch winters, so gypsophila, phlox, solidago, helianthus and lily were the products to focus on. Now African competition is taking these products as well and Israeli growers are refocusing on products specifically fit for Israeli climate like peony, foliage and potted waxflower. Together with the possibility to transport by ship (7 days) this opens new perspectives. However new markets are found as well in Russia through Russian immigrants (Vakblad, 2006 (12)).

3.8.2 Exports

Compared to African countries the percentage of rooted cuttings in the export of starting material is much higher, accounting for 88% in 2007 (Figure 3.15). The main reason for this high share of rooted cuttings in the young plant material is the possibility to transport by sea, which brings lower costs than air freight. The export of

cut flowers from Israel to the Netherlands shows a decline since 2000. In the export roses are relative insignificant compared to other flowers. (Figure 3.16)

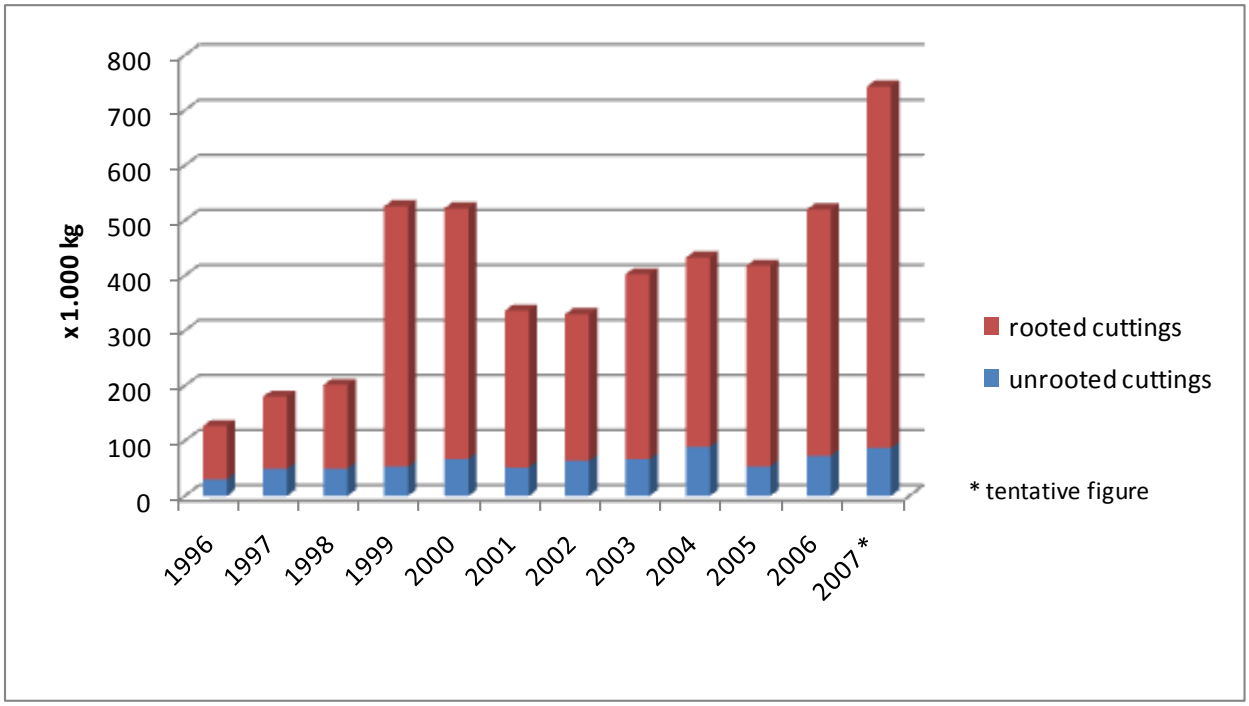


Figure 3.15 Exports of unrooted and rooted cuttings from Israel to the Netherlands in the period 1996 until including 2007 in kg (source CBS).

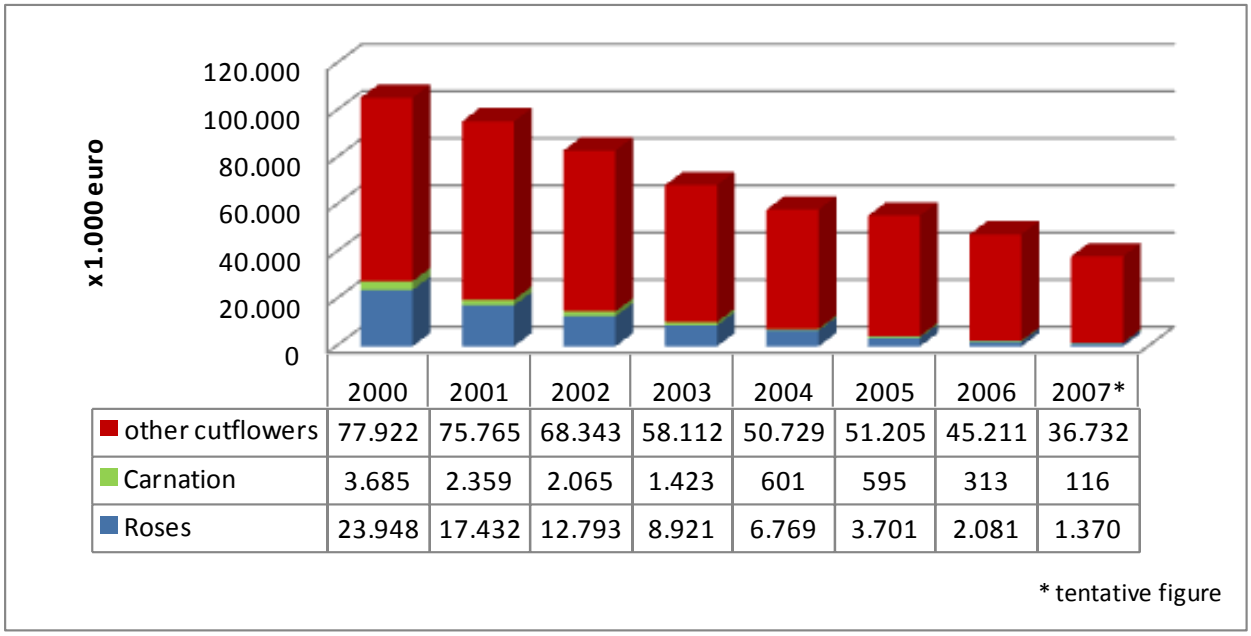


Figure 3.16 Value of exports of roses and other cut flowers from Israel to the Netherlands from 2000 until including 2007 in million euro (source CBS).

3.8.3 Present and future situation

At present 2,200 hectares are used for flower production on which a strongly reduced number of 1,200 growers is active.

Main restraint for Israeli growers is lack of water due to little precipitation for being a former desert country. This means water use is restricted by quota and expansion of a company is limited by this. Also limiting is labour availability. Israeli do not like to be a worker in a greenhouse anymore. Palestinian workers are not allowed to come from Gaza and the West Bank anymore due to political tension. Thousands of Thai worker are hired by the government with a work permit for a couple of years. These workers are sent to companies based on area and crop, which is mostly too little to get all the work done. Inspections are done to make sure no extra labour is hired and Thai workers do not do other work than in the greenhouse. The government determines the

wages, which are lower than Israeli workers would have. However the growers have to provide housing, so the final costs are the same.

The Israeli shekel is linked with the US$, which is low at present. At the end of the previous century the dollar was strong however, which was bad news for Israeli growers. They were having high costs in shekel and payment for flowers in 'cheap' Dutch guilders.

Capital is another restriction that growers are facing. In contrast to Dutch growers investments in automation or new greenhouses are difficult to finance. Banks are not willing to permit long-term loans. However growers do change the plastic cover of the old greenhouse constructions yearly. Positive aspect of the low investments is that growers are flexible in changing cultivations. As a result in the last few years quite some growers have changed from flowers to growing vegetables (sweet pepper) (Vakblad, 2006 (12)).

4 Developing countries, internal and external opportunities and threats

In this chapter miscellaneous information on opportunities and threats for developing countries, both internal and external, are addressed to. This is to make the information complete and allows the discussion, conclusions and recommendations in the next chapter.

4.1 Strengthening aspects for the sector in developing countries

4.1.1 Food security

A publication on Floriculture for food security (Baudoin, 2007) illustrates the impact that floriculture can have on food security in developing countries. FAO is committed to improve food security in order to reduce half the number of 800 million suffering from hunger and malnutrition by 2015. One of the ways to do so is creating sources of income and thus contribute to the food security status of developing countries. Among horticultural crops, flower crops have considerable earning potential and can play an important role to create employment and income leading to improved livelihood for the less endowed. Another positive aspect of floriculture is the contribution to another universal commitment related to safeguarding the biodiversity. The international flower trade is still growing at a rate of 2% per year, so developing countries can catch a share in this expanding business. Many developing countries have an interesting ornamental plant diversity which can be used for commercial floriculture directly or through breeding of new crops. Advantage is that these crops are adapted to the natural agro-environmental conditions, so the cultivation can be intensified with minimal investment and avoiding royalties surcharges.

At present cut flowers grown and exported from Colombia, Ecuador and Kenya are not developed from local species. Almost all commercial breeding material is imported. For flowers this is still bringing a lot of employment (e.g. Colombia 70,000, Kenya 50,000 and Ethiopia 13,000 people). In ornamental plants (e.g. Dracaena and Ficus) often cane or cuttings are exported from the countries of origin (Costa Rica, Guatemala, Mexico, Sri Lanka) not providing lots of employment opportunities to developing countries.

As an example, South Africa has a wealth of indigenous plants. Researchers of the Agriculture Research Council RC have been involved in the development of new flower bulb cultivars of the *Hyacinthaceae* family. For instance in Lachenalia (Cape Cowslip) several flower colour mutation were obtained. In Ornithogalum (Bethlehem star) a substantial increase of flower size was selected in mutants and in Eucomis (Pineapple lily) a mutant with bright leaf spots was identified. Apart from being registered these crops are also produced by a community in the Northern Cape. The project started off as a small pilot in 1997 but is now a commercially viable project with 500,000 bulbs being exported on a yearly basis.

As stated in the discussion: "breeding for beauty is a noble activity especially when it can contribute to relieve peoples poverty and improve their food security" (Baudoin, 2007).

4.1.2 Effect of floriculture industry on small growers

In Kenya an effect of the floricultural sector is visible in small scale farms in Central Kenya. For floriculture being an important sector the Kenya Agricultural Research Institute (KARI) Embu station developed flower varieties that can be grown in the

open field using rain water. They are varieties of Arabicum, Crocosmia, Mobydick, Tuberose and Gladiolus. Small scale farmers do not have to do huge capital investments and by forming groups of 15 to 60 growers they can meet exporters demands of 3,000 stems at a time. Kari promises to roll out an elaborate extension service network that includes seed management, pest- and disease control, post harvest handling and cooling requirements. Calculated are nearly double returns compared to traditional cash crops such as coffee and tea. Restraints at the time are costs of seeds, fertilizers and pesticides as well as shortage of suitable vehicles for refrigerated transport of produce to the market (Business Daily Africa, 26. July 2007).

4.1.3 Diverse strategies of developing countries

The World Bank identified horticulture, being fruits, vegetables, cut flowers and ornamentals, as one of the most important high-value export sectors. In the 1996 – 2000 period the value of export of fruit and vegetables surpassed the value of the traditionally most important African exports, coffee and cocoa. Floriculture exports are small but growing rapidly. SSA-countries have a comparative advantage in a number of horticultural commodities due to their favourable climate, proximity to European markets and cheap labour. Major players in horticulture in SSA are South Africa, Kenya, Zimbabwe and Côte d'Ivoire. The countries have a different strategy and approach however. Kenya's fruit and vegetable production is based on small-holder production, while Zimbabwe and South Africa rely on large-scale commercial farms. Côte d'Ivoire presents an intermediate case. Kenya and Zimbabwe have relatively diversified horticultural exports, including a variety of vegetable products and cut flowers. Côte d'Ivoire however concentrates on two main products: pineapples and bananas. Kenya, Zimbabwe and South Africa depend on airfreight for much of their

horticultural exports while Côte d'Ivoire primarily exports by sea-freight (World Bank, 2004).

4.1.4 Diversification within the country

A country should not be depending on one industry only. Ethiopia for instance has more to offer than coffee, tea and flowers. The government has clearly succeeded in adopting market friendly policy measures. By doing so the command economy was transformed into a full-fledged market economy. Examples are reduction of the highest customs duty from 230 per cent to the current 30 percent. Also Ethiopia has applied for accession to the World Trade Organization (WTO). State Minister of Trade and Industry Tadesse Haile addressed an European business delegation in March 2008 underlining the need for further promotion of trade and investment ties between Ethiopia and EU. An example of development potential is hydropower, where a production capacity of 45,000 megawatt is possible of which only 3 percent has been developed so far. Another interesting sector is tourism, since Ethiopia has several tourist attractions for instance the stelae in Axum and the monolithic rock cut churches of Lalibela (Ethiopian News Agency, 2008).

4.1.5 Knowledge and creativity brought in by foreign entrepreneurs

Foreign investment and knowhow is important for a country starting in floriculture. This is illustrated by the fact that in 2007 45% of the 70 flower farms in Ethiopia are owned by local people and the other 55% by foreigners. This is similar to Kenya which has just over 100 active flower exporters, half of them foreign owned and members of the Flower Council, who supply 80% of the country's exports (Riungu, 2007).

Foreign investors need to adapt local circumstances, including politics. An example of creativity is found in the way a Dutch flower grower 'survives' in Zimbabwe. Aart Nugteren started his rose farm in Zimbabwe in 1985. In 2003 he decided to send his wife and children to the Netherlands. He himself stayed on his farm Mazou Flowers, 25 hectares of roses and 15 hectares of flower for export at 60 km north of capital Harare. He complied with the government to give natives part of his farm by handing it to Zimbabwean friends, even at the time that Mugabe wanted to have Zimbabwean have a majority of the farm. His friends did not mingle in the management of the farm. Nugteren states that this will be the end of Mugabe, since no companies quoted on stock exchange can ever invest in Zimbabwe under these conditions (Gelder, 2007).

4.1.6 Role of institution in floriculture

The impact of institutions on the performance of the flower industry in developing countries was researched by Jo Wijnands of WUR-LEI. In the research no evidence was found that export growth of cut flowers is related to outcomes of institutions. Expectations are that flower exporting industry is a special case that is rather unrelated to the rest of the economy. Due to the involvement of foreign knowledge, inputs and marketing the domestic institutions might be of less importance. (Wijnands, 2007).

4.2 Potential weakening influences for the sector in developing countries

4.2.1 Role of the government

In most of East African countries, mainly in Kenya, growers feel that the horticultural sector as developed despite instead of with the help of the local government. They feel little specific appreciation and understanding for the positive contribution of horticulture to the country's economy. Growers have the impression that the authorities lack knowledge and understanding of the strong dynamics and the international character and the related demands. The general feeling is that the government knowledge and attention clings to the small farmer. At the same time growers know that more cooperation with the authorities might lead to conflicts in division of roles and tasks. For growers the main points of needed support from the government are improved loan facilities, improved infrastructure and for Tanzania and Uganda tax holidays for new investors. In general simplifying rules, taxes and obliged remittances are needed (Ashtari, 2004).

4.2.2 Dependence of external expertise

Of the approximately 70 flower farms in Ethiopia (2007) 45% is owned by local people and the remaining 55% by foreign investors. This is similar to Kenya which has just over 100 active flower exporters, half of them foreign owned and members of the Flower Council, who supply 80% of the country's exports (Riungu, 2007). The development of the cut flower industry in Kenya and Zimbabwe depended heavily on Dutch and Israeli floriculture experts who were hired as managers and technicians. If policies towards work permits for foreign experts would not have been so relaxed it is

not likely that the cut flower sectors would have taken off in these countries (World Bank, 2004).

4.2.3 Incentives

Joop Dame is an advisor of consultancy Hortilinx in Kenya with much experience in floriculture. He visited many countries and has a clear opinion on the developments in Africa at present. "Seeing the success of Kenya and Ethiopia governments of other countries attempt to attract floriculture as well." He states "What governments like is employment for unskilled workers and incoming foreign exchange." To attract growers they offer all kinds of incentives, financially helped by organisations like the World Bank. This helps to set up farms, but when the companies have to stand on their own feet the setback comes. Part of the companies will not be able to continue. After this phase has passed it becomes clear what the chances of the country in floriculture are. Dame: "In floriculture a critical mass of approximately 500 hectares is needed to grow. Kenya passed this point in the mid-90's and Ethiopia will be able to pass that line as well." In Ethiopia expansion might be too fast for some companies at present, but Sher Agencies is an important impulse in Dame's opinion. Tanzania and Uganda never made it to the critical mass and thus never broke through (Vakblad, 2007 (19)).

4.2.4 Relocation by frustration

The Standard of 12 September 2006 reports on threats of investors in flower farms around Naivasha to relocate their business from the country due to poor infrastructure and insecurity. Some already started investing in Ethiopia, claiming that new farmers are enjoying favourable economic terms there. Workers were gripped by panic since they fear massive lay-offs after possible relocations and declining profits in the international markets. Sher Agencies, producing 600 million stems annually, already

acquired a large tract of land in Ethiopia. Reported favourable circumstances compared to Kenya are a 10-year tax holiday, better road network and well equipped security system. Mr. Gerrit Barnhoorn, Sher Agencies Chief Executive stated that "They do not want to shut down in Kenya". He expressed however incurring heavy expenses due to the poor state of the Naivasha – Mai Mahiu Road. This led to frequent breakdown of the vehicles and delay of the produce reaching the market. Another matter is the rising insecurity at the time due to frequent attacks. This is scaring away potential investors and thus hurting the multi-million flower industry. While other countries are busy promoting their fast growing flower industries their Kenyan counterparts were painting it in black light. Growers are doing a lot to uplift the living standards of their workers and protecting the environment (Njoroge, 2006).

On 14. December 2006 two export oriented farms in Uganda seem to have reached final stages of relocation to Ethiopia because of investment incentives offered there. The farms in Uganda had an area of 5 and 10 hectares, exporting 40 to 60 million roses stems annually. Chairman of the Uganda Flower Exporters Association (UFEA), Dutchman Jacques Schrier, expressed disappointment over the news. He blames the government of Uganda for frustrating growers by not granting them incentives. UFEA submitted a five-year strategic plan and a proposal on incentives in 2003, which was not responded by the end of 2006. Schrier states that competing with other countries is difficult in Uganda with increased production costs, high freight charges and the new labour laws (www.newvision.co.ug, 2006).

4.2.5 Influence of turmoil, Kenya as example

After the turmoil in December Dick Bruinsma, the agricultural counsellor of the Netherlands Embassy in Nairobi, was asked for his opinion on the economic perspectives and possible fleeing of investment in February. In his point of view growers were damaged by workers moving out of the area and increasing costs of raw materials. According to Bruinsma no direct threats were made towards growers. Indirect threats have been made though, by letters in which was explained that workers of certain tribes had to leave the farm or the farm would be set on fire. It would be easy to do so, but Dutch entrepreneurs have an ethical objection against discrimination in accordance with Social Responsible Entrepreneurship (in Dutch abbreviated as MVO). Many of the experienced and well trained workers fled however, which apart of the drama for these people means those growers have to start with unskilled labour again. Apart from this many companies paid a bonus or remain paying wages anticipating future developments. Economic damage seems to be limited, but the image of Kenya is damaged anyway. As for new investments Bruinsma sees no stop or flight from Kenya. Behaviour of investors is difficult to predict anyway. In Ethiopia the situation is tense since many years, yet many investors started in the last few years. Tanzania has been stable and quite for a long time, yet investment activities in horticulture are low (Vakblad, 2008 (08)). Joop Dame, consultant in Kenya, explains why prices of raw material have been rising so fast after the turmoil. "Growers tend to use their suppliers as a bank", he says, "The suppliers have seen the outstanding debts rising and try to minimize the risks". Jos van der Venne, owner of Sian Roses explains the alternatives he tried to continue 'business as usual' on his four farms in Western Kenya. During six days two of his farms, located Eldorado and Kitale

were not able to deliver flowers to Nairobi due to the unsafe situation on the road. He organized convoys with other farms. The first night the convoy had to pass 21 road blocks, unmanned because of the night, and at arrival in Nairobi still some arrows were found at the side of the truck. Other alternative he tested was flying the flowers from the local airport Eldoret to Nairobi. Both turned out to be good alternatives. Eric Doodeman, manager of a farm in Ol Kalou, had a lot of consultations with the farm managers. He, like all other farms, made a donation to the local refugees. He states that not only investments will keep him in Kenya, but also he feels socially obliged for being the largest employer in the area bringing boosts to the local economy every month (Vakblad, 2008(12)).

4.3 Strengthening outside influences for the sector in developing countries

4.3.1 ACP-EU cooperation

Cooperation between the European Union and the African, Caribbean and Pacific Group of States (ACP-Group) began in 1975 with the First Lome Convention. In this convention developing countries, all former colonies of the involved European countries, were able to export their produce without import duties. The Lome Conventions were succeeded by the Cotonou Agreement in 2000, which ended 1. January 2008. African growers were facing import duties of 8 to 11% if the Agreement would not have a follow-up. In November 2007 a continuation of the Cotonou Agreement was agreed on by the EU and 77 developing countries, although with some changes. Economic Partnership Agreements (EPA's) are part of the deal. EPA's include free access to the European market but also free access to the market in the former

colonies by European companies. The latter is asked for by the World Trade Organisation (WTO) that states that the former agreements were to one-sided. Development-aid organisation Oxfam Novib points at the negative side of EPA's. Developing countries will be missing import duties, which account for 10 to 20% of the government earnings.

For the year 2008 a zero tariff on import in the EU was secured for African growers. Growers thus will be able to export without additional costs of taxes (www.acp-eu-trade.org; de Volkskrant, 2007; Vakblad 2007 (47)).

4.3.2 PSOM

The Program for Co-operation with Emerging Markets (PSOM) aims to encourage Dutch investments in emerging markets in Eastern Europe, Africa, Asia, the Middle East and Latin America. It is primary aimed at pilot investments in the private sector and promotes trade relations as the motor behind sustainable economic development in developing countries and countries in transition. Investments generate employment, income and knowledge, thus contributing to strengthening and diversifying of the local private sector. Of course the involved Dutch companies are better positioned in these countries through this program as well. The PSOM program is open for projects in any sector of economy. The target group for PSOM consists of Dutch companies or consortia of Dutch companies, which execute projects in cooperation with local companies. Besides ensuring that the establishment of the company in the country is not temporarily a local partner knows the way through the procedures in the country.

The total project costs and PSOM contribution per project differ between the various countries. For most countries the contribution is 50% of the project budget with a maximum of € 750,000. For the so called Least Developed Countries (LDC) from the

DAC list the contribution is 60% of the total budget up to a maximum of € 495,000. For Ethiopia this last percentage is applicable.

Minimum requirements to apply for the PSOM-program are:

- You are a Dutch company with aim to set up a new activity in partnership with a local partner in one of the PSOM countries
- You and your local partner are financially sound, have relevant experience and expertise in the market and enter into a long term trade or investment relation.
- The companies are officially registered in the Netherlands and the recipient country.
- You do not have the financial means to implement your plans nor can you obtain funds from a bank to finance your business plan.
- Your proposal is commercially feasible in medium or long term and has a positive effect on the local economy of the recipient country in terms of creating additional employment, introducing new technology, improving livelihoods and resulting in improved environmental conditions.
- Your project leads to additional investments and increase in turnover.
- You are both capable to finance your own contribution, required capital and will manage to pre-finance part of the project equipment.

Since 2005 nineteen projects with PSOM were granted to Ethiopian projects in the sector agriculture, ten of which in floriculture (www.evd.nl).

PSOM has been a successful instrument and has started positive developments in Uganda and Tanzania. Through PSOM innovative projects have been conducted in the field of efficient and environmental friendly cultivation and new product/market combinations. Examples are hydroponics, multiplication of roses, cuttings, cultivation

of peppers and raspberries for the European market and cultivation and export of safflower oil. Remarks to be made are:

- One of the goal of PSOM is enhancing joint-ventures of Dutch and local entrepreneurs. NGO's have commented that this is not always the case.
- After finishing the project lack of financing makes it difficult to move to a larger scale. This because banks are reluctant to finance loans.
- In the flower- and vegetable sector mostly well equipped and professional companies are involved. Giving PSOM to these companies is improper competition.
- Entrepreneurs who received PSOM would like to see the procedures simplified (Ashtari, 2004).

Case: Freesia farm with PSOM subsidy in Ethiopia

Example of PSOM subsidy as a positive instrument is the start of the first freesia farm in Ethiopia. At the end of 2006 a group of Dutch freesia growers decided to put an end to the decline of freesia production in the Netherlands. In 2007 a greenhouse of 31,000 m^2 and 2,000 m^2 packing area is constructed in Suluta, half an hour drive north of Addis Ababa. Idea is to plant cormels in Ethiopia which produce a lighter quality of freesia and at the same time a new corm. This corm will be given a treatment of five months and be planted in the Netherlands to give a high quality freesia. This way the production time in the Netherlands greenhouses can be reduced. In return for the PSOM subsidy the growers should take care of training and should invest a yearly 1% of the turnover in projects for the community close to the farm. The PSOM subsidy covers part of the investment, the remaining part is for the growers themselves (FlowerTech, 2008(01)).

4.3.3 World Bank challenges for Ethiopia

Challenges identified for Ethiopia by the World Bank in 2004, summarized in 5 I's: Investment, Infrastructure, Institution, Innovation and Inputs. (World Bank, 2004)

- Investment: increasing the level of investment by removing the disincentives so the business environment for the private sector is more attractive.
- Institutional support. Advised is a enhanced institutional environment that supports the sector like in Kenya. The Kenyan case demonstrates that all three of the core functions of production, logistics and marketing require a concerned public sector support and an active public-private partnership. Referred is to HCDA, a corresponding department in the Ministry of Agriculture, KEPHIS.
- Infrastructure: physical and technical capacity (roads, power and water).
- Innovation; to maintain competitiveness innovativeness is necessary, so EARO, agricultural universities and colleges and private sector should have a closer linkage.
- Inputs: plant material and effective chemicals is a critical issue.

4.3.4 International quality standards

Sooner or later a Code of Conduct is developed for the horticultural sector in a developing country. For Kenya it took a long time since the country was not at all prepared for this. In Ethiopia the Code of Conduct was developed by WUR for EHPEA last year, in collaboration with the government. This cooperation of an industry with the government is unique in Ethiopia so far. Within five years after the serious start of horticulture in the country it was released. But what is the use of a code of conduct? At the Hortiflora Expo 2007 in Addis Ababa Piet van 't Hoff, international coordinator of MPS, suggested the same approach. The Code of Conduct will be minimum

requirement for export. MPS can be used as a basic registration system and benchmark. "If you join MPS you are lowering your risks, raising you image and increasing the level of management activities of the company", according to Van 't Hoff (Peleg, 2007). At present the different levels of the Code of Conduct comply with several labels. Bronze is a basic level and is composed of statutory regulations and good agricultural practice. Silver equals Global-gap and Gold equals MPS Social Qualified and Fair Flowers and Fair Plants (Peleg, 2008).

Plate 4.1 A Code of Conduct or MPS Social Qualified cares about the health and well being of workers and prevent them to apply chemicals without protective clothing (I. van Meggelen, Ethiopia January 2007).

4.3.5 Lease of farms

Lease is a relative new form of starting a farm in a developing country. An investor offers a package of necessities for growing, amongst other things soil, greenhouse, infrastructure (for instance fertigation, power supply), grading hall, cold stores. This makes it easier for a grower to start in a new country, where he is not familiar with

legislation and way of doing business. Examples are Sher Agencies with lease construction in Kenya and Ethiopia (see Appendix 1, chapter 2) and Flower Business Park of Igal Elfezouaty in Kenya. Mentioned advantages of lease are lower investment, less risks (for having better knowledge of the costs) and quick start of the farm. Disadvantages are higher costs in the long term, limitation of expansion and dependence of others (Vakblad, 2004(39)).

4.4 Potential weakening outside influences for the sector in developing countries

4.4.1 Incentives in other countries

On 12. September 2007 Catherine Riungu reported in The EastAfrican that Ethiopia's flower sector outgrows Kenya. KFC chairman Erastus Mureithi stated that it has taken Ethiopia five years to achieve half of what Kenya has in three decades. By going this rate, Kenya could be overtaken by Ethiopia in a decade, he added. At the time investors from the Netherlands, Germany, India and Israel have secured licences for floricultural developments covering 1,700 hectares of land in the central region alone. Investors from Uganda and Kenya have also jumped on the bandwagon, as well as white farmers from Zimbabwe. In 2005 Ethiopia went shopping for investors who were promised an attractive investment package of a five-year tax holiday, duty free machinery imports and easy access to bank loans. All of this was sugar coated with 70% investment bank funding and easy acquisition of leased government land at US$ 18 per hectare. Even as this was happening and Kenyan and Ugandan flower farmers were appealing to their governments for support their pleas were unheeded, even when they threatened to relocate to Ethiopia. Ethiopia is rapidly gaining market

acceptance, even in countries like Japan, where Kenya has not made inroads according to Jane Ngige KFC chief executive officer (Riungu, 2007).

4.4.2 Public opinion

Labour costs are low which sometimes is misunderstood by outsiders. In the Dutch television program RTL4 news broadcasted on 22nd of September the news makers concluded that by paying € 1 or € 2 a day farmers were exploiting their workers. The mayor of Naivasha, Thomas Gitau, stated that flower farms in his municipality conducted 'legalised slavery'. Jane Ngigi, Chief Executive officer of the Kenya Flower Council (KFC) explained that the criticism are groundless and certainly not true. In Kenya the government looks after the treatment of employees and general standards, and no complaints are heard from these authorities according to Ngigi. Salaries are negotiated with the unions, representatives of the workers and employers. Moreover most farms are certified by MPS and/or KFC which does not allow bad treatment of employees on farms (Flowertech, 2007(07)). Apparently the interviewed men had a conflict with their former employer and tried to get back to them this way.

5 Methodology of the field research

Former experience in horticulture

The research for this dissertation went principally through communication with different stakeholders in the floriculture industry and literature review. A lot of information and experience on entrepreneurship in floriculture in various countries was gained by the researcher during the 23 years professional life as a horticultural specialist. This information was the starting point of arising interest to have a closer look at the observed nomadic nature of floriculture and its growers.

Collection of statistic data to prove nomadic nature

To prove the nomadic nature statistics were collected from different sources, mainly publications in reports and horticultural and floricultural magazines, as well as statistical websites from CBS, Eurostat and CBI.

Qualitative research by questionnaire and interviews

A questionnaire was sent to companies in Ethiopia which were (partially) owned by non-native investors. Ethiopia was chosen for being the latest hotspot in production. The international production and trade of flowers is rather new (less than ten years old) in this country. The addresses of the companies were obtained through the EHPEA and the Dutch Embassy. The received answers were processed through qualitative research using Microsoft Excel.

Answering some question (question 10 for Ethiopia and 14 and 15 for Kenya) the grower could rank reasons. The answers were processed by giving the main reason 3

points, the second 2 points and the least 1 point. By adding all the points a division could be made upon which the graphs were prepared.

The output of the questionnaire led to interviews with different stakeholders in the Netherlands and abroad in order to get an inside view. By interviewing Dutch companies in the industry with a long time experience in international production a broader view on the different subjects was obtained. An interview was held with a vegetative propagation company (Fides) for their long time experience in production of cuttings abroad (since 1976). Growers in Ethiopia were visited during a study trip in January 2007.

To have an opposite view on movements in industry, growers in Kenya were interviewed to have their opinion on the booming of Ethiopian floriculture and the effect this development might have on their own business. The interviews were planned to take place during the Kenyan horticulture fair Hortec in March 2008. Unfortunately this event was cancelled because of the turmoil after the president elections of December 2007. After cancelation the information needed was collected by a questionnaire, which the agricultural counsellor of the Netherlands embassy in Nairobi kindly sent to growers. Apart from this an extensive interview with the founders one of the biggest foreign nurseries in Kenya, Sher Agencies, provided information on different perspectives.

Before sending the questionnaires a pilot was done to see if the questions were unambiguous. The pilot was done by asking the supervisors and several growers to check in the questionnaires and give feedback. The final questionnaires can be found in appendices 3 and 4.

To have more ideas about capacity building trips were made in Ethiopia to Jimma University (January 2007) and Mekelle University (December 2003, June 2004 and April 2005).

Restraints

During the research for this dissertation some constraints were met. Main constraint was the postponing of the Hortec from March to November 2008 due to the political situation at the beginning of 2008. Since the Netherlands embassy also advised no travelling to Kenya at the time the field research was limited to sending questionnaires to obtain information from growers.

Other minor restraints were the difficulty to find reliable figures on production and area over an extended period of time in different countries.

6 Field research in Ethiopia and Kenya

This chapter focuses on the field research carried out in Ethiopia and Kenya. The methodology is explained, replies to the questionnaires are given and discussed separately for both countries. For additional information an interview with Gerrit Barnhoorn, owner of Sher, was done. Sher has profound knowledge of the sector in both countries. The interview can be found in Appendix 1, chapter 2. A negative experience is presented in Appendix 1, chapter 4 is an interview with a Netherlands growers almost bankrupted by the bureaucracy in Ethiopia.

6.1 Ethiopia

6.1.1 Methodology

Since growers have started business in Ethiopia recently a questionnaire was sent to 36 e-mail addresses of horticultural companies with a foreign owner in Ethiopia. This was close to the total of nurseries at that time. Reason for limiting the group to (partially) foreign owned companies is that in this research the reasons for choosing Ethiopia are looked for, which is different for full Ethiopian owned companies of course. The questionnaire can be found in Appendix 3 and the names of responding companies in Appendix 5. The addresses were obtained from the royal Netherlands embassy and Ethiopian Horticulture Producer-Exporters Association (EHPEA) in Addis Ababa and from former visits to Ethiopia. The questionnaires were sent 30 January 2007 with a reminder on 22 March 2007.

Eleven replies were obtained, but three of them were out of the range of interest for this research for being suppliers or vegetable grower. Eight replies were analyzed to get qualitative data. The companies replying the questionnaire can be found in

Appendix 5. For statistical interpretation the number of eight is too low. Nevertheless a response of 30% and the characteristics of the responding group represent an average of the companies in Ethiopia with foreign investors.

6.1.2 Replies

The companies that answered the questionnaire all were started between January 2004 and September 2005.

Five out of eight companies are owned by non-Ethiopian investors alone, being three Dutch companies, an Israeli and a German company. One Dutch and the German company are producing cuttings of potplants and bedding plants for the European growers, one Dutch company grows roses, the Israeli company grows gypsophila and the last Dutch grower starting material of roses for local growers. In the other three cases an Ethiopian-Dutch partnership is involvement in the company.

Products can be grown out on the field, but most crops for export are grown under cover in order to protect the crop from hazards like changing weather conditions and pests and diseases (Figure 6.1). These data cannot apply for the whole Ethiopian production in floriculture, but give a perspective on the growers responding the questionnaire. As for the sales of the product local consumption is not available, except for the rose graphs and cuttings for starting material produced by one of the nurseries (Figure 6.2). Most growers export to EU or gulfstates.

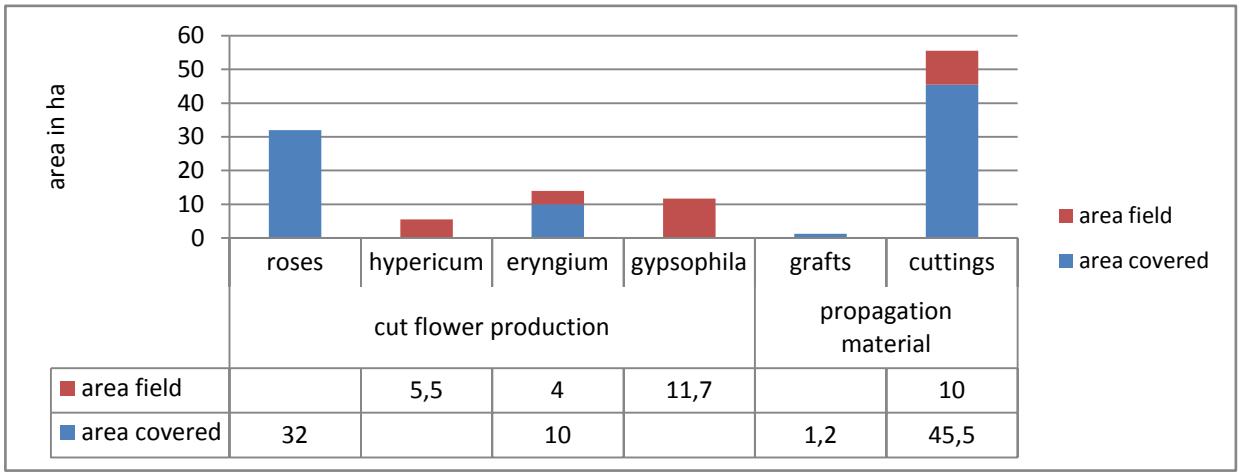


Figure 6.1 The crops of the different responding companies are quantified in area (hectares).

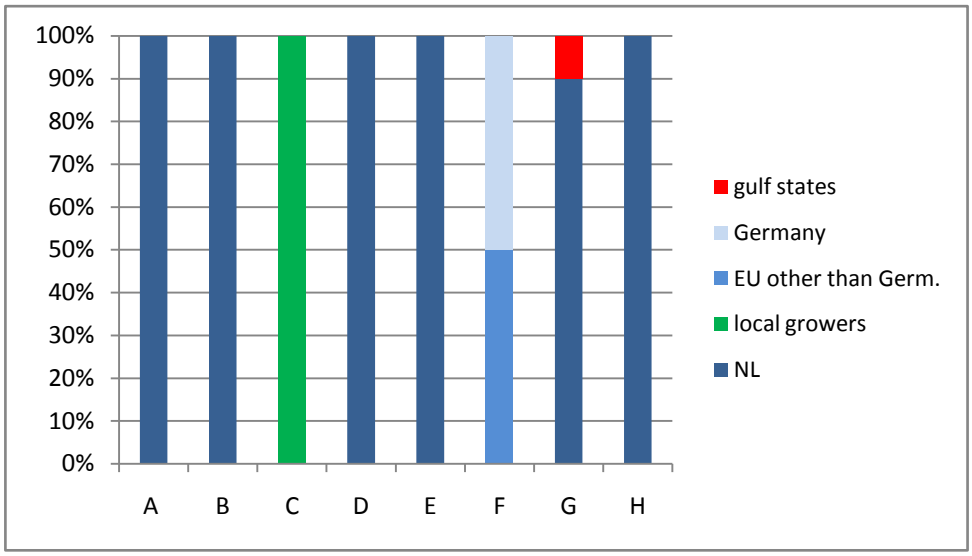


Figure 6.2 countries for which produce is destined in percentage of production per farm of responding companies.

6.1.3 Reasons for starting in Ethiopia

Main reason for sending the questionnaire was to highlight the reasons for growers to move to Ethiopia. Apart from this it is interesting to know whether they abandoned a nursery anywhere else in the world and the reasons for this abandonment. The

reasons and the weight they were given by the growers are depicted in Figure 6.3 and detailed information per issue is listed below.

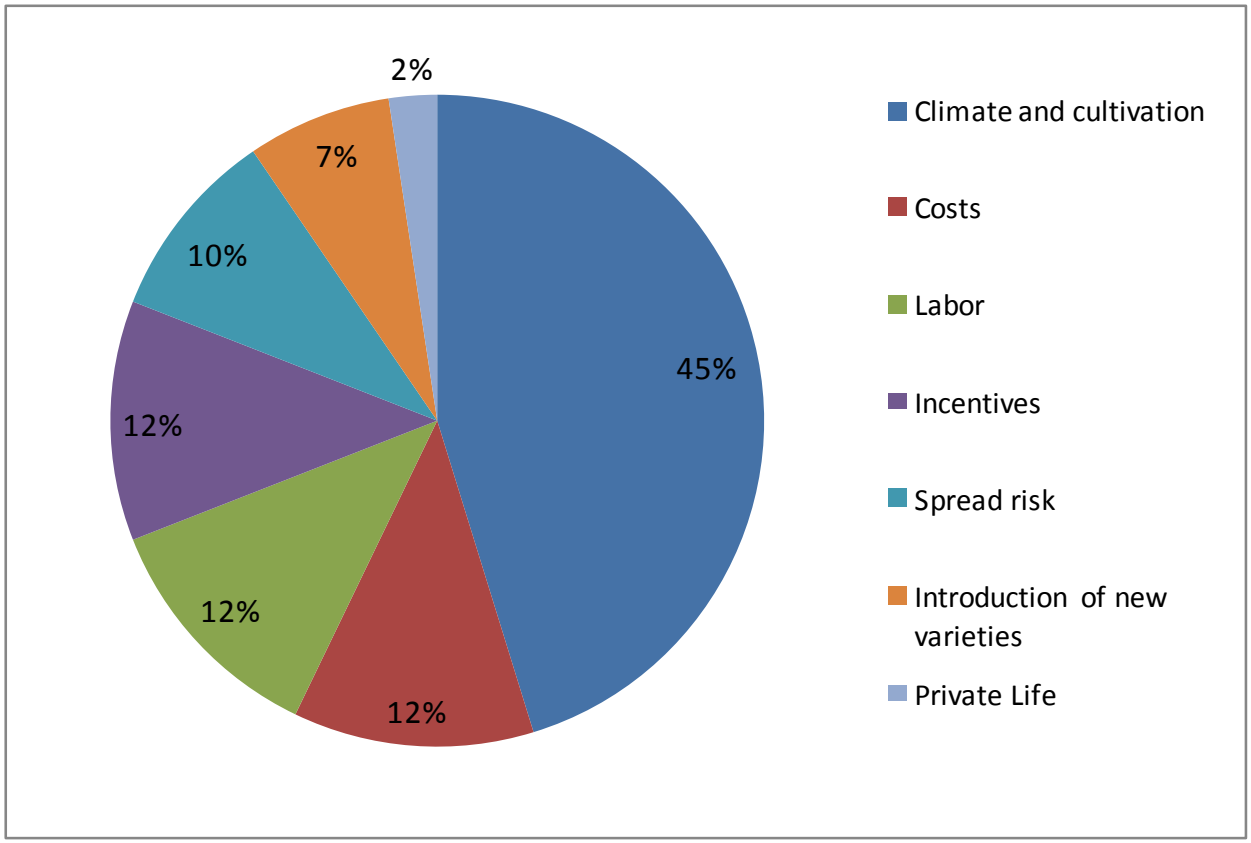


Figure 6.3 Main reasons for choosing Ethiopia as the country to start a nursery.

The sector climate and cultivation includes answers like interesting climatologically circumstances, climate and other cultivation factors, good climate and good timing of the rainy season.

Recorded responses on costs are lower airfreight costs, low cost price and cheap labour. In the sector labour remarks on attitude of people to work and changing labour climate in Kenya are mentioned. Incentives in this case is the collection of both the possibility to start in a project build and financed by a Dutch company as well as financial incentives and income tax holiday offered by the Ethiopian government.

Private life had to do with the fact that one of the respondents already lived in Ethiopia.

One of the respondents had a PSOM-subsidy, which is 60% of the investment paid by the Dutch government with a maximum of € 495,000. (More info on PSOM in chapter 4.3.2).

The overall conclusion of this small inquiry is that climate and cultivation are the main reasons to choose for this country, followed by costs and labour as expected.

Of the eight responses, two indicated they have abandoned a nursery in another country. One of them was located in Zimbabwe, Tanzania and Kenya. He was growing 150 ha hypericum in open field and left for political instability and cost price reasons. After he left maize and wheat are grown on the farm land. The other company indicating they left a country to start in Ethiopia is a German propagator of poinsettia and pelargonium cuttings. They used to have nurseries in the Canary Islands, Tenerife and in Spain. The main reasons for leaving the nurseries in these countries were unstable climate and expensive labour costs. The nurseries were sold to an ornamental grower of cacti for the local market.

Of the other six responses it is clear that mostly the Ethiopian nursery is an addition to what they already possess, for example three Israeli growers that did a joined investment to start up a nursery in Ethiopia.

6.2 Kenya

6.2.1 Methodology

To compare the reasons growers in Ethiopia are giving with the more mature sector Kenya a questionnaire was sent by the royal Netherlands embassy thus avoiding violation of privacy legislation. The questionnaires were sent at 14 February 2008, with a reminder on 28 February. These 53 e-mail addresses accounted for approximately 40 companies according to the agricultural counsellor. Apart from this three questionnaires were sent to contacts in Kenya from a visit in December 2003. The questionnaire was a replacement for the planned visit to the Hortec in March 2008, which was postponed due to the turmoil after the president's election of 27 December 2007.

A total of fourteen e-mails was received, one of which was out of range for being an area manager from international trader Intergreen. The other thirteen replies were useful, although the focus of the companies in this survey is mostly on propagation, giving a different view on the expansion in Kenya than the average rose grower in Kenya will feel. The questionnaire can be found in Appendix 4 and the names of responding companies in Appendix 5.

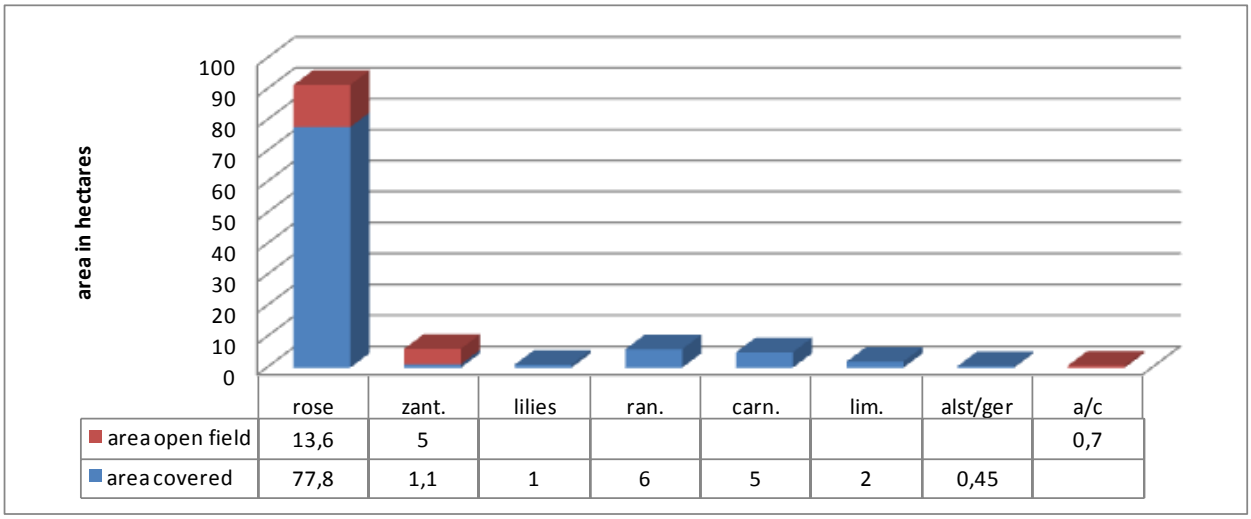
6.2.2 Characteristics of the responding companies

The responding companies can roughly be divided in cut flower related companies and companies with vegetative propagation of ornamentals, bedding plants and chrysanthemums. The two groups will be addressed to separately at the start of this chapter. Two responding growers have the Kenyan nationality (one is a former UK-citizen), one grower is French and the rest is Dutch. One of the Dutch growers married a Kenyan wife, another one to a British.

6.2.2.1 Companies related to cut flower production

Nine of the responding companies are in cut flower production or propagation of cut flowers with a total production area of 101.3 hectares. Six of them are flower production companies and three are (part of) Dutch breeding and propagation companies in roses, carnations, alstroemeria and gerbera. The production companies in majority represent roses with an area of 77.5 hectares in production, the remaining 13.6 hectares are both cut flower production and testing of varieties of a breeder and/or propagator) (Figure 6.4).

The history of the companies varies a lot. The three companies related to Dutch breeders and propagators of roses and other cut flower crops started in Kenya in 1996 and 2006. Some of the other companies have a long history. One of the farms already started in 1920 with production of coffee, maize and rose plants, which changed in 1960 to fruit production. As of 1993 this farm produces cut flowers. The other four farms started in 1997, 2002, 2006 and 2007 respectively. Of these one farm also has a long history starting as farm of an American breeder in ornamentals, bedding plants and cut flowers, changing to rose farm in 1997 and having the present owner since 2006.



	rose	zant.	lilies	ran.	carn.	lim.	alst/ger	a/c
area open field	13,6	5						0,7
area covered	77,8	1,1	1	6	5	2	0,45	

Figure 6.4 Area of responding companies in cut flowers in hectares. Indicated flower species are from left to right: roses, zantedeschia, lilies, ranunculus, carnations, limonium, alstroemeria/gerbera and ammi/carthamus (a/c).

The production of all farms is destined for export. Eight of the companies export all their produce to the Netherlands. One company is exporting carnations with three destinations, which are reflected in Figure 6.5. By doing so the risk on sales is spread.

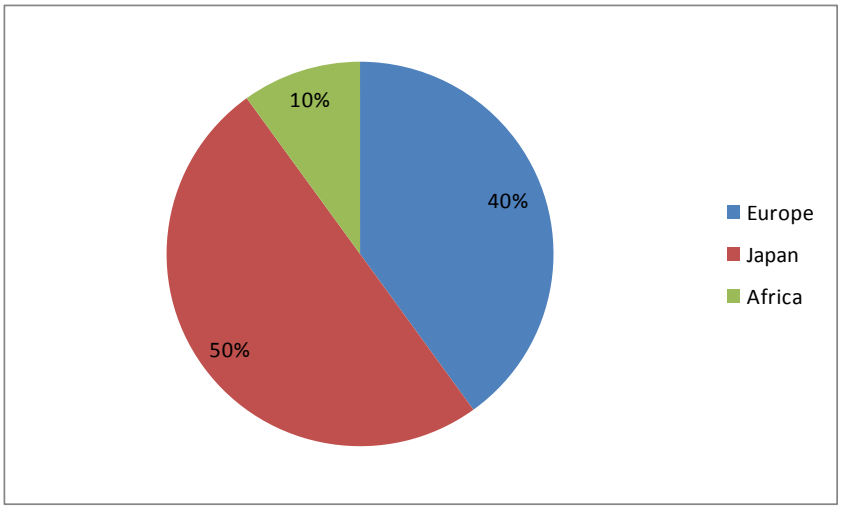


Figure 6.5 exports of carnation of one of the responding companies.

Another farm exports to a large amount of countries, means a good spreading of risks (Figure 6.6). France is a major market for this company since the general manager is French.

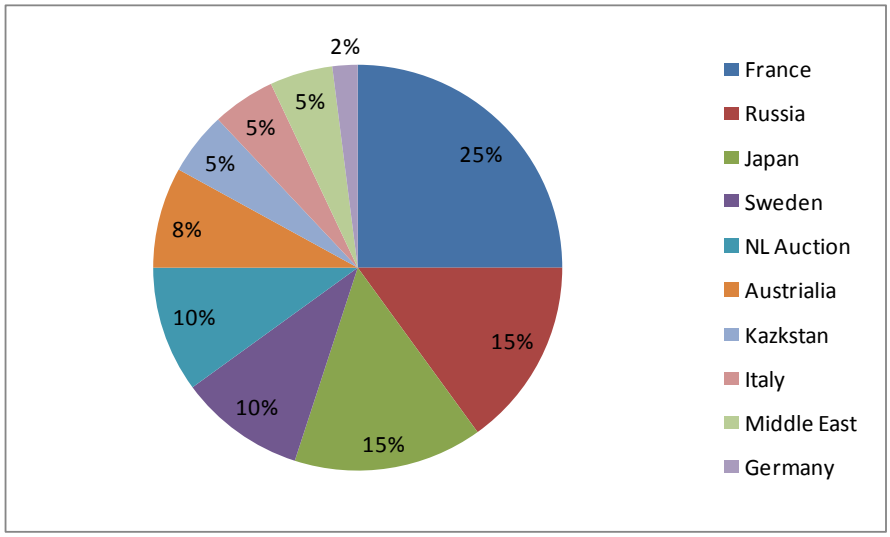


Figure 6.6 export of roses from one of the responding companies.

6.2.2.2 Propagation companies

Four companies with vegetative propagation of chrysanthemums, beddings plants and ornamentals responded. The total area of the four companies is 31.5 hectares. Since most propagation companies have several crops and ornamentals are difficult to split into bedding plants and pot plants, no splitting up is done here. The four companies export all of their produce to the Netherlands, which makes that they will meet the same opportunities and difficulties in their production facilities in Kenya. The four companies started in Kenya in 1987, 1995, 1997 and 1998.

6.2.3 Reasons for establishing a farm in Kenya

The growers were asked to give reasons for starting their business in Kenya. Sometimes this was just a logic consequence of having Kenyan nationality and/or living in the country, sometimes it was the consequence of selling propagation

material to growers in that country. The reasons were ranked by the growers and this resulted in a rating of the importance. However most growers emphasized that ranking is hardly possible. Like one grower expressed: "a good climate without a road and without a reliable lorry driver is of little use".

For this question all thirteen companies are taken in account as well as the ranking of the reasons by the growers (Figure 6.7). The different aspects are related and will be discussed in next paragraphs.

Main reason for starting in Kenya is the climate. Costs are mentioned as production costs and labour costs. Labour costs are also part of the production cost, so they are included in the part of costs. Apart from the costs labour is also mentioned in respect to work ethics of people and labour in general. Proximity to the market is mentioned by breeding and propagation companies of cut flowers. They sell starting material to growers as well as test varieties in local circumstances. Infrastructure is the next subject, which is mainly referred to as the (relative) good roads in Kenya and sufficient air freight capacity. Some of the growers mention personal life (Kenyan nationality, married to Kenyan wife, already living in Kenya for a long time, "I like the country") as well as professional life (all investments are in Kenya) as reasons to start in Kenya. Quality is referred to as product quality, which is related to growing circumstances and thus climate. The different style of farming is also mentioned.

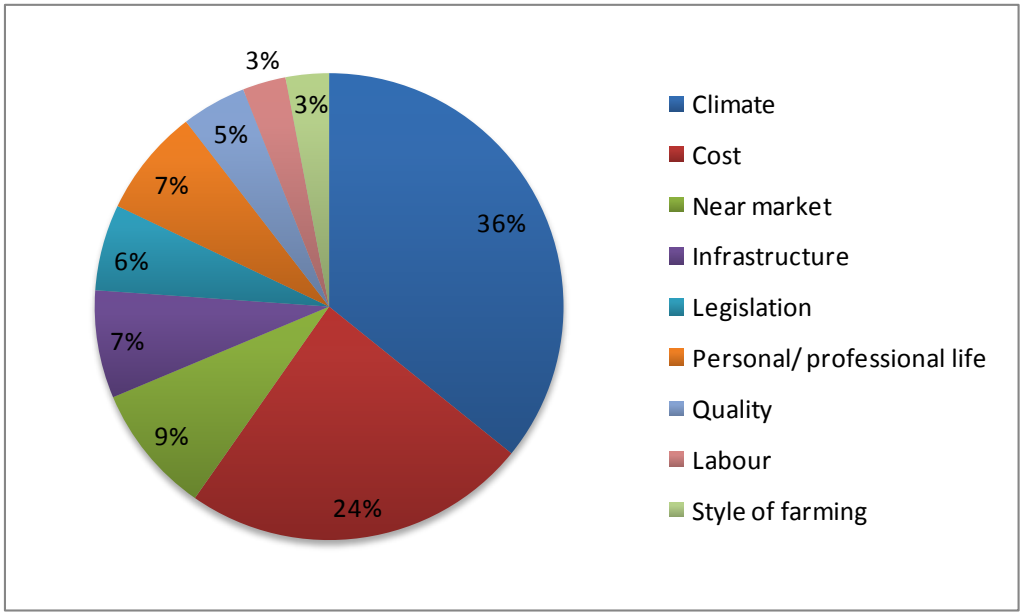


Figure 6.7 Reasons to start in Kenya.

Some of the breeding and propagation companies have active branches in several countries in the world. Two of the responding breeding companies had testing facilities at a Kenyan flower farm and decided to be independent and start own greenhouse facility. One grower used to be partner in a rose farm and two of the growers were in the family business in European countries. None of the latter three had a farm themselves before.

6.2.4 Respondent opinion about development in Ethiopia.

Before continuing questions about moving to Ethiopia or not an open, general question was asked about their feelings towards the development in Ethiopia. The answers were broad, from "not worried" and "good for competition purposes" to extensive sentences. The opinions are reflected in this paragraph. One grower that started in Kenya in 1987 states that the same is happening as in Kenya fifteen years ago. He does not see it as

a threat, although his customers can decide to have a farm in Ethiopia themselves. Ethiopia is still behind in all aspects, but catching up quickly, nevertheless Ethiopia is a big risk itself, he thinks. Another grower fears that the market will be congested due to oversupply by the rapid expansion. This might lead to a tough struggle for some production areas in Africa. The next person sees it as a nice development but never would start a business in Ethiopia. He thinks the hype will be finished as soon as people start to discover the disadvantages of Ethiopia and is sure some people already regret ever starting there. Another rose grower claims that Ethiopia does not have the right climate for being in the northern hemisphere and thinks the Ethiopian workers will need too much time to get enough skills. A next grower sees the heavy subsidies as a reason for the development, while infrastructure in suppliers and logistics are not yet as developed as in Kenya. Also the production conditions are not as good, and Ethiopians must rely on top quality since their yields are low in his opinion. The last grower argues that all kind of institutes are supporting the development in Ethiopia, which seems unfair competition. In Kenya this kind of support was also offered to some farms, but the majority of these farms do not exist anymore or are bought by others. In his vision the whole expansion in Ethiopia is very artificial, like a similar, also not very successful, scheme in India. He is sure that royalties are not paid to the extent that they are paid for in Kenya. Other scam is doubling investment costs to get the 50% loan to pay for the full investment or even more. He is even wondering whether a country that invaded another country (Somalia) and has a quick rising population qualifies for economic assistance anyway.

More positive are the breeding and propagating companies, two of which already have a farm in Ethiopia. Competition will keep the sector to constantly improve itself is mentioned by a grower. Another one sees it as positive for East Africa for bringing more revenues and generating employment and development in the country. Less positive is a rose breeder who does not see Ethiopia as the African Colombia like the Ethiopians pictured. Higher altitudes give bigger bud sizes but also more disease problems is his experience. The country will achieve its place in business, but more investors than growers are involved in his opinion. Also the payment of royalties should improve. Another grower with much international experience advises others to wait and see before starting. It does not seem to be all roses there is. "Labour costs a rising quicker than in Kenya and the productivity of Ethiopians is lower compared to Kenyans".

6.2.5 Considerations on development in Ethiopia and turmoil after elections.

Since the turmoil was not quite ended during the survey some questions on the effects of this have been included.

Six out of thirteen growers answered positive to the question whether they ever considered moving their production to Ethiopia. One of the six positive respondents will not move after considering, three companies already moved (part of) their production from Kenya to Ethiopia and the last two companies will move (partially) this year or next year. The six growers ranked the main reasons for deciding on moving from Kenya to Ethiopia, which are rated and reflected in Figure 6.8. New compared to the reasons to start in Kenya (Figure 6.7) are spread of risk, security and subsidies. With government in this case the Kenyan government is addressed to. Clear

is that proximity to the market is relating to breeding and propagating companies who want to be near their customers, being growers.

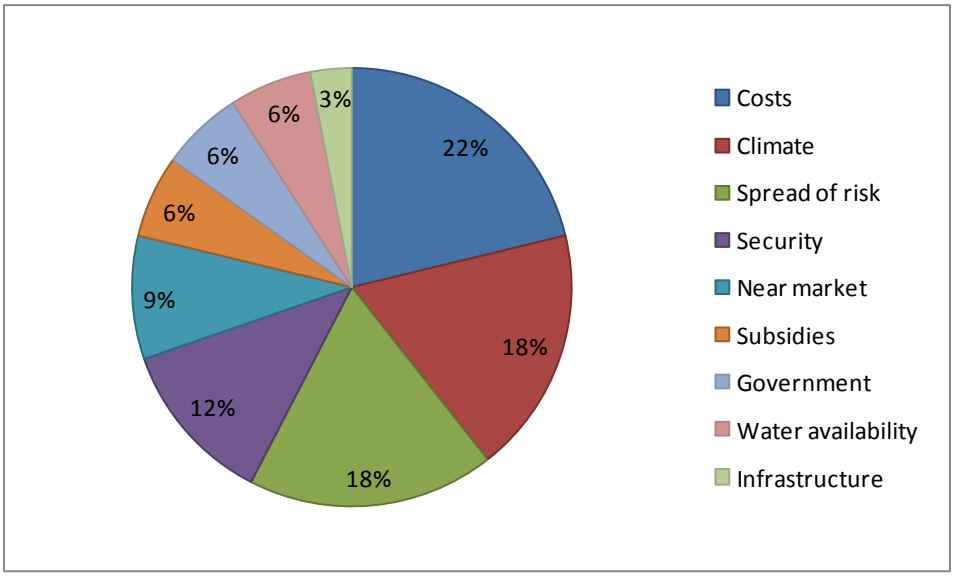


Figure 6.8 Mentioned reasons for moving to Ethiopia.

All of the growers answered the questions for reasons to stay in Kenya (Figure 6.9). Most relevant aspects mentioned are skilled and motivated workforce, the experience of the country with horticulture, partner companies and having all investments in Kenya. Also the country is valued as home-land, convenient for travel, health and with a great scenery. One grower would not like to work with Ethiopians for their very proud nature which makes it difficult to work with them. A breeder mentions the 2,000 hectares to be filled (in Kenya) with varieties gives him clearly a reason to stay in Kenya.

Nevertheless some respondents make clear they will move their business to other places if this means improvement for the company. One of the rose farmers states that they will move to Japan, USA, Canada, France, Italy or Brazil if they find the right

business opportunities. Another grower with exports to Japan started a nursery in China to have the production closer to the final market. Another grower mentions that apart from the climate being very suitable for production, experienced labour and plenty water available also the personal life is important. With this he points at good schools for children and quality lifestyle that can be enjoyed in Kenya. The last grower with additional comments states clearly that Kenya is his home, with its positive and negative aspects. "The lawn is always greener at your neighbour's." People acting on that will move from place to place with only their own profit in mind, without caring for the environment in which they make their money.

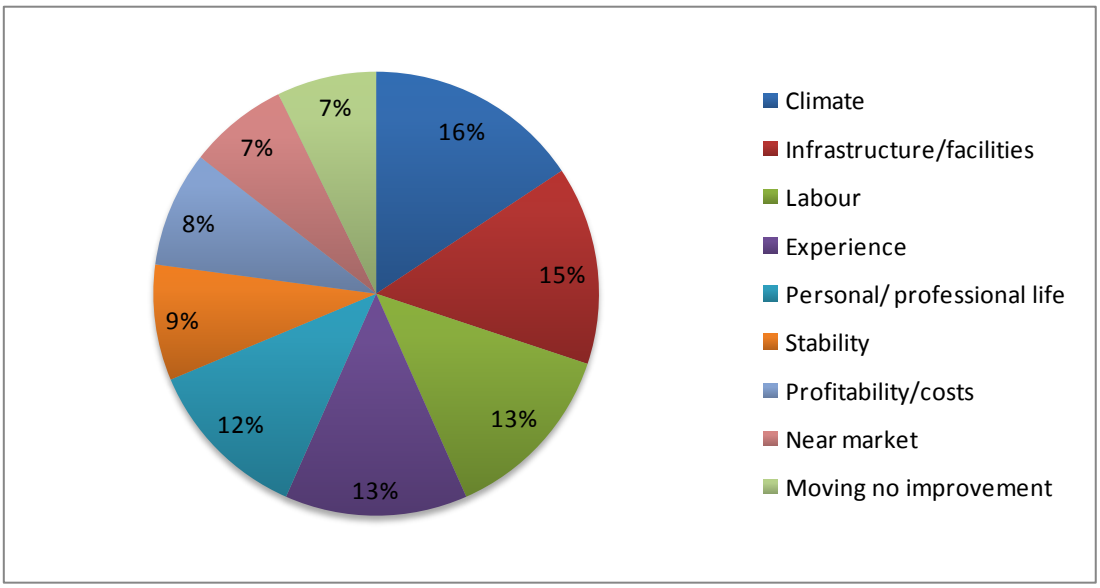


Figure 6.9 Mentioned reasons to stay in Kenya.

6.2.6 Ethiopia on the international market

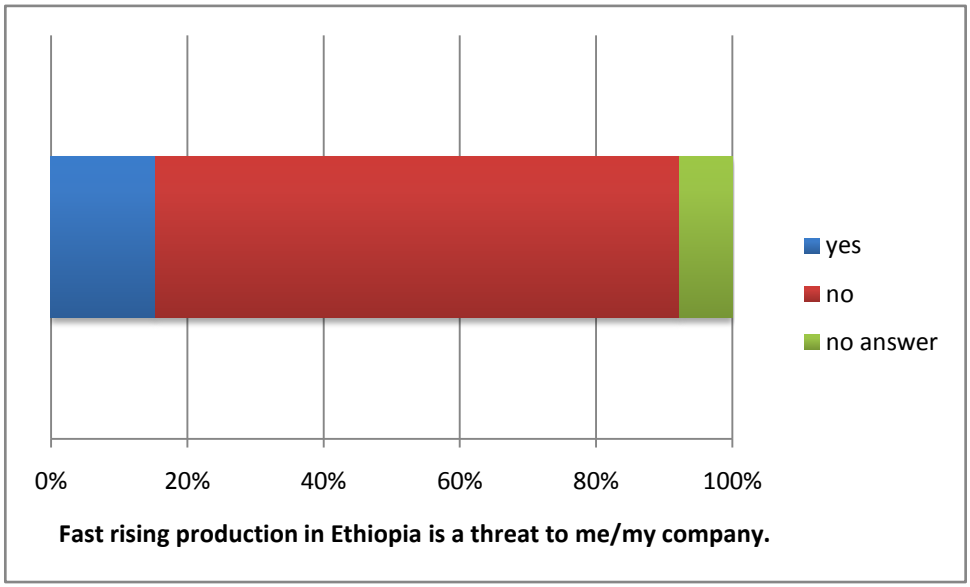


Figure 6.10 Threat of Ethiopian production for the Kenyan grower and his business.

Kenyan growers are not feeling threatened by rising Ethiopian production as 77% says the feel not threatened, and only 15% feels the threat (Figure 6.10). Partly this is explained by part of the respondents being breeder/propagators who see business opportunities there. They even see it as a positive effect for having a bigger market to serve as suppliers of young plant material. Others comment that the market is big, they grow an exclusive product with exclusiveness of the breeder for Africa or they are sure the Ethiopian climate and infrastructure are not better than in Kenya. On top of that one grower mentions that production in Europe is still decreasing, but the only threat might be the large farms in the south of Italy which integrate all business. A native Kenyan grower sees it as healthy to have competition, it improves quality.

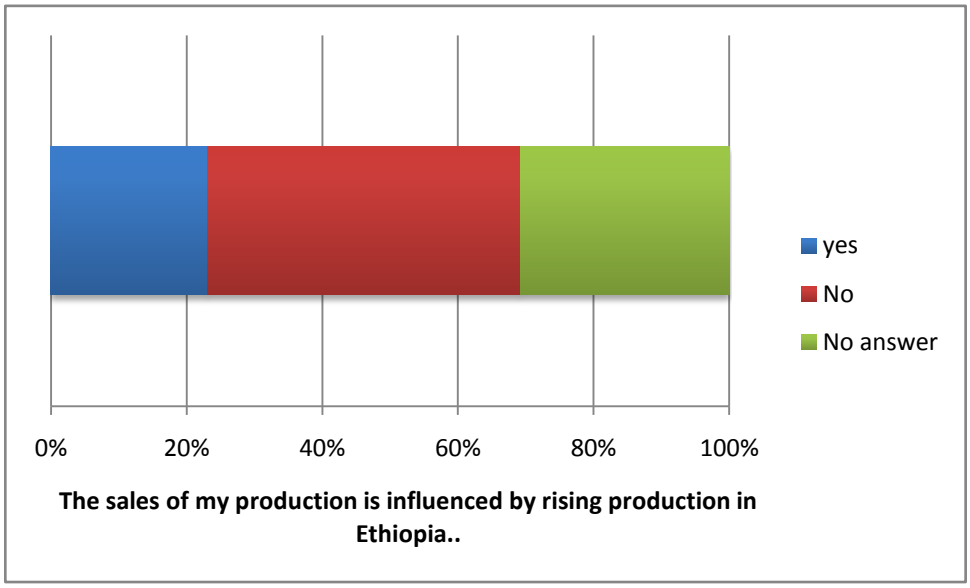


Figure 6.11 Felt influence of Ethiopian production on sales of own produce.

From Figure 6.11 can be concluded that 46% growers do not fear influence of Ethiopian production on their sales. Partly this is because of the new market this is bringing for breeders and propagators (23% they answer yes, positive influence). For propagators of ornamentals, chrysanthemums and bedding plants it is irrelevant since they produce starting material for growers in the Netherlands and/or Europe (46% no or 31% no answer). Other growers explain that their quality produce is valued at the market, so they will not be affected by other production areas. "It will keep me on toes to grow quality flowers or else I will be overtaken", a grower adds. Only one of the rose growers however fears competition since the Ethiopian produce is from higher altitudes, meaning that they might have bigger bud sizes.

A reflection of a question on the benefits of the fast rising production is given in Figure 6.12. The same rose grower that feared competition of Ethiopian roses with his own

produces sees no benefit of the development in Ethiopia. Mostly however it is felt as a healthy and positive competition.

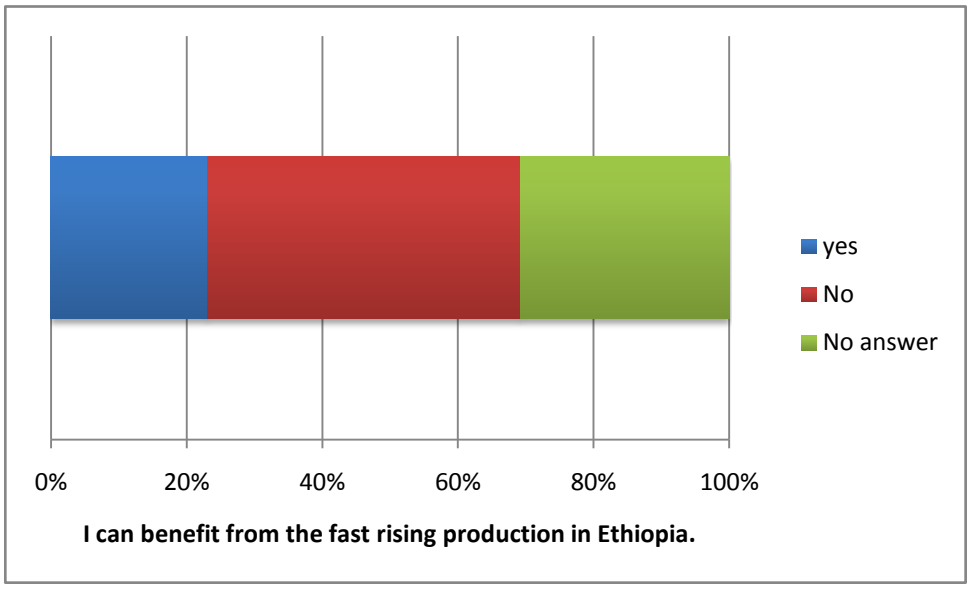


Figure 6.12 Kenyan growers can benefit from rising Ethiopian production.

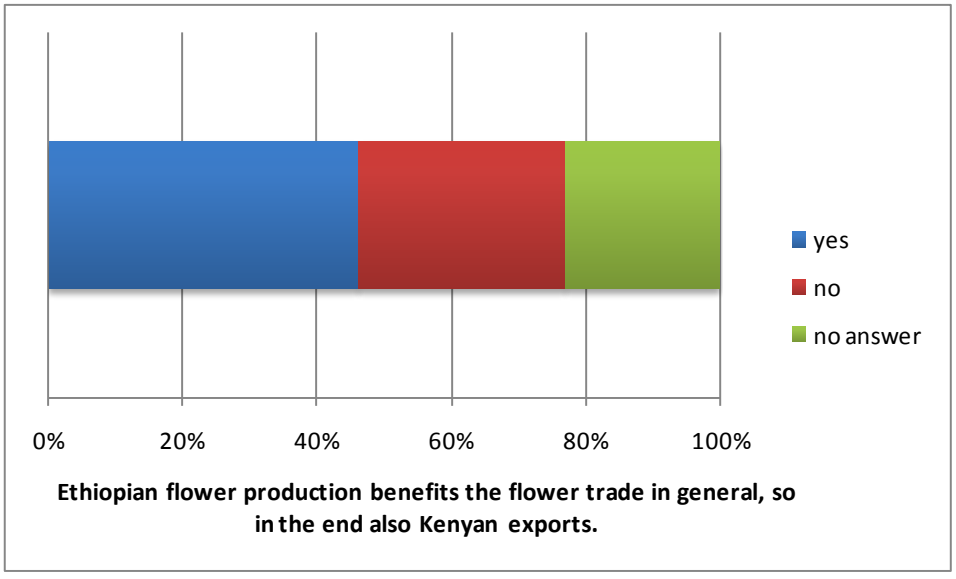


Figure 6.13 Flower trade can benefit from rising Ethiopian production.

Flower trade in general benefits from the development in Ethiopia is the statement. The opinion on this statement is divided as can be seen in Figure 6.13. Buyers are looking for constant quality, which according to one of the negative responders cannot be accomplished in Ethiopia for having “a far less constant climate than Kenya”. That will not help the general perception of flowers. The second issue is the bigger competition for north-bound cargo planes. With the existing shortage of south-bound freight more planes have to come to Africa which might lead to increase of freight prices. And freight is the highest percentage of the cost price. Other point of attention is the possible oversupply of the market due to the current rapid expansion in both countries. Another thought is that only the large flower traders and big supermarkets will benefit, since they will be able to reduce their purchase price and thus increase their profit. It is feared that in the end they will not care about corporate social responsibility, although they do so in words. Indicated by one of the respondents is that Ethiopia steps in an existing market, using existing knowledge about varieties etcetera. Also mentioned is that all flowers end up in one big world market. A strong positive sound is heard from a native grower stating that discoveries on new varieties are necessary, so extra activities in horticulture will contribute to this.

6.2.7 Mutual dependence of workers and companies

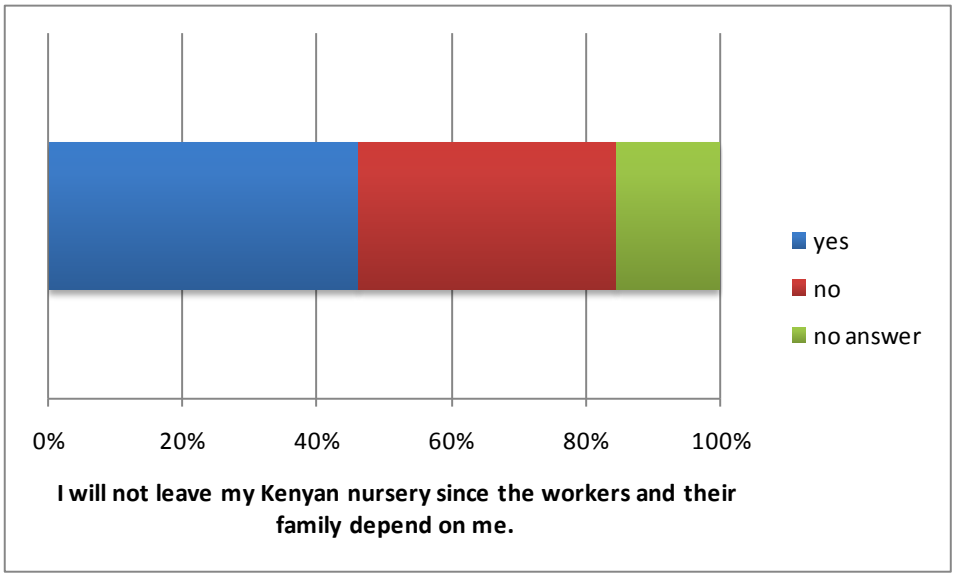


Figure 6.14 Workers are a reason to stay in Kenya.

Figure 6.14 expresses the responses to the questions regarding dependence of workers. The growers answering that they will not leave (46%) their nursery because of the workers and their family refer to the fact that most people only care about their own pocket. "In other words: they do care about the social aspects, but not reality." Another grower explains that 500 workers directly depend on him for a salary and probably thousands indirectly. A third grower states that this is only one of the reasons not to move. A native Kenyan grower states that interdependence is mutual and necessary.

From the growers saying that they will not stay for their workers (38%) if they have to make a choice the main reason is the interest of the business and own safety. All of these respondents work for Dutch breeding and propagation companies with branches in other countries as well. As one of them states: "I feel responsible for my people, but

of course there is a limit somewhere!". One big Kenyan rose farm states that the workers are not a reason to stay claiming that workers are not depending on the company, but on their work capability and their competitiveness like any employee in the world.

6.2.8 Turmoil in Kenya

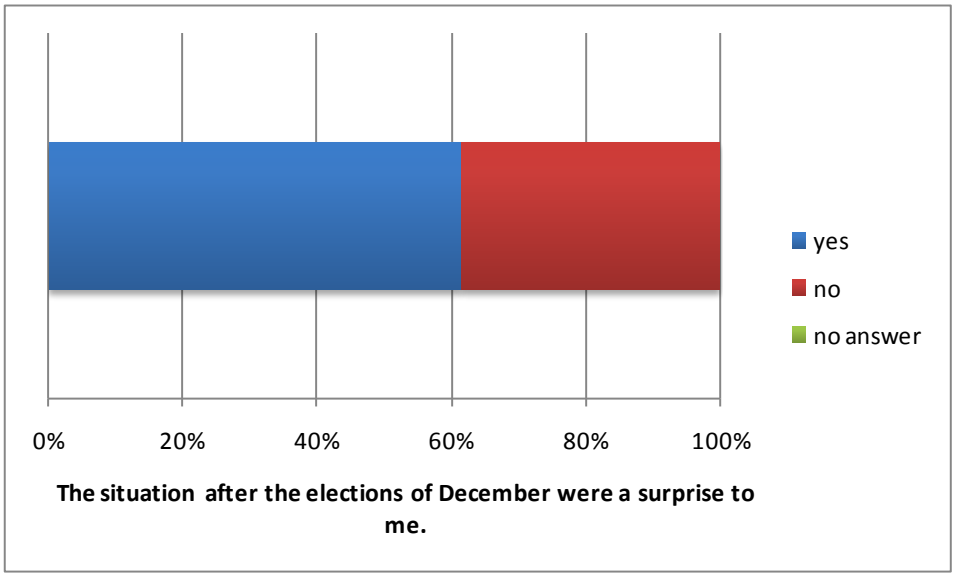


Figure 6.15 Surprised by turmoil after the elections.

Of the respondents 62% was surprised by the turmoil after the election in December (Figure 6.15). "Kenya was supposed to be a mature democracy" was one of the comments. A native Kenyan grower expected the elections to be peaceful as Kenya has been a known peaceful country. However people have seen situations alike in former elections, but never with so many deaths as this time. The situation in 1991/1992 is mentioned specifically as a former turmoil situation. Before the elections the tension was already building up according to observations of a grower. The extent of what happened however surprised him as well. One grower is certain that this has

to do with the increasing population having to share the reducing resources of the land. He even expects other countries in the area to suffer from the same kind of problems in the near future.

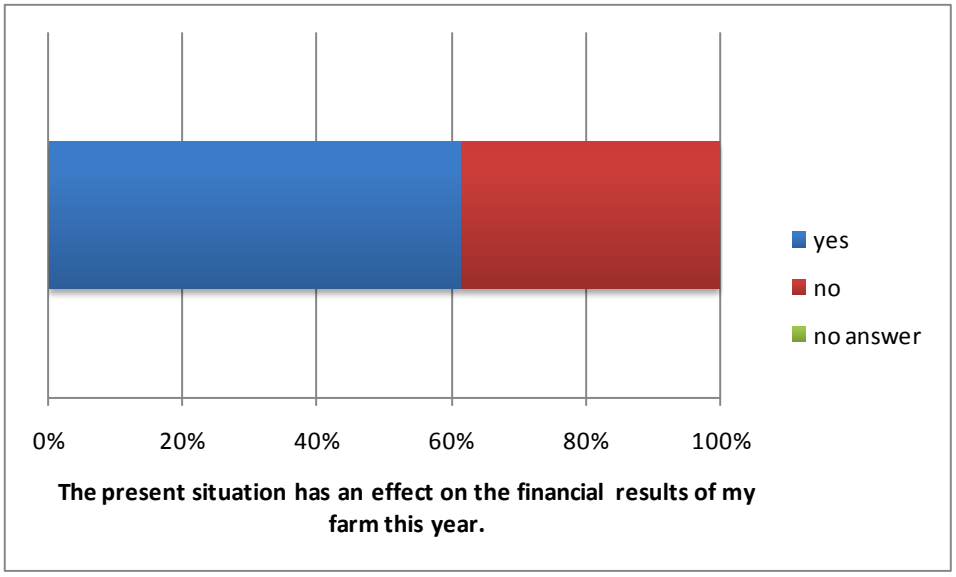


Figure 6.16 Financial effects of turmoil on farms.

Financial effects on the farm are expected by 62% of the respondents (Figure 6.16). Three respondents simply answer yes on the question whether the turmoil affected them financially. The others put comments to express why this is the case. "Any situation will have an effect, but because of the distance from the activities the damages are limited", stated one grower. Another one suffered from blocked transport and export. To summarize there were financial implications in terms of labour displacements and orders/targets not being met. For breeders/propagators it is clear that this might affect their business in terms of new investors staying away from Kenya and replacements and expansions in present nurseries will be postponed.

Of the people who were not affected financially one says: "business as usual, we lost half a day, but did manage to get rid of the delay. Apart from that there was extra stock because of the January holidays." Another one only feels that costs of supplies may have been rising, but since the KSh currency has a low exchange rate this is hardly felt in the cost price. A next propagator also sees the rising costs as more of a financial attack, not only in Kenya but also in Uganda where transport is getting more expensive. For the last grower there was not a problem since he just started the farm and no exports were done at the time.

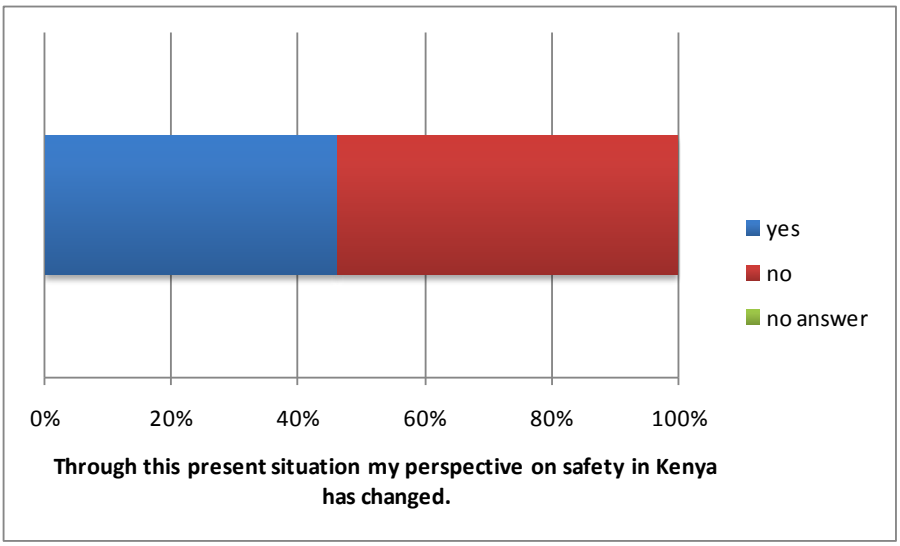


Figure 6.17 Change of perception of safety in Kenya.

Of the responding growers 46% feels different about the safety in Kenya in February (Figure 6.17). The ones that did not change their minds explain why. "We always knew that safety is not like in Europe." and "I believe the situation will normalize." In addition is mentioned that safety of white people was worse three to five years ago with people even killed in robbing and highjack. A more positive sound is the hope that

Kenyans will be able to finish the problems in a good way so the future for Kenya can be good. This will take a few years, but it is still felt to be the best country to grow flowers. Another grower adds that the political situation is not new, and they have to accept it and trust that the Kenyan people work towards a reasonable stable situation. One grower was not affected since his area was relatively quiet, so his perspective did not change. A second grower puts it in perspective: "When in the worst political situation in maybe sixteen days, the farms around Naivasha only lost maybe one or two days production. Being hit by a serious downy mildew attack your farm will be damaged more!"

For those whose perspective on safety changed they say that they have to be more careful. There seems to be more attacks than before the elections. Social structures are destroyed by the killing of lots of people and ethnic relations will take years to overcome. The huge relocations of people will result in higher unemployment which will increase crime.

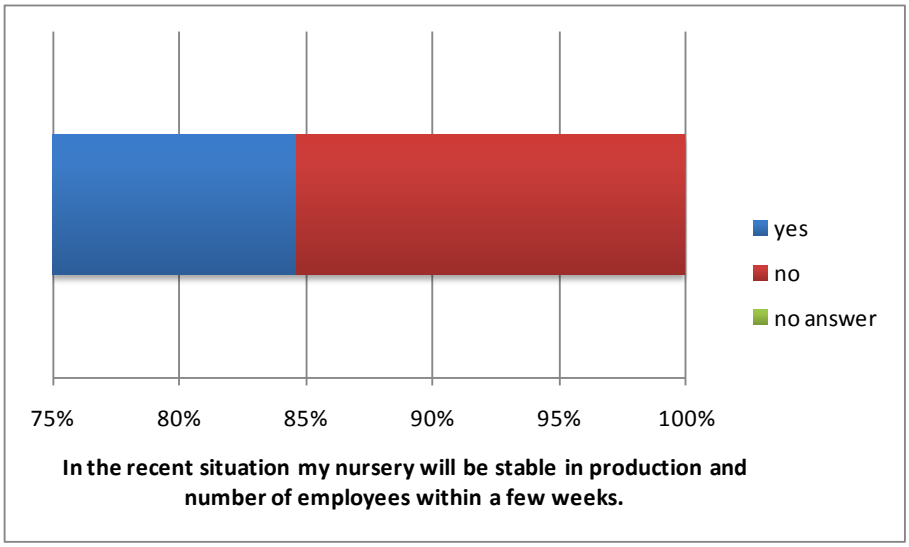


Figure 6.18 Return to a stable situation on farms (note: presented in different scale).

Only two of the thirteen responding growers (15%) do not feel they will be in a stable situation in a couple of weeks (Figure 6.18). One of them explains that it will take time for the 'temporary' workforce will take time to move again and not all his displaced workers will return.

The other growers (85%) are confident that they will be 'normal' soon. "Peace and reconciliation are underway", commented one grower. Another only had to evacuate 2% of the workers, some have not been affected at all, and others say that the remaining workers worked a bit harder. Two growers explain that their workers were relatively safe since housing was on the farm. One of them even took up 82 refugees. A last comment is that a grower thinks he can fill up the empty spaces in the organization within a couple of weeks, and hopefully even improve the quality of the organisation.

6.3 Discussion on the replies from Ethiopia and Kenya

This discussion will have a closer look at the reasons brought up by respondents and the validity of the reasons they brought up.

6.3.1 General remarks and discussion

As already explained the survey is not reliable in terms of statistics, but given an average of companies has replied the answers are expected to be an average of the opinions of the whole sector. This is supported by the literature review in other chapters.

Through comparison and discussion of Figures 6.3 and 6.7 the different reasons given by respondents for starting in Ethiopia and Kenya are discussed first. Looking at the number of reasons given by growers the Kenyan have a larger variety than Ethiopian companies. This might be explained by the recent start in Ethiopia and the long-term stay in their country of Kenyan growers. Reasons like personal and professional life indicate in this direction, since not many of the Ethiopian foreign investors will have established in the Ethiopian society, let alone marry an Ethiopian wife. In line with this is also the opinion that a country is not left if personal financial investments are made that cannot be withdrawn.

An interesting conclusion that can be drawn is that the main expected reasons to start a farm in a developing county, being climate and costs, have an almost similar accumulated share in the reasons. For Ethiopia is 45% for climate and cultivation and 12% for costs (57%) and for Kenya 36% for climate and 24% for costs (60%).

The introduction of new varieties (7% in Ethiopia) and near to the market (9%) are closely related for both being breeding and propagating companies the buyers of which

are the growers in the same country that will use their young plant material. Climate influences the performance of varieties in both cultivation and appearance. For this reason breeding companies have at least test facilities in areas with high production of their crop.

Half of the responding growers in Kenya has considered moving to Ethiopia, completely or start of a new branch. Five out of the six respondents are breeder/propagators. The last respondent seriously thought about Ethiopia because of cost reduction, but for him this did not compensate for the positive sides of Kenya. In Figure 5.8 the reasons considered to move from Kenya to Ethiopia are presented. Main reasons mentioned are again costs (22%), climate (18%) and spreading of risk (18%). Security shows up for the first time, but is one of the considerations (12%). Near market is used again as a reason, being that propagators want to be in Ethiopia when growers need plant material. Subsidies and supportive government are clearly available in Ethiopia compared to Kenya. Water availability and infrastructure are surprising, since in Ethiopia water has to be taken from a depth of approximately 100 meters below surface and is scarce for inhabitants. Nevertheless for example at ET Highland Flora near Addis Ababa the benefits of boreholes for the whole community were observed during the mission in January 2007 (Meggelen, 2007). Infrastructure has been improved considerably in Ethiopia over the last few years as can be seen in Figure 5.19, in contrast to Kenya. During the interview with Gerrit Barnhoorn he explained that at present the roads in Kenya are worse than in Ethiopia because of delayed and stolen maintenance (through bribe lower percentage of asphalt or a 5 cm

layer instead of 10 cm asphalt used in construction). This is also addressed to in chapter 4.2.4.

Plate 6.1 Infrastructure has been improved considerably in Ethiopia as can be seen here at Jimma Road (I. van Meggelen, Ethiopia, 12. January 2007).

In Figure 6.9 all respondents listed the reasons to stay in Kenya instead of moving to Ethiopia. This list turns out to be different from the figure on reasons to start in Kenya. Climate and costs are not main reasons anymore, labour and experience however become the main reasons (28%).

New reasons compared to the initial list of reasons to start in Kenya or Ethiopia are experience, stability and moving not being an improvement for the present situation. Experience is related to both own experience, since growers 'know their way' in Kenya after living there for several years, as well as an experienced workforce (reason labour) and country. Institutions like KFC and Kephis are maybe not working optimal for growers but nevertheless have gained experience with the sector and exports over

the years. The workforce in Kenya is trained and familiar with export production, while in Ethiopia major part of the population couple of years ago even was unaware of floriculture, let alone knew that Ethiopia had a bright future in that sector (Meggelen, missions to Mekelle 2003 - 2005). For several growers moving would not improve business or personal life since Ethiopia is also a developing country. Stability is related to the stable situation in Kenya for flower growers, expectations are that Ethiopia might face similar problems as Kenya during the turmoil. Other aspects are private life, for instance a good school for the farmer's children.

A closer look is taken at some of the reasons given to consider the value of it. After that conclusions are drawn on the field research.

6.3.2 Climate and cultivation

Climate is the main reason to start a company in a specific developing country. Climate and cultivation demands on crops may vary, but all crops need enough light at the right spectrum, certain day length, optimal temperature and humidity, good quality water available. Further on right soil conditions or suitable substrate alternatives should be available as well as needed fertilizers. Possibility to construct protective structures like greenhouses and availability of knowledge and labour are left aside here. In Plate 6.2 the sieving of local found volcanic red ashes leads to different fractions in order to prepare a substrate suitable for rose production at Menagesha Flowers in Ethiopia. This is one of the examples of using local material in cultivation.

Plate 6.2 Sieving of volcanic red ashes to prepare substrate for rose production (picture I. van Meggelen, 22. June 2006)

In the survey 18% of respondents in Kenya are indicating climate and cultivation would be the main reason to start in Ethiopia. However 16% of the Kenyan respondents mention the climate a reason to stay in Kenya. The climate may however not be too different in the two countries. For Ethiopia many different climates can be found since the altitudes are quite different throughout the country. Asking Gerrit Barnhoorn during the interview he states the same. For his farms in Naivasha and Ziway the temperature is almost the same. Although the temperature in Ziway is 1 or 2°C warmer than in Kenya, it is not causing problems since night temperatures are low enough and that is what matters most for rose production. The rainy season in Ethiopia is even more favourable compared to Kenya for being during the European summer when flowers are not so much demand on the market.

6.3.3 Costs

Comparing costs in different situation is difficult. According to Joop Dame, consultant in Kenya the costs of an average nursery is € 12 per m^2 per year being costs until the airport (personal communication with J. Dame). This includes depreciation. Dame expects the costs to go up approximately 30% in the export season 2008-2009 due to raising costs of chemicals, fertilizers, packaging, labour and transportation. Transport costs are approximately US$ 2 per kilo according to Sher. With 20 gram per stem in sweethearts and a yield of 200 stems/m^2/year this is US$ 8 per m^2, at the present dollar-euro rate approximately € 5.30.

A calculation of a Dutch consultant in the Vakblad voor de Bloemisterij shows a general cost price of € 30 per m^2 including all costs until including auction costs (Reinders, 2005).

If the dollar rate is low Kenyan growers benefit in two different ways. First the air freight costs are paid in US$, while the flowers are paid in Euros. However fuel costs are rising, so air freight costs increase as well. The second benefit for Kenyan growers is the pairing of the Kenyan shilling and the dollar, which brings down for instance labour costs when the dollar is weak. However fertilizers, crop protection and other inputs will be more expensive when they are imported from Europe.

Wijnands (2005) collected some in his publication of which the share of various items can be derived. In Kenya the transport costs are approximately 50% of the cost price, depending on the dollar/euro rate. In Zimbabwe air freight was calculated to be 60% of the total costs in the season 1992-1993. In Uganda freight (36%) and handling and commission for marketing (17%) account for a share of 53% in total costs. For a cut

flower farm in Tanzania the rates of freight (16%) and marketing commission (52%) account for a share of 68% in the total costs. Looking at labour costs in Kenya a share of 11% of the total costs is calculated, for Zimbabwe 14.2% in the season 1992-1993, for Uganda 15% (if marketing is included in the total price, excluding marketing 32% of the total costs is labour) and for Tanzania 3.4% (Wijnands, 2005). To give the perspective: in the Netherlands labour accounts for 30% of the cost price, while deliverance is 8% (Reinders, 2005). For Ethiopia the costs will not differ from Kenya. All materials for construction have to be imported in both countries. Comparative advantage would be the shorter flight distance from Ethiopia but as Sher Agencies stated the freight costs are equal at the moment. Apart from rising fuel costs this is caused by limited air freight capacity and the monopoly of Ethiopian Airlines at the time. Sher Agencies is negotiating to have their own charters from Addis Ababa like they always had in Kenya, but the government is still trying have control on everything happening in the country (personal communication, March 2008). The negotiations were successful in the summer, although in October no charters of Sher were flying yet (personal communication G. Westenbrink, October 2008).

6.3.4 Labour

Labour needed on nurseries is at several levels demanding different types of education and training. The majority of the workers on a farm are trained on the job to obtain the skills that they need. On flower farms and propagation farms most of this work is done by women for being more careful workers. The preference for females gives them a better position in their family, being the ones to bring home a salary.

A group of workers is under supervision of a supervisor. This supervisor often has a bachelor degree from a local university or is well trained in another country (e.g. a Kenyan supervisor in Ethiopia). The management of the farm is done by a farm manager, mostly a well-educated male with at least a bachelor degree. In many cases in Ethiopia this person is a foreigner, coming from the Netherlands, Kenya, Israel or India. Especially in Ethiopia the education level for middle and higher management was low, since students from Jimma university graduated with the first bachelors in horticulture in 2003. Even then they had little to no knowledge on floriculture, since the program included vegetables, fruits and cash crops like coffee and tea as well. Meanwhile this education improved a lot and the industry is cooperating with the universities to have students well educated. All university education is in English, so graduates are able to communicate with people of other nationalities in their company or sector as well as inform themselves on international information on their subjects. As for the main work force, most of the training is on the job, carried out by a supervisor. EHPEA has taken initiative to provide training on the farm for subjects like application of chemicals in crop protection. This way workers have better knowledge of the dangers of early re-entry and way to handle chemicals. On-farm training is carried out in the local language, since most Ethiopians have no command of English. "Minimum requirement for a worker at Fides is being able to read and write and able to count" (personal communication R. Le Clerc).

6.3.5 Incentives

Incentives will give a boost to a sector in a country. This can be clearly noticed in Ethiopia, but also other countries in the region. Incentives can be improvement of the infrastructure and easier regulations (e.g. long term lease of land), but also tax

holidays and exemption on import duties. Not only the country involved can offer incentives, subsidies of other stake holders are welcomed too. Examples are PSOM subsidies from the Netherlands government (chapter 4.3.2), trade agreements (chapter 4.3.1) and lower interest rates and possibility for long term loans from banks. Incentives can make the start of a nursery in a new country easier, but the farm should be able to have a sound farm profit without subsidies after a while. Subsidies, tax holidays etcetera will end after some time, and the farm must still be able to be profitable then.

6.3.6 Spread of risks

Spreading of risks is very much applicable in agricultural production, especially in the developing countries. Risks are always to be found in weather conditions, availability of land, water, fertilizers, crop protection and other inputs. Risks in these countries also include the availability of skilled labour force and the political and economic situation of the country. Estimation and covering of risks is part of entrepreneurship and cannot be covered by authorities. Making the right choices brings entrepreneurs profit, but can also lead to going broke. From the interview in Appendix 1, chapter 4 however another side of the bank loans is shown, namely not being familiar with the horticultural sector. This led to financing only 70% of the technical parts that the development bank thought were needed related to the subject and the end result being a much higher own funding than foreseen.

6.3.7 Private and professional life

Looking at issues coming up as private and professional life in the responses to the questionnaire these issues are brought up more in Kenya than in Ethiopia. This is the result of the longer time span of growers being in Kenya than in Ethiopia. As growers

or farm managers stay in a country they will integrate with the population. Many will end up married to a person from that country and raise their family there. As soon as children are involved it becomes more difficult to move to a different country for instance because children have to visit a school. The longer a grower is in the country the more bonding is involved. However also more investments are made and especially if financial investments are involved the country is not easily left.

6.3.8 Conclusion for the field research

The reasons for a grower or investor to start a horticultural enterprise in a developing country like Ethiopia or Kenya are mainly costs and climate. Since financial investments are made and growers learn to cope with the challenges of the country in the broadest sense, they will not easily move to another country and start all over again. If in addition they get settled in the country by marrying a local spouse and/or have their children in school it is even less likely that they will move, even with turmoil like in Kenya in December 2007. The reasons for moving or staying are more emotional and less rational after some years, which could be seen in the replies on the questionnaire of Kenya (weather not suitable, safety, costs).

This situation is different for multi-national farms, for instance in breeding and propagation. They will start a branch of their company where they think it is wise, with climate, costs, knowledge and labour and their market in their minds. For the farm management in that case a farm manager is hired, either a young Dutch for some years or an expatriate or other experienced farm manager already living in the country. In case a Dutch grower starts a second farm in a developing country often management is hired or part of the Netherlands management is living abroad for some

time. In that case frequent visits are paid to the farm abroad to make sure the day-to-day routine is taken well care of.

7 Discussion

After all literature and field research the research questions raised in chapter 1 are discussed in this chapter and answers to the research questions formulated.

7.1 What is nomadic behaviour?

Nomadic nature is moving from one place to another finding the optimal circumstances for, in this case, production of flowers and floricultural propagation material. Optimal circumstances are in this case climate, costs, space, labour and other related issues.

7.2 Why do growers tend to move from one place to another?

Floricultural growers in the Netherlands, like other growers, have been facing increasing problems on different issues.

First of all the climate in the Netherlands is far from optimal for cultivation of floricultural crops, and the growing season does not allow year round production. Greenhouses are constructed to protect the crop from weather influences. These greenhouses have to be heated (gas needed) and supplemental light (power is needed) is required to optimize production and quality of the crop. Gas and power have become increasingly expensive and public opinion is negatively influenced by the need of resources in the sector. Also the use of chemicals for fertilization and crop protection is frequent issue of public discussion.

Second restriction is the shortage of space in this crowded country. Growers have been located near big cities in the past centuries so the fresh produce could be delivered at consumers in time. In the last decades the cities have been expanding their suburbs in areas where growers used to have their greenhouses. Many growers stopped their production, some started in other areas of the Netherlands or abroad.

A third reason for moving is the availability of payable labour. Apart from the high costs in the Netherlands the availability of local people to work in the greenhouse is too low. Other challenge are the options to have the workers do their job within the always tighter labour laws, e.g. in lifting weight. Automation is an expensive solution, and more difficult in floriculture than in vegetables.

The Netherlands however remains a key player in international trade, technical knowledge and innovation in horticulture. Always seeking optimal profit and being real entrepreneurs, the Netherlands growers explore new countries for opportunities. These opportunities can be production itself or, to a larger extend, trade and sharing knowledge.

7.3 Where is this nomadic behaviour observed?

Looking at the figures of the auctions over the last decades major shifts of production are identified. The Netherlands VBN-auctions trade over half of floricultural produce in the Netherlands. The share of import in the supply of cut flowers at the VBN-auctions has increased from 14% in 1991 towards 31% in 2007. This increase was steady, apart from a major dip in 1994 – 1996 when the auctions had a restricting policy towards imports. This was under the pressure of Netherlands floricultureal growers, owners of the auctions, but was released when they realized that the flowers were coming through other market channels than the auction anyway.

In the 1980's Israel was major exporting country outside the EU. Looking at developments in the last six years East Africa has become major player at the Netherlands flower auctions with Kenya and Ethiopia as most important suppliers.

For young plant material (principally unrooted cuttings of chrysanthemum, pot- and bedding plants) production in the southern regions has come up quickly. Main reasons are alternate season, favourable climate and (probably the main reason) labour costs. As cuttings have to be picked and graded by hand labour costs are too high in Europe. Looking at the imports of cuttings at the end of last century Kenya and Uganda were major countries. Meanwhile Tanzania and to a lesser extend South Africa have joined these countries in pole position and Ethiopia in this sector is also rising quickly.

Kenya has been the best performer in floriculture over the years and can be considered to be a mature floricultural country. This is shown by the steady growth, development of various institutions and availability of inputs for the industry. The institutions mentioned are for instance the growers association KFC. Although the institutions are not always functioning properly at least they are a partner for the growers and can be spokesman for the sector. Issues like infrastructure, wages, marketing and promotion can be done jointly although individual growers are rarely satisfied with the results of collective actions.

Floriculture in Ethiopia shows a remarkable growth because of the support of the government. For the government supporting this prosperous sector is a way to get foreign currency, investment in the country and lowering unemployment. Negative side effect is that legislation is not ready for this development and the country lacks knowledge. This means that not everything is anticipated and for instance in chemicals forbidden in other countries can be imported for the sake of the sector.

The great interest of the Ethiopian government in the relative new sector of floriculture was visible at the opening of ODA Flowers on 13. January 2007 with the presence of president Girma Woldegiorgis (Plate 7.1).

Plate 7.1 The Ethiopian president Girma Woldegiorgis seated next to Dr. Lemlem Sisay at the official opening of ODA Flowers in Addis Ababa, 13. January 2007 (picture I. van Meggelen).

7.4 Which are the repercussions of nomadic floriculture?

7.4.1 For the grower

Although floricultural growers (like other entrepreneurs) are looking for optimal profit in production and return, moving to another country is not without problems. First the search for a suitable country has to be done, in which aspects like climate, available land and water, infrastructure, legislation and available workforce are major issues. If all of this fits well, support of the government and local authorities is needed. This is a time and money consuming process. After setting up another branch or moving production completely the management has to be set up in line with the countries culture, so the workforce can function well. In the case of Ethiopia many workers didn't have a job before, so they were not used to work ethics and could simply disappear after receiving the first wages.

Investing lots of money in a non-familiar country is difficult too. For a grower leasing a greenhouse as Sher Agencies is offering in Ethiopia will make the step abroad easier, since all is taken care of and one has only to bring a pair of scissors to start producing roses. Another issue involved is the support of the family to move to another country. If children are involved appropriate schools have to be found for instance.

7.4.2 For the country

Depending on the reasons a production site is left in a the country repercussions vary. If the Netherlands has growers moving out, mostly the area will be used for construction of houses. For the work force there are hardly consequences since labour in greenhouses is scarce. Worker will easily find a new job. This is different in a developing country like Kenya. Growers are often the biggest employer in a village and apart from wages families depend on the farms for housing, water, medical care and education. So the impact of a farm shutting down is quite different and involves the surrounding villages. If with the growers also the export is gone there is, apart from loss of knowledge and development of a region, loss of foreign exchange coming in.

For countries receiving growers there are also repercussions. Growers need support from the government and local authorities, and often these authorities have no idea what growers need. Infrastructure has to be well, from telephone lines and power supply to well equipped airports and roads that can stand the crossing of lorries. Land must be available at long term lease, since greenhouses are not constructed for a few years. Finance for investment at reasonable interest rates have to be available. The work force has to be willing to work and training of skills is necessary.

7.4.3 For the sector at large (world trade)

Moving of floricultural production means that trade has to be flexible and know where products at the desired quality and amounts can be found. Logistics are an important issue, not only for the distances but also for floricultural produce being perishable. The produce has to be transported in as limited time as possible from the producer to the final consumer through a well conditioned channel. A change of temperature will immediately have a negative effect on the vase life.

For the floricultural growers themselves competition is fierce by having production spread over many countries and locations. Competition can even be influenced to a large extent by incentives offered to growers in certain countries. By having financial benefits like subsidies or tax holidays the cost price of the produce is lowered and lower sales prices can be accepted. However incentives are necessary to start the adventure of production in another country, since they will cover some of the risks taken. In entrepreneurial sense fierce competition is healthy and making entrepreneurs perform at their best.

Labels like MPS Socially Qualified are needed to make sure growers will not increase their profit on account of the workers or the environment.

7.5 From the point of view of the country:

7.5.1 How to prevent growers from moving out?

The only thing a country can do to hold the growers is maintain the conditions well enough. This means that safety issues (Kenya, Zimbabwe) have to be addressed to in time. Other important issues are keeping the infrastructure at an appropriate level, so business is not interfered with by bad roads, tight airfreight capacity or lack of telephone capacity. As for workers issues demands on wages and fringe benefits

should be in line with possibilities. In Ethiopia workers assume that growers make big profits due to the fact that they are constructing all the time. The fact that the expansions are financed with money from the bank is not clear to them since they are not familiar with this system. Clear explanation is needed to prevent workers from feeling rebellious and used at low expense. Unions in Kenya demand rise of wages every time the minimum salary is raised by the government. Clear communication is needed here by growers, authorities and institutions like KFC and EHPEA.

Offering incentives like subsidies and tax-holidays is not necessary once the growers started up, since normal entrepreneurship should be involved and the weaker growers do not need to be kept in business.

7.5.2 What remains after the growers are gone and how to use resources?

After growers left a country little might remain. This is seen in Zimbabwe, where white farmers were forced to leave their farms and Zimbabwean people had no idea how to manage the farm. Education is the key word here. Farmers will educate their workers to the level of skilled worker, which is far from managing (part of) a farm. Education in agricultural colleges and universities is needed in order to have native supervisors and farm managers. During the first visit of the researcher to Ethiopia in December 2003, when there were just a small amount of flower farms, all farm managers and even supervisors were none Ethiopians. One of the recommendations to the university of Mekelle at the time was to develop a curriculum for horticulture (Meinderts, 2004). Cooperation with growers is vital in this, since theory is not enough to obtain the competences of farm manager and practical training is essential.

7.6 From the point of view of the growers:

7.6.1 What is necessary to remain in the same place?

For a floricultural grower is it essential to be able to produce a crop (climate, soil etcetera) in a stable environment (political, economic, socially) and be able to transport it to the market. As long as all these factors are satisfactory growers will stay in place, since moving is always costing time and money. Education is important to obtain a skilled work force and growers are willing to invest in this education. Cooperation with other growers is vital for most growers as well, since this way promotion and sales can be organized better and cheaper. Organisations like KFC and EPHEA are important for looking after interests of growers in many aspects.

7.6.2 Participation in sustainable development for the country.

For growers it is important to see the broader perspective in their role. By being located in a developing country a contribution is made to the development of the country. First of all unemployment is going down and workers are developing skills necessary for a job and giving them good prospects for the future. Participation in education, for instance offering practical placements, will help the country develop. Growers tend to invest in education in elementary and secondary education for villagers as well, partly a result of social chapters in legislation or quality marks like MPS. Also investments in health care are done, for instance the hospital at the Sher compound which is beneficial for the workers and to a larger extend also the villagers of Ziway.

Floriculture, like horticulture in general, has special needs for chemicals, mostly not available in the developing country. By having foreign growers starting in the country

a wider range of fertilizers and chemicals for crop protection becomes available. At first this will be exclusively for the growers importing the chemicals, but later on also small farmers will benefit from this.

8 Conclusions and recommendations

Based on the information obtained through desk research and field research and the discussion and answers to the research questions in the previous chapter this chapter will give overall conclusions and recommendations.

8.1 Conclusions

1. **Floriculture is nomadic**

Looking at the auction statistics a major shift in countries of origin of cut flowers at the Netherlands flower auctions can be observed towards growing exports from East Africa at the expense of for instance Israel. In cutting production the same is observed.

2. **Cut flower growers do not show a nomadic nature.**

Reasons for a grower or investor to start in a developing country like Ethiopia or Kenya are rational and mainly focussed costs and suitable climate. Once located abroad reasons to move or stay are more emotional focussed and growers will hardly move. In case a Netherlands grower starts a second farm in a developing country often management is hired or part of the Netherlands management is living abroad for some time. In that case frequent visits are paid to the farm abroad to make sure the day-to-day routine is taken well care of.

3. **(Multi-national) breeding and propagation companies more often show a nomadic nature.**

The situation is different for multi-national farms, for instance in breeding and propagation. They will start a branch of their company where they think it is wise, with climate, costs, knowledge and labour and their market in their minds. For the farm management in that case a farm manager is hired, either a young Dutch for some

years or an expatriate or other experienced farm manager already living in the country.

4. **Production location is mainly selected by climate and costs**

Conclusion of the field research is that both in Kenya and in Ethiopia main reasons for starting a floricultural nursery were climate and costs. It turns out that the costs in different location in East Africa are not so different, often depending on availability of the supply (chemicals) or service (air freight). Costs as a reason thus is related the EU compared to East Africa.

5. **Incentives are a threat to a flourishing industry**

Incentives like a tax holiday, bank loans and subsidies are good to get a sector started in a new area. Floriculture however is a enterprising sector, and in entrepreneurship taking risks that might turn out positive or negative is part of the game. By offering incentives to a large extend lesser quality entrepreneurs might remain in the market too long, while better entrepreneurs have less chance to survive due to lower cost rates of the entrepreneurs receiving incentives.

6. **Floriculture can have a key role in sustainable development of a country**

Many of the issues floriculture can solve in a country are:

1. Bring in new knowledge and technology that might enhance related sectors as well
2. Make improvement of infrastructure important for authorities
3. Bring solutions for unemployment problems in a country
4. Bring water, medical care, income security, education to villages

7. Floriculture enhances emancipation in developing countries.

In greenhouses female workers are preferred for being more careful. Through this women get a different position in the community and family. When bringing in the money they get to decide what the money is spent on.

Apart from gender issues floriculture clearly brought new possibilities to the people of Ethiopia, where unemployment was a major problem at the end of the last century.

8. Countries in East Africa depend too much on foreign knowledge

Foreign growers started exploring African countries for floricultural production since they had the need to find better cultivation and economic conditions for their production. With this European crops and varieties were introduced in the countries. Also the technical knowledge is within the companies. If local (small) farmers do not make an effort to learn the result might be what happened in Zimbabwe were the growers were send out and local people were not able to take over the management. Apart from this by growing crops from foreign breeders and propagators for which royalties have to be paid, the country misses out on a chance to develop its own products. South Africa uses its own resources like Protea and 'fynbos' in production of cut flowers, which are adapted to the local climate. Clearly these crops should not be harvested in the wild, but propagation and cultivation should take place on farms. By doing so small farmers can easily be involved in the floricultural industry and development of the country is enhanced.

9. **Education (capacity building) is the key factor for a success**.

Supervisors and farm managers in Kenya are trained and educated in floricultural production. In Ethiopia many of the middle- and higher management staff are foreign for the education in horticulture being quite new. To make floriculture a lasting success in a country it is important to have well educated staff.

10. **Public opinion in EU countries is negatively influenced by mal communication**

The public opinion in countries where consumers live is important since they have to buy the produced flowers. Negative feelings on aerial transport of flowers will be part of the public discussion which focuses on environmental care. Negative news on labour conditions at farms leads to public discussion as well. As a sector floriculture should clearly give information on what it does and why.

8.2 Recommendations

1. **Developing countries should attract new investments and thus benefit from the nomadic nature of floriculture in order to develop.**

Knowing that floriculture is nomadic, developing countries can try to attract it in order to lift up the economy. When a government wants to attract investors they have to know the sector and its needs. If these needs can be fulfilled without damaging the environment, people or other aspects locally the start should not be inhibited by bureaucracy. It is recommended that governments inform themselves about a sector, make clear and feasible regulations and avoid bureaucracy in order not the scare the entrepreneurial sector away.

2. **Growers who remain in the country deserve to be supported.**

Cut flower growers are not moving around if they do not have to. They have made investments financially, professionally and in private life. Thus they contribute continuously to the local society. The authorities can show their appreciation for the sector by taking the sector seriously. It is advised to show interest in and discuss with growers and/or their representatives (like KFC or EHPEA) rising difficulties and possible solutions. Education (of middle and higher management) and research on horticultural problems are two items in which the authorities can support. Also in keeping up infrastructure and regulations in line with the needs of the sector. Communication is a key word here.

3. **Enhance maturing of the sector is done by attracting supplying industry as well.**

After production of cut flowers started off, often the suppliers of young plant material try to settle in the country. Apart from production for local supply also young plants are produced for other markets. These companies often need a farm manager from the country of origin of the company due to specialized knowledge and clear communication. A country can give support by having clear regulations for admitting foreigners to work in the country. For the propagating sector itself clear and feasible phytosanitary regulations are needed when importing or exporting of plant material is involved.

4. **Provide reliable information on climate on different sites and costs.**

The authorities of a developing country can enhance the process of decision upon moving for floricultural growers by having reliable information on climate on different sites in the country. Other aspect is information on costs of production factors, which can be provided by both the authorities and growers representatives (for instance KFC or EHPEA). Cooperation of the authorities and sector representatives with the Agricultural Counsellor of the local Royal Netherlands Embassy is important.

5. **Incentives should be used for feasible set up of a company only and thus restricted in time and means.**

Entrepreneurship is a main characteristic of the floricultural sector. Sound entrepreneurship is needed to have a sound industry. Incentives easily lead to unfair competition in a country. In case export is involved this unfair competition is even a threat for foreign growers, as an example the rose industry in Africa threatening the

Netherlands production. A good strategy with clear regulations is needed when tax holidays or subsidies are involved.

6. **Floriculture should be acknowledged for their role in sustainable development of a country**

Since floriculture plays an important role in a country in economic and social aspects the sector should be acknowledged for this. This way the sector can use this acknowledgement in the promotion of their products abroad as a contrast to the discussion on carbon footprints or labour conditions. As the growers feel appreciation for their efforts they will develop further initiatives instead of just minding their profits. Acknowledgement can be given by different stakeholders like authorities, sector representative organisations, research and education institutes, work force (for instance through unions), consumers and trade.

7. **Gender should not be more important than having the right person in the right place.**

Floriculture has given a new position to especially women in East African countries. This has lead to a situation in which scholarships are rewarded to females of sub-Saharan countries by preference. These are not always the persons with the best competences. Scholarships should be awarded to the best suitable person for the position, only in case of equal candidates the preference should be given to a female.

8. **Creating and collection of knowledge in the country is needed to be able to operate independent of the foreign investors.**

Growers associations, educational- en research institutions in a country are advised to collect information on cultivation and other aspects of floricultural farms. In doing so

and translating the information to a smaller company it becomes feasible for small farmers in the country to start in the successful floriculture as well. The knowledge is also needed to educate people for all types of jobs related to floriculture.

9. **Education has to catch up quickly with the developments of a new industry.**

Since education is the key factor to success for a sound floricultural sector in a country more research is needed to find out exactly what is needed. In this research the competences needed in a floricultural nursery or farm should be the starting point, thus need to be discussed with (representatives of) the industry.

- In general curriculum development, based on the needs of the industry, is needed on the different levels of farm manager, workers, assistant manager. This can be part of a university program, but also training on-the-job.
- Small farmers can be stimulated to be part of the industry as well through training programs in entrepreneurship, economics or cultivation techniques.
- Training knowledge of university staff, which is often not familiar with high-tech floriculture.
- Also teaching methods of lecturers can be improved by training. The possibility to evaluate lecturers on their competences and enthusiasm would enhance the learning process of students. Young people will only be inspired by lecturers who are enthusiastic about a subject and know what they are talking about.

10. Communication towards end consumers in Europe and else has to be enhanced

In order to prevent the public opinion being mal informed about labour conditions, carbon footprints and so on, the association of growers, the government and the growers have to emphasize the positive influence of flower production in developing countries. True information must be used for this, so no 'bad stories' can undermine this information. By having consumers happy with the fact that by buying flowers they help people in developing countries all stakeholders will benefit.

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16.http://www.newvision.co.ug, Flower Export revenue down 22%, 20. February 2007

17.http://www.newvision.co.ug, Flower Farms relocate to Ethiopia, 16. December 2006

18.http://www.pzc.nl/internationaal/buitenland , Creatief boeren in schaduw Mugabe, 20. September 2007

19.http://www.state.gov (various maps used in chapter 3)

20.http://www.zjfdi.com/UploadFiles/aaf001200751085541_2.pdf (last visited 22. March 2008)

Visited workshops and symposia

1. Seminar Entrepreneurship in Africa, 5. October 2007, Rotterdam
2. Dutch Kenya Flower Day, 10. October 2007 during the Hortifair, Amsterdam presentation of amongst others Jane Ngige (CEO Kenya Flower Council)
3. Breakfast briefing of Syntens, 16. October 2008 during the Hortifair, Amsterdam

Personal communication

1. D. Bruinsma, agricultural counselor of the Netherlands embassy in Nairobi; Rotterdam 5. October 2007 and various times per e-mail
2. G. Westenbrink, agricultural counselor of the Netherlands embassy in Addis Abeba; Addis Ababa January 2007 and various times per e-mail
3. G. and P. Barnhoorn, owners of Sher; Aalsmeer 27 March 2008
4. F. Kuipers, advisor of Sher Holland; Aalsmeer, 27. March 2008
5. R. le Clerc, CEO of Fides; Rotterdam 5. October 2007
6. P. Piels, Den Ingh Roses; Amsterdam 16. October 2008
7. J. Dame, consultant in Kenya, contacted by mail several times

Appendix 1 Case studies

1 Case: production of cuttings at Fides

Fides has been active in breeding and multiplication of floricultural crops since 1967, main crop being chrysanthemum. The turnover of the company was 40 million euro in 2007. The company employs 1,600 people, 170 of which in the Netherlands.

Starting about 1975 outsourcing was done to South Africa. As of 1996 Uganda, Kenya and Tanzania joined in. Main reason for outsourcing is a stable climate allowing year round production. The production of about 800 million cuttings per year, all taken by hand, which makes labour costs the second main reason.

Fides uses a checklist to evaluate a country for its fitness for production:

1. Logistics has to be fine (at least three flights a week to Europe, city does not matter).
2. Good infrastructure regarding power supply and quality of roads
3. Skilled employees, specially able to read, write and ability to count.
4. Political stability and calm, uneventful

Managing the foreign branch is a Dutch farm manager and the farms are 100% owned by Fides. Staff and production employees are locally hired. The branch is managed as if it were in the Netherlands, meaning Dutch Occupational Health and Safety Act have to be respected, work conditions etcetera are in accordance with Dutch standards. The wages are locally orientated. Apart from the wages 100% is spent on extras like three times a day a meal for the workers, housing, medical care, clothing, small loans (never as a gift, always to be paid back) and investments in the surroundings of the company (water, micro-financing and education). Each branch accounts for about

1,400 employees, which means that 1,400 x 5 is 7,000 people share the income and other benefits.

Basic assumption is the own business economic interest of Fides. The decision to be in three different countries is spreading of risk.

Fides has been in Uganda for 11 years now, John Rutten being manager. The image of Uganda was low because of the domination of Oboto and Amin. Nowadays it is a pleasant to be in business here since people are eager to show what they are worth after the bad times they had. The level of education is well and the English is spoken very well. Kampala has the best university of the region. Politically there is a reasonable stability, although the hate against the Indians increases noticeably. Air freight capacity meets about the demand. Cold store facilities at the airport are constructed by Fides and some other companies.

Kenya shows increasing crime rates, which at present also involves robbing the own population. Concern for tribe disputes is always present; a manager should find a balance in presence of tribes in his team. Unusual point of attention for Fides has been the menace of a herd of giraffes plundering the kitchen gardens. Since it turned out to be a rare species shooting them was no option. They were lured with food and transported to a reserve, which 21 out of 23 giraffes survived.

Fides has started in Tanzania in 2005. Up to now a severe bureaucracy turned up and education and language are a major problem compared to other countries. Other

problem is the monopoly of KLM at the airport Kilimanjaro. Power supply is becoming a increasing problem.

General statements towards Africa:

- Do not underestimate the enormous impact of the AIDS-problems on the society in Africa. The population still ignores the 'skinny disease' and people will tell you that people died of flu or something similar.
- Malaria cannot be underestimated either, it kills one million people a year.
- Refund of VAT is time consuming. It may take one or two years, while you cannot afford to be one day late in paying your tax.
- Corruption; Fides does not have too much trouble with this and lives by the rule of conduct of not giving in.
- Transfer pricing; the treasury in those countries is very interested to know the amounts of export due to the possible exporting of profit (sales to the Netherlands with low cost price)
- Varying exchange rates.
- Be patient, if an African will not keep his promise or is late he will tell you: " relax man, you may have the watches, but we have the time".
- Royalties: Kenya is member of UPOV, Tanzania has started to be member, but in Uganda it is wild west.

(Seminar Entrepreneurship in Africa, Rotterdam, 5. October 2007, presentation and interview with René le Clercq, CEO Fides)

2 Case: Sher Agencies in Kenya and Ethiopia

Gerrit Barnhoorn started as a grower, propagating chrysanthemum and gypsophila. He sold his nursery in 1992 to the American chrysanthemum breeder Yoder, after which he stayed for some years as general manager. After he stopped there a friend of his, Cor Zwolsman, asked him to come to Kenya to help him with his farm. Gerrit fulfilled the financial management for a year, after which he bought the nursery. At that time it was only eight hectares of wooden greenhouse. The start of Sher Kenya with Barnhoorn was 1. January 1997. He developed the company to a nursery of 250 hectares with eye for the social aspects of being entrepreneur in a country like Kenya. So 3,000 houses have been constructed, elementary and secondary school in the village, hospital, police stations and even a professional soccer team that participates in the highest national competition. Apart from social awareness these investments result in commitment of the people that find a job at the company as well as their family members. As Barnhoorn explains: "What you give with your right hand will eventually return in your left hand." In 2006 75 hectares of the Sher compound were leased to the company van de Berg in Delfgauw. In October 2007 the rest of the compound was sold to an Indian investor Karuturi Networks.

2.1 Lease in Ethiopia

In 2005 Sher started investments in Ethiopia. The start of that was a visit of some Ethiopian ministers during the Hortifair who proposed that Sher would do the same investments in their country as it has done in Kenya. Since Sher was asked to come they put a list of necessities to be met before considering investment. On the list was availability of 300 hectares of land with a term of 30 years lease, good infrastructure

(roads), water in the surroundings and proximity of a village to assure labour force. The government was very eager to lift of horticulture, and they returned with Ziway as proposed area within a few months. At the moment of signing of licenses etc. no problems were observed, as the government was very supportive. As of the start of construction 2 hectares a week were built. At present 250 hectares is in production, rented by nine entrepreneurs. Four of the companies are of Netherlands origin, five have Ethiopian owners. There is a waiting list of possible renters for another 1,000 hectares. Barnhoorn: "we've stopped putting names in files, since we will never be able to fulfil all requests." The ambition of Sher is to have 600 hectares in two years, 450 hectares of which in Ziway and 150 hectares in Awasa.

Apart from construction of greenhouses in Ziway schools with ten class rooms have been build and last December a hospital with 180 beds was opened. This is an investment that reaches wider than own workers and their families, since there's no hospital in the region within 100 km from Ziway.

A Plate 2.1 AQ Roses of Ammerlaan at the Sher Compound in Ziway, an easy start in a new country by leasing a turn-key rose greenhouse. (I. van Meggelen, January 2007).

Sher doesn't produce roses themselves, but they fully support their renters. The greenhouses are constructed, the roses planted and staff trained. The renter will enter at the growing of the second flush of the roses. The renters are both foreign (40%) and Ethiopian (60%). The latter are not only investors or rich people, since one can start with only a pair of scissors in a greenhouse rented from Sher. One of the renters is a group of several Ethiopian owners, who started in this together. Also roses is not the only product grown. At present a vegetable grower is growing tomatoes, sweet peppers and cucumbers for sales in the Middle East and a gerbera growers brings good quality flowers to the Netherlands. Plates 2.2 and 2.3 show an impression of the Sher compound in Ziway.

A Plate 2.2 Main gate of Sher Ethiopia in Ziway. (I. van Meggelen, January 2007)

A Plate 2.3 All the grading halls are next to each other, on the left the land for the next 100 hectares of construction is prepared. (I. van Meggelen, January 2007)

2.2 Problems met starting in Ethiopia

Major problems met in Ethiopia is the language (In Kenya 98% speaks English, in Ethiopia only 2%). Another problem met is the mentality of the people, which is more Arabic compared to Kenya. However a good relationship with authorities helps in achieving goals. One of the main improvements is the start of a horticultural college in Ziway soon, where people can be trained for work in the greenhouses. Practical training is done in the greenhouses at the Sher compound.

Another problem in Ethiopia is still airfreight. At present only Hortishare, part of EHPEA, is assigned to do air freight with Ethiopian airlines. Barnhoorn is negotiating with the authorities to have their own charters like they used to have in Kenya. This will probably be possible soon. In July 2008 Sher got permission of the Ethiopian authorities to fly their own charters from Addis Ababa (Vakblad, 2008 (31)).

Since resources in Ethiopia in the field of fertilizers and crop protection chemicals were almost zero AgriSher was established to import all goods necessary for cultivation. AgriSher thus supplies all Ethiopia, but typically an Ethiopian should be trading the products not for own use, due to government regulations.

2.3 Reasons to leave Kenya

The decision to leave Kenya was based on two main issues: safety and costs. Although never experienced problems themselves they've seen and heard about the highjack and robbing other foreigners suffered from. In costs mainly salaries raised a lot. As a comparison at present in Ethiopia € 1.50 is paid per day, while in Kenya the costs are € 6.00 per worker. The unions get more power every time, and the last wage claim was 200%, which is extravagant according to Barnhoorn. He states that he never had trouble with the unions or the workers, especially since he was awarded three times (2005, 2006 and 2007) for good social practices by the Kenyan Workers Right Watch.

The Ethiopian wages are lower, but a remark should be made that productivity is lower too, so after all the costs are not much lower than in Kenya. Ethiopia seems to have more discipline from the government in the perception of Barnhoorn.

2.4 Future development of Sher in Ethiopia

In the next few years another plot in Awasa will be constructed on 100 hectares. Also Sher has started a vegetable project in which small vegetable growers cooperate and improvements like drip irrigation are handed by Sher. Further towards the future there is no specific idea where the next steps will be heading for.

All flowers should have a quality mark in order to remain in a good market position. At present in each country a growers association is developing a code of conduct. In Ethiopia this was released by EHPEA, developed by WUR. Barnhoorn explains that there is no need to develop a code of conduct, since all growers can join MPS, a strong international label with all environmental and social aspects covered. He will make an effort to have all growers on the Sher compound join MPS soon.

2.5 International flower trade and position of the Netherlands

As for the market Barnhoorn sees that the production will grow 10% a year and the sales 4 to 6% a year, which means that growers have to consider their future. For the Netherlands there will be a place in international trade for being the break bulk market. Dubai Flower Centre is concentrated on a limited number of products, where traders are looking for the whole spectrum. This is exactly what makes the Netherlands unique.

As for the auctions, not everything has to come to the auction place physically and long term trade will become more important every time. Kuipers remembers that in 1975 the intermediary office started since line drivers from the south of the Netherlands didn’t have time to sit at the auction clock in the morning, but they

wanted to settle their finances through the auction. Ten years later there was already 50% direct sales with only the financial part at the auction. (personal communication, Aalsmeer 27. March 2008).

According to Gerrit Barnhoorn a grower starting in a 'new' country needs:

- Good contact with both authorities and local authorities (seniors in the tribes for instance)
- 30 year lease contracts
- Licenses
- Availability of labour force

2.6 Karuturi Networks in Kenya

Sher Agencies sold their properties in Kenya to Indian company Karuturi Networks. Ramakrishna Karuturi (42 years) is managing director and started growing roses in a 4 hectares greenhouse in 1994. Quality in India was not as good as in Africa, since the climate was too hot for the production of bigger size roses. Also the local market was not ready for expensive high quality roses. In 2003 Karuturi founded a farm in Ethiopia at an altitude of 2,400 m to grow Hybrid Tea roses. At present the farm has 60 hectares, expanding 200 hectares at a speed of 5 hectares a month. In October 2007 the takeover of Sher Kenya became fact. Kenya is supplying mainly Germany, while the Ethiopian production is exported to the United Kingdom. In 2010 Karuturi wants to have 500 hectares of rose production. For this he is looking for locations in Ecuador and Colombia as well for rose production. For the sales Karuturi already started a location at Dubai Flower Centre, and in India he expanded in flower shops, expecting to have 100 by the end of last year. He is determined to have only roses: "We are

good at growing roses and therefore we want to stick to this product.” (FlowerTech, 2007(08)).

3 Case: AQ roses leases at the Sher compound.

Rose company Ammerlaan Roses in Rijsenhout/NL belongs to Wim Ammerlaan and his two sons Frank and Wim jr. The area of 3.2 hectares used to be filled with roses (variety Aqua), which are sold under the flag of Rosa Plaza. As energy prices grew higher half of the nursery area has changed to cut hydrangea in early 2006 to save costs. At the same time a nursery was leased of Sher in Ziway, Ethiopia and given the name AQ Flowers. The first part was 18 hectares, this year the production area in Ethiopia will increase to a total of 37 hectares. While father Wim runs the company in the Netherlands the sons take turns of a month in running the farm in Ethiopia. In January 2007 the farm was visited by the author where both Frank and Wim jr. were present at the time.

AQ Flowers has 2 x 9.6 ha, of which 18 ha is for production. The greenhouse is 960 m long and 100 m width. At about 450 m the fertigation and crop protection units can be found. Chemicals are spread through a system of pipes, so the appliers can connect at the spot where they need to be in the greenhouse. In one cap op 9.60 m 6 beds of roses are planted in the soil, with a plant density of 9 pl/m^2.

Currently 400 people are employed at the farm working 7 days a week from 7.00 until 17.00 for a wage of 9 birr per day. After seven days they will have a day of. Per three caps two people will be responsible for the harvesting (five times a day), maintenance and other duties in the crop. This way they feel responsible for the production and can see the result of their efforts.

One of the farm managers is a BSc graduate from Mekelle University, Andenet.

Water is collected from Lake Ziway. Although taking out water, the lake will not be object to depletion. After one year in use, the water level even is higher than before, even during the dry season at the time.

Biggest challenge for Ammerlaan will be to manage the human resource, so to get the workers committed to their jobs. A Problem Ammerlaan is facing are the logistics. It takes too much time to load the airplanes at Bole International Airport. Apart from that the cold stores are not used or not efficiently because of wrong logistics. This means quality problems at arrival in Brussels or the Netherlands. Trying to solve the problems visits were paid to responsible authorities, but they keep defending the level reached and are not open for comments as to improvements.

(source: personal communication; Meggelen, 2007; Vakblad 2008(31)28.

4 Case: Unfortunate adventure of a grower in Ethiopia

A 54 year old rose grower from the Netherlands was giving a presentation on his experience starting up a farm in Ethiopia. Together with his son at present he runs one nursery of 15,000 m² in the surroundings of 's Hertogenbosch. From growing few varieties on two nurseries, they move to growing a large number of varieties on one nursery with direct sales to traders in principally Austria and Switzerland. Before this happened father and son had an unsuccessful adventure in Ethiopia.

4.1 Interest in Africa

The grower was member of the VBA commission for the southern region in the Netherland for eight years. Through this commission he went on a study trip to Kenya, where he was astonished by the development, but interested to take part in this. In 2004 he went to Ethiopia with a trip of growers association LTO. He felt a complete different culture in that country than in Kenya. He mentions people friendlier and lack of corruption. During the trip meetings were organized with the Netherlands embassy and ministers. Promised were loans of 70% of the capital to invest and a period of five to six months to settle everything.

4.2 Process

The grower started developing his idea and contacting people through his network in the auction commission. A financial advisor and a former colleague from the Netherlands were willing to co-invest. The three parties brought in an equal share of the 30% own funds required in a separate BV. In January 2005 the plan was setup and the search for 40 hectares of land was started. The growers wanted to have greenhouses of three to six hectare per block on flat land. To find appropriate land was

a problem since flat land was scarce and the local people had no problem with the 20 to 30% slope on 40 hectares. Also the presence of eucalyptus trees on the land was a negative aspect, for being time consuming and expensive to get rid of. The price of the land however was good, with 40 dollar per hectare and 30 year lease. The representative of the soil bank helped to acquire 36 hectares of land in May 2005. This area belonged to 43 farmers, who all had to agree on the deal, otherwise it was off. This agreement was organized in ten days time. Officially the soil is owned by the government, rented by farmers who rented it to the BV.

4.3 Loan

On the part of the loan information was obtained from the authorities and EHPEA. In the end the development bank turned out to be a major bureaucratic organisation with little understanding of the situation in the world. As the grower explains Kenya is better developed in this aspect. The fact that only when you are present your case is looked after, while it is piled on a bureau when you are out of the country is an example of this. Taking responsibility is not done by anyone, from the lowest clerk to the CEO according to the experiences of the grower. The promised six months became two years.

Although it was promised that 70% loan was possible, the reality was different. For instance on the irrigation the 70% was just for the tubes, but technical stuff like pumps was kept out of the 70%. Altogether the costs from own funds were 65% while the bank was financing 35%.

The greenhouses, imported from India, and the irrigation from the Netherlands were shipped to Djibouti when the bank confirmed the finance. When the shipment arrived

it could not be imported in Ethiopia, due to the paperwork not being ready. Again the BV financed the costs, other option would have been to ship the equipment back to India and the Netherlands. At the end of 2006 the first six hectares of greenhouse was ready for the first plantings. In four years time the company would grow to 24 hectares.

4.4 problems

By that time the energy price in the Netherlands had gone up and the grower was growing on four hectares at the time (two nurseries). For financial reasons he stepped out of the project, since going broke seemed to be nearby. In the project many mistakes were made, like flat planting instead of using lifted beds and planting of the wrong assortment (susceptible to botrytis). A Netherlands farm manager was in charge, but after a while he quit due to burnout problems. At that time the crop was in bad shape, with spider mite problems and an EC of 0.3 in the soil. The grower was asked to be consultant and needed six months to fix the problems. Before the problems were fixed however the partners decided to stop the project in 2007. At present a new investor is looked for, but all interested parties meet the same bureaucracy. In October 2008 an investor had an agreement with the management of the development bank that only 15% of own funding was needed. The agreement included a full detailed repayment schedule. A lower clerk however decided this was not according the 70% financing and the procedure was stopped again.

4.5 General perception and recommendations.

The grower is still working as an consultant for some rose growers in Ethiopia and emphasizes that half of the companies is making money and the rest is in financial

trouble. Air freight is a struggle every day, and Sher has not accomplished their own charters yet although the government agreed in July. Weakest item in Ethiopia is the management, both in authorities and banks but also in farms. On farm level mostly the decision power of middle management is too low. The grower comes with three advices for people thinking to go abroad:

- Make sure you have good knowledge of procedures and authorities involved (know your way)
- The procedures always take more time than estimated
- Costs are always higher than expected

(source: breakfast briefing at Horti Fair, 16. October 2008)

Appendix 2 The Countries of Sub-Sahara Africa

Source: http://www.countriesandcities.com/regions/sub-sahara-africa.htm

- A -
Angola

- B -
Benin
Botswana
Burkina Faso
Burundi

- C -
Cameroon
Cape Verde
Central African Republic
Chad
Comoros
Congo (Brazzaville)
Congo DRC (Zaire)
Cote d'Ivoire

- D -
Djibouti

- E -
Equatorial Guinea
Eritrea
Ethiopia

- G -
Gabon
Gambia
Ghana
Guinea
Guinea-Bissau

- K -
Kenya

- L -
Lesotho
Liberia

- M -
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mozambique

- N -
Namibia
Niger
Nigeria

- R -
Reunion
Rwanda

- S -
Sao Tome and Principe
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
Sudan
Swaziland

- T -
Tanzania
Togo

- U -
Uganda

- Z -
Zambia
Zimbabwe

Appendix 3 Questionnaire Ethiopia

Initial questionnaire for MSc-dissertation 'Nomadic nature of floricultural growers' by Ineke van Meggelen-Laagland, lecturer at HAS Den Bosch, the Netherlands

Introduction

Growers tend to have a nomadic nature. Dutch growers move to places where the circumstances most favourable. These circumstances can be climate and other cultivation factors (production of cutting in the southern hemisphere), costs (labour and energy costs are extremely high in the Netherlands), preventing limiting factors like space or regulations, political and social stability (Zimbabwe), safety issues (Kenya at present), proximity to the market or personal circumstances.
The objective of this dissertation is to identify the suggested nomadic nature of growers, the reasons and problems raised by this for all stakeholders and possible solutions for the countries involved. These solutions can both be keeping the growers in place or building capacity to continue business.
In order to collect first data I'm carrying out this questionnaire, supported by EHPEA and Jimma University. I would be very pleased if you want to respond this questionnaire and send it to me by e-mail or by mail. It can be answered in English, or if more comfortable in Dutch or German. The questionnaire is a first step to gather information. Of course the information will be treated confidentially. If possible and necessary I'd like to contact you later on for further questions based on the results of the analysis of this questionnaire. If you wish I will keep you informed on the results and conclusions of the research.

Ineke van Meggelen-Laagland
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PO box 90108
NL 5200 MA 's Hertogenbosch

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1. Name and address of nursery

Name	
Address	
Telephone	
e-mail	
Website	www.

2. Name and nationality of owner

Name	
Address	
Telephone	
e-mail	
Nationality	

3. Name, nationality and job title of person completing the questionnaire *(if other than owner)*

Name	
Address	
Telephone	
e-mail	
Nationality	

4. About the structure of the company:

	yes	No
a. Is the nursery part owned by the mentioned owner alone? (if yes: continue at question 5)		
b. Is the nursery part of an international consortium/organization? (if no: continue at question 4d)		
c. What is the name of the consortium/organization?		
d. Do you have an Ethiopian partner in business?		
e. Do you have partners of other nationalities, if yes which nationalities?		

f. What is the main reason for choosing your partner (e.g. financial, obtaining land, obtaining subsidies like PSOM)?

……
……

5. a. What products are grown on your nursery?
   b. What is the producing area of (the different) product(s)?
   c. Is it covered or open field production?

Crop	Varieties	Area (m^2)	Covered	Open field

6. Could you indicate the percentage of produce exported to which countries?

Crop	Varieties	Export countries	%

7. When was the nursery established in Ethiopia?

……
……

8. Did you have a nursery before? If yes in which country? *If no please continue at question 14.*

……
……

9. What products did you produce on the previous nursery?

Crop	Varieties	Area (m^2)	Covered	Open field

10. What are the three main reasons for you to start production in Ethiopia? *(please indicate the most important as no 1, and least important as no 3)*.

1	
2	
3	

11. Which country is/was your other nursery located?

……
……

12. Is this nursery still in production, if so who's in charge for the daily routine?
……
……

13. If you abandoned your previous nursery, what were the three most important reasons to leave the country? *(please indicate the most important reason as no1 and the least important an no 3)*.

1	
2	
3	

14. If abandoned, what happened to the nursery after you left? E.g. is it still producing with another owner or taken down by yourself?
……
……

15. Can I contact you for further questions, either by e-mail or in person during the Hortifair in October or during a next visit to Ethiopia later this year? Please indicate what you want:

Contact	Yes	no
By e-mail		
Meeting during Hortifair October 2007		
Visit on the nursery in Ethiopia		
No contact after this questionnaire		

16. Additional information or comments:
……
……

Thank you very much for your cooperation!

Appendix 4 Questionnaire Kenya

Questionnaire for MSc-dissertation 'Nomadic nature of floricultural growers' by Ineke van Meggelen-Laagland, lecturer at HAS Den Bosch, the Netherlands

Introduction

Growers tend to have a nomadic nature. Dutch growers move to places where the circumstances most favourable. These circumstances can be climate and other cultivation factors (production of cutting in the southern hemisphere), costs (labour and energy costs are extremely high in the Netherlands), preventing limiting factors like space or regulations, political and social stability (Zimbabwe), safety issues (Kenya at present), proximity to the market or personal circumstances.
The objective of this dissertation is to identify the suggested nomadic nature of growers, the reasons and problems raised by this for all stakeholders and possible solutions for the countries involved. These solutions can both be keeping the growers in place or building capacity to continue business.

I wanted to do some interviews in person during the Hortec in March, but since this unfortunately was postponed a questionnaire per e-mail is more suitable. I'm grateful that the agricultural counsellor of the Dutch embassy in Nairobi supports me by mailing the questionnaire to you. I would be grateful if you would take some time to respond this questionnaire and send it to me by e-mail or by mail. It can be answered in English, or if more comfortable in Dutch or German. The questionnaire is a further step to gather information for my dissertation. Of course the information will be treated confidentially. If possible and necessary I'd like to contact you later on for further questions based on the results of the analysis of this questionnaire. If you wish I will keep you informed on the results and conclusions of the research.

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1. Name and address of nursery

Name	
Address	
Telephone	
e-mail	
Website	www.

2. Name and nationality of owner

Name	
Address	
Telephone	
e-mail	
Nationality	

3. Name, nationality and job title of person completing the questionnaire *(if other than owner)*

Name	
Address	
Telephone	
e-mail	
Nationality	

4. About the structure of the company:

	yes	no
a. Is the nursery partly owned by the mentioned owner alone? *(if yes: continue at question 5)*		
b. Is the nursery part of an international consortium/organization? (*if no: continue at question 4d*)		
c. What is the name of the consortium/organization?		
d. Do you have an Kenyan partner in business?		
e. Do you have partners of other nationalities, if yes which nationalities?		
f. is your partnership based on 50%/50%?		

5. a. What products are grown on your nursery?
   b. What is the producing area of (the different) product(s)?
   c. Is it covered or open field production?

Crop	Varieties	Area (m^2)	Covered	Open field

6. Could you indicate the percentage of produce exported to which countries?

Crop	Varieties	Export countries	%

7. When was the nursery established in Kenya?
   ……

8. What are the three main reasons for you to start production in Kenya? *(please indicate the most important as no 1, and least important as no 3)*.

1	
2	
3	

9. Do you have or did you have a nursery before? If yes in which country? *If no please continue at question 11.*
   ……
   ……

10. What products did you produce on the previous or present other nursery?

Crop	Varieties	Area (m^2)	Covered	Open field

11. Since some years floricultural production in Ethiopia has been growing fast. How do you feel about this development?
……
……..

12. Have you ever considered moving your production from Kenya to Ethiopia?
    - Yes
    - No (*please continue at question 15*)

13. Will you move your production to Ethiopia or another country in 2008 or 2009?
    - Yes, completely
    - Yes, partially (….% of the production)
    - Not sure yet
    - No

14. What would be the main reasons to move your production to Ethiopia? *(please indicate the most important reason as no1 and the least important an no 3)*.

1	
2	
3	

15. What are be the main reasons to stay in Kenya? *(please indicate the most important reason as no1 and the least important an no 3)*.

1	
2	
3	

16. Comments on moving from or staying in Kenya
……

17. Fast raising production in Ethiopia is a threat to me/my company.
    - Yes
    - No
      Because …….

18. The sales of my production is influences (positive or negative) by raising production in Ethiopia.
    - Yes (indicate positive /negative)
    - No
    - Because …….

19.I can benefit from the fast raising production in Ethiopia.
- Yes
- No

Because……..

20.Ethiopian flower production benefits the flower trade in general, so in the end also Kenyan exports.
- Yes
- No

Because ……..

21.I will not leave my Kenyan nursery since the workers and their family depend on me.
- Yes
- No

Because……..

22.The situation after the elections of December were a surprise to me
- Yes
- No

Because……..

23.The present situation has an effect on the financial results of my farm this year
- Yes
- No

Because……..

24.Through this present situation my perspective on safety in Kenya has changed.
- Yes
- No

Because……..

25. In the recent situation my nursery will be stable in production and number of employees within a few weeks
- Yes
- No

Because……..

26.Can I contact you for further questions by e-mail? Please indicate what you want:

Contact	yes	No
By e-mail		
No contact after this questionnaire		

27.Additional information or comments:

.....
.....
.....
.....
.....

Thank you very much for your cooperation!

Appendix 5 Replying companies in Ethiopia and Kenya

On 30 January 2007 36 questionnaires were sent by e-mail to growers known to be none-Ethiopian. The addresses were obtained from the Dutch embassy as well as from EHPEA. The response was 8 usable replies. Some of the recipients of the questionnaires turned out to be vegetable growers and some suppliers.

Useable replies received by e-mail:

Avon flowers (Olij)
Derba Flowers PLC
Ethioplants PLC
Maranque Plants
Marginpar Ethiopia
Red Fox Ethiopia PLC
Spirit PLC
Ziway Roses PLC

On 14. February 2008 the Netherlands embassy in Nairobi sent out questionnaires to 53 e-mail addresses, accounting for approximately 40 companies. One of the recipients was a in trade, eleven useful replies were received.

Useable replies received by e-mail:

Deliflor/Beekenkamp
Flora Delight Ltd
Florensis Kenya Ltd
Hilverda Kenya
Laurel Inv. Ltd
Mayflower Kenya Ltd
Mount Elgon Orchards Ltd
Preesman Kenya
Red Land Roses
Terra Nigra/Color Vision Roses
Terrasol/lathyflora
Tilela Ltd
Tsara Rozen