

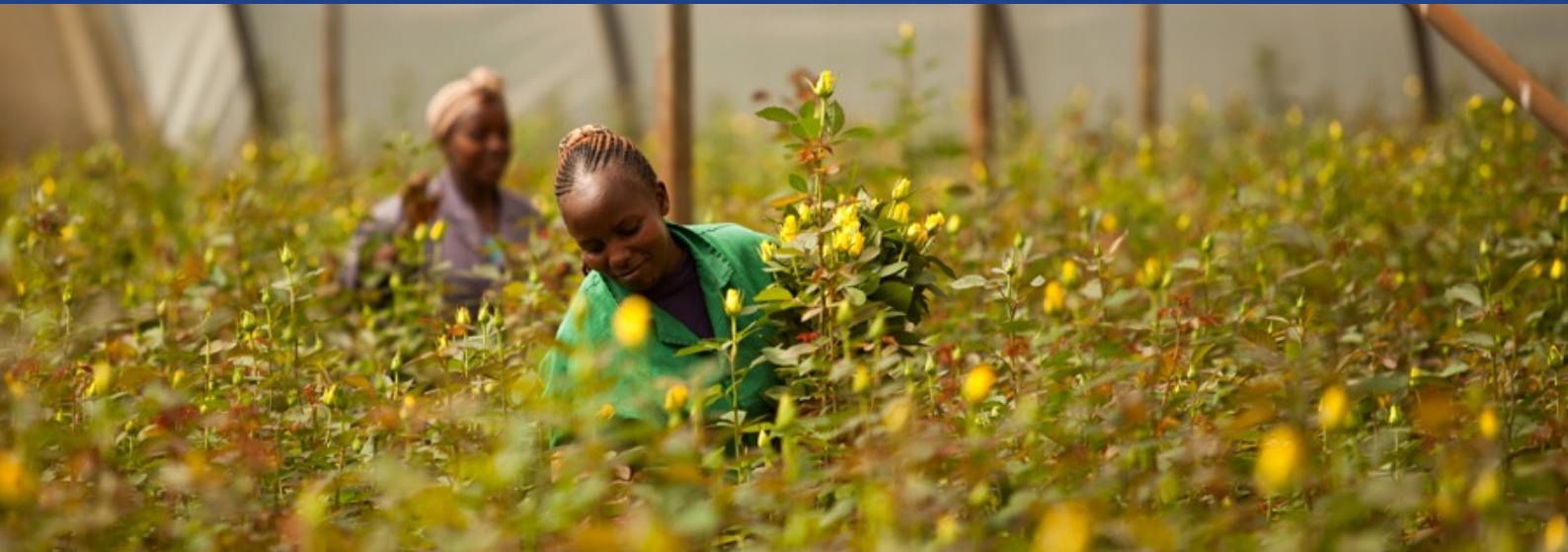


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# Kenya Flower Industry Global Competitiveness Report

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## Executive Summary

### About the study

With assistance from the Centre for the Development of Enterprises (CDE) and the World Bank Foundation, the Kenya Flower Council (KFC) developed a project to conduct a series of studies and activities to determine the global competitiveness of the Eastern African flower industry. Specifically the World Bank funded a series of regional video conferences between May and December 2011. This year, the CDE component of the project delves deeper into implementing some of the interventions identified, mainly in training, pilot projects and studies on the impact of taxes & levies, soil borne diseases with a focus on agro-bacterium, climate change and the role of strategic environment assessment.

The underlying report is the result of a study to identify measures to improve government-industry relations, support innovative entrepreneurship and promote exports to strengthen the competitiveness of Kenya's floricultural sector. By reviewing other leading and upcoming producer countries, this study offers opportunities to learn from their experiences.

Besides the aforementioned CDE/World Bank series, a number of other ongoing projects cover different aspects of competitiveness:

- National Mechanism for Industry-Wide Compliance a project by the Dutch AgentschapNL.
- The Kenya Horticulture Competitiveness Project (KHCP) by USAID.
- Kenyan-Dutch Horticultural Supply Chain Study by the Dutch Ministry of EL&I.
- Development of a National Floricultural Strategy by the Kenyan Ministry of Agriculture.

### Lessons from other leading flower producing countries

Reviewing other leading flower producing countries, we found that external factors like climate, currency exchange rates and oil price fluctuations have had a major impact on their competitiveness. On the other hand, the existence of an enabling business environment is an absolute precondition for the industry's success in the current highly competitive flower industry, which is characterised by increasing internationalisation and highly dynamic market conditions. Important lessons are:

*A sound regulatory environment:* Growers worldwide consider compliance with local laws and regulations important and positive. Countries have put considerable efforts in reducing paperwork and bureaucratic overhead.

*Critical role of knowledge and innovation:* Costs are rising in all leading producer countries. Growers look for ways to increase productivity and efficiency. Innovation is encouraged through grant schemes, tax relief on research and development spending, specific technical assistance, or government support to an active floricultural research programme.

*National coordination and cooperation:* Competition from other supplying countries in Kenya's main markets is increasing. The real challenge and source of future success lies in a nationally coordinated approach.

*Infrastructure and logistics:* Recognition of the importance of a competitive logistics infrastructure. Local transportation and infrastructure including telecommunication has much improved in competing countries.

### Key Drivers

The key market trends that drive the industry are:

#### *Changing market conditions*

There is a general notice that the industry is changing dramatically. Consumption stagnates in major markets, while the supply of flowers remained abundant.

In the traditional florist channel, which continues to be the largest market segment, direct trade is increasing, particularly in markets further away from the Netherlands.

The industry is increasingly dominated by large and sophisticated supermarkets chains. These large retailers are laying down quality standards, which are becoming more stringent and differentiated.

There is also an acceleration of technology and knowledge development, not only in cultivation, but particularly in the way flowers are traded (remote buying system, web shops). Trade becomes virtual making consistency and accurate exchange of information critical.

#### *Margins under pressure*

In all producer countries, production and logistics costs are rising (labour, fuel, airfreight, inputs, energy, taxes, etc.), while prices will remain under pressure in the long run. As a result, margins are getting squeezed. To remain competitive, farms are required to continuously improve their productivity and efficiency. This principle actually applies to the entire value chain as a whole. The industry is evolving towards lean and transparent chains characterised by consolidation and vertical integration.

### **Challenges for Kenya**

There are couple of big issues that way heavy on the competitiveness of the Kenyan flower industry such as political stability, safety, corruption and bureaucracy. One of the main daily concerns of growers, however, not only in Kenya but also abroad, are the ever rising costs.

For the mid and long term future, we identify five vital challenges for the Kenyan flower industry to retain or strengthen its competitiveness in the global flower markets:

#### No 1. Efficiency improvement

- \* Productivity
- \* Pest management
- \* Innovation

As price levels remain under pressure and are not expected to rise, there is a clear need for efficiency improvement. Competing countries are moving forwards fast. In terms of production costs, ample opportunities for efficiency gains exist. With respect to the costs of labour, the two main options are either to work on worker productivity and skills development or on mechanisation.

This report identified a general lack of truly innovative enterprises, especially indigenous Kenyan enterprises. At this stage, Kenyan farms require appropriate-level technology, which is often not readily available. High-tech solutions are internationally available, but are either too expensive or not practical. Lack of innovation is a weakness of the Kenyan flower industry.

Administrative tasks on the farms are mostly carried out by hand and on paper. With the increasing importance of information and move towards direct trade, farms will have to automate system administration.

Pest management practices and in particular an adequate application of chemicals in cultivation are other areas in which farms can further improve efficiency. We also found that registration of new chemical products, including bio-pesticides, is a problem.

## No 2. Sustainability

- \* Market requirements
- \* Compliance issues
- \* SME growers losing ground

Compliance to international standards regarding quality, workers' health, safety and rights, and environmental sustainability are a precondition for European market access, particularly in the direct channel supplying mass market retailers. Most Kenyan export growers are well aware of this and the majority of the growers are certified for one or more quality standards. Nevertheless, nation-wide compliance is an issue and negative publicity is regularly the result.

What's more, enforcement of government regulations like the environment-related NEMA licensing remains weak in Kenya. Compared to its Latin American competitors, it appears that Kenya is falling behind. In Kenya, this issue is currently being addressed by the ongoing project on the "National Mechanism for Industry-Wide Compliance".

## No 3. Supply chain improvement

- \* Cold chain management
- \* Transport and logistics
- \* Packaging
- \* Handler performance
- \* Information and communication

The strong growth in export volumes has put pressure on the supply chain, creating bottlenecks that hinder efficiency and further development. There are many opportunities for efficiency gains along the entire supply chain.

Kenyan growers sell more flowers directly to customers in countries like Russia, Japan and the US. With the strong and continued development of direct marketing lines, Nairobi has the opportunity to develop into an important trading centre.

Many supply chain inefficiencies are the result of a lack of communication and coordination between key actors in the supply chain. The industry has developed generally accepted 'workarounds' to bypass recognised problems.

Flying flowers to Europe is more costly than shipping them by sea. If successfully developed, sea transport can make Kenyan growers more competitive and can improve profitability. Sea transport trials have been carried out, but were not yet very encouraging.

## No 4. Sector promotion

- \* Country branding
- \* Export support
- \* Sector promotion

Kenyan growers increasingly face strong competition from other leading producer countries, like Colombia, Ethiopia and Ecuador, who are aggressively expanding their markets.

The importance of sector cooperation and organisation cannot be overstated. In all leading countries, private sector organisations are reasonably strong and active.

A real challenge and source of future success for Kenya lies in a co-ordinated approach to create national product recognition in foreign markets. What is needed is a more sustained joint approach to international promotion by sector associations KFC and FPEAK, with HCDA and EPC support. Actually,

to effectively promote the Kenyan flower brand, Kenya needs one face to the world (the Kenya Horticultural Council?).

#### No 5. Public sector coordination

- \* Inconsistent taxes and levies
- \* VAT refund issue
- \* Fiscal incentives supporting innovative entrepreneurship
- \* Bureaucracy
- \* Coordination among public organisations

The primary role of the government should be facilitative and indirect (laws and regulation for foreign investment, intellectual property rights, technology transfer, air cargo licensing, foreign exchange transaction, etc.). Still, these are critical to the success of the sector.

A specific issue in Kenya is the decentralised system of taxation that often results in double taxation and inconsistencies. The VAT rebate system is very inefficient and a burden to the industry.

The sector would benefit greatly from improved coordination among public institutions and between the public and private sector. A coordinated effort is needed to lift the Kenyan business enabling environment to more competitive levels. Public services should be more in line with the needs of the private sector.

Technology and innovation are ever more important playing cards in the international competitive game. The Dutch, Israelis and Colombians are pushing forward. Growers are backed by government incentives and well-developed agricultural research and development systems all striving to strengthen the knowledge and efficiency in the sector. It is important that the Kenyan government has a sound incentive regime in place rewarding good performance such as high productivity, sustainability and innovation.

#### **Way forward**

Kenya is in a good position to grow into its role as a leading global flower supplier... but market conditions are changing dramatically and the competition is moving fast.

A coordinated effort by both government and private entrepreneurs is necessary. Both sides will need to work passionately and determinedly together to strengthen Kenya's competitive advantages and to create an enabling environment in which export growers and industry service providers can thrive. With the strong and continued development of direct marketing lines, Nairobi has the opportunity to develop into an important trading centre.

A number of ongoing projects, all covering aspects of competitiveness, are currently formulating ideas and suggestions for improvements. This is the time for a leap forward. Kenya is invited to take up the challenge.

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## Introduction

### 1.1 Background

As the Kenyan flower industry continues to grow, it is cognisant of an increasingly sophisticated market, riddled with unprecedented challenges as posed by global climatic, economic and social dynamics. As such, growers have expressed a keen interest in accessing information on competitiveness, under prevailing and unfolding conditions, to be used as a planning tool for business strategies going forward.

With assistance from the Centre for the Development of Enterprises (CDE) and the World Bank Foundation, the Kenya Flower Council (KFC) developed a project to conduct a series of studies and activities to determine the global competitiveness of the Eastern African flower industry. Specifically the World Bank funded a series of regional video conference based seminars, through the Global Learning Development Network (GLDN), which were concluded between May and December 2011. The CDE component of the project delves deeper into implementing some of the interventions identified, mainly in training, pilot projects and studies on the impact of taxes & levies, soil borne diseases with a focus on agro-bacterium, climate change and the role of strategic environment assessment.

The CDE support provides technical assistance in research, design and management of projects aimed at implementing interventions identified in the through World Bank supported technical papers, as critical to improvement of productivity / competitiveness of the flower industry in the region. Some of these are expected to include pilot projects in policy development; on farm demonstrations & trials, training; awareness creation; formulation of projects aimed at improving efficiency and cleaner development mechanism (CDM) initiatives.

Besides the aforementioned World Bank series, a number of other recent and ongoing projects, commissioned by KFC and others, cover different aspects of competitiveness:

- ▶ *National Mechanism for Industry-Wide Compliance* - Kenya Flower Industry Capacity Building for Sustained Market Access, a project by the Dutch AgentschapNL (status: ongoing).
- ▶ The *Kenya Horticulture Competitiveness Project (KHCP)* by USAID (status: ongoing).
- ▶ *Kenyan-Dutch Horticultural Supply Chain Study* by the Dutch Ministry of EL&I (status: study finished, project ongoing).
- ▶ Development of a *National Floricultural Strategy* by the Ministry of Agriculture, which is planned to be finalised by the end of July 2013. The outcomes of the recent field research among Kenyan farmers have been kindly shared with the author of underlying report.

### About the Kenya Flower Industry Global Competitiveness Report

The underlying report is the result of a study that focused on complementary topics and on deepening issues. The study identifies measures to improve government-industry relations, support innovative entrepreneurship, and promotes exports to strengthen the competitiveness of Kenya's floricultural sector.

By reviewing other leading and upcoming producer countries, this study offers opportunities to learn from their experiences. Factors to gain a competitive edge are discussed by benchmarking their strengths and weaknesses against the Kenyan sector.

### 1.2 Objectives

The study provides credible information and recommendations for planning of industry interventions and support, both for Government and the larger enabling environment. The study reviews policy

interventions in leading and upcoming producer countries aiming to support the development of their export-oriented flower industry. By comparing the impact of their interventions with the Kenyan policy environment, a gap analysis is carried out to identify the main factors to gain a competitive edge.

Main research questions:

- What relevant interventions (including macro-economic policies) have been made in the past 10 years in leading and upcoming producer countries to stimulate the development of an export-oriented flower industry? What has been the impact of these interventions and what lessons can be learnt?
- How does the Kenyan policy environment compare to other leading producer countries?
- With due considerations to the outputs of studies on the impact of climate change, taxes & levies, soil borne diseases with a focus on agro-bacterium and the role of strategic environment in flower production, what opportunities are available to strengthen the competitive edge of the Kenyan flower industry?

### 1.3 Methodology

The study was conducted through a combination of desk research and interviews with growers and sector experts in Kenya, Europe and South America.

#### *Desk research*

Desk research formed the basis for obtaining insight into matters such as the ongoing discussion in literature about the different views on building a favourable business environment to promote an industry's competitiveness. Desk research was also used to gather information on policy interventions and the broader investment climate in the leading flower producing countries.

#### *Interviews*

Subsequently, interviews with growers, sector experts and officials in several countries were conducted (see list in Appendix 1). These interviews offered detailed insight into which factors in the business enabling environment have played an important role in the development of a competitive advantage in their flower industry.

During a fact-finding mission in Kenya, interviews were held, preliminary results were discussed and a gap analysis was carried out.

### 1.4 Guide for the reader

Readers not very familiar with the trends and developments in the floricultural sector are referred to the World Bank Technical Paper on The Global Competitiveness of The Kenyan Flower Industry (ProVerde 2011). The paper also provides insight into the main characteristics of the Kenyan flower industry and by extension the East African producers compared to other global producers.

- Chapter 2 establishes the theoretic basis of the study. It gives an overview of the main theories on the business enabling environment and identifies relevant factors for a competitive flower industry.
- In Chapter 3, the business enabling environment in the four leading competitors to the Kenyan flower industry is described, as well as relevant aspects in other flower exporting countries. We identify lessons to be learnt for the Kenyan flower industry.
- Chapter 4 reviews the Kenyan situation and developments. Which factors influence the competitive position of Kenyan flower farms?
- In Chapter 5, the gap analysis is conducted. Starting with the key market trends that drive the industry. We compare the situation in Kenya with the other leading flower producers and identify the main challenges for Kenya.
- The concluding chapter maps a way forward with recommendations for interventions.

## 2 Theory at a Glance

### 2.1 Two prevailing theoretical approaches

There is an extensive body of literature dealing with the building of competitive advantages of national industries. Some analysts and policymakers place their emphasis on de-bureaucratisation, whereas others focus on public sector support programmes and other kinds of public interventions. These two approaches are categorised and described by UNIDO (2008) as:

*The neoclassical approach: 'deregulation'*

The neoclassical approach assumes that most markets work reasonably well without government intervention if property rights and competition are guaranteed. It is stressed that many government interventions in fact hamper private sector development. Interventions are in most cases considered less efficient than market-based solutions. Measures to strengthen competitiveness therefore focus on deregulation and the good functioning of markets, with only a limited role for the public sector in a few areas where market failure is most obvious.

*The neo-structural approach: 'an active role'*

The neo-structural approach stresses the role of additional determinants, especially the ability to upgrade and build knowledge-based competitive advantages in the increasingly globalised and knowledge-intensive markets. The key difference lies in their assumption that market failure is pervasive and governments have a more active role to play in correcting such market failure.

Most literature shows that as industries become more developed, advanced factors increasingly determine competitive success - rather than basic factors like natural resources, location and pools of unskilled labour. The competitive advantages of national industries become more and more dependent on deliberate action ("man-made advantages"). An important aspect is the quality of the working relationship between government and the private sector.

As the process of building competitive advantages becomes more complex, more coordination and facilitation is required. While a part of this can be supplied by private service providers, the role of the public sector in this process necessarily also increases.

### 2.2 The enabling environment

The creation of an enabling environment for entrepreneurship is one of the most important roles of public policy intervention. A favourable or enabling environment is not by itself sufficient to ensure the success of a sector, but it is an often necessary condition.

To capture factors that are relevant for building a competitive business environment, analysts usually identify the narrow concept of the regulatory business environment and the broader concept of the investment climate. In some literature, the macro-economic environment is added as an extra layer:

- A. Macroeconomic environment
- B. Regulatory business environment
- C. Broader investment climate

The *macroeconomic environment* covers the conditions that exist in the economy as a whole, rather than in a particular sector. In general, the macro environment includes trends in gross domestic product (GDP), inflation, employment, spending, and monetary and fiscal policy.

The *regulatory business environment* covers regulations that immediately affect businesses through the costs of compliance. These are composed of direct costs, such as license fees, and indirect costs

resulting from (often unnecessary) transactions. The latter include transaction costs arising from the time that has to be spent in obtaining a licence as well as increasing costs stemming from inappropriate government regulations that make contract enforcement or the hiring and firing of workers unnecessarily complicated and costly. (UNIDO 2008)

The *broader investment climate* comprises all elements of the macroeconomic and regulatory business environment, but in addition it includes factors as the quality of infrastructure, health system, level of education, rule of law, political stability and security, financial markets, trade liberalisation and rules and standards as factors which constitute the "location-specific factors that shape the opportunities and incentives for firms to invest productively, create jobs, and expand". (World Bank 2004)

### 2.3 Factors for a competitive floricultural business environment

Zooming in on the specific case of the floricultural industry, we find that most literature tends to adhere to a combination of the two above-explained approaches, but almost always with a firm base on deregulation and a restrained role for the government.

In a recent World Bank Technical Paper (Jaeger 2010), it is argued that a commercial horticulture sector needs government policies that provide an environment in which the sector can thrive. It does not need direct intervention from the government in its activities; rather, the government should recognise the need for a vigorous private sector as the engine of commercial growth.

Notably, the same report identifies five areas in which government policy can provide a more active support to horticulture: infrastructure, investment, institutional, innovation and human capital.

From general literature (UNIDO 2008, GAIF 2008, UNCTAD 1996) and industry specific publications, we have drawn up a list of factors that are mostly mentioned as relevant for the competitiveness of a national floricultural industry. The elements in this list have subsequently been verified through a series of interviews with industry actors in the leading producing countries (see Chapters 3 and 4).

**Table 1 Factors for a competitive floricultural business environment**  
(in no particular order)

<b>Macroeconomic environment</b>	<ul style="list-style-type: none"> <li>• Gross domestic product (GDP)</li> <li>• Inflation</li> <li>• Employment</li> <li>• Spending</li> <li>• Monetary and fiscal policy</li> </ul>
<b>Regulatory business environment</b>	<ul style="list-style-type: none"> <li>• Starting, operating and closing a business</li> <li>• Property entitling</li> <li>• Credit and finance (financial markets)</li> <li>• Investor protection</li> <li>• Tax system</li> <li>• Trading across borders (trade regulations, customs)</li> <li>• Enforcing contracts</li> <li>• Labour regulations</li> </ul>
<b>Broader investment climate</b>	<ul style="list-style-type: none"> <li>• Security (rule of law, political stability)</li> <li>• Getting electricity</li> <li>• Infrastructure</li> <li>• Health system</li> <li>• Sector cooperation (clustering, inter-firm linkages)</li> <li>• Knowledge and technology (education, research, innovation)</li> <li>• Inputs</li> <li>• Services</li> </ul>

### 3 Review of the Business Enabling Environment in Leading Flower Producer Countries

In this section, we review the business environment in which flower export growers operate, with a particular focus on the leading global flower exporting countries, the Netherlands, Colombia, Kenya, Ecuador and Ethiopia. These countries are competing fiercely with each other on Kenya's main European markets.

This section intends to clarify those factors that, according to local growers, have made the strongest impact on their competitiveness. These factors, which are beyond the basic factors like location and natural resources, either form the basis for their success or limit their ability to compete.

As a starting point for comparing the competitiveness of the flower producing countries, World Bank/IFC's Doing Business Data were used ([www.doingbusiness.org](http://www.doingbusiness.org)).

- > Doing Business sheds light on how easy or difficult it is for a local entrepreneur to open and run a business when complying with relevant regulations. It measures and tracks changes in regulations affecting 10 areas in the life cycle of a business: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. Doing Business presents quantitative indicators that can be compared across 183 countries, over time. The indicators are used to analyse economic outcomes and identify what reforms have worked, where and why.

Interviews with local growers (and public and private sector representatives) were used to find those factors which, according to them, have had the most impact on their competitiveness.

In the end, the review offers viable lessons for the Kenyan industry and forms the bedrock for the Gap analysis.

#### 3.1 Colombia

The World Bank's Doing Business report for 2012 ranked Colombia at 42 out of 183 countries. In Colombia, much has changed in recent years. The country has been one of the top 10 reforming economies. This consistent pace of reform allowed Colombia to move up the ease of doing business ranking over time. Within Latin America, Colombia currently occupies the number 1 position for its ease of doing business.

- > Colombia has made it easier for firms to start and operate, strengthened property rights and improved bankruptcy procedures.
- > Another example: one-stop shops have been set up at the Chambers of Commerce, known as Centros de Atención Empresarial or CAEs.

**Table 2 Ease of Doing Business Rank of Colombia**  
(out of 183 economies)

Population: 46,300,196	<b>Doing Business Rank 2012</b>	<b>42</b>
GNI Per Capita: US\$ 5,510	Starting a Business	65
	Dealing with Construction Permits	29
	Getting Electricity	134
	Registering Property	51
	Getting Credit	67
	Protecting Investors	5
	Paying Taxes	95
	Trading Across Borders	87
	Enforcing Contracts	149
	Resolving Insolvency	12

Source: World Bank/IFC 'Doing Business 2012'

Colombians are entrepreneurial. The development of Colombia's cut flower industry over the last 4 decades is a telling example. From virtually non-existent, the sector has grown and flower exports now bring in around US\$ 1 billion per year. This makes Colombia the second largest exporter of fresh cut flowers in the world and the largest flower exporter to North America. Its model relies on efficient infrastructure and services, reliable and result-driven associations and effective export promotion.

The Colombian government has been quite actively supporting the development of the flower industry and helped to create a favourable environment for flower production and exports from as early as the 1960s. Government policy improved macroeconomic stability and encouraged non-traditional exports.

Currently, the Colombian government continues investing significantly in the floriculture sector. Recently, eight specific stimulus proposals have been introduced to strengthen the industry. The proposals encompass a variety of measures, ranging from the abolition of a 5% import tax on chemical compounds used in agriculture, to a 6 million dollar investment by the *Colombian Agricultural Research Corporation (Corpoica)* aimed at stimulating innovative research and development.

Subsidies and incentives most relevant for flower producers are:

*Phytosanitary Incentives (ICA)*

Through this program, the Ministry of Agriculture and Rural Development (MARD) aims to support proper phytosanitary handling and maintain employment in the flower sector. Producers receive a payment per hectare if they have proven to comply with the phytosanitary requirements of the Colombian Agricultural Institute (ICA).

*ICR - Rural Capitalisation Incentive (ICR)*

An economic benefit granted to a natural person or legal entity that makes investments directed towards modernisation, competitiveness and sustainability of agricultural production.

*Technical Assistance Incentive (IAT)*

Aid granted to trade organisations by the Ministry to finance 80% of the total expenditure on the delivery of technical assistance services to producers in the sector.

**Table 3 Highlights of interviews with Colombian companies***What factors strengthen (+) or weaken (-) your competitive position?*

<b>A. Macroeconomic environment</b>	<ul style="list-style-type: none"> <li>+ Employment: good availability of qualified labour for all activities at flower exporter, from growing to sales.</li> <li>- Monetary and fiscal policy: strong peso due to appreciation has made Colombia expensive.</li> </ul>
<b>B. Regulatory business environment</b>	<ul style="list-style-type: none"> <li>- Credit and finance: high interest rates; difficulties to secure loans as banks now consider the flower business more risky due to bad performance and defaulting of some flower companies.</li> <li>- Tax system: upcoming change in tax system with respect to social benefits/income tax; high taxes on imported inputs.</li> <li>+ Trade regulations &amp; customs: customs is a smooth and fast process (40 years of experience with flower exports); National Plant Protection Organisation facilitates issuing of phytosanitary certificates.</li> <li>- Trade regulations &amp; customs: export documentation a lot of paperwork.</li> <li>- Labour regulations: employees have legal benefits such as health insurance and a pension plan, which is costly for companies.</li> </ul>
<b>C. Broader investment climate</b>	<ul style="list-style-type: none"> <li>+ Security: stable political/economic environment; improved safety situation.</li> <li>+ Infrastructure: frequent flights; good airport facilities.</li> <li>- Infrastructure: expensive local transport; high insurance costs; no train network; long transport times.</li> <li>+ Knowledge and technology: quality labels such as Florverde have a strong presence; some companies are innovative.</li> <li>- Knowledge and technology: low availability of technology in the country and importing from abroad is expensive.</li> <li>+ Sector cooperation: has led to better reputation in international markets.</li> <li>- Sector cooperation: dominant position of big companies.</li> <li>- Inputs: tax on imported inputs; expensive land.</li> <li>+ Services: strong trade promotion organisation Proexport facilitates export activities, such as trade fair participation.</li> </ul>

Two factors were unanimously identified by the interviewed growers as strongly influencing their competitive position:

### **Employment, labour regulations and education**

First of all, Colombian growers seem quite content about the availability of qualified labour for all activities at flower exporter, from growing to sales. Employees of all levels have generally enjoyed adequate education. Labour, however, does not come cheap for Colombian growers.

- > One of the main costs for Colombian growers is labour, which has risen sharply in recent years.

### **Monetary and fiscal policy**

The second factor that was frequently mentioned pertained to the difficulties stemming from the persisting strength of the local currency, the peso. Farmers complain bitterly about the strong peso / weak dollar, high transport costs and high inflation.

- > An important cause for the high exchange rate is an increased flow of dollars coming into Colombia because of the improved safety and the discovery of oil and other resources, attracting foreign investors.
- > On the other hand, one of the growers mentioned that 3 years ago the government provided financial compensation (grants) to flower companies suffering from the peso devaluation.

### **Trading across borders**

According to growers, another important factor that has led to an improved competitive position is Colombia's regulations and trade agreements with respect to external trade. With 40 years of experience exporting flowers, custom procedures are regarded as smooth and fast. Colombia's trade agreements with North America and the EU are among the most favourable and match other leading flower producing countries. The development of the floricultural export sector has already been for a long time top of the agenda of the Colombian government.

- > The Colombian government prioritised trade agreements that would help ensure preferential access to the primary flower markets.
- > Since the early 1990s, flowers have been allowed to enter the USA under preferential import tariff rates as part of the Andean Trade Promotion Drug Eradication Act or *ATPDEA*, an incentive programme in the fight against drugs. Half February 2011, the ATPDEA was expired. As a result, US importers had to pay 3.2 to 7% tax on Colombian flowers. Recently, a new Free Trade Agreement (FTA) has been signed that extended the ATPDEA allowing Colombian flowers again to enter the US without import duty.
- > Formation of the trade promotion agency *Proexport*, which helped finance exporting companies and provided some investment around necessary infrastructure. It was also associated with trade and investment promotion. One grower gave the example of a recent trade mission to Japan, which was organised for him by Proexport. Proexport financed 50% of the costs.
- > Customs declarations are now submitted online. A new system to coordinate simultaneous inspections was implemented a few years ago.
- > Several growers mentioned that although legislation concerning environment (and phytosanitary) is strict, it is good that the government is vigilant.
- > Colombian grower: "export documentation still requires a lot of paperwork, but customs do not provide serious problems".
- > Most agricultural product import licenses are issued automatically and "free of charge" (by the Ministry of Commerce).

### **Security, rule of law**

In the past years, security conditions and the overall stability of the political and economic environment have improved strongly in the formerly violence-prone nation. Entrepreneurs regard this as an important factor when making investment decisions.

### **Credit and finance**

Obtaining credit has become a problem as banks nowadays consider the flower industry more risky due to increased number of bankruptcies.

- > Credit is mostly allocated by the private financial market. Loans of foreign origin or foreign financing of imports are permitted. Foreign investors have full access to local credit.
- > The government and the Central Bank are important sources of funding for the financial system. The Central Bank, provides the usual discount facilities to support system liquidity, but also manages several special government funds to promote lending into a number of sectors that have been determined to be important to national development or economically essential.
- > Exporters have access to credit offered by the Colombian Foreign Trade Bank (Bancoldex).
- > Colombia has reduced foreign exchange controls significantly in recent years. Nowadays, Colombia imposes no out of the ordinary foreign exchange controls on trade.

### **Tax system**

Growers were quite critical about an upcoming change in Colombia's tax system with respect social benefits/income tax and about the high taxes on import of input materials.



- > According to interviewed growers, companies currently pay 13.5% of payroll for social benefits. This will change as the government is planning to pay for social benefits. In turn, the government will charge an extra income tax of 8% instead. This change will improve the situation for companies with many employees. This should also be seen in the light of increasing salary costs. The increase was 5% last year, while inflation was around 3.5%.

On the other hand, several positive developments and incentives in the tax system can be identified:

- > Colombia has modernised its system to pay taxes and social security contributions. Now, businesses pay all social security contributions online using a single electronic form, instead of separate payments to health care providers, pension funds, professional risk insurers and other welfare entities. As of 2008, income and value added taxes can also be paid online.
- > Another government incentive is the creation of export tax credits, which was essentially a tax incentive to export.
- > The *Plan Vellejo* gave duty exemptions for raw material imports used for export production.
- > A plan was announced to abolish a 5% import tax on chemical compounds used in agriculture.

### Sector cooperation

According to interviewed growers, sector cooperation is an important factor in the success of the Colombian flower industry. Particularly, the role of *Asocolflores*, the Colombian Association of Flower Exporters, representing more than 75% of total Colombian flower exports, needs to be recognised.

- > Asocolflores encourages a strong sense of cohesion among flower producers and promotes country product recognition abroad. It assumes a national approach of coordination in response to the various obstacles and challenges associated with production and export.
- > Asocolflores has a range of social and environmental development initiatives. One such initiative is *Florverde*, which is essentially a code of conduct aimed at sustainable environmental and social responsibility in the floriculture industry. The Florverde programme is a strategic tool to promote sustainable floriculture with social responsibility at both the company level and industry-wide, comparable to the KFC-Gold and Silver standards. Florverde certification fully benchmarked with GLOBALGAP.
- > As one of the growers stated: "The international flower industry, and especially in Colombia, increasingly requires quality labels, such as Florverde. These labels have a strong presence in Colombia, which supports a proactive approach by companies to become more efficient and to treat the employees fairly."
- > Asocolflores also initiated *Proflora*, which is a leading biannual cut flower trade fair.

Nonetheless, growers indicated that the willingness among growers to cooperate seems to be under pressure, because of individual mentality and the dominant position of large companies.

### Knowledge and technology

Colombian growers are open to innovations and have developed for instance strong expertise in biological soil decontamination. Some companies have been growing successfully in the ground for years without any form of disinfection with chemicals or steam. Growers, however, also complain that availability of technology in the country is relatively limited and importing from abroad is expensive.

Asocolflores is involved in various R&D initiatives, ranging from joint projects in science and technology with the American Floral Endowment Fund and a number of US universities to *Ceniflores*, the Colombian Centre for Innovation in Floriculture.

- > Ceniflores was created to back research, promote technological development and contribute to improve the competitiveness of Colombian floriculture. The centre conducts research programs on technological conversion, soils and substrates, integrated crop protection and extension. The

particular interest of the centre is to focus on how to improve efficiency in production and post-harvest processes, by defining the bottlenecks and searching for solutions through the adoption or adaptation of existing technologies.

- > Ceniflores also coordinates the floriculture industry phytosanitary campaigns in conjunction with ICA, in order to reduce the presence of pests in flower exports. In addition, Ceniflores has also put together a training package on monitoring and control practices.
- > Ceniflores conducts research and projects with its own resources and co-financed by specialised agencies.
- > Recently, the Colombian Agricultural Research Corporation (Corpoica) announced a new plan to set up a US\$ 6 million investment fund aimed at stimulating innovative R&D.
- > In Colombia, USAID has played an important role in various aspects of the industry and has invested heavily in R&D, mostly in partnership with local associations and research institutions.


### Infrastructure

Colombia enjoys frequent flights to all major markets against reasonable costs. The airport has good handling facilities. A number of interviewed growers, however, were quite critical about the situation of local transport.

- > Local transport tends to be expensive, partly due to high insurance costs and the situation of the local roads. Transport times are sometimes long.
- > No train network.
- > Colombia has experience in sea transportation, amongst others thanks to the so-called Merlin project, which lasted three years and was initiated by Asocolflores.

## 3.2 Ecuador

In 2012, Ecuador was ranked 130<sup>th</sup> on the World Bank's Ease of Doing Business ranking, the lowest of the five leading flower producing countries, but recording an increase of 1 point compared to last year. Particular obstacles to running a business in Ecuador are starting a business, resolving insolvency, protecting investors and getting electricity. Trading across borders is also ranked relatively low at a 123<sup>rd</sup> position, mainly due to the time and costs to export and the paper work involved.

 <b>Table 4 Ease of Doing Business Rank of Ecuador</b> <i>(out of 183 economies)</i>		
Population: 13,774,909	<b>Doing Business Rank 2012</b>	<b>130</b>
GNI Per Capita: US\$ 4,510	Starting a Business	164
	Dealing with Construction Permits	91
	Getting Electricity	128
	Registering Property	75
	Getting Credit	78
	Protecting Investors	133
	Paying Taxes	88
	Trading Across Borders	123
	Enforcing Contracts	100
	Resolving Insolvency	139

*Source: World Bank/IFC 'Doing Business 2012'*

The government in Ecuador deploys several instruments to support entrepreneurship and productive investments such as support funds, specific incentives, and promotion of investment projects, however, none specifically target the flower industry.

Ecuadorian farmers are quite critical about the new left Correa government. Costs for producers have increased enormously over the past couple of years, particularly labour costs. Extra taxes were also introduced on the imports of raw materials and energy costs have increased.

In the past years, dozens of companies have gone bankrupt. Nevertheless, flower exports are still growing strongly. In 2011, Ecuador's flower exports reached US\$ 676 million, an increase of 11% compared to 2010.

**Table 5 Highlights of interviews with Ecuadorian companies**

*What factors strengthen (+) or weaken (-) your competitive position?*

<b>A. Macroeconomic environment</b>	<ul style="list-style-type: none"> <li>+ Monetary policy: dollar economy (US\$ is currency of Ecuador), which makes international transactions easier.</li> <li>- Monetary policy: Due to the strong dollar Ecuador has become expensive.</li> <li>+ Employment: good quality and availability of workers and technicians.</li> </ul>
<b>B. Regulatory business environment</b>	<ul style="list-style-type: none"> <li>+ Starting, operating and closing a business: no real obstacles to doing business by regulations.</li> <li>- Tax system: many taxes, such as corporate tax/income tax, taxes for having an establishment and taxes for salaries; estimated 30% of a company's income goes to taxes; mandatory environmental license (if no compliance than tax).</li> <li>- Trade regulations, customs: export procedures lots of paperwork; trade agreements problematic (Colombia has better agreements); export taxes.</li> <li>+ Trade regulations, customs: strict quality control for export (prevention).</li> <li>+ Labour regulations: workers supported by government; customers feels more confident working with Ecuadorian companies.</li> <li>- Labour regulations: increasing minimum wages; expensive social benefits; inflexible labour regulations; difficult and expensive to fire employees.</li> </ul>
<b>C. Broader investment climate</b>	<ul style="list-style-type: none"> <li>+ Security: political stability.</li> <li>- Security: weak institutions, no certainties (conditions can change).</li> <li>+ Infrastructure: good roads and connections to airport; electricity network.</li> <li>- Infrastructure: high airfreight costs to Europe/Russia; availability of airlines.</li> <li>+ Knowledge and technology: government invests in technology to increase productivity.</li> <li>- Sector cooperation: association Expoflores relatively weak.</li> <li>- Inputs: water supply problematic.</li> <li>- Services: no sector support from government.</li> </ul>

### Trading across borders

It was noticed that when asking about their competitive position, Ecuadorian growers often compared their situation to Colombia. They were almost unanimous about the negative impact of their situation regarding trade regulations and customs. Export procedures tend to require a lot of paperwork. Also, trade agreements seem to be an area in which Ecuador is facing uncertainty.

- > Ecuador enjoys Free Trade Zones with Andean neighbours and Chile offering, amongst others, tax reductions and imports of goods at zero percent VAT rate. However, these free trade arrangements are not very relevant to the flower industry.
- > Ecuador has several free trade arrangements, amongst others the ATPDEA with USA. There is, however, a political threat that agreements are not prolonged. An issue is the harbouring (political asylum) of Wikileaks founder Assange in the Ecuadorian embassy in London.
- > One of the growers described the export procedures he has to go through, which involves a lot of paperwork. First, a permit for export is required, then every month an export licence. The government, however, has been streamlining procedures (automatic and digitalised).

## Tax system

Another topic that was mentioned by several growers was the negative impact of the tax system on their competitive position. Growers face many different types of taxes, such as corporate taxes, income tax, taxes for having an establishment and taxes for salaries. A grower estimated that about 30% of his company's income goes to taxes. Under the new Correa government, extra taxes were introduced on imports of raw materials and a mandatory environmental license is required. According to the World Bank, the total tax rate as percentage of profit has been fairly stable over the past couple of years and stands at 35.3% in 2012.

- > There are a number of general tax reductions and exemptions, mainly targeting investments related to improving productivity and technology, stimulate cleaner production and salary increases and hiring new personnel:
  - Farms operating in a so-called disadvantaged geographic zone can receive a deduction of 100% of the cost of hiring new workers for five fiscal years.
  - There is a tax reduction system promoting 'innovation and exportation'. The reduction applies to reinvestment of profits in new equipment, assets, plant material, etc. All used for productive activity, research, technology or otherwise improves productivity, generates productive diversification or increased employment.
  - A tax incentive to share company ownership with employees.
  - A tax incentive to invest in more sustainable production (tax deduction related to depreciation and amortisation of machinery and equipment for cleaner production).
  - A range of incentives supporting companies with 1-9 employees and sales below US\$ 100 thousand.
- > Flower growers in Ecuador have to pay a minimum annual tax, whether they make profits or not.
- > Since 2 years, there is a mandatory environmental license. Companies need to do an assessment of their environmental impact and draw up an environmental protection plan, which is monitored by the government. If a company does not comply it is taxed.

## Employment, labour regulations, education

Growers in Ecuador are positive about the quality and availability of employees, both general workers as well as medium and higher-skilled workers. The new government has done much to improve the position of workers. The government increased social spending on social welfare and education. An increase in minimum wages, together with expensive social benefits, has made labour costs a hot topic among growers. Growers also complained about increasingly inflexible labour regulations. It has become more and more difficult and expensive to fire employees.

On the other hand, growers also emphasise the positive effect of the improved worker situation. As one of the growers stated: 'Happy workers are good for the company'. It was also mentioned a few times that customers in Europe and North America feel more confident working with Ecuadorian companies.

- > Wages have risen enormously in a short time. Five years ago, the minimum wage was US\$ 120 per month. This has increased to about US\$ 290 at the moment. Additionally, farmers are required to pay a 13th month, travel expenses for employees, social charges, holidays, and breakfast and lunch. All in all, labour costs have increased to about US\$ 400 per employee per month, accounting to about 40-50% of total production costs.

## Infrastructure

Ecuadorian government has made huge investments in infrastructure throughout the nation. Many roads have been improved in the past years. Interviewed growers consider roads and connections to

the airport generally good. However, the high airfreight costs to Europe and Russia and low availability of airlines makes infrastructure an important topic in Ecuador's competitive assessment.

- > A new airport near Quito is scheduled to open in 2013. The new airport, which lies 400 meter lower, will make required stopovers unnecessary. Fully loaded planes can fly directly to their final destination thanks to the longer runway and lower altitude of the airport. Increased competition between airports will also help to bring down air freight costs. The new airport is also closer to a number of farms.
- > In recent years, Ecuador has built experience in shipping flowers by sea, mainly hypericum, gypsophila and carnation. Expectations for roses are not high. Flowers take 21 to 27 days via Panama Canal to arrive in Europe.
- > With respect to airfreight costs, one of the growers mentioned that airfreight companies claim that they return to Ecuador with empty planes (unlike in Colombia where prices are lower).
- > Good energy network. Energy costs, however, have increased partly due to new taxes.

### **Monetary and fiscal policy**

The last factor that was recognised by more than one grower related to Ecuador's monetary policy. Deteriorating economic performance in 1997-98 culminated in a severe financial crisis in 1999. In 2000, the Ecuadorian government, in an attempt to restore stability to its shattered economy, officially abandoned the hyper-inflated Sucre and adopted the US dollar as the official currency of Ecuador.

The chief advantage to the introduction of the dollar is that inflation has been dramatically stabilised. This has, in turn, stabilised the overall economy, sustained the buying power of the Ecuadorian people, and allowed the country to experience significant economic growth.

Growers recognise the positive effect of the more stable economic situation and the fact that the dollarization has made international transactions easier. They, however, also complain about the rising costs due to the strong dollar.

### **Security and rule of law**

Growers complain that government institutions are generally weak. There are no certainties for the long term, because conditions can change. To Ecuadorian growers, the situation in Colombia seems more stable.

## **3.3 Ethiopia**

In 2012, Ethiopia was ranked 111<sup>th</sup> on the World Bank's Ease of Doing Business ranking, 7 places down from the preceding year. In the past couple of years, Ethiopia has made some big improvements in areas like dealing with construction permits and getting credit. Last year, however, a strong loss in competitiveness was recorded, the result of declines in almost all areas. In general, costs are increasing and reforms appear to be slower in Ethiopia. The only areas in which Ethiopia more or less held ground were protecting investors and trading across borders.

- > The Government of Ethiopia is engaged in a slow process of economic reform and liberalisation; however, the state remains heavily involved in most economic sectors. The government retains control over the utilities sector, as well as telecoms, and prohibits foreign ownership of banking, insurance, and financial services companies. Since its' inception in late 2010, the government is implementing the five-year Growth and Transformation Plan (GTP). Improving the quality of social services and infrastructure, ensuring macroeconomic stability, and enhancing productivity in agriculture and manufacturing are major objectives of the plan. (USCS 2012)



**Table 6 Ease of Doing Business Rank of Ethiopia**  
(out of 183 economies)

Population: 84,975,606	<b>Doing Business Rank 2012</b>	<b>111</b>
GNI Per Capita: US\$ 380	Starting a Business	99
	Dealing with Construction Permits	56
	Getting Electricity	93
	Registering Property	113
	Getting Credit	150
	Protecting Investors	122
	Paying Taxes	40
	Trading Across Borders	157
	Enforcing Contracts	57
	Resolving Insolvency	89

Source: World Bank/IFC 'Doing Business 2012'

The Ethiopian government has played a crucial role in the impressive growth of the local flower industry. Since about ten years ago, after initial successes of a few pioneering firms, the government has introduced various measures and a determined effort towards developing the flower industry. Nowadays, the floriculture has become one of the top priorities of the Ethiopian government.

**Table 7 Highlights of interviews with Ecuadorian companies**

*What factors strengthen (+) or weaken (-) your competitive position?*

<b>A. Macroeconomic environment</b>	+ Employment: cheap and relatively productive labour force.
<b>B. Regulatory business environment</b>	+ Starting, operating and closing a business: registration process has improved; support from horticulture agency in terms of information; government support for foreign investors. - Starting, operating and closing a business: bureaucracy. + Property entitling: easy access to land through land lease contracts from government at low costs; horticulture agency also facilitates. - Property entitling: difficulties in transferring title of land because of bureaucracy. + Tax system: tax holidays for 5 years; duty free import of input materials. + Trading across borders: good trade agreement between EU and Ethiopia. + Credit and finance: favourable loans from development bank (70% financing by development bank against low interest rate). - Credit and finance: bureaucracy.
<b>C. Broader investment climate</b>	- Infrastructure: airfreight dictated by government (Ethiopian Airlines); airfreight capacity sometimes limited; bad roads; electricity problems; difficulties with telephone connections. + Knowledge and technology: sector knowledge has improved a lot. + Inputs: tax free import of materials for the business. - Inputs: little local supply of high-tech materials, few input materials available; in need of shorter lines; high import duties on electrical products and repair materials for greenhouses. - Services: lack of trade promotion support.

Ethiopia's regulatory system is generally considered fair, though there are instances in which burdensome regulatory or licensing requirements make the business environment difficult. Administrative procedures and paperwork are usually complicated and time-consuming. Improvements have been made in recent years.

In 2002, the government established a Horticulture Development Team which was upgraded in 2008 to the *Ethiopian Horticulture Development Agency (EHDA)* with the aim of providing faster and more coherent services for horticulture exporters. The creation of such a semi-autonomous agency was to offer one-stop services for investors in order to avoid cumbersome transactions with several layers of bureaucracy.

### **Tax system**

Interviewed growers were unanimously positive about the tax system. Particularly, the fact that starting investors in the flower industry benefit from an income tax exemption of five years was mentioned by almost all growers. They enjoy duty free import of input materials.

### **Infrastructure**

On the other hand, growers collectively complain about infrastructure issues. Airfreight is dictated by the government (Ethiopian Airlines) and capacity is sometimes limited. Nevertheless, compared to a few years ago airfreight and handling services has seen some major developments in recent years. Other problems relate to the frequent electricity problems. The state-owned telecommunications company offers slow, expensive, and unreliable phone and Internet services.

- > One of the growers mentioned that flower farms are at the mercy of the national carrier, because effectively there is a monopoly: other airlines experience delays of handling at airport and other difficulties.
- > In a recent article in Capital, the Director General of the EHDA, stated that Ethiopia is planning to increase the number of cargo flights and destinations of its main horticultural products. He said that the arrangement will allow exporters to manage the costs of transportation with the government subsidising the cargo.
- > Logistics of input materials are often problematic. Sea freight from Europe should take around 45 days (22 days shipping), but actually takes up to 5 months, because of bureaucracy at customs/revenues. This makes it difficult to plan and the company might run out of the stocks.
- > Growers complain that Ethiopian airlines is not reliable, because flights are often over- or under booked, which causes delays. Several growers indicated that the government frustrates other airlines' operations by asking high landing fees and providing inconvenient time slots.
- > Intermittent power outages were particularly a problem during peak periods in 2010, but such critical shortages seem to have been resolved in 2011. Despite new hydropower dams, electricity demand still outpaces supply.

### **Property entitling**

Access to land through land lease contracts from government at low costs have been one of the attractive factors in the development of the Ethiopian flower industry. This helped to reduce the financial burden for investors and has made entry easier.

- > In the past years, the government made land available for flower farms.
- > There is no right of private land ownership. All land is owned by the state and can be leased for up to 99 years (average 25-30 years).
- > There are some complaints among growers about the difficulties they encounter in transferring title of land because of bureaucracy.

### **Credit and finance**

The prohibition on foreign financial services institutions from operating in Ethiopia and the undeveloped regulatory environment have resulted in a limited and weak financial sector. Ethiopia's banking sector is not fully liberalised and interest rates are not always determined by the market forces since Government controls the lending policies of the Central Bank. This makes local borrowing difficult for new investors.

However, the Ethiopian flower industry has benefitted over the last 8 years from Government-funded incentives offering new export projects 70% loans with a 12% interest rate. Investors could borrow up to 70:30 debt-equity ratio with no collateral requirement and against low interest rates. This has encouraged a surge of foreign direct investments, mainly for the establishment of rose farms. Interviewed growers stressed the importance of the attractive credit facilities for their companies. (USCS 2012, USAID 2012, ProVerde 2011)

- > Foreign exchange availability continues to challenge businesses in Ethiopia, despite some improvement since the biggest problems in 2008.
- > Ethiopia has been battling high inflation in recent years. Year-on-year inflation peaked at 64% in July 2008.

### Inputs

Growers are heavily dependent on imported inputs, including fertilisers, irrigation equipment, and construction material for greenhouses. There are little local supplies of high-tech materials, only few input materials are available. They indicated difficulties obtaining these inputs. Importing materials is burdensome and in need of shorter lines. There are high import duties on electrical products and repair materials for greenhouses. On the positive side, import of materials for business is exempted from duties.

### Sector cooperation

The *Ethiopian Horticulture Producer Exporters Association (EHPEA)* has been a major force behind the growth of the industry. Its main goal is to promote and safeguard the sustainable and competitive position of the Ethiopian flower industry. Several interviewees considered that EHPEA has played an important part in the success of the industry. On top of its successful lobbying, the association provides important services like the organisation of a biannual trade exhibition. EHPEA also took the lead in establishing a Code of Practices for the flower industry.

### Knowledge and technology

Technological progress in the Ethiopian flower industry is largely driven by foreign investors. Agricultural research intensity in general (total spending as a percent of agricultural output) in Ethiopia is one of the lowest in the world (GDS 2011). Funding remains highly dependent on donor loans and grants. Within the context of weak research intensity in the overall agriculture sector, the R&D specific to the flower industry sector is also weak.

- > Growers indicated that the quality of human resources have improved a lot, Ethiopians have gained knowledge and experience to produce/export according to European standards, there are less expatriates required, which means lower salary costs.

### Employment, labour regulations

Ethiopian wages are low, considerably lower than in Kenya. Nevertheless, none of the interviewed growers mentioned this during the interviews.


- > Approximately 85% of Ethiopia's 86.8 million people work in subsistence agriculture in 2011. Labour remains readily available and inexpensive in Ethiopia. Skilled manpower, however, is scarce.

## 3.4 Netherlands

Structural and regulatory reforms have long been an integral part of a major reorientation of Dutch economic policy. Product market competition is strengthened through programs aimed at stimulating market forces, liberalisation, deregulation, and legislative quality combined with a tightening of competition policy. As a result, the Netherlands is ranked 31<sup>st</sup> on the World Bank's Doing Business Ranking of 2012, highest of all the leading flower producing countries reviewed.



As an open economy, the Netherlands scores particularly high on 'trading across borders'. Notably low ranks are related with the protection of investors and dealing with construction permits.

 <b>Table 8 Ease of Doing Business Rank of the Netherlands</b> <i>(out of 183 economies)</i>		
Population: 16,622,560	<b>Doing Business Rank 2012</b>	<b>31</b>
GNI Per Capita: US\$ 49,720	Starting a Business	79
	Dealing with Construction Permits	99
	Getting Electricity	67
	Registering Property	48
	Getting Credit	48
	Protecting Investors	111
	Paying Taxes	43
	Trading Across Borders	13
	Enforcing Contracts	28
	Resolving Insolvency	7

Source: World Bank/IFC 'Doing Business 2012'

The Dutch floriculture industry is widely known as leading in the world. Nevertheless, Dutch flower production is struggling. Costs for labour, energy, land and greenhouse construction are high, government regulation is relatively strong, and the impact of the economic crisis is also felt in the Netherlands. Notwithstanding the decline in production area, the strong Netherlands' position in the global cut flower trade remains.

For the Netherlands, as a member of the European Union, EU policies on agriculture and rural development are leading at national level. As from the 1960s, the *EU Common Agriculture Policy (CAP)* has been applied in order to facilitate a viable agricultural sector. The impact of the CAP on the Dutch flower industry, however, seems limited. Agricultural production subsidies and mechanisms for guaranteed prices have never applied specifically to the floricultural sector. Actually, increasingly strict rural and environmental policies have become CAP elements that do influence floriculture, in particular in areas like energy use in greenhouses and pesticide use.

The main policy instruments that are currently used by the Dutch government are:

- Subsidies (innovation investments; demonstration projects).
- Tax reduction on sustainable investments.
- Rules/directives, for example EU's CO<sup>2</sup> cap-and-trade system.
- Guarantees, for example for geothermal projects (risk reduction).
- Support for research and extension.

### Tax system

The Dutch tax system is fairly general, while other countries may have more specific agricultural facilities or other favourable facilities. However, a broad range of investment incentives exists: free depreciation of environmental investments, accelerated depreciation for starting entrepreneurs, an investment allowance, the energy-saving investment allowance and the environmental investment allowance. The Netherlands offers a broad range of additional tax credits.

- > In the Netherlands, investment incentives, the agricultural arrangement (support to knowledge system) and the rules for loss transfer are particularly beneficial and place it in the category of countries with the most supportive tax system in the EU:
  - The rules for loss transfer are quite generous in the Netherlands.
  - As in most EU countries, more than one depreciation method is allowed.

### Labour regulations

The high labour costs and complex labour laws are a constant concern for growers, but also a driving force for innovation and pursuing efficiency improvements.

- > Relatively high labour costs and labour market imperfections, e.g. complex labour laws resulting in restrictive hiring and firing practices for employers.
- > The minimum wage starting January 1, 2012 for employees older than 23 years is approximately € 1,446 a month. The minimum wage for younger employees is lower.
- > The majority of the Dutch workforce is well-educated and multilingual.

### Credit and finance

The financial markets are fully developed and operate at market rates, facilitating the free flow of financial resources. Since the financial crisis, however, it has become more difficult for companies to obtain loans.

- > Most projects are financed by public and private sector lenders at commercial rates. The Netherlands has access to EU funded programs, which provide a wide range of support in the form of grants, loans and co financing for training, feasibility studies, infrastructure projects in the environmental, transportation, energy and other key sectors.

### Knowledge and technology

Two years ago, the Dutch government set a general policy aiming to promote a sustainable, viable, innovative and internationally competitive agribusiness. The new industrial policy is very specific about leaving room for entrepreneurs to do their business and to grow.

- > Of all innovations in the protected cultivation 80% originate in the Netherlands.
- > Research & development in the Dutch floriculture sector comprises public and private sector organisations.
- > Plant breeding and seed companies in the Netherlands spend on average 15% of their turnover on R&D activities.
- > Dutch horticulture is concentrated in five clusters, called *Greenports*, where businesses and research institutes work closely together on production, R&D, logistics, infrastructure, and exports.

The previous government has chosen nine so-called '*Top sectors*' to focus on for further strengthening. Each top sector formed a 'top team' with representatives of companies, scientists and government. The top team advises the Minister on the ambitions and priorities of the sector. 'Horticulture and Source Materials' is selected as one of nine top sectors of the Dutch economy.

- > The horticulture top team has articulated has seven key elements: 1) doubling the growth in added value, 2) being a world leader in international enterprise, 3) being an international hub for knowledge exchange, research and education, 4) sustainability, 5) optimisation of space and infrastructure for the entire chain, 6) a strong image and an internationally leading brand, and 7) a decisive and responsible sector organisation.

The Dutch *agricultural knowledge system* has always received considerable government support. From the beginning, the system consisted of a close interaction between the agricultural education system, research and extension system. The exchange of information and transfer of knowledge, based on a strong infrastructure for scientific research and education, has led to a tremendous improvement of the Dutch knowledge basis and to a corresponding high level of innovation. In this so-called 'Golden Triangle' (Research-Extension-Education), the Ministry of Agriculture was responsible for the entire agricultural education system in the Netherlands. Gradually, the system has developed towards a stronger interaction between the companies and the research organisations. Nowadays, the

knowledge system is in the middle of a transition towards new concepts of co-innovation, in which industries and research centres operate together in new and more open forms of collaboration.

Examples of Dutch innovation initiatives:

- > An example of the golden triangle in action is *Green Farming*, a program that aims to connect horticultural networks in the Netherlands, Kenya and Ethiopia by setting up joint activities, projects or co-operations in research, development and production. The Green Farming consortium consists of about 25 companies in horticulture technology and Wageningen University and Research Centre. The Dutch government supports the programme in close cooperation with the Dutch Embassies in Nairobi and Addis Ababa. For example, a demonstration project on water management for the Kenyan horticultural sector was set up.
- > An example of a subsidy with considerable impact on the floricultural sector is *Private Sector Investment programme (PSI)*. The PSI programme is a subsidy programme of the Dutch Ministry of Foreign Affairs / Development Cooperation that supports innovative investment projects in emerging markets. A PSI project is an investment project, implemented by a Dutch (or foreign) company together with a local company, in one of the eligible developing countries. If this investment meets the criteria, it can be eligible for a grant by PSI. This grant consists of a financial contribution to the investment costs. Under certain conditions, up to 50 percent of the investment will be compensated. PSI is available to Kenya, Ethiopia, Tanzania and Uganda.
- > In autumn 2012, *Greenport Aalsmeer* started. The aim of this innovation programme is to support innovation processes of growers, traders and suppliers of horticultural crops, so that innovations come about faster and result in more profitable businesses. The programme is made possible by grants from the province of Noord-Holland and Europe (ERDF). The programme runs until 2015 and has a budget of € 2.5 million. Educational institutions (WUR and Inholland) are also involved in the program.

### 3.5 Other countries

Besides the four leading flower producing countries described in the previous sections, the World Bank's view on a number of other more or less relevant countries are illustrated in Table 9. Important differences can be noted.

- > Israel obviously stands out, particularly because of its protection of investors and ease of obtaining credit.
- > Together with India, the African countries Tanzania and Uganda score particularly poor.
- > Remarkably, all countries score relatively high (better than their total ranking) on getting credit.

**Table 9 How other producer countries rank on ease of doing business**

	Africa		Middle-East		Asia	
	Tanzania	Uganda	Egypt	Israel	India	China
<b>Ease of Doing Business Rank</b>	<b>127</b>	<b>123</b>	<b>110</b>	<b>34</b>	<b>132</b>	<b>91</b>
Starting a Business	123	143	21	43	166	151
Dealing with Construction Permits	176	109	154	137	181	179
Getting Electricity	78	129	101	93	98	115
Registering Property	158	127	93	147	97	40
Getting Credit	98	48	78	8	40	67
Protecting Investors	97	133	79	5	46	97
Paying Taxes	129	93	145	59	147	122
Trading Across Borders	92	158	64	10	109	60
Enforcing Contracts	36	116	147	94	182	16
Resolving Insolvency	122	63	137	45	128	75

Source: World Bank/IFC 'Doing Business 2012'

## Tanzania

- In the past, the government assisted the industry with temporary tax exemptions and the provision of cheap land. Government support ceased for a while which hampered further development of the sector. Nowadays, the government is again promoting horticulture with funding and land.
- Tanzania remains an attractive country for growers (of flowers and cuttings) thanks to its political stability, good water, climate and relatively low production costs.
- Improving air and road networks are focal points of TAHA, the Tanzanian Horticultural Association.
- The Horticultural Development Council of Tanzania is also concerned with "horticultural business".
- Airfreight capacity is sometimes problematic.
- Tanzania offers a competitive package of fiscal incentives in comparison with other African countries, aiming at providing an attractive fiscal regime for foreign trade:
  - Zero-rated duty on capital goods, all farm inputs including fertiliser, pesticides and herbicides.
  - Reduced import tariff on project capital items to 0% for investors (Tanzania Investment Centre).
  - Favourable investment allowances and deductions on agricultural machinery and implements.
  - Deferment of VAT payment on project capital goods
  - Imports duty drawback on raw materials for inputs for exports.
  - Zero-rated VAT on agricultural exports and for domestically produced agricultural inputs.
  - Indefinite carry-over of business losses against future profit for income tax.
  - Reasonable corporate and withholding tax rates on dividends.
- Dealing with construction permits and registering property remains cumbersome.

## Uganda

- Roses are still the leading export product, but production of cuttings has become increasingly important over the years, not in area, but in terms of employment and export value.
- Rose growers are facing difficulties. The market for small-budded varieties (sweethearts), which are traditionally grown in Uganda, is under pressure.
- Critical constraints to the competitiveness of Ugandan horticulture are, amongst others, inadequate infrastructure, limited airfreight and facilities, and frequent power shortages.
- Access to credit is problematic (limited and at high cost).
- Phytosanitary and other trade-related standards and institutions need improved capacity.
- There are attractive tax incentives, such as a 0% import duty on importation of a complete greenhouse unit and VAT is deferrable. There is also a 10 year tax holiday for flower exporters (incentive awaits approval of relevant regulations). Then again, entrepreneurs also face multiple taxes and charges with similar effects.

## Egypt

- The floriculture industry in Egypt is modest, but has potential. The majority of the growers produce for the local market, which is large in Egypt. Another part goes to the Middle East region. Only a small portion goes to Europe.
- Advantages of Egypt are cheap labour and electricity. Water available is not a problem for most farmers.
- Climatic conditions are similar to Israel. Egypt will not directly compete with Kenya and Ethiopia as the climate is not suitable for growing Kenyan varieties. Egypt should, however, be able to compete with countries like Israel and Turkey.

## Israel

- The area cultivated with flowers has been shrinking considerably and continuously during the past ten years. Growers face strong competition from particularly African countries.
- Production costs are high because labour, land and water are scarce.
- The shekel-euro exchange rate between was not always favourable to exporting flowers to Europe.
- With respect to getting credit and the protection of investors, Israel is among ten most favourable countries in the world.

- Over the past years, there has been a strong trend towards Israelis adapting their product range. The new focus, however, has not prevented Israeli floriculture from falling back.

### India

- India is fast becoming a strong centre of floriculture production.
- Production is principally supplying the growing local market.
- Floriculture is at present a priority sector in India. National policies, budgetary allocation, diversification of horticultural products, liberalised imports are clearly an indication that the country is committed to development in the field of horticulture including floriculture.
- Bureaucracy related with starting a business and dealing with construction permits, as well as problems in enforcing contracts remain a problem for Indian entrepreneurs.

### China

- The flower industry has the government's support. Large investments are directed at the industry.
- Floriculture education and research stand at a low level. Farm management skills are limited.
- Available land is cheap, but labour costs are gradually increasing.
- China has the largest potential market in the world and flower consumption is expected to increase as the economy grows.
- China, however, is not expected to become a direct competitor for Africa on the European market in the coming years. Exports remain limited and mainly target Asian countries.

## 3.6 Lessons to be learnt

We have seen that a number of factors have a strong impact on the competitiveness of flower producers in the leading flower exporting countries. A distinction can be made between internal and external factors, which can or cannot be controlled by individual companies, organisations or governments. In the past couple of years, external factors like climate, currency exchange rates and oil price fluctuations have had a major impact on the competitiveness of flower exporting countries.

Internal factors are determined in the first place by the entrepreneurs themselves, but also governments and sector organisations play an important role. Other relevant actors are research and training institutes, credit and financial institutions, quality and regulatory agencies, and trade and investment promotion agencies.

In the current highly competitive flower industry, which is characterised by increasing internationalisation and highly dynamic market conditions, the existence of an enabling business environment is an absolute precondition for a successful industry. So is a stable political and economic environment.

Experiences from around the world show that growers that have to pay more than their competitors for energy, telecommunications, customs services, transport and logistics, finance, specialised skills and business services, and overall security find it hard to compete in overseas markets.

Important lessons with respect to floricultural competitiveness include:

#### *A sound regulatory environment*

- Growers worldwide consider compliance with local laws and regulations important and positive. Examples are the stringent phytosanitary regulations in Colombia and the increasing labour and environmental regulations in Ecuador. In both examples, growers at first complain about the costs associated with these regulations, but almost unanimously they conclude that sector-wide compliance has had a positive impact on reassuring customers with respect to concerns about social and environmental issues.

- We have seen that several countries have put considerable efforts in reducing paperwork and bureaucratic overhead. Not only the environment for trade has been streamlined (by increasing the efficiency of customs), but also the tax system has become less complex.

#### *Critical role of knowledge and innovation*

- Labour and other production costs are rising in all leading producer countries (often more than in Kenya). Growers look for ways to increase productivity and introduce mechanisation.
- Latin American and African growers encounter difficulties in finding and applying relevant technology. High-tech solutions from the Netherlands and Israel are readily available, but appropriate medium-technology that corresponds to the local situation is what they need.
- Innovation can be encouraged in a number of ways, for instance through grant schemes, tax relief on research and development spending, specific technical assistance, or government support to an active floricultural research programme.
- The number of specific R&D activities by foreign institutions and companies for the Kenyan floriculture sub-sector is limited. Flower breeders have dedicated breeding programmes for the Kenyan floriculture sector. The Dutch Wageningen University has been involved in various adaptive research and capacity building programmes financed by the Dutch Government. These examples are however exceptions.

#### *National coordination and cooperation*

- Competition from other supplying countries in Kenya's main markets is increasing. Colombian and Ecuadorian private sector bodies and export promotion organisations are more actively promoting their national brand than African countries.
- In some countries, governments play an important role in coordinating efforts among different actors. Sometimes a sector association fulfils this role. Experience from Ethiopia illustrates the potential impact of government support on the development of a young industry. Also the Colombian and Dutch governments still play a major role in facilitating advances in the sector.
- The Colombian story illustrates that, while the idea or vision is important, the real challenge and source of future success lies in a coordinated approach. Government support and policies helped to create adequate conditions for investment and production growth, not to mention initiatives geared towards export promotion and facilitation. The role of Asocolflores in promotion cannot be overstated, which creates national product recognition in foreign markets.

#### *Infrastructure and logistics*


- Other leading flower exporting countries have recognised the importance of a competitive logistics infrastructure as a critical ingredient to the success of their flower industry. Nevertheless, in countries like Ecuador and Ethiopia, growers complain about sub-optimal conditions in airfreight logistics. Either reliability of air connections, availability of cargo space or the mere airfreight rates are a problem.
- The quality of local transportation and infrastructure including telecommunication in general has much improved in countries like Colombia and Ecuador, and even Ethiopia.

## 4 Review of the Kenyan Business Enabling Environment

### 4.1 How Kenya compares to other countries

From a global comparative perspective, Kenya ranks 109 out of 183 economies on the World Bank/IFC 'Doing Business 2012' list. Kenya scores well on dealing with construction permits (rank 37) and getting credit (rank 8). The country's business climate is particularly underperforming in taxes (rank 166), but also starting up business (rank 132), registration of property (rank 133), trading across borders (rank 141) and enforcing contracts (rank 127).

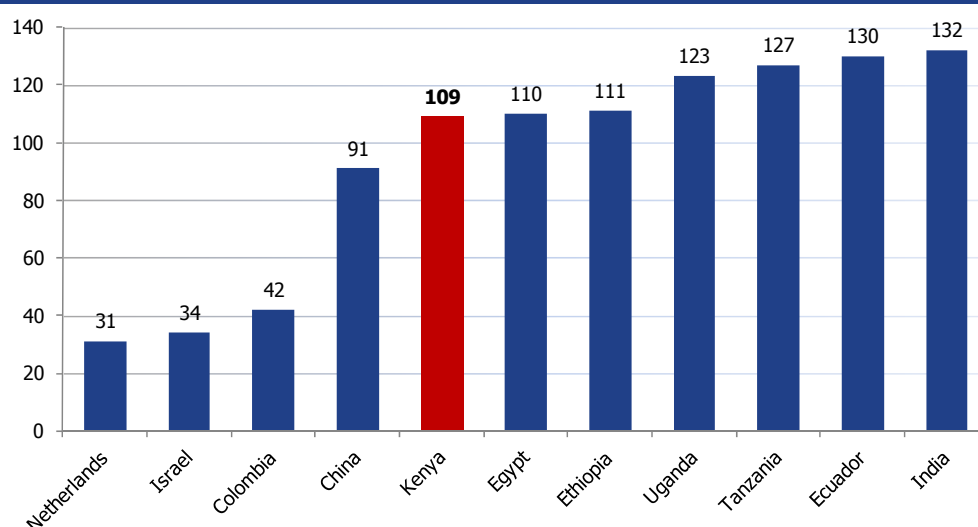
Since 2006, Kenya has improved a bit on some indicators. Most notably the time to start a business was reduced. Other improvements were made in getting credit and trading across borders. Other areas saw fewer or no improvements. The data indicate that Kenya is reforming, just not at the same pace as some of its regional and global competitors.

 <b>Table 10 Ease of Doing Business Rank of Kenya</b> (out of 183 economies)		2012	2011	change
Population: 40,862,900				
GNI Per Capita: US\$ 780				
<b>Doing Business Rank</b>	<b>109</b>	<b>106</b>	<b>-3</b>	
Starting a Business	132	128	-4	
Dealing with Construction Permits	37	38	+1	
Getting Electricity	115	111	-4	
Registering Property	133	133		
Getting Credit	8	8		
Protecting Investors	97	93	-4	
Paying Taxes	166	163	-3	
Trading Across Borders	141	141		
Enforcing Contracts	127	126	-1	
Resolving Insolvency	92	90	-2	

Source: World Bank/IFC 'Doing Business 2012'

In Africa, Kenya is ahead of Egypt, Ethiopia, Uganda and Tanzania, but behind Rwanda and South Africa. Except for Ecuador, most other leading flower producing countries rank higher than Kenya.

**Figure 1 How Kenya compares to other producer countries**



Source: World Bank/IFC 'Doing Business 2012'

The table below offers insight into the individual competitive factors. Kenya's weak position in terms of 'Paying Taxes' stands out, the lowest of all flower producing countries. On the other side, the high position in 'Getting Credit' is also worth noticing.

The Kenyan government seems keen on undertaking comprehensive structural reforms aimed at improving the investment climate. However, creating the right environment for a country to grow is not an easy task, especially in today's integrated global economy. Many external factors are beyond government control. But there are areas within the sphere of government jurisdiction that can make a country's economy more resilient. Business regulation reforms help create an investment climate conducive to starting and running a business, where complying with regulations brings more benefits than costs. (WB/IFC 2012a)

**Table 11 How Kenya and comparator producers countries rank on the ease of doing business**

	Netherlands	Israel	Colombia	China	Kenya	Egypt	Ethiopia	Uganda	Tanzania	Ecuador	India
<b>Overall Rank</b>	<b>31</b>	<b>34</b>	<b>42</b>	<b>91</b>	<b>109</b>	<b>110</b>	<b>111</b>	<b>123</b>	<b>127</b>	<b>130</b>	<b>132</b>
Starting a Business	79	43	65	151	<b>132</b>	21	99	143	123	164	166
Construction Permits	99	137	29	179	<b>37</b>	154	56	109	176	91	181
Getting Electricity	67	93	134	115	<b>115</b>	101	93	129	78	128	98
Registering Property	48	147	51	40	<b>133</b>	93	113	127	158	75	97
Getting Credit	48	8	67	67	<b>8</b>	78	150	48	98	78	40
Protecting Investors	111	5	5	97	<b>97</b>	79	122	133	97	133	46
Paying Taxes	43	59	95	122	<b>166</b>	145	40	93	129	88	147
Trading Across Borders	13	10	87	60	<b>141</b>	64	157	158	92	123	109
Enforcing Contracts	28	94	149	16	<b>127</b>	147	57	116	36	100	182
Resolving Insolvency	7	45	12	75	<b>92</b>	137	89	63	122	139	128

Source: World Bank/IFC 'Doing Business 2012'

## 4.2 Macroeconomic and regulatory business environment

Despite several domestic and external shocks (post-election violence, global financial crisis) the Kenyan economy has shown resilience. According to the Economic Review 2012, published by the Kenya National Bureau of Statistics, the Kenya economy grew by 4.4% in 2011, compared to a growth of 5.8% in 2010. Annual inflation increased to 14.0 per cent in 2011 from 4.1 per cent in 2010. Kenya, however, continues to face challenges associated with corruption, unemployment, tribal tensions, land titles, insecurity, and poverty.

The flower industry has been active in Kenya since the 1980's. In the 1990's, it developed into a major international player. This success can be attributed for a large part to the strong involvement of the private sector in a relatively stable and open economic environment.

The Kenyan flower industry has grown tremendously since the turn of the century. In 2000, production area was an estimated 750 to 1,000 hectares with about 38 thousand tonnes of flowers being exported. In 2004, the sector had already grown to 2,000 hectares. Today, there are about 3,400 hectares of flowers (greenhouse and outdoors). The cut flower industry is one of the top foreign exchange earners for the country.



## General policy and regulatory environment

The floricultural sector has been the focus of most government policies, including the Economic Recovery Strategy (ERS), the Strategy for Revitalisation of Agriculture (SRA) and Kenya Vision 2030, the first Medium-Term Plan (2008-2012) and the Agricultural Sector Development Strategy (ASDS).

With respect to the flower industry, the *Ministry of Agriculture* is the leading government body, providing overall policy, regulation and operational direction. Other ministries whose mandates directly impact the industry include Water and Irrigation, Health, Environment and Natural Resources, Local Government, Cooperatives development and Marketing, Trade and Regional Development Authorities.

- > The legal and regulatory framework that governs the flower industry consists of acts of parliament and subsidiary legislations. For example, KEPHIS and HCDA are regulatory institutions established through subsidiary legislation.

### *National Horticultural Policy*

In June 2011, the Kenyan government made public its final draft of the National Horticultural Policy, which has recently been approved by the parliament. The new policy shows continued government support to the horticulture (and more specifically floriculture) sector. It offers policy interventions for production, support services (financing the industry, research and extension), marketing (local, regional and export markets), infrastructure as well as regulatory and institutional arrangements.

- > The broad objective of government intervention is to accelerate and sustain growth and development of the horticultural industry in order to enhance its contribution towards food security, poverty reduction, employment and wealth creation. More specifically, policy objectives for the realisation of the broader objective are to:
  - i) Facilitate increased production of high-quality horticultural produce.
  - ii) Enhance provision of the sub-sector's support services.
  - iii) Promote value addition and increase domestic and external trade.
  - iv) Establish and develop infrastructure to support the horticulture industry.
  - v) Establish and strengthen institutional, legal and regulatory framework in the industry.
  - vi) Promote mechanisms for environmental sustainability and other cross-cutting issues.

### *National Floricultural Strategy (in preparation)*

The National Horticultural Policy gives broad guidelines. Recently, the Ministry's sub-unit vegetables and flower has embarked on deepening and refining these guidelines into developing strategies for the floricultural sector. The National Floricultural Strategy is envisaged to be a tool for the floricultural sector, to mobilise resources and owned by the stakeholders.

- > This new National Floricultural Strategy is planned to be finalised by the end of July 2013 in the following phases: desk research; field research; drafting of strategy; stakeholder validation; and launch. The field research has just been finalised.

### *Horticultural Crops Development Authority (HCDA)*

HCDA has the mandate to facilitate the development, promotion, facilitation and regulation of the horticultural industry in Kenya. However, over the years, changing government policy and international market requirements have necessitated a re-orientation in the regulation of the industry. Currently, HCDA focuses on its regulatory duties. The organisation has prioritised its horticultural information services, and is the main provider of horticulture production and trade data.

- > Marketing efforts are focused on identified priority locations like Russia, Germany (trade fair participations).

### *National Environmental Management Authority (NEMA)*

NEMA is the principal government instrument in the implementation of environment-related policies.

- > Since 2003, all newly established companies have to complete an Environmental Impact Assessment & Audit (EIA). The assessment is carried out by an external expert who reports to NEMA. The fee to be paid consists of 0.05% of the project costs, plus the costs of the expert.
- > All existing companies have to carry out a yearly Environmental Analysis (EA), resulting in an annual report (by external expert). Costs of the external expert are to be paid by the company.
- > The assessments give an indication if a company complies with important relevant regulations like the waste management regulation and the water quality management regulation.
- > KFC Silver/Gold and Kenya-GAP standards require a NEMA license.
- > Most companies established after 2003 comply with NEMA regulations (EIA). Many other companies do not. Particularly, smaller farms and those in more remote regions where NEMA compliance is not yet that strongly enforced.
- > Direct costs (license fee, hiring experts) and administrative burden related to the assessments are a burden for many growers. They, however, mostly complain about the costs related to required improvements, particularly expensive onsite water treatment plants. NEMA recognises this problem and in many cases a "negotiated compliance" is settled.
- > The NEMA system is very similar to the mandatory environmental licensing system set up by the Ecuadorian government. In Ecuador, if a company does not comply, it is taxed.

### **Employment, labour regulations**

Kenya is not a low cost economy anymore. The costs of skilled, educated labour have gone up and are high by developing world standards. Growers estimate that wages have increased about 10% per year over the past four years.

- > The daily rates for unskilled labour have tripled over the last 10 years in Kenya from an average \$1.2 per day in 2001 to more than \$3 per day in 2011 (USAID 2012).
- > A very large portion of the young population is relatively unskilled. Skilled, educated labour is, however, relatively abundant in comparison with neighbouring countries.

Kenya's labour laws provide many safeguards and benefits for workers. Mechanisms and procedures to address complaints relating to worker rights are in place. The regulations are enforced by the Ministry of Labour and the Department of Occupational Health and Safety. It appears that the legal framework is there, but enforcement is a problem.

- > The normal work week is 40 hours, after which overtime must be paid. Kenya also has a minimum wage scale for twelve different categories of employees.
- > Benefits, ranging from housing to home transportation allowances, account for 25 to 50 percent of a Kenyan worker's compensation package.
- > Despite efforts from the sector to improve labour standards, it regularly receives bad press.

### **Starting, operating and closing a business**

Time required to open a business has been reduced thanks to improvements in communication between agencies and the upgrading of the registry. Nevertheless, it remains a weakness of the Kenyan investment climate.

### **Property entitling**

Kenya has not had a single and clearly defined national land policy since independence thus leading to a complex land management and administration system. Disparities in land ownership, tenure insecurity and squatting have occurred (resulting in conflicts), amongst which in the Naivasha areas.

- > Land rates are higher than in other countries in the region.

- > The government embarked on the formulation of a National Land Policy. The policy designates all land as Public, Community or Private. Non-citizens and foreign companies are only allowed leasehold land for duration of 99 years maximum.
- > Land lease was difficult for floriculture, but under the new constitution it seems to have improved.

### **Credit and finance**

Kenya's financial industry, while relatively modest in international standards, is one of the most sophisticated in Eastern Africa.

- > The banking sector was liberalised in 1995 and all exchange controls were lifted. Many larger farms have access to hard currency loans at international rates.
- > Recently, access to credit has been improved by implementing a law on credit bureaus that provides a framework for a regulated, reliable system of sharing credit information.
- > Lending rates are at about 18%, which is high compared to other leading producer countries.

### **Tax system**

The Kenyan tax system comprises both direct and indirect forms of taxation. The collection and administration of these taxes falls under the responsibility of the *Kenya Revenue Authority (KRA)*. From interviews with stakeholders, it is clear that there are many uncoordinated, duplicated and inconsistent taxes. The perception is that over the years national and local Governments are increasingly looking for ways to tax the flower industry.

One of the biggest challenges for the flower industry is the issue of VAT tax refunds from government which creates cash flow problems for flower farmers.

For more detailed insight into the tax issues, also refer to the CDE project on taxes and levies. The executive summary can be found in Appendix 3.

#### *Tax burden*

The industry faces a substantial tax burden in the form of levies and taxes imposed by a wide variety of different institutions (World Bank/KFC 2011):

- Export levy of KSh 0.2 per kilo of every produce being exported – HCDA.
- Local market levy per weight or by tonnage of the truck – Local Authority.
- A phytosanitary services levy KSh 0.2 per kilo of produce exported – KEPHIS.
- Phytosanitary certificate levy of KSh 400 per certificate – KEPHIS.
- Water levy of KSh 0.37 per litre of irrigation water – WARMA.
- A minimum levy of US\$ 400 for composting organic matter – NEMA.
- Tax on land payable to the local government.
- Personal and income taxes for all the permanent and pensionable staff.

#### *Tax benefits*

Growers generally feel that flowers are more heavily taxed. Still, the Kenyan flower industry enjoys considerable tax benefits, particularly aiming at attracting new investors (World Bank/KFC 2011):

- 10-year corporate income tax holidays.
- 10-year withholding tax holiday on dividends and other remittances to non-resident parties.
- Perpetual exemption from VAT and customs import duty on inputs (greenhouses, greenhouse covers, and cold chain systems).
- Dam construction and irrigation equipments.
- Capital equipment and other resources.
- Perpetual exemption from payment of stamp duty.
- Subsidised financing loans.

### *VAT refund issue*

The VAT rebate system is very inefficient. It is well known that nearly all produced flowers are exported, but at the same time, all growers must pay VAT on their input materials and afterwards submit a claim for a rebate, which usually is not paid back until 6 to 12 months later.

- > The VAT refund issue seems to be acknowledged by Government. During last KFC General Meeting in July 2012, the Chairman of the Kenya Revenue Authority has said KRA is addressing the problem. He also said that KRA and is working closely with the Treasury to address the issue. To address the issue, KRA discontinued withholding VAT in July 2011 at the expense of collecting more revenue.
- > A *new Value Added tax (VAT) bill 2012* was unveiled in June. The bill was a culmination of efforts to find a solution to the challenges that have bedevilled the tax system. The intention of the new bill (not yet passed) is to simplify the law as spelt out in the VAT Bill 2012 applying a general VAT rate of 16% with minimal exceptions. This means that exemptions and zero rating of items are removed, resulting in taxpayers spending less time computing taxes. Note: VAT on some basic agricultural inputs and basic food commodities will be charged at 16% up from 0%.

### **Trading across borders**

Kenya is a fairly open economy, with relative little obstacles when doing international business. In recent years, Kenya has made considerable improvements in the area of procedural requirements such as documentation requirements and procedures at customs and other regulatory agencies as well as at the airport. Nevertheless, ample opportunities to smoothen procedures remain.

- > Since 2002, the Kenyan government has a policy stimulating foreign investment in order to increase foreign exchange earnings, provide employment, promote backward and forward linkages and transfer technology in international supply chains. Therefore there are no special requirements imposed on foreign investors. (MinELI 2011)
- > Kenya has recently introduced an electronic cargo tracking system and linked this system to the Kenya Revenue Authority's electronic data interchange system for customs clearance. Growers appear pleased with KRA's C-Bank System because it is much faster. KRA has got this system from Ghana and South Africa and adopted it to the Kenya situation.
- > KFC is lobbying for an Export Processing Zone (EPZ) for flower growers in the Naivasha region.

### *Market access*

Kenya has a number of tax treaties and investment promotion and protection agreements. Exports from Kenya enjoy preferential access to world markets under a number of special access and duty reduction programmes, comparable to most other leading producer countries. KFC membership to the Union Fleurs has been extremely useful in the ongoing EAC-EU-EPA-Negotiations.

- > Kenyans still pays no import duty when exporting to Europe. In 2007, the East African Community member states signed an *interim economic partnership agreement with the European Union (EPA)*. Under this interim economic partnership agreement, exports from the East African Community entering the EU are entitled to duty reductions and freedom from all quota restrictions as the countries have been classified as so-called Least Developed Countries. Currently, Kenya benefits significantly from this economic partnership agreement, as the country is no longer classified as a Least Developed Country. The interim economic partnership agreement has been renewed multiple times, and negotiations towards a full interim economic partnership agreement are still ongoing.
- > Kenya is WTO member, and also member of the Common Market for Eastern and Southern Africa (COMESA) and ACP/Cotonou Partnership Agreement. Kenya holds a membership of the Multilateral Investment Guarantee Agency (MIGA), which promotes foreign direct investment in developing countries by offering political risk insurance (guarantees) to investors and lenders.

The country is also a member of the International Centre for Settlement of Investment Disputes (ICsID). (MinELI 2011)

- > In 2008, the East African Community was formed. EAC member states agreed to allow zero-rated entry of raw materials from other EAC members, levy a 10% duty on semi-processed goods, and levy a 25% duty on finished goods. (MinELI 2011)

#### *Kenya Plant Health Inspectorate Services (KEPHIS)*

KEPHIS is responsible for regulating plant health issues relating to phytosanitary and seed matters. KEPHIS has formed the Plant Variety Protection, Seed Certification, Phytosanitary Services, Agro and Agri-input Formulation Analysis and Farmer Advisory service units. KEPHIS carries out field inspections and point of exit inspections. KEPHIS assists farmers in building capacity in field management (training of scouts on farm).

- > It is expected that strengthening the capacity of KEPHIS will play a vital role in implementing the National Horticulture Policy in the coming years. The organisation will be involved in execution of the proposed production, support services and regulatory policy interventions.
- > In April 2011, KEPHIS launched the Export Electronic Certification System (CLIENT Kenya). The system has converted a manual paper based phytosanitary certification system to a fully electronic system. The system has led to reduced export costs, reduced interceptions, better control of certification, flexibility in planning pre-clearances, and secure transmission of phytosanitary certificates. In the beginning, some initial problems with internet congestion were encountered. The system can be a challenge for smallholders (literacy, computers).
- > One of the issues raised in the recent supply chain study (Hortiwise 2012) was that Government bodies involved with phytosanitary certificates and export documents are not available 24/7. There is a clear need for matching inspection services in both Kenya and the Netherlands with 24/7 requirements of freight forwarders. Also, differences of more than 10% in shipments require a completely renewed export documentation, which results in delays/next flight.

### **4.3 Broader investment climate**

#### **Security**

Nowadays, political stability is regarded by growers and investors as one of Kenya's weaknesses. The continuing security problems weigh on the competitiveness of the Kenyan flower industry as it leads to costs and in the end competitive disadvantages.

- > The government has not been able to provide a secure environment for businesses and families, especially in urban settings. Property crime and violence are major concerns and a normally avoidable cost for companies. Typically, a grower of an average 20 hectare farm has about 30-35 security staff to secure the premises (15 day shift, 20 night shift).
- > In 2008, Kenya was confronted with political unrest, which affected the sector for a few weeks. Flowers could only be exported with difficulty. Currently, stakeholders locally and abroad, appear slightly nervous regarding the upcoming elections early next year.
- > Bribery prevalence in Kenya remains high as the country moved from fourth place recorded in 2011 to third in the 2012 East African Bribery Index (EABI). Transparency International ranked Kenya 154 of 182 countries in 2011.

#### **Getting electricity**

According to several interviewees, power supply has improved a bit lately. Still, erratic shortages in production areas can heavily affect the start of the cold chain. Energy has become more expensive. Government investment is needed and happening (hydro-power).

- > The growth in electricity generation was mainly driven by 27% increase in production from thermal oil. Installed capacity expanded by 8.6% from 1,412 MW in 2010 to 1,534 MW in 2011.

Consequently, total electricity generation increased by 8.4% to 7,560 GWh in 2011 compared to 6,976 GWh in 2010. (KNBS 2012)

- > KEPSA, the Kenya Private Sector Alliance, has been engaging Parliament and the Executive with a view of addressing bottlenecks in the power sector in Kenya. The Private sector also continues to invest in power production that will ultimately lower the cost of power. (KFC Blog)
- > With the New Energy Regulations mandating every firm to undertake an Energy Audit, KFC and Kenya Association of Manufacturers (KAM) have entered into an agreement to carry out the Audit Programme within the KFC membership. The Energy Audit will help the farms to Identify Energy Wastage, determine Saving Potential and give recommendations on measures to be implemented resulting in reduction of Energy Consumption. (KFC Blog)

### **Infrastructure**

Nairobi continues to be the primary communication and logistics hub of East Africa. It has the region's best transportation links, communications infrastructure, and trained personnel. The road network in Kenya is well developed compared to other countries in the region. Still, underdeveloped rural roads lead to high costs for transporting products. In rainy seasons, the situation is worsened. Kenya has been investing significantly in the country's infrastructure over the last two years. Several major national highways are currently under construction. In the last decade, Kenya has undergone a transformation in the Information Communication and Technology (ICT) sector.

- > Unrefrigerated and often slow transport to airport. Refrigerated trucks are still not the industry norm.
- > Boxes are loaded into trucks as loose items, resulting in extra handling and poor air circulation. Loading/unloading times can be shortened by using load carriers (pallets/trolleys).

### *Air*

Daily cargo flights depart to destinations all over the world. A new terminal is being built in Jomo Kenyatta International Airport (JKIA) to cater for direct transport between Kenya and the USA.

- > The air transport sector in Kenya has been growing steadily in the last decade. JKIA is the busiest airport in East Africa with regular air connections to neighbouring countries, Europe, Southern Africa, West Africa and Asia. From Eldoret Airport in East Kenya, cargo is also shipped.
- > Kenya-to-Europe routes are served by about a dozen commercial airlines as well as charter companies using wide-body planes. A considerable share of Kenyan freight is flown to Europe with passenger aircrafts. (Hortiwise 2012)
- > Freight to the USA is still expensive, as no direct flights are possible due to non-compliance with their security standards. Nevertheless, several Kenyan farms export flowers to the USA.
- > The Kenya Airport Authority (KAA) requires freight forwarders to scan all packaging items rather than accepting the random sampling practiced so far.
- > KAA plans to raise the costs for the Airways Bill (AWB) with US\$ 0.01 per kg. Forwarders object.
- > There is a strong competition among airfreight forwarders and handlers at JKIA. The four transit handling companies that are directly located at the tarmac complain about the concession levy of the Kenya Ports Authority, which amounts to 9% over turnover (to be paid in advance). Other forwarder/handling agents which are located off site do not pay this levy.

### *Sea*

Flying flowers to Europe is more costly than shipping those products by sea. If successfully developed, sea transport can make Kenyan growers more competitive and can improve profitability. Sea transport trials have been carried out, but were not yet very encouraging. The Latin American competition seems ahead.

- > The Port of Mombasa is the most important deep-water port in the region, supplying the shipping needs of more than a dozen countries despite stubborn deficiencies in equipment, inefficiency, and corruption.
- > There is, however, little service to European destinations from Kenya: no direct connections currently possible, trans-shipping is necessary. Other challenges are piracy, delays at the port, right varieties.
- > Current facilities at farms and forwarders are not capable of cooling and loading large volumes of flowers (a reefer can transport 8-10 tonnes of flowers) at temperatures close to 0°C.

### **Sector cooperation**

The *Kenya Flower Council (KFC)* and the *Fresh Produce Exporters Association of Kenya (FPEAK)* are the most prominent private sector organisations in the Kenyan floricultural industry. FPEAK and KFC appear relatively strong compared to other associations in other Kenyan sectors.

- > The primary objective of KFC is to foster the responsible and safe production of cut flowers in Kenya, while protecting the natural environment and promoting the welfare of member farm staff. The council focuses on the three areas of lobbying, industry self regulation and industry promotion. KFC membership represents about 50-60% of the flowers exported from Kenya. KFC has developed a Code of Practice that operates on two levels: Silver and Gold Certification Standards. The Silver Edition is fully bench marked to GLOBALGAP, Tesco's Nature and FFP.
- > The activities of FPEAK are focused on providing technical support, marketing information and training to growers and exporters, act as an information centre, and implement lobbying and advocacy programs to enhance the sector's competitiveness. FPEAK developed and implements the Kenya Good Agricultural Practices (Kenya-Gap) protocol. FPEAK monitors the domestic and international policy environment and lobbies relevant institutions and governments for actions and changes aimed at enhancing competitiveness of the industry.
- > A few years ago, the *Kenya Horticultural Council (KHC)* was created as an umbrella body where KFC and FPEAK are corporate members. The main objective of KHC was to enhance effectiveness and efficiency in resource utilisation and service delivery to the horticulture industry in the country. KHC appears currently inactive.

### *National Task Force on Horticulture*

The National Task Force on Horticulture was created in 2004 in response to challenges in the international markets. It is a multi-stakeholder interactive and consensus-building forum with representation from public and private sector stakeholders in the horticulture sub-sector, promoting private-public sector dialogue. The major goal being to assure Kenya's horticultural produce complies with market requirements and sustains its reputation as a leading grower and exporter.

- > The task force has been involved in activities of capacity building; accreditation of business support facilities; awareness creation, development of common strategies; risk assessment; adoption of international codes of practices and regulations and market diversification.
- > The task force meets on a "need" basis, which in practice is quarterly.
- > The task force is mentioned as a possible domicile for "National Mechanism to Assure Industry-Wide Compliance".

### *Project 'National Mechanism for Compliance'*

The ongoing project to develop a "National Mechanism for Compliance" is intended to define the minimum standards for exports that will be voluntary underwritten by all exporters with the overall goal to increase product quality and improve public relations of the sector.

- > Despite a range of both public and private tools governing regulation of the industry in the realm of labour standards, protection and stewardship of natural resources, it is clear from

consistent reports and concerns raised in international press, that more work on the robustness of implementation of regulatory systems needs to be done.

- > To make compliance more inclusive and to involve all exporters, the problem is tackled in a joint effort by both the private sector as well as the regulatory arms of Government.

In September 2012, a first feasibility study concluded that there is an overwhelming agreement on the need for a mechanism to ensure compliance. The current status of the project is that there are, however, still concerns about how this mechanism would work: costs for the exporters; constraints for small growers; bureaucracy. A vetting committee with stakeholder representation will be formed.

### Knowledge and innovation

In general, the agricultural educational level of Kenyans is known to be quite high in comparison to other countries in East Africa. Research and innovation, however, stand at a very modest level. Kenyan R&D institutes such as KARI are predominantly focused on activities for the smallholder sub-sectors with a view to enhancing food security and poverty reduction.

- > Agricultural education in Kenya is mainstreamed throughout the curriculum from secondary school via vocational, trade schools and proprietary to universities. The University of Nairobi, the Jomo Kenyatta University of Agriculture and Technology in Nairobi, the Egerton University in Nakuru, and the Moi University in Eldoret are the most prominent players offering a wide range of horticultural courses. All companies in the horticulture sector pay a monthly levy of Ksh 50 per employee as contribution to horticultural education. Stakeholders indicate that there is low enrolment in horticulture-related courses due to low wages in the sector. University research tends to focus on on-farm production with little attention to the whole value chain.
- > Besides Universities, floriculture research is also undertaken by the private sector and the Public Research Institutes like *Kenya Agricultural Research Institute (KARI)*. The Department of Research Development of the Ministry of Research and Technology has no responsibility for directing agricultural research, besides having its officers in the Board of these institutions. KARI runs research programs in eight areas, amongst which horticulture. KARI has not been able to establish sustainable links with the floriculture sector, as the level of research has remained low over the years. Some growers complain that KARI is slow to react to grower needs. It is the feeling that flowers are not in their main crops list (no priority).
- > The new *Thika Horticultural Research Station* has the national mandate to conduct research on horticulture and to demonstrate how to apply new technologies.
- > The Kenyan government has developed the *National Agricultural Research Systems (NARS)* policy and the NARS Bill 2011 in line with other Sub-Saharan African countries. The goal of the NARS bill is to harmonise the administration in terms of prioritisation, funding and coordination of research. The *Horticulture Research Fund* has been established under this legislation with a modest budget of around € 50,000.

### Inputs

Being a leading global producer, the Kenyan flower industry enjoys an international network for input supply. Additionally, local supply of inputs has been developing strongly.

- > Quite a few companies in Kenya propagate plant material for flowers. Nowadays, the propagation of new rose plants takes place in the country itself. Some larger growers have their own facilities to propagate plants, but most growers depend on third party suppliers.
- > Major trade reforms were implemented, reducing the overall time to import inputs. The opening hours of customs and port authorities were extended, and the number of inspection points between Nairobi and Mombasa port reduced. (WB/IFC 2012b)
- > The function of the *Pest Control Products Board (PCPB)* is to regulate the importation, exportation, manufacturing, distribution and use of pesticides. Registration of new chemical products is a problem. In case of agro-bacteria, there is no real effective product yet, which is a



major concern. To reduce the impact on the environment and people most flower operations have introduced means of biological control. It takes, however, much time and costs to get a new product registered with the PCPB (lengthy process). Some potential products contain genetically modified ingredients, which are not allowed.

- > Packaging costs make up a considerable part of overall costs. Paper (raw material) is imported, for instance from South Africa. Still, packaging costs are considerable lower than Ethiopia.

### Services

In Kenya, there are various companies and organisations that provide business support services to the flower export sector (commercial, government, donors). Some that need mentioning are:

- > The *Export Promotion Council (EPC)* is established with the mandate of developing and promoting Kenya's exports. EPC's primary duty is to identify and address constraints facing exporters and producers of export goods and services. The EPC participates in the National Task Force on Horticulture. EPC support to the flower industry has been modest so far.
- > The *Kenya Horticulture Competitiveness Project (KHCP)* is a five-year program designed to improve productivity and food security and strengthen local and domestic horticulture supply chains funded by the United States Agency for International Development (USAID). KHCP is collaborating with public and private sector partners to address constraints and improve the enabling environment of the horticulture industry. The project is helping farmers and businesses with grants and expanding the area of operations to help some 200,000 smallholders. The project operates throughout the country and has identified a number of target crops, amongst which summer flowers for smallholder production.

## 5 Gap Analysis

### 5.1 Key drivers

#### Changing market conditions

- \* Direct trade channels, bypassing the Dutch auction system, are on the rise
- \* Virtualisation of the trade
- \* Increased competition with Latin America in upcoming direct markets (Russia, Japan)

There is a general notice that the industry is changing dramatically. In recent years, consumption has stagnated in major markets, while the supply of flowers remained abundant. In the medium and long term, a moderate growth of only 2 to 4% annually is expected in Western Europe's flower markets.

In the traditional florist channel, which continues to be the largest market segment, direct trade from producer to end market is increasing, particularly in those markets further away from the Netherlands.

In addition, the flower value chain is increasingly dominated by large and sophisticated European supermarkets and other mass-market retailers. This is resulting in a gradual shift of purchasing power from wholesalers and the Dutch auction system towards these mass-market retailers. Supermarkets tend towards single-sourcing, based less on price (as the Dutch auction system) and more on quality, delivery reliability and traceability. These large retailers are increasingly laying down quality standards, which are becoming more stringent and increasingly differentiated. Demand for sustainably produced and distributed products is rising.

There is also an acceleration of technology and knowledge development, not only in cultivation, but particularly in the way flowers are traded. More than 60% of the roses traded at the FloraHolland auction are sold through the remote buying system. European wholesalers offer products in their own online web shop, where customers (wholesalers and retailers) can buy directly from stocks. Trade becomes virtual making consistency and accurate exchange of information critical.

#### Margins under pressure

- \* Rising costs
- \* Need for continuous improvement
- \* Chain integration

In all producer countries, production and logistics costs are rising (labour, fuel, airfreight, inputs, energy, taxes, etc.), while prices will remain under pressure in the long run. As a result, margins are getting squeezed.

To remain competitive, farms are required to continuously improve their efficiency. This principle actually applies to the entire sector as a whole. Joint sector and public-private efforts are needed to gain efficiencies in the value chain.

The industry is evolving towards lean and transparent value chains characterised by consolidation and vertical integration.

## 5.2 Challenges

We reviewed what determines the success of a national cut flower export sector, not only in Kenya, but in a number of leading flower producing countries. We found that some issues are typical for their local situation. Mostly, however, growers globally face similar issues, either production, logistics or marketing-related. For a large part, their success is determined by their entrepreneurial and growing skills. Still, literature and interviewed growers also agree that the business environment is a critical factor.

There are couple of big issues that way heavy on the competitiveness of the Kenyan flower industry such as political stability, safety, corruption and bureaucracy. One of the main daily concerns of growers, however, not only in Kenya but also abroad, are the ever rising costs. Rising costs are not only related to production factors as labour, energy and inputs, but also the costs of logistics and doing business in general.

Most relevant cost items:

- Production-related costs: labour, chemical inputs, energy
- Logistical costs: airfreight, packaging, paperwork, fuel
- Costs of doing business: taxes and levies, bureaucracy, security

As price levels remain under pressure and are not expected to rise, there is a clear need for efficiency improvement. Competing countries are moving forwards fast.

For the mid and long term future, we identify five vital challenges for the Kenyan flower industry to retain or strengthen its competitiveness in the global flower markets:

- ▶ Efficiency improvement
- ▶ Sustainability
- ▶ Supply chain improvement
- ▶ Sector promotion
- ▶ Public sector coordination

### No 1. Efficiency improvement

- \* Productivity
- \* Pest management
- \* Innovation

In terms of production costs, ample opportunities for efficiency gains exist. In the case of the costs of labour, the two main options are either to work on worker productivity and skills development or on mechanisation. As we have seen, skills level of Kenyan personnel is high by developing world standards and receives attention through education, practical training centre, etc. However, compared to Latin American and European competitors, there is still ample room for improvement. Furthermore, growers indicate that they believe they can further increase general worker productivity.

Note also the effect of a shift in rose assortment from small & medium-sized varieties towards larger rose varieties. In case of small to medium-size roses, labour costs comprise about 30 to 35% of total production costs, compared to only 20 to 25% in case of large varieties.

This report identified a general lack of truly innovative enterprises, especially indigenous Kenyan enterprises. We assume that the most likely explanation for this is a combination of the traditional surplus of unskilled labour, a lack of access to adequate technology and knowledge, and knowledge institutes which have not been able to produce applicable technology for the local flower industry.

We noticed that some Kenyan farms owned by foreigners experiment with mechanical grading and other forms of mechanisation. Many farmers, however, are hesitant if this is really appropriate technology for Kenya. At this stage, most Kenyan farms require medium-level technology, which is often not readily available. High-tech solutions for instance from Holland and Israel are available, but are either too expensive or not practical. Lack of innovation is a weakness of the Kenyan flower industry.

Many administrative tasks on the farms are still carried out by hand and on paper. With the increasing importance of information and the move towards direct trade, farms will have to automate system administration to stay competitive.

Pest management practices and in particular an adequate application of chemicals in cultivation are other areas in which farms can further improve efficiency. The CDE study on soil borne diseases illustrates the impact coordinated improvements can have on production. We also found that registration of new chemical products, including bio-pesticides, is a problem.

## **No 2. Sustainability**

- \* Market requirements
- \* Compliance issues
- \* SME growers losing ground

Compliance to international standards regarding quality, workers' health, safety and rights, and environmental sustainability are a precondition for European market access, particularly in the direct channel supplying mass market retailers. Most Kenyan export growers are well aware of this and the majority of the growers are certified for one or more quality standards. Nevertheless, nation-wide compliance is an issue and negative publicity is regularly the result.

What's more, enforcement of government regulations like the environment-related NEMA licensing remains weak in Kenya. Compared to its Latin American competitors, it appears that Kenya is falling behind. In other countries, a sound regulatory environment is combined with more stringent enforcement of government regulations. For years, the Colombian government and private sector have been on top of sustainability issues. In Ecuador, increasingly strict labour regulations are being introduced. In both countries, growers at first complain about the costs associated with these regulations, but almost unanimously conclude that the resulting sector-wide compliance has had a positive impact on reassuring customers.

In Kenya, this issue is currently being addressed by the ongoing project on the "National Mechanism for Industry-Wide Compliance", a project initiated by the Dutch AgentschapNL.

## **No 3. Supply chain improvement**

- \* Cold chain management
- \* Transport and logistics
- \* Packaging
- \* Handler performance
- \* Information and communication

Since flowers are highly perishable by nature, speed of delivery is critical, as are appropriate temperature control measures during transit. The strong growth in export volumes, however, has put pressure on the supply chain, creating bottlenecks that hinder efficiency and further development. Studies like the recent supply chain study (Hortiwis 2012) show that there are many opportunities for efficiency gains along the entire value chain.

With the strong and continued development of direct marketing lines, Nairobi has the opportunity to develop into an important trading centre. Kenyan growers sell more flowers directly to customers in countries like Russia, Japan and the US. Direct trade, however, does not always mean direct connections. Many flowers still pass through the Netherlands or fly via hubs in the Middle East, which adds costs in terms of freight rates, but also in terms of deteriorating quality resulting in lower market prices.

Many supply chain inefficiencies are the result of a lack of communication and coordination between key actors in the supply chain. The industry has developed generally accepted 'workarounds' to bypass recognised problems, such as flight delays and flowers arriving at the airport at excessive temperatures. Furthermore, in the flower supply chain, neglect by one player typically leads to costs for somebody else.

Flying flowers to Europe is more costly than shipping them by sea. If successfully developed, sea transport can make Kenyan growers more competitive and can improve profitability. Sea transport trials have been carried out, but were not yet very encouraging. Roses are problematic for the time being. The Latin American competition seems ahead.

#### **No 4. Sector promotion**

- \* Country branding
- \* Export support
- \* Sector promotion

The flower export industry is highly internationalised. Kenyan growers increasingly face strong international competition from other leading producer countries, like Colombia, Ethiopia and Ecuador, who are aggressively expanding their markets.

Colombia's Proexport is a good example of a public sector support organisation that contributes to the competitiveness local export growers. Growers receive assistance in organising trade missions, but also through coordinated trade fair participations. The Colombian ornamental sector regularly demonstrates its collective promotion efforts at international exhibitions.

The importance of sector cooperation and organisation cannot be overstated. In all leading countries, private sector organisations are reasonably strong and active. They also enjoy a broad base among producers. Differences exist in the scope of services that these organisations provide. Some associations are very active in promotion, others more in aspects like advocacy, research, training, socio-environmental issues or logistics.

A real challenge and source of future success for Kenya lies in a co-ordinated approach to create national product recognition in foreign markets. What is needed is a more sustained joint approach to international promotion by sector associations KFC and FPEAK, with HCDA and EPC support. Actually, to effectively promote the Kenyan flower brand, Kenya needs one face to the world. The recent joint country pavilion at the IFTF trade fair was a good first step. It is pity that the once created Kenya Horticultural Council (umbrella body with KFC and FPEAK as corporate members) does not appear to be active anymore.

Interestingly enough, in most of the other producing countries, the local flower industry is also promoted within its own borders. Often, promotion is aimed at stimulating purchasing of locally grown flowers, but also to bring the importance of the sector under the spotlight.

## No 5. Public sector coordination

- \* Inconsistent taxes and levies
- \* VAT refund issue
- \* Fiscal incentives supporting innovative entrepreneurship
- \* Bureaucracy
- \* Coordination among public organisations

Experience learns that the flower industry cannot be led by public initiatives alone. The primary role of the government should be facilitative and indirect (laws and regulation for foreign investment, intellectual property rights, technology transfer, air cargo licensing, foreign exchange transaction, etc.). Still, these are critical to the success of the sector.

Ethiopia illustrates the potential impact of government support on the development of a young industry. Also in Colombia and the Netherlands, the government still plays a major role in facilitating advances in the sector. Each country faces specific challenges that ask for targeted support and coordination. So is the case in Kenya. A specific issue in Kenya, for instance, is the decentralised system of taxation that often results in double taxation and inconsistencies.

The VAT rebate system is very inefficient and a burden to the industry. It is well known that nearly all produced flowers are exported, but at the same time, all growers must pay VAT on their input materials and afterwards submit a claim for a rebate, which usually is not paid back until 6 to 12 months later.

We have seen that several other countries have put considerable efforts in reducing paperwork and bureaucratic overhead. Not only the environment for trade has been streamlined (by increasing the efficiency of customs), but also the tax system has become less complex.

A number of issues were often mentioned with respect to the various government bodies that are relevant to the flower industry. For instance, the costs (license fee, hiring experts, required adjustments) and administrative burden related to the NEMA assessments are considered a burden for many growers. They, however, mostly complain about the costs related to required improvements, particularly expensive onsite water treatment plants. NEMA recognises this problem and in many cases a "negotiated compliance" is settled.

It is clear that the sector would benefit greatly from improved coordination among public institutions and between the public and private sector. A coordinated effort is needed to lift the Kenyan business enabling environment to more competitive levels. The sector would also gain if government institutions would be more familiar with the characteristics of the entire flower value chain, understand the market, and knows how it affects the local export industry. Public services should be more in line with needs of private sector.

Technology and innovation are ever more important playing cards in the international competitive game. The Dutch, Israelis and Colombians are pushing forward. Growers are backed by government incentives and well-developed agricultural research and development systems all striving to strengthen the knowledge and efficiency in the sector. It is important that the Kenyan government has a sound incentive regime in place rewarding good performance such as high productivity, sustainability and innovation.

The National Horticultural Policy has recently been approved by the parliament. Now, the Government has embarked on deepening and refining these guidelines into strategies for the floricultural sector. This National Floricultural Strategy, which is currently being prepared, can become an important tool for the government to coordinate its efforts towards the sector.

## 6 Way forward

### 6.1 Conclusion

Kenya is in a good position to grow into its role as a leading global flower supplier... but market conditions are changing dramatically and the competition is moving fast.

A coordinated effort by both government and private entrepreneurs is necessary. Both sides will need to work passionately and determinedly together to strengthen Kenya's competitive advantages and to create an enabling environment in which export growers and industry service providers can thrive. With the strong and continued development of direct marketing lines, Nairobi has the opportunity to develop into an important trading centre.

A number of ongoing projects, all covering aspects of competitiveness, are currently formulating ideas and suggestions for improvements. This is the time for a leap forward. Kenya is invited to take up the challenge.

### 6.2 Recommendations

For the mid and long term future, we identified five vital challenges for the Kenyan flower industry:

- ▶ Efficiency improvement
- ▶ Sustainability
- ▶ Supply chain improvement
- ▶ Sector promotion
- ▶ Public sector coordination

To address these challenges we propose the following set of interventions with, in our view, the largest potential impact on competitiveness:

**Table 12 Recommendations****1. Efficiency improvement**

<b>Topic</b>	<b>Opportunities to improve</b>	<b>Suggested interventions</b>
Productivity	<ul style="list-style-type: none"> <li>▶ Worker productivity and skills development</li> <li>▶ Mechanisation in production and post-harvest</li> <li>▶ Automating administration</li> <li>▶ Smallholders lagging behind in productivity</li> <li>▶ Vulnerability to climate events</li> </ul>	<ul style="list-style-type: none"> <li>■ Technology needs assessment to determine specific areas of attention: What are the gaps and priority areas? What capacity do we have? Design or replicate technology? Cost-benefit analysis necessary.</li> <li>■ Develop appropriate technology (low and medium-level technology).</li> <li>■ Stimulate the development of climate control capabilities.</li> <li>■ Make available appropriate insurance products tailored for the industry.</li> <li>■ Improve specialised floricultural extension services and training (role Thika Training Centre).</li> </ul>
Innovation	<ul style="list-style-type: none"> <li>▶ Slow technological development and adoption</li> <li>▶ Coordination among research institutes</li> <li>▶ Practicality of research</li> <li>▶ International linkages</li> <li>▶ Research and development funding</li> </ul>	<ul style="list-style-type: none"> <li>■ Boosting knowledge and innovation in the sector by increasing investment in research and development.</li> <li>■ Create incentives for entrepreneurs to invest in research (innovative funding mechanisms).</li> <li>■ Joint floricultural innovation effort: <ul style="list-style-type: none"> <li>- Public Research Institutes, Universities &amp; Associations</li> <li>- Collaborative R&amp;D funding</li> <li>- Fund for Floricultural Research and Development?</li> <li>- Centre for Innovation in Floriculture?</li> </ul> </li> <li>■ Existing Public Research Institutions &amp; Universities: <ul style="list-style-type: none"> <li>- Strengthen links with private businesses.</li> <li>- More attention for medium-scale commercial floriculture.</li> <li>- Improve coordination among knowledge institutions.</li> <li>- Link up with existing (international) research and development structures.</li> </ul> </li> <li>■ Information technology investment for linking supply chain members and product traceability.</li> </ul>
Pest management	<ul style="list-style-type: none"> <li>▶ Vulnerability to soil borne diseases</li> <li>▶ Availability of chemical inputs</li> <li>▶ Registration process for new chemical products</li> <li>▶ Adequate application of chemicals</li> </ul>	<ul style="list-style-type: none"> <li>■ Improve registration procedures of new chemicals, incl. bio-pesticides (PCBP).</li> <li>■ See outcome CDE project Soil Borne Diseases.</li> </ul>



<b>2. Sustainability</b>		
<b>Topic</b>	<b>Opportunities to improve</b>	<b>Suggested interventions</b>
Market requirements	<ul style="list-style-type: none"> <li>▶ Existing private standards do not cover all (new) relevant market requirements like residue levels.</li> <li>▶ Uncertainty about CO2 discussion</li> </ul>	<ul style="list-style-type: none"> <li>■ Stronger Kenyan sector involvement in carbon footprint and broader international sustainability discussion:               <ul style="list-style-type: none"> <li>- Quick scan 'Status of CO2 discussion', i.e. review of existing studies on impact on Kenyan industry. Note ongoing study in the Netherlands.</li> <li>- Research into CO2 impact of specific industry activities in Kenya</li> </ul> </li> <li>■ Improvement programme to develop processes that make better use of natural resources, generate less waste and have reduced impact on the environment</li> <li>■ Coordination with ongoing Floriculture Sustainability Initiative (FSI) programme for cut flowers</li> </ul>
Compliance issues	<ul style="list-style-type: none"> <li>▶ Some Kenyan firms still demonstrate insensitivity to the principles of CSR.</li> <li>▶ Enforcement of government regulations</li> </ul>	<ul style="list-style-type: none"> <li>■ Hybrid system of compliance recommended:               <ol style="list-style-type: none"> <li>1. Principal issues: achieving 100% compliance; strict enforcement by government.</li> <li>2. Additional issues: industry self regulation; private standards (recognised by market).</li> </ol> </li> <li>■ Project 'National Mechanism for Compliance'.</li> </ul>
SME growers losing ground	<ul style="list-style-type: none"> <li>▶ SMEs access to resources needed to keep up with the professionalisation of the global flower industry.</li> <li>▶ Knowledge, skills and attitude on aspects like market-oriented approach.</li> </ul>	<ul style="list-style-type: none"> <li>■ Make information more accessible to SMEs.</li> <li>■ Improve financing possibilities for SMEs.</li> <li>■ Targeted research and training to fit SME needs.</li> </ul>
<b>3. Supply chain improvement</b>		
<b>Topic</b>	<b>Opportunities to improve</b>	<b>Suggested interventions</b>
Cold chain management	<ul style="list-style-type: none"> <li>▶ Knowledge &amp; awareness about cold chain requirements</li> <li>▶ No cold chain standards and protocols</li> <li>▶ Inadequate cold chain facilities and equipment</li> <li>▶ Poor information exchange</li> </ul>	<ul style="list-style-type: none"> <li>■ Develop standards and protocols for cold chain and packaging, including framework for compliance:               <ul style="list-style-type: none"> <li>- Develop an industry-wide system of supply chain standards.</li> <li>- Integration with existing standards: GAP, KFC codes, IATA time &amp;</li> </ul> </li> </ul>

Transport and logistics	<ul style="list-style-type: none"> <li>▶ Transport to airport (unrefrigerated, slow, no universal load carriers)</li> <li>▶ Increasing transportation costs (oil prices, security measures)</li> <li>▶ Flight delays and indirect flight routes</li> <li>▶ Communication about delays</li> <li>▶ Tarmac time</li> <li>▶ Sea transportation</li> </ul>	<p>temperature task force, etc.</p> <ul style="list-style-type: none"> <li>- Learning from other countries and sectors: USDA protocols, etc.</li> <li>- Participation of associations and coordination in KEBS Technical Committee, KEPHIS, Customs Services Department of KRA, KAA, etc.</li> <li>- Embed best practices in industry with incentives &amp; disincentives.</li> <li>- Set up a compliance inspection framework.</li> </ul> <p>■ Training on implementation of standards and protocols</p> <ul style="list-style-type: none"> <li>- Training in knowledge &amp; awareness about supply chain requirements</li> <li>- Target groups: SME growers, handling agents, airport personnel, etc.</li> <li>- Role for associations and existing institutions, including Technical Training Centre in Thika. Coordinate efforts with other training providers like CBI.</li> </ul> <p>■ Stimulate sector-specific supply chain innovation</p> <ul style="list-style-type: none"> <li>- Targeting strategic, technological, and structural innovations and supply chain performance improvements.</li> <li>- Packaging innovations.</li> <li>- Link with existing R&amp;D structures, nationally and internationally.</li> <li>- Initiative for collaborative R&amp;D funding</li> </ul> <p>■ Platform for Horticultural Supply Chain</p> <ul style="list-style-type: none"> <li>- Platform can play an important role in developing standards</li> <li>- Explore possibility of periodical dissemination forums (workshops, conferences, seminars etc.)</li> <li>- Enhancement and/or integration of existing platforms.</li> <li>- Website for Kenyan Horticultural Supply Chain improvement: a home base for dissemination of information on supply chain standards. Online training tool for implementing standards and protocols</li> </ul> <p>■ Collaboration between key stakeholders, including associations and government bodies.</p>
Packaging	<ul style="list-style-type: none"> <li>▶ Insufficient packaging knowledge</li> <li>▶ No standard procedures in handling packaging materials</li> <li>▶ Awareness of price/quality ratio of boxes</li> <li>▶ Pack rates (over- and under-packing)</li> <li>▶ Packaging waste</li> </ul>	
Handler performance	<ul style="list-style-type: none"> <li>▶ No standards/protocols for handlers</li> <li>▶ Logistical inefficiencies (aircraft pallets not composed on consignee base)</li> <li>▶ Price is the decisive criterion. No minimum quality limits determined (SLA's)</li> <li>▶ Discriminative concession levy by the Kenya Ports Authority</li> </ul>	

#### 4. Sector promotion

Topic	Opportunities to improve	Suggested interventions
Country branding	<ul style="list-style-type: none"> <li>▶ Weak appearance of unity to the market</li> <li>▶ International presence</li> <li>▶ Individual mentality among growers</li> <li>▶ Funding situation of associations</li> </ul>	<ul style="list-style-type: none"> <li>■ A co-ordinated approach to create national product recognition in foreign markets (KFC/FPEAK/HCDA).</li> <li>■ One face to the world: Kenya Horticultural Council (KHC)</li> <li>■ Associations towards more financial self sufficiency.</li> </ul>

Export support	<ul style="list-style-type: none"> <li>▶ Trade fair participations</li> <li>▶ Market visit / trade mission support</li> </ul>	<ul style="list-style-type: none"> <li>■ Further strengthen coordinated trade fair participations; country pavilion.</li> <li>■ Direct support to exporters for trade mission / market visits (example Proexport Colombia).</li> </ul>
Sector promotion	<ul style="list-style-type: none"> <li>▶ Local industry promotion</li> </ul>	<ul style="list-style-type: none"> <li>■ Step up positive promotion of the local flower industry. Bring flower industry under the spotlight: <ul style="list-style-type: none"> <li>- Annual Naivasha Flower Parade? (<a href="http://en.wikipedia.org/wiki/Flower_parade">en.wikipedia.org/wiki/Flower_parade</a>)</li> <li>- Sponsoring</li> </ul> </li> <li>■ Active sector participation in drafting the "National Floricultural Strategy" (by the Ministry of Agriculture).</li> </ul>

## 5. Public sector coordination

Topic	Opportunities to improve	Suggested interventions
Tax system	<ul style="list-style-type: none"> <li>▶ Decentralised system of taxation</li> <li>▶ Inconsistent taxes and levies</li> <li>▶ VAT refund issue</li> <li>▶ Focus of fiscal incentives</li> </ul>	<ul style="list-style-type: none"> <li>■ Modernisation of tax system: <ul style="list-style-type: none"> <li>- Consolidate taxation for ease of admissibility and compliance: remove double taxation and inconsistencies.</li> <li>- Coordination among government institutions on levies targeting the floricultural industry.</li> </ul> </li> <li>■ Tax reduction system promoting productivity, innovation, and stimulate cleaner production. <ul style="list-style-type: none"> <li>- Incentives for productive investments and innovation</li> <li>- Stimulate sector-specific supply chain innovation</li> </ul> </li> <li>■ See outcome CDE project Taxes &amp; Levies.</li> </ul>
Coordination among public bodies	<ul style="list-style-type: none"> <li>▶ Weak inter-agency coordination leading to poor delivery of regulatory services</li> <li>▶ Bureaucracy</li> <li>▶ Matching government services with 24/7 trade requirements</li> <li>▶ Electronic information and documentation of export documents and certificates</li> </ul>	<ul style="list-style-type: none"> <li>■ Reduce excessive and complicated bureaucratic procedures.</li> <li>■ Reduction of paper based documents; increase use of electronic systems: further development/implementation of electronic systems like CLIENT, E-freight, etc.</li> <li>■ Electronic systems such as CLIENT Kenya can be a challenge for smallholders.</li> <li>■ National Task Force on Horticulture should be more actively involved in promoting private-public sector dialogue.</li> <li>■ National Floricultural Strategy: active participation of private sector in public policy formulation.</li> </ul>

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## Appendix 1 Interviews

<b>Industry professionals</b>		
Abax Industrias y Flores	Mr. Gabriel Guerron, Sales Officer	Ecuador
Agricola Agronatura	Mr. Juan Arboleda, Sales Executive	Ecuador
Canan Valley	Mr. Juan Torri, Sales Manager	Ecuador
Colibri Flowers	Mr. Andres Toro, General Manager	Colombia
Dire Highland Flower	Mr. Tesfaye, Farm Manager	Ethiopia
Ecoroses	Mr. Esteban Chiriboga, General Manager	Ecuador
Ethio dream	Mr. Jan Prins, General Manager	Ethiopia
Ethiopassion	Ms. Kidist, General Manager	Ethiopia
Flores Santa Fé	Ms. Lucia Pombo, Marketing	Colombia
Growers Online	Mr. Peter Kaaka, General Manager	Kenya
Inroses	Ms. Lorena Altamirano, General Manager	Ecuador
JJ Kothari	Mr. J. Kothari, Director	Ethiopia
Joygardens	Ms. Lucia Carillon	Ecuador
King's Ethio Roses	Mr. Samson Nigussie, Commercial Manager	Ethiopia
Kuehne+Nagel	Mr. Paul Kitheka, Airfreight Manager	Kenya
La Gaitana	Mr. Frans Buzek, Sales Manager	Colombia
La Plazoleta	Mr. Fransisco Bazzani, General Manager	Colombia
Magana Flowers	Mr. Peter Mwangi, General Manager	Kenya
Noa	Mr. Ziyada Paulos, Marketing Manager	Ethiopia
Pigeon Blooms	Mr. Eliud Mwendia, Managing Director	Kenya
Red Fox	Mr. Bruce Hamilton, Manager Director	Ethiopia
Sagaro	Ms. Natalie Lebon, Sales Manager	Colombia
SB Talee	Mr. Juan Fonnegra, Sales Executive	Colombia
Sian Roses	Mr. Jos van der Venne, Managing Director	Kenya
Total Touch	Ms. Venna Omar, Manager Commercial	Kenya
Triple FFF	Mr. Eric Agufana, CEO	Kenya
<b>Public officials</b>		
Centre for the Development of Enterprise (CDE)	Mr. Rooben Mooteeveeren, Operations Officer	
Horticulture Crops Development Authority (HCDA)	Dr. Alfred K. Serem, Managing Director Ms. Anne Gikonyo, General Manager Marketing Ms. Florence Masia, Horticulture Officer	
Jomo Kenyatta University of Agriculture and Technology (JKUAT)	Prof. Kamau Ngamau, Horticulture Department	
Kenya Industrial Research and Development Institute (KIRDI)	Dr. M. Charles Moturi, Director/CEO	
Kenya Plant Health Inspectorate Services (KEPHIS)	Dr. James M. Onsando, Managing Director	
Kenya Horticulture Competitiveness Project (KHCP) / Fintrac	Mr. Ian Chesterman, Project Director Ms. Grace Mueni Nyaa, Marketing & Trade Promotion Ms. Sylvia Mbaabu, Market Information Systems Manager	
Ministry of Agriculture	Mr. Modest Muthembwa, Head of Floriculture Branch	
National Environmental Management Authority (NEMA)	Ms. Salome Machua, Deputy Director – Enforcement	
Netherlands Embassy in Kenya	Mr. Melle Leenstra, First Secretary Food Security and Trade Ms. Phyllis Karanja, Assistant Agriculture	

## Appendix 2 Challenges identified by the Kenyan-Dutch Horticultural Supply Chain Study (2012)

### CHALLENGE 1 - COLD CHAIN MANAGEMENT

- Lack of knowledge & awareness about the importance of cold chain requirements
- No cold chain standards and protocols (incl. monitoring compliance)
- Inadequate cold chain facilities and equipment
- Poor information exchange

### CHALLENGE 2 - TRANSPORT AND LOGISTICS

- Uncertainty about CO2 discussion (carbon footprint)
- Flight delays and indirect flight routes
- Increased transportation costs (oil prices, security measures)
- Tarmac time
- No use of load carriers for truck transportation (in Kenya)
- Sea transportation

### CHALLENGE 3 - PACKAGING

- Insufficient packaging knowledge throughout the industry
- Lacking specific knowledge and standard procedures about handling packaging materials
- Awareness of price/quality ratio of boxes
- Current packaging not optimal for direct sales channels
- Pack rates (over- and under-packing)
- Packaging waste

### CHALLENGE 4 - INFORMATION AND COMMUNICATION

- Absence of electronic information and documentation of all import documents and certificates
- Absence of a structural system for feedback through the chain
- Poor communication about delays

### CHALLENGE 5 - THE RELATIVELY WEAK POSITION OF SME GROWERS

- VAT rebate system
- Difficulties complying with export requirements (direct market)
- Lack of cold chain knowledge and awareness
- Access to capital
- Access to post-harvest cold storage facilities and transport

### CHALLENGE 6 - HANDLER PERFORMANCE

- No standards for handlers
- No structural and constructive system for feedback
- Logistical inefficiencies (aircraft pallets not composed on consignee base)
- Price is the decisive criterion. No minimum quality limits determined (SLA's)

### CHALLENGE 7 - INTEGRATION WITH MASS-MARKET RETAILERS

- Retailers lack specific flower supply chain knowledge
- Product and packaging wastage (at retail level)
- Mixed transports (temperature requirements, ethylene production)

### CHALLENGE 8 - SECTOR-WIDE TEAMWORK

- Lack of standards and protocols targeting supply chain improvements
- Matching phytosanitary (and other government) services with 24/7 requirements
- Road development and maintenance in production areas

## Appendix 3 Summaries of studies on climate change, taxies & levies, soil borne diseases and role of strategic environmental assessment

### A3.1 Executive Summary - Climate Change

Globally, agricultural production is one of the most vulnerable economic sectors to the adverse impacts of climate change. In the East African region, particularly in Kenya, agriculture is reliant on rain-fed practices which make it highly susceptible to an increase in the number of extreme weather events due to climatic changes and vulnerability. Notably, Kenya's economy largely relies on climate sensitive resources with the agriculture sector contributing 22% of Gross Domestic Product (GDP) (KNBS, Economic Survey 2010) and constituting the main source of livelihood and sustenance for a substantial proportion of the national population. Furthermore the sector employs about 75% of the Kenyan labour force (KNBS; MoPND, 2010). The adverse effects of climate change will impact the levels of agricultural production and the reduced agricultural activity will subsequently have significant socio-economic consequences on national economic growth, including as source of livelihood, employment and importance to GDP. The agricultural sector in Kenya comprises of the following sub-sectors: (i) crop production; (ii) livestock rearing; (iii) fisheries (both capture and aquaculture); and (iv) horticulture.

The horticultural sub-sector in Kenya is emerging as one of the fastest growing sub-sectors in Kenya, in terms of foreign earnings, employment, food security and poverty reduction (GoK, National Horticulture Policy, 2012). The growth in the floriculture industry is reflected in the positive correlation between the agricultural sector growth and that of the national economy, with an annual direct and indirect contribution to the GDP of between 22% and 27% annually. It is one of the oldest and largest in Africa and after three decades, the sector has reached maturity maintaining an average growth of 20% per annum after its rapid expansion in the early 1990s. According to the Kenya Flower Council (KFC), the sub-sector employs 90,000 people directly and a further 600,000 to 700,000 indirectly in auxiliary services.

The overall objective of this study is to enhance the competitiveness of the African flower industry, particularly in Kenya. The specific objectives targeted at the Kenyan flower industry include: (a) conducting a training or awareness based consultative process on the outcomes set out in the Technical Paper, with management personnel, flower growers, policy makers and other stakeholders and enhance awareness on the actions to address the impacts of climate change at an international, regional and national level; (b) undertake data collection and analysis, coupled with industry players needs assessment for capacity building on carbon, energy and water foot-printing, as well as identify the carbon sequestration potential in the industry through the design and implementation of carbon/Clean Development Mechanism (CDM) project(s) and carbon credit trading; and (c) identify possible carbon/CDM project opportunities within the flower industry which can earn saleable Certified Emission Reduction (CER) credits, which can be counted towards off-setting Kyoto Protocol targets of developed countries, while gaining value addition through earning carbon finance for the floriculture industry.

### A3.2 Executive Summary - Taxes and Levies

#### Introduction

With assistance from the CDE and the World Bank Foundation, the Kenya Flower Council (KFC) has developed a cost sharing, albeit independently funded project, to conduct a series of studies and activities, to determine the global competitiveness of the Eastern African flower business. The Impact of taxes and levies on the competitiveness of the Kenya flower industry forms part of these studies.

KFC engaged PKF Taxation Services Limited (PKFTS) to carry out the aforementioned study. The study was carried out between 1 August 2012 – 15 November 2012.

The key findings of the study were discussed at the National Conference on 13 November 2012 and are covered under Sections 6 and 7 of this report.

### Summary of findings

Taxes and levies have been evaluated as part of the microeconomic components of determining competitiveness. The main impact of the taxes and levies in the flower industry is the great influences investment decisions in the country and in the industry. The taxes and levies obligations one has also greatly influence decisions on expanding the existing operations too. The summary of the findings is as follows;

	Tax/ levies classification	Findings	Commentary
1	Corporation tax	78% of the respondents interviewed were in a Corporation tax paying position.	This is a positive indicator as the bulk of the industry players are in tax profit positions showing the significant contribution by the flower industry in form of contribution to the GDP.
2	VAT	Research shows that 73% of the respondents interviewed were in a VAT refund position.  The amount of VAT refunds pending at the KRA averaged around 25 Million per respondent interviewed. It was also noted that the mean waiting time for refunds was between 16-20 months after lodging the refund with the KRA.	Industry is adversely affected by the long period taken by KRA to process VAT refunds.  The amounts owed by the KRA have an adverse effect on the working capital of the flower farms. The cost to the farms of waiting for a refund increases with several factors amongst them the amount of the refund due, the length of the delay, the interest rate on working capital, and the non-financial compliance costs of paperwork, audits, and management time entailed to deal with refund delays. The working capital impact of the VAT refunds held up at the KRA was not measured.
3	Cost of compliance (as a factor of time spent)	The findings indicate that the bulk of the flower farms dedicate between 61-75 man hours per month at an average cost of cost of KShs 241,000- KShs 480,000 per month.	This clearly demonstrates the significant cost that the flower farms have to incur in order to comply with the current tax regime requirements. We did not measure the number of hours spent per each tax head identified.
4	Tax payers awareness levels	A high level of awareness is reported in Corporation tax and PAYE issues. Majority also reported a comfortable level of understanding of VAT issues with majority reporting very low know-how on the areas of WHT and Transfer pricing issues.	The low levels of awareness as regards Withholding Tax and Transfer Pricing issues has consequently resulted to increasing levels of non-compliance by the flower farms in the areas of WHT and Transfer Pricing.
5	Levies	On the imposition of taxes/levies, research shows that the number of levies/fees and	There is a duplication of levies imposed with some being deemed to serve the same purpose. The increasing number of



	Tax/ levies classification	Findings	Commentary
		other charges paid by the flower industry players to various arms of Government exceed 40 in number.	levies has also resulted to increasing non-compliance as flower industry players have a daunting task to keep up to date with the levies.

### A3.3 Executive Summary - Soil Born Diseases

The consultants visited Ethiopia, Tanzania and Kenya to assess the magnitude of the crown gall problem in roses. Selected farms and area represented the major rose growing area in the region. Information was gathered through discussions with the growers, administration of questionnaire, observations and assessments on the incidence and severity of Crown gall on roses in the farms. All the growers indicated that Crown gall is a major problem in their farms, and is not classified among rose diseases like botrytis, powdery mildew, and downy mildew but a condition that they have to live with. Our assessment was that crown gall was a major problem in all the farms visited. The difference between crown gall and other diseases is that the other diseases affect flowers or leaves and have a direct impact on the aesthetics and may lead to rejection by the phytosanitary authorities or the consumers in the importing countries. Although crown gall is systemic and symptoms generally appear on the lower parts of the stem, galls could be seen in young branches as high as one meter above the ground level in some of the farms visited. Some growers cut marketable stems above the galls and maintain a high table height to escape crown gall. Crown gall was found both on roses growing on soil and on substrate reducing yield losses in terms of number of marketable stems by over 50% in some varieties. In some farms, Crown gall affected certain varieties with an incidence of 75-95% when the crop was only 3 years old. The high infection led to a decision to uproot before the normal 7 years expected for each crop. Some varieties were found to be highly susceptible while others have some level of tolerance. The different methods reported to be used in the farms to manage the disease include cultural practices like rouging and burning the affected plants, and smearing Copper oxychloride on the galls. There is close collaboration between the pesticide regulators and the Horticultural associations on matters related to introduction of new pesticides for management of various pests affecting the flower industry. Growers identified the need to have all stakeholders (breeders, propagators, researchers, regulators and growers) look for an urgent solution to the crown gall condition, where they all play an active role. The team concluded that Crown gall is a serious disease affecting many farms in East Africa. It causes high yield losses by reducing the lifecycle, number of marketable stems, stem lengths and crop vigour. The economic losses depend on varieties grown and agronomic and disease management practices. Although cultural practices are generally used to manage crown gall most of the recommended hygiene measures are not strictly followed. There is need to develop specific guidelines for registration of biopesticides in order to enhance use of IPM. There is an urgent need to look for effective control to ensure competitiveness of the rose crop.

### A3.4 Executive Summary - Role of Strategic Environment Assessment

One of the key objectives of development planning is to ensure sustainability is achieved; i.e. that development projects meet the needs of today without compromising those of future generations. As such, governments, local authorities, project planners and other stakeholders use environmental assessment tools such as Environment and Social Impact Assessment (ESIA) and Strategic Environmental Assessment (SEA) to promote the integration of environmental and social considerations into proposed development actions.

The floriculture industry in Kenya faces a number of environmental challenges, both of local and global nature. Locally, environmental concerns facing the industry include issues such as the industry's over-consumption of water, pollution of water bodies leading to eutrophication, negative impacts on species habitats, and fugitive emissions of chemicals used by the industry. The main global challenge

facing the industry today is climate change, particularly the issue of carbon footprints since the industry relies on air transport for the shipment of cut-flowers to Europe and other overseas markets. It is thus important that environmental concerns be well scoped.

This assignment was in furtherance to a recommendation of a technical paper that looked into the role of SEA in the flower industry in the East African countries of Ethiopia, Kenya, Tanzania and Uganda. The Technical paper was commissioned by the World Bank Foundation on behalf of the Kenya Flower Council (KFC).

This assignment focussed on identifying challenges faced by the flower industry in Kenya including but not limited to; environmental challenges, gaps and weaknesses in the policy and legal framework, and international and local challenges. The study gives recommendations for addressing the identified challenges by proposing opportunities for the identified challenges. Some of these recommendations include; energy and water efficiency systems and plans, lobbying the government for comprehensive policies to steer development in the industry, capacity needs assessment and capacity building, and undertaking a comprehensive Strategic Environmental Assessment for the flower industry in Kenya that can be replicated in the other countries in the East Africa region.

In conclusion, this study seeks to demystify the normal assumption that a Strategic Environmental Assessment will replace Environmental and Social Impact Assessments by asserting that both environmental assessment tools are necessary for sustainable development. It is agreeable that the SEA is a better tool for planning as it approaches environmental issues from a broad, anticipatory, integrated, and regional perspective, and thus ultimately prevents rather than mitigates negative impacts of development