

Kenyan Flowers, Ethical Trade and the Question of Sustainable Development.

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Abstract: Sustainable development can not be meaningfully discussed today without considering the effects of economic globalisation, for which there is an increasing call to be regulated by a stronger ethical framework. Many sub-Saharan African countries face enormous challenges to make globalisation work for them and to achieve sustainable development. One recent success story in African agriculture is the Kenyan cut flower industry, which in many ways is representative for economic globalisation. Kenyan flower farms have also been at the forefront of embracing ethical trade. These characteristics make the Kenyan cut flower industry an ideal case study for this dissertation to explore the relationship between economic globalisation, ethical trade and the prospects for sustainable development. The dissertation discusses the Kenyan cut flower industry along the lines of social, environmental and economic aspects and considers the effects of ethical trading on sustainability. Overall, the discussion suggests that the industry makes a considerable contribution towards sustainable development in Kenya and that ethical trading has played a positive role in this favourable assessment. However, some important systemic features of the global cut flower value chain limit the potential of the cut flower industry and of ethical trading initiatives to instigate a more inclusive virtuous circle of sustainable development in Kenya.

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1 Introduction

It is now twenty years since the publication of the influential report of the World Commission on Environment and Development (1987) titled "Our Common Future", better known as the Brundtland report. Many things have changed since the publication of this report, and sustainable development is now mainstreamed across the development programmes of governments and major aid agencies. However, the marriage of economy and ecology as envisioned by the report has so far not been realized and most of the environmental and developmental challenges identified back then remain unchanged. In 2005 two landmark reports confirmed these challenges and highlighted some very worrisome negative trends. The Millennium Ecosystem Assessment (2005) finds that the world's ecosystems are in continuous decline and that approximately 60 percent of them are used unsustainably. The UN Millennium Project (2005) shows that progress in global poverty reduction has been painfully slow, and that at current rates the Millennium Development Goals will not be reached.

The question of sustainable development therefore remains as relevant as it was 20 years ago. But today this question cannot be meaningfully addressed without considering the effects of economic globalisation on the prospects for sustainable development. One of the main features of economic globalisation over the last two decades has been the liberalisation of the global trading regime and the resulting enormous growth of commodity chains spanning the globe. Now, after many years of free trade enthusiasm there is a growing recognition of the darker sides of globalisation (Stiglitz 2002; Weber et al. 2007) and some claim that globalisation may have already passed its peak (Abdelal and Segal 2007). One indicator of this growing unease is the

call for a stronger ethical framework for globalisation (World Commission on the Social Dimension of Globalization, 2004). This call has found its first powerful expression in the late 1990s in campaigns by NGOs and anti-globalisation activists who accused multi-national companies of unethical trading practices in developing countries (Klein 2000). These campaigns have resonated well with a trend towards ethical consumerism, which is becoming part of a northern urban life-style. Worry of media criticism and eager to exploit the trend towards ethical consumerism many multi-national companies and leading retailers have since opted for ethical trading initiatives. One prominent example of such an initiative is the United Nations Global Compact, which calls on leading companies to voluntarily adopt codes of practice covering human rights, labour, environment and anti-corruption aspects. However, whether this "ethical turn" is able to remedy some of the darker sides of economic globalisation remains a matter of empirical analysis.

In many ways the challenges for achieving sustainable development and making globalisation work for the poor (DFID 2000) are today greatest in Sub-Saharan Africa. Agriculture continues to be the most important economic sector in many sub-Saharan African countries (Raikes 1997) and the regions relation to the world economy is persistently shaped by agrofood commodities and minerals (Gibbon and Ponte 2005). Over the last two decades many African countries have turned to non-traditional agricultural exports reflecting their comparative advantage as a strategy for achieving growth (McCulloch and Ota 2002). One example of non-traditional agricultural exports which is considered a major success story in African agriculture is the Kenyan cut flower industry (Gabre-Madhin and Haggblade 2004). This industry, which in many ways is characteristic for economic globalisation, has experienced phenomenal growth

rates when the Kenyan economy as a whole was declining. Interestingly, the global cut flower industry and especially Kenyan producers have also been at the forefront of embracing ethical trading initiatives. These characteristics make the Kenyan cut flower industry an ideal case study for this dissertation to explore the relationship between economic globalisation, ethical trade and the prospects for sustainable development.

The dissertation is structured as follows. Section 2 reviews the literature on sustainable development and on ethical trade. Section 3 outlines the analytical framework informing the dissertation and the research methodology used. Section 4 introduces the case study by providing a factual description of the Kenyan cut flower industry. Section 5 then discusses the potential of the Kenyan cut flower industry for sustainable development and assesses the effects of ethical trade on sustainability. Finally, section 6 concludes.

2 Literature Review

The aim of this literature review is to provide an overview of the main discussions on the two theoretical concepts informing this dissertation: sustainable development and ethical trade. The literature review will explore the historical origin, the definition, the mainstream meaning and the main critiques of both concepts.

2.1 Sustainable Development

The historical origin of the concept of sustainability can be found in forestry. Hans Carl von Carlowitz, a nobleman from Saxony, Germany first referred to the concept in published form in his book *Sylvicultura Oeconomica* published in 1713 (Grober 1999). Concems about environmental constraints on development can also be found in the writings of the classical economists. Most notorious is Thomas Malthus with his *Essay on the Principle of Population*, first published in 1798 (Malthus 1914). The starting point of today's discussion on sustainable development is to be found in the 1960s. The International Institute for Sustainable development (IISD 2006) takes the publication of Rachel Carson's *Silent Spring* in 1962 (Carson 1965) as the beginning for its sustainable development timeline. Throughout the 1960s and 70s the environment-development debate was mostly directed towards conservation issues (UNESCO 1970), the effect of population growth on the environment (Hardin 1968; Ehrlich 1968) and the limits to growth posed by natural resources (Meadows et al. 1972). The first major international document to explicitly use the term "sustainable development" was the *World Conservation Strategy* published by the IUCN (1980).

Sustainable development was then put firmly into the centre stage of international politics by the publication of *Our Common Future*, a report prepared by the World Commission on Environment and Development (WCED 1987) under the chairmanship of the Norwegian Prime Minister Gro Harlem Brundtland. This document, often simply referred to as the *Brundtland report*, has provided today's widely accepted definition of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, p. 43). The Brundtland report is marked by a deep concern about the impacts of environmental degradation upon future economic growth and the prospects for poverty reduction. Sustainable development is mostly conceived by the report as a problem to be solved by governments, whilst the role of civil society is mainly seen in helping the public to make informed choices. In essence, the Brundtland report is an attempt to theoretically bring economy and ecology in harmony without significantly changing the global socio-economic order.

One direct international outcome of the Brundtland report was the call for a UN summit on environment and development, which was to be held in Rio de Janeiro in 1992. Building on the Brundtland report the Rio summit further elaborated the meaning of sustainable development. Agenda 21 (UNDSD 2004), the main policy document adopted by the Rio summit treats sustainable development under the two separate headings of *social and economic dimensions* and *conservation and management of resources for development*. By the time of the World Summit for Social Development held in Copenhagen in 1995, sustainable development was already understood as consisting of economic development, social development and environmental protection (United Nations 2000). The World Summit on Sustainable Development held in

Johannesburg in 2002 then takes the concept further and talks of three mutually reinforcing pillars of sustainable development consisting of economic development, social development and environmental protection (UNDSD 2004a). The Brundtland definition of sustainable development together with the three pillars concept as formulated by the Johannesburg summit constitute today's mainstream meaning of sustainable development.

Discussions on sustainable development have of course not been limited to the Brundtland report and the major UN conferences. More radical approaches to frame the environment and development problématique are being developed from a variety of perspectives such as ecodevelopment, deep-ecology, eco-socialism, bioregionalism, sustainable livelihoods and post-development. However, space does not allow here to cover the vast literature linked to these approaches. Instead, two well-established lines of critique of the mainstream approach to sustainable development shall be highlighted. The first line of critique calls for more conceptual clarity of sustainable development. Lélé (1991) for example criticises sustainable development for lacking a clear theoretical and analytical framework and for suffering from an absence of semantic and conceptual clarity. This absence, so Lélé (1991), puts sustainable development in danger of becoming just anther development catchphrase. A second line of critique calls for deep structural changes in the world economy if development is to become sustainable. Redclift (1987) for example argues that sustainable development is founded on contradictions because it draws on two opposed intellectual traditions. One, which is concerned with the limits that nature poses to human beings and another one, which is concerned with the potential for human material progress that is locked up in nature. For Redclift (1987), resolving these contradictions cannot be achieved without radical structural reform of the international economic system and a redefinition of development which clearly breaks with its current definition as economic growth.

Ethical trade has only recently entered the discussion on sustainable development. One major publication that refers to issues of ethical trade is the World Development Report 2003 published by the World Bank (2003). This report, titled *Sustainable Development in a Dynamic World*, is firmly committed to an agenda of economic globalisation. It approaches the question of sustainable development from an institutional economics perspective and frames the environmental and social sphere as part of a broader portfolio of assets that societies need to manage. The report calls for institutions for sustainable development that are able to align individual incentives with the public interest. One concrete form of market friendly institutional change that the report envisions is to induce firms to adopt socially and environmentally responsible behaviour. This is mainly to be achieved through voluntary standards, certification and performance reporting mechanisms all of which are part of the vocabulary of ethical trade.

2.2 Ethical Trade

Ethical trade has a relatively short history dating back to the mid 1990s, a period which was marked by a wave of criticism of multinational companies and their global trading practices (Klein 2000; Christian Aid 1996). Blowfield (1999) in a comprehensive review of ethical trade provides a widely accepted definition of the term. He suggests thinking of ethical trade "as a term that brings together a variety of approaches affecting trade in goods and services produced under conditions that are socially and/or environmentally as well as financially responsible" (Blowfield 1999, p.754). He divides

approaches to ethical trade into enterprise initiatives and labelling initiatives. Enterprise initiatives most often use codes of practice as an instrument to foster ethical trade whereas labelling initiatives are mostly independently managed certification programmes. Ethical trade should not to be equated with fair trade and a clear distinction needs to be made between them. The aim of ethical trade is usually to regulate global supply chains according to ethical minimum standards with regards to environmental protection and labour rights (Hughes 2004). The aim of fair trade, on the other hand, is usually a more fundamental transformation of global trading relationships in favour of local producers (Fridell 2006).

Most authors see the drivers behind the emergence of ethical trade as emanating either from globalisation or the realm of consumption. Barrientos (2000) for example argues that ethical trade represents a progressive outcome of globalisation. For her, ethical trade has potentially positive developmental impacts as it represents a limit to downward pressures on labour standards. Trends and developments in the realm of consumption like green and ethical consumerism are widely regarded as a key driving force behind ethical trade (Klein 2000, Crewe 2004). Hughes (2004) identifies the press, campaigners and supermarkets as the main driving forces behind ethical trade.

Notwithstanding its short history ethical trade has attracted its share of academic criticism. Most critical perspectives direct their critique at what they perceive as a lack of real participation by the South in ethical trading initiatives. Hughes (2001) accuses ethical trading initiatives of lacking genuine participation from the South in the establishment and monitoring of codes of practice. Another line of critique portrays ethical trade as a fig leave for multinational companies providing them with an easy

tool for shielding of criticism without making substantial changes to their business practices in the developing world. DuToit (2002) calls this the "ethics effect" of ethical trade. He presents a post-structuralist critique of ethical trade, calling it "a globalising technology of ethics" that allows for the operationalisation of Corporate Social Responsibility. One of the most troubling aspects of ethical trade for duToit (2002) is that it may simply normalize and regularize existing power relations through the creation of a depoliticizing and consensual discourse. A similar vein of critique is pursued by Freidberg (2003) who argues that ethical trade resembles a "neocolonial civilizing mission" that allows northern retailers to control their southern suppliers without absorbing the cost of compliance with new ethical trading standards.

Despite these critiques many authors believe that ethical trade can be a valuable tool to steer globalisation and make a positive contribution towards development (Heeks 2003; Barrientos 2000). The existence of several high level initiatives suggests that ethical trade is more than just a short lived public relations exercise. On an international level the Global Reporting Initiative, a UNEP-sponsored organisation, is currently developing auditable standards for environmental and social reporting. On a European level the Business Social Compliance Initiative (BSCI) is promoting ethical trade and in the United Kingdom a high profile example is the Ethical Trading Initiative (ETI). Such initiatives indicate that ethical trade may become the norm for many industries. Gereffi et al. (2001) even suggest that the 21st century may see voluntary certification schemes as the main response to global social and environmental problems.

The above literature review shows that there is already a substantial body of literature on ethical trade. What is however largely missing from the literature are, to the best of my knowledge, case studies that provide a systematic account of the effect of ethical trade on sustainable development in its three dimensions of economic development, social development and environmental protection. One of the aims of this dissertation is to contribute towards filling this gap in the academic literature on ethical trade.

3 Analytical Framework and Research Methodology

The analytical framework for this dissertation is given by the three pillars concept of sustainable development as outlined in the above literature review. Furthermore, the framework is broadly inspired by recent research on African agriculture using a global value chain approach (Gibbon and Ponte 2005). The research methodology adopted is one of case study analysis. The unit of analysis is the cut flower value chain spanning from Kenya to the European Union with a particular focus on its potential for sustainable development in Kenya. Data for this research is drawn from a wide range of sources, including primary and secondary ones. Most important to note are the Kenyan Horticultural Crops Development Agency and research linked to the UK's Department for International Development projects on Globalisation and Poverty (2000-2003) and on Ethical Trade in African Horticulture (2002-2004) (see www.gapresearch.org). The general focus for this research is provided by the following two research questions:

- 1 What is the potential of the cut flower industry for sustainable development in Kenya?, and
- 2 What are the effects of ethical trading initiatives on sustainable development?

4 Case Study: The Kenyan Cut Flower Industry

The cultivation of Kenyan flowers for export markets was initiated by European settlers in the 1960s (Hughes 2004). During the last two decades the production and export of Kenyan flowers have experienced phenomenal growth rates (see table 1). Floriculture is today the fastest-growing sector of the Kenyan economy and is after tea the second largest source of foreign exchange generating more than \$250 million a year (DFID 2007). The main types of flowers cultivated for export are roses, statice, alstroemeria and carnations (KFC 2007). The overwhelming majority of Kenyan flower exports are destined for the European Union with the Netherlands as the most important market followed by the UK and Germany (Hale and Opondo 2005).

Table 1: Export Volume and Value: 1980-2006 (Selected Years)

Year	Volume (Tons)	Value (Kshs. Millions)
1980	7422	227
1985	10,000	463
1990	14,425	940
1995	29,374	3,642
2000	38,757	8,650
2001	41,396	10,627
2002	52,106	14,792
2003	60,982	16,495
2004	70,666	18,719
2005	81,217	22,896
2006	86,480	23,560

Sources: Dolan et al. (2003) and HCDA statistics (available at www.hcda.or.ke).

The economic success of the Kenyan flower industry can be attributed to several factors. Bolo (2006) classifies the industry's key success factors into climatic, contextual, policy and infrastructural factors. The climatic conditions in Kenya are ideal

for floriculture and its location on the equator allows for year round production. The contextual success factors include the availability of agricultural land, fresh water and an unlimited supply of cheap labour. The policy factor is mainly characterized by the Kenyan government's non interference in the industry. The infrastructural success factor is given by the proximity of the major growing areas to Jomo Kenyatta International Airport in Nairobi. The most important area for flower production is around Lake Naivasha which is situated in Rift Valley province 80 km northwest of Nairobi (see figure 1).



Figure 1: Map of Kenya

Source: Google Earth

The structure of the Kenyan flower industry is characterized by an increasing tendency towards large scale flower operations. There are approximately 500 flower farms in Kenya but more than 60 percent of exports are attributable to only two dozen large-scale producers (Smith et al. 2004). The industry is an important source of employment

with estimates ranging from 40,000-50,000 (Hale and Opondo 2005) to 100,000 workers (DFID 2007) directly employed. As table 2 shows the employment provided by the industry is characterised by high levels of non-permanent work and female employment.

Table 2: Estimates of employment in Kenyanflower farms

Total employment	% temporary, seasonal, casual	% female
40,000 - 70,000	65%	75%

Source: Adapted from Smith et al. (2004)

In the mid-1990s the European public became increasingly concerned about working conditions and environmental impacts on flower farms in developing countries. Several NGOs in the Netherlands, Germany and the United Kingdom started flower campaigns which were met with strong media attention. This negative media exposure sent shock waves through the global cut flower value chain (Hughes 2004). At around the same time an increasingly demanding regulatory environment emerged in the European Union forcing retailers to take over more responsibility for their sourcing practices, one example being the 1990 UK food Safety Act (Dolan and Sutherland 2003). These factors are the main drivers behind a plethora of ethical trading initiatives which today are promoted by the global flower industry.

The Kenyan cut flower industry has been at the forefront of embracing ethical trading initiatives, both by adopting oversees initiatives and by developing its own programmes (Dolan and Opondo 2005). The most common starting point for ethical trade initiatives is the development of codes of practice regulating the social and environmental aspects of production (Blowfield 1999). Today a multiplicity of such codes is in use in the Kenyan cut flower industry to the point that the industry has become one of the world's

most codified agricultural sectors (Dolan et al. 2003). An overview of the most important codes currently in use in the Kenyan cut flower industry is given in table 3 and two examples of codes are reproduced in the Annex. However, despite this abundance of codes of practice critical reports about the social and environmental impacts of the Kenyan cut flower continue to surface which raises serious doubts about the effectiveness of ethical trading initiatives.

Table 3: Ethical trading codes in use in the Kenya cut flower industry

Company codes	UK supermarket codes	
	UK importer codes	
Northern sectoral codes	EUREP GAP	
	MPS (Milieu Programma Sierteelt) environmental	
	certification standard	
Southern sectoral codes	KFC (Kenya Flower Council)	
	FPEAK (Fresh Produce Exporters Association of	
	Kenya codes)	
	HEBI base code (Horticultural Ethical Business	
	Initiative)	
Independent codes	ETI Base Code (Ethical Trading Initiative)	
	International Code of Conduct for Cut Flowers	
	Max Havelaar Switzerland Criteria for Fairtrade Cut	
	Flowers	

Source: Adapted from Dolan and Opondo (2005)

5 Case Study Discussion

The case study description provides the starting point for a discussion of the Kenyan cut flower industry and its potential for sustainable development. The industry will be discussed in three sections along the lines of social, environmental and economic sustainability. Each section will conclude by considering the effects of ethical trading on sustainability.

5.1 Social Sustainability

The exact meaning of social sustainability is the aspect of sustainable development where there is least consensus to date. Most writers would however agree that social sustainability involves poverty reduction and the respect for labour rights. This section of the discussion is therefore structured along these two aspects.

5.1.1 Poverty Reduction

Poverty is widespread in Kenya. The 2004 Kenyan *Poverty Reduction Strategy Paper* (IMF 2005) states that income poverty in Kenya has risen from about 48.8 percent in 1990 to 55.4 percent in 2001. In total numbers this amounts to 17.1 million Kenyans living below the national poverty line in 2001. The non-income dimensions of poverty also worsened during the same period (IMF 2005). The geographical variations in the distribution and depth of poverty are very large as well on the regional level as on the district level (CBS 2003). Against this background of wide spread poverty understanding the contribution of the cut flower industry to poverty reduction is of major importance to Kenya.

No detailed economic study which singles out the effect of the flower industry on poverty reduction in Kenya could be found for this research. However, studies exist on the effect of the Kenyan export horticulture sector on poverty reduction. These studies can serve as a good proxy as the flower industry is the most successful horticultural sub-sector. McCulloch and Ota (2002) report the results of a household survey in which they attempt to establish the linkage between export horticulture and poverty reduction in Kenya. They present evidence that households involved in export horticulture have a significantly lower incidence of poverty, especially in rural areas, than households not involved in export horticulture. They therefore suggest that further growth of the export horticulture sector in Kenya would have a positive impact on poverty reduction. Also the Kenya poverty mapping (CBS 2003) based on 1999 Population and Housing Census data suggests that people living in proximity to the cut flower industry around Lake Naivasha tend to be less poor (see Rift Valley poverty map in the Annex). The poverty incidence around Naivasha is between 30-40 % whereas at a national level it is well above 50 % (IMF 2005). At an aggregate level therefore the data suggest that the export horticulture sector as a whole and the floriculture sector in particular clearly contribute to poverty reduction in Kenya.

This picture also seems to hold true on the disaggregate level of individual perception of employees in the horticulture sector. Dolan and Sutherland (2003) report data from a field study in 2001 where the majority of workers interviewed felt that working in the horticulture industry has made a positive impact on their lives. However these data need to be qualified and put into context. The Kenya flower industry mostly depends on migrant and female labour (Dolan et al. 2003). These workers are pushed away from

their homes due to increasing land fragmentation and high unemployment. Dolan and Sutherland (2003) point out that it is against these dire circumstances that employment in the flower industry is highly valued by many and that a number of shortcomings exist in horticultural employment. With regards to its capacity for poverty reduction, so Dolan and Sutherland (2003), the Kenyan horticultural sector is limited by its use of high levels of non-permanent work arrangements which implies a situation of income and employment insecurity for many workers in the industry.

The vulnerability of temporary workers in the Kenya horticulture industry is highlighted by several authors and studies. Barrientos et al. (2005) point out that insecure workers in the horticultural industry are highly vulnerable to poverty, a feature which is especially salient for temporary female labour which often has to combine productive and reproductive roles. Smith et al. (2004) provide figures which show that 65 percent of the workforce in the Kenya flower industry is temporary, seasonal or casual. One factor which could explain the high prevalence of temporary work arrangements is the seasonality of the flower business with annual peaks of production around Christmas, Valentine's Day, Easter and Mother's Day. However, cut flower production is a year round business as the following chart from the Kenyan Horticultural Crops Development Agency demonstrates.

EXPORT VOLUME TRENDS 2006

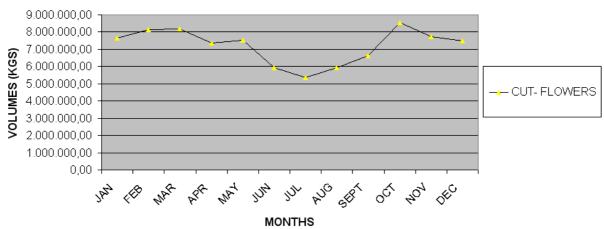


Figure 2: Kenyan cut flower export volumes 2006

Source: Annual statistics Horticultural Crops Development Agency (<u>www.hcda.or.ke</u>)

Although figure 2 shows important seasonal variations in the volume of flower production throughout the year, these variations are not big enough to provide a full explanation for the existence of a 65 percent temporary workforce. Barrientos et al. (2005) relate that although many workers in the Kenya horticulture industry are employed most of the year and repeatedly work for the same employer they are treated as temporary workforce. The real impetus behind the use of temporary labour seems to be the industry's attempt to reduce labour costs, which despite modern production methods still accounts for 50-60 percent of farm costs (Barrientos et al. 2005). The ability of Kenyan flower growers to offer more secure and long term work is to a great extent shaped by competitive pressures intrinsic to the global cut flower value chain. Dolan and Sutherland (2003) see several factors creating systematic downward pressures for labour costs in producing countries. The most important factors being fierce price competition at the retail level, which is forcing the whole value chain to become leaner, and just-in-time purchasing practices which provide a competitive edge to producers with a highly flexible workforce.

5.1.2 Labour Rights

The labour rights situation on Kenyan flower farms has long been an issue for NGO campaigning (Christian Aid 2001) and media attention (BBC 2003). As the majority of the workforce on Kenyan flower farms is female (75% according to Smith et al. 2004), many labour rights issues have a specifically gendered dimension. Barrientos et al. (2005) point out that gender segregation is a common feature in the Kenyan horticulture industry, with women mainly occupying insecure and temporary positions and men being concentrated in more permanent and senior positions. According to Barrientos et al. (2005) two factors account for the high levels of female employment in African horticulture. The first factor is that women are perceived as having better "skills" and "dexterity" to handle delicate produce like flowers. A perception, which the authors point out, is largely socially constructed. The second factor is that women are seen as docile and as more ready to accept poor working conditions than their male counterparts.

As pointed out in the case study description in section 4 the flower industry has introduced a multiplicity of social codes since the mid 1990s to address labour rights abuses. Dolan et al. (2003) present empirical data from a field study in Kenya using a participatory research methodology. For this study they collected workers accounts in 100-semi-structured interviews and 13 in-depth focus group discussions on five Kenyan farms and packhouses applying social codes of conduct. They found a number of severe problems facing Kenyan flower farm workers, particularly women, ranging from sexual harassment to compulsory overtime and job insecurity. However, they also report areas of improvement like health and safety practices and state that there is some cause for optimism regarding further labour rights improvements. Nevertheless, a number of

labour rights issues seem to stubbornly persist as a report by the UK's Ethical Trade Initiative (ETI 2005) on labour practices on Kenyan flower farms shows. The report presents the results of an ETI delegation's visit to Kenyan flower farms which are supplying ETI member companies in the United Kingdom. According to the report (ETI 2005, p.8) the labour rights issues facing workers on Kenyan farms are the following:

- Low pay
- Lack of adequate housing
- Health and safety issues, in particular with regard to pesticide spraying
- Sexual harassment, in particular by supervisors
- Lack of severance pay
- Short-term contracts
- Lack of maternity leave

- Unfair dismissal
- Excessive overtime
- Deductions from pay
- Lack of freedom of association
- Lack of contracts
- Social security payments not met
- Abusive supervisors

The capacity of the Kenyan flower industry to treat its workforce with respect of established labour rights and social codes seems to be limited by several factors, some internal to the industry and some external resulting from systemic features of the value chain. The issues of abusive supervisors and sexual harassment points to severe management deficiencies internal to the industry. These problems, particularly that of sexual harassment could be remedied by a significant increase of female personnel in more senior positions. Many of the labour rights issues are linked to the prevalence of temporary employment arrangements, like the lack of maternity leave, lack of severance pay and unfair dismissal. The prevalence of temporary labour in turn is the result of competitive pressures in the global cut flower value chain, as pointed out in the previous section. Hale and Opondo (2005) therefore see the buyer-driven dynamics of the cut flower chain, which encourages flexible production (just-in-time) and flexible

employment methods (informal, casual and seasonal labour) as systematically undermining attempts to improve the labour rights situation.

5.1.3 The Effects of Ethical Trade on Social Sustainability

The above discussion shows that employment created in the Kenya flower industry has positive consequences for workers, but that there are also some serious shortcomings within the industry especially the high percentage of temporary work arrangements. The Kenyan cut flower industry has adopted ethical trading principles in the form of social codes of practices since the mid-1990s and a multiplicity of own industry codes and overseas buyer codes are currently in use (Dolan and Opondo 2005). This section will examine to what extent current ethical trading practices in the Kenya flower industry are contributing to the social sustainability of the flower industry.

With regards to poverty reduction the key element of many codes of conduct is the stipulation of the payment of living wages for the workforce. Ethical trade, in contrast to fair trade, does not attempt to significantly raise employee wages but rather aims at assuring that wage payments follow national legislation and are not below the national minimum wage. Smith et al. (2004) report in a study on ethical trade in African horticulture that wage levels in the Kenya cut flower industry exceed statutory minimum wages. However, they also point out that most workers covered by their field study were living in precarious economic circumstances. An observation which is also confirmed by Hughes (2001). While codes of conduct therefore seem to be successful in ensuring the payment of the national minimum wage, the question remains whether the national minimum wage really constitutes a *living wage*.

With regards to labour rights Dolan et al. (2003) report that social codes have raised the standards for permanent workers in the Kenya cut flower industry. They point out however that these codes usually overlook workers in non-permanent employment arrangements. This constitutes a serious weakness given that the majority of the workforce finds itself in non-permanent employment arrangements. For codes of conduct to significantly improve the labour rights situation in the Kenya flower industry it will be necessary that they explicitly apply to the entire workforce.

A third problem, besides the definition of what constitutes a living wage and the coverage of social codes is the way ethical codes are drawn up, implemented and audited. Several authors point out that the process is driven by a northern agenda and lacks real participation of the workforce these codes are intended to benefit (Hughes 2001 and 2004; Dolan and Opondo 2005; Smith et al. 2004). However, the implementation of social codes has also been the starting point for positive southern initiatives like the Kenyan Horticultural Ethical Business Initiative (HEBI) and provides a base-line from which constructive local and international criticism can be formulated.

To summarise ethical trading has a positive effect on social sustainability but is greatly limited by two factors. First, by its inability to address systemic issues inherent to the global cut flower value chain. Second, by its lack of real participation by the workforce and other stakeholders in drawing up codes and in monitoring and auditing these codes. A way forward could be the adoption of multi-stakeholder processes and participatory social auditing, as for example proposed by Dolan and Opondo (2005). Furthermore, a genuine willingness on behalf of northern buyers and retailers to address their own

buying practices will be needed if ethical trade is to be equated with socially sustainable trade.

5.2 Environmental Sustainability

In order to discuss the environmental sustainability of the Kenyan cut flower trade it is useful to adopt a spatial approach to environmental effects that distinguishes between local, national and global environmental impacts. It is of course not always possible to separate the impacts neatly between the three levels. Wetland destruction, for example, that threatens local water resources could also undermine biodiversity of global significance. Nevertheless, such a spatial classification is helpful in understanding the main environmental impacts of the Kenyan cut flower value chain.

5.2.1 Local Environmental Impacts

On the local level the environmental impact of the Kenyan cut flower industry is concentrated around Lake Naivasha, which due to its climatic and geographic conditions has become the centre of the Kenyan flower industry. Lake Naivasha and its catchment is an area of great environmental sensitivity. It is a designated Ramsar site and home to important wildlife and bird populations. The beauties of the lake and its ecological and hydrological characteristics have attracted the attention of colonial writers and scientists. The lake has a written history dating back to the 19th century and there exists an abundance of scientific ecosystem research on Lake Naivasha (Hubble and Harper 2001). More recently journalistic accounts on the ecological threats to Lake Naivasha and its looming collapse have been flourishing (Mwakugu 2003; New Vision

2003). This abundance of written material makes Lake Naivasha an ideal case for understanding the local level impacts of the Kenyan cut flower industry.

The integration of the Naivasha area into the global cut flower value chain over the last two decades has had a profound impact on the lake and its surrounding landscapes. Becht and Harper (2002) report that the nature of agriculture close to Lake Naivasha has changed substantially over this period. Stock-rearing, ranching and sisal-cultivation have been mainly replaced by irrigated flori- and horticulture. The land used to cultivate these non-traditional export crops today is approximately 4,000 ha. This dramatic change in land use patterns was accompanied by a large rise in population both of which have increased the pressures on Lake Naivasha and the surrounding environmental resources. Becht et al. (2005) summarize today's environmental stresses on Lake Naivasha as the following: water abstraction, agrochemical and sewage pollution, destruction of riparian habitat (papyrus), over-fishing, and erosion/siltation. The two main lake stresses are water abstraction and agrochemical pollution, both of which are frequently attributed to the cut flower industry.

Water abstraction for flori- and horticulture irrigation has significantly reduced the lake level since the 1980s (Becht and Harper 2002). A declining lake level is particularly worrisome for the local fishermen who depend on the lake for their livelihood. Irrigation is, however, not the sole culprit of declining water levels, as there is also significant abstraction for potable water and for the Olkaria Geothermal Power Station, South of Naivasha. Furthermore, the water level of Lake Naivasha is subject to significant variations due to rainfall and periods of drought. Verschuren et al. (2000) have conducted research on the lake level covering the past 1000 years and have

identified several periods during which the lake went almost dry without human interference. The size fluctuations of Lake Naivasha also constitutes the origin of its name which stems from the Massai "e-na-ipòsh-à" which means "that which moves to and fro" (Hubble and Harper 2001, p. 244). Although the historic records show that the lake level depends more on climatic changes than on human interference, water abstraction nevertheless constitutes a serious threat to the ecological balance of Lake Naivasha. The question facing the flori- and horticulture industry today is what level of water abstraction would constitute a sustainable or safe yield. Although it is not yet clear what exactly would constitute a sustainable level of water abstraction, there seems to be a scientific consensus that current levels do not constitute a sustainable yield (Mavuti and Harper 2005).

Agrochemical pollution of Lake Naivasha is often linked to the pesticide use in the flori-and horticulture industry around Lake Naivasha (New Vision 2003). Becht et al. (2005), however, point out that the threat to the lake from agrochemicals used in the flori- and horticulture industry is limited due to the physical conditions surrounding the lake. Also recent changes to more environmentally-friendly pest control and improvements in irrigation management have further reduced the impact of the industry on the lake. Becht et al. (2005) attribute much of the current pesticide load which pollutes the lake to rain-fed agriculture practised in the upper catchment area of Lake Naivasha. Another factor not linked to the industry which greatly threatens the ecological balance of the lake is the introduction of exotic fishes (Hickley et al. 2004). A narrow focus on the agrochemical pollution through the flori- and horticulture industry thus clearly hides the bigger picture of the multiple threats facing Lake Naivasha. Everard and Harper (2002) therefore rightly remark that sustainable

development of Lake Naivasha must be conceived at the whole catchment scale if it is to be successful.

Despite the many threats to the ecological balance of Lake Naivasha, its overall condition is still reasonably healthy and water quality is within acceptable limits. Becht et al. (2005) are positive about the future of Lake Naivasha and state that: "All the necessary conditions are in place for Lake Naivasha to become one of the first basins in Africa with a lake managed for its sustainable use" (ibid., p. 297). A multi-stakeholder management programme - the Lake Naivasha Management Plan – which benefits from the support of the flori- and horticulture industry is currently in place to mediate competing interests in the use of Lake Naivasha and to work towards its sustainable use. Overall, it seems that although the flower industry has contributed to some of the environmental problems facing Lake Naivasha it has also helped to build up the institutional capacity for a sustainable future use of the lake.

5.2.2 National Environmental Impacts

On a national level the environmental impacts of the Kenyan cut flower industry are more difficult to establish. No studies could be identified by the author which would attempt to analyse the overall impact of the cut flower industry on the environmental situation in Kenya. However, one impact of the cut flower industry on the Kenyan environment can be inferred by its attraction of a large migrant labour force. Already in 1987 the Brundtland report noted that the protection of wildlife in Kenya is facing severe difficulties by population growth and the resulting pressures on protected areas by invading farmers (WCED 1987, p.153). The World Bank's 2003 Development Report on Sustainable Development (World Bank 2003) identifies agricultural

intensification and outmigration of fragile areas as a key strategy to reduce pressures on biodiversity. By attracting a large agricultural workforce from rural areas in Kenya the cut flower industry is likely to relieve pressures on some protected and fragile areas. The extent of this impact is not known. However, it is reasonable to assume that overall the outmigration encouraged by the flori- and horticulture industry has a significant positive impact on conservation efforts in Kenya.

5.2.3 Global Environmental Impacts

The transcontinental trade in flowers has become possible due to the availability of cheap airfreight and cooling techniques, which allow for an uninterrupted cool-chain stretching from Lake Naivasha to the point of sale in Europe. Both, airfreight and cooling techniques are highly energy intensive components without which the Kenyan cut flower industry could not exist. On a global level therefore the environmental impact of the Kenyan cut flower industry is likely to be a function of resource efficiency and CO² output. The question then is whether producing flowers in Kenya and airfreighting them to Europe is more or less resource and CO² intensive than producing them in places closer to the European consumer. The more fundamental value-based question of whether European consumers really need to gratify their loved ones constantly with flowers as the retailers' advertising efforts are trying to convince us shall not be considered here.

Recent debates on the CO² impact of global agricultural supply chains have focused on the concept of food miles. In its simplest formulation the food miles concept measures the distance that food travels from the farm to the consumer, implying that shorter distances are better for the environment. In a major study on the validity of food miles as an indicator of sustainable development the UK's Department of Environment, Food, and Rural Affairs (DEFRA 2005) concludes that a single indicator based only on distance is not a valid indicator, but that other factors such as energy intensity of production, mode of transport and total CO² emissions need to be an integral part of the food miles concept. Concerning the mode of transport the report clearly identifies air transport as having the highest CO² emissions per tonne and as being the most damaging for the global climate.

The food miles debate has not gone by unnoticed by major European retailers, always anxious of consumer criticism of their retailing practices. Sainsbury, one of the UK's largest food retailers and World Flowers, the UK's market leader in the supply of cut flowers have recently commissioned a food miles study on cut flowers by Cranfield university. The study (Williams 2007) compares the energy intensity and total CO² emissions of the production of 12,000 cut stem roses at one production centre in Kenya and in the Netherlands. The results of the study are clear and quite surprising (see table 4). The total carbon emissions of Kenyan roses consumed in the UK amount to just 17 percent of the carbon emissions of comparable Dutch roses according to this study. However, the results of the study should be interpreted with some caution given that fact that powerful commercial interests in the sale of Kenyan cut flowers are behind the organisations who have commissioned the study. World Flowers, according to its own website, has special trading arrangements with cut flower producers in Kenya (see www.world-flowers.co.uk).

Table 4: Comparison of impacts for the production of 12,000 cut stem Kenyan and Dutch roses

	Kenyan	Dutch
Climate impact	2,400 kg CO ² e (no altitude	$37,000 \text{ kg CO}^2 \text{ e}$
	impact)	
	6,200 kg CO ² e (with altitude	
	impact)	
Most carbon intensive stages	Air Fright (73-89% of climate	Heating and lighting of
	impact)	greenhouses (99% of
		climate impact)
Other key differences	Geothermal source for energy	Fossil intensive heating
	use & almost double the yield	and lighting, and just
	per unit area	over half the Kenyan
		yield rate

Source: UK Energy Research Centre (2007) based on Williams (2007).

Notwithstanding the clear results of the study, the debate on the climate impact of cut flowers airfreighted from Africa to Europe is likely to continue in the future. European cut flower producers might find ways of reducing the climate impact of their production and customers might be convinced of buying seasonal flowers for which there is less need of greenhouses. The carbon impact of air fright, however, will remain difficult to mitigate. According to climate change campaigner George Monbiot (2007) it is unlikely that there is a "technofix" for reducing CO² emissions of aviation any time soon. Monbiot therefore sees no way of reconciling the growth in aviation and the need to tackle climate change. For the moment, however, based on the above study the global environmental impact of Kenyan cut flower production seems to be more benign than alternative production in Europe.

5.2.4 The Effects of Ethical Trade on Environmental Sustainability

Ethical trading initiatives are mainly concerned with environmental impacts at the local level of the site of production. Here it seems that the various voluntary codes of practice adopted by the flower producers in Lake Naivasha are having a positive impact. Many of these codes regulate the use of water and agrochemicals on the flowers farms. The importance attached to these codes by European buyers seems to have greatly contributed to create an enabling environment for local initiatives to protect Lake Naivasha (Becht et al. 2005). An important limitation of ethical trade to improve the local environmental situation is given by the fierce competition to which Kenyan producers are subjected. The same European buyers who are promoting ethical trade are also exerting systematic pressures to drive down prices. As environmental protection has its costs, Kenyan producers risk loosing their competitive price advantage if they start investing more heavily in environmental protection.

National environmental impacts of the cut flower industry have so far not come into the orbit of ethical trade initiatives. As the above discussions shows there is also no need at the moment for this to change. The great absent in most ethical trading initiatives so far are global environmental aspects. The global environmental impact of the cut flower trade is however likely to dominate future discussions on the environmental performance of the industry. Overall, the above discussion suggests that the environmental impact of the Kenyan cut flower production is not a cause of major concern at this point in time. Ethical trading initiatives, where they have been implemented, have been a driver of positive environmental change in the Kenyan cut flower industry.

5.3 Economic Sustainability

The economic success of the Kenyan cut flower industry is partly due to its natural competitive advantage based on a favourable climate and the availability of cheap land and labour. These factors are rather static and will continue to benefit the industry in the future. Threats to the economic sustainability of the industry are likely to emanate from other more variable factors. The most important variable factor is linked to the future market prospects for Kenyan flowers in the European Union which is its main market. A second important factor, which is of great importance for the profitability of the flower industry and its impact on wider economic development in Kenya, is the governance structure of the global cut flower value chain. The following will analyse these two factors and will then discuss whether ethical trading initiatives are positively contributing towards the economic sustainability of the Kenyan cut flower industry.

5.3.1 Market Prospects

Over 95 percent of the Kenyan flower production is destined for the European Union (Bolo 2006). Developments in the European market are therefore decisive for the future growth prospects of the Kenyan cut flower industry. A recent market survey by the Centre for the Promotion of Imports from Developing Countries (CBI 2005) found that total cut flower consumption was relatively stable in the EU between 2002 and 2004. According to the same study most of the larger European markets including Germany, France, Italy and the Netherlands show clear signs of market saturation. The exception to this is the United Kingdom where the consumption of cut flowers is still increasing. This market is of special importance for Kenyan producers as the UK is the second largest importer of Kenyan flowers in the EU (Hale and Opondo 2005). Another

important aspect of the market prospects for Kenyan flowers is the development of the international price for cut flowers, which is illustrated in figure 3. Since the early 1990s the international price for cut flowers shows a clear upward trend. This is a remarkably better price performance than for most of the other Kenyan agricultural export commodities. The international price for coffee, for example has significantly declined over the same period (Daviron and Ponte 2005; Oxfam 2002). However, further growth in the global production capacity for cut flowers, partly resulting from export oriented policies currently promoted by the International Financial Institutions in many developing countries, could have a depressing effect on the world price for cut flowers in the future.

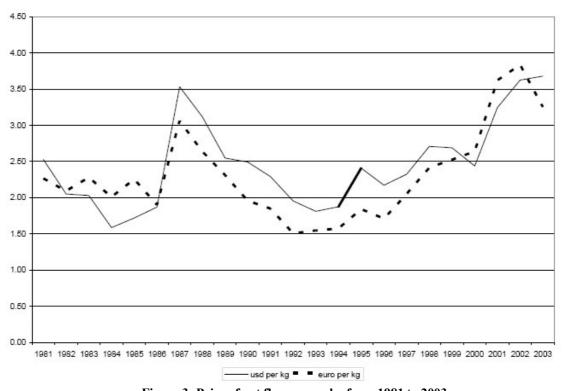


Figure 3: Price of cut flowers per kg from 1981 to 2003

Source: Wijnands (2005) based on data from HCDA

One significant threat to the market prospects for Kenyan flowers in the European Union stems from the phasing out of the Lomé IV trade agreement between the EU and ACP (African, Caribbean and Pacific) developing countries by the end of 2007. Bolo (2006) sees the preferential market access to the EU provided under the Lomé IV Convention as one of the key success factors in the development of the Kenyan cut flower industry. The Lomé IV Convention is being replaced by the Cotonou Economic Partnership Agreement (EPA), which was signed in 2001 and will become effective at the beginning of 2008. Although the details are still being negotiated Kenya is likely to be classified as non-LDC (Least Developed Countries) and loose some of the trade benefits it enjoyed under the Lomé IV trade agreements. Kenyan flower producers are expected to face strong competition from new producers in Ethiopia, Uganda and Tanzania, all of which will still be classified as LDCs under the new trade agreement (Bolo 2006). The total reliance on the European market clearly represents a potential threat for the economic sustainability of the Kenyan cut flower industry. Overall however, the market prospects for the near future can still be considered positive.

5.3.2 Governance Structure of the Global Cut Flower Value Chain

In the 1990s Gereffi and others developed an analytical framework called "global commodity chains" (Gereffi and Korzeniewicz 1994). This framework was primarily developed to analyse industrial commodity chains and was situated within a political economy of development perspective (Raikes et al. 2000). Since then the concept has been further developed and broadened and is now often referred to as global value chain approach (Gereffi and Kaplinsky 2001). This approach has been shown to be particularly useful for understanding the developmental impact of recent changes in African export agriculture (Daviron and Gibbon 2002; Gibbon and Ponte 2005). Central

to the global value chain approach is its conceptualization of value chain governance. Gibbon and Ponte (2005) define governance in global value chains as "the process of achieving a certain functional division of labour along the chain – resulting in specific allocations of resources and distributions of gains" (ibid., p.163). The main concepts of chain governance which are used to analyse the distributional aspects of global value chains are: buyer-drivenness/producer-drivenness, upgrading/downgrading, and inclusion/exclusion. The following will shortly introduce each concept and discuss it in relation to the cut flower value chain spanning from Kenya to the European Union.

The first level of analysis of value chain governance usually looks at whether a global value chain is buyer driven or producer driven. Buyer-driven value chains are characteristic of labour intensive industries were the chain coordination is mainly undertaken by buyers. Producer-driven value chains are characteristic of technology intensive industries were producers play the key role in chain coordination. The last ten to twenty years have seen a significant trend towards buyer-drivenness for most of Africa's agricultural and horticultural exports (Gibbon and Ponte 2005). The Kenya-European Union cut flower value chain and particularly the Kenya-UK trade is a case in point (Hale and Opondo 2005). Kaplinsky (2000) observes that in buyer-driven value chains the primary economic rents are increasingly to be found in areas downstream of production, like marketing and retailing. This observation holds true for the Kenya-EU cut flower value chain, as can be deducted from table 5. The primary economic rent in the cut flower chain is clearly located on the retail level. Besides the unfavourable distribution of economic rent in buyer-driven value chains, they are also characteristic of buyers constantly seeking new sources of supply (Dolan and Humphrey 2001). Cut

flowers producers in Kenya are therefore fearful of being replaced by other producers if they do not accept the terms of trade imposed by European buyers.

Table 5: Share of costs in % of retail purchasing price of Kenyan flowers

	Dutch auction to	Direct to German	UK direct
	German market	market (stems)	chain
	(stems)		(bouquets)
Producer's share	38	45	57
Air freight	18	19	24
Marketing costs	44	36	20
Purchase price retail	100	100	100
Consumer price	214	214	235

Source: Wijnands (2005, p. 51)

The concept of upgrading is used in global value chain analysis to examine the possibilities for producers to move up a particular value chain, and thus to take over economically more rewarding functions within the value chain. The concept of downgrading refers to the opposite move within a particular value chain leading to a position of increasing marginalization for the producer (Gibbon and Ponte 2005). The global cut flower value chain offers opportunities for upgrading in the form of post-harvest processing, product differentiation and innovation. There are some examples of Kenyan cut flower producers who have successfully taken over packaging, labelling and product innovation functions. Gibbon and Ponte (2005) cite the Kenyan company Homegrown, which is operating its own freight flights to the UK as one successful example of upgrading. Table 5 above also suggests that Kenyan producers are able to get a significantly better deal if they switch to more value added products like flower bouquets. Although the possibilities for upgrading are limited by the buyer-driven

nature of the global cut flower value chain, there clearly are some significant opportunities for Kenyan producers to exploit. Certainly, the potential for upgrading is better than for more traditional Kenyan export crops like coffee and tea (Raikes and Gibbon 2000).

The concepts of inclusion and exclusion in global value chain analysis are used to identify which actors are able to participate in a particular value chain and which ones are not (Gibbon and Ponte 2005). Over the last decade the Kenyan cut flower industry and indeed the Kenyan horticultural sector as a whole have shown clear signs of concentration of a few larger companies at the expense of smaller producers (Dolan and Humphrey 2001). Today the industry is becoming more capital intensive and inclusion in the cut flower value chain is contingent upon meeting the stringent requirements of northern buyers. Under these circumstances smallholders find it extremely difficult to participate in this lucrative market and are increasingly excluded from the global cut flower value chain.

5.3.3 The Effects of Ethical Trade on Economic Sustainability

In many ways ethical trade has become an entry requirement for the global cut flower chain, as can be deducted from the multiplicity of codes of practice which are promoted by northern buyers. The buyer-driven governance structure of the global cut flower value chain does not leave much choice to Kenyan producers whether to adopt ethical trading or not. Northern buyers can use decisions about inclusion or exclusion in the value chain to ensure compliance. The adoption of ethical trading by Kenyan producers therefore is only assuring the continued participation in the global cut flower value chain but does not significantly improve market prospects.

One important aspect of the effects of ethical trade on the economic sustainability of the Kenyan cut flower industry is an analysis of the cost of compliance and its distribution among the participants in the value chain. Collinson (2001) analysed the cost of compliance with the Kenya Flower Council code of practice for five Kenyan flower producers. He estimates that the cost of compliance constitutes less than 1% of turn over for these producers and that the compliance cost for Northern buyers is zero. However, Collinson might have underestimated total compliance cost as there is currently a multiplicity of codes in use on Kenyan flower farms resulting in duplication of work and costs for producers (ETI 2005). What is however clear from Collinson's analysis and other studies of ethical trade in African export agriculture (duToit 2002, Freidberg 2003) is that the cost of compliance for ethical trade is passed down the supply chain to the producers. In the final instance it is likely that they in turn will push their costs down to the workers at the bottom of the global cut flower value chain.

From a perspective of economic sustainability ethical trade mainly represents a convenient and inexpensive tool for northern buyers to increase their influence over their suppliers in the South. Barrientos et al. (2003) note that ethical trading helps northern buyers to avoid adverse publicity in their home markets and to increase quality in the supply chain by setting strict quality standards. The main effect of ethical trade for Kenyan producers is that it limits the potential for inclusion in the cut flower value chain as it raises the bar for participation. A positive economic aspect of ethical trading is that it hastens the adoption of European best business practice and promotes the creation of a Kenyan entrepreneurial class aware of environmental and social dimensions of business.

6 Conclusion

The rapid expansion of the Kenyan cut flower industry has made a profound impact on the lives of tens of thousands of people and has decidedly drawn the landscapes surrounding Lake Naivasha and other flower growing areas into the ambit of globalisation. The three pillars concept of sustainable development has proved to be a useful analytical tool for exploring the multiple impacts instigated by the cut flower value chain spanning from Kenya to the European Union. Overall, the above discussion suggests that the trade in cut flowers makes a considerable contribution towards sustainable development in Kenya and that the country should seek to further its expansion. This said, however, there are some important limitations. The capacity of the cut flower industry for enhancing social-well-being is greatly limited by its predominant use of temporary work arrangements. The reliance on air freight and the potential overuse of local resources, although not yet at critical levels, constitute important limitations from an environmental perspective. The positive economic impacts of the industry are limited by its over-dependence on European markets and by the buyer-driven nature of the global cut flower value chain. It remains to be seen to what extent the industry will be able to overcome these limitations and to initiate a more inclusive virtuous circle of sustainable development in Kenya.

The multiplicity of ethical trading initiatives in the Kenyan cut flower industry certainly has played an important role in the favourable assessment of the industry's performance with regards to sustainable development. The endorsement of ethical trade by many actors in the global flower value chain must be seen as an implicit acknowledgement that unregulated free trade is not conducive to sustainable development. Given weak

state capacity and lenient environmental and social regulation in many developing countries ethical trade is an important alternative for remedying some of the negative impacts of global supply chains in the South. However, this form of global private interest regulation also has important shortcomings. Most importantly it fails to address systemic issues linked to power imbalances in global value chains. Ethical trade most often requires changes in the South and leaves the position of northern buyers unchallenged. Furthermore, ethical trade usually has a narrow focus on the environmental impacts at the site of production and does not address wider externalities linked to the product lifecycle, total energy use and consumption. Future research and NGO campaigns should focus on these systemic issues in global value chains and highlight the full cost of doing unethical business in the South. If the agenda of ethical trade is successfully widened to include these issues, then ethical trade could become an important driver for solving the question of sustainable development and achieving the marriage of economy and ecology as envisioned by the Brundtland report twenty years ago.

References

- Abdelal, R. and Segal, A. (2007) "Has Globalization Passed Its Peak?", *Foreign Affairs*, 86(1): 103-114.
- Barrientos, S. (2000) "Globalisation and Ethical Trade: Assessing Implications for Development", *Journal of International Development*, 12: 559-70.
- Barrientos, S., Dolan, C. and Tallontire, A. (2003) "A Gendered Value Chain Approach to Codes of Conduct in African Horticulture", *World Development*, 31 (9): 1511-26.
- Barrientos, S., Kritzinger, A., Opondo, M. and Smith, S. (2005) "Gender Work and Vulnerability in African Horticulture", *IDS Bulletin*, 36(2): 74-79, Brighton: Institute of Development Studies.
- BBC (2003) "Concerns Grow Over Flower Farms", *BBC One Real Story*, 12 May, news.bbc.co.uk/1/hi/programmes/real_story/3020329.stm, accessed 25 August 2007.
- Becht, R. and Harper, D. (2002) "Towards an Understanding of Human Impact Upon the Hydrology of Lake Naivasha, Kenya", *Hydrobiologia*, 488: 1–11.
- Becht, R., Odada, E.O and Higgins, S. (2005) "Lake Naivasha: Experience and Lessons Learned Brief", in *Lake Basin Management Initiative: Experience and Lessons Learned Briefs*, Kusatsu: International Lake Environment committee Foundation (ILEC), pp. 277-298. Available at www.iwlearn.net/publications/ll/lakenaivasha 2005.pdf.
- Blowfield, M. (1999) "Ethical Trade: a Review of Developments and Issues", *Third World Quarterly*, 20: 753-70.

- Bolo, M. (2006) Knowledge, Technology and Growth: The Lake Naivasha Cut Flower

 Cluster in Kenya. World Bank Institute Africa Cluster Case Study. World Bank,

 Washington, D.C. (draft).
- Carson, R. (1965) Silent Spring, London: Penguin Books.
- CBI (2005) *EU Market Survey 2005. Cut Flowers and Foliage*, CBI Centre for Promotion of Imports from Developing Countries, Rotterdam, The Netherlands.

 Available at www.adexperu.org.pe/CBI/eu market survey ct flow.pdf.
- CBS (Central Bureau of Statistics) (2003) *Geographic Dimensions of Well-Being in Kenya: Where are the Poor? From Districts to Location*, Ministry of Planning and National Development, Nairobi, Kenya. Available at http://www.worldbank.org/research/povertymaps/kenya.
- Christian Aid (1996) The Global Supermarket, London: Christian Aid.
- Christian Aid (2001) "The Ethical Trading Initiative", christian-adi.org.uk/campaign/supermar/ethicalt.pdf, accessed 20 July 2007.
- Collinson, C. (2001) "The Business Cost of Ethical Supply Chain Management: Kenyan Flower Industry Case Study", NRI Report No.2607, Chatham, UK: Natural Resource Institute.
- Crewe, L. (2004) "Unravelling Fashion's Commodity Chain", in Hughes, A. and Reimer, S. (eds.) *Geographies of Commodity Chains*, London: Routledge.
- Daviron, B. and Gibbon, P. (2002) "Global Commodity Chains and African Export Agriculture", *Journal of Agrarian Change*, 2(2): 137-161.
- Daviron, B. and Ponte, S. (2005) *The Coffee Paradox: Global Markets, Commodity*Trade and the Elusive Promise of Development, London: Zed Books.
- DEFRA (2005) The Validity of Food Miles as an Indicator of Sustainable

 Development. Final Report for DEFRA by AEA Technology, London:

- Department of Environment, Food, and Rural Affairs. Available at http://statistics.defra.gov.uk/esg/reports/foodmiles/final.pdf.
- DFID (2000) Eliminating World Poverty: Making Globalisation Work for the Poor –

 DFID White Paper on International Development, London: Department for International Development.
- DFID (2007) "Questions and Answers About Flower Production at Lake Naivasha", www.dfid.gov.uk/news/files/speeches/trade/naivashaqa.asp, London: Department for International Development, accessed 15 August 2007.
- Dolan, C. and Humphrey, J. (2001) "Governance and Trade in Fresh Vegetables: The Impact of UK Supermarkets on the African Horticultural Industry", *Journal of Development Studies*, 37(2):147-76.
- Dolan, C. and Opondo, M. (2005) "Seeking Common Ground: Multi-stakeholder Processes in Kenya's Cut Flower Industry", *Journal of Corporate Citizenship*, 18: 87-98.
- Dolan, C. and Sutherland, K. (2003) "Gender and Employment in the Kenya Horticulture Value Chain", Globalisation, Production and Poverty Discussion Paper 8, Norwich: University of East Anglia. Available at www.gapresearch.org
- Dolan, C., Opondo, M. and Smith, S. (2003) *Gender, Rights and Participation in the Kenya Cut Flower Industry*, NRI Report No. 2768, Chatham, UK: Natural Resource Institute. Available at http://www.nri.org/NRET/kenyareportfinal2.pdf.
- duToit, A. (2002) "Globalizing Ethics: Social Technologies of Private Regulation and the South African Wine Industry", *Journal of Agrarian Change*, 2(3): 356-380.
- Ehrlich, P. (1968) The Population Bomb, New York: Ballantine Books.

- Ethical Trading Initiative (ETI) (2005) *Addressing Labour Practices on Kenyan Flower Farms. Report of ETI Involvement 2002-2004*, London: Ethical Trading Initiative. Available at www.eti2.org.uk/Z/lib/2005/02/rept-kenyaflwrs/ETIrept-Kenyaflowers2005.pdf.
- Everard, M. and Harper, D. (2002) "Towards the Sustainability of the Lake Naivasha Ramsar Site and its Catchment", *Hydrobiologia*, 488: 191–203.
- Freidberg, S. (2003) "Cleaning Up Down South: Supermarkets, Ethical Trade and African Horticulture", *Social & Cultural Geography*, 4(1): 27 43.
- Fridell, G. (2006) "Fair Trade and Neoliberalism: Assessing Emerging Perspectives", Latin American Perspectives, 33 (6):8-28.
- Gabre-Madhin, E. and Haggblade, S. (2004) "Successes in African Agriculture: Results of an Expert Survey", *World Development*, 32(5): 745–766.
- Gereffi, G. and Kaplinsky, R. (eds) (2001) "The Value of Value Chains", *IDS Bulletin*, 32 (3), special issue.
- Gereffi, G. and Korzeniewicz, M. (eds.) (1994) *Commodity Chains and Global Capitalism*, Westport: Praeger.
- Gereffi, G., Garcia-Johnson, R. and Sasser, E. (2001) "The NGO Industrial Complex", Foreign Policy, 125: 56-65.
- Gibbon, P. and Ponte, S. (2005) *Trading Down. Africa, Value Chains, and the Global Economy*, Philadelphia, Pa.: Temple University Press, Combined Academic.
- Grober, U. (1999) "Der Erfinder der Nachhaltigkeit", DIE ZEIT, 48/1999: 98.
- Hale, A. and Opondo, M. (2005) "Humanising the Cut Flower Chain: Confronting the Realities of Flower Production for Workers in Kenya", *Antipode*, 37(2): 301-323.
- Hardin, G. (1968) "The Tragedy of the Commons", Science, 162: 1243-1248.

- Heeks (2003) "Taming the Market: Can Self-Regulated Ethical Trade Control Globalisation?", *id21 research highlight*, 5 December 2003. Available at www.id21.org/insights/insights49/insights-iss49-art05.html.
- Hickley, P., Muchiri, S., Britton, J. and Boar, R. (2004) "Discovery of Carp, Cyprinus Carpio, in the Already Stressed Fishery of Lake Naivasha, Kenya", *Fisheries Management and Ecology*, 11: 139-142.
- Hubble, D. and Harper, D. (2001) "What Defines a 'Healthy' Lake? Evidence from Lake Naivasha, Kenya", *Aquatic Ecosystem Health and Management*, 4: 243-250.
- Hughes, A. (2001) "Global Commodity Networks, Ethical Trade and Governmentality:

 Organizing Business Responsibility in the Kenyan Cut Flower Industry", *Transactions of the Institute of British Geographers*, 26(4): 390-406.
- Hughes, A. (2004) "Accounting for Ethical Trade. Global Commodity Networks, Virtualism and the Audit Economy", in Hughes, A. and Reimer, S. (eds.) *Geographies of Commodity Chains*, London: Routledge.
- IISD (2006) "The Sustainable Development Timeline", Winnipeg, Canada:

 International Institute for Sustainable Development. Available at

 www.iisd.org/pdf/2006/sd_timeline_2006.pdf
- IMF (2005) *Kenya: Poverty Reduction Strategy Paper*, Washington, D.C.: International Monetary Fund.
- IUCN (1980) World Conservation Strategy: Living Resource Conservation for Sustainable Development, Gland, Switzerland: International Union for Conservation of Nature and Natural Resources.
- Kaplinsky, R. (2000) "Globalisation and Unequalisation: What can be learned from Value Chain Analysis?", *Journal of Development Studies*, 37(2): 117-46.

- Kenya Flower Council (KFC) (2007) "Flower Industry Information", www.kenyaflowers.co.ke/industryinfo/kenyanf.php, accessed 20 August 2007.
- Klein, N. (2000) No Logo: Taking Aim at the Brand Bullies, London: Flamingo.
- Lélé, S. (1991) "Sustainable Development: a Critical Review", *World Development*, 19(6): 607-621.
- Malthus, T. (1914) An Essay on Population, New York: E.P. Dutton & Co.
- Mavuti, K. and Harper, D. (2005) "The Ecological State of Lake Naivasha, Kenya, 2005: Turning 25 Years Research into an Effective Ramsar Monitoring Programme", in Proceedings of 11th World Lake Conference Nairobi, Kenya, 31 October to 4 November 2005, Volume II. Available at www.ilec.or.jp/eg/wlc/wlc11/World%20Lake%20Conference%2011%20Kenya%202005%20Proceedings%20Volume%202.pdf.
- McCulloch, N. and Ota, M. (2002) "Export Horticulture and Poverty in Kenya", IDS Working Paper 174, Brighton: Institute of Development Studies.
- Meadows, D. et al. (1972) The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind, New York: Universe Books.
- Millennium Ecosystem Assessment (2005) *Ecosystems and Human Well-being:*Synthesis, Island Press, Washington, DC.
- Monbiot, G. (2007) Heat. How To Stop the Planet Burning, London: Penguin Books.
- Mwakugu, N. (2003) "Anxiety as Kenyan Lake Dries Up", *BBC News*, 10 November, news.bbc.co.uk/2/hi/africa/3241049.stm, accessed 15 August 2007.
- New Vision (2003) "Lake Naivasha Being Polluted by Flower Farmers and the Poor", New Vision (Kampala, Uganda), 11 November, www.worldlakes.org/shownews.asp?newsid=1533, accessed 15 August 2007.
- Oxfam (2002) Mugged. Poverty in Your Coffee Cup, Oxfam International.

- Raikes, P. (1997) "Structural Adjustment and Agriculture in Africa", in Spoor, M. (ed.)

 The "Market Panacea" Agrarian Transformation in Developing Countries and

 Former Socialist Economies, London: Intermediate Technology Publications.
- Raikes, P. and Gibbon, P. (2000) "Globalisation and African Export Crop Agriculture", *Journal of Peasant Studies*, 27(2): 50-93.
- Raikes, P., Jensen, M. and Ponte, S. (2000) "Global Commodity Chain Analysis and the French Filière Approach: Comparison and Critique", *Economy and Society*, 29 (3): 390-417.
- Redclift, M. (1987) *Sustainable Development: Exploring the Contradictions*, London: Methuen.
- Smith, S., Auret, D. Barrientos, S., Dolan, C., Kleinbooi, K., Njobvu, C., Opondo, M. and Tallontire, A. (2004) "Ethical Trade in African Horticulture: Gender, Rights and Participation", IDS Working Paper No. 223, Brighton: Institute of Development Studies.
- Stiglitz, J. (2002) Globalization and its Discontents, London: Penguin.
- UK Energy Research Centre (2007) Carbon Labelling: Evidence, Issues and Questions.

 Briefing Paper for TESCO-ECI Carbon Labelling workshop 3-4 May 2007.

 Appendix. Available at www.eci.ox.ac.uk/research/energy/downloads/carbonlabelling workshop apx.pdf.
- UN Millennium Project (2005) *Investing in Development: A Practical Plan to Achieve*the Millennium Development Goals. New York: United Nations.
- UNESCO (1970) Use and Conservation of the Biosphere. Proceedings of the Intergovernmental Conference of Experts on the Scientific Basis for Rational Use and Conservation of the Resources of the Biosphere 4-13 September 1968, Paris: UNESCO.

- United Nations (2000) World Summit for Social Development. Copenhagen

 Declaration on Social Development, New York: United Nations. Available at

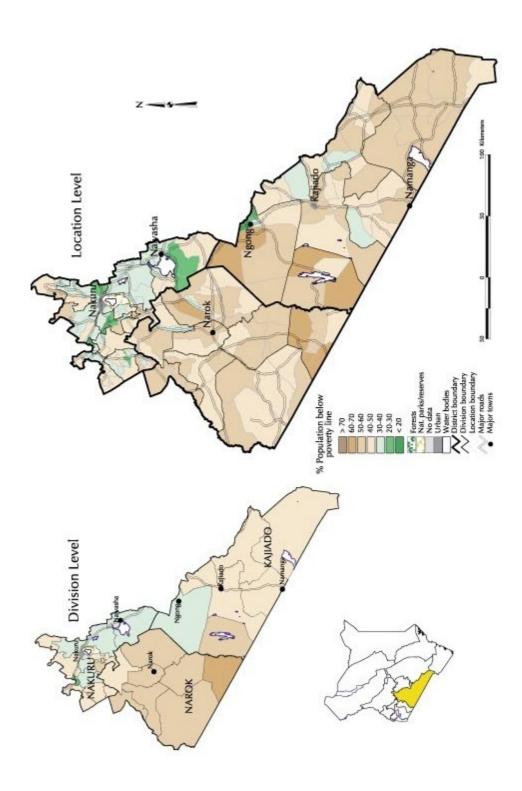
 www.un.org/esa/socdev/wssd/agreements/decparti.htm.
- United Nations Division for Sustainable Development (UNDSD) (2004), *Agenda 21*, New York: United Nations. Available at www.un.org/esa/sustdev/documents/agenda21/english/agenda21chapter2.htm.
- United Nations Division for Sustainable Development (UNDSD) (2004a),

 **Johannesburg Plan of Implementation, New York: United Nations. Available at www.un.org/esa/sustdev/documents/WSSD POI PD/English/POIToc.htm.
- Verschuren, D., Laird, K. and Cumming, B. (2000) "Rainfall and Draught in Equatorial East Africa During the Past 1,100 Years", *Nature*, 403: 410-414.
- Weber, S., Barma, N., Kroenig, M. and Ratner, E. (2007) "How Globalization Went Bad", *Foreign Policy*, 158: 48-54.
- Wijnands, J. (2005) "Sustainable International Networks in the Flower Industry", *Scripta Horticulturae*, Number 2, The Hague: International Society for Horticultural Science. Available at www.actahort.org/chronica/pdf/sh 2.pdf.
- Williams, A. (2007) Comparative Study of Cut Roses for the British Market Produced in Kenya and the Netherlands, A report for World Flowers, Bedford: Cranfield University.
- World Bank (2003) World Development Report 2003: Sustainable Development in a Dynamic World: Transforming Institutions, Growth, and Quality of Life, New York: Oxford University Press.
- World Commission on Environment and Development (WCED) (1987), *Our Common Future*, Oxford: Oxford University Press.

World Commission on the Social Dimension of Globalization (2004) *A Fair Globalization: Creating Opportunities for All*, Geneva: International Labour Organization.

Annex

Poverty Incidence Rift Valley Province (South East)



Poverty Incidence: Percent population below the rural poverty line Source:Central Bureau of Statistics (2003, p.48)

Codes of Practice

Ethical Trading Initiative (ETI) Base Code

1. EMPLOYMENT IS FREELY CHOSEN

- 1.1 There is no forced, bonded or involuntary prison labour.
- 1.2 Workers are not required to lodge "deposits" or their identity papers with their employer and are free to leave their employer after reasonable notice.

2. FREEDOM OF ASSOCIATION AND THE RIGHT TO COLLECTIVE BARGAINING ARE RESPECTED

- 2.1 Workers, without distinction, have the right to join or form trade unions of their own choosing and to bargain collectively.
- 2.2 The employer adopts an open attitude towards the activities of trade unions and their organisational activities.
- 2.3 Workers representatives are not discriminated against and have access to carry out their representative functions in the workplace.
- 2.4 Where the right to freedom of association and collective bargaining is restricted under law, the employer facilitates, and does not hinder, the development of parallel means for independent and free association and bargaining.

3. WORKING CONDITIONS ARE SAFE AND HYGIENIC

- 3.1 A safe and hygienic working environment shall be provided, bearing in mind the prevailing knowledge of the industry and of any specific hazards. Adequate steps shall be taken to prevent accidents and injury to health arising out of, associated with, or occurring in the course of work, by minimising, so far as is reasonably practicable, the causes of hazards inherent in the working environment.
- 3.2 Workers shall receive regular and recorded health and safety training, and such training shall be repeated for new or reassigned workers.
- 3.3 Access to clean toilet facilities and to potable water, and, if appropriate, sanitary facilities for food storage shall be provided.
- 3.4 Accommodation, where provided, shall be clean, safe, and meet the basic needs of the workers.
- 3.5 The company observing the code shall assign responsibility for health and safety to a senior management representative.

4. CHILD LABOUR SHALL NOT BE USED

- 4.1 There shall be no new recruitment of child labour.
- 4.2 Companies shall develop or participate in and contribute to policies and

- programmes which provide for the transition of any child found to be performing child labour to enable her or him to attend and remain in quality education until no longer a child; "child" and "child labour" being defined in the appendices.
- 4.3 Children and young persons under 18 shall not be employed at night or in hazardous conditions.
- 4.4 These policies and procedures shall conform to the provisions of the relevant ILO standards

5. LIVING WAGES ARE PAID

- 5.1 Wages and benefits paid for a standard working week meet, at a minimum, national legal standards or industry benchmark standards, whichever is higher. In any event wages should always be enough to meet basic needs and to provide some discretionary income.
- 5.2 All workers shall be provided with written and understandable Information about their employment conditions in respect to wages before they enter employment and about the particulars of their wages for the pay period concerned each time that they are paid.
- 5.3 Deductions from wages as a disciplinary measure shall not be permitted nor shall any deductions from wages not provided for by national law be permitted without the expressed permission of the worker concerned. All disciplinary measures should be recorded.

6. WORKING HOURS ARE NOT EXCESSIVE

- 6.1 Working hours comply with national laws and benchmark industry standards, whichever affords greater protection.
- 6.2 In any event, workers shall not on a regular basis be required to work in excess of 48 hours per week and shall be provided with at least one day off for every 7 day period on average. Overtime shall be voluntary, shall not exceed 12 hours per week, shall not be demanded on a regular basis and shall always be compensated at a premium rate.

7. NO DISCRIMINATION IS PRACTISED

7.1 There is no discrimination in hiring, compensation, access to training, promotion, termination or retirement based on race, caste, national origin, religion, age, disability, gender, marital status, sexual orientation, union membership or political affiliation.

8. REGULAR EMPLOYMENT IS PROVIDED

- 8.1 To every extent possible work performed must be on the basis of recognised employment relationship established through national law and practice.
- 8.2 Obligations to employees under labour or social security laws and regulations

arising from the regular employment relationship shall not be avoided through the use of labour-only contracting, sub- contracting, or home-working arrangements, or through apprenticeship schemes where there is no real intent to impart skills or provide regular employment, nor shall any such obligations be avoided through the excessive use of fixed-term contracts of employment.

9. NO HARSHOR INHUMANE TREATMENT IS ALLOWED

9.1 Physical abuse or discipline, the threat of physical abuse, sexual or other harassment and verbal abuse or other forms of intimidation shall be prohibited.

Kenya Flower Council Silver Standard Code of Practice

This Standard outlines the following requirements among others:

- Health and safety of the workers in all aspects of provision of a safe working environment, provision of personal protective equipment, working instructions and supervision;
- General worker welfare which covers work contracts, job descriptions, wages, housing, safe transportation, medical provision, annual leave, maternity leave, pro-rata leave, and other terms and conditions of employment;
- Social accountability issues which include freedom of association and collective bargaining, gender and equity committee; mechanisms of harassment prevention, child labor, equal pay for equal work, worker grievance handling procedures among others;
- Good agricultural practices (GAP) including all EUREPGAP Cut Flowers and Ornamentals requirements;
- Crop protection strategies including integrated pest management (IPM), resistance management, crop disease / pest tolerance / susceptibility, scouting for disease and pest incidence;
- Training of all farm staff on Safe Use of Pesticides, Health and Safety, First Aid and Hygiene;
- Safe transportation, storage and usage of pesticides and safe disposal of pesticide wastes;
- Good management and safe disposal of all other farm wastes;
- Environmental Management Plan incorporating general protection of the natural environment, which includes water, air, land, flora and fauna. Management of energy, water, wastes, soil, fertilizer, nitrogen fertilizer plan, with baselines of these aspects and also outlining the positive and negative aspects of the agricultural, environmental and social activities of the farm;
- Proper record keeping and documentation of all aspects in crop production, post harvest and export of cut flowers to ensure traceability of all activities;
- An annual internal audit of all the clauses of the KFC code of practice.