

■ ■ ■ **DYNAMICS OF HORTICULTURAL EXPORTS TO EUROPEAN UNION MARKETS: CHALLENGES AND OPPORTUNITIES IN SUB-SAHARAN AFRICA.**

This paper discusses the dynamics of the growing trade in fresh horticultural produce between the Sub-Saharan African exporters and the European Union (EU) importers and consumers, using the concept of marketing chain. Two main chains are discussed which include wholesale and supermarkets. While having no direct investment in Kenya, it is the supermarkets in EU who control production in Kenya and other Sub-Saharan African countries, through intermediaries who ensures that standards of quality and presentation are met. Importers play a crucial role in facilitating this trade, acting as vital links between farmers and exporters in Kenya and supermarkets in the EU. The need for quality, traceability, ethical agricultural practices and environmental sustainability dictates this dynamics presents challenges to African horticultural producers and exporters.

■ ■ ■ **INTRODUCTION**

This paper contributes to the debate on the dynamics of exporting fresh horticultural produce from African countries to the EU in relation to the changing food supply systems of the Developed Market Economies, focusing on the fresh horticultural export from Kenya to the European Union (EU) markets. The paper investigates the relationship between the globalisation of the horticultural export trade, the EU consumer tendencies and food re-regulations as articulated by the multiple retailers and the export of fresh horticultural produce from Kenya. It identifies two marketing chains which include the wholesale chain and the supermarket chain. Whereas imported horticultural produce has been previously channelled primarily through wholesale markets, the largest EU retailers now control 70-90 percent of fresh produce imports from Kenya and other Sub-Saharan countries (Barrett, Ilbery et al. 1999). It examines the impact of the supermarket chain on the Kenyan supply network, particularly on small growers.

Most horticultural products in developing Sub-Saharan countries are produced on small farms and often in labour - intensive ways. With appropriate policies and technologies, horticultural production can significantly contribute towards increasing the incomes of small-scale farmers, expanding employment opportunities, enhancing rural development and an important source of foreign exchange earnings. In Africa, Egypt, Ivory Coast and Zimbabwe have traditionally been important exporters of horticultural crops. More recently Kenya, Gambia, and Zambia have greatly increased their horticultural exports as well. Table 1 shows the average volume of export of fresh fruits and vegetables to EU from selected African countries (Bruinsma 2008).

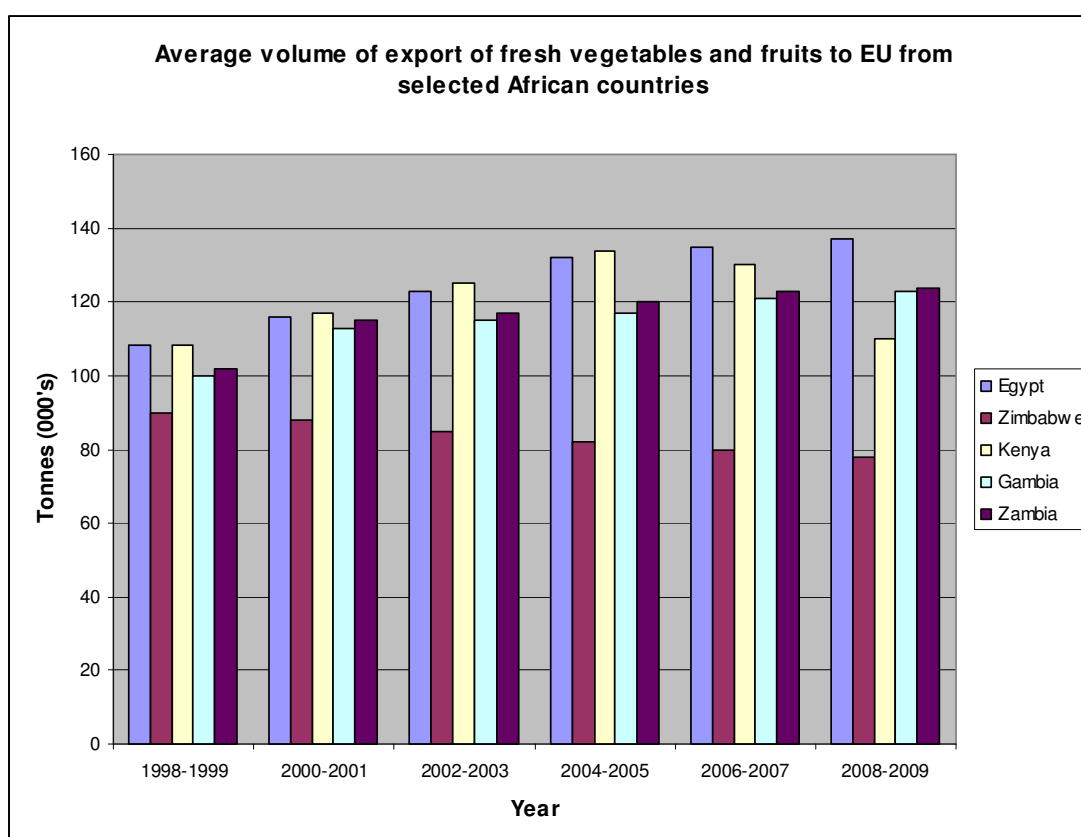
■ ■ **Table 1: Average volume of export of vegetables and fruits to EU from selected African Countries (Tonnes 000's)**

Country/Year	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009
Egypt	108	116	123	132	135	137
Zimbabwe	90	88	85	82	80	78
Kenya	108	117	125	134	130	110
Gambia	100	113	115	117	121	123
Zambia	102	115	117	120	123	124

Source: Bruinsma (2008)

The data presented in Figure 1 indicates that the volume of fresh fruits and vegetables exported to the European Union from selected Sub-Saharan countries have steadily increased between 1998 to 2009 by about 107 percent (Dolan and Humphrey 2000)

■ ■ **Figure 1: Average volume of export of vegetables and fruits to EU from selected African Countries (Tonnes 000's)**



Source: Bruinsma (2008)

■■■ GLOBALISATION OF THE HORTICULTURAL TRADE

Trade in fresh horticultural products has become increasingly global. The trade is vertically integrated through contracts rather than control and ownership of the means of production (Bruinsma 2008). This trend has been encouraged by a liberalising international and national regulatory framework, associated with World Trade Organisation (WTO), International Monetary Fund (IMF) and the World Bank policies, and has been further facilitated by improvements in communication and packaging technologies. Others estimate that trade in fresh fruits, vegetables and cut flower is equivalent to 8 percent of global commodity trade-equivalent to that of crude petroleum (Jaffee 1994).

Horticultural exports from the developing countries in Africa have become a major growth sector in international trade (Barrett, Ilbery et al. 1999; Dolan and Humphrey 2000). The major developing African producers like Kenya, Egypt, Zimbabwe, Gambia, Ivory Coast and Zambia have benefited from this trade. They export speciality vegetables, ready-to-eat, pre-washed salads to the EU. Table 2 indicates the extent to which Sub-Saharan African countries are involved in fresh horticultural trade with the main UK super markets.

While agricultural networks have become increasingly global, significant changes have also occurred in both consumer food demands and food retailing in the developed market economies (DMEs) (Goodman and Redclift 2001). In these countries, demand is for year-round supplies of foods produced by traditional extensive agricultural techniques¹ with a strong ethical² components. This change in demand is clearly consumer-led and is articulated in the EU, who are increasingly adopting a global sourcing policy to satisfy these new demands.

This shift in consumer demand, and subsequent changes in production methods in DMEs, are part of what has been labelled the 'Post-Productivist Transition (PPT). It is a transition that embraces the whole food chain from production and processing to consumer choices and the marketing systems that have evolved to link them (Barrett, Ilbery et al. 1999).

It is characterised by a reduced output of food, the progressive withdrawal of State subsidies, production of food within a competitive international market and the environmental regulation of agriculture. Although elements of the PPT can be identified in the food supply systems of the EU countries, researchers stress that it

¹ Minimal use of agricultural chemicals such as inorganic fertilisers, weeds, pest and disease control chemicals.

² Use of child labour, exploiting farm workers.

has not replaced 'Productivist Agriculture'³ but co-exist in the wider food environment.

■ ■ **Table 2: Speciality vegetables in UK supermarkets, 2008**

Product	ASDA	Marks & Spencer	Sainsbury	Waitrose	TESCO
asparagus	Zimbabwe	Thailand	Peru, Thailand	Thailand, Zimbabwe	Thailand
asparagus, baby-corn and snow peas (mange-tout)	Guatemala, Spain, Thailand				
baby-corn/dwarf-corn	Thailand	Kenya	Thailand, Kenya	Thailand	Thailand
baby-corn and snow peas (mange-tout)	Kenya		South Africa, Zimbabwe	Gambia	Kenya, South Africa
baby-corn, snow peas(Mange-tout and carrots)		Thailand, Guatemala, Holland		More than one country	South Africa
snow peas (mange-tout)	Egypt, Guatemala, Kenya,	Kenya	Guatemala, Kenya, Zambia	Kenya	Kenya
Dwarf beans	Egypt	Kenya	Kenya		Kenya
finebeans and baby carrots	Kenya				
hard-shell garden peas		Kenya			
round beans		Gambia			
stringless beans				Egypt	Egypt
runner beans	Zimbabwe	Zimbabwe	Kenya	Zimbabwe	Kenya
runner beans and carrots		various countries			
sugar snaps			Guatemala, South Africa	Guatemala, Kenya	Guatemala, Kenya
brussel sprouts	Kenya	Kenya			
broccoli		Zimbabwe			
courgettes		South Africa			
globe artichokes	Egypt				

Source: Barret et. al (2008)

³ Is characterised by increased food outputs and state subsidies.

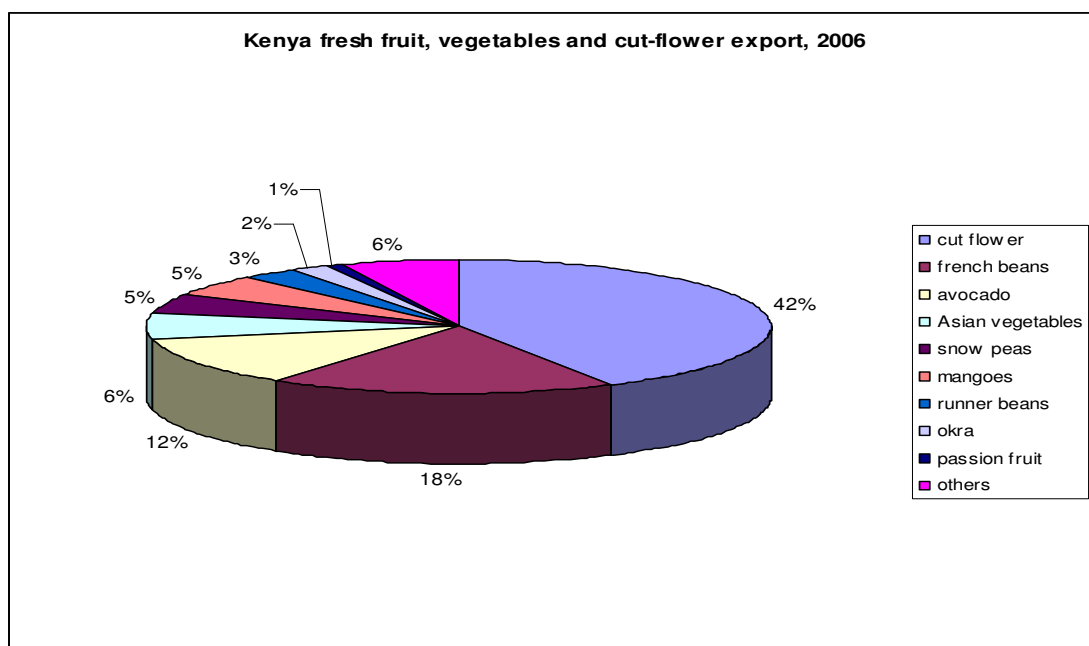
■■■ CHANGING CONSUMPTION TENDENCIES IN THE EU

A process of cultural fragmentation and segmentation is occurring amongst the EU consumers. The consumers give more emphasis on aspects of quality and convenience than to price and quantity. There is demand for healthy food and foods from market 'niches' which often reflect ethnic variety and traditions. There is a new emphasis on taste and aesthetics, thus demand for healthy, ethically produced high quality food, presented as a convenient product, with customers willing to pay for the value added. Consumers now demand that farmers and retailers are accountable for food safety and are prepared to pay for this assurance (Marsden, Munton et al. 1996). The irony is that these new consumer demands are encouraging the spread of productivist agricultural systems in developing countries (ibid).

■■■ EXPORT HORTICULTURE SECTOR IN KENYA: MEETING PERFORMANCE STANDARDS OF EU MARKET, CONSUMER NEEDS AND DEMANDS

Kenya exported approximately 134, 000 tonnes of fresh fruits and vegetables by 2006/2007 (HCDA, 2007) in the international market. Huge private investments have been made in the sector by producers in the cut flower and pre-package fresh fruits and vegetable sectors in response to changes in demands in Europe. Kenya is a major supplier of high-value horticultural produce such as green beans, snow peas (mange-touts), runner beans, okra, chillies, avocados, mangoes, and cut flowers. Figure 2 shows 2006 export proportions in which cut flower export has increased by 40 percent compared with fruit and vegetable export.

■■ Figure 2: Kenya fresh fruit, vegetable and cut flower export, 2006

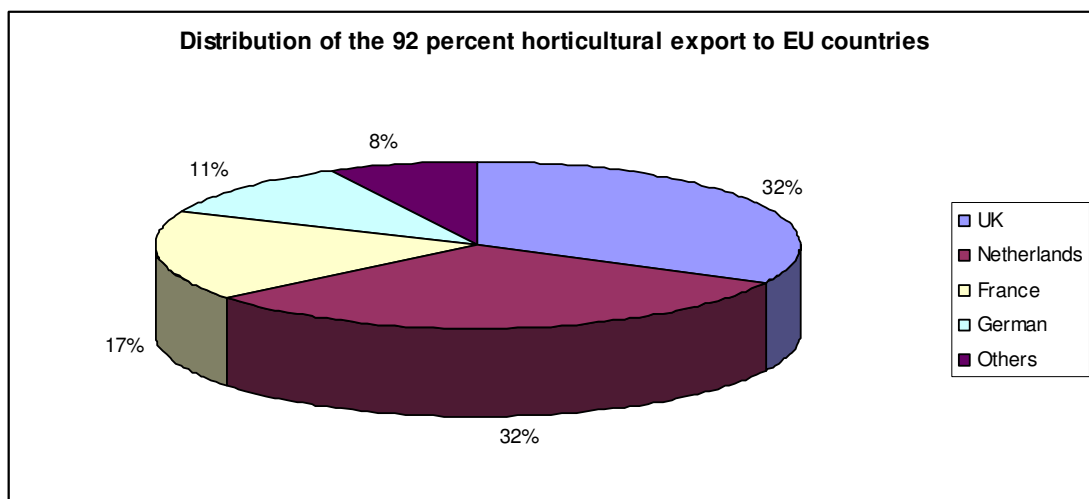


Source: HCDA (2006)

Kenya produces among the highest-quality green beans in the world, although quantity of export declined in 2007/2008. Snow peas (mange-tout) have replaced Asian vegetables(okra, chillies, squashes) as the second most exported vegetables after green beans. Avocados, followed by mangoes and passion fruits are Kenya’s dominant fruit exports.

While the export of fruits and vegetables has stabilised at 60,000 tonnes per annum, the export of cut flower has increased by 40 percent by 2006 (HCDA, 2006). In 2006, 49,000 tonnes of cut flower valued at US\$ 112 million were exported (Kenya, flower Council, 2006). Flowers are not covered by the food safety legislations and is difficult for customers to determine the country of origin of the flowers they buy. This is an issue that raises concern and frustration among Kenyan flower growers, most of whom have signed the Kenya Flower Council Code of practice, which ensures the welfare of workers and good and safe agricultural practices (Kenya Flower Council, 2005)

■ ■ **Figure 3** shows that of the 92 percent of horticulture exported to EU countries, UK imports 30 percent, Netherlands 29 percent, France 16 percent, Germany 10 percent and seven percent goes to other European countries.



Source: HCDA (2007)

Other markets include middle-East, South Africa and Japan. Kenya is now the leading supplier of green beans to the EU, overtaking Egypt in 200/2005. France is the main market for this, receiving 43 percent of the export , followed by UK with 36 percent. The UK is the main importer of Kenyan 'Asian vegetables' with okra being the most important produce followed by chillies (HCDA, 2006)

■■■ EMERGING AND CURRENT CHALLENGES IN HORTICULTURAL EXPORT TO EU

The requirements of international regulations and the need for very large and regular consignments of produce in EU markets have combined to concentrate export horticulture in the hands of the larger and highly capitalised producers.

■■ *Need for traceability*

The need for traceability has accelerated the trend to concentrate export horticulture in the hands of highly capitalised producers. It is essential for EU importers to receive supplies from known sources and to be able to check agricultural practices and handling standards on the farms. This favour large commercial farms than smallholders.

■■ *Fair trade ethics*

Supermarkets in the UK and other EU markets, being increasingly concerned with ethical trading issues, are supportive of utilising smallholders provided that they can meet import standards. Customer concerns over the apparent exploitation of African producers are assisting smallholders to be incorporated fairly into international trade (Brown, 2003). Consumers also express their concern about the ethical behaviour of exporting companies by means of ethical buying and consumer behaviour.

The ethical consumers of horticultural produce in the EU feels responsible towards Sub-Saharan societies and express these feelings⁴ by means of their purchasing behaviour towards ethical issues such as human rights, labour conditions, environment, fair-trade, products free from child labour, organic foods, promoting development of poor African nations. However, the fair trade ethic has risks to these category of exporters and they should not be complacent (Blowfield 1999).

■■ *Proliferation of private standards and supermarket power*

In EU countries there is rapid multi-nationalisation and consolidation of the supermarket sector, with own private standards over the EU legislated standards, with profound changes in procurement systems affecting the conditions facing small-scale farmers in Sub-Saharan countries. Every supermarket has its own standards over the EU legislation which directly determines the quality, quantity and specific health and safety requirement for the EU consumers. These supermarkets provide trade opportunities for horticultural exporters. However, the

⁴ Philanthropic compassionate feelings of non-exploitation with premiums back to producing communities for education, health, gender concerns and others.

standards increases the overhead costs to the smallholders which may constrain their performance in the horticultural export industry and future expansion of export business.

■ ***Climatic change: food miles, carbon 'foot print' and life-cycle greenhouse gas (GHG)***

There is a growing concern in the EU about the sustainability of agricultural and food systems and the unintended side effects that can be imposed on the environment and human health. Evidence is mounting that 'farm' to 'plate' transport costs, or the 'food miles'⁵ could be substantial. Food that has travelled long distances is perceived as being harmful to the environment and has some media attention in key EU markets for horticultural produce. UK studies indicate that total agricultural environmental and health cost are £ 1514 million for the year 2000 (Pretty et al, 2000) of which £2.2 million (0.1 percent) is contributed by UK imports of fruits and vegetables, which was a relatively smaller percentage. It has been found out that sub-Saharan countries use lower energy and lower emission per tonne of horticultural produce exported to EU compared to those produced within the EU (Saunders et al, 2006). However the food mile policy will still affect horticultural exports to the EU markets.

There is increasing quantities of greenhouse gases (GHG) in the earth's atmosphere which has led to modification in the climate. Horticultural production contributes to this build up of GHG and global warming (Rosenzweig and Hillel 2008). The emission of GHG is associated with long distance food production and distribution. In the life-cycle supply chain⁶ GHG emission is dominated by production phase which contributes 83 percent of the average UK household's 8.1 tonnes CO₂ emission per year 'foot print' for food consumption. Transportation represents only 11 percent of life-cycle GHG emission and delivery from producer to retail four percent only. Therefore 'buying local' policy of EU consumers will not lower the average household's food related climate Carbon 'foot print'. EU market has recognised that a shift in vegetable from meat diets achieves more GHG reduction than buying only locally sourced food. This is an opportunity that African horticultural exporters can exploit.

■ ***Healthy eating: '5-a-day' advice to UK consumers***

The UK government's nutrition advisers have encouraged UK consumers to eat more vegetables and fruits for a healthy diet to manage the emerging medical

⁵ Food miles measures the distance food travels from producer to consumer

⁶ 'Food mile' is approximated at 4000 miles for Sub-Saharan Africa and 700 miles delivery within EU.

conditions that have resulted from poor eating habits. The popular advice is to eat 'five portions' a day of vegetables and fruits. This advice stems from fruit and vegetable consumption contained in the World Health Organisation report on Diet, Nutrition and the Prevention of Chronic Diseases⁷. In order to meet these needs and demand, the UK market provides an opportunity for horticultural exporters from African countries to satisfy the needs of these consumers.

■ ■ WTO agreement on Sanitary and Phyto-Sanitary (SPS) measures

The sanitary and phyto-sanitary (SPS) measures aim to protect the life and health of consumers of horticultural produce among WTO members. The SPS does not discriminate between WTO members. The European legislation represents the minimum requirements for market access which can constitute obstacles to trade between EU and African horticultural exporters. The 'private voluntary standards' (PVS) have extended the level of control by EU retailers back along their supply chain to horticultural producers and exporters. Suppliers rather than retailers meet the cost of compliance with PVS, which are per certification and individual farm units, regardless of the size. African smallholders face difficulties in meeting these costs and fees because the standards were originally developed for large farms in Europe.

■ ■ ■ CONCLUSION

Despite the recent liberalisation of the international agricultural markets, Western retailers are becoming increasingly influential in the horticultural production and export trade from Africa to EU. The recent rapid growth of horticultural trade has been accompanied by the strengthening of marketing chains. It is estimated that UK retailers now control 70 percent of fresh horticultural imports into the UK from Kenya. The dominance of the large supermarket chain in the UK and EU has resulted in the development of flexible contractual food supply networks, with powerful supermarkets imposing EU requirements and satisfy new consumer demands with increasing global sourcing policies. The wholesale network is based on international ties, often based on kinship, and dependent for its trading success on trust, flexibility and mutual agreement. The supermarket chain relies on various types of contract and agreements. Both the marketing chains must take account of the international and national regulatory frameworks, which requires that produce meet quality and food safety standards. Challenges faced by African horticultural exports include need to comply traceability, WTO agreements, being non-complacent with fair - trade ethics, meeting the challenges of

⁷ WHO (1990) technical report series 797.

supermarket and consumer needs and demands, health and environmental issue which focus on climate change due to horticultural exports and imports.