



air freight and organic

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organic air freight



- 96% fresh fruit and veg
- Key for UK retailers in bringing year round supply and continuity
- Estimate less than 1% of organic imports into UK are air freighted
- Over 3/4 produced in developing countries
- 21,500 people depend on the trade

why look at air freight?

- Growing public concern over carbon emissions from food transport
- Air freight seen as the worst offender
- Contradiction between organic environmental principles and organic air freight



consultation

May 2007 launched 4 month public consultation with the aim of:

- addressing concerns over air freight's contribution to climate change
- better understanding the social and economic benefits of organic air freighted fresh fruit and veg
- finding out people's expectations of organic standards, food distribution and climate change



Who we spoke to



- We received over 200 written submissions
 - over half were from the general public
 - 24 submissions from NGOs
 - 28 responses from industry
 - 5 responses from government and international agencies
- Proactively going to talk to those with a view
 - we spoke to roughly 100 representatives from industry, NGOs, government and international agencies
 - some individually and some at our summit



Friends of the Earth



CARBON TRUST

Making business sense of climate change



ITC



forum for the future

action for a sustainable world



ABEL & COLE

The greener grocer



act:onaid



NCC National Consumer Council

Making all consumers matter



Oxfam



FAIRTRADE



YOUR M&S



UNEP

Riverford

vegbox organic vegetables home delivery



iied



WORLD DEVELOPMENT MOVEMENT

Justice for the world's poor



Sustainable Development Commission

TESCO



FPC



PLANET ORGANIC



airportwatch

Waitrose



UNCTAD



Sainsbury's organic



Kenya Organic Agriculture Network



ELCI

ASDA

part of the WOLLMART family

Organic farm foods



AgriFRESH



sustain the alliance for better food and farming

defra

Department for Environment Food and Rural Affairs



NATURALLY G's



co-op



BERRYWORLD

WEALMOOR LTD.



AL HODA

GREENPEACE UK



BLUE SKIES

DFID

Department for International Development



SOIL ASSOCIATION ORGANIC STANDARD

What we learnt



- We need to think critically about air freight
 - Rapid growth rate
 - In the context of GHG from all food, from farm to fork
- We need to acknowledge the social and economic benefits of organic farming in developing countries
 - significant environmental and human health benefits for local people
 - inclusive global organic market nor curb the
 - high value goods and unique opportunities to add value
- Action must be proportionate and equitable

Standards Board recommendations

- All air freighted organic food should deliver genuine benefits for farmers in developing countries.
- Guarantee and communicate these benefits through **Soil Association Ethical Trade** or **Fairtrade** certification
- Businesses should have a plan for reducing their reliance on air freight wherever possible
- Look at how we can reliably and fairly assess the full carbon footprint of all organic products



Next steps



- Second round public consultation on the recommendations in March – May 2008
- July – Standards Board agree any changes to Soil Association standards, based on the consultation responses
- Any changes to the standards published in Jan 2009 with a timetable for implementation

Why not carry on as normal?



- Proactively address consumer concerns
- Maintain market access
- Highlight potential risks
 - Growth of air freight
 - Long term viability of air freight

Monitoring air freight



- Aim – better information on what and how much is air freighted
- Challenge – transport mode is not always clear
 - more paperwork

Reducing air freight



- Aim to minimise the use of air freight by organic producers by, for example:
 - developing shipping alternatives through technology innovations and infra structure improvements [Organic Farm Foods]
 - improving planning and flexibility to reduce air freight [M&S 'Plan A']
 - supporting initiatives which promote growth of more local organic markets in exporting countries [Egypt]
- For a small handful of organic producers this will take time
- Managed reduction as part of a move towards food supply that isn't heavily dependent on fossil fuels

Assessing and communicating the benefit



- Transparent guarantee that socioeconomic benefits are optimal.
- communicate the benefits of trade in air freight to those critical of it's carbon footprint
- aim to look at labelling carbon of all organic products when a suitable scheme is available

Thank you



Second round of the consultation

6th March – 30th May 08

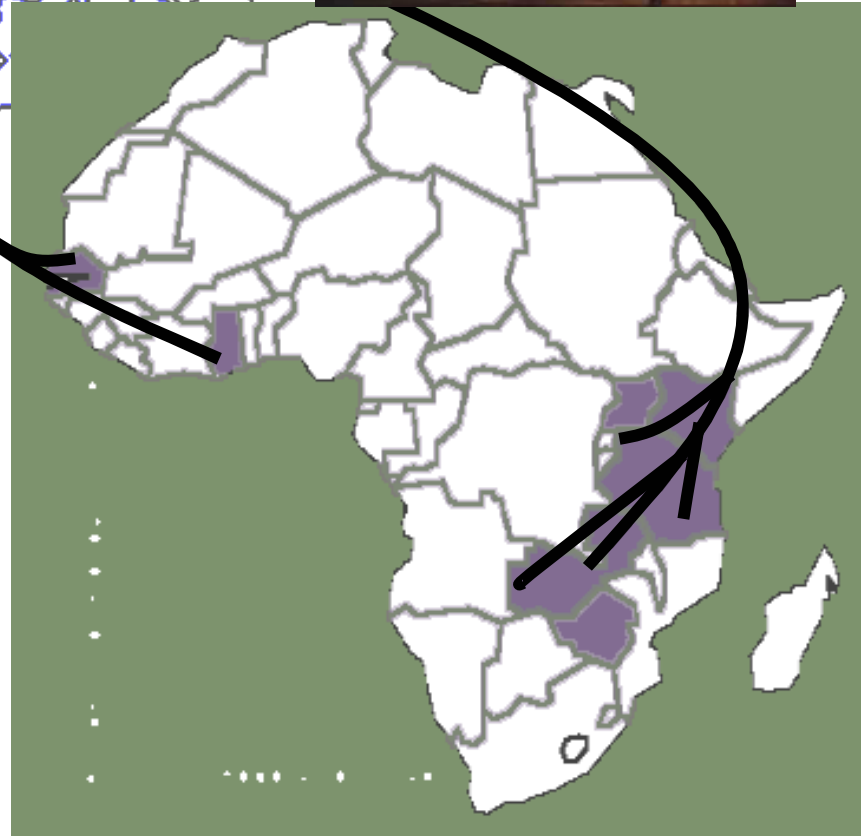
www.soilassociation.org/airfreight

Air freight and Africa: trading off environment and development??

Bill Vorley

Food Ethics Council workshop on Air-
Freighted Food, 4 April 2008





**48-72 hours
from field to
shopping basket**



A hardening of attitudes, battle of 'killer facts'

'We have never agreed with those who say we should punish African farmers because they don't like the emissions... If you take green beans, studies have shown there are fewer emissions from growing green beans in Africa than producing them in the European Union. The way to reduce carbon emissions is to get a post-Kyoto global deal, not penalise Africans who then can't get their goods to market... Putting aside the question of whether air-freight is a good thing or a bad thing, if economic drivers led retailers to stock fewer air-freighted products how would they fulfil their (ethical) responsibilities to producers and consumers?'

Gareth Thomas

'The concept of food miles is **unhelpful and stupid**,

Adrian Williams, Cranfield University

"The Government needs to ask the question, "Why is Africa feeding the already overfed and why is Britain not feeding itself?" We are using Africa as a **neo-colonial** food system.'

Tim Lang, City University

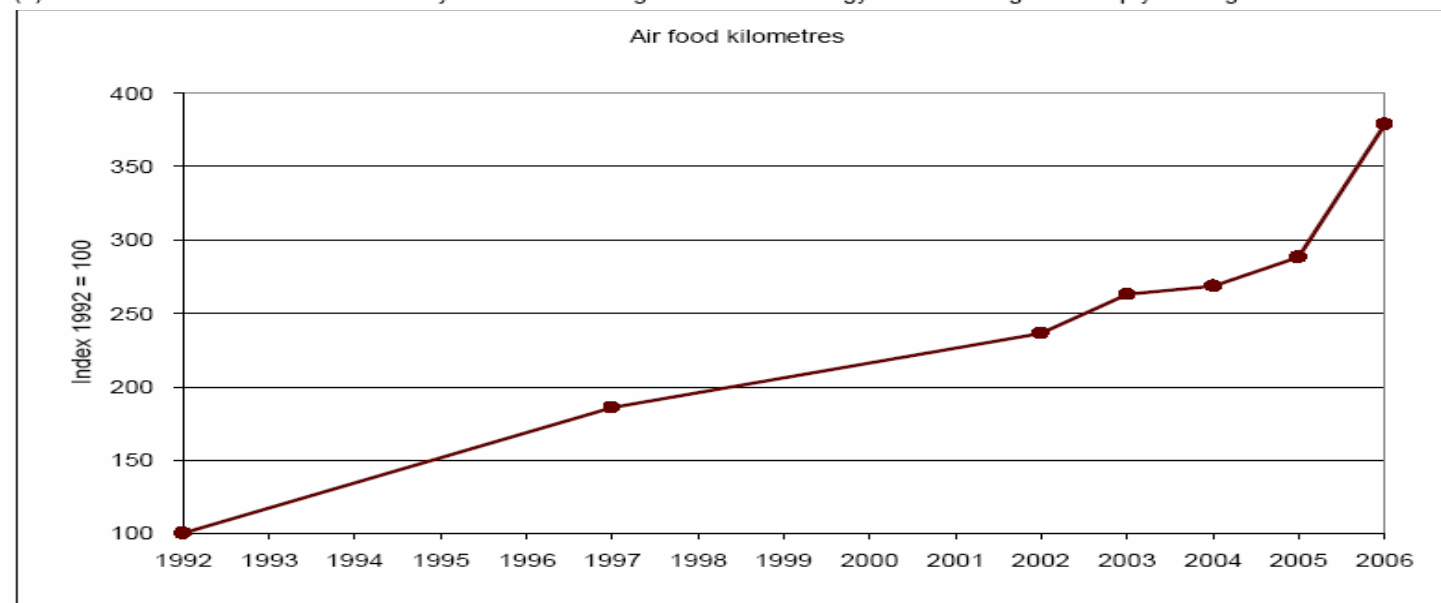
The Observer, March 23 2008
Evening Standard, 11 March 2008

The food transport indicators

Indicators of the External Impact of Food Transport for UK Consumers								change 2005 to 2006
	1992	1997	2002	2003	2004	2005	2006	
Indicator 1^(a)								
UK Urban food kilometres (millions)	10,677	12,058	11,470	11,903	12,130	13,162	14,039	+7%
Index 1992 = 100	100	113	107	111	114	123	131	
Indicator 2^(b)								
HGV food kilometres (millions)	7,862	8,412	8,121	8,066	9,104	9,209	8,965	-3%
Index 1992 = 100	100	107	103	103	116	117	114	
Indicator 3								
Air food kilometres (millions)	10	18	23	25	26	28	36	+31%
Index 1992 = 100	100	186	236	263	269	288	379	
Indicator 4								
Carbon dioxide emissions (kilotonnes)	15,044	16,494	16,747	16,369	17,839	17,948	18,862	+5%
Index 1992 = 100	100	110	111	109	119	119	125	

(a) The car data for 2002, 2003 and 2004 may be under-recorded due to the method of data collection in those years.

(b) The rise between 2003 and 2004 may be due to a change in the methodology for calculating HGV empty running.

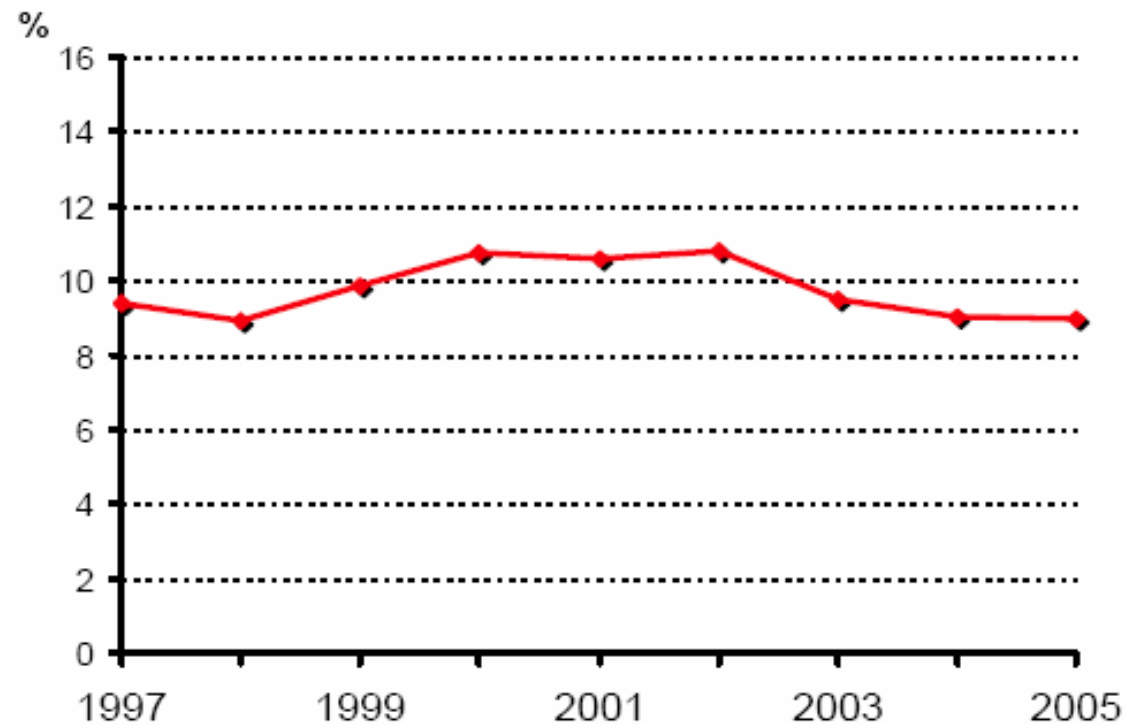


Source: Food Transport Indicators to 2006: Experimental Statistics

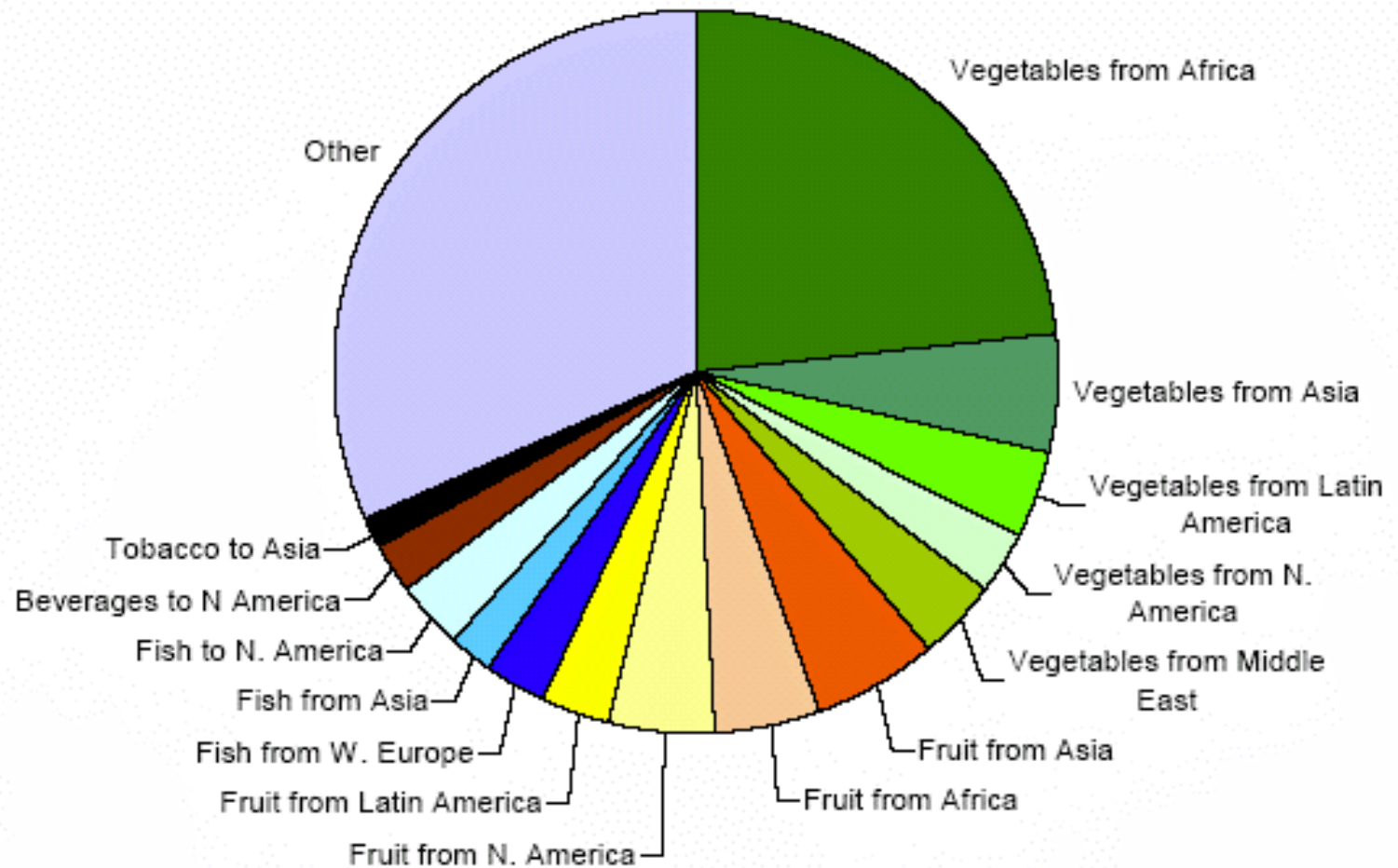
http://statistics.defra.gov.uk/esg/index/list.asp?i_id=180

Air freight's share of fruit and vegetables imported to the UK from African countries

Source: DEFRA



UK air imports by food type and source/destination



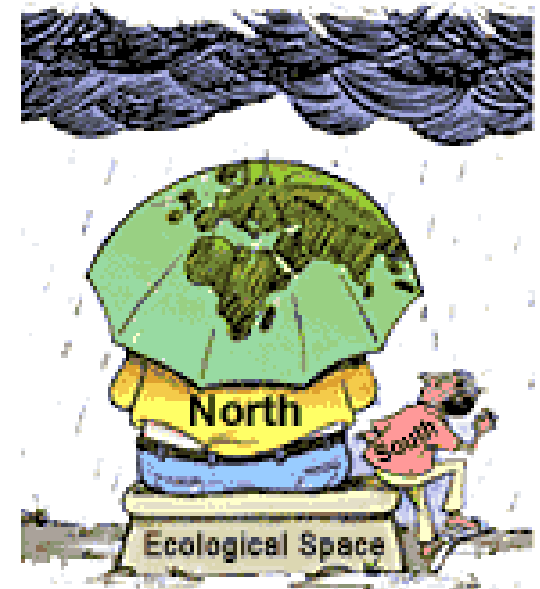
Comparison of selected impacts of production of green beans in Kenya and the UK for sale in the UK

Criteria	Kenya	UK
Food miles	4500 miles	<100 miles
Energy – transport	58 MJ/kg	<5 MJ/kg
Energy – production	1.7 MJ/kg	1.1 MJ/kg
Water	5.4m³/kg	N/a

Emissions and equity

Per capita carbon load:

- Kenya **0.2T**,
- UK **9.2T**
- 0.62 – 2.2T for stable CO₂, falling to 0.32 by 2030
- Kyoto Protocol recognises the need for equity and economic development for developing countries in the transition to a low-carbon future.



Allocation of emissions

If the carbon emissions from importing fresh fruit and vegetables (FFV) from Africa to the UK were allocated:

- entirely to the **UK's** emissions budget, they would add an extra **0.1%** per cent of total emissions for the UK. Per capita emissions would rise to 9.22 tonnes (512 per cent of natural carbon sink capacity)
- entirely to **Kenya's** emissions budget, they would account for an extra **4.8%** of total emissions for Kenya. Per capita emissions would rise to 0.42 tonnes (23 per cent of natural carbon sink capacity)

Open questions

- **What to include?**
 - Systems boundary
- **Data accuracy**
 - energy consumption for airfreight for Kenya-UK: 58MJ/kg? 103MJ/kg? 205MJ/kg?
- **Emissions attribution**
 - emissions from aircraft currently not included in national inventories, EU Emissions Trading Scheme, or a binding part of the Kyoto Protocol
 - Exporter or importer? Producer or consumer?
 - Passengers or bellyhold freight?
- **Drivers of airfreight**
 - by UK consumers not eating imported FFV, would fewer planes fly today or into the future?

Fair Miles? The concept of “food miles” through a sustainable development lens

James MacGregor and Bill Vorley

The concept of “food miles” presents an argument to buy goods which have travelled the shortest distance from farm to table, and to discriminate against long-haul transportation, especially air-freighted goods. The long-distance transport of food is associated with additional emissions due to increased transportation coupled with greater packaging, as well as negative impacts on local rural communities, and a disconnection between the public and local farming. Furthermore, “food miles” encapsulates (and is at the vanguard of) the climate change debate in the UK. In light of growing international concern over the speed and scale of climate change, the concept of “food miles” has captured public attention and apparently is changing some consumers’ behaviour, although only a round one-third of shoppers know of the concept.

The implications of the “food miles” debate are considerable. Much high-value produce from Africa, especially flowers and horticulture, are air-freighted, and are being singled out as the epitome of unsustainable consumption. But from a development and poverty reduction angle, the inclusion of sub-Saharan Africa in these high-value markets has been a success story. Food miles as a concept is blind to these social and economic benefits associated with trade in food, especially from developing countries.

UK consuming African fresh produce

Nowhere are UK consumers more persistently engaged with rural Africa than through food consumption choices. A wide range of fresh fruit and vegetables (FFV) are imported to the UK from sub-Saharan African countries (SSA – excluding South Africa). UK consumers spend over £1 million at retail every day on FFV from this region. Furthermore, the UK is consuming more produce today from Africa than ever before, and it is growing.

Yet this trade is dependent on the UK consumer, and also on air-freight, bringing climate change impacts of this trade squarely into the

development equation. In total, 40% of air-freighted FFV imports to the UK are from SSA. Indeed, poor African countries rely on the UK market to support their domestic industry.

How much ‘ecological space’ do African nations have?

‘Ecological space’ is the individualised (per capital) right to natural resources for utilisation such as energy, food, land and water. The concept of equitable ecological space translates well into “per capita carbon dioxide emissions” and the “per capita right to emit carbon dioxide”. Currently, carbon dioxide emissions are unequal and the gap widening: global, 3.6 tonnes; the UK, 9.2 tonnes; Africa, 1 tonne. Furthermore, African figures are skewed towards oil-rich countries, and only two countries exceed the global average. Hence, SSA countries have considerable and growing reserves of “ecological space” compared with industrialised countries.

There is also inequality of impact and adaptive capacities of climate change. Many African countries are feeling the force of climate change impacts, the root cause of which was produced in developed countries. Poorer countries have fewer disposable financial resources to commit to adapting to these impacts.

The Kyoto Protocol recognises the need for equity and non-restrictive economic development for developing countries in the transition to a low-carbon future. Under current calculation of a sustainable carbon future, equitable ecological space per capita is 1.8 tonnes. This represents the estimated absorptive capacity of natural carbon sinks, both land and sea – currently absorbing half of anthropogenic emissions. Yet this per capita space is falling owing to projected warmer climate accelerating decay of carbon in soils coupled with projected population increases.

The strong relationship between the level of industrial economic development of a country and its carbon emissions remains a worry.

KEY MESSAGES:

- Nowhere are UK consumers more persistently engaged with rural Africa than through food consumption choices
- Over one million livelihoods in Africa are supported by UK consumption of imported fresh fruit and vegetables
- African nations have considerable “carbon credit”, unallocated aviation emissions could accrue to African countries in a bid to stimulate trade
- Not buying fresh produce air-freighted from Africa will reduce UK total emissions by less than 0.1%
- Economic development for the poorest in a low carbon future necessarily means expanding emissions for some

Development upsides

Employment

- Over 100,000 rural Africans are employed in the FFV export sector in SSA, roughly split 50/50 between small-scale farmers and employees on larger farms
- Estimated 100-120,000 employed in support services for these producers and employees

Spillover

- Technology, food safety, improved access to inputs, credit, extension services

Development downsides

- **Labour standards** in export horticulture called into question
 - crowded facilities, no employment contracts, handling dangerous chemicals without proper protective equipment, sexual harassment, no maternity leave, overcrowded housing, low pay
 - purchasing practices encourage precarious employment
 - Kenyan Flower Council Code of Practice
 - GlobalGAP, FT
- **Costs to suppliers** – exclusionary impact of standards

Costs to suppliers

- GlobalGAP
- Retailer-specific standards
- The Carbon Trust and the British Standards Institute -- new standard for measuring the carbon footprint of products



Concluding remarks

- Food miles is a legitimate citizen interest (cf Cranfield “unhelpful and stupid”)
- Understand the GHG ‘hot spots’ of entire food system
- Development and ecol. space arguments are powerful counterweight when based on legitimate data
- If environmental harm is to be weighed against developmental gains, it is essential that (1) the degree of harm is quantified and put into the context of other food choices, (2) the degree of harm is put into the context of Africa’s current use of ‘ecological space’, and (3) the degree of development gain is quantified, to demonstrate whether this trade really benefits those living in poverty.
- Best practice needs to be developed in..
 - Measuring and minimising the environment impact of export horticulture
 - Measuring and maximising the development impact of export horticulture
 - Reducing the carbon footprint of airfreight