Tropentag 2007
University of Kassel-Witzenhausen and
University of Göttingen, October 9-11, 2007

Conference on International Agricultural Research for Development

Organic vegetables: Domestic and regional marketing constraints and opportunities for small-scale farmers in East Africa

Shilpi Saxena

AVRDC - The World Vegetable Center, Regional Center for Africa, P.O. Box 10; Duluti, Arusha. Tanzania. shilpi.saxena@avrdc-rca.co.tz

Background[1]

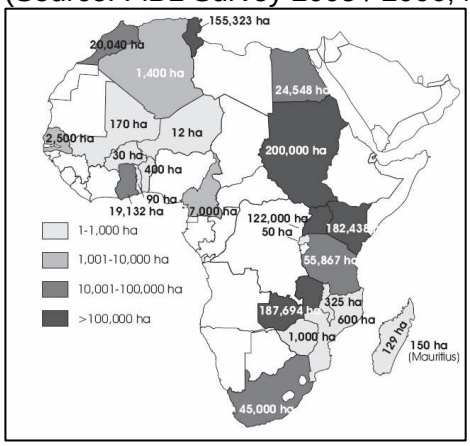
Certified organic farming is practised throughout Sub-Saharan Africa, but is concentrated in East Africa, particularly Kenya, Uganda and Tanzania. The total certified organic production area in Africa is still very low, comprising just 0.2 % of the total agricultural area (PARROTT et al. 2006). Most organic products are geared towards the export markets of Europe and the US which are affected by volatile market prices and demand. It is important that small-scale organic farmers reduce their risks by building up domestic and regional markets for organic produce in Africa (ORGANIC MONITOR 2006).

Two types of organic farming can be found in Africa: certified and non-certified, the latter being often "organic by default" as farmers either have been by-passed by the Green Revolution or simply do not have enough money to pay for agricultural inputs. Farmers who are default organic farmers constitute the majority. In Uganda for example, such traditional, non-certified farming accounts for about 85 % of the total farming area, comprising over 2 million hectares (TUMUSHABE et al. 2006).

Within the certified sector, there are large export-oriented farms converting to organic production in Zambia, Malawi and South Africa, and small-scale farmers who produce their export commodity through organisations, co-operatives or companies such as those in Tanzania and Uganda (HINE AND PRETTY 2006). Uganda's organic exports were valued at about US$ 6.2 million in 2004-05 (GIBBON 2006) and the number of companies exporting organic produce grew from 5 to 15 between 2001 and 2003 (TUMUSHABE et al. 2006).

[1] The purpose of this paper is to assess the necessity for small-scale farmers to build local and regional organic vegetable markets. The methodology used: The data presented is based on literature review.

Fig. 1: Certified organic area in Africa
(Source: FiBL Survey 2005 / 2006, IN: PARROTT et al. 2006)



The area under organic management compared to the total agricultural area and the number of organic farms in East Africa for two comparative years are also shown in table 1.

Table 1: Overview of the organic area for all crops in East Africa
(Source: FiBL Survey 2005 / 2006, IN: PARROTT et al. 2006; WILLER AND YUSSEFI 2007; HINE AND PRETTY 2006; *abridged*)

Country	Year	Area under Organic Management (ha)	Share of Total Agricultural Area (%)
Kenya	2003	494	0.002
	2005	182,438	0.69
	2006	182,586	0.7
Rwanda	2005	50	-
	2006	105	0.0
Tanzania	1998	4,000	0.01
	2003	55,867	0.14
	2006	38,875	0.1
Uganda	2004	122,000	0.99
	2006	182,000	1.5
Sub-Saharan Africa	2005	639,750	<0.2
	2006	701,931	

Most organic market studies have analysed organic produce in general and not the organic vegetable market per se, and so there is little data regarding the production area, volume and markets for organic vegetable production in Sub-Saharan Africa. But the existing information indicates that fresh certified organic vegetables, geared mostly at export markets, are produced in East Africa in Kenya and Uganda in addition to Madagascar, Malawi, South Africa and Zambia; PARROTT et al. 2006). Tanzania is also a producer and exporter of fresh vegetables, but it is not quite clear where it is exported to and whether it is certified as organic (TAYLOR, 2006). Other mostly certified and hence export-oriented organic cash crops in East Africa[2] include cotton, coffee, tea, cocoa, vanilla, spices, herbs, fresh and processed fruits, nuts (ITC 2006a, b, c).

There is no overall country data on production volumes as most literature provides production information for specific companies or farmers' groups producing vegetables, affiliated with a project (see table 2).

[2] Countries referred to are Kenya, Tanzania, Uganda.

Table 2: Organic vegetable production in East Africa according to producer segment (Source: *own compilation based on* TAYLOR 2006 (Kenya, Tanzania, Uganda))

Country	Producer segment	Crop	Production (t)	Area (ha)	Year	Main Market
Kenya	C[a]: Kisima	Fresh vegetables, dried spices (paprika, birds eye chillies; & dried herbs)	30	42	2005	UK
	C: Sunripe	Beans, peas, sweet corn, chillies, avocadoes (& fruits)	380	190	2005	UK, Europe
	C: Three Palm Garden	Chilli	82	171	2005	USA
	C: Vitacress	Salad, baby vegetables	100	42	2005	UK
Tanzania	W[b]: Mkuranga women vegetable growers	Fresh vegetables	-	3.4	2005	-[c]
	C: Zanz Germ	Ginger, pepper, turmeric, chilli and lemon grass	65	4,400		-
Uganda	C: Bo Weevil - Lango Organic Farming promotion	Chilli	-		2004	EU

[a] C: Company
[b] W: Women's group
[c] - : Due to the use of different sources, the data provided are not always complete, e.g. for one country, some sources have indicated destination markets, while others have not specified any

Based on the existing data, there seem to be both domestic and regional markets for organic agricultural produce surfacing in East Africa. Although there are constraints on the development of domestic and regional markets for organic vegetables in East Africa, they do appear to have potential as a part of the high value crops segment in East Africa.

Constraints

The local markets for organic vegetables are undeveloped as most of the local populations are not prepared to pay price premiums for such products (TAYLOR 2006). Consumers in African domestic markets often lack awareness of the availability of organic products and don't rate their qualities as important (MJUNGULI 2005). Consumers consider African indigenous vegetables as inferior or of low value (although they are actually highly nutritious), which makes it difficult to sell them. Because many vegetables whether indigenous or exotic are organic by default, those that are actually certified as such have little extra value in the marketplace (TAYLOR 2006: 12).

On the supply side, poor infrastructure, a lack of technical support and especially market information concerning what products are in demand and quality requirements are further constraints to supplying domestic and regional markets with organic vegetables (TAYLOR 2006). All these factors lead to organic products being only a niche market in Africa.

At the international level, the world market for organic vegetables is very volatile. Currently, there is a shift in organic vegetable production from developed to developing countries, as demand exceeds supply in developed countries. High labour requirements are leading to a growing dependency on (small-scale) farmers from developing countries to meet this need, but such farmers also need the security of developed local markets if demand in the richer countries diminishes (ORGANIC MONITOR 2006). Table 3 gives an overview of the organic vegetables exported from East Africa.

An additional pressure on small producers in developing countries comes from the structure of marketing systems in developed countries. Big retailers, as well as mergers and acquisitions of large producing companies have led to a domination of the organic sector by a few large players who are able to dictate prices and standards, and restrict market access for small-scale farmers. Strict regulations and certification are having a severe impact on the opportunities for small-scale farmers to sell their organic vegetable produce into these markets (SCIALABBA 2005).

Table 3: Export of organic vegetables from East Africa
(Source: *own compilation based on* Kenya / Tanzania: ITC 2006a, b; TAYLOR, 2006; Kenya only: KIMEMIA AND OYARE, 2006; Uganda: WALAGA 2005; GIBBON 2006; ITC 2006c) [a]

Exporting Country	Crop	Destination	Quantity / Value	Year
Kenya	Fresh vegetables	ns [b]	510 t	2005 (est.)
	Fresh vegetables, beans	EU, Japan	ns	2003
	French beans, runner beans, mange tout, salads	UK	ns	2005
Tanzania	Fresh vegetables	ns	34 t	2005 (est.)
	Ginger (semi-processed or raw)	Germany, NL, Sweden, Japan, Switzerland, UK, Indonesia, US	ns	2006
Uganda	Fresh & dried vegetables, chilli, ginger	Europe, US	ns	2006
	Dried chilli	ns	USD2,240 / ton	2005 ?
	Fresh & dried vegetables	ns	USD1 mill.	2004 - 05
	Organic exports	ns	USD4.6 mill.	2002 - 03
	Organic exports	ns	3,159 t / USD7.7 mill.	2003 - 04

[a] Due to the use of different sources, the data provided are not always complete, e.g. for one country, some sources have indicated destination markets, while others have not specified any
[b] ns: not specified

In East Africa, not only the production costs but also the certification costs for organic vegetables can be very high and often inconsistently applied. In Kenya for example, inspection costs are USD325 per year, if a farmer wants to be certified by the UK Soil Association (WAGNER 2003). Though the studies did not provide data on production costs, one can say that the "average certification costs at farm level are 3 % of business turnover" (THE ORGANIC STANDARD 2001: 7-8). In Uganda, 15 operators "exporting on a certified organic basis" had to pay USD132,105 (an average of USD8807 each) whereas another operator paid USD4,000 for certification costs (GIBBON 2006). This has to be taken into account in assessing the domestic and regional market opportunities.

Opportunities

The following data give an idea of size and value of the global organic market, along with details of the two largest markets for organic vegetables in Europe, namely Germany and the UK (KORTBECH-OLESEN 2006):

In 2004, the world market for organic produce of all kinds was valued at USD27 billion. Global retail sales between 1997 and 2001 increased from USD10.5 to USD19 billion, and by 2003 they had reached an estimated USD23 - 25 billion and in 2005 it was around USD30 - 32 billion. Global sales of fresh organic fruit and vegetables are currently increasing at 8.4 % p.a. (GARIBAY 2007).

Germany is the world's second largest market and Europe's largest importer of organic produce[3], taking for organic fruits and vegetables (which are mainly fresh) about 30 %. Although Germany's organic share of the total food market is estimated at 2.5 - 3 % (KORTBECH-OLESEN 2006) the total value is still very significant. The value of organic retail sales in 2004 were USD4.4 billion, rising to USD5.1 billion in 2006 (KORTBECH-OLESEN 2006) and to an estimated USD5.7 billion in 2007 (WILLER et al. 2007). A large proportion of organic produce is sold through supermarkets, which in Germany is around 40 % (in the US 49 %, in Denmark 85 %; SCIALABBA 2005).
The UK is the third largest market for organic produce in the world. Retail sales of organic produce were worth USD2.2 billion in 2004 rising to USD2.5 billion in 2005 (KORTBECH-OLESEN 2006). The sales of organic products have largely been driven by big supermarket chains which accounted for 75.3 % of total sales in 2004. Independent retailers accounted for 11.9 % or retail sales worth USD264 million while box schemes and mail orders accounted for 12.9 %, worth USD286 million; KORTBECH-OLESEN 2006).

Spending on organic fruits and vegetable accounted for 31 % of all spending on organic foods in UK in 2003, its production source being domestic, from the EU and developing countries (latter being tropical fruit and off-season vegetables). The next largest categories were dairy products with 23 %, bread and bakery products 12 % (KORTBECH-OLESEN 2006), with the figures representing a particular commodity sold. It is interesting to note that "although percentages probably changed somewhat since then, there is no doubt that organic fruit and vegetables remain the most important product category" (KORTBECH-OLESEN 2006: 11).

In addition to the increasing demand for organic vegetables in markets like Europe, there is also a growing demand in Sub-Saharan Africa. In Tanzania for example, both specialized and non-specialized outlets exist to supply organic vegetables, processed foods and nuts. In Uganda, NOGAMU has established a successful outlet shop (TAYLOR 2006). The shop has grown with monthly sales rising from USD93.50 in January 2003 to USD1,110 in December 2004 and over USD1,650 by December 2005. These figures show that local sales grew by 50 per cent in 2005. "By the end of 2005, customer visits averaged 110 per week (up from 50 per week in early 2005), and volumes of home deliveries averaged 850 kg per week up from 150 kg per week earlier in the year" (TAYLOR 2006: 16). NOGAMU also has three contracts for supplies to schools and restaurants. This example clearly shows that organic produce has a growing in demand.

Such outlets are mostly located in capital cities, where sales are also increasingly conducted through larger supermarket chains (non-specialized outlets), for example Nakumatt Supermarkets in Nairobi, Shoprite in Dar-es-Salaam and Uchumi in Kampala. Organic produce is becoming more popular, and the busiest Uchumi store in Kampala; Uchumi Sarit Hyper, is planning to create an "organic corner" in its supermarket (NDERU 2007).

In part, sales are increasing in both types of outlets due to the health aspects associated with organic produce. According to survey conducted in Tanzania the current clientele mostly comprise European expatriates and some wealthy nationals as well as a small number of tourists and travellers. These buyers are willing to pay reasonable premiums for organic vegetables (MJUNGULI 2005). The premium range for fresh organic vegetables in Uganda is between 30 – 50 % and in Kenya 15 % (TAYLOR 2006), while the premiums paid for general organic produce in Tanzania range from 50 % to 100 % (MJUNGULI 2005).

Export opportunities have also been assessed for organic products from East Africa. The largest markets are the EU, the Middle East and the US, though for the latter East Africa faces strong competition from Latin America (KORTBECH-OLESEN 2006).

[3] The USA is the largest global market for organic produce. Its retail sales in 2005 were at USD15 billion, in 2004 USD12.7 billion (KORTBECH-OLESEN 2006).

Way forward

Domestic and regional market development in Sub-Saharan Africa is an important factor for small-scale organic vegetable farmers to gain from this growing sector and be less dependant from the vagaries of the world market. Linking the small-scale farmers to the local market, having transparent and shorter supply chains, as well as being clear on regulations and quality requirements are one side of the issue. The other side is creating more awareness for organic vegetables from the demand side, showing the associated environmental and health benefits of organic vegetables (as such there is a growing demand in SSA), as well as the importance and reason for premium prices. Though organic farmers have to get organized and are supported by organizations or projects to successfully access the international market, being in a farmers group for the domestic and regional market is not necessarily a drawback. Furthermore, alternative marketing strategies for the domestic and regional market as practiced in other countries can provide valuable examples of innovative marketing: In Japan the Teikei system connects farmers directly with consumers, as does 'Community Supported Agriculture" in the USA. Such movements work when there are direct farm sales to consumers that build trust and remove the need for independent and expensive certification. However once organic produce enters the anonymity of the domestic market chain consumers will want some certification to guarantee quality standards. For international exports but also regionally, national certification schemes adapted to the African context or the regional setting, which should be less costly, can help create a better market opportunity and be a marketing tool. While organic vegetable production is likely to remain a niche market it is still a valuable market that smallholders cannot ignore.

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