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# Increasing income by improving marketing strategies for small-scale organic vegetable farmers in Tanzania

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# Abstract

There is a growing demand for organic agricultural produce in and from Africa (Parrott and Kalibwani 2005), leading to income generating opportunities for farmers all over Africa. This includes vegetable produce. Despite the rise in demand, the domestic market for organic vegetable produce has not been developed. Small-scale farmers who do practice organic agriculture in Africa find export markets in the US and the EU more attractive than domestic markets (Organic Monitor 2006). However, it is risky for small-scale farmers to rely solely on the export sector. Domestic and regional markets in Africa can be good fallbacks.

No detailed research has been conducted on organic vegetables for the African market. Most research has been geared towards export opportunities for East Africa. Local NGOs that teach small-scale farmers organic agricultural practices do not explain to farmers how to efficiently market their organic produce. There are numerous constraints in the supply chain from the farm gate to the consumer. This project assesses constraints in the supply chain to explore better marketing strategies for small-scale organic vegetable farmers in order to improve their income.

The project has collected data\* from a questionnaire survey of more than 200 small-scale organic vegetable farmers, about 50 wholesalers, middlemen, and retailers in the intermediary sector, and more than 200 consumers on aspects of organic vegetable production such as volume, prices, uses, transportation to the market, marketing difficulties, selling points for the main products, main customers, awareness of organic vegetables by market supply chain actors and consumers, and consumers' willingness to pay for organic vegetables. The consumers were chosen by stratified sampling (by income and location), mainly at supermarkets and organic shops, latter additionally in Dar-es-Salaam.

Keywords: Africa, domestic markets, marketing strategies, organic agriculture, organic vegetables small-scale farmers, Tanzania

#### Background

There is a growing demand for organic agricultural produce in and from Africa (Parrott and Kalibwani 2005), leading to income-generating opportunities for farmers. Despite the rise in demand, the domestic market for organic vegetable produce has not been developed. Small-scale farmers who do practice organic agriculture in Africa find export markets in the US and the EU more attractive than domestic markets (Organic Monitor 2006). However, it is risky for small-scale farmers to rely solely on the export sector. Domestic and regional markets in Africa can be good fallbacks. Nevertheless, due to a lack of proper marketing, the domestic and regional markets are not well developed and the organic vegetable sector has not been researched specifically. It is therefore necessary to determine the constraints along the supply chain, suggest solutions to improve marketing, and link producers to markets.

#### Materials and methods

In analyzing the supply chains for organic vegetables (OVs), detailed interviews were conducted with a total of 501 respondents in Tanzania using a semi-structured questionnaire. Three types of questionnaires were developed to gather general and specific information from small-scale organic vegetable farmers, the intermediary sector (wholesaler, middlemen, and retailers), and consumers.

The research areas in Northern Tanzania were selected based on the location of small-scale organic vegetable farmers (because local NGOs have been working with these farmers on organic agricultural production methods) and their potential supply areas. On this basis, the largest market located closest to the producers was chosen. In the cities, upscale supermarkets, hotels, and restaurants were selected, all with the potential to buy (certified) organic vegetables at a premium price. Consumers were chosen according to income and location, i.e. at supermarkets catering to more-affluent customers. The research areas are Arumeru and Marangu Districts (Fig. 1); the former is located in the Northern Highlands between 1000 and 1500 m and the latter on the southern slopes of Mt. Kilimanjaro between 1200 and 1800 m.



Source: ICRAF 2002-3



# **Results and discussion**

# I. Supply chain characterization

The typical supply chain for small-scale organic vegetable farmers is either sale at the farm gate to consumers or middlemen, or sale at the market gate to middlemen and retailers (Fig. 2). From there on, organic vegetables mostly get sold to consumers. Such markets for the Arumeru District (where surveys were conducted) included Tengeru or Kilombero in Arusha town. In Marangu District, markets are Marangu-Mtoni, Kinyange, or Kisamboki. Often farmers grow organic and conventional vegetables and simply consume the organic ones for themselves and sell the conventional ones to the market; they consider organic vegetables as better for them in terms of health, but they can make more money from the conventional ones. This is due in part to the fact that the intermediary supply chain actors do not sell organic vegetables as such (they are mixed with conventional produce) and also not sell organic vegetables at a higher price, because, as the intermediary actors say, consumers do not ask for them. Uncertified organic vegetables do not reach the supermarket and only two (0.9%) of the interviewed 218 small-scale farmers were certified organic.



Figure 2. Supply chain for organic vegetables in Northern Tanzania

# II. Marketing difficulties faced by supply chain actors

Small-scale organic vegetable farmers are not well linked to markets due to bottlenecks such as poor transportation (bad roads, markets too far, low prices paid by intermediary sector, no vehicle available or rental too expensive), storage and handling (at the market, organic and conventional are simply mixed together), and lack of awareness of price premiums they may receive. Of the small-scale organic vegetable farmers, about 46% stated they find high transportation costs a problem, followed by about 33% that say consumers are simply unwilling to buy their OVs (Fig. 3). Also, 18% state the markets are located too far from their production areas. Producers are often trained in organic agricultural practices, but not in efficient marketing methods. Some local NGOs like Floresta Tanzania, which helped conduct surveys in the Marangu research area, have tried the marketing aspect, but the producers did not take these on and would rather rely on funding or help from outside.



Figure 3. Marketing difficulties faced by small-scale organic vegetable farmers

At the market, about 40% of the intermediary sector thinks there is a lack of awareness and training on OVs, and an insufficient supply (Table 1). As there is no special marketing place for OVs (13.5%), this also adds to the constraints for buying and selling OVs properly. Some stated that they see no difference in organic and conventional vegetables, or see the former as a cheaper production method. Because their customers do not ask for OVs, they sell organic produce for the same or lower prices than conventional vegetables.

In addition, consumers are unable to find organic vegetables markets. Interestingly, about 32% of consumers also consider a lack of awareness and training on OVs as a constraint for the development of the organic market in Tanzania (Table 2). Furthermore, about 21% feel there are no strong organizations promoting OVs, and that not enough are produced (about 10%). The low price farmers get for their OVs is another factor that discourages them from attempting organic production (about 6%).

		Frequency	%	Valid %	Cumulative %
Valid	Lack of awareness & training	21	40.4	43.8	43.8
	Insufficient supply of OVs	8	15.4	16.7	60.4
	No separate OV markets	7	13.5	14.6	75.0
	OV producers not known to buyers	4	7.7	8.3	83.3
	No stable market for OVs	3	5.8	6.3	89.6
	Price fluctuations	2	3.8	4.2	93.8
	Don't know	2	3.8	4.2	97.9
	Lack of committment in producing OVs	1	1.9	2.1	100.0
	Total	48	92.3	100.0	
Missing	System	4	7.7		
Total		52	100.0		

Where do you think are constraints in the supply chain for buying and selling OVs?

Table 1: Intermediary sector's point of view on marketing problems for OVs

**Table 2:** Consumers' point of view on problems for the organic market development

		Frequency	%	Valid %	Cumulative %
Valid	Lack of awareness & training on OVs	68	32.1	32.1	32.1
	Don't know	51	24.1	24.1	56.1
	No strong organisations to promote OVs	22	10.4	10.4	66.5
	Low production of OVs	21	9.9	9.9	76.4
	Low price of OVs discourage farmers	13	6.1	6.1	82.5
	No specific market for OVs	8	3.8	3.8	86.3
	Poor belief on potential of organic inputs	6	2.8	2.8	89.2
	High production cost	6	2.8	2.8	92.0
	No organic stds & regulation in Tanzania	6	2.8	2.8	94.8
	No OV supply in Tanzania	5	2.4	2.4	97.2
	Economics	4	1.9	1.9	99.1
	Certification not trustable	2	.9	.9	100.0
	Total	212	100.0	100.0	

What do you consider as main constraints for the development of the organic market in Tanzania?

# III. Lack of standards knowledge by supply chain actors

Of the 218 small-scale organic vegetables farmers, 99.1% were not aware of any organic standards and only 0.9% (two farmers) knew of the East African Organic production Standards (EAOPS). Only two farmers are certified. These and the official East African Organic Mark (Kilimo Hai) were officially launched in June 2007 by the Tanzanian Ministry of Agriculture and include the countries of Tanzania, Kenya, Uganda, Rwanda, and Burundi. The interviewed farmers had a choice between the following organic standards: IFOAM (Intl.), EU, JAS (Japan), NOP (USA), and EAOPS (East Africa). The lack of uptake clearly shows that after the launch of the logo, no further promotion has been conducted at market and consumer level. The organic mark is only a marketing tool and will be issued to those who are certified. Here too, the local NGOs and especially the Tanzanian Organic Agriculture Movement (TOAM, the national movement based on IFOAM, the International Federation of Organic Agriculture Movements) needs to promote the organic mark more effectively. Nevertheless, 92% of the farmers consider certification necessary or better for the sale of their organic vegetables. They reached this conclusion mostly after the enumerators explained to them what certification means.

In the intermediary sector, 69% knew what certification means (though the total intermediary sector is 71 interviewed, this response refers to only 52 intermediary actors excluding the 19 specialized and non-specialized outlets as these had different questionnaires). Here too, the majority (about 94%) do not know of any organic standards. With the consumers, about 86% do not know of any standards and about 90% do not know the Kilimo Hai logo even though they were shown the logo during the interview. Only about 6% know that it is the "logo used in East Africa for organic products."

#### **Marketing strategies**

Small-scale farmers must work together with local NGOs with whom they have started organic agricultural production methods. These NGOs can serve as mediators to help create awareness for organic vegetable farmers at the market and consumer level. Of course, the farmers need to promote themselves as well, especially when selling at farm or market gate to consumers and middlemen. This promotion can include explaining the significant benefits of organic vegetables in terms of soil, health, and environment—and therefore the slightly higher price for uncertified OVs. For certified OVs, higher prices can be justified due to the certification. Furthermore, farmers need to create a pamphlet explaining who they are and why they are growing OVs; these pamphlets can be handed out when they are selling their OVs. Farmers also need to create their own organic marketplace if possible, and arrange transport possibilities, as many of them simply do not sell at the market because the infrastructure is bad and transportation costs are high. Concerning transportation of organic vegetables from the farm to the market, a shared vehicle can be organized as well as collection points set up, so especially remote areas are not left out of a marketing opportunity.

The intermediary sector suggested themselves that organic vegetables need to be certified, promoted, and sold as OVs at the market stand, at a higher price. Nevertheless, as many middlemen did not know uncertified and conventional vegetables should not be mixed during transportation, storage and sale, awareness needs to be created here on handling OVs from the point of buying until the point of sale.

Consumers clearly need awareness-raising via the small-scale farmers at sale points. Local NGOs and TOAM can help consumers find out where OVs can be procured; consumers can be invited to visit farmers' fields and get an idea of organic production for themselves. When consumers are included in the Teikei system, which is a direct producer-consumer relationship based on trust, the sale of OVs will be facilitated. The Teikei system originated in Japan and has been successfully incorporated in the United States as "Community Supported Agriculture" (CSA); the model is also being followed in Thailand and Brazil.

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