

BTC TRADE FOR DEVELOPMENT



ORGANIC SPICES IN TANZANIA:

***OPPORTUNITIES FOR PRODUCERS OF
ORGANIC GINGER, CHILLI AND VANILLA***



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CONTENT

CONTENT	3
1. INTRODUCTION	4
2. OVERVIEW ORGANIC SECTOR IN TANZANIA	5
2.1. LOCAL ORGANIC SECTOR	5
2.1.1. <i>Distribution channels</i>	5
2.2. INTERNATIONAL MARKETS	8
2.2.1. <i>Regional markets</i>	8
2.2.2. <i>Other international markets</i>	10
2.3. CERTIFICATION	10
3. ORGANIC GINGER	12
3.1. LOCAL PRODUCTION	12
3.2. LOCAL MARKET	13
3.2.1. <i>Local organic processing</i>	13
3.2.2. <i>Local end-market</i>	14
3.3. INTERNATIONAL MARKETS	14
3.3.1. <i>Regional markets</i>	14
3.3.2. <i>Other international markets</i>	15
4. ORGANIC CHILLIES	16
4.1. LOCAL PRODUCTION	16
4.2. LOCAL MARKET	16
4.2.1. <i>Local organic processing</i>	17
4.2.2. <i>Local end-market</i>	17
4.3. INTERNATIONAL MARKETS	18
4.3.1. <i>Regional markets</i>	18
4.3.2. <i>Other international markets</i>	18
5. ORGANIC VANILLA	19
5.1. LOCAL PRODUCTION	19
5.2. LOCAL MARKET	19
5.2.1. <i>Local organic processing</i>	20
5.2.2. <i>Local end market</i>	20
5.3. INTERNATIONAL MARKETS	21
5.3.1. <i>Regional markets</i>	21
5.3.2. <i>Other international markets</i>	21
6. FINDINGS AND CONCLUDING REMARKS	22
6.1 FINDINGS	22
6.1.1. <i>Constraints in the Tanzanian organic spices sector</i>	22
6.1.2. <i>Opportunities for value addition</i>	23
6.2. CONCLUDING REMARKS	23
ANNEX 1. REFERENCES	25
ANNEX 2. MARKET ACCESS REQUIREMENTS	28

1. Introduction

Strong growing organic markets in Europe and the US have stimulated organic produce all over the world. Many non-governmental organisations (NGOs) and other development partners have designed and supported projects and programmes aiming for increased farmers' incomes by tapping into the opportunities that these strong growing organic markets offer. Many farmers in developing countries (DCs) produce organically by default, making it relatively easy to convert to true organic agricultural practices.

However, these smallholders often have no access to international markets. Kilimohai certification is not yet approved on the international markets (besides regional markets) and most individual buyers are not able to meet the quality and quantity requirements of international buyers. The Tanzania Organic Agriculture Movement (TOAM) coordinates and promotes the development of the organic farming sector among smallholder producers, in order to realize sustainable livelihoods in Tanzania.

This report examines the options that Tanzanian farmers producing certified organic ginger, chilli and vanilla have to sell their products. It maps the Tanzanian organic spices sector, as well as the international organic spices market. It discusses buyer requirements and identifies opportunities for Tanzanian organic farmers on local and international markets. Furthermore it identifies opportunities for value addition.

To do this, existing reports on the organic sector in Tanzania, Uganda and Kenya were screened. Trade data and production data analysed. Face-to-face interviews with key stakeholders, like processors, exporters, retailers were conducted. Besides TOAM, also other service providers, such as TanCert and organisations in Uganda and Kenya were contacted.

2. Overview organic sector in Tanzania

2.1. Local organic sector

In 2009, around 85,366 farms, mostly smallholders, were active in certified organic farming in Tanzania. This was the third largest number of organic farms in Africa (After Uganda and Ethiopia), and fifth in the world. Total organic agricultural land amounted to 72,188 hectares, indicating that only 0.21% of the total agricultural land is organically certified¹. However, many non-certified farmers produce organically by default.

Products organically produced include coffee, tea, herbal tea, essential oils, pineapple, cocoa, cotton, cashew nuts, several vegetables, (dried) fruit, rubber and several spices. Organic production is organized in different ways²:

- trading/packing/exporting companies buying supplies from out-growers or a farm association
- farm enterprises vertically integrating land, packaging and exporting
- farm associations organized by farmers themselves.

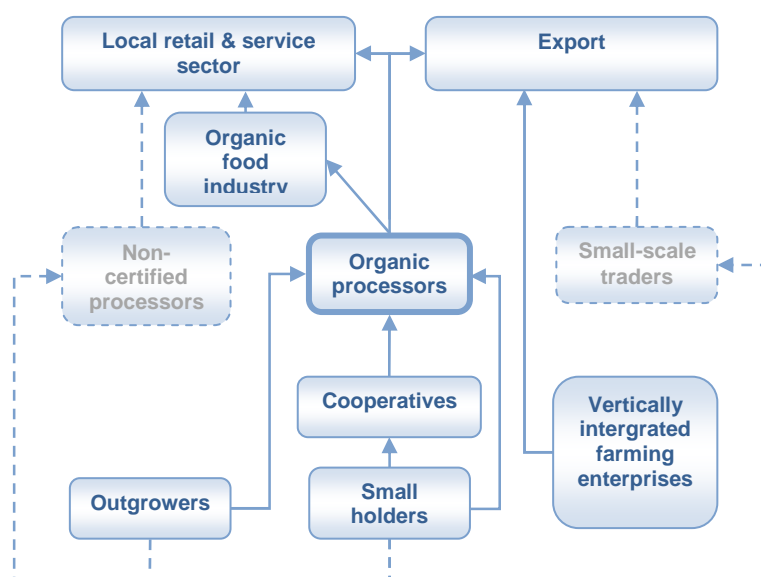
Tanzanian certified organic farmers produce almost exclusively for the export market. The total value for the nine most exported products³ was estimated to be almost € 10 million in 2009. In terms of volume, cocoa, cashew and coffee are the most exported products. In terms of value, cocoa, cashews, vanilla and tea are the most important export products, representing 55% of the total organic export value⁴.

Nevertheless, Tanzania also has a growing domestic organic market. There is increasing awareness of the benefits of quality food. Around 90% of the consumers of certified organic products are foreigners, expatriates and tourists. However, demand for organics from urban Tanzanian elite and middle class is increasing.

2.1.1 Distribution channels

Organic products reach their end-markets in various ways. Figure 2.1 provides an overview of how organic food products are distributed.

Fig. 2.1 Organic distribution channels



¹ FiBL and IFOAM, 2011.

² Kledal and Kwai, 2010.

³ Cocoa, cashews, coffee, tea, spices, sesame, pineapple, cotton and vanilla. TOAM and field data Kledal 2009.

⁴ FiBL and IFOAM, 2011.

Organic processors play a central role in the distribution of organic products. They collect, process, pack and distribute the products to their final destination. In case of spices, this means that organic processors are also exporting. Most farmers (associations) have made agreements with processing companies, which buy their crops. These processors often provide training on organic practices and assist with inspections and certification. Processors/exporters normally are not sure of the conventional or the organic export price at the time of buying from the farmers. What they know is the price that other (conventional) buyers in the same area are offering farmers. Normally they offer the farmer a premium of 10% to 25% over this price. Premiums need to be higher when quality requirements are higher⁵.

When organic prices are low or conventional prices high, farmers also sell to conventional processors. In case of spices, the difference between the 'organic-by default' and certified organic spice production is not recognized yet by most conventional spice buyers. Small scale traders often trade informally. Often they buy lower quality, for example unripe, products at low prices. Both channels do not pay an organic premium and the spices lose their formal organic status. Farmers engage in this side-selling, because it offers them instant cash. However, it negatively impacts the availability of good quality certified spices, posing supply problems for organic spice exporters.

There are three types of end-markets for organic products⁶:

- The organic premium market;
- Specialty products in the conventional market;
- The conventional market, where the lower quality of conventional products is improved by mixing it with higher quality organic products.

Opportunities in the organic market are very different from the conventional market. Sales of organic food stuffs rely on integrated and transparent chains with a relatively slow turnover but a high quality profile. Relevant markets for organic products are specialty shops, supermarkets and integrated tourist operations.

Specialty shops

In 2002, Mum's Kitchen pioneered as specialized organic shop and was followed by others, like Vitality shops. These efforts were joined much later by MAC Shopping Centre (organic products) and Lutoni Shop. MAC Shopping Centre, Mum's Kitchen and Lutoni are located at a shopping place, known as Morogoro Store in Oysterbay area, near Masaki area where Vitality shop and Garden Market are found. Food Dell Ltd, another outlet is located in Oysterbay area near the beach and away from Morogoro Store area. Customers include health conscious consumers, who can afford organic prices.

Mum's kitchen

Mum's kitchen is a small shop for organic food products, including some spices and handmade products. From the start, spices were not given priority, because they are usually used in small quantities and the company did not believe there would be customers visiting the shop simply to buy spices. The main focus was supplying organic vegetables (carrots, cabbage, tomato etc), fruits and juices. The biggest challenge mentioned by the company was sustainability of supply from growers and processors, as customers get disappointed when they visit the shop only to find products they are looking for are out of stock. When the shop was visited during the research, there were no vegetables because of lack of supply. Lack of supply limits any efforts for the shop to aggressively promote or expand business. Word of the mouth e.g. in meetings is the only method used by the company to reach new customers.

MAC Shopping Centre

MAC Shopping Centre is a small shop selling organic products (including organic spices) and handmade souvenirs targeting tourists. The shop has been in operation for two years and very keen to promote Tanzanian organic products. If any foreign products, they will be from within the regional market (EAC). The company offers a free opportunity for new suppliers to bring their products to the shop to test the market. It will start buying from them after the product has been accepted. It advises companies on how it wants packaging to be. An example was a simple but artistic presentation of spices from GFP.

⁵ Agro Eco BV and grolink aB, 2008.

⁶ Agro Eco BV and grolink aB, 2008.

According to the proprietor, the business was good as customers looking for organic products already know the shop, buy the products and are satisfied with quality and price of the items they buy. The major cited challenge was packaging, which constrains many potential local organic producers from getting orders from the shop. Some stocked items were packaged in paper bags that cannot protect content from moisture and air, factors that damage the product. Shelf-time is therefore very limited.



Lutoni Shop

Lutoni shop mainly sells handmade souvenirs, but also sells some organic products, including organic spices. It stocks organic vanilla, both certified and non-certified. It also sells *masala* which is made from organic ginger and chilli.

Garden Market

The 'Garden Market' is a small shop targeting customers looking for organic products. The shop was established in April 2011 and was satisfied with business growth. The shop stocks fresh fruits, dried beans, rice and vegetables. The suppliers of fresh vegetables are organic farmers from Lushoto in Tanga region. Fruits are supplied from domestic production as well as imports. On the product list in the shop was fresh ginger from Morogoro, but without evidence of being organically grown.

The shop was looking for a supplier of spices from Zanzibar but was not aware of an organic certified dealer.

Food Dell Ltd

The mini-supermarket is situated at Oyesterbay shopping centre, a very strategic compound with other shops and restaurants. The shop stocks domestic and imported food items as well as non-food products. Among stocked products were spreads (honey, jams, marmalade) from various ingredients made by Dada Women Group of Zanzibar. Of particular importance was 'the tomato jam with spices'. The label on the jar shows that the spicy jam was made with organic chilli, but no mention of mixing the ratio.

Dada Women Group

The 'Dada' (sisters in Kiswahili language) project is an initiative by the people in Mbuyu Mabundi and Matemwe villages in Unguja – Zanzibar to address the fuel wood shortage and income generation activities in their communities. Among other things, women are given training on entrepreneurship and food processing. The group is based on organic principles. Raw materials are obtained from registered organic suppliers. The group does not produce in large quantities. The philosophy is to produce small and manageable quantities so that they can guarantee quality and freshness. Prior orders are entertained to guarantee supply.

The group produces spiced spreads (such as tomato jam), ginger mustard and organic ginger candies made of organic ginger, honey and brown sugar. The candy is used with a cup of tea or used in cakes and dessert.

Envirocare

One of the first specialty shops now moved to another, odd location, on a dusty road. The shelves were dusty and empty, except for some honey, herbal soap and some bottles of moringa oil. When asked about the situation of the shop, the response was that they have lack of supplies and that the little they get is delivered at people's homes.

Vitality shop

Vitality shop used to sell organic/natural products that come from South Africa, mostly medicinal products. At the time of research the shop was not located, so an update on its current activities cannot be given.

Bio-Shop Tanzania Ltd

The organic shop recently opened in January 2012 at Msasani Slipway. The shop targets tourists, diplomats and other foreign community and high income Tanzanian earners and more. The shop plans to stock a wide range of products – fruits, herbs, spices, juices, tea, coffee, honey, eggs and more. Currently, it stocks chilli from Kimango Farm and dried whole ginger and ginger mustard from the Dada Women group on Zanzibar.

Supermarkets

There are about 5 supermarket chains in Tanzania. The South African chain – Shoprite, the Kenyan chain – Uchumi, recently entered the Tanzania market (in 2011), Shoppers Plaza, Srijees Supermarket and the newly opened Coco Plaza. All these are located in very strategic areas.

Supermarkets provide growing opportunities for sales of organic products, however, they are very demanding in price, quality and supply capacity. Similar to the specialty shops, supermarkets mainly focus on organic fruit and vegetables. Although the supermarkets mentioned above claim to have organic spices, at the time of research, no evidence was found to support these claims e.g. designated shelves for organics, advertisement of organic products or products with organic labels. The supermarkets seem to refer to products cultivated organically by default.

Dell

Dell supermarket is eager to engage in organic products. The management needs to see the samples and price list of available products. Also the products should meet high quality standards, such as those accepted by Tanzania Bureau of Standards (TBS). Products should be well packed and properly labelled. Provided that locally available organic products conform to quality standards, Dell would prefer local supplies. The management insisted that these products should look neat and physically attractive. Otherwise they would rather go for imported commodities. They also felt that organic products should carry a certificate and if possible carry the logos of outlets like Dell. However, they only came up with TBS certification and not mentioned Kilimo Hai, EAOPS or other organic certificates. Although, Dell seems to be the best located and organised supermarket for selling organics, like in the other supermarkets there seems to be an awareness gap, which currently prevents the range of organic products to expand.

Hotels

Hotels like the Dar es Salaam Serena Hotel (former Royal Palm Hotel), New Africa Hotel and Hyatt Regency Dar es Salaam, The Kilimanjaro claimed to be eager to buy organic spices and their suppliers claim to deliver organic spices. Often, local availability seems to be a problem. However, relevant hotel staff was not really aware of organic certification and some did not know it existed at all.

The Sea Cliff Hotel has subcontracted its restaurants. The Western, Indian and Chinese restaurants were all anxious to work with organic products, but were unaware of organic certification. Some of their supplies come from the Masifio Estate in Iringa region, which produces top end vegetables, herbs and fruits. However, Masifio Estate is not organically producing.

Some eco-lodges also claim to serve organic food. However, this also mainly concerns organic by default products. Hotels seem to use 'organic' food as marketing instrument, but have not shown real commitment to certified organic food stuffs. There are probably some tourist outlets that do serve certified organic food. However, they are scarce and not identified during the research period.

2.2. International markets

Most organic produce is destined for export. Generally, second-grade products are directed at the regional markets and first-grade products sold to the European markets⁷.

2.2.1. Regional markets

Kenya

The Kenya Organic Agriculture Network (KOAN) estimated the size of the organic market to be close to 30 million Kenya shillings (approximately €270,000) in 2009, representing 4.6% of the total turnover of the organic sector. Growth of organic domestic market estimated to be 40% annually. Driven by a relatively large expatriates community, the premiums for organic produce have been ranging from 30 to 40%.

⁷ Royal Tropical Institute (2010)

Around 27 organic certified enterprises supplied the domestic market in 2009. An additional nine organic export oriented enterprises also sell a small percentage of their products locally.⁸

Kenya's demand for organic products from other East African countries is relatively high. Several organic outlets sell branded products from both Uganda and Tanzania. These products include; herbal teas, spices, dried fruits, juices, vanilla and honey. The organic market is centred in and around Nairobi. A monthly organic farmers' market has been established near one of the up-market estates at the River Garden Centre in Nairobi. Organic products are also sold through the three main supermarket chains in the country; Nakumatt, Uchumi, and Chandarana supermarkets (six stores). Furthermore, there are also six specialty food shops, which stock organic products. Some of the traders are operating a basket delivery system to consumer's homes or workplaces. In 2009, 185 consumers were being supplied.⁹



Most of the organic products supplied have gone through a third party verification system and carry the Encert certification mark and/or Kilimohai Mark. Other products are branded and are in different stages of certification.

Kenya's demand for organic produce from other East African countries is high. Branded products (mostly not certified) from both Uganda and Tanzania are being sold in organic outlets. Products include: herbal teas, dried fruits, juices, honey, vanilla and other spices.

Only the Green Corner in Nairobi and Juja Market in the Nairobi Area were identified to sell organic spices (see table 2.1). In Mombasa two supermarkets sell organic food items, but spices were not included.

Table 2.1 Summary of some key organic outlets in Kenya, 2010¹⁰.

Outlet	Organic products	Location
Uchumi Supermarkets	Fruits and vegetables, honey, herbal pharmaceuticals	Key cities, including Nairobi, Mombasa and Kisumu
Nakumatt Supermarkets	Fruits and vegetables, honey, herbal pharmaceuticals	Key cities, including Nairobi, Mombasa and Kisumu
Healthy U at Sarit Centre	Porridge oat, honey and sunflower.	Nairobi
Zucchini Green Grocers at ABC Place	Organic salad vegetable (lettuce) and other greens	Nairobi
Green Dreams Organic Shop		Nairobi
Organic Green Grocers at the Mobil Plaza	Salad vegetable and other conventional green groceries	Nairobi
Green Corner	Fresh fruits and vegetables, dairy, eggs, frozen meats, dried and canned items, spices .	Nairobi
Juja Organic Market	Fresh fruits, dried fruits, vegetables, herbs, spices , tubers, squash, and vegetables, nuts, porridge powders, Chapati flour, herbal teas, body care products, honey, arrowroots, oranges, amaranth grains, garlic, ginger and sweet potatoes.	Juja Town
Biosafe Technologies	Mushroom	Juja Town
Bridges Organic Health Restaurant	Fresh vegetable and fruit juice cocktails, dietary fibre, vitamins, minerals, oils, vegetable soups, and traditional Kenyan dishes made with whole grain and organic ingredients.	Nairobi

⁸ KOAN (2009)

⁹ KOAN (2009)

¹⁰ UNECA (2010)

Uganda

The local market for organic products has been growing steadily. Although, most of the local produce is destined for export markets, farmers and processors increasingly supply to the local market. Organic outlets are supermarkets like Uchumi and Nakumatt, restaurants, international schools and open markets. The product range includes coffee, bee products, fresh fruits and vegetables and dried fruits. For some products, demand exceeds supply. This is the case for several organic dried fruits. NOGAMU shop, of the National Organic Agriculture Movement of Uganda, works with a basket delivery scheme, which has gained in popularity. This way, fresh fruits and vegetable and other organic products (including spices) are distributed to individual consumers and some schools and restaurants.

Uganda has around 42 certified exporters of which 24 deal with fresh and dried fruits. The rest is involved in commodities and spices. Most products for export as well as for the local market are locally sourced as there is much organic produce in Uganda. It has the most organic land in Africa, 226,954 ha¹¹. Sometimes organic fresh fruits and vegetables are imported from Kenya and Southern Sudan. Other products are only sourced abroad in case of local shortages due to failed crops. Informally, a wide variety of products cross the border, including spices, however, quantities are generally low.

2.2.2. Other international markets

The European market and the US market are the largest organic markets in the world and most relevant to Tanzanian exporters of organic spices. Despite the economic downturn in recent years, overall organic markets have proved to be fairly resilient and continued growing, although at slower pace.

The US organic market reached a turnover of € 18 billion in 2009 and has showed steady growth rates for in the last 10 years. Organic fruits and vegetables accounted for 38% of total organic food sales and experienced the most growth. Around 54% of the organic products are sold through mainstream grocers, club stores and retailers. Natural retailers also are important distributors of organics. However, the US market is distant and there is strong competition from Latin American organic exporters¹².

European markets are much easier to reach. European organic sales amounted to € 18.4 billion in 2009. Germany is by far the largest organic market, accounting for almost 32% of organic sales. Germany is also an important distributor of organic products to other European markets and the US. The Netherlands has a medium sized domestic market for organics, but is more important as trader and distributor of organic products, including spices. Switzerland and Denmark have the highest organic food market penetration and highest per capita consumption of organic food¹³.

Both the European and US organic market are expanding their assortment of available organic food products. Especially the range of compound products, like spice mixes, sauces and ready meals, are expanding quickly.

Main obstacles to enter these markets are the stringent legal and non-legal market requirements, although requirements in the US are generally less stringent than those in Europe. US and European buyers at least demand reliable supplies of constant quality. Exporters unable to deliver will see their buyers moving on to other suppliers. Organic products can only be imported if the certifying agency has been approved by the respective authority. Approval of certification bodies requires compliance or equivalency with the requirements of the importing countries.

Market access requirements are related to food safety and certification and labelling of organic products and are presented in Annex 3.

2.3. Certification

In April 2007 the East African Community adopted the East African Organic Products Standard (EAOPS), with the purpose of having a single organic standard for organic agriculture production under East African

¹¹ FiBL and IFOAM (2011)

¹² FiBL & IFOAM (2011)

¹³ FiBL & IFOAM (2011)

conditions¹⁴. EAOPS certification can be realized through both the Participatory Guarantee Systems (PGSs) or through third party certification.

Most small scale spice farmers in Tanzania follow the GPS system. According to the IFOAM (International Federation of Organic Agriculture Movements), the PGSs (also called self-evaluation systems) are 'locally focused quality assurance systems that certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange and are adapted to local markets and short supply chain'. In Tanzania, this system is supervised by TOAM, TanCert and the local agricultural extension officers.

Companies that want to export to Europe, the US or other international markets, they need to comply to EU legislation, Bio Suisse standards, the NOP (National Organic Plan, for the US) or JAS (Japan's Agricultural Standards) and need to be certified through the third party certification system. International third party certifiers working in Tanzania include IMO, Bio Suisse and CERES. Third party certification can also take place through the Tanzanian Organic Certification Association, TanCert. However, TanCert can only offer these services with interference of an international recognized certification body.

At the time of writing, TanCert certification is not yet recognized in the EU market. However, TanCert has filed application for IFOAM recognition. The Ugandan Certification body UgaCert, recently received recognition in the second half of 2011.

Linked to EAOPS certification is the East African Organic Mark. The Kilimo Hai label is owned by the national Organic Movements in Kenya (KOAN), Tanzania (TOAM) and Uganda (NOGAMU). The East African Organic Mark can be used by all certified to the EAOPS, both in PGSs and third party certified systems. Also products certified to other recognized standards as the EU-regulation, the NOP and JAS and organic products imported to East African countries can carry the Kilimo Hai label.¹⁵



Spices

In the organic spices sector, processors/exporters buy EAOPS certified spices, mostly from small-scale farmers. The processors process the spices and make sure that they comply to the standards of the destination markets. While some companies focus on local and regional markets, others target Europe and the United States. Table 2.2 presents an overview of certified companies involved in organic ginger, chilli and/or vanilla and the standards they comply with.

Table 2.2 Overview of certified organic companies in spices.

Producer/processor/exporter:	Certified according to:
GFP	EAOPS, EU, NOP
Kimango Farm	EU, Bio Suisse
Maruku Vanilla Farming and Processing Company	EAOPS
MAVICO	EAOPS/CERES, EU, NOP
TAZOP	EAOPS, EU, Bio Suisse
Gando Farmers Association	(EAOPS in process)
Twanduseni Vanilla Growers Group	(EAOPS in process)
ZANOP	(EAOPS in process)



While organic labels are widely used in European markets and the US market, to validate the products' organic claim, the Kilimo Hai label is hardly used on the Tanzanian market. At the time of writing, on the local organic spices market, the Kilimo Hai mark was only used by TAZOP, for its certified organic masalas (see chapter 3).

¹⁴ The EAOPS can be found under: http://www.ifoam.org/partners/projects/pdfs/EAS%20456-2007_Organic%20products%20standard_w_cover.pdf

¹⁵ Global Organic Market Access, 2011. <http://www.goma-organic.org/hamonization-tracker/the-east-african-organic-products-standard/>

3. Organic ginger

3.1. Local production

Tanzanian production of ginger amounted to approximately 4.3 thousand tonnes in 2010/11, which is considerably more than production levels of the years before. Ginger is produced in many parts of the country: Coast, Tanga, Mbeya, Ruvuma, Morogoro, Kilimanjaro, Kigoma and Kagera regions.



Table 3.1. Local ginger production¹⁶, in tonnes, 2006-2011

2006/07	2007/08	2008/09	2009/10	2010/11
2,694	2,700	1,485	2,876	4,267

Source: Ministry of Agriculture, Food Security and Cooperatives

Ginger production in Tanzania is dominated by smallholders who use little or no agricultural inputs at all. Therefore, many of them produce organically by default. Although only a small share of them is organically certified (by third party certification), efforts by TOAM have been initiated to certify the main producing associations in Tanga, Kilimanjaro and Ruvuma regions.

Examples of non-certified organic production are MAMBA Ginger Growers Rural Cooperative Ltd. in Kilimanjaro region, Kilimo Mseto Welei (KIMSEWE), USHIRIKA WA KILIMO HAI TANGAWIZI NKHOMBO and Mcharo Organic Agriculture (T) Ltd all in Tanga region and Kiwata in Ruvuma region. All mentioned groups/associations work together with TOAM. Kiwata works also with RUCODIA (NGO) to improve the farmers' skill in organic farming, business and value addition. It includes 300 farmers working on plots ranging from ¼ to 3 acres. Kiwata's total production of non-certified organic ginger amounted to 75 tonnes and is expected to increase considerably. Kiwata has taken initial steps towards Kilimohai certification by TanCert.

No data on certified organic ginger production are available. Based on interviews with the main processors of locally sourced ginger, a production level of 60-80 tonnes annually is a rough indication. Real production should be somewhat higher, as sales to independent traders and foreign companies are not taken into account in this estimation. Furthermore, amounts can fluctuate strongly from year to year due to weather conditions.

Certified organic ginger is produced in several regions but mainly in Tanga and Zanzibar. Kasulu in Kigoma region used to be major sources of organic ginger, before a mistrust and breach of contracts between the only buyer and farmers occurred.

TAZOP (organic processor) used to buy from organic ginger farmers in Kasulu. However, when a fungal disease affected Ugandan ginger crops, Ugandan buyers approached Tanzanian farmers in Kasulu, driving up local prices to levels TAZOP was not able to offer. With time the same disease wiped out ginger production in Kasulu. While it was found that discontinuing production for a certain time would ensure future return to productivity, local farmers opted to use chemicals to control the disease. As this would make the ginger no longer organically certified, TAZOP refused to buy and advised farmers to follow technical advice. When Ugandan production returned to normal and this market was also lost, farmers became highly disappointed. Efforts by TAZOP to introduce new seeds failed due to high cost of certification per farmer, as only a few farmers opted to re-start. During this period TAZOP shifted to Tanga where the company is now established.

According to TAZOP, Kasulu remains the best place for ginger production, yielding high oil content ginger which gets good prices on the market. Farming has started again but remains uncertified.

¹⁶ Figures do not distinguish between conventional and organic production

3.2. Local market

Tanzanian ginger farmers sell their ginger to collectors from processors or independent collectors/intermediaries that go from farm to farm to buy small amounts, often of low quality at a low price. Through these processors and independent intermediaries the ginger reaches the local end-market.

3.2.1. Local organic processing

Most of the certified organic ginger is sold to local processors, of which TAZOP is the largest by far, followed by GFP and ZANOP. TAZOP is based in Zanzibar and GFP has its main office in Arusha and a branch in Tanga which is responsible for collection of ginger and processing. Whereas TAZOP obtains organic spices from Zanzibar and Lushoto and Muheza in Tanga region, GFP obtains organic ginger from Muheza in Tanga region. Both companies work with farmers by supplying them with some inputs. ZANOP is based in Zanzibar and sources locally.

Processor	Amounts sourced annually ¹⁷
TAZOP	50-70 tonnes
GFP	10 tonnes
ZANOP	200 kg

Freshly harvested ginger is washed to remove soil, cut or sliced into chips and then sun dried. Ginger is also sourced in dried, non-ground form. GFP only sources fresh ginger that is free of soil and other contaminants and uses its own facilities for drying. This way the company has better control over the quality of the end-product. TAZOP sources fresh as well as dried ginger, while ZANOP only sources in dried form.

TAZOP processes undisclosed amounts ginger into 'masala', a mixture of ground spices used to prepare and add flavour to various dishes. The masala is certified, carrying the Kilimohai label and sold locally. TAZOP is currently working on packaging design to stand out in the market. Similarly, Rocky's Products, currently producing conventional masala, is considering going organic.

The required specifications of dried organic ginger are presented on the right. A smaller company like ZANOP, has no means to assess moisture and oil content. Its buyers use their experience and determine quality by bending the ginger.

Requirements of dried ginger

Moisture content ≤12%

Oil content 2.6-5%

Free from mold

Good appearance

The rhythm of supply depends on the buyer and varies from quarterly to twice a month. According to the processors mentioned above, local availability of certified organic ginger is considered to be average to limited.

With training and supervision from the processors, some farmers do the drying by themselves and get better prices. GFP, however, wants to process using its own facilities, in order to better control the quality.

Prices for organic ginger, paid to the farmers, have been high for some years now. Demand for ginger (whether organic or not) on the local market has been high. Furthermore, buyers from Kenya and Uganda informally have been buying directly from farmers. Both factors resulted in increasing prices. Regularly, farmers sell on the side to small scale traders because they pay better prices than the organic processors. Often, farmers also accept lower prices in return for instant cash. For the processors this poses problems because it makes their supply unreliable.

Processor	Price range 2011 ¹⁸	Form
TAZOP	Sh. 5,000-6,000/kg	dried
GFP	Sh. 1,500-2,000/kg	fresh
ZANOP	Sh. 12,000/kg	dried chips

¹⁷ Based on interviews with respective companies, 2011.

¹⁸ Based on interviews with respective companies, 2011.

3.2.2. Local end-market

Use of ginger is widespread in Tanzania. In the fresh form which takes the bulk of it, ginger is used as a tenderiser in barbeque which is very common in Tanzania. Besides its use in masalas, ginger is used as an ingredient in drinks such as tea and coffee. Ginger is also used in flavouring of some carbonated drinks such as the ginger soda and treatment of some ailments by traditional practitioners.

Non-certified organic ginger is commonly sold to small local processors, mainly in Kilimanjaro, Dar es Salaam, Arusha, Tanga and Zanzibar. They process the ginger into powder and pack it either as a single spice or make some 'masalas'. Packaging remains a problem to many of these companies. The ground ginger is packed into transparent polyethene consumer bags/packets which are not attractive and do not protect the product inside. The Dada Women Group (see box on p.7) sells dry non-certified organic ginger and ginger mustard and ginger candy through the newly opened Bio-shop Tanzania Ltd, amongst others. Non-certified organic ginger is also sold to tea and coffee blenders, like Afri Tea and Coffee Blenders (1963) Ltd, International Food Packers Ltd and TATEPA.



Certified organic ginger, however, is far from common. Some certified organic ginger is sold in specialty shops. The ginger is sold in powder or masala form. They are supplied by TAZOP, the largest local supplier of organic ginger, and some independent local collectors/traders. At the time of research, certified organic 'masala', with Kilimohai label from TAZOP, was sold at Mum's Kitchen and MAC Shopping Centre in 75 gram packages, for Sh. 4,000 and Sh. 3,000 respectively. Comparatively, the non-organic masala by Rocky's (also a Tanzanian company) was sold at Sh. 2500 for a 100 gram pack). As mentioned earlier, TAZOP is currently developing new packaging for the masalas in order to stand out on the shelf. TAZOP's masalas are also sold at Lutoni shop.



Certified organic ginger is rarely used as an ingredient for other products. Afri Tea and coffee (1963) Ltd., interested in organic ginger powder, complained of insufficient quality when 'cup taste' were made from samples received from different suppliers. A 'cup taste' is made to evaluate the flavour, aroma and pungency of the ginger. The aroma, in turn, is a function of oil content, which depends on variety, soil and growing conditions, but also processing and storage conditions. If a good supplier was found, able to supply consistently, at good price and 'good' taste, this tea company was ready to send an expert to train staff so that they can produce a product of an acceptable quality.

3.3. International markets

Tanzanian exports of ginger are directed towards Kenya and Germany. Ginger exports have been fluctuating strongly. While exports reached 256 tonnes in 2008 and 164 tonnes in 2009, exports diminished to only 15 tonnes in 2010. Normally, most of the ginger exports are destined for Kenya, however, in 2010 Kenyan demand fell short¹⁹.

Export data of certified organic ginger are not available; however the lions share is exported to Europe.

3.3.1. Regional markets

Overall ginger exports are dominated by exports towards Kenya, except in 2010 did not source from Tanzania. These fluctuate strongly, as demand depends on Kenyan ginger crops and stocks. Furthermore, Kenya imported most of its ginger from Ethiopia.

¹⁹ ITC (2011)

There is also frequent trade of organic ginger to neighbouring countries. Nevertheless, quantities traded are small. Sometimes, Ugandan or Kenyan traders buy directly from Tanzanian farmers, but mostly they buy through middlemen, who are buying immature or low quality produce at a low price. This reduces the availability of good quality organic ginger. For this reason, GFP started contacting Kenyan buyers who normally buy from these middlemen, to offer them GFP's higher quality produce. This reduces the role of the middlemen²⁰. Identified Kenyan buyers include Mkamba Lucy, an individual large collector for Kenyan processors, Jambo Biscuit Company and some unnamed buyers from Mombasa.

Regional markets are also often reached through informal trade channels. Reliable estimates of the amounts of informally traded organic ginger are not available.

3.3.2. Other international markets

Export of ginger to other international markets is limited to Germany. Export of organic ginger, however, is destined to more than one country. Certified organic ginger exports are in hands of TAZOP and GFP.

M/s Zanz-Germ and Madawa which were active since the 1990's are no longer in business. Whereas Zanz-Germ does not exist anymore and off which office premise and facilities are rented out to TAZOP, Madawa (in organic herbs business) is operating for the domestic market at a very low level.

The major import markets for Tanzania's organic ginger are Germany (TAZOP) and the Netherlands (GFP). To enhance its exports, GFP has hired an organic certified warehouse in the Netherlands from where the products are distributed to relevant buyers, mostly processors and manufacturers, in the EU and US.

Organic ginger for export is packed according to packing requirements of the buyers in destination markets. GFP, for example, packs its dried ginger chips in 20kg polypropylene or raffia bags. Paper bags may also be used but are expensive. They can only be used when the market price is good enough to justify the use.

The most recent prices for dried chips mentioned by the exporting companies ranged from EURO 3.5 – 6 per kilo on FOB basis.

Labelling is done according to the general labelling standards of destination markets, but also with organic information such as certification mark and name of certifier.

²⁰ Royal Tropical Institute (2010).

4. Organic chillies

4.1. Local production



Tanzanian production of chillies amounted to over 7 thousand tonnes in 2010/2011, indicating an ongoing growth of 30% annually. Chilli can be produced in many parts of the country. Main production regions are Arusha, Tanga, Coast, Zanzibar and Morogoro. Thanks to MAYAWA/MAVICO, Kagera has also started production of organic chilli.

Table 4.1. Local chilli production²¹, in tonnes, 2006-2011

2006/07	2007/08	2008/09	2009/10	2010/11
2,495	2,700	4,063	5,631	7,199

Source: Ministry of Agriculture, Food Security and Cooperatives

Chilli production in Tanzania is dominated by smallholders who produce organically by default, because they do not use chemical fertilizers and pesticides. However, only a small share of them is organically certified.

An example of non-certified organic production is MAYAWA (farmers' association) in Kagera. Although not yet certified, the cultivation of chilli in this region is under the close supervision of the Association to ensure that farmers follow organic principals. Production levels are, however, too small to export outside Africa, but MAYAWA aims to scale up production levels. Strategy used to increase production is to pay higher prices to motivate farmers but also to provide training and the necessary facilities to add value, like drying sheets that protect the red colour of chilli during the sun drying process. This way the Association receives a high quality product and the farmers receive better farm-gate prices.

Another example of non-certified organic production is Mcharo Organic Agriculture (T) Ltd. in Tanga. The chilli is produced under the Participatory Guarantee System supported by the International Federation for Organic Agriculture Movement (IFOAM) which gives room to consider products organic if they were produced according to organic principles. The products may be sold in the local and regional market as organic with no necessity for being certified.

Data on organic chilli production are not available. Based on interviews with main processors, who source locally, certified organic chilli production is roughly estimated to be around 24-28 tonnes annually. Farmers sell relatively small amounts to independent traders and foreign companies that are not included in this estimation, so real production is somewhat higher. Furthermore, amounts can fluctuate strongly from year to year due to weather conditions.

Morogoro has become the top organic chilli producing region in Tanzania, due to the presence of Kimango Farm, producer, processor and exporter of organic chillies, certified by the Swiss Institute of Market Ecology – IMO.

Production of certified organic chillies is expected to increase, since processors like GFP and MAVICO are making serious efforts to upscale production. GFP is in the start-up phase and assessing whether it should go for cayenne or bird's eye chilli. MAVICO wants to export to the USA, but currently is not able to supply the quantities needed.

4.2. Local market

Tanzanian chilli farmers sell their chilli to collectors from processors or independent collectors/intermediaries that go from farm to farm to buy small amounts, often of low quality at a low price. Through these processors and independent intermediaries the chilli reaches the local end-market.

²¹ Figures do not distinguish between conventional and organic production

4.2.1. Local organic processing

Kimango Farm is the largest certified organic chilli processor in Tanzania. Almost all of its chilli is dried, part of it is cut and part is milled into chilli powder, depending on the requirement of the importer. Small quantities of fresh chillies are sold domestically, at Kariakoo market (but frustrated by the auctioneers (*dalalis*)) and regional export markets.

TAZOP, MAVICO and ZANOP buy dried chilli. MAYAWA/MAVICO and TAZOP provide drying facilities to farmers to ensure quality. GFP buys fresh chilli. Fresh chilli is sorted to take out debris and the clean chillies are then sun dried. Whereas Bird's eye chillies are sun dried as wholes, the long type can be cut or dried as wholes, depending on customers' instructions.

The required specifications of dried organic chilli are presented on the right. A smaller company, like ZANOP, has no means to assess moisture content. Its buyers use their experience and determine quality by flipping some randomly picked chillies and assess the sound they make.

MAVICO currently works with EAOPS certified chilli. However, they find it to be expensive and MAVICO considers shifting to CERES, registered in Uganda or even UgaCert which has just been registered in the EU. These schemes are considered by MAVICO to be more cost effective.

Packaging is done in poly bags of 20 - 25 kg depending on importer requirements (whole dried, cut dried or powder). The primary package is followed by carton boxes as secondary packaging.

Labelling is done on the secondary package to show weight, name and country of production and also as an organic product.

Price indications as given by the specified processors, are very different and might not be representative. According to MAVICO, it purposely gives a high price to the farmers, as a strategy to motivate them to produce more and inspire new farmers to switch to organic practices.

Processor	Amounts sourced annually ²²
Kimango Farm	20 tonnes
TAZOP	1-5 tonnes
MAVICO	2 tonnes
GFP	1 tonnes
ZANOP	150 kg

Requirements of dried ginger

Moisture content ≤12%

Free from mold

Good red colour

Processor	Price range 2011 ²³	Form
TAZOP	Sh. 4,000-5,500/kg	dried
MAVICO	Sh. 2,800/kg	fresh
ZANOP	Sh. 12,000-15,000/kg	dried

4.2.2. Local end-market

Chillies are a common product in Tanzania. It is used to flavour food and as ingredient for masalas and sauces. Conventional chillies are sold in many supermarkets and small shops and on Kariakoo market and similar markets in Dar es Salaam and other cities and towns from where it is distributed to the local and regional markets. Non-certified organic chillies are sold to companies like Red Gold in Arusha, Akili's Born in Tanga, but are also found on Kariakoo and other markets in Dar es Salaam and other cities and towns.

Competition on the local market mainly comes from Mombasa chilli, which is sold at considerably lower prices. However, there are unconfirmed claims alleging the Mombasa chilli to be adulterated and this gives local producers, like Mcharo Organic Agriculture (T) Ltd, a quality advantage. Competition also comes from India, whose chilli paste is imported for use by Red Gold. According to Mcharo Organic Agriculture (T) Ltd, although comparatively cheaper, this product is of poor quality and Red Gold is slowly substituting it with locally sourced chilli.

²² Based on interviews with respective companies, 2011.

²³ Based on interviews with respective companies, 2011.

Certified chillies are difficult to find. In the research period it was only encountered in MAC Shopping Centre. It sells liquid chilli in bottles of 20 and 50 ml, however, imported from Rwanda. MAC Shopping Centre also sells the EAOPS certified masala of TAZOP, carrying the Kilimohai label. This masala is also sold at Mum's Kitchen. The recently opened Bio-Shop Tanzania Ltd. sells certified organic dried and ground chilli from Kimango Farm, without an organic label.



4.3. International markets

Total exports of Tanzanian chilli amounted to 27 tonnes in 2010, considerably smaller than in the period 2005-2007, when exports were extremely high, mainly through sudden demand from Spain. Normally, around 70% of the chillies are exported to Kenya. The rest to Europe.

4.3.1. Regional markets

In 2010, 19 tonnes of conventional chillies were exported to Kenya. This includes conventionally produced as well as non-certified organically produced chilli.

Non-certified organic chillies reach regional markets in various ways, through Tanzanian processors that export to these markets, through collectors of Kenyan and Ugandan traders that buy directly from Tanzanian farmers or through independent collectors (informally) selling to importers in these markets.

Organic chillies are regionally exported by MAVICO, which currently sells around 2 tonnes to importing agents in Uganda, Esco Uganda Ltd. However, certified chilli farmers also sell on the side to collectors who offer instant cash (and no organic premium).

4.3.2. Other international markets

Besides Kenya, Tanzania only exports chillies to Europe, Germany, Spain and the UK. These countries usually import their chilli from India and only turn to other suppliers when Indian crops are damaged. Export to Europe therefore fluctuates strongly.

Organic chilli exports are estimated to be around 21-27 tonnes annually, of which Kimango Farm is responsible for the export of approximately 20 tonnes to the organic markets in Germany, Italy and the USA.

GFP and TAZOP are also known to export organic chilli to the EU, but in much smaller quantities. GFP handles about 1 ton annually and distributes it through its organic certified warehouse in the Netherlands. GFP indicated it could handle more if local availability of the crop increases. TAZOP in the recent past exported about 1 to 5 tons of semi-processed organic chillies. However due to supply scarcity, the company is currently not exporting organic chillies, despite good market in the EU.

MAVICO found an importer in the USA, which accepts EAOPS certified chilli, because it is produced by the same farmers who produce the NOP certified vanilla that the US Company buys. A trial shipment to this company in the USA indicated the quality of chilli to be acceptable. However, the importer required a container of 6 tons to be supplied twice a year. MAVICO could not take the offer as production volumes were not sufficient.

5. Organic vanilla

5.1. Local production



Although vanilla is cultivated in Uganda for over 40 years now, in Tanzania vanilla is relatively a new crop. According to MAVICO, Vanilla production in the region started about a decade ago. The pioneer farmers in Tanzania have already adapted but many others like Morogoro, Kilimanjaro, Tanga and Pemba farmers are still learning the basics.

Table 5.1 Tanzanian vanilla production, 2010²⁴.

Producer groups	Production 2010
MAYAWA (Kagera)	102 tonnes
Maruku Vanilla Farming and Processing Company (Kagera)	8 tonnes
Farmers in Kilimanjaro, Tanga & Pemba	Est. 5 tonnes
Twanduseni Vanilla Growers Group (Uluguru Vanilla Beans)	250 kg
Gando Farmers Association	<1 ton
Produce sold on the side	Est. 10 tonnes

Official statistics on production levels are not available. Based on reported purchase figures by interviewed companies Tanzanian production of fresh vanilla amounted to a roughly estimated 126 tons in 2010. This includes both organic and non-organic vanilla and some leakage into Uganda. Kagera region is responsible for approximately 90% of total produce. Other producing regions include Morogoro, Kilimajaro, Pemba and Tanga.

Most of the vanilla produced in Tanzania is certified organic. In Kagera region, most of vanilla farmers are certified organic by Ceres after inspection by TanCert, thanks to MAYAWA policy that was adopted right from the initial stage. Vanilla by Maruku Vanilla Farming and Processing Company, also in Kagera, is not yet certified but is produced following organic practices.

Vanilla from the other regions is also produced according organic principals, however not yet certified. Quantities produced in these places are still very little. A good example is Gando Farmers Association on Pemba Island and Twanduseni Vanilla Growers Group producing less than a ton each. Currently they sell their Vanilla as natural product, but no premiums are received. Both are in the process of obtaining EAOPS certification by TanCert.

Efforts are made to upscale Tanzanian vanilla produce. Quality is reported to be high and there is an international market for this vanilla. Maruku almost doubled its production to 15 tonnes in 2011. On the other hand, weather conditions have been unfavourable, effecting crops considerably. Furthermore, farmers have been selling on the side to Ugandan buyers, whose local supply diminished due to the same bad weather conditions.

Tanzanian vanilla is generally of good quality. According to Maruku Vanilla Production and Processing Company, Kagera vanilla (probably due to soils content or climatic condition) has 3.68% vanillin content which is probably one of the highest in the world.

5.2. Local market

Most of Tanzania's demand for vanilla beans is locally sourced. However, some amounts of non-certified vanilla are imported, mainly from South Africa. Vanilla imports have been fluctuating strongly, mostly depending on local availability. While imports reached 46 tonnes in 2008 and 25 tonnes in 2009, imports declined to 9 tonnes in 2010.²⁵ This is little, compared to the amounts of certified organic locally produced.

²⁴ Based on interviews with respective cooperatives/companies, 2011.

²⁵ ITC (2011)

Some very small amounts of organic vanilla are imported from Uganda and Comoro by some shops in Zanzibar.

5.2.1. Local organic processing

Processors normally buy fresh vanilla beans. These beans are inspected and graded according to sizes and level of maturity (very green, ripe, overripe), which is determined by the bean colour. The vanilla beans are then cured according to the 'Bourbon method'.

In some countries where curing is done by individual farmers, vanilla is found to have mixed qualities, something that could harm the reputation of the supplier. MAVICO, by far the largest processor of vanilla in Tanzania, wants to avoid that and therefore has centralised the curing process at a company facility so that it can strictly observe curing conditions and ensure quality. MAVICO accepts any quantity of beans delivered to the company's receiving stations, as long as they are at least 10 centimetres long and look good. Beans are delivered by farmers in traditional baskets, but relatively large farmers deliver them in plastic crates.

Requirements for cured vanilla

Size ≥10 cm

Uniform colour

Free from mold

Pliable (can bend without breaking)

Maruku Vanilla Farming and Processing Company is not yet certified, but goes a step further in processing, by producing vanilla powder, mainly for the local market, but also with some exports to Italy through TAZOP. The company can do up to 40 tonnes in 2 years and an increasing number of farmers are joining the company. Its only limitation is the availability of working capital. It works with cash on delivery and is not willing to take a bank loan, as this might frustrate farmers.

TAZOP sources 0.5-1 ton of vanilla from small holder farmers in Morogoro, Tanga and Bukoba and cures it for the European organic market.

Processor	Amounts sourced annually ²⁶
MAVICO	70-102 tonnes
TAZOP	0.5-1 tonnes
ZANOP	200 kg

ZANOP processes small numbers of vanilla. It buys vanilla from local shops in Zanzibar. The shops import from Uganda and Comoro and possibly from Maruku Vanilla Farming and Processing Company, that produces vanilla powder. With vanilla, ZANOP processes 'masala' but also herbal soaps ordered by some tourist shops in Zanzibar.

5.2.2. Local end market

The local market for vanilla is very limited as the spice has not found ordinary household applications as it is still a new or even an unknown product to many. However, some supermarkets, e.g. Shoprite, Uchumi, Shoppers Plaza and even mini supermarkets such as Food Dell, other, high profile offices, high profile hotels and conference venues etc are found to be stocked or use blended vanilla flavoured teas and coffees which are also relatively new on the market. These flavoured teas are from Afri Tea and Coffee Blenders (1963) Ltd, TATEPA/Chai Bora and the International Food Packers. Vanilla flavoured coffee comes from Serengeti Coffee Company. Although most vanilla found in the market is sourced locally, it is not certified organic. Similarly, some ice cream making companies and water rollie makers use cheap imported artificial vanilla and other flavours to prepare their products. These imported artificial flavours are in direct competition with natural flavours produced in Tanzania. According to Maruku Vanilla Company, an initiative has been taken by the company to negotiate with M/s S.S Bakhressa, an ice cream producing company in Dar es Salaam to supply vanilla powder, but this product is not yet certified as organic and the ice cream company is not producing organically.

Some small quantities of organic vanilla are sold to customers that visit the processing companies. Some of these buyers are just curious and want to taste the product, others are small local shops (Dar es Salaam, Morogoro, Bukoba, Arusha and Moshi). These buyers are not necessarily buying because it's organic. They just buy vanilla, which they can only buy there. For example, at MAVICO visitors can purchase the vanilla Sh 40,000/kilo.

²⁶ Based on interviews with respective companies, 2011.

No certified organic vanilla was identified in supermarkets.

Hotels were eager to buy organic spices, including vanilla, and their suppliers claim to deliver organic spices. However, relevant hotel staff was not really aware of organic certification and some did not know it existed at all.

At the time of research, certified organic vanilla was only found in MAC Shopping Centre. Its vanilla was sourced from MAYAWA/MAVICO and sold in 30 gram packets for Tsh. 5000. The vanilla did not carry a visible organic label. Mum's Kitchen and Lutoni Shop sell non-certified Uluguru vanilla beans, but they were open to sell certified vanilla. The latter also mentioned that it stocks vanilla from MAYAWA/MAVICO.

5.3. International markets

5.3.1. Regional markets

Regional markets for organic vanilla are limited. Uganda is mostly self-sufficient. However, regularly, buyers from Uganda informally source unspecified quantities of vanilla from Kagera, which is consolidated with Ugandan produce and exported to other destinations. Processors could not or would not disclose names of buyers. ESCO Uganda Ltd, an organic vanilla exporter, is probably one of them. This mostly happens when local supplies are scarce, for example when crops are damaged by bad weather conditions.

5.3.2. Other international markets

Potentially interesting markets for organic vanilla are: Germany, France, the UK, the Netherlands, Sweden, Belgium, the US and the United Arab Emirates²⁷. Currently, nearly all organic certified vanilla produced in Tanzania is exported to the USA and Germany. MAVICO sells nearly all its cured vanilla through CBI (agent) to McCormic, one of the largest vanilla buyers in the world. McCormic has clients in many countries. The organic Kagera vanilla is extracted in Indonesia, where the good quality of the vanilla was confirmed.

At MAVICO, cured Vanilla is packaged in polyethene bags (primary packages) and followed by carton boxes of 20 - 25 Kg (secondary packages) according to specification provided by the buyer who also responds to the requirements of the next customer. The cartons are labelled with name of product, weight, organically produced, but CBI/McCormic does not allow the name of the producer on the label, so that competitors would not know the source of the vanilla. MAVICO sold its vanilla at a price range of \$ 22.5-30/kg.

TAZOP exports its cured vanilla to Germany and vanilla powder to Italy, where it is further processed. It has recently sold at a price range of € 25-35/kg.

²⁷ Agro Eco BV and Grolink (2008)

6. Findings and concluding remarks

6.1 Findings

Inspired by opportunities in growing international organic markets, many initiatives for organic production have emerged in Tanzania. Nevertheless, the organic sector in Tanzania is small and not well organised. A major constraint to organic agricultural development is a lack of market. However, international organic markets, mainly in Europe and the US, have been growing considerably. The international organic markets are far from saturated and the ranges of organic products are expanding. This means there is room for existing suppliers to expand and for new players to enter these markets.

The domestic organic market is also growing. Although still small, the recent and expected opening of new specialty shops in Dar es Salaam, that focus on organic products, indicate that interest for organic consumption is on the rise. Nevertheless, demand for organic spices is still very limited. Retailers mainly focus on organic fruits and vegetables. Spices are consumed in very small quantities and therefore no priority. Although retailers, but also tourist operations have claimed to be very interested in selling more organic products, including spices, they are not well informed about the availability of certified organic products and some did not even know such certification exists. Current opportunities for organic ginger, chilli and vanilla producers are limited to only few farmers, but the expanding organic market will increasingly offer opportunities to others as well.

6.1.1. Constraints in the Tanzanian organic spices sector

For now, international organic markets offer much better possibilities, than the local market. Currently, smallholder farmers are not able to access these markets by themselves. They can only sell their produce to one of the organic processors that pack and export the products after processing. These processors/exporters need to be certified by international recognized organic schemes.

Exporters need reliable supply, in order to be a reliable supplier themselves. During this research, exporters have indicated that unreliable supply of certified organic products has been and still is a constraining factor in doing business. Expansion of their exports is hampered, thereby limiting growth of the organic spice sector in Tanzania. An increase of certified organic production is needed in order to stimulate the Tanzanian organic spice export. However, there are many constraining factors:

- Organic certification is often not within reach for individual farmers, due to its costs, hampering growth in the number of certified farmers.
- Lack of knowledge on organic cultivation practices, the use of low quality seeds and lack of proper post harvest handling skills, facilities and packaging, limit farmers productivity and the quality of his products.
- Limited business knowledge and access to market information prevent farmers to optimize their revenues.
- Farmers' limited access to finance. Processors generally pay for their supplies when they are actually received, there is no pre-financing. In order to overcome gaps in their finances, farmers turn to side-selling to local/regional traders. Sometimes these traders buy unripe produce at lower prices, but offering instant cash. Other times, local/regional traders simply offer better prices albeit they are not interested in the organic nature of the produce²⁸. This side-selling, however, undermines the reliable supply of processors/exporters, which jeopardizes processors'/exporters' existing and potentially new trade relations.

²⁸ Processors and farmers negotiate on prices long before the products are actually delivered. It happens that conventional prices in the mean time exceed organic prices negotiated earlier, for example because of failed crops in major producing countries elsewhere in the world.

6.1.2. Opportunities for value addition

All processors indicated that they expect to add more value to the products they sell in the near future. Opportunities range from further processing, for example into extracts and spice oils, to packaging, depending on demands from the markets.

TAZOP and GFP are good examples of how value can be added. They have already taken steps to add value to products locally sold. TAZOP has certified masala with brightly colored packaging, quite different from the traditional khaki colored papers, ribbon-like banana fabric tied around the neck of a jar or simple transparent plastic packages. Currently, this company is in the process of designing new packaging in order to stay innovative.

ZANOP wants to add value by obtaining internationally recognized certification, in order to be able to access export markets.

By adding value, these processors expand their businesses, locally and internationally. This will also lead to more opportunities for farmers to engage in value adding activities and processors increasingly buy products with value added, but there are differences:

Ginger

Some processors support the washing, slicing and drying of ginger at farm level. No grading is done with dried ginger slices or whole rhizomes as they will be grounded into powder. This makes it easier for farmers to engage in these activities. Further processing to produce powder requires more facilities, skills and careful handling. Processors are therefore hesitant to allow individual farmers to grind ginger to powder. Ginger powder can be produced either at farmers' Association level e.g. Mamba ginger or by exporting companies (TAZOP and GFP). GFP only buys fresh supplies, in order to better control the processing process, using its own facilities.

Ginger paste is a possibility but the product is not found in the domestic market in any meaningful quantities, be it conventional or organic market.

Chilli

Kimango Farm Enterprises processes its own chilli to dry sliced or dry whole forms. Depending on customer requirements chilli is ground into powder for the export market. TAZOP, GFP, MAVICO and Mcharo Organic Agriculture (T) Ltd. provide opportunities for farmers to add value by drying chilli. A direct incentive is not always given. The transport costs of dried chilli are much more favorable, directly benefitting the farmer.

Vanilla

MAVICO, the main organic vanilla processor, does not allow vanilla curing by individual farmers. In order to protect the good reputation of its vanilla it does the curing itself. Vanilla curing process is said to be a laborious, lengthy and skill based process if a good quality product is to be obtained. The companies believe small farmers with a few kilos may not find the process worthwhile.

6.2. Concluding remarks

The Tanzanian organic sector is still not well developed and individual farmers producing certified organic ginger, chilli or vanilla have limited opportunities to find end-markets for their products. As the local market for certified organic spices is still very limited, they depend on processors, which distribute the products to the international organic market in Europe and the EU. Similarly, processors depend on farmers' supply, in order to meet agreements made with their buyers. This mutual dependency on each other can only work well if the different partners can rely on each other and communicate clearly.

In order to improve the availability of certified ginger, chilli and vanilla, more farmers need to be certified and already certified farmers need training in order to improve productivity/quality. Farmers' associations are important for this, because organized farmers can share transaction costs, certification costs and

stand stronger in their negotiations with processors. Associations can also play an important role in financing mechanisms and together with processors, farmers' associations can realize workshops to improve farmers' skills.

Sustainable development of the organic spices sector in Tanzania requires an integrated approach and commitment from all parties involved. TOAM, as well as other actors, like TanCert and local government, play a vital role in mobilizing financial institutions and business development services creating an enabling environment for farmers (associations) and processors to cooperate and support each other.

At the same time, essential work has to be done on the marketing side. In order to stimulate local demand, retailers, hotels and other potential organic outlets need to be informed about organic certification, the use of the Kilimo Hai label, the availability of certified spices in Tanzania and potential growth opportunities. TOAM can take the lead in joining forces with other relevant actors and be a stimulating factor by actively promoting locally produced certified spices on the demand side.

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Interviews have been conducted with the following companies/organisations:

Company Name	Name (position)	Contact details
Tanzania Zanzibar Organic Producer (TAZOP)	Khamis Issa Mohammed (Managing Director)	Tel: +255 713232602 Email: khim64@hotmail.com
Zanzibar Organic Producers (ZANOP)	Nassoro Ahmad Omar (Managing Director)	Tel: +255 777497515 Email: zanop@yahoo.com
GFP Organics Ltd and GFP Ltd for Natural products	Cleopa Ayo (Managing Director)	Tel: +255 784887599 Email: info@gfp.co.tz
Mayawa Victoria Company (MAVICO)	Gosbert Kabanda (Processing and Marketing Manager)	Tel: +255 28 2220921 Cell: +255 756010063, Email: vanillaorganisation@yahoo.com
Maruku Vanilla Farming and Processing Company	Murshid H. Byeyombo (Managing Director)	Tel: +255(0)717 97 29 57 +255 (0) 786 97 29 58 Email: marukvanilla@gmail.com
Afri Tea and Coffee Blenders (1963) Ltd	Mr. Surajit Kumar Sarma (Head of Operations)	Tel: +255 (22) 2131145 Cell: +255 787252261 Email: teablend@ttb.co.tz
JUWAKIHUMA - Jumuia ya Wakulima wa Kilimo Hai Usambara Mashariki	Mr. Pius Mpembela (Farmer and Member of the Board of Directors of the Association)	Tel: +255 787270611
Kimango Farm	Simone Axmann (Co-owner)	Tel; + 255-784-601220 Email: kim@kimango.com
Ruvuma Commercialisation and Diversification of Agriculture	Mhagama Joseph	Tel: +255 25 2600112 Cell: +255 715 132 139/ 0767

(RUCODIA)		132 139
Kariakoo Market Corporation	Mrero S. Mgheni (Planning and Commercial Manager)	Tel: +255 22 2180678 Cell: +255 712177798 / +255 755070063 Email: mrero_mgheni@yahoo.co.uk
CARITAS – Dar es Salaam	Stephen Mapunda (Field officer)	Tel: +255 22 2118537 Cell: + 255 754555357
Hyatt Regency Dar es Salaam, The Kilimanjaro Hotel	Mitesh Divecha (Materials Manager)	Tel: +255 764 704704 Cell: +255 787 420888 Email: mitesh.divecha@hyatt.com
Rocky 's Product	Ms. Zahrocky Ahmed (Managing Director)	Cell: +255 713 460173 / 752 460173 / 787460173 Email: rockyproducts13@yahoo.com or rockyproduct1@yahoo.com
Mamba Ginger Growers Rural Cooperative Society	Elisafi Kiamro (Chairman)	Tel: +255 684680481
KILIMO MSETO WELEI (KIMSEWE)	William Francis Kihyo (Vice Chairman)	Tel: +255 713417156
Ushirika wa Kilimohai Tangawizi Nkhombo – Mnazi	Twahiru Elisa Shemahenge (Chairman)	Tel: +255 787 522775
SHOPRITE supermarket	Mathew Kaubo (Procurement Manager)	Tel: +255 22 2181272/3 Cell: +255 757454510 Email: mkaubo@shoprite.co.za
Uchumi Supermarket	Daniel Othiambo Olongo (Floor Manager)	Tel: +255 653212377 / +254 722212377 Email: danielolongo@yahoo.com
Fresh Traders	Ms Helen Lyaruu (Managing Director)	Tel: +255 713 288991 Email: mkunde04@gmail.com / mkunde03@yahoo.com
Mum's Kitchen	Jacqueline Maleko (Managing Director)	Tel: +255 716303993 / 754303993
MAC Shopping Centre (organic products)	Adroph Rwelamira (Managing Director)	Tel: +255 755 268686 / 655 268687 – Managing Director Email: adroph@yahoo.com
Twenduseni Vanilla Growers (Uluguru Vanilla Beans)	Kassian Mhaluma (Secretary of Growers' group)	Tel: +255 786297479
Lutoni Shop	Edwin Willa (Shop attendant)	
Food Dell Ltd	Ms. Sam (Shop Owner)	Tel: +255 (22) 2600050 Email: delilt@yahoo.com , delilt@hotmail.com
Mamba Ginger Growers Rural Cooperative Society	Elisafi Kiamro (Chairman of the Association)	Tel: +255 684680481

Mcharo Organic Agriculture (T) Ltd	Ezekiel Richard (Managing Director)	Cell:+255 754341236 /+255 682673467 Email: erimcharo@yahoo.com
Gando Farmers Association	Suleiman Ahmed Suleiman (Secretary and Extension Service officer)	Tel: +255 766 247 160 / 0777859457
Garden Market	Amos Matiku (Shop Owner)	Tel: +255 782427336
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Tanzania Organic Agriculture Movement (TOAM)	Noel Kwai	Tel: +255 754 61 84 84 / +255 732 97 57 99 Email: toam@kilimohai.org
Faida Market Link	Masasa James Makwasa (Market Linkage Officer)	Tel: +255 768496589
Ministry of Agriculture Food Security and Cooperatives	Judith M Kitivo (Principal Agricultural Officer)	Tel: +255 784463030
Horticulture Development Council of Tanzania	Adah Mwashia (Principal Agricultural Officer)	Tel: +255 713249758
Tanzania Trade Development Authority	Samuel Mvingira (Director of Research Planning and Capacity Building)	Tel: +255 653962601 Email: smvingira@yahoo.com
TanCert	Leonard Mtama (Manager)	Tel: +255 78449027 Email: lm@tancert.or.tz
Lydia Food Processing Company	Lydia Jacob (Managing Director)	Tel: +255 784 807 450 Email: lydiagadi@hotmail.com
Bio-Shop Tanzania Ltd.	Silke Königsmann (Owner)	Tel: +255 684111950 Email: info@organic-tanzania.com Website: www.organic-tanzania.com

ANNEX 2. Market access requirements

General legislation

Codex Alimentarius adopted an international Code of Hygienic Practice for Spices and Dried Aromatic Plants in 1995 (CAC/RCP 42-1995). This code establishes hygienic requirements in the production area, in the company's facilities, for personnel hygiene, for hygienic processing requirements and product specifications, including ginger, chillis and vanilla, and is available at: http://www.codexalimentarius.net/standard_list.asp.

EU legislation

The code is used as a basis for EU legislation; General Food Law (Regulation (EC) 178/2002), laying down general principles and requirements of food legislation, establishing the European Food Safety Authority and laying down procedures in matters of food safety and traceability.

In the field of food safety, relevant regulations discuss;

- Maximum Residue Levels (MRLs) (Regulation (EC) 396/2005, (EC) 178/2006 and (EC) 149/2008)
- Microbiological contamination (Regulation (EC) 2073/2005)
- Contaminants (Regulation (EC) 1881/2006). Regarding the contaminant ochratoxin A in pepper, paprika, **chillies**, allspice, nutmeg, **ginger**, turmeric and mixtures containing one of these spices the current level of 30 µg/kg will be tightened to 15 µg/kg in 2012.
- Irradiation (Directive 1999/2/EC, 1999/3/EC)

EU organic legislation is laid down in Regulation (EC) 834/2007, Regulation (EC) 889/2008 and Regulation (EC) 1235/2008. Here, the EU establishes requirements on the production and labelling with which an organic product of agricultural origin must comply, in order to be marketed in the EU as "organic".

Swiss legislation

Switzerland makes continuous efforts to harmonise its food law to EU food law to eliminate barriers to trade. Imported spices have to comply with the requirements of Swiss food legislation. The basis for enforcement and implementation of food legislation is formed by the Swiss Food Act (*Lebensmittel- und Gebrauchsgegenständeverordnung* SR 817) and further related ordinances. These provisions apply to the manufacture, treatment, storage, transportation and delivery of food, for the marking and advertising of food, as well as for agricultural food production. In addition to the Swiss Food Act and the Ordinance on Food, the most important ordinances applicable to exporters of (processed) herbs and spices are:

- Ordinance on indication of country of origin of foodstuffs, ingredients and raw materials used in foodstuffs (817.021.51)
- Ordinance on food hygiene (817.024.1)
- Ordinance of Foreign and Inherent Components in Food (817.021.23)
- Ordinance on food labelling (817.022.21)
- Ordinance on soups, spices and vinegar (817.022.103)
- Ordinance on beverages (mostly tea, herbal tea, coffee, fruit juices, syrups and soft drinks) (817.022.111)

Imports of organic products, both unprocessed and processed, from countries outside the EU into Switzerland are regulated by means of equivalence requirements: production, inspection and certification and labelling of organic products in emerging markets and markets in transition must conform to conditions that are equivalent to those contained in the Swiss Organic Farming Ordinance (SR 910.18 and SR 910.181).

Full legal texts are solely available in German, French and Italian. Only a small selection of Swiss acts and ordinances is available in English at present. For more legislation and further information, please

refer to: http://www.admin.ch/ch/e/rs/suggestions_communications.html and consult the sources indicated below.

- The Federal Authorities of the Swiss Confederation for full legislation texts at: <http://www.admin.ch> and select 'Documentation'. An introduction in English is given, but further elaboration is only given in German, French and Italian.
- Rentsch & Partner provides an introduction to Swiss food law in English at: <http://www.industriallaw.ch>. The most relevant provisions regarding Swiss food law are also listed in this website, but they are only available in German, French and Italian: http://www.industriallaw.ch/?sub_id=87&leng=1

In addition, the European Spice Association (ESA) has set minimum quality requirements for spices, supplementing the EU legislation on spices and herbs. ESA's Quality Minima Document can be found under 'Documents' at: <http://www.esa-spices.org>. Although originally an American standard, the American Spice Trade Association (ASTA) standard is the most important reference for quality and food safety in the global spices business. ASTA Cleanliness Specifications can be found at: <http://www.astaspice.org/i4a/pages/index.cfm?pageid=3360>.

US legislation

Regulations and guidance on certification, production, handling, and labeling of USDA organic products are laid down in the National Organic Program (NOP). Information on organic standards, certification and compliance can be found at:

<http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateA&navID=NationalOrganicProgram&leftNav=NationalOrganicProgram&page=NOPNationalOrganicProgramHome&acct=AMSPW>

Organic regulations can be found at:

http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=3f34f4c22f9aa8e6d9864cc2683cea02&tpl=/ecfrbrowse/Title07/7cfr205_main_02.tpl