

# Organic Food and Farming in Tanzania

PAUL RYE KLEDAL<sup>1</sup> AND NOEL KWAI<sup>2</sup>

## Geography and social economy

Tanzania is located in East Africa on the Indian Ocean and covers an area of 945'000 km<sup>2</sup> - approximately twice the size of Spain. Topography and climatic conditions limit cultivated crops to only four percent of the land. Average temperatures range all year round from 17 to 27 C. Elevations range from sea level to the highest point in Africa, namely the glaciated peak of Kilimanjaro at 5'895 meters, the expansive slopes of which constitute one of the unique ecosystems of Africa. Tanzania also includes the Serengeti, the site of one of the last major terrestrial mammalian migrations in the world and a prominent tourist destination.

The current population of 42 million (2008) is expected to double by 2040. Tanzania is among the poorest countries in the world, with an income per capita of 420 US dollars (2007). External aid alone constitutes 34 percent of the state budget. 13 million people live in extreme poverty, the vast majority of whom are in rural areas where they depend almost entirely on natural resources (MFAD, 2009).

Agriculture makes up 50 percent of GDP and employs 80 percent of the workforce, with women constituting the majority of agricultural workers. The farm structure is dominated by small-holders cultivating an average farm size of 0.9 to 3.0 hectares.<sup>3</sup> 70 percent of the export value is made up by fish meat and agricultural products like coffee, tobacco, nuts (coconuts, Brazil nuts, and cashews), cotton, tea and dried leguminous vegetables. The remaining major export income comes from gold (FAO 2007).

The last ten years of stable economic growth (six to seven percent per year) has been favoring urban wealthy people in service and mining, but neglecting agricultural productivity and the poor in the rural areas (MFAD, 2009), and hence seriously threatening the country's food security.

Climate change is in the future expected to have a severe impact on food production, as lower rainfalls make the Central, West and Southern parts of Tanzania unsuitable for agricultural production. Already by 2020 the permanent snowcap of Kilimanjaro is expected to vanish (OECD, 2003).

## History

When NGOs were allowed to operate in Tanzania during the 1980s, most of them trained farmers in sustainable agriculture practices and started to document the wealth of indigenous knowledge on sustainable agriculture. With the growing interest and demand from the North to purchase organic products, especially from the tropics, various stakeholders from the private sector and NGOs started to formalize a platform for policy development. In 1995, 'Kilimo Hai Tanzania' (KIHATA) was established as a national association to promote and develop organic agriculture in Tanzania, and at first it mostly consisted of extension officers and local producers. However, a growing need for unifying the organic export-

Willer, Helga and Kitcher, Lukas. (Eds.) (2010) The World of Organic Agriculture - Statistics and Emerging Trends 2010. IFOAM, Bonn, and FiBL, Frick

<sup>1</sup> Dr. Paul Rye Kledal (corresponding author), Institute of Food and Resource Economics, Copenhagen University, Denmark. E-mail paul@foi.dk

<sup>2</sup> Noel Kwai Marketing officer, Tanzania Organic Movement TOAM, Dar es Salaam, Tanzania

<sup>3</sup> See the Tanzania National Website at [www.tanzania.go.tz/agriculture.html](http://www.tanzania.go.tz/agriculture.html)

ers, enterprises and NGOs working with various aspects of organic production in Tanzania led to the establishment of the Tanzania Organic Agriculture Movement (TOAM) in June 2005. Today TOAM is responsible for policy formulation, advocacy, marketing, information documentation, and information dissemination. In relation to the phasing out of the Swedish development program EPOPA (Export Promotion of Organic Products from Africa), TOAM is now part of a task force, representing the exporters, certification bodies, and the Ministry of Agriculture, working to set up 'The National Organic Agriculture Development Program for Tanzania'. The program will address the needs for developing further growth in the organic sector and set up indicators from 2009 to 2015. Its clear political purpose is to create a formal national policy regarding organic agriculture in Tanzania.

### Legislation and certification

The existing National Livestock Development Policy has references to organic agriculture, but there is still no formal policy on organic agriculture in Tanzania - either as a separate policy or integrated within the general national agriculture law. The organic sector is therefore generally being excluded from various governmental support schemes concerning inputs, extension, capacity building, and research.

There are four international certification bodies operating in Tanzania: IMO, Ceres, Ecocert and Bio.Inspecta. IMO is the most important certifier, inspecting almost half of the organic enterprises. A national certification body TanCert (Tanzania Organic Certification Association) was established in October 2003, and is intended for the export market. TanCert received IFOAM accreditation in July 2008 and is currently responsible for inspecting two enterprises.

In May 2007, the East African Organic Products Standard (EAOPS) was launched after a consultative process that started in 2005 by harmonizing the organic standards that were beginning to emerge in the East African region. Together with the EAOPS, the 'Kilimohai' brand was purposely developed to help promote and boost regional trade. 'Kilimohai' is a Swahili word meaning 'Living Agriculture'. However, the credibility of the regional trade brand is at risk until it is embedded in mutual national laws on organic agriculture. It could be undermined if one of the East African countries decides to accept GMO crops or the use of DDT spraying. Both examples have advocates in conventional agriculture and various governmental ministries.



Woman chopping the organically grown cinnamon bark off its branches, Zanzibar May 2009. The cinnamon is then dried and exported as ingredient in tea, food additive etc. Picture taken at one of the suppliers to the exporting company TAZOP.  
Picture: Paul Rye Kledal, University of Copenhagen

## The present organic production base

As illustrated in Table 16, organic production is located mostly in the northern and eastern parts of Tanzania. Production consists mainly of coffee, tea, nuts, spices and various types of vegetables. In addition to the fertile soils and good climatic conditions in this part of the country, urban centers, accessible infrastructure, and transportation possibilities play an important role. For example, the northern region of Kagera, bordering Uganda, is only 200 kilometers from the Ugandan capital Kampala with its international airport Entebbe. The region of Arusha, close to the fertile volcano soils of Kilimanjaro, likewise has an international airport, and in the east at the coast, the Tanzanian capital Dar es Salaam (which is Arabic for 'heaven of peace'), offers international air travel as well as harbor freight possibilities.

**Table 16: Tanzania: Organic farming by region 2009**

| Geographical Placement | Regions Producing organic | No. of Enterprises and supply organizations* |   | Major produce                     | Hectares | Outgrowers/ Farm members** |
|------------------------|---------------------------|--|---|-----------------------------------|----------|----------------------------|
| <b>North</b>           | Arusha                    | 1  | 2 | Vegetables coffee                 | 237      | 572/                       |
|                        | Mara                      | 1  |   |                                   |          |                            |
| <b>North West</b>      | Kagera                    | 5  | 7 | Coffee, tea, vanilla, dried fruit | 2'744    | 2'640/20'035               |
|                        | Shinyanga                 | 2  |   |                                   |          |                            |
| <b>North East</b>      | Kilimanjaro               | 3  | 5 | Ginger, veg., coffee              | 5'391    | 1'443/7'676                |
|                        | Tanga                     | 2  |   |                                   |          |                            |
| <b>East</b>            | Morogoro                  | 3  | 8 | Fruit, spices, cocoa              | 1'362    | 1'198/25                   |
|                        | Pwani                     | 5  |   |                                   |          |                            |
| <b>Central</b>         | Iringa                    | 2  | 3 | Pineapple, tea, cotton, sesame    | 9'600    | 3'300/                     |
|                        | Singida                   | 1  |   |                                   |          |                            |
| <b>South</b>           | Mbeya                     | 4  | 4 | Cocoa, coffee, vegetables         | 24'655   | 36'979/63                  |
| <b>Islands</b>         | Pemba                     | 1  | 2 | Spices, rubber, fruit             | 2'800    | 15'000/                    |
|                        | Zanzibar                  | 1  |   |                                   |          |                            |

Source: TOAM and field data Kledal 2009

\* Includes some enterprises that are not yet certified.

\*\* Farm members are part of a farm association or a cooperative

## Markets

Tanzania consists of 26 regions, and certified organic production is registered in 13 of them. The enterprises fall into one of three categories:

- 1) trading/packing/exporting companies buying supplies from outgrowers or a farm association
- 2) farm enterprises vertically integrating land and packaging
- 3) farm associations organized by farmers themselves

Due to the dominance of smallholders in Tanzania, the typical supply chain is made up by a private enterprise organizing many smallholders as outgrowers to secure the 'critical mass of supply', or the farmers have organized themselves in a farm association supplying and packaging for exporting trading companies.

**Domestic:** The domestic market for organic food is very small in scale and scope. A few products, being generally durable products like tea and cereals, are found in some up-scale supermarkets like Shoprite (South African owned), Imalaseko and Shoppers supermarket, placed in wealthy areas of Dar es Salaam. The consumers are predominantly expatriates working at NGOs in religious/humanitarian projects or with international companies.

TOAM is facilitating a trading agency, Chakula, to open an organic market outlet as well as be a wholesaler distributing to the rest of the country. Likewise TOAM has set up a marketing information center in the Masaki area in Dar Es Salaam where consumers are, again, predominantly expatriates.

In the regions of Arusha and Kilimanjaro, 'Global service coop' and 'Floresta' are NGOs facilitating farm groups to commercialize and sell their organic vegetables on open markets.

**Export:** In Table 17 the nine most exported organic product categories are listed together with their farm gate value and total economic value. In terms of tons, heavier nut products like cocoa, cashews and coffee are at the top followed by tea, sesame seeds, various spices, pineapples, cotton, and vanilla. In economic terms, cocoa, cashews, vanilla and tea are the most important export products constituting 55 percent of the total organic export value at approximately 10 million Euros.

The export is mostly destined to the European Union and USA with a few products bound for Asia and Australia.

**Table 17: Tanzania: The nine most exported organic product categories (2009)**

| Export category | Metric tons | Farm gate price (Euro/kg) | Total value (farm gate) (Euros) |
|-----------------|-------------|---------------------------|---------------------------------|
| Cocoa           | 3'822       | 0.95                      | 3'630'900                       |
| Cashews         | 2'671       | 0.95                      | 2'537'450                       |
| Coffee          | 590         | 1.00                      | 590'000                         |
| Tea             | 500         | 2.10                      | 1'050'000                       |
| Spices:         | 400         |                           |                                 |
| - Pepper        | 160         | 0.48                      | 76'800                          |
| - Lemon grass   | 120         | 0.08                      | 9'600                           |
| - Cardamom      | 60          | 0.89                      | 53'400                          |
| - Cloves        | 50          | 2.10                      | 105'000                         |
| - Cinnamon      | 10          | 1.47                      | 14'700                          |
| Sesame          | 273         | 0.94                      | 256'620                         |
| Pineapple       | 196         | 0.12                      | 23'520                          |
| Cotton          | 151         | 0.47                      | 70'970                          |
| Vanilla         | 74          | 20.00                     | 1'480'000                       |
| <b>Total</b>    |             |                           | <b>9'898'960</b>                |

Source: TOAM and field data Kledal 2009

## Future prospects

Due to the fact that raw material exports are generally handled by larger international enterprises, there is a significant deficit of Tanzanians who possess the knowledge and skills in international trade and business. Among entrepreneurs, there is a great need for building innovative partnership models if the Tanzanian organic sector is to take full advantage of the global organic market growth. These partnerships should be connecting TOAM, organic

enterprises, finance and NGOs as a minimum, facilitating capacity building and targeting the barriers of operating on a modern food market.

A significant breakthrough for the organic sector of Tanzania would be a successful implementation of an organic action plan with governmental approval and economic support so the sector can continue its growth, contributing not only to the country's need for technology transfer, up-grading, jobs, and improvements in livelihood, but also to social and environmental benefits. For years ahead a majority of the farmers in many poor African countries will be dependent on their local resources strained by climate changes and weak infrastructure. Therefore, modern organic methods will have to be part of the continent's development policies promoting food security, potential market inclusion, and social stability.

### Note

This article has been conducted within the research project GLOBALORG, funded by the International Centre for Research in Organic Food Systems ICROFS<sup>1</sup>, analyzing the social and environmental impacts of globalization on organic farmers in the South and needs for organic farming to overcome constraints in the course of contributing to development.

### Sources and websites

- Food and Agriculture Organization of the United Nations (FAO) (2007): Country profile Tanzania. The Organic Agriculture homepage of FAO, Rome. Available at [www.fao.org/countryprofiles/default.asp?iso3=CHN&lang=en](http://www.fao.org/countryprofiles/default.asp?iso3=CHN&lang=en)
- International Centre for Research in Organic Food Systems (ICROFS): [www.icrofs.dk](http://www.icrofs.dk)
- Ministry of Foreign Affairs of Denmark (MFAD) (2009) – country facts (in Danish): Landefakta Tanzania. Homepage of the Ministry of Foreign Affairs Denmark. Available at [www.um.dk/da/menu/Udenrigspolitik/Landefakta/LandefaktaAfrika/Tanzania](http://www.um.dk/da/menu/Udenrigspolitik/Landefakta/LandefaktaAfrika/Tanzania)
- OECD, Environment and Development Co-operation Directorates (2003): Development and climate change in Tanzania: Focus on Mount Kilimanjaro. By Shardul Agrawala, Annett Moehner, Andreas Hemp, Maarten van Aalst, Sam Hitz, Joel Smith, Hubert Meena, Stephen M. Mwakifwamba, Tharsis Hyeraand Obeth U. Mwaipopo. Organisation for Economic Co-operation and Development OECD, Paris. Available at [www.oecd.org/dataoecd/47/0/21058838.pdf](http://www.oecd.org/dataoecd/47/0/21058838.pdf)

Willer, Helga and Kitcher, Lukas. (Eds.) (2010) The World of Organic Agriculture - Statistics and Emerging Trends 2010. IFOAM, Bonn, and FIBL, Frick

<sup>1</sup> ICROFS is the former Danish Research Centre for Organic Farming DARCOF. More information is available at [www.icrofs.org](http://www.icrofs.org)