





# THE WORLD OF ORGANIC AGRICULTURE

STATISTICS & EMERGING TRENDS 2009

OCEANIA 12.1 MILLION HA

**EUROPE 7.8 MILLION HA** 

LATIN AMERICA 6.4 MILLION HA

**ASIA 2.9 MILLION HA** 

NORTH AMERICA 2.2 MILLION HA AFRICA 0.9 MILLION HA

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# Organic Food and Farming in Kenya

# PAUL RYE KLEDAL, HABWE FLORENCE OYIERA, JOHN WANJAU NJOROGE AND EUSTACE KIARII

#### Geography and economy

Kenya is a country about as large as France, with a population of 37 million. Agriculture is the backbone of Kenya's economy, contributing 26 percent of its GDP and 60 percent of its export earnings. Conventional horticulture and tea alone contribute almost half of these earnings. Approximately 80 percent of the population lives in rural areas, with three quarters of them being poor. About 70 percent of smallholder farmers are women. More than half the population lives below the poverty line, and Kenya ranks among the ten most unequal countries in the world, and the fifth in Africa. HIV/aids has been declared a national disaster by the government, and AIDs-related deaths represent about 40 percent of total mortality<sup>5</sup>.

Four climate zones prevail in Kenya, where the Great Rift Valley in the southwest is the most productive. The eastern side of the valley is dominated by the mass of Mount Kenya, a giant extinct volcano, making the Eastern highlands among the world's richest agricultural lands. The farms here, mainly established during the British white settler period, are large compared to the rest of Kenya's many subsistence farmers or nomadic pastoralists, and they are predominantly export oriented within horticulture, fruits, coffee, tea and essential oils. A major part of the organic farm sector is concentrated here and connected to the consumers of Nairobi, international airfreight possibilities as well as feasible transport linkages to the commercial harbor of Mombasa.

### History

The growth and development of organic agriculture (farming) in Kenya was initially an initiative of Non-Governmental Organizations (NGOs) and private organizations like the Kenya Institute of Organic Farming (KIOF), formed back in 1986. However, from the mid 1990s, efforts were shifting from isolated individual to more collaborative with the establishment of organizations such as the Kenya Organic Farmers Association (KOFA), initiated by farmers participating in KIOF extension and training programs. The association published organic farming standards for members based on standards by IFOAM and the European Union. KOFA wanted particularly to develop a vibrant organic market - both locally and internationally - for their produce. Larger companies and commercial farmers already in

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<sup>&</sup>lt;sup>5</sup>UNDP Human Development Report 2005

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the export market, though, have organized themselves into the Kenya Organic Producers Association (KOPA). In 2005, organic agriculture stakeholders in Kenya, including KOPA and KOFA, formed the umbrella network KOAN to support the continuing successful growth of the organic sector.<sup>12</sup>

#### Legislation and certification

There are no official policies for organic agriculture in Kenya, even though there is an increasing public interest and recognition of organic agriculture. The organic sector has developed to date without any explicit official government policy support. The Ministry of Agriculture has established an organic desk to lead in the development of an organic policy under the department of Food Security and Early Warning Systems. The ministry's approach is to develop both a policy for organic agriculture as well as to incorporate it into other policies relating to agriculture, food security and the environment. So far, organic agriculture has been incorporated in the Food Security Policy draft and the Soil Fertility Policy draft.

There are five international certification bodies that are involved in Kenya, namely: Soil Association (UK), Ceres (USA), EcoCert, (France), IMO (Germany) and Bio Suisse (Switzerland). However, to minimize the cost of certification by the external certifiers, most of the certifiers use locally trained inspectors. A national certification body Encert was established in 2005 to certify for the national markets.

In May 2007, the East African Organic Products Standard (EAOPS) was launched after a consultative process, which started in 2005 by harmonizing organic standards that existed in the East African region. Together with the EAOPS, the 'Kilimohai' brand was purposely developed to help promote and boost regional trade. However, a regional brand without an implementation of regional trade-and farm policies on organic farming can quickly be undermined if one of the countries allows growing GMO crops or using DDT to combat malaria. Strong economic and political interest groups are at the moment advocating for these inputs to be used in agriculture in Kenya and Uganda respectively.

## The present organic production base

The organic farm sector itself is basically organized around a minor number of large farm enterprises, or various supply organizations, based on purely commercial, community, faith or simply farmer cooperation involved in packaging, domestic or export sales. As illustrated in Table 29, 35 farm enterprises covered the organic production in Kenya's eight provinces. More than half are concentrated in the Central Province, where also most of the outgrowers are connected in relation to the labor intensive crop production within horticulture.

<sup>&</sup>lt;sup>1</sup> Overview of the Current State of Organic agriculture in Kenya, Uganda and the United Republic of Tanzania and the Opportunities for regional Harmonization by Alistair Taylor for UN (UNCTAD, UNEP) 2006.

<sup>&</sup>lt;sup>2</sup>The Status of Organic Agriculture, Production and Trade in Kenya – Report of the Initial Background Study of the National Integrated Assessment of Organic Agriculture Sector – Kenya, by Ms. Cecilia Kimemia and Mr. Eric Oyare January 2006

Table 29: Kenya: Organic farm sector in relation to Kenya's eight provinces

| Province      | Number of farm<br>enterprises +<br>supply organiza-<br>tions | Number of outgrowers | Agricul-<br>tural land<br>(ha) | Wild area/<br>extensive<br>use (ha)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Total (ha) |
|---------------|--------------------------------------------------------------|----------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Central       | 19                                                           | 819                  | 3'023                          | 40'500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 48'861     |
| Coast         | 19 19 19 19 19 19 19 19 19 19 19 19 19 1                     | 474                  | 1'543                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2'017      |
| Eastern       | 4                                                            | 334                  | 324                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 658        |
| Nairobi       |                                                              |                      | 16                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 16         |
| North eastern | 0                                                            |                      |                                | Section of the sectio |            |
| Nyanza        | 0.                                                           |                      | the operation                  | Company of the same                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |
| Rift Valley   | 5                                                            | 154                  | 276                            | 32'640                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 32'599     |
| Western       | <b></b>                                                      | 100                  | 251                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 351        |
| Total         | 35                                                           | 1'811                | 4′535                          | 73'851                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 78'438     |

Source: KOAN, Encert, Kledal, field data

Table 30: Kenya: Major organic produce from Kenya's eight provinces (2008)

| No of farm enter-<br>prises                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Major products produced                                                                                                                                                                                                                                                         | Provinces     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Beans, peas, sweet corn, chilies, avocadoes, baby salad, baby vegetables, spinach, potatoes, leeks, indigenous vegetables, cucumber, passion fruit, pear, oranges, bananas, raspberries, essential oils, lemon grass, rosemary, ground, macadamia- and cashew nuts, tea, coffee |               |
| 2 considerate de la constanta | Coconut oil, avocado oil                                                                                                                                                                                                                                                        | Coast         |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Chamomile, carcade, lemon, grass,<br>mangoes, guava, sweet bananas,<br>Honey and wax, indigenous vege-<br>tables, tomato, kale, spinach,<br>onions, pepper, grains                                                                                                              | Eastern       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | indigenous vegetables, tomato,<br>kale, milk, probiotic yogurt                                                                                                                                                                                                                  | Nairobi       |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                 | North eastern |
| Out of a second                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                 | Nyanza        |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Tea, paprika, birds eye chillies,<br>taegetes, enchinecea purpea,<br>coriander, calendula, borage,<br>safflower, strawberry, milk,                                                                                                                                              | Rift Valley   |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Pineapple, Chillies, onions                                                                                                                                                                                                                                                     | Western       |

Source: KOAN, Encert, field data (Kledal. 2008)

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A total of 1'811 farm outgrowers (smallholders of various sizes) were included to secure the 'critical mass of supply' – either for export or national market chains. The total organic area is distinguished between what is agricultural land and what is considered wild and extensive production. The agricultural land consisted of 4'535 hectares, which together with the area for wild and extensive collection reaching 73'851 hectares, amounted to a total 78'438 hectares certified organic.

In Table 30 the major products being produced are illustrated in accordance with the provinces. The Central province dominates within horticulture, fruits, nuts, coffee and essential oils – five out of the six major organic product categories Kenya produces and exports. Tea is the sixth product, which is produced in the Rift Valley province around the town Kericho.

#### Markets

#### Local

Like in many developing countries, the local organic market is mainly placed around the capital city, where a major part of the consumers are foreigners and affluent higher middle class citizens. In Nairobi, more than 10 outlets are selling organic products, and they are situated in the wealthy areas of Karen, Muthaiga, Lavington, Westlands and Gigiri. The outlets are greengrocer shops, health shops and the two Kenyan supermarket chains 'Uchumi' and 'Nakumatt.' The latter is a supermarket chain in the high end concerning product variety and prices. The organic products sold in the supermarkets are typically coffee, tea, honey, sunflower oil, flour, macadamia nuts, and various health products. One of the Nakumatt outlet stores, Westgate, has outsourced floor space to the organic 'Green dreams shop' in the fresh produce section, and Uchumi is in the process of doing the same with 'Masai eco farm.'

The greengrocers offer, besides some of the products found in the supermarkets, a variety of vegetables and fruits. The main shops are 'Healthy U,' 'Green Corner Shop,' 'Zucchini Green Grocers,' 'Organic Green Grocers,' 'Green dreams Shop' and 'Kalimoni Greens.' There are three organic restaurants in Nairobi, two by the organic restaurant chain, 'Bridges Organic Restaurant' and one by



Various organic flour products are used for making popular African dishes. Especially corn flour is an important part of the diet for millions of Africans. It is similar to the Italian polenta.

Picture: Paul Rye Kledal 2008

'Healthy foods creation.' A number of hotels and restaurants, respectively in Nairobi, Kisumu and Mombasa, provide organic on order. In Mombasa by the Indian Ocean, tourism is the main driver for organic food demand.

#### **Export**

The major exports are within the six major product categories produced: fresh vegetables and tropical fruits, essential oils, herbs, nuts, coffee and tea. In Table 31, the produce in

metric tons per year is illustrated. Data has not been collected on fruits and essential oils. Within all six commodity areas, two to four major companies are in charge of the overall production, packaging and export.

Table 31: Kenya: Major organic export categories in metric tons (2008)

| Export category | Metrictons |
|-----------------|------------|
| Vegetables      | 700        |
| Goconut oil     | 15         |
| Herbs           | <b>150</b> |
| Nuts            | 860        |
| Coffee/Tea      | 400/200    |

Source: Kledal, August September 2008. Company information collected by interviews

#### Future prospects

The growth in new organic farm area since 2005 has either been larger areas destined for export, often of a single high value crop, or very small areas producing for a growing home market. Concerning the latter, Kenya is home to a number of UN organizations, including UNEP, HABITAT and the regional UNESCO headquarters. There are also a number of international agricultural research institutes based in the country, and all of them have a large number of foreigners working there and serving as important drivers behind the local organic demand. However, the riots after the election held in December 2007 have caused a downturn in the tourist industry, as well as in the disposal income of most Kenyans, and will put a limit on the growth prospects for the home market in the short run. Likewise, the export market has also been hit by rising fuel costs, as well as the debate on carbon emissions and food miles on products flown from Kenya. The exporters of fresh horticulture products using air freight for transportation are considering changing production towards lighter and higher value crops like herbs, or finding other nearer markets like South Africa. Similar problems face the exporters of durable fruits and vegetables, tea and coffee using container transportation by sea. Due to the increasing raids of pirates from the Somali coast, ships now have to go further out at sea, which has raised transportation costs. The development of organic exports destined for EU could therefore see a decline, but expand and diversify into other potential African and some Asian markets. The liberalization of the Kenyan coffee market could open up for growth in organic coffee, and organic tea is going to double its production to 400 metric tons in 2009. However, the organic tea producers in Kenya face hard competition on labor costs from Uganda and Asian countries as well.

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Overall, there is a great need for further investments and donor aid to the Kenyan agriculture, where organic farming has a long and strong tradition addressing and contributing positively to such important and interrelated issues, such as poverty, food security, gender, social and environmental vulnerable farm environments, as well as including smallholders in global supply chains. However, a more dynamic legislative recognition of organic agriculture by the government is necessary for the organic stakeholders to create more efficient, powerful and necessary market institutions and trade network that con-



Masai women at the Masai Eco Farm. The farm produces organic vegetables and teaches the women pastoralists how to farm organically. The farm organizes trainings in collaboration with KOAN for 300 farmers to produce and deliver organic produce like fruit, vegetables, egg, meat and dairy products mainly to consumers in Nairobi.

Picture: Paul Rye Kledal 2008

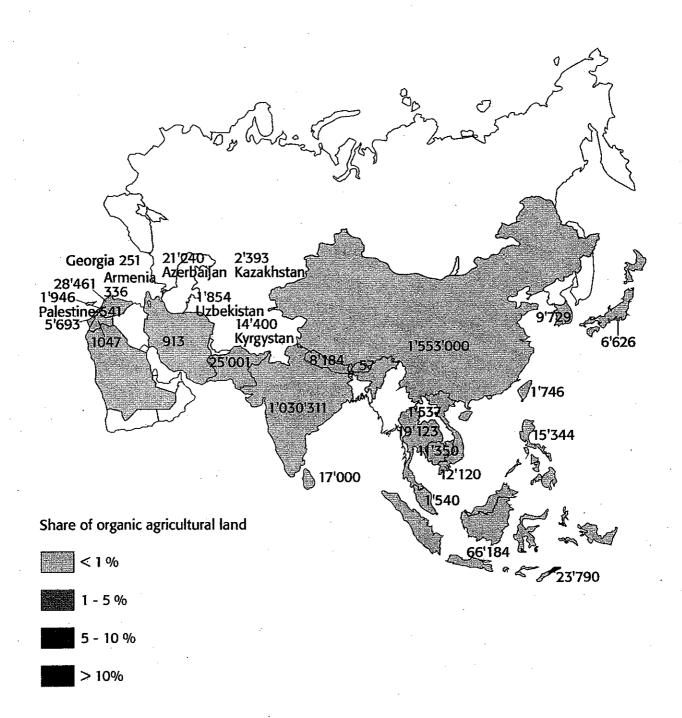
tribute to the overall wealth of the Kenyan society.

NB: This article has been conducted within the research project GLOBALORG funded by DARCOF (see websites for further information), analyzing the social and environmental impact of globalization on organic farmers in the South.

#### Websites

Kenya Institute of Organic Farming: www.kiof.org GlobalOrg project: www.globalorg.dk Danish Research Centre of Organic Farming: www.darcof.dk

# Asia



Map 3: Asia: Land under organic management (hectares) in the countries of Asia 2007

Source: FiBL Survey