

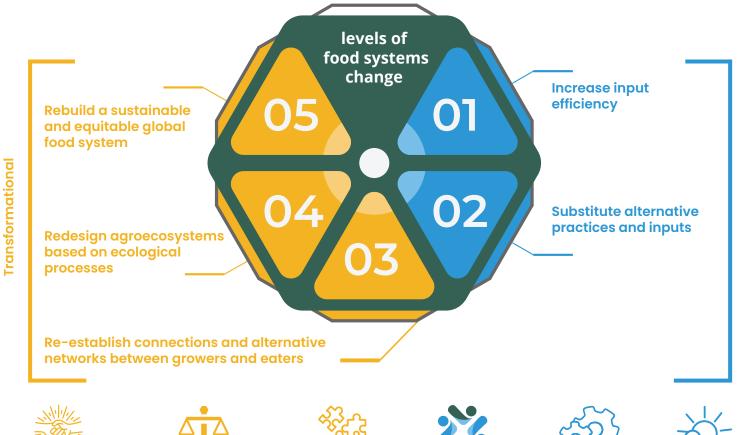


## Eastern African Agriculture Context: Why Ecological Organic Agriculture?

Africa's food systems and agriculture face complex and interrelated challenges, requiring systemic solutions supported by an enabling policy environment for food systems transformation. Hunger and food insecurity are rising, and these issues are worsened by growing numbers of micronutrient deficiency and obesity-related health issues. Dwindling biodiversity and the impacts of climate change further threaten agricultural and food systems and require fundamental transformations. These transformations are essential in enhancing sustainability, resilience and increased production of quality and quantity of food under dramatically changing conditions.

The COVID-19 pandemic has painfully highlighted the poor resilience and equity in industrial food systems. Agroecology and organic farming increasingly take a whole food systems approach. The FAO Agroecology Criteria Tool distinguishes five levels of food systems change, the first two associated with incremental changes and the last three with transformational changes.

### The Agroecology Criteria Tool + 10 elements of Agroecology









Responsible



Co-creation of Knowledge



Diversity



**Synergies** 



Resilience



Circular Economy



Culture & food **Transitions** 



Recycle



Regulations



Efficiency

Using a typology developed for the African Union based on five EOA types, there are four (4) advanced EOA countries, eleven (11) active EOA countries, ten (10) developing EOA countries, twelve (12) infant EOA countries and eighteen (18) countries awaiting inspiration regarding Ecological Organic Agriculture. In West Africa, Benin, Mali, Nigeria, and Senegal have joined EOA Initiative. In Eastern Africa, Tanzania, Uganda, Ethiopia, Kenya and Rwanda have also joined the EOA Initiative.

Organic agriculture and agroecology provide systemic and evidence-based solutions to these interrelated challenges, resulting in increased sustainability, equity and resilience of food systems.

This, however, requires a major shift in funding and public policies. Ecological Organic Agriculture (EOA) will put carbon into the soil, not the atmosphere; it will reduce poison use, reduce pollution, improve food quality and increase water use efficiency. Since the 2010 decision on Organic Agriculture of the African Union (AU) Heads of State, the EOA Initiative has been implemented to support small-scale farmers and improve African food security and sovereignty.

Eastern Africa has more countries supporting Ecological Organic Agriculture (EOA) than any other region of Africa through the EOA Initiative, but there is still a long way to go!

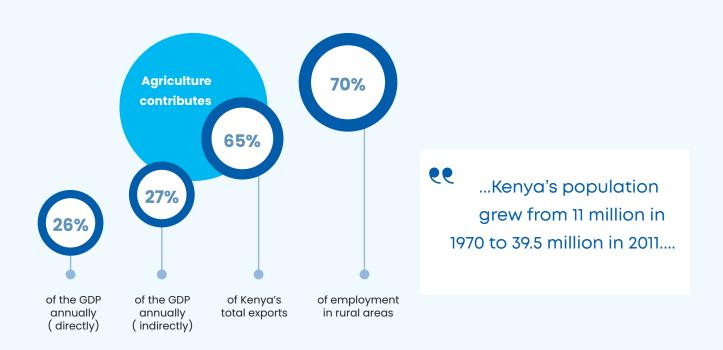
Several issues need to be addressed in Kenya's agricultural development, such as:

- Transport infrastructure for access to markets.
- Equitable land rights.
- Public procurement schemes for sustainably country produced foods.
- · Payment for ecosystem services to farmers.
- · Communities and entrepreneurs.
- Elimination of subsidies for synthetic fertilisers, pesticides, and hybrid seeds.
- Integrated seed systems value traditional varieties and breeds and seed exchange systems.
- Promotion of agroforestry.
- Strengthening of agroecological research and development as well as participatory extension services.
- Integration of agroecology in the country's climate change adaptation plan.
- Organic waste strategies take principles of the circular economy into account.
- Formalised inclusive multi-stakeholder processes for policy development on food system change.



## The situation in kenya: Food system and agricultural production

The agricultural sector is the driver of Kenya's economy and the means of livelihood for the majority of Kenyan people. Being the backbone of the Kenyan economy, it directly contributes to 26% of the GDP annually and another 27% indirectly annually. The sector provides more than 70% of employment in rural areas and accounts for 65% of Kenya's total export. Low agricultural productivity, poor soil fertility, increasing population pressure on arable land, inadequate access to financial and extension services, encroachment of agriculture into unsuitable rangelands and wildlife areas, poor governance, increased urbanisation, climate change, high unemployment rate (especially among youth), inadequate infrastructure, and a variety of cultural challenges have combined to create Kenya's current complex poverty, malnutrition and food security dilemma. Stagnant productivity combined with limited ability to expand the area under production poses critical challenges to food security. With the current population growth rate of 2.2% (2021), demand for food will soon outweigh productivity growth.



Kenya's population grew from 11 million in 1970 to 39.5 million in 2011 and will double in the next 27 years, reaching 81 million by 2039. As a result of this rapid increase, land parcels in the areas of high agricultural potential (which represents 20% of the country's land surface) are decreasing in size, affecting food production. Farmers, who are used to rainfed farming systems, are being pushed into drier, more marginal areas where they become increasingly vulnerable to drought and the unpredictability of weather patterns resulting from climate change. The population increase, coupled with the expansion of agriculture into arid lands, has affected the dynamics of pastoralism, where increased competition for natural resources has sparked escalated conflict in some areas.

Unfortunately, the Government and the private sector (farm input suppliers) have increasingly subscribed to modern agriculture and policies due to the promise that its populations will be adequately fed. In addition, seed laws that do not favour small-scale farmers have been enacted, whilst land tenure systems and policies designed to favour large-scale commercial farming and government subsidies on synthetic fertiliser are put in place.

With increased awareness about organic products in Kenya, the potential local and regional markets for organic products are also increasing. The Kenya Organic Agricultural Network (KOAN) sees this as a great opportunity for the sector actors to capture while it lasts. With this as an impetus, KOAN is set to facilitate organic sector actors to take advantage of the existing potential.

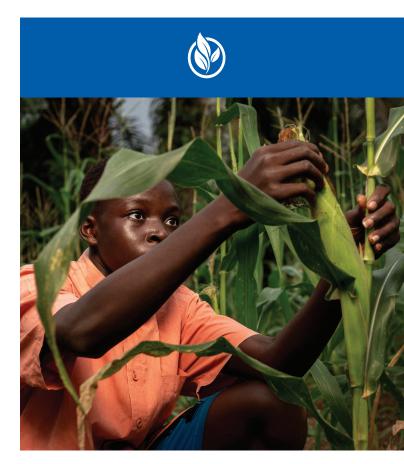
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The African Union commissioned an assessment of policy interventions to mainstream EOA in Africa. This study developed a system of measuring progress in EOA based on whether a country has an organic policy, a product standard, government support for the sector, well-organised farmers, private sector involvement and developed domestic and export markets for organic products. Based on these seven criteria, a typology ranging from Type 1 (Advanced EOA sector) to Type 5 (Awaiting Inspiration) has been developed. Kenya has been evaluated as Type 2 (Emerging EOA Sector).

## Preliminary EOA type (Type 2)

Kenya has some government support, there is a policy or strategy underway, some private sector involvement, a strong NOAM, a domestic market and strong NGO farmer support.

Kenya has no official policies for EOA even though recognition of organic agriculture and public interest are rising. The sector has developed without any policy support explicitly from the Government. The Ministry of Agriculture has an Organic Desk to lead in the development of an organic policy under the Department of Food Security and Early Warning Systems. Over the past 20 years, the ministry's approach was to develop a policy for organic agriculture and incorporate it into other policies relating to agriculture, food security, and the environment.



Organic agriculture has been incorporated in the Food Security Policy and Soil Fertility Policy drafts. There is a strategy for Organic agriculture that is under way by the Ministry, KOAN and other stakeholders.

It was being deliberated on at the cabinet level but was not tabled in Parliament. KALRO was established in 2013 to coordinate agricultural research and is tasked with formulating policy and prioritising areas for agricultural research, according to its website (www.kalro.org). EOA is not mentioned, nor is there an update on the policy that is supposed to be under development on the website (Dec 2020).



The research required to support EOA in Kenya should be based on best practices in other countries; long-term research has been carried out for over thirty years in Switzerland, Denmark and the United States of America (see Auerbach, 2020).

An extract from the abstract of Chapter 3 of this work follows:

Long-term research has had a major impact on the production, processing, marketing, and consumption of organic products worldwide, as shown by a Danish study through four research programmes at Aarhus University (which contributed to sales of organic produce increasing from US\$80 million in 1996 to US\$821 million in 2010), and this assisted many Danish farmers to expand production and understand the needs of the market. Danish policymakers took note and formulated more supportive organic farming policies. In the USA, the Rodale Institute in Pennsylvania carried out long-term research trials to show that OA can be economically competitive while benefiting the environment and consumers' health; they showed that organic crops outyield conventional crops in dry years. All three studies had close links with agricultural policy. However, the Danish and Swiss studies were more sympathetically received and resulted directly in positive changes to agricultural policies in those countries. (Organic Research Contributes to Sector Development and Good Organic Policy: the Danish, Swiss, American and African Case Studies, p.32).



Thus, research and training should be targeted to support EOA in Kenya and integrated with agriculture, health and education policies.



Projection: Geographic. Datum Hartesbeeshoek 1994.

Source: Surveyor General. Insert : ESRI Data & Maps.

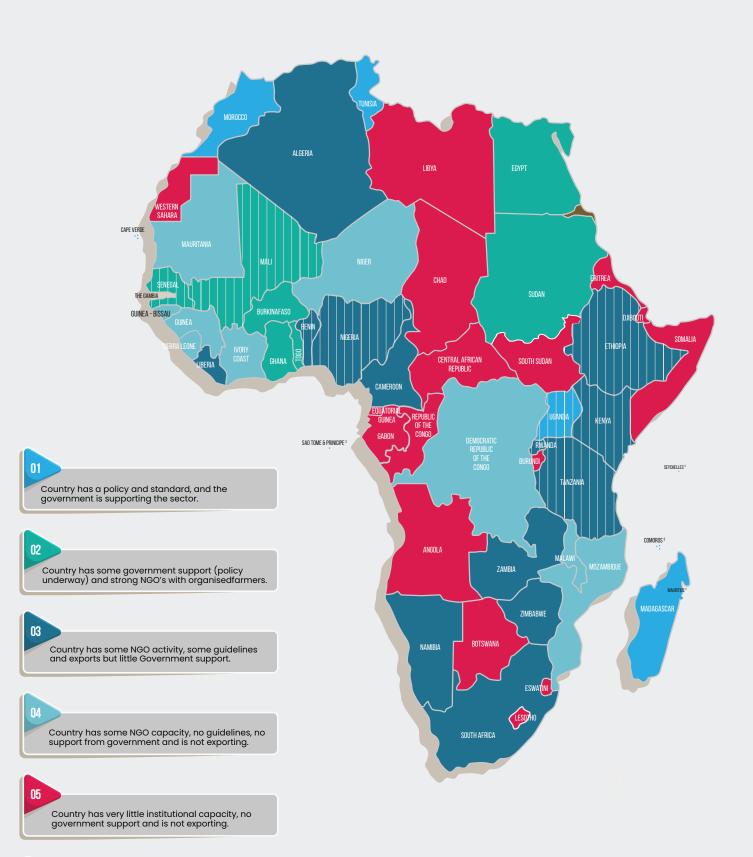




Figure 1: Ecological Organic Agriculture Status of the 55 Countries of Africa Source: Biological Systems Consulting & Research for the African Union Commission in 2020

# Monitoring and evaluation of sustainable food systems in Kenya

The monitoring and evaluation (m&e) framework is based on the five typologies developed for the assessment analysis study, using the following six criteria:



#### **National Policy**

The extent to which a national policy is in place for EOA and supported by a budgetary allocation.



#### **Organic Regulations**

The extent to which organic regulations have been promulgated and implemented.



### National Standards & Certification

The extent to which national standards and certification are in place.



#### **Government Support**

The extent of government support to the organic sector.



#### **Civil Society Involvement**

The degree to which civil society is involved in the development of the EOA sector in a country.



#### **Domestic & Export Markets**

The performance of the domestic and export EOA markets, respectively.

While Uganda has now adopted an EOA Policy, and the East African Organic Product Standard is available for the whole East Africa Community (EAC), other countries could learn from Uganda and move ahead more swiftly with National EOA policies. All EAC countries need to integrate EOA into the training of their farmers and extension officers. The current FISP approach should largely be abandoned, except that EAC farmers can be helped to produce compost, and, where needed, basal dressings of rock phosphate should be made available at subsidised prices in order to rectify those soils which are deficient in available phosphate.

The African Union Heads of State agreed in 2010 that EOA should be supported, and each country should monitor progress and report to the AU through CAADP Programme every three years using the M & E Framework.

## Food system targets and a monitoring and evaluation system to meet them

The indicator framework is built based on the five typologies developed for this study, utilising the six criteria given above:

#### Regarding the first criterion, the assessment requires the following process:

- l(a) An in-depth integrated assessment of general agriculture policies, programmes and plans should be performed to understand how they affect the competitiveness and production of the organic sector.
- 1(b) Objectives for government involvement in the development of the EOA sector **should be clarified and formulated**, and all relevant stakeholders are involved in policy development and the development of plans and programmes. Objectives can include increased income, environmental protection, biodiversity enhancement, smallholder competitiveness, human health, increased exports, and domestic growth.
- l(c) One government ministry or agency should be assigned a leading role in sector development, and organic desks should be established in other relevant ministries and agencies.
- I(d) A national organic action plan or strategy should be formulated and implemented. Plan typically would include aspects of standards, regulations, market development, production issues, capacity-building and research. The plan must be correctly sequenced (logic) and should state measurable targets for the organic sector to help agencies and stakeholders focus their efforts.
- l(e) A Country should formulate a national EOA policy based on participatory policy development with close interaction between the government and the sector. Government should actively support the sector's organisation (KOAN) and its participation in the policy formulation process.
- 1(f) A country should formulate and promulgate EOA regulations.
- 1(g) A country should formulate implementation decrees and action plans for the actioning of an EOA Policy.
- 1(h) **EOA** must be recognised and integrated into the main policies of the country, e.g. agricultural policy, food, health, education policies, environmental, and poverty eradication policies.

The development of mandatory regulations is considered to be the right policy response to develop the organic sector:

- They give organic agriculture a more respectable and credible image.
- Improved access to export markets.
- Development of the local market.

Regarding the second criterion (national certification and standards), the following is needed:

- 2(a) Standards are available.
- 2(b) A Participatory Guarantee System is in place but needs further development.
- 2(c) Government should **facilitate access to certification services.** In Kenya, where the private sector is weak, the Government could consider establishing a governmental certification service.

**Indicator:** Measure of government support for certification. A proxy may be the ease of access of farmers to certification (i.e. are certification requirements excluding some farmers?).

#### Regarding the third criterion (government support), the following is needed:

- 3(a) The existing EOA Strategy by KOAN and other partners should be used to develop a budget for EOA support.
- 3(b) Research and Extension need to be strengthened in accordance with the Strategic Plan.

#### Regarding the fourth criterion (civil sector strength), the following is needed:

- 4 (a) Mapping of civil society organisations must be performed & assessment of their capacity undertaken.
- 4 (b) Government should support the development of a well-organized sector through KOAN.

## Regarding the fifth and sixth criteria (civil society involvement & markets), the following is needed:

- 5(a)Annual growth in an organic agricultural area (ha) must be measured and evaluated against the strategy.
- 5(b) Measure the change in the number of EOA producers (no.) and set targets for the next three years.
- 5(c) Determine annual growth in EOA earnings through export and domestically (currency).
- 5(d) Assess changes in civil society involvement in the organic sector

Although Kenya is classified as Type 2 based on processes started some time ago, these processes appear to be making little progress. Some commentators have called for the reclassification of Kenya to Type 3. Whereas organic practices were readily used in the past (organic manure, local seeds, adapted animals, etc.), the policies pushing for the use of synthetic fertiliser coupled with seed bred to respond to a narrow set of external inputs have slowly eroded the availability of adaptable seeds and use of organic fertilisers.

This means that large farms that need organic seed and fertiliser in sufficient quantities may not get adequate supplies. One major element of the strategy for EOA is, to kick start vibrant market and supply systems to increase the supply of these inputs through practices like seed bulking, germplasm selection and lobbying the private sector input suppliers to invest in innovating and producing sufficient organic inputs.



KOAN has called for the training of Extension Officers, funding for Research Projects, support for Quality Management, Consumer Education, and Farmer Training Workshops.

### The Regions of Africa

Like many country borders in Africa, the regions of Africa are subject to discussion, and several countries are involved with more than one region. In developing regional policies for EOA in Africa, the **Eastern Africa** region countries include Southern Sudan, Ethiopia, Kenya, Uganda, Tanzania, Rwanda and Burundi, as well as Somalia. In the **Northern Africa** region the ten countries are Mauritania, Western Sahara, Morocco, Algeria, Tunisia, Libya, Egypt and Sudan, as well as Eritrea and Djibouti.

The fifteen **West African** countries of ECOWAS are Benin, Burkina Faso, Cape Verde, The Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo. As several Central African countries are also in the East African Community (EAC), we include only the following eight countries in the **Central African** EOA Policy: Cameroon, Chad, Central African Republic, Congo Republic, the Democratic Republic of the Congo, Equatorial Guinea, Gabon and the island state, Sao Tome & Principe. Under the **Southern African** regional policy, we include Angola, Mozambique, Malawi, Zambia, Zimbabwe, Botswana, Namibia, Lesotho, Eswatini, South Africa, Madagascar, Seychelles, Mauritius and the Comoros Islands. In this way, each of the 55 countries of Africa is only included in one region for the purposes of this policy.

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