



Institutional Framework for Ecological Organic Agriculture Development in Kenya

**African Technology Policy Studies Network
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About the Mainstreaming Ecological Organic Agriculture Initiative

The Ecological Organic Agriculture Initiative (EOA-I)¹ is a continental initiative that holds promise for increasing the productivity of Africa's smallholder farms, with consequent positive impacts on food security. Garnering support and legitimacy for programs and initiatives run in Africa from continental bodies such as the African Union Commission (AUC), the New Partnership for Africa's Development (NEPAD), the United Nations Economic Commission for Africa (UNECA), the Regional Economic Commissions (RECs) as well as the relevant National governments could undoubtedly lead to ownership, high visibility, success, and sustainability of such programs and initiative. However, the process of engaging with these high-level bodies and governments is not straightforward. It requires strong champions who have established longstanding relationships both formal and informal with these bodies and governments to achieve the desired objectives. The African Technology Policy Studies Network (ATPS)² is one rare organization in Africa that has established working relationships and goodwill with these aforementioned bodies and governments for over 30 years. In most cases, ATPS provides human resource supports to these bodies in a win-win situation that has led to the development of trust and high integrity between ATPS and the continental bodies and governments. The EOA-I aims to transform and create sustainable food systems through promoting ecologically sound strategies and practices among diverse stakeholders in production, processing, marketing and policymaking, to safeguard the environment, improve livelihoods, alleviate poverty and guarantee food security. The overall goal of the initiative is to mainstream EOA into national agricultural production systems by 2025 in order to improve agricultural productivity, food security, access to markets and sustainable development in Africa.

¹ <https://biovisionafricatrust.org/ea-initiative/>

² <https://atpsnet.org/about-atps/>

About the African Technology Policy Studies Network (ATPS)

The African Technology Policy Studies Network (ATPS) is a trans-disciplinary network of researchers, policymakers, private sector actors and civil society actors that promote the generation, dissemination, use and mastery of Science, Technology and Innovations (STI) for African development, environmental sustainability and global inclusion. ATPS has over 5000 network members and 3,000 stakeholders in over 51 countries in 5 continents with institutional partnerships worldwide. We implement our programs through members in national chapters established in 30 countries (27 in Africa and 3 Diaspora chapters in Australia, the United States of America and the United Kingdom). In collaboration with like-minded institutions, ATPS provides platforms for regional and international research and knowledge sharing in order to build Africa's capabilities in STI policy research, policymaking and implementation for sustainable development.

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Key Messages

- The agriculture sector in Kenya is largely dominated by conventional agricultural practices known to affect both human, animal and environmental health. Organic agriculture has been touted to be the best option for ensuring agricultural sustainability but will require political goodwill in terms of policy and budgets, which currently are not present.
- There is a strong presence of private sector engagements in the development of the EOA subsector in Kenya. The Kenya Organic Agriculture Network (KOAN), the Participatory Ecological Land Use Management (PELUM) Association, Kenya and many non-governmental organisations (NGOs) among others have played critical roles in the development of the subsector and particularly in the development of the draft National Organic Policy, which is yet to be gazetted by the relevant authority.
- Organic agriculture practice and conventional agriculture practice can co-exist in ensuring food and nutrition security for Kenya but will require strong policy and regulatory frameworks to guide the pathways to impacts for each of the practices.
- There is a high demand for organic agriculture products in the country but this demand is hardly met due to operational problems that are exacerbated by the lack of policy and legislative frameworks on organic agriculture development.
- There is need to speed up the enactment of the National Organic Policy that will help in developing the value chain of organic products to ensure market differentiation between organically and conventionally produced crops. Increased public awareness, sensitization and advocacy are required to push this policy to success.

1. Introduction

Kenya is a densely populated country with over 50 million inhabitants. Its population is growing very fast and may reach more than 100 million people by the year 2055³. Over 50% of the country's population are farmers, but only one-fifth of the land is used for agriculture. Increased population pressure has led to land fragmentation which is a major threat to efficient production systems. Farming is mostly run by women who comprise 80% of farmers (Kenyan Organic Agriculture Network [KOAN], 2018). Kenya's rapidly growing population faces many health and nutrition challenges. Drought and other factors are contributing to undernourishment and hunger. More and more citizens, particularly city dwellers, are struggling with obesity caused by highly refined foods. This situation is further exacerbated by added sugars, salts, and fats, which are linked to negative health impacts. The agriculture sector in the country is facing many challenges caused largely by conventional agriculture which has led to soil degradation and increased chemical pollution as well as increased diseases to humans and biodiversity loss. Organic agriculture has been touted to be the best option for enhancing agricultural sustainability and has been advocated by African leaders (Biovision Africa Trust [BvAT], 2015).

Kenya's organic agriculture subsector is predominantly export-oriented. Over the years, exports have developed beyond vegetables and fruits to include other products such as essential oils, dried herbs and spices, as well as products for the cosmetic and pharmaceutical industries which are more often produced or collected by smallholders. The Kenyan Organic Agriculture Network (KOAN)⁴ was formed in 2005 as the umbrella body representing all organic agriculture organizations in Kenya, to coordinate, facilitate and provide leadership and professional services to all members and other stakeholders in the organic agriculture industry in Kenya. KOAN was mandated to help develop an organic market that would affect other aspects in the subsector such as training, advocacy and lobbying and standards development (Kimemia and Oyare, 2006). The organic subsector is relatively small but fast-growing and led mainly by civil society organizations (CSOs) and the private sector. Organic products demand in the country is high but is largely unmet. Despite the increasing demand and public recognition of organic agriculture, there still remains no official policies for organic agriculture in Kenya. However, a draft organic agriculture policy has been developed under the Department of Food Security and Early Warning Systems in the Ministry of Agriculture's organic desk'. The Ministry's approach

³ <https://www.organicwithoutboundaries.bio/2020/02/06/organic-delivers-health-in-a-holistic-sense/>

⁴ <https://www.koan.co.ke/>

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. Organic agriculture has been incorporated in the Food Security Policy as well as the draft National Agricultural Soil Management Policy.

According to the study on “Productivity and Growth in Organic Value Chains (ProGrOV),” conducted in Nairobi in 2016, the main challenges facing the subsector are the lack of adequate supply of products; lack of information for market players; lack of organic assurance through certification and labelling; limited organic inputs; and the introduction of GMO crops in the country (Murimi et. al., 2016). The high cost of certification is also a major constraint to the sector, the high cost of certification charged by foreign certifiers discriminates against small scale farmers who aspire to convert into organic agriculture. The main sources of demand for organic products are tourists and urban consumers, especially the expatriate community and Kenyans in a higher income bracket. There is a potential to expand this market by increasing awareness of the health and environmental benefits of organic products. This also needs to be accompanied by a legislative recognition of organic agriculture for organic stakeholders to create more efficient market institutions and trade networks that can contribute to wealth creation, food and nutritional security, and environmental improvements in Kenyan society.

2. Rationale for EOA in Kenya

There has been increasing concerns on food safety and nutrition issues triggered by human, animal and plant health challenges, as well as the need to protect and conserve the environment. This has brought a renewed focus of shifting from conventional farming methods to ecologically sound organic farming methods, which have been advocated by African leaders (BvAT, 2015). Organic agriculture is a holistic production management system, which promotes and enhances agroecosystem health, including biodiversity, biological cycles and soil biological activity. It seeks to minimise the use of external inputs, avoiding the use of synthetic drugs, fertilizers and pesticides and aims at optimising the health and productivity of interdependent communities of soil health, plants, animals and the people. The heightening global concern for food safety and the need to protect the environment offers EOA an outstanding chance of becoming a viable solution. The history, culture and community values of Kenyans are embedded in agriculture. It is the most important source of livelihoods for millions of them. The sustainable management of the agriculture production process is therefore crucial if livelihoods are to be sustained. EOA builds on the

existing rich heritage of indigenous knowledge, favourable climatic conditions and biomass among other natural resources if combined with modern science, technology and innovative practices that provide a good environment for EOA to thrive in Kenya. The endorsement of the East African Organic Product Standards (EAOPS) by the East African Community (EAC) places Kenya at a major advantage in the development of the sector since the demand for EOA products locally and internationally will be greatly enhanced.

3. Methodology

This Policy Brief was developed from a study conducted using mixed approaches. First, a comprehensive desk study was conducted where existing literature on all policies, strategies and institutional frameworks relevant to EOA in Kenya were reviewed. Secondly, Key Informant Interviews (KIIs) were conducted with the identified EOA stakeholders at the national level targeting policymakers, researchers, non-governmental bodies, private sector, traders and individual actors among others. Finally, Focus Group Discussions (FGDs) were conducted with selected stakeholders to triangulate the data and information on EOA-related policies, strategies and institutional frameworks in the country.

4. Key Findings

4.1 Agricultural Policy Environment in Kenya

There is a myriad of policies in Kenya that aim at enhancing agricultural productivity. The principal policy that supports organic farming being the **National Agriculture Policy of 2019** that proposes the promotion of organic farming for sustainable crops production and promotion of research in the utilization of land resources for crops, livestock and fisheries production.

The **Constitution of Kenya, 2010** assures Kenyans of the right to be free from hunger and to have adequate food of acceptable quality (Article 43(c). Article 71 of the constitution requires legislation on agreements relating to the exploitation of natural resources. Under article 260, natural resources mean the physical non-human factors and components whether renewable or non-renewable including soils among others.

The **Agricultural Sector Transformation and Growth Strategy 2019-2029 (ASTGS)** has emphasized adequate food of acceptable quality for the Kenyan people in its Flagship Projects. This has prompted the development of the draft National Agricultural Soil Management Policy 2020. The **draft National Agricultural Soil Management Policy 2020** identified key areas namely Sustainable agricultural soil management; Soil management and environment; Technology development, dissemination and utilization; Fertilizer development and investments; Policy, Legal and Institutional framework; Monitoring and Evaluation of the policy implementation; and Implementation plan. These are critical provisions and are in tandem with the principles of organic agriculture that can enhance the development of the EOA subsector in Kenya.

Other policies and strategies aimed at sustainable agricultural production in Kenya include: National Agricultural Sector Extension Policy 2012; Draft National Land Reclamation Policy 2013; Sessional Paper No 1 of 2017 on National Land Use Policy; National Environment Policy 2013; National Irrigation Policy 2017; National Forest Management Policy 2014; the National Food And Nutrition Security Policy 2011; Strategy for Revitalizing Agriculture (SRA) 2004; Agriculture Sector Development Strategy 2010-2020; and National Climate Change Response Strategy 2010 among others.

The development of the National Organic Policy in Kenya is taking longer than was expected. The Government has ordered a fresh formulation of the National Organic Policy, an action that has elicited sharp reactions from

agriculture experts⁵. There is no clarity from the government on why it needs the policy to be re-done afresh. In line with the Kenyan Constitution of 2010 which devolved the agriculture sector to the counties, it now behoves on the county assemblies to promote EOA policy and strategy development at that level. Counties are smaller, manageable, and semi-autonomous administrative units. The functions assigned to County governments by Kenya Gazette Supplement No. 116 of 9th August 2013 include implementation of programmes in the agricultural sector to address food security in the counties; development of programmes to intervene on soil and water management, and conservation of the natural resource base for agriculture. Many county governments are looking into innovations to support viable value chains in their counties. Among the emerging interests is the development of organic agriculture at the county levels. In appreciation of this emerging interest and recognizing that the agriculture sector is now a function of devolved Government in Kenya, KOAN has deliberately decided to partner with the counties to develop policies that promote and support the adoption of organic agriculture among the farming communities.

Most importantly, the draft National Organic Policy needs to be debated extensively, finalized and passed quickly to allow seamless development of the EOA subsector in the country. This requires increased pressure on the government from the various stakeholders to expedite as there seems to be a strong wave of Genetically Modified Organisms (GMO) proponents coming up to derail its enactment (Munene, 2019).

4.2 Agricultural Sector Institutional Framework for EOA development in Kenya

Besides the key policies developed, the accompanying strategies and plans need to strongly mainstream the EOA principles as well as provide the required institutional framework. This requires strong institutionalization of EOA among the various actors/stakeholders with each of the categories of actors playing its roles optimally. This means that critical roles such as research, training and capacity building, sensitization and advocacy and enhancing financing for various EOA programmes as well as the development of technologies that will boost EOA productivity will be well performed and coordinated. Other critical roles such as the provision of extension services, certification and marketing of the EOA products are also required if the subsector is to thrive.

⁵ <https://www.kenyanews.go.ke/agriculture-experts-call-for-passing-of-the-national-organic-policy/>

CSOs and private sector companies growing organic produce for export and domestic uses mainly lead the EOA subsector. The initial efforts to promote organic agriculture in Kenya were made by Non-Governmental Organizations (NGOs), Faith-Based Organizations, individuals and Community-Based Organizations (CBOs) who sought to help rural farmers address the issues of declining agricultural productivity (especially, the degradation of soils and natural resources, poverty levels, food insecurity, and low incomes). Later, there was the formation of the Kenya Organic Producers Association (KOPA) for medium and large-scale farmers engaged in export as well as the Kenya Organic Farmers Association (KOFA), representing smallholder farmers. Lately, there has been increased engagement and support from the Government leading to the development of the East African Organic Product Standards (EAOPS) and the Draft Organic Agriculture Policy. Export of organic products from Kenya has been taking place for the last two decades mainly on vegetables and fruits. Over the years, this has developed beyond vegetables and fruits to include other products such as essential oils, nuts, herbs and spices, as well as products for the cosmetic and pharmaceutical industry.

Since 2005, KOAN has successfully brought the Organic Agriculture subsector to the national map looping in key Government institutions such as the Ministry of Agriculture Livestock and Fisheries (MoALF), Ministry of Industrialization and Kenya Bureau of Standards (KEBS), Public universities and Kenya Agriculture Livestock Research Organization (KALRO) to appreciate and recognize the importance and role that the sub-sector contributes to the overall agricultural development in the country. KOAN has also been working with the Private sector including private companies (Smallholder groups, middle size producer associations, commercial farmers, processors, traders and retailers, certifiers and inspection agencies); CSOs (Training & Research Institutions and community promoter NGOs); Development partners such as SDC, SIDA, FAO, DFID, GTZ etc. KOAN has been instrumental in the development and implementation of the East African Organic Mark (EAOM), the EAOPS and other relevant national organic product-specific standards and in the development of Participatory Guarantee Systems (PGS), a low-cost, locally-based system of quality assurance with a strong emphasis on social control and knowledge building- as an alternative system for guaranteeing organic products.

Again, the Participatory Ecological Land Use Management (PELUM) Association is a network of Civil Society Organizations / NGOs working with small-scale farmers in East, Central and Southern Africa. PELUM- Kenya is the Kenyan country chapter of the PELUM Association and has a membership of 57 member

organizations. It promotes Participatory Ecological Land Use, Management practices, sharing of information of development experiences, innovations, and best practices; strengthens linkages and collaboration through action learning; builds the capacity of members and partners to respond appropriately to community needs as well as directly lobbying for change and formulation of policies in favour of small-scale farmers. It is a major stakeholder in the EOA-I.

Research remains an important component in the development of the EOA subsector. Currently, there are several research activities and projects implemented in various institutions either of local or international statuses in Kenya. The major local institutions undertaking research in the country include; KALRO, public universities and some private firms to a limited extent, while international institutions include World Agroforestry Centre (ICRAF), ICIPE, CIMMYT, KEFRI and CIAT among others. Various technologies have been developed in the areas of integrated soil fertility management including biofix inoculants, conservation agriculture, agroforestry systems, soil and water conservation systems, water harvesting and irrigation in addition to the development of appropriate tools and equipment. However, the research activities are often disjointed with each institution or project implementing activities independent of each other. This often has led to duplication of efforts in certain areas. Despite the government efforts in establishing Research and Development (R&D) institutions as well as training of researchers in the country, the benefits of research have not been fully realized in support of EOA development. Only a few research results have been converted into tangible technologies especially in EOA development. There are weak research-extension-farmer linkages that affect the dissemination of research findings to end-users. Effective research-extension-farmer linkages would address socio-cultural factors, costs, accessibility and suitability of new technologies that determine the rate of adoption of research findings. Research institutions have inadequate capacity in terms of personnel, funding and equipment to undertake crop, livestock and fisheries research in EOA.

Kenya Plant Health Inspectorate Services (KEPHIS) is a government parastatal whose responsibility is to assure the quality of agricultural inputs and produce to prevent adverse impact on the economy, the environment and human health therefore very handy in the development of the EOA subsector. The institute conducts soil analysis for fertility evaluation and fertilizer use recommendations. It also undertakes manure and organic compost analyses. It also tests new seeds and varieties and ensures that they are viable and disease-free before approving them for use.

5. Conclusion

The organic agriculture subsector in Kenya has gained increased importance in its contribution to food and nutrition security, increased profit margins, improved environmental protection and access to new markets. Organic agriculture provides an excellent means of replenishing depleted soil nutrients, sustaining agroecosystems, providing healthy quality products, assuring farmers markets for their produce while empowering women to participate in income-generating agricultural practices. The organic sector has developed to date without any explicit official government policy support. The MOALF provided an organic desk that led to the development of a draft organic policy under the Department of Food Security and Early Warning Systems working with other stakeholders such as KALRO, PELUM and KOAN. KOAN has successfully networked with many stakeholders in the EOA subsector in Kenya. The Government has continued to support research activities by establishing agricultural research institutions such as KALRO as well as inspectorate service institutions such as KEPHIS and universities across the country to support EOA developments. The private sector has also provided various production, marketing and research services while the NGOs have also been engaged in research, provision of extension services as well as training and organizing smallholder farmers around EOA. These actors have over the years contributed immensely to the development of the subsector in Kenya. However, poor linkages especially the research-extension-farmer linkages have led to low production and adoption of technologies in the subsector. Research activities are often disjointed with each institution or project implementing activities independently leading to duplication of efforts in certain areas. It becomes important to improve agricultural productivity through EOA in order to increase farmers' incomes, achieve food and nutrition security as well as environmental sustainability for the rural small-scale farmers who depend on agriculture for their livelihoods. Expediting the finalization of the National Organic Policy as well as mainstreaming EOA into the other vital sector policies will be very crucial going forward. Certification processes for the production of EOA products need to be strengthened through training and sensitization of farmers as well as recruiting new farmers into the system in order to expand their market in the country, region and internationally. There is, therefore, need to have all the stakeholders both governmental and non-governmental to be well organized and coordinated to play their roles effectively for the development of the subsector in the country.

6. Policy Recommendations

The government in collaboration with other stakeholders should exercise their powers and execute its mandate to ensure successful development and implementation of the EOA subsector. For its success and sustainability, the following institutional recommendations are proffered:

Recommendation 1: Finalize the development of the National Organic Policy to streamline the EOA subsector

The enactment of the organic agriculture policy in Kenya will transform the subsector as the policy will open up opportunities for funding and support through the resultant implementation strategies and plans that will emerge. It is also expected that this policy and its implementing strategies and plans will provide details on institutional structures that will outline the roles of the different actors involved in its implementation.

Recommendation 2: Establish coordination structures and strengthen existing ones to allow meaningful participation of all actors in EOA activities

Given that the EOA subsector has numerous stakeholders drawn from different categories of actors, coordination mechanisms must be provided to ensure that they all play their part in the development of the subsector through a well-defined line of command. This coordination mechanism would also lead to synchronizing activities and therefore collection of important data to support monitoring and evaluation. Involvement of the private sector and non-governmental actors in promoting EOA through agribusiness, the establishment of organic fertilizer plants, agricultural commodity storage, processing and marketing, organic input supply and distribution is crucial. This will give EOA a holistic and inclusive dimension for its development. It will also attract foreign partners and investors thus spurring the growth of the EOA subsector.

Recommendation 3: Develop the capacity and competence of researchers and officers to engage in EOA research and implementation

The establishment of the department of organic agriculture in higher institutions of learning especially in the universities, Technical and Vocational Education and Training (TVET) and colleges of agriculture is critical. This will aid in the incorporation of organic agriculture in the formal learning curriculum, hence more research on the subject. Moreover, more research and training are required to unveil new and relevant eco-friendly organic practices specific to various parts of the country. This may require the formation of new institutions whose mandate may be specific to promote ecological organic agriculture. Training and technical advice on organic farming practices need to be provided

through agricultural extension services and develop information networks among farmers. Finally, conferences, seminars and workshops should be held regularly to ensure that the officers in the EOA subsector, as well as researchers, are continuously updated on new developments in technology and other aspects in the subsector.

Recommendation 4: Increase budgetary allocation for EOA activities

The government needs to increase its budgetary support for EOA activities. Specifically, more public funds should be directed towards increasing research on EOA in the country. This will lead to unveiling new technologies and opportunities in the subsector that will increase the productivity and returns from EOA, hence making it a profitable venture to the local farmers. This is because many EOA farmers currently rely on traditional knowledge which limits their agricultural productivity and efficiency.

Recommendation 5: Increased sensitization and marketing of EOA and its products

Regular sensitizations on the benefits of EOA especially on health, finance and the environment are required, as well as emphasizing its contributions in mitigation of climate change via the media such as television and radio jingles, newspapers and posters among others. This will increase public awareness of EOA and trigger strong and functional stakeholder linkages along the value chains for proper flow and exchange of information. Sensitization on EOA should target more youth and women since they are mostly involved in agricultural activities in the country. Improving the marketing of EOA products by the establishment of local markets is important. Local certification processes that will be affordable need to be established and strengthened to fit the local environment.

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