

Policy and Institutional Landscape of Ecological Organic Agriculture in Rwanda

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African Technology Policy Studies Network (ATPS)





The African Technology Policy Studies Network (ATPS) is a transdisciplinary network of researchers, policymakers, private sector actors and the civil society promoting the generation, dissemination, use and mastery of Science, Technology and Innovations (STI) for African development, environmental sustainability and global inclusion. 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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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.

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¹ https://biovisionafricatrust.org/eoa-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 the 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, 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

- Rwanda currently has some Ecological Organic Agriculture (EOA) related policies in place however, they are not strong enough to promote and support EOA sustainability and the required transformative change in the sub-sector. A stand-alone EOA policy is preferred.
- ➤ There is strong goodwill from key stakeholders in Rwanda including the government, private sector, and Non-Governmental Organizations (NGOs) to support the EOA-I. This is evident through the established national body devoted to the promotion of EOA the Rwanda Organic Agriculture Movement (ROAM).
- ➤ The awareness of EOA is still low in the country and concerted effort is required to sensitize and educate the relevant stakeholders on the benefits of the practice through sustained campaigns, capacity building, advocacies and mainstreaming of EOA into curricula, programmes, development plans and strategies of governments and other practitioners.
- As a signatory to the East African Organic Products Standard (EAOPS), adopted in 2007 by the East African Community (EAC) as the single, official standard for organic agriculture production in the region, Rwanda is encouraged to continue to comply with the principles and practices in this Standard. Establishing a stand-alone policy and agency will facilitate the implementation of this Standard.

1. Introduction

There has been an unprecedented increase in the use of chemical agricultural inputs compelled by the increasing human population and food insecurity issues. This has aggravated adverse impacts on the ecosystem biodiversity and overall human welfare. Africa has been focussing on improving agriculture and food production systems to make them more resilient and sustainable while increasing productivity. This has necessitated a shift from conventional agricultural production systems to ecological organic agriculture, as a better option. The Ecological Organic Agriculture Initiative (EOA-I) was born to support organic agriculture and is being implemented in several countries in Africa. This initiative aligns with various strategic documents that focus on increasing agricultural production and ensuring sustainable environmental resource management such as the Sustainable Development Goals (SDGs), the Comprehensive Africa Agriculture Development Programme (CAADP), the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD), United Nations Framework Convention on Climate Change (UNFCCC) and the Convention on Biological Diversity (CBD) among many others. 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.

The Rwandan agricultural sector has been operating in the context of rapid changes and evolving dynamics in policy and institutional environments at national, regional, continental and international levels. This has impacted the sector's sustainable performance and development. Rwanda is working with regional bodies such as the East African Community (EAC) and Common Market for Eastern and Southern Africa (COMESA) to expand the opportunities created by agricultural growth and integrated regional trade. It is also gaining recognition as a leader in its response to global goals and challenges, such as the Sustainable Development Goals (SDGs) and climate change respectively (International Trade Centre [ITC], 2008). The Government of Rwanda (GoR), through the Ministry of Agriculture (MINAGRI), is responsible for guiding rural development and promoting agricultural transformation that increases agricultural production and improves the lives of the rural poor. MINAGRI has

also been tasked with facilitating the consolidation of agricultural land use to improve land management and productivity. Organic farming in Rwanda has been developing under support from the Government of Rwanda (GoR), Non-Governmental Organizations (NGOs) and the private sector among others.

2. Rationale for Ecological Organic Agriculture

According to a study by United Nations Environment Programme (UNEP)- United Nations Conference on Trade and Development (UNCTAD) (2008), organic agriculture is a good option for food security equal or better than most conventional systems and more likely to be sustainable in the longer term. Moreover, a shift towards organic production systems has an enduring impact, as it builds up to levels of natural, human, social, financial and physical capital in farming communities. However, organic production systems among other forms of sustainable agriculture receive little support from the governments. Some policies, such as agrochemical subsidies, tilt the playing field away from organic producers. Moreover, organic agriculture is virtually absent in agricultural education, extension services, and research and development activities. Misinformation and lack of awareness are also among the big challenges confronting the practice since people believe organic yields are lower than conventional yields.

Noteworthy, the agricultural systems in Rwanda are buffeted by sudden and acute shocks caused by natural and man-made hazards, such as drought, flooding, erosion and conflicts. In the long term, factors such as poor governance, lack of political will, national policy decisions and institutional frameworks are often great impediments. Since the majority of the small-scale farmers depend on rain-fed agriculture, environmental degradation and diminishing natural resource base pose a great challenge to them. Realizing this, various agriculture stakeholders such as NGOs, community-based organizations, research institutions and governments have been testing alternative agricultural technologies and approaches in search of a lasting solution. Such approaches as "conservation farming", smart agriculture, and organic agriculture are becoming part of the technical packages of both international and national research and

development institutions. This policy brief highlights the extent to which Rwanda has embraced EOA through policies and how the related policies and institutional structures support this Initiative in principles and practice. Key recommendations were proffered for sustaining EOA in Rwanda.

3. Methodology

This study was conducted using mixed approaches. First, a comprehensive desk study was done where existing literature on all policies, strategies and institutional frameworks relevant to ecological organic agriculture in Rwanda 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 parties among others. Finally, Focus Group Discussions (FGDs) were conducted with selected stakeholders on ecological organic agriculture issues including policies, strategies and institutional frameworks related to EOA.

4. Major Findings

4.1 National Policies, Strategies and Plans that support EOA implementation

Rwanda has experienced a tremendous change in policies and institutional frameworks that govern different sectors of the economy, intending to achieve sustainable development and improved livelihoods for its citizens. This study found out that EOA development is still at its infancy stage in Rwanda, with no explicit policy that supports it. However, some relevant policies have been identified that support aspects of EOA development in the country such as those promoting ecological and biodiversity protection which is relevant to sustainable agriculture. The country has rich traditional farming knowledge and it is mainly applied by the resource-poor whose financial ability limit their access to modern conventional inputs. This is why many farmers are regarded as "organic by default". However, the majority of the farmers use both organic and inorganic farm inputs which disqualifies them as pure organic farmers.

Some key policies and strategies that have provisions for supporting aspects of ecological organic agriculture growth and development in Rwanda. These include:

- a) National Agriculture Policy (NAP), 2018: NAP supports organic agriculture through its advocate for the use of livestock manure to improve soil fertility as a way of promoting agricultural productivity in Rwanda. It recognizes the importance of soil quality and supports the increased training in organic fertilizer production and utilization as part of Integrated Soil Fertility Management (ISFM) practices in conjunction with the gradual liberalization of fertilizer supply.
- b) The Strategic Plan for Agriculture Transformation (PSTA) IV (2018- 2024): The Plan builds on the achievements of the PSTA III that ran from 2013 to 2018 intending to transform the Rwanda Agriculture from subsistence to a market-oriented value-creating sector, that contributes to the national economy and ensures food and nutrition security. In this strategic plan, the Rwandese government has no explicit concern on promoting ecological organic agriculture but rather, it has made concerted efforts to increase environmental and ecologically friendly farming practices thus indirectly supporting ecological organic agriculture.
- c) National Environment and Climate Change Policy, 2018: The goal of this policy is to have a clean and healthy environment resilient to climate variability and change that supports a high quality of life for its society. This is achieved through greening economic transformation, enhancing functional natural ecosystems and managing biosafety, strengthening meteorological and early warning services, promoting climate change adaptation, mitigation and response, improving environmental well-being for Rwandans, strengthening environment and climate change governance and promoting green foreign and domestic direct investment and other capital inflows. Although this policy does not explicitly pronounce organic agriculture development, it identifies inadequate soil conservation practices, the use of chemical fertilisers and over-cultivation of land resource as big contributors to soil degradation and pollution, which impacts negatively to the environment. Invariably, the policy advocates for environmentally friendly farming practices which are in tandem with ecological organic agriculture.

- d) The National Fertilizer Policy, 2014: The Policy envisions a competitive and profitable fertilizer sector that ensures fertilizer access and affordability at farm gate promptly creating acceptable fertilizer use by farmers for increased and sustainable agricultural productivity and farm incomes. The policy aims to promote diverse fertilizer products and technologies such as improved seeds, irrigation, soil conservation and lime that enhance efficient utilization of fertilizers. This policy encourages local production and use of fertilizer made from locally available natural resources as a way of minimizing the production costs. It directs that the Rwanda Agriculture Board shall provide technical guidance in developing and implementing extension programs aimed at promoting fertilizer use in collaboration with the local government through farmers' field days and demonstrations. In its support for ecological organic agriculture, the policy encourages the use of lime, organic and bio-fertilizers to compliment inorganic fertilizer use as an integrated approach to soil fertility management. In addition, it encourages appropriate use of fertilizers to minimize the emission of greenhouse gases thus protecting the environment.
- e) Green Growth and Climate Resilience Strategy, 2011: This strategy recognises the fact that the future socio-economic development of Rwanda could be uncertain due to rapid population growth and climate change, which exerts pressure on land, water, food and energy resources among other natural resources. Coupled with a high rate of urbanization, the country faces a potential threat to its food production given that it relies on rain-fed agriculture both for rural livelihoods as well as in their tea and coffee exports. This strategy aims to guide national policy and planning in an integrated way, mainstream climate change into all sectors of the economy and also place Rwanda in a better position to access international funding to combat climate change. Although this strategy does not explicitly recognize organic agriculture, it supports eco-friendly agriculture since it aims to achieve sustainable land use and water resource management that result in food security, appropriate urban development and preservation of biodiversity and ecosystem services.
- f) The Crop Intensification Program (CIP), 2007: CIP was a pilot program to increase agricultural productivity in high-potential food crops and

- ensuring food security and self-sufficiency. CIP proposes quality checks for organic fertilizers.
- g) Horticulture Strategy for Rwanda, 2006: This strategy firmly delineates the production and export of fresh and dried organic fruits and chillies to the European markets as well as the United States and the regional markets. The strategy also asserts that the development of organic horticulture segment in Rwanda requires mapping of certain areas as strictly organic production zones taking precaution to avoid chemicals from other areas affecting them, thus supporting ecological organic agriculture.
- h) *The Girinka Program, 2006:* The Program aims to enable every poor family to access a dairy cow for income, nutrition and manure as organic fertilizer, thus promoting organic agriculture in the country.
- i) The Master Plan for Development of Fisheries and Aquaculture in Rwanda 2011-2020: The Master Plan aims to provide Rwanda consumers with domestically produced, high quality, safe, competitively priced, and nutritious aquaculture products, produced in an eco-friendly manner thus revealing its indirect support for ecological organic farming in the aquaculture industry.

The GoR has developed a Comprehensive Strategic Plan for Agricultural Transformation in the country that emphasises intensification, professionalization, regionalisation and commercialisation of agriculture. Rwandan policies are not pro-organic *per se*, but they acknowledge that organic agriculture can play an important role, side-by-side with conventional agriculture. In all the above policies and strategy documents, there are no explicit provisions for EOA but have rather, made concerted efforts to increase environmental and ecologically friendly farming practices.

4.2 Institutional Framework and Standardization for EOA in Rwanda

Organic agriculture in Rwanda has been developed and promoted in two parallel tracks, an NGO track and a commercial track, driven by companies. Quite uniquely for Rwanda, the government was long already involved in the early stages as was reported by Källander and Rundgren, (2007). On the NGO side, the organic farming idea was introduced in 1999 while on the commercial side, the

first organic production was developed in the late nineties with the production of organic fruits by Emballage Rwanda/Rwanda Volcano Export Produce. In 2001, a USAID funded project ADAR introduced support to emerging organic exports from Rwanda (ITC, 2008). Until 2007 there was no Rwandan standard for organic production. With the adoption of the East African Organic Products Standard (EAOPS), Rwanda now has a public standard.

The GoR is fairly positive in the institutionalization of organic production, with the MINAGRI being involved in creating awareness, capacity building among farmers, supporting the certification process, distribution of seeds/seedlings, training local certifiers in an attempt to reduce the cost of certification, aggressive afforestation, agroforestry and reforestation programmes to increase biomass for organic production, radical and progressive terracing, and general restocking of livestock. It also supports organic certification through further programmes and measures including training of farmers on the EAOPS and how to implement it, as well as of NGOs and farmers' unions to build-up a network of extension support services for farmers wishing to convert to organic farming.

This study also found out that there are some established markets for ecological organic products especially for the international markets with only a few products found in the local supermarkets. This implies that producers rely on foreign markets for their products, which are not accessible by many local consumers. This is because of the stringent standardization of products targeting foreign markets. Even though the region has the EAOPS, it is not affordable for many Rwandan producers to meet its requirements. Additionally, it does not meet the specific needs of the producers at the country level, hence limiting local market access.

The Rwanda Organic Agriculture Movement (ROAM) is the National Umbrella Organization which unites producers, farmers' organizations, processors, exporters, importers, institutions and organizations who are greatly involved in or support organic production, processing, marketing and export in the organic sector in Rwanda. ROAM was established in 2007 to realize the vision of increased incomes and improved livelihoods in Rwanda through the adoption of

organic agriculture. To achieve this, it has invested in education, training, extension and research in organic agriculture, promoting local and export marketing of organic products, advocating for organic agriculture, as well as attracting support for organic agriculture in Rwanda. Its main activities are to represent and promote the organic sector in Rwanda, to facilitate the establishment of laws and regulations as well as technical advice in the field of production, training, certification and marketing of organic products. Additionally, it coordinates all activities related to certification services and organic inspection acceptable at the national, regional and international levels. It also aims at attracting donors and investors in the field of organic agriculture, lobbying and advocacy for organic farming and to participate in the formulation and the implementation of organic agriculture policies in Rwanda.

4.3 Sustainable implementation of EOA in Rwanda through collaborations

For organic agriculture to grow in Rwanda, there is need for increased synergies between the existing agricultural policies and the institutions as well as by government investing more resources in developing specific policies and institutional frameworks to guide and support EOA development. There is a remarkable achievement in the adoption of eco-friendly agricultural practices which are gaining grounds and popularity in Rwanda. This can be attributed to the increasing demand for organically produced agricultural products and the development of markets for the products especially foreign markets. This success can also be attributed to the push for environmental protection and conservation which is an issue of great concern in the country given the prevailing environmental challenges that cause food and water insecurity among others. The existence of the EAOPS is an advantage that should be built upon.

Integrating EOA into overall agricultural policies and poverty reduction strategies, and building organic agriculture supply capacities through education, research, extension services, local and regional market development and export facilitation, are key to realizing the benefits that EOA offers in Rwanda. For sustainability, the government should focus on playing a facilitative rather than a controlling role, since organic agriculture acknowledges the experiences of the farming communities and can build on and integrate indigenous or traditional

knowledge, thereby recognizing the farmers as shapers of their future, rather than implementers of an agriculture production system imposed on them from above or from outside the system. Due recognition should also be given to other stakeholders especially the private sector actors, farmer associations, agripreneurs, researchers, the civil society actors, and the media who play great roles in promoting the growth and development of EOA in Rwanda. There is need for all stakeholders to join hands together in promoting this initiative to ensure that the gains therefrom are fully harnessed for a transformative change in the subsector in the country.

The country is also at the forefront in implementing various regional and continental policies as well as various international conventions that support EOA. The continental policies that Rwanda is implementing include the Malabo Declaration, Strategy for Agricultural Transformation in Africa (2016-2025) among others, while the regional policies include the EAC Vision 2050, EAC Food and Nutrition Security Action Plan (FNSAP) 2018-2022 among others. For Rwanda to develop and support sustainable EOA, the national agriculture policy needs to be reassessed to ascertain to what extent they are encouraging, are neutral or are biased against EOA. It should also consider encouraging organic agriculture development using policy instruments such as subsidizing organic inputs distribution systems, granting tax exemptions for organic farmers, and giving special agricultural loans to organic farmers in the country.

5. Conclusion

This policy brief focused on the policy and institutional landscape that can support the successful implementation of the EOA Initiative in Rwanda. It provides insights into the policy and institutional structures that support EOA in Rwanda. In line with the ongoing environmental and health-related concerns, EOA can be the solution to the incumbent national and regional development needs. The study findings revealed that Rwanda does not have explicit policies that support EOA but has sectoral policies that support aspects of EOA in principle and practice. Although these policies and strategies are not meant purposely for EOA, a remarkable achievement is noticeable in the adoption of eco-friendly agriculture which is gaining popularity in the country. This can be

noted from the increasing demand for organically produced agricultural products and the development of markets at the local and international levels. Notwithstanding, the implementation pace of these ecological organic aspects of the policies and strategies is still wanting due to poor institutionalization and low awareness levels on the benefits of EOA. Some institutional structures have however provided a basis for the implementation of the policies to which the EOA principles can be anchored and escalated. The country is also at the forefront in implementing various regional and continental policies as well as various international conventions that support EOA. However, there is need to initiate conversations that will lead to amendments of existing policies to fully embrace EOA. Institutional structures should be explicitly supported in policies and laws with clearly stated roles and responsibilities in the implementation of EOA. A renewed focus on enhancing the indigenous technologies and inventing new ones is also required in order to increase its productivity and match or even outdo its conventional counterpart. Overall, there is need for the collaboration of all actors including government, researchers, private sector entities, the civil society actors and the media in promoting EOA through supports for new policies and institutional reforms to ensure its sustainability in Rwanda.

6. Policy Recommendations

From the study, the following policy recommendations are proffered in order to ensure the growth and development of EOA in Rwanda.

Recommendation 1: Review the existing agriculture policy or enact a standalone National EOA policy

Since there is no specific policy for EOA development in Rwanda, it is proposed that a stand-alone Ecological Organic Agriculture (EOA) Policy be developed and enacted. This will give a clear guideline and full support to the development of the subsector in Rwanda. For this to be successful, proper institutionalization, inclusivity of all stakeholders and public-private partnerships are also key. Moreover, a bottom-up approach in the policy formulation offers the farmers a good opportunity to contribute to the process and ensure its success in implementation. The policy should be able to encourage mainstreaming of EOA initiatives into programmes of governments and the private sector and their

collaborations. Moreover, the EOA technologies and practices should be youth friendly since this is an opportunity for youth employment.

A cross-sectoral coordination and support mechanism is very critical in bringing together key actors. This is necessary as it will form a strong basis for sustainability. To ensure success and sustainability of EOA in Rwanda, proper systems and institutions should be put in place to ensure adequate and effective local certification of EOA products that conforms with the common international standards thus widening the market. These should be captured in the standalone policy for EOA or integrated into the revised policy.

Recommendation 2: Awareness creation and advocacy in support of EOA policy and programs:

There is need to mount a concerted effort to increase general awareness about EOA, its benefits in terms of health outcomes and income generation as well as in the sustainability of the environment in general. Similarly, an advocacy campaign that will build on the findings of this research study by the ATPS should be mounted across the EOA value chain to ensure the development of a standalone EOA policy and its mainstreaming into Rwanda government programmes. All efforts should be inclusive and people-centered with the aim of increasing productivity and resilience of agricultural systems in the country.

Recommendation 3: Capacity building across all levels of EOA value chain:

There is need to build the capacity of all actors along the EOA value chain to ensure effective and efficient delivery of goods and services in the subsector. Considering that the subsector is still in its infancy in the country, all actors including producers, processors, middlemen, marketers, product certifiers, policymakers, researchers, the civil society and the media need to understand what their roles are and how to play these roles in order to achieve the target objective of a sustainable EOA in Rwanda. Most importantly, regular training should be designed for organic agriculture producers to ensure that they adopt the good practices that will attract more money for their products. The agricultural extension system should integrate regular visits to train the organic agriculture producers and processors to ensure that standards are regularly maintained.

Recommendation 4: Establish effective markets for EOA products as well as organic standards:

Proper supply and value chains should be established for effective marketing of the organic products both locally and internationally. This requires the involvement of all stakeholders in Rwanda to design the value chain that will be effective. It will also require the development of organic standards that are easily implementable in the country mirroring the regional and international standards. These would offer producers an opportunity to apply them in their specific contexts, climatic and agro-ecological conditions, conform with standards and earn more income from the business. The domestic market for organic products is not well developed, and the majority of certified organic products is exported. Organic certification in the domestic market offers quality assurance to consumers by knowing that the products have been produced in adherence to strict production standards.

Recommendation 5: Increase avenues for research and EOA sensitization and information sharing:

There is need to increase support for research on EOA. This can be through increased funding by government and/or development partners. The research findings should continuously be shared through conferences and workshops to increase the awareness, knowledge exchange and learning on EOA thereby boosting its adoption. It is also important to create functional and reliable national and regional networks for better interaction and networking among stakeholders in EOA. The 10% public expenditure allocation to agriculture as proposed in the Malabo Declaration 2014 by the African Heads of States should provide a special allocation for organic agriculture development. This will boost further research, capacity building, market access and overall development along the EOA value chain and hence realize a transformative change in the subsector.

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