



# Policy and Institutional Landscape for Ecological Organic Agriculture in Senegal

**African Technology Policy Studies Network  
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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)<sup>1</sup> 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 initiatives. 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)<sup>2</sup> is one uniquely placed organization in Africa that has well-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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<sup>1</sup> <https://biovisionafricatrust.org/ea-initiative/>

<sup>2</sup> <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. ATPS implements its 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

- Senegal has developed policies, strategies and plans in the agricultural sector but none yet has explicit provision for ecological organic agriculture (EOA) development.
- There is increasing political goodwill, government support and private sector participation in EOA related developments in Senegal.
- The existing EOA products certification organizations in Senegal are not well-coordinated. This has negatively affected the participation of the small-scale organic producers and hence a decrease in productivity in the EOA subsector.
- Given the low awareness levels on EOA in Senegal, concerted efforts are required to sensitize and educate the relevant stakeholders on the benefits of the practice through sustained advocacy campaigns, capacity building, and mainstreaming of EOA into policies, curricula, programmes, development plans and strategies of governments and other practitioners.



## 1. Introduction

There have been aggravated adverse impacts on the ecosystem biodiversity and overall human welfare due to unprecedented increase in the use of chemical agricultural inputs. Africa has been focussing on improving agriculture and food production systems to make them more resilient and sustainable while increasing productivity. A shift from conventional agricultural production systems to ecological organic agriculture (EOA), as a better option, has been necessitated. There have been efforts to improve agricultural productivity, food security, access to markets and sustainable development in Africa. These include the continental, regional and national initiatives and strategies such as the Strategy for Agricultural Transformation in Africa (2016-2025), Grow Africa Partnership of 2011, the Comprehensive African Agriculture Development Programme (CAADP) of 2003, ECOWAS Common Agricultural Policy Framework (ECOWAP) of 2005, and the Malabo Declaration of 2014 among others. The government of Senegal aims to make agriculture an engine of economic growth through several programmes and initiatives.

Senegal is among the few African countries that have allocated up to 10% of their annual public budgets to agriculture in accordance with the CAADP Maputo target (Sers and Mughal, 2018). The livelihoods of about 77% of the population depend on small-scale agriculture, which is adversely affected by the consequences of climate change and environmental degradation. As a result, the Senegal's National Adaptation Programme of Action (NAPA) was developed in 2006, following the recommendation to least developed countries to create policy frameworks that enable them to communicate more clearly about their vulnerabilities and priorities for adaptation. Many other private and public interventions aimed at improving the livelihoods of vulnerable people through the introduction of various technologies for improving productivity, adaptation and mitigation of climate change impacts were initiated. From among those technologies, organic farming techniques are gaining importance and popularity with the help of non-governmental organizations (NGOs). In the Niayes region, ENDA-PRONAT is one of the leading NGO's that have been promoting organic farming methods since 1986. Reports show that farmers who adopted these farming methods make significant savings from the purchase of fertilizers (inorganic) and have improved their incomes in addition to the positive environmental effects that this method of farming offers (Amadou and Barbier, 2015).

## 2. Rationale for Ecological Organic Agriculture

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, according to a study by the United Nations Environment Programme (UNEP) and the United Nations Conference on Trade and Development (UNCTAD) (2008). 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 (UNEP-UNCTAD, 2008). However, organic production systems among other forms of sustainable agriculture receive little support from the governments compared to conventional agriculture. Some policies, such as agrochemical subsidies, tilt the playing field away from organic producers. Worse still, organic agriculture is not well mainstreamed into agricultural education, extension services, and research and development activities. Lack of awareness and misinformation or poor information flow are also among the big challenges confronting the practice since there is a misconception that organic yields are lower than conventional yields.

The gradual saturation of arable land, due to population growth, on the one hand, and the degradation and decline in fertility of the land currently cultivated, make agroecological intensification an unavoidable requirement. Advances in science and technology now offer new research tools and biological materials that offer great prospects for improving agricultural productivity (Seck, 2017). There is increasing political support for sustainable agricultural practices in Senegal. This has been demonstrated by its participation in two international symposia on agroecology co-organised by FAO in 2015 in Dakar and 2018 in Rome respectively. Senegal has pursued several initiatives aimed at promoting the adoption of climate-resilient approaches throughout the country, with the support of FAO and other partners. These actions include the Multi-stakeholder approaches for the development of agroecology in West Africa, organized by the multi-stakeholder Task Force for the Promotion of Agroecology in Senegal (TaFAé)<sup>3</sup>, the signing of a charter for green cities and towns committing more than 50 local authorities to the promotion of agroecology which is closely related to EOA, as well as regional and national workshops organised alongside partners from civil society organisations and beyond.

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<sup>3</sup> <https://pfongue.org/-TaFAe-.html>

### 3. Methodology

Mixed approaches were used for data collection in this study. A comprehensive desk study was conducted where existing literature on all policies, strategies and plans as well as institutional frameworks relevant to EOA in Senegal were reviewed and analysed. Secondly, 12-15 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. Focus Group Discussions (FGDs) were also conducted with a group of 8-12 selected stakeholders who provided deeper insights on EOA issues including policies, strategies and institutional frameworks related to EOA.

### 4. Major Findings

#### 4.1 National Policies, Strategies and Plans that support EOA development

The implementation of environmentally sustainable farming systems in Senegal is influenced by a range of policies and strategies, which provide incentives or disincentives on the development of EOA. The Senegalese government has often been criticized for lacking clear direction in the design and implementation of agricultural innovation policies (Stads and Sene, 2011). Most of the policy measures used to support agriculture discourage organic farming. In the short term, this means that farmers switching from high-input to resource-conserving technologies cannot do so without incurring some transition and transaction costs. Nevertheless, Senegal has developed several policies and strategic plans that directly or indirectly support EOA development in the country. They include:

- a) ***Plan for an Emerging Senegal (PSE) (2015-2035)***: In 2014, the Government of Senegal adopted the Plan for an Emerging Senegal (PSE), a 20-year strategy to guide the implementation of coherent economic and social development policies. PSE aims to promote human capital by improving people's living conditions and reducing social inequalities as well as focuses on social protection and resilience of the most vulnerable, gender equality, improved disaster and risk prevention, optimal use of natural resources and sustainable development. This plan commits to an inclusive, holistic approach to sustainable development, noting that meeting basic social needs is a key factor in promoting sustainable human development and the green economy, thus revealing its indirect support for ecologically benign agriculture.

- b) *National Strategy and National Action Plan for Biodiversity (2015-2020):*** The strategy and action plan reinforce the country's vision 2030 and the PSE among other policy frameworks. The plan aims to improve biodiversity knowledge and strengthen institutional and technical capacity, reduce pressures and restore and conserve biodiversity, promote biodiversity accounting in socioeconomic development policies and promote the sustainable use of biodiversity and mechanisms for accessing biological resources and equitably sharing of the benefits derived from them. The plan is fully supportive of eco-friendly economic activities and practices in the country including agriculture.
- c) *Partnership for Action on Green Economy (PAGE) of 2014:*** PAGE supports Senegal to transform its economy as a driver of sustainability and social equity. It asserts that green investments in sustainable agriculture technologies and techniques will prevent soil degradation and lead to an increase in agricultural production. PAGE has worked directly with multiple branches of government to mainstream green economy advocacy at the national and sub-national levels and has leveraged its specialised expertise to help formulate and implement the National Strategy on green economy. PAGE's commitment to capacity building has also led to the establishment of national institutions and partnerships that can help ensure the long-term success of Senegal's green economy transition, hence its support for EOA in the country.
- d) *National Agricultural Investment Plan [PNIA] (2010-2020):*** This Plan was formulated in 2010 and operationalizes the ECOWAP and the CAADP compact at the national level. Its objective is to increase production, ensure sustainable management of water and natural resources, improve market access and value-added transformation, and strengthen stakeholders' capacity to ensure efficient implementation of ECOWAP and CAADP. With regard to ecological organic agriculture, PNIA recognizes the importance of combating environmental degradation challenges in order to increase agricultural productivity, which is an ecologically sound practice but is not explicit on organic agriculture.
- e) *National Plan for Adaptation to Climate Change (NAPA) of 2006:*** This Plan gave a cross-sectoral view of the impacts of climate change as well as the adaptation and mitigation strategies. It identifies the agriculture sector among the most vulnerable sectors of the economy. This is due to factors such as soil degradation and loss of vegetation cover caused by

higher temperatures and decreased rainfall, leading to continued agricultural losses. The Plan is also concerned about the effects of climate change on biodiversity, such as extinction and changes in species composition. Since environmental protection and conservation is one of the primary objectives of this Plan, it shows that the Plan invariably supports eco-friendly agricultural practices that EOA promotes.

- f) ***The Agricultural, Forestry and Pastoral Law (LOASP), (2004-2024)***: This law defines guidelines for the development of the agricultural sector and the reduction of poverty for 20 years, explicitly targeting the objectives of increasing agricultural exports and improving the quality of products destined for export, as well as establishing a system of incentives for private investment in agriculture and rural areas. So far only a small portion of the specified activities under LOASP have been realized. LOASP aims to reduce poverty and increase food security in the country while ensuring environmental protection and sustainable management of natural resources, thereby supporting EOA in the country.
  
- g) ***The National Strategy for Sustainable Development (NSSD) of 2002***: This Strategy aims at integrating sustainable development in different sectors deemed as priorities and growth drivers for the country including increasing the level of awareness and education of actors for sustainable development, promotion of sustainable production and consumption patterns and the promotion of economic and harmonious development. This Strategy supports and promotes environmentally friendly agriculture as a way of sustainable production, which is in line with EOA principles.

Results from the study further show that for organic agriculture to thrive in Senegal, agriculture policies should address issues of relevance to organic agriculture, such as reduction of pesticides, protection of soil and biodiversity, developing small-scale farms and decreasing dependency on imported inorganic fertilizers. Also, very important is the need to address the land tenure systems which are very critical for investors in the subsector. Organic farming represents a major investment in a piece of land, and it is not likely to interest farmers that are squatting or otherwise have less secure tenure. Therefore, there is dire need for the government through the responsible ministry to ensure stable land ownerships, especially for small scale producers. As of now, the existing policies, strategies and plans are inadequate to support EOA development in the country although evidence shows that there is increasing political goodwill and government support.

## **4.2 Institutional Framework for EOA in Senegal**

Senegalese agricultural sector is organized and administered through various ministries, including the Ministry of Agriculture; Ministry of Mining, Industry, Agro-Industry, and Small and Medium Companies; Ministry of Livestock; and Ministry of Higher Education and Scientific Research. The Ministry of Agriculture oversees various directorates within the agricultural sector. One of the mandates of the Ministry of Mining, Industry, Agro-Industry, and Small and Medium Companies is to promote the competitiveness of the country's agricultural sector. The Ministry of Livestock operates several services that delegate government support and control to the livestock, dairy, and poultry subsectors. The Ministry of Higher Education and Scientific Research administers biotechnology regulations and development and oversees agricultural research and development carried out by the country's universities (Stads and Sene, 2011). Critics assert that research coordination is dispersed across too many ministries, and linkages between ministries are weak, leading to the duplication of activities.

The National Federation for Organic Agriculture (FENAB) is the lead organization in Senegal that coordinates EOA activities in the country. Regarding certification in organic farming, the services are currently provided by support organizations such as ENDA-PRONAT, AGRECOL, and Association Solidarity of the Partisans of Ahllou Bayti (ASPAB) for farmers' organizations that practice organic farming. However, this certification is valid only at the national level and is not recognized by foreign bodies like the European Union (EU), the United States of America, Japan, among others. Thus, for the export of organic products, producers are obliged to ask European Certification Organizations to certify their products. This certification process is very expensive and may not be within the reach of many organic farmers.

Other various agencies of government have been found to promote aspects of EOA practices in Senegal. They include the Senegalese Institute of Agricultural Research (ISRA) responsible for agricultural research and cooperation with the private sector, the Food Technology Institute (ITA) responsible for research in storage, conservation, and processing of agricultural products as well as the development of new local food products and in assisting in quality control of food products. Other public agencies involved in agricultural R&D include a number of faculties and departments under the Université Cheikh Anta Diop (UCAD), Université Gaston Berger, and the Advanced National School of Agriculture (ENSA) among others (Stads and Sène 2010).

Despite the implementation of policies promoting participation by the private sector in agricultural R&D in Senegal, the private sector's role in technological development and agricultural innovation to promote EOA remains unclear. Reliable data on how much private agricultural R&D and innovation contribute to increasing EOA production, farm incomes, social welfare, or environmental sustainability does not exist. Many NGOs are, however, involved in various agricultural research activities in the country such as international agricultural research centres supported by the Consultative Group on International Agricultural Research (CGIAR) but the specification on which organizations are involved in EOA research is not clear.

Since May 2019, NGOs, farmer organizations, research establishments, multi-stakeholder platforms, consumer associations and pioneering elected representatives have been working on a policy dialogue with the State, focusing on the agroecological transition, following President Macky Sall's declaration that agroecology was now a priority<sup>4</sup>. This was also reemphasized by the minister of Agriculture Moussa Balde at an agroecology event in the capital Dakar in January 2020<sup>5</sup>. *"We can't destroy our fields by farming. Sustainable agriculture ... is the president's vision."*

Individual farmers as well as private firms have strongly been involved in the production and marketing of organic products in Senegal. For example, *"a young Senegalese farmer in the commune of Toubab Dialaw, south of Dakar, Rahim has managed to tame the arid land by creating his ecological garden. He started with a surface area of 300 m<sup>2</sup>, and his farm school now extends over four hectares of land. He is passionate about organic farming, grows a little bit of everything. Tomatoes, corn, vegetables, a host of fruit trees, etc. He also raises bicycle chickens, geese and ducks. Rahim works without chemical fertilisers and offers 100% organic products on the market, a type of product that has become rare on the Senegalese market. A West African country where, because of the scarcity of rainfall, farmers very often use fertilisers and other chemicals to boost yields. This strategy has an impact on the environment and human health. He has been training numerous youth and women who are now working to promote ecological agriculture in Senegal<sup>6</sup>."*

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<sup>4</sup> <https://www.cirad.fr/en/news/all-news-items/press-releases/2020/agroecology-senegal-public-policy>

<sup>5</sup> <https://reliefweb.int/report/senegal/senegal-turns-eco-farming-protect-food-supply-climate-changes>

<sup>6</sup> <https://www.afrik21.africa/en/senegal-abdoul-rahim-ba-showcases-bio-agricultures-potential-for-africa/>

## 5. Conclusion

This Policy Brief highlights the policy and institutional structures that support EOA in Senegal. The findings revealed that the government of Senegal is committed to supporting agroecology and by extension EOA although it has not provided explicit policies or strategies that support it. This support needs to manifest in government policies, strategies and programmes for EOA development. As it is now, the existing agricultural policies and most of the strategies do not explicitly support EOA nor is there sufficient financial support for it. Nevertheless, Senegal is among the few countries in Africa that have managed to comply with the Malabo Declaration of 2014 by contributing 10% of public expenditure to support agriculture. Most of the funding has been directed to conventional agriculture and government subsidies, for example, have mainly been provided for conventional agriculture inputs and has neglected the EOA subsector. There are no formal institutional structures provided for EOA development to support the implementation and coordination of actors in the subsector. A major weakness exists in the certification of EOA products where many farmers especially the small-scale farmers are not able to afford the services, which are rather expensive, or the processes, which are complicated to comply with, hence the need to streamline the issue of certification standards for swift development of the subsector. This will require the involvement of all subsector players led by the government and other subsector coordinating organizations led by FENAB. To seamlessly achieve these, there need to be strong public awareness campaigns and advocacy across all the stakeholders in the country. It is also critical to design training programmes aimed at regularly building the capacity of the various personnel involved in the subsector. Developing a standalone EOA policy/strategy or integrating EOA into the overall agricultural policies and poverty reduction strategies, and building organic agriculture supply capacities through education, research, extension services, of local and regional markets and export facilitation, are key to realizing the benefits that EOA offers in Senegal.



## 6. Policy Recommendations

Based on the key findings from the study, the following policy recommendations are proffered in order to ensure the growth and development of EOA in Senegal:

### ***Recommendation 1: Review the existing agricultural policies to integrate EOA***

Review of existing agricultural policies with a view of integrating aspects of EOA principles and practices and strategies for achieving them remains of priority in the short to medium terms. This option should be pursued while efforts for developing a standalone EOA policy or strategy, which is most preferred, is undertaken in the long term. To achieve this, all actors in the EOA value chain including policymakers (including relevant government ministries), researchers (including research institutes and universities), private sector entities (such as EOA farmer associations, youth and women associations), the civil society, and the media among others need to work together collaboratively in order to produce a robust EOA policy or strategy that provides a roadmap for transformative change in the agricultural sector through organic farming.

### ***Recommendation 2: Build the capacity of stakeholders across all levels of the 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. All actors including producers, processors, middlemen, marketers, product certifiers, policymakers, researchers, civil society and the media need to understand their roles in order to achieve the target objective of a sustainable EOA in Senegal. The government needs the capacities and competencies to elaborate, negotiate, put into work, and to evaluate the effective and equitable policies of agricultural and rural development in partnership with private stakeholders and farmer associations. The agricultural extension system should integrate regular visits to train the organic agriculture producers and processors to ensure that standards are regularly maintained. It will also be necessary to streamline the coordination of all the stakeholders in the subsector with each of them having clear roles and responsibilities in contributing to the development of EOA in the country.

### ***Recommendation 3: Increase avenues for research and development and dissemination in EOA***

There is need to increase support for research on EOA. This can be through increased funding by the government and/or development partners. The research findings should continuously be shared through conferences and workshops, farmer field schools, field days and curricula in order 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 establishment of a system of information, training, research and a support council in rural areas is also indispensable to support farmers in the adoption of improved EOA technologies. This system must permit all rural peoples to have access to information, training, improved technologies and necessary advisories in order to make decisions concerning their economic activities. The 10% public expenditure allocation to agriculture as proposed in the Malabo Declaration of 2014 by the African Heads of States and increased support from development partners and private sectors will help bridge this gap and hence improve productivity in the subsector.

***Recommendation 4: Intensify awareness creation and advocacy activities on EOA***

Concerted efforts are required to increase general public awareness about EOA, especially on its benefits in terms of health and income generation as well as in the sustainability of the environment. Similarly, an advocacy campaign needs to be launched to secure increased political goodwill and government participation in the subsector through policies, programs, funding and curriculum reforms on EOA. All efforts should be people-centred and inclusive with the intention of increasing productivity and one health (soil health, plant health, animal health, and human health) in the agricultural systems in the country.

***Recommendation 5: Streamline the EOA products certification processes***

There is no government-approved certifying body yet to regulate and ensure compliance with the organic production system that will provide a level-playing environment for all EOA stakeholders. Several organizations are involved in the certification process and that has further led to complications especially for the smallholder farmers in Senegal. To improve market access for EOA products, there is need to establish a well-organized market for local and international outlets. There should be organized standard sales outlets for organic products to bring producers closer to potential buyers and consumers who should be well informed on the health values of the organic products.

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