



**Ecological Organic
Agriculture Policy**

North Africa

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Biovision Africa Trust
Secretariat to African Union-led
EOA Initiative



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ECOLOGICAL ORGANIC
AGRICULTURE

Growing Sustainably



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For

Biovision Africa Trust
On behalf of African Union-led Ecological Organic Agriculture Initiative

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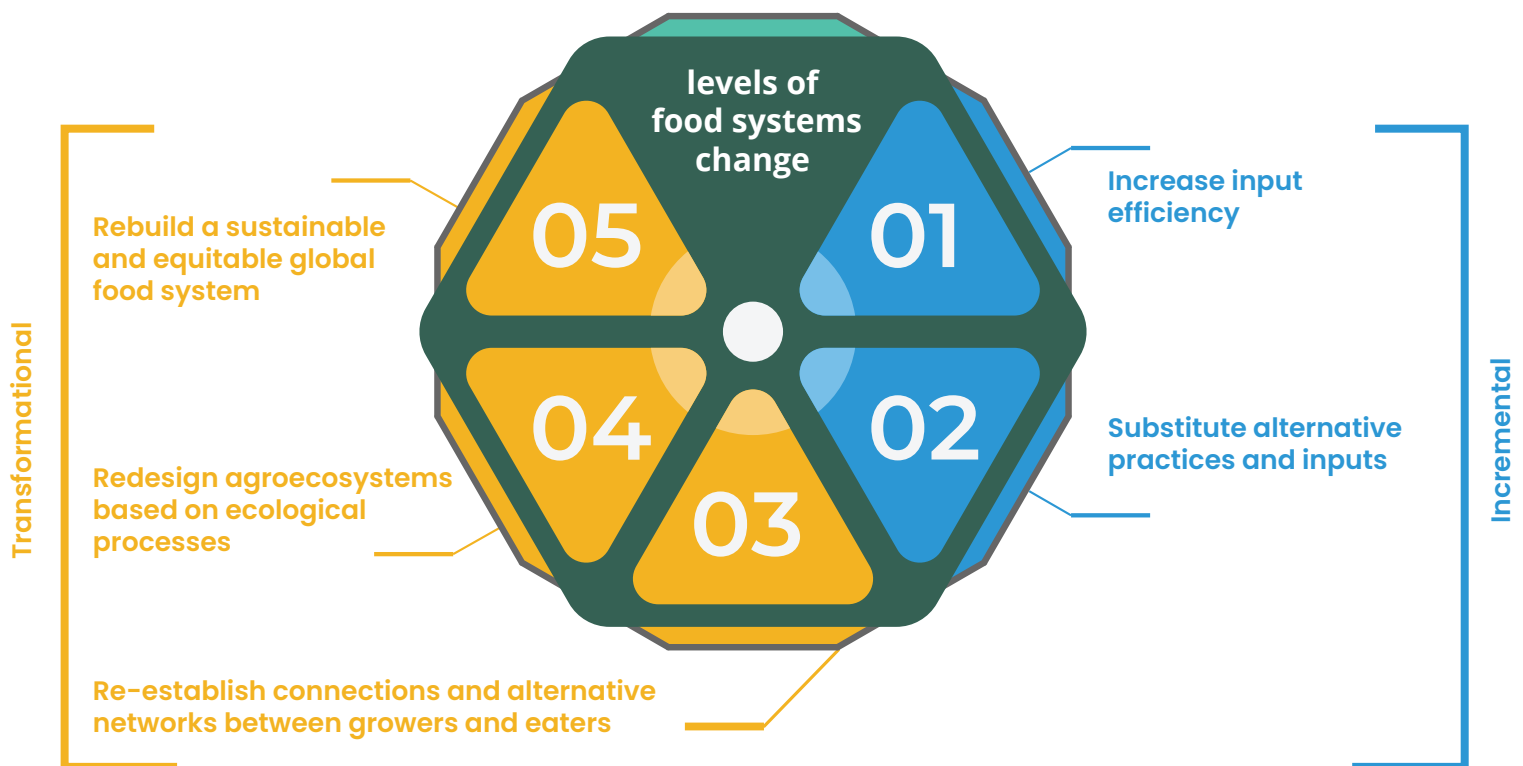
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North African Agriculture Context: Why Ecological Organic Agriculture?

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

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

The Agroecology Criteria Tool + 10 elements of Agroecology



Human & Social Value



Responsible Governance



Co-creation of Knowledge



Diversity



Synergies



Resilience



Circular Economy



Culture & food Transitions



Recycle



Regulations



Efficiency

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

Organic agriculture and agroecology provide systemic and evidence-based solutions to the aforementioned interrelated challenges, resulting in increased sustainability, equity and resilience of food systems. For the results, however, to be realized a major shift in funding and public policies is required.

Ecological Organic Agriculture (EOA) will put carbon into the soil, not into the atmosphere; it will reduce poison use, reduce pollution, improve food quality and increase water use efficiency. Since the 2010 decision on Organic Agriculture of the African Union (AU) Heads of State, the EOA Initiative has been implemented in order to support small-scale farmers and improve African food security and food sovereignty. Western Africa has a history of involvement with Ecological Organic Agriculture (EOA) through the EOA Initiative and farmer organisations, but there is still a long way to go!

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

- Transport infrastructure for access to markets.
- Equitable land rights.
- Public procurement schemes for sustainably countries produced foods.
- Payment for ecosystem services to farmers.
- Communities and entrepreneurs.
- Elimination of subsidies for synthetic fertilisers, pesticides, and hybrid seeds.
- Integrated seed systems value traditional varieties and breeds and seed exchange systems.
- Promotion of agroforestry.
- Strengthening of agroecological research and development as well as participatory extension services.
- Integration of agroecology in the country's climate change adaptation plan.
- Organic waste strategies take principles of the circular economy into account.
- Formalised inclusive multi-stakeholder processes for policy development on food system change.
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2010

The year the Head of State resolved the EOA Initiative should be supported in Africa.

The African Union (AU) Heads of State and Government resolved in 2010 that EOA should be supported in Africa with research, extension and capacity-building support. They expressed this resolution in 2012 by supporting the development of the EOA Initiative, and activities have now been mainstreamed in nine countries (four in West Africa and five in East Africa).

The AU is now adopting a climate-resilient monitoring and evaluation framework in order to encourage member states to move towards climate-smart ecological intensification in agriculture. Each country is called upon to monitor the climate-resilient variables as outlined in the AU Assessment of EOA and to work towards food security, food sovereignty, and sustainable rural development through Ecological Organic Agriculture.

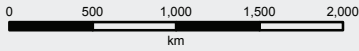
If EOA is to be mainstreamed in Africa's farming systems agriculture as envisioned in the Africa 2063 document, a process of scaling up will be required. This can only be done through implementing policies that reward and support climate-resilient strategies and remove non-developmental approaches such as Farm Input Subsidy Programmes (FISP).

The almost universal adoption of the FISP approach in North Africa (as in the rest of the continent) is essentially non-developmental, as shown in Auerbach et al. (2021). This work points out the need to understand sound nutrition, develop institutional capacity, train farmers in the use of locally available resources, and adopt Ecological Organic Agriculture as one of the strategies for achieving health, food sovereignty, and food security, based on scientific evidence from research trials, and evaluations of successful African strategies.

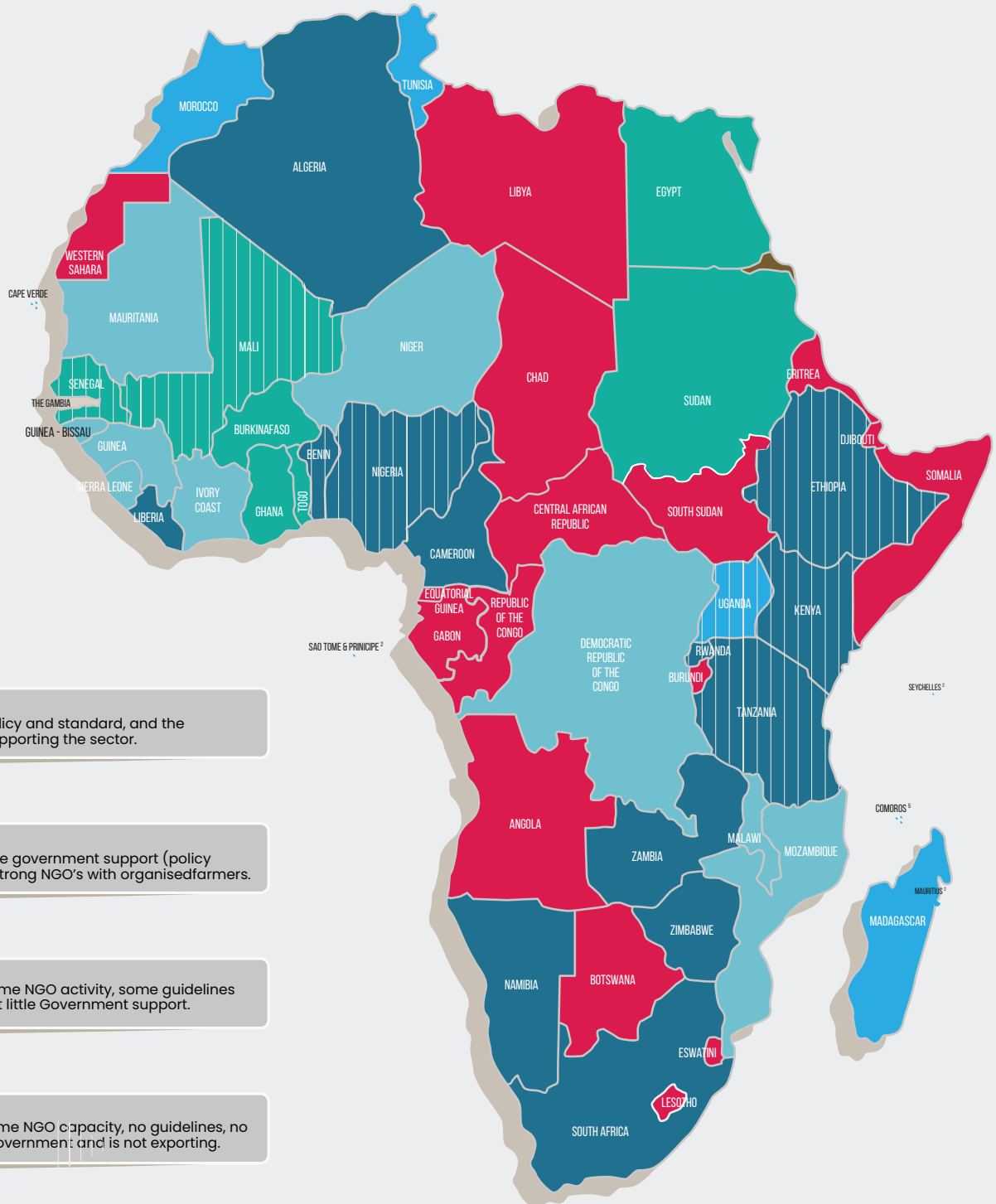
These show that FISP is both short-term and inefficient. It hands out inputs rather than helping farmers to develop sustainable farming systems to cope with climate change, sequester carbon in the soil, improve water use efficiency, build up soil fertility and develop sustainable rangeland and animal health management systems.

...The almost universal adoption of the FISP approach in North Africa is essentially non-developmental...





Projection : Geographic. Datum Hartesbeeshoek 1994
 Source: Surveyor General
 Insert : ESRI Data & Maps



01
 Country has a policy and standard, and the government is supporting the sector.

02
 Country has some government support (policy under way) and strong NGO's with organised farmers.

03
 Country has some NGO activity, some guidelines and exports but little Government support.

04
 Country has some NGO capacity, no guidelines, no support from government: and is not exporting.

05
 Country has very little institutional capacity, no government support and is not exporting.


 EOA-I member.

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

Scaling up to achieve the Sustainability Development Goals (SDGs)

...in the scaling discourse, sustainability refers to a change that perpetuates itself as the "new normal" sustained by local actors beyond a particular project.

Scaling up requires an understanding of the "levers of change". If change towards EOA is to take the SDGs into account, it is essential to combine scientists' findings with the experience of farmers and the government's political objectives. A required policy must be based on recognising the integrated management of natural resources; an agroecological approach based on an understanding of the multi-functional nature of agriculture.

In recommending an agroecological approach as an important part of future agricultural policy, the International Assessment of Agricultural Knowledge, Science and Technology for Development (2008) reported on the interconnectedness of agriculture's different roles and functions. To scale up, we need to bring about sustainable system change; in the scaling discourse. Sustainability refers to a change that perpetuates itself as the "new normal" sustained by local actors beyond a particular project.

In the course of 2020, the phrase "new normal" has regularly been applied to a post-Covid world, where the spectre of persistent infectious diseases is part of the reality we have to live with. Climate change is another aspect of this reality, but as we re-build food systems, EOA must also be factored in as a major part of the solution to broken food systems, compromised global health, disempowered women suffering under chauvinistic regimes and crippled economies struggling to find prosperity. Scaling implies a sufficient number of key drivers and relations such that the system which once perpetuated a "problem" now perpetuates a solution.



The situation in North Africa: food system and agricultural production



North Africa

Has a history of EOA development with government support; both Morocco and Tunisia have been assessed as "Advanced EOA countries" (type 1), while Egypt and Sudan are (type 2) and need only to show that the Government has a policy and is supporting EOA to progress to (type 1).

Morocco and Tunisia's organic sectors are currently supported by government-facilitated institutions, programmes, market development activities, and effective national policies. As the main drivers of these organic sectors, the governments have engaged in multiple collaborative relationships between specialised organic institutions and other public and non-government establishments. They also provided financial support for the organic sector and established institutional structures to conduct research and provide training. Their success in implementing EOA through these measures is attributed to government plans and activities that link all aspects of the organic sector (governmental and non-governmental) and foster stakeholder cooperation from multiple sectors, in line with [UNCTAD](#) recommendations. Tunisia presents a model case for how the UNCTAD recommendations can mainstream organic agriculture in a developing country.

UNCTAD recommends that a country's general and organic policies should support each other and that a clear national plan for organic food and farming should include measurable targets. In 2004, Tunisia's first national plan for organic agriculture was issued. Two national strategies and action plans for EOA in Tunisia have followed: the first for 2010-2014 and the second for 2016-2020. Tunisia's action plans were developed through consultation and collaboration with non-governmental stakeholders. The Tunisian government actively sought input from local, regional and international stakeholders on how to devise the action plans.

Research from many countries (including South Africa: [Auerbach 2020](#)) shows that EOA uses water and nutrients more efficiently than conventional farming, uses less non-solar energy, improves biodiversity, and sequesters carbon in the soil, thus reducing greenhouse gas emissions significantly. When soil fertility is improved using scientific recommendations, EOA yields are similar to conventional, and under moisture-constrained rainfed agriculture, EOA outperforms conventional agriculture. This is important for supporting African Food Security and African Food Sovereignty post-Covid and during times of climate change.



Policymakers should take note and build African Agricultural policy around these findings. This will make for independent producers of nourishing food who do not have to use expensive imported inputs.

Additionally, the government laid out specific courses of action to increase the global visibility of Tunisia's organic markets. The plans set yearly targets for land area and volume of certain organic produce backed by specific governmental interventions. UNCTAD notes that including specific targets increases the likelihood that action plan objectives will be implemented. UNCTAD suggests that including stakeholders from multiple sectors is more likely to lead to successful organic policy implementation.

Egypt and Sudan have strong potential to achieve advanced EOA status, as evidenced by legislation currently under consideration. Strong NGO farmer support is also favourable for the continued development of organic agriculture in Egypt. Conditions in Egypt are also suitable for more diversified production and markets for high-value crops like tropical fruits. Growing fruit and vegetables results in much higher economic returns than growing most other crops, including cereals. However, challenges to Egypt's EOA implementation remain.

According to the FAO, Egypt's shortcomings in achieving sustainable agriculture can be attributed to "weak infrastructure, and unclear direction in agricultural development with frequently changing priorities, as well as deficiencies in the design of specific intervention policies such as the long-standing universal food consumption subsidies". These shortcomings also apply to the implementation of EOA initiatives. Despite being liberalised, Egypt's weak institutional structures have not evolved significantly beyond the prevailing structures that existed during the government-controlled agricultural economy era.

In 2009, the Government of Egypt launched its Sustainable Agriculture Development Strategy 2030 (SADS 2030), which focuses on:

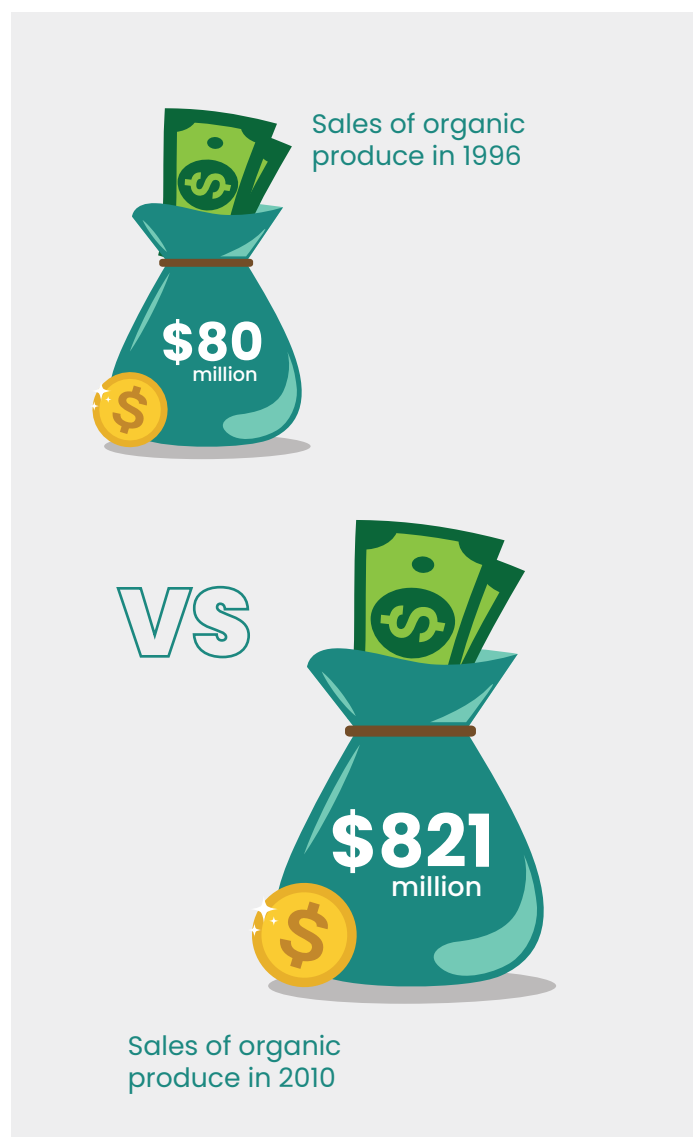
- a. The sustainable use of natural agricultural resources.
- b. Increasing land and water-use productivity.
- c. Increasing food security in strategic commodity groups.
- d. Strengthening agricultural products' competitiveness.
- e. Improving the climate for agricultural investment.
- f. Poverty alleviation in rural areas.

Research approach

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

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

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



Elements of policy required to transition to sustainable food systems in the region

The Foreword to [UNCTAD](#) (2008) states: “Organic agriculture is a production system based on an agroecosystems approach that utilises both traditional and scientific knowledge. Modern organic techniques can potentially maintain and even increase yields over the long term while improving soil fertility, biodiversity and other ecosystem services that underpin agriculture”.

Guidelines from the International Federation of Organic Agriculture Movements ([IFOAM 2017](#) p.8) propose that: “It makes political sense to support organic agriculture, as it contributes in many ways to the welfare of society and to achieving the Sustainable Development Goals. It is also an infant economic sector with strong consumer demand and market potential. Recognising this, governments in all parts of the world have initiated public policies and programs to support the organic sector. Such political support may result from different political strategies and goals, such as tapping into export markets or addressing the issue of externalities in agriculture. Designing organic support policies that will most effectively address those political goals and be adapted to the situation of each country is a complex undertaking”.

Each country needs to develop an EOA strategy, an EOA policy and an action programme.

Biovision Africa Trust (BvAT) and the German government agency (GIZ), at the request of the African Union (AU) through the EOA Initiative (EOA-I), assessed African agricultural policies to mainstream EOA in Africa. Using this and other scientific research as evidence, policy recommendations are now presented for each of the five regions of Africa, using the typology developed in the EOA assessment.

The 55 African countries have vastly differing cultures, languages, climates and natural resources. Within a particular country, there are often many languages, some very arid areas, some very well-endowed with rain, some with rivers and dams for irrigation and irrigable soils, and others mountainous, rocky, barren or degraded. Suggesting policies for the five regions, or even for each country, requires approximation. These policy briefs are intended only to illustrate the kind of interventions that could help regions work together to promote inter-African trade and mutual collaboration for the benefit of food sovereignty, good health and food security. African food systems will benefit from intelligent planning and understanding of the strengths and weaknesses of individual countries.

Government support for EOA should include extension support, appropriate research programmes, and consumer education for young mothers and scholars. This should help the domestic market develop high-quality, nutritious organic produce. Farmers thriving economically can then be assisted to scale up to supply local supermarkets, the coming Africa Free Trade Zone, and eventually certified organic export markets.

Governments and the region should support the emergence of Participatory Guarantee Systems (PGS) so that quality management starts on small-scale farms, building capacity at the local level. At the district or county level, farmer associations working with EOA should be encouraged, and National Organic Agricultural Movements (NOAMs) should federate these local and district initiatives. Training of organic facilitators is a vital part of building capacity for NOAMs. The Government should consider assisting farmers ready to export with the costs and process of third-party organic certification. The Roadmap for certification development starts with farmer training and then moves to PGS development. From PGS groups, local markets with effective quality management can grow. As PGS's capacity develops, specialised marketing groups and community box schemes will grow. Eventually, those farmers who are successfully managing quality and who are growing their market share will be ready to supply supermarkets and eventually export once they have learned about third-party organic certification.

Building community participation: why is it important, and how can it be done?

The GIZ-supported Knowledge Centre for Organic Agriculture (KCOA) programme in Africa includes projects in North, West, Central, East and Southern Africa. In Northern Africa, the facilitators are called pollinators. They work with the local NOAMs in farmer training and developing quality management systems, such as third-party organic certification and PGS, allowing farmers and consumers to manage quality for local markets at a very low cost. Once local capacity has been developed and farmers given the tools to negotiate terms of trade with wholesalers and retailers, the sector is on the road to sustainability (social, environmental and economic). The use of smartphone "apps" is helping with research, transparency, market development and farmer networking, helping independent farmers innovate and make use of indigenous technical knowledge and local resources.

Transforming the Departments of Agriculture:

- a. A National department and ARC (also health, education & environment) should be engaged, and government policy must ensure that appropriate skills are included in extension training.
- b. Provincial departments should work on the production and distribution of nourishing food.
- c. Local farmers' associations and EOA Co-operatives need support and resources.
- d. Participatory Guarantee Systems (PGS) can help farmers to manage quality, plan crop plantings and marketing, train members in organic practice and keep abreast of useful farmer innovation and research findings.

Monitoring and evaluation of EOA progress in Nothern Africa

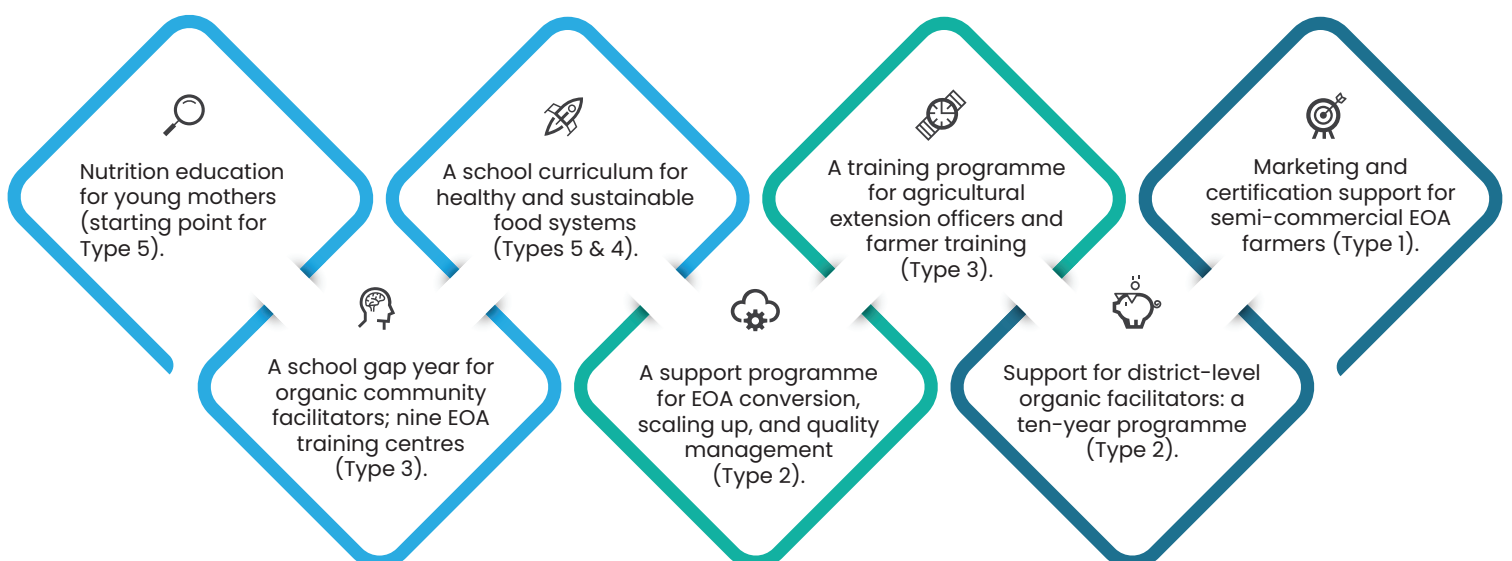
The criteria identified through the assessment, examining the progress of various countries towards EOA, and the desired outcomes for each, were the following:

M & E Criterion	Desired Outcome
1. Development of national EOA policy and regulations	Development process and support for EOA sector and national EOA policy and legislation development.
2. National EOA Standards & Certification	A national or regional standard for organic production is developed, with the private sector and Government, well adapted to conditions in the country and focused on the domestic market.
3. Government support to the EOA sector	National governments develop and implement enabling policies and programmes in support of EOA. National institutions are equipped with skills and competencies required to promote EOA in Africa. Scientific research outcomes, indigenous knowledge, technologies and innovations in EOA are increased. Consumer education and awareness should be actively promoted.
4. Civil sector strength	Development of organic farming in countries has typically been initiated by either NGOs or private companies and sometimes both. In many developing countries, organic agriculture has been promoted by NGOs. Countries with well-developed organic sectors have had participatory policy development with close interaction between the Government and the EOA sector (including NGOs, associations and organised agriculture). This improves the sector's own ability to work towards joint objectives, and it also makes it easier for the government to consult with the private sector. A unified and organized EOA sector enabling ability to work towards joint objectives.
5. EOA sectoral performance (Domestic & Export Markets)	The EOA sector in the country has developed in a positive direction towards the goals formulated in the national action plans and national policy; EOA farmer organisations are flourishing and well-governed; markets are developing.
6. Role of the Private Sector	The private sector is taking the initiative in branding and marketing.

The monitoring and evaluation framework is based on the five typologies developed for this study, utilising the following six criteria:



The elements of change for the strategy, policy and programme need to include:



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

Regarding the first criterion, the policy support requires the following process:

1(a) An in-depth integrated assessment **of general agriculture policies, programmes and plans has been performed** to understand how they affect the organic sector's competitiveness.

1(b) Objectives for government involvement in developing the EOA sector **are clarified and formulated**. All relevant stakeholders should be involved in the development of policy, plans and programmes. Objectives can include increased income, environmental protection, biodiversity enhancement, smallholder competitiveness, human health, increased exports, and domestic growth.

1(c) **One Government ministry or agency is assigned a leading role in sector development**, and organic desks are established in other relevant ministries and agencies.

1(d) **A national organic action plan or strategy is formulated and implemented**. The plan is correctly sequenced (logic) and should state measurable targets for the organic sector to help agencies and stakeholders focus their efforts. The Plan typically would include aspects of standards, regulations, market development, production issues, capacity-building and research.

1(e) **A Country has formulated a national EOA policy based on participatory policy development with close interaction between the government and the sector**. The government has actively supported the sector's organisation and its participation in the policy formulation process.

1(f) A Country has formulated and promulgated EOA regulations.

1(g) A Country has formulated implementation decrees and action plans for the actioning of the EOA Policy.

1(h) **EOA is recognised and integrated into the main policies of the country**, e.g. agricultural policy, food, health, education policies, environmental, and poverty eradication policies.

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

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

Regarding the second criterion (National Certification and Standards), the following is needed:

2(a) Standards are available.

2(c) A Participatory Guarantee System is in place but needs further development.

2(b) Governments should **facilitate access to certification services**. In some countries, especially where the private sector is weak, the government could consider establishing a governmental certification service.

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

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

3(a) The existing EOA Strategy from NOAM should be used to develop a budget for EOA support.

3(b) Research and Extension need to be strengthened in accordance with the Strategic Plan.

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

4(a) Mapping of civil society organisations must be performed & assessment of their capacity undertaken.

4(b) Government should support the development of a well-organized sector through NOGAMU.

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

5(a) Annual growth in an organic agricultural area (ha) must be measured and evaluated against the strategy.

5(b) Measure the change in the number of EOA producers (no.) and set targets for the next three years.

5(c) Determine an annual growth in EOA earnings through export and domestically (currency).

5(d) Assess changes in civil society involvement in the organic sector.



The Regions of Africa

Like many country borders in Africa, the regions of Africa are subject to discussion, and several countries are involved with more than one region. In developing regional policies for EOA in Africa, we have taken the ten countries of the **Northern Africa** region: Mauritania, Western Sahara, Morocco, Algeria, Tunisia, Libya, Egypt and Sudan, as well as Eritrea and Djibouti.

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



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