SOWING THE SEEDS

for Sustainable Food Systems in Africa

Success Stories from the Ecological Organic Agriculture Initiative, Phase I & II

March 2023

eoa
ECOLOGICAL ORGANIC AGRICULTURE
Growing Sustainably

Biovision Africa Trust

The Ecological Organic Agriculture Initiative (EOA-I) is funded by the Swiss Agency for Development and Cooperation (SDC)

Authors:
Biovision Africa Trust and Ecological Organic Agriculture Initiative (EOA-I) Implementing Partners

Contributors:
Ms. Venancia Wambua, Dr. David Amudavi

Publisher:
Biovision Africa Trust, The Executing Agency of EOA-I,
Nairobi, Kenya

This booklet was compiled and produced by iDev Consulting: Justice Rutenge and David Ngome

Contents

SOWING THE SEEDS for Sustainable Food Systems in Africa

Success Stories from the Ecological Organic Agriculture Initiative, Phase I & II

Executive Director's Note

Dr. David Amudavi
Executive Director

Dear Readers,

As the world grapples with the impacts of climate change, the importance of sustainable agriculture practices cannot be overstated. I am excited to introduce you to the Ecological Organic Agriculture Initiative (EOA-I) which has been at the forefront of promoting and implementing organic farming practices in Africa, with a focus on mitigating the effects of climate change while improving the livelihoods of smallholder farmers.

Since its inception, the EOA-I has made remarkable progress towards its goal of mainstreaming EOA into national agricultural production systems across Africa. The initiative has achieved this by promoting agricultural practices that maintain the health and fertility of the soil, conserve water resources, and safeguard natural habitats and ecosystems.

The adoption of EOA into national policies, strategies, and programs in African countries, including Benin, Ethiopia, Kenya, Mali, Nigeria, Rwanda, Senegal, Uganda, and Tanzania, has been a significant success story for the EOA-I. For example, in Ethiopia, the government has developed a national strategy to promote EOA-I, which has resulted in the establishment of organic agriculture development zones and organic certification systems. This has created new market opportunities for small-scale farmers, increased their income, and improved their livelihoods.

In Senegal, the government has supported the development of EOA through the establishment of the National Ecological Agriculture Program. This has promoted the use of natural fertilizers, composting, and crop rotation practices, resulting in increased soil fertility, reduced use of pesticides, and increased crop yields. Similarly, in Mali, EOA has been integrated into the government's agricultural development program, resulting in the establishment of farmer field schools and the adoption of agroforestry practices, such as intercropping of trees and crops, leading to improved soil fertility, increased crop yields, and enhanced biodiversity.

To achieve its goals, the EOA-I has prioritized community involvement, promoted traditional and indigenous knowledge, and emphasized all facets of food systems, including ecological, economic, and social aspects. The initiative has also made significant progress towards increasing knowledge sharing and dissemination, market penetration, enabling a business environment and quality control, and enhancing policy and capacity. These efforts have yielded promising results in promoting sustainable agriculture, enhancing food security, and improving the livelihoods of smallholder farmers across Africa. However, there is still a need for more investment and support to enable EOA to reach its full potential in Africa.

I invite you to learn more about the impact of the EOA-I in our collection of success stories from direct beneficiaries of the project at farmer, processor, and policy-actor levels. These stories reflect the effective implementation of the project action plan through strong partnerships and beneficiaries' needs-oriented interventions. Thank you for your interest in the EOA-I.

BvAT Executive Director Dr. David Amudavi and H.E Amb. Josefa Sacko, the African Union Commissioner for Agriculture, Rural Development, Blue Economy and Sustainable Environment (ARBE) in Addis Ababa Ethiopia signing the MOU between BvAT and the Africa Union Commission on 20th July 2022.

Project Manager's Note

Venancia Wambua
Project Manager

Dear Readers,

I am pleased to present the EOA-I success stories for Phases I & II. Phase II, which commenced in 2019 and ended in 2023, built on the successes of Phase I, which was implemented for four years (2014-2018). During Phase I of the EOA Initiative, we made remarkable progress in various aspects of organic agriculture with 87% of farmers having adopted to EOA practices and technologies and 61% proportion of agricultural land being set aside for organic production. The project reached 3,227, 819 farmers, with 64,433 trained ecological organic agriculture, and linked 21,448 farmers to markets, enhancing their market access and economic opportunities. We facilitated trade fairs, exchange visits, workshops, and conferences for 1,866 farmers, promoting knowledge exchange and collaboration.

These efforts led to an 83% increase in production, a 37% average increase in productivity per area, and an improved quality of life for 73% of participating farmers. Additionally, we successfully developed 15 EOA policy documents, plans and strategies demonstrating our commitment to policy advocacy and long-term impact..

Phase II has been successful despite the challenges brought about by the COVID-19 pandemic. We are grateful to our donors (SDC and SSNC), implementing partners, and farmers for their collaboration as we readjusted our plans and strategies for implementing the program. It is my pleasure to report that, despite the challenges presented by COVID-19, our teams displayed incredible resilience and adaptability, allowing us to implement most of the activities for the years 2020-2022 and attain several milestones, which are highlighted in this report.

We are optimistic that our achievements in both practical implementation and policy advocacy will contribute to the long-term sustainability and resilience of agricultural systems in countries where we are currently active. As the nine countries participating in the EOA Initiative continue to showcase the transformative power of organic agriculture, the compelling evidence generated from their experiences will undoubtedly serve as a catalyst for spreading the impact and driving the widespread adoption of sustainable agricultural practices across the entire African continent.

I take this opportunity to thank all EOA-I implementing partners in the 9 countries for supporting the implementation of successful agroecological/ EOA interventions in their countries and at the grassroots level.

There are immense growth opportunities in the organic sector that our partners can benefit from, especially the growing opportunity of the global organic market, due to the trend towards healthy living and health consciousness. Additionally, the advent of climate change has made organic agriculture even more important as it helps mitigate against climate change giving hope to the small-scale farmers who are more exposed to climate change shocks.

The African Union (AU), on behalf of the Specialized Technical Committee (STC) on Agriculture, Rural Development, Water and Environment, signed an MoU with Biovision Africa Trust (BvAT) in July 2022 endorsing BvAT as the EOA Initiative's Continental Secretariat. Under this role, EOA Continental Secretariat hosted by BvAT serves as the official agency to oversee the implementation and reporting the progress of the implementation of the AU's decision on ecological organic agriculture.

Introduction

In 2011, the Executive Council of the African Union (AU) took a decision to build an Africa-wide organic agriculture platform. The African Union Commission (AUC) accepted the mandate, launched the Ecological Organic Agriculture Initiative (EOA-I) and established the Continental Steering Committee (CS) as the apex in the governance structure of EOA in Africa whose members serve to provide EOA in Africa and its membership with guidance, oversight and decision-making regarding the operations and activities of EOA Initiative in Africa. , EOA-I has received alot of support from the Swiss Agency for Development and Corporation (SDC) in the framework of the Global Program on Food Security (GPFS), Swedish Society for Nature Conservation (SIDA) and from Africa Union Commission - DARBE through funds from EU.

The Ecological Organic Agriculture Initiative (EOA-I) was established to transform and create sustainable food systems in Africa by 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 initiative entails a holistic system that aims to sustain the health of ecosystems by relying on functional natural cycles adapted to local conditions, rather than the use of synthetic inputs, which have adverse effects on human, animal, plant, and environmental health. With agroecology as its cornerstone for achieving sustainable agriculture, the initiative placed emphasis on all facets of the food systems from production to processing, marketing and consumption with ecological, economic, and social aspects benefits. EOA-I promots agricultural techniques tailored to local conditions and encouraged practices, technologies and innovations that enhance beneficial biological interactions between various plants and species to build long-term fertility and soil health.

Recognizing the value of conventional, traditional and indigenous knowledge in creating sustainable agricultural systems, the initiative lays a heavy emphasis on community involvement and information sharing. The EOA-I aims to transform and create sustainable food systems by promoting ecologically sound strategies and practices among diverse stakeholders in production, processing, marketing and policy-making, to safeguard the environment, improve livelihoods, alleviate poverty and guarantee food security.

From its inception, the initiative harbors an ambitious goal to mainstream EOA into national agricultural production systems by promoting agricultural practices that maintain the health and fertility of the soil, conserve water resources, and safeguard natural habitats and ecosystems with respect to the interconnectedness between plants, animals and the environment.

To achieve this goal EOA-I is organized around four objectives:

1. To increase documentation of information and knowledge on organic agricultural products along the complete value chain and support relevant actors to translate it into practices and wide application.
2. To systematically inform producers about the EOA approaches and good practices and motivate their uptake through strengthening access to advisory and support services.
3. To increase the share of quality organic products at the local, national, and regional markets; and
4. Strengthen inclusive stakeholder engagement in organic commodities value chain development by developing national, regional, and continental multi-stakeholder platforms to advocate for changes in public policy, plans, and practices.

This booklet highlights some of the outstanding success stories from direct beneficiaries of the project in the nine countries at farmer, processor, and policy-actor levels and as a reflection of the effective implementation of the project action plan through strong partnerships and beneficiaries' needs-oriented interventions.

COUNTRY IMPLEMENTING PARTNERS BY COUNTRY AND PILLAR	
ETHIOPIA	
Pillar 4	Institute for Sustainable Development (ISD) — County Lead Organization (CLO)
Pillar 1	Wollo University
Pillar 2	PAN Ethiopia
Pillar 3	Institute for Sustainable Development (ISD)
KENYA	
Pillar 4	The Kenya Organic Agriculture Network (KOAN) — County Lead Organization (CLO)
Pillar 1	Egerton University
Pillar 2	FarmKenya
Pillar 3	Kenya Organic Agriculture Network (KOAN)
UGANDA	
Pillar 4	Pelum Uganda— County Lead Organization (CLO)
Pillar 1	Uganda Martyrs University (UMU)
Pillar 2	Eastern and Southern Africa Small Scale Farmers' Forum (ESAFF) Uganda
Pillar 3	Kulika Trust
RWANDA	
Pillar 4	Rwanda Organic Agriculture Movement (ROAM) — County Lead Organization (CLO)
Pillar 1	Regional Research Centre for Integrated Development (RCID)
Pillar 2	Radio HUGUKA
Pillar 3	Rwanda Organic Agriculture Movement (ROAM)
TANZANIA	
Pillar 4	Tanzania Organic Agriculture Movement (TOAM) — County Lead Organization (CLO)
Pillar 1	Sustainable Agriculture Tanzania
Pillar 2	Pelum Tanzania
Pillar 3	Tanzania Organic Agriculture Movement (TOAM)
MALI	
Pillar 4	Féderation Nationale des Producteurs de l' Agriculture Biologique et Equitable du Mali (FENABE Mali) — County Lead Organization (CLO)
Pillar 1	Institute of Rural Economy (IER) Mali
Pillar 2	Association Malienne pour la Solidarité et le Développement (AMSD)
Pillar 3	Union des Producteurs de Sésame de Banamba (UPSB)

SENEGAL	
Pillar 4	National Council for Concertation and Cooperation of Rural People (CNCR) — County Lead Organization (CLO)
Pillar 1	Environnement Développement Action pour la Protection Naturelle des Terroirs (EndaPronat)
Pillar 2	Environnement et Développement en Afrique (IED)
Pillar 3	Agrecole Afrique
BENIN	
Pillar 4	Beninese Organization for the Promotion of Organic Agriculture (OBEPAB) — County Lead Organization (CLO)
Pillar 1	Research Laboratory on Innovation for Agricultural Development of the Faculty of Agronomy of the University of Parakou (LRIDA/FA/UP)
Pillar 2	Platform of Civil Society Actors of Benin (PASCiB)
Pillar 3	Research and Technical Assistance Center for the Environment and Agricultural Development (CRASTEDA ONG)
NIGERIA	
Pillar 4	Association of Organic Agriculture Practitioners of Nigeria (NOAN) — County Lead Organization (CLO)
Pillar 1	Kwara State University
Pillar 2	Farmers Development Union
Pillar 3	Ibadan Go Organic Multipurpose Cooperative Society

EOA Initiative Coverage

Highlights of Impact

By the end of the 2022 reporting year, the EOA-I national partners across nine countries in Africa collaborated with other players to record significant gains towards the adoption of organic agriculture practices across various levels of production systems and registered encouraging footprints within the policy-making networks. The impressive progress made by the initiative is evidenced by the achievements in various aspects of the organic agriculture value chain.

One of the most noteworthy accomplishments of the EOA Initiative was generating information and knowledge on 40 EOA technologies and practices. This initiative ensured that over 3,227,819 farmers were reached with essential EOA information and knowledge, far exceeding the initial target of 1.5 million. This extensive outreach promoted the adoption of sustainable organic agriculture practices across the nine (9) EOA-I countries, benefiting both farmers and the environment.

This has enabled the project to equip a new generation of agricultural professionals with the skills and knowledge necessary to promote organic agriculture practices on a large scale. As a result, 14,040 (39% female, 19% youth) value chain actors, including farmers, input suppliers, processors, and transporters, have been trained in various EOA practices and standards.

To ensure the long-term sustainability of the initiative, 10 EOA training curricula were developed or reviewed for integration into national formal education programs, surpassing the target of nine. Additionally, nine tertiary institutions are implementing EOA training programs, meeting the set goal.

In terms of market access and development, 21,779 farmers (33% female, 37% youth) participated in both domestic and export markets. This was supported by an increase in the number of farmers meeting the organic market standards, with 69,494 farmers achieving this milestone. To further strengthen market access, 30 participatory guarantee system (PGS) groups were established and fully certified, surpassing the target of 18.

The EOA Initiative successfully developed and accessed 48 new market channels and strengthened 69 existing market channels for value chain actors. As a result of consumer awareness campaigns, there was an increase in the number of people consuming organic products, now totaling 31,843 individuals.

Innovation in product development was also evident, with 55 products undergoing value addition, significantly surpassing the target of 18. This achievement highlights the initiative's commitment to not only increase organic agricultural practices but also to promote value addition in the market.

The EOA national platform meetings served as a hub for sharing lessons, best practices, experiences, and opportunities. Under the initiative, 64 such meetings were held, drawing representatives from different institutions, backgrounds, and expertise in each national platform organized by the national secretariat annually, contributing to a more inclusive and collaborative environment for organic agriculture.

Policy advocacy and integration played a significant role in the EOA Initiative's achievements. A total of 15 EOA-related aspects including by-laws, ordinances, policies, legislation, strategies, plans, programs were integrated into national policy frameworks, more than doubling the target of nine. Additionally, 12 EOA-related national programs or projects were implemented, also exceeding the goal of nine.

Summary of key results

Research and Applied knowledge:

56

Types of EOA technologies, practices and others **generated**

69

Types of EOA technologies, practices and others **validated**

Information and Communication:

3,242,556

Farmers reached with EOA information and knowledge

1,467

38% female, 40% youth

Extension officers and rural service providers trained on EOA practices and standards

Value Chain and Market Development;

36,278

35% female, 34% youth

Value chain actors linked to a range of business development services

21,779

33% female, 37% youth

Farmers participating in domestic and export markets

69,494

Farmers meeting the organic market standards

31,730

People consuming organic products as a result of consumer awareness campaigns

Management Coordination and Governance:

20

EOA-related by-laws, ordinances, policies, legislation, strategies, plans, programmes integrated into national policy frameworks.

64

National platform meetings held to share lessons, best practices, experiences, and opportunities

PILLAR 1 - RESEARCH AND APPLIED KNOWLEDGE

Under Pillar 1 of EOA-I, the project through partner conducted a value chain analysis to identify knowledge gaps, needs, and priorities of various actors along selected value chains, with a special focus on women, youth, and marginalized groups. With the results of the value chain analysis, EOA-I partners conducted research in their respective domains to generate information and knowledge to address the gaps, needs, and priorities identified. This yielded extensive evidence-based knowledge for sustainable organic agricultural practices to be disseminated in the project.

Some of the key findings from the Research on EOA have demonstrated that this approach can lead to a wide range of benefits, including:

Improved soil health: Practices, such as the use of cover crops and compost, can improve soil fertility and regeneration.

Increased biodiversity: Intercropping and crop diversification can increase productivity in mixed farming systems for both human and animal health.

Enhanced food security: EOA practices can improve food security by increasing crop yields, diversifying production, and reducing dependence on external inputs.

Reduced environmental impact: EOA practices such use of biocontrol and organic pest control can reduce the environmental impact of agriculture by reducing pesticide and fertilizer use, and conserving natural resources.

Practices promoted under the EOA showed great potential to improve health by reducing exposure to harmful pesticides and promoting the consumption of healthy and nutritious food.

Overall, EOA represents a promising approach to sustainable agriculture that can help to address a range of environmental, economic, and social challenges.

I WANT VERMICOMPOSTING TO EXPAND – REACHING MORE FARMERS

Ethiopia

Mohammed Ali is a smallholder farmer residing in Gobeya Village, Tehuledere district of South Wollo zone in the Amhara Region, Ethiopia. Prior to joining the EOA-I project, Mohamed and his neighbours experienced low crop yields that were insufficient for their families to subsist on. Mohamed and his peers had been applying the conventional system of farming.

He was recruited by Wollo University researchers as one of the lead farmers to be trained on how to make and effectively apply vermicompost.

> **Vermicomposting** is a type of composting in which certain species of **earthworms** are used to enhance the process of organic waste conversion and produce better soil nutrients.

Mohamed was trained on how to convert a wide range of organic residues, such as straw, husk, leaves, stalks, weeds, and animal waste into vermicompost. With the new knowledge, Mohammed set about producing vermicompost to increase his crop production. A dedicated farmer of vegetables, fruits, and cereal crops, Mohamed fully replaced synthetic fertilizers with vermicompost for vegetables and fruits in his backyard and for cereal crops grown in larger plots away from his homestead.

The use of vermicompost has resulted in healthier crops with little or no sign of pest attack, eliminating the need for pesticides. This success has attracted the attention of other farmers in his neighbourhood, making Mohammed become a key resource person for the district agriculture office by providing training and inputs for 55 farmers beyond his village. He now plays an important role in the expansion of vermicompost beyond the Tehuledere district, providing vermicompost and vermiculture training for free to two districts via the Tehuledere district agriculture office.

Mohammed sells his surplus vermicompost to his neighbours to make an extra income. In the last four months of 2022 alone, he earned USD 1,000 by selling vermicompost and vermiculture. With the nationwide shortage of agrochemical inputs in Ethiopia since 2021, Mohammed's income from selling vermicompost and vermiculture has become even more critical for his family's economic well-being.

Mohammed's experiences and results with vermicompost have become a focus area for agriculture extension who are using vermiculture as a part of the solution to the agrochemical inputs shortage in Ethiopia. Mr Aragie Abate, an agriculture officer in the Tehuledere district, reported that the government, through the ministry of agriculture, is promoting composting technology through mainstream media and extension systems and training farmers on different composting techniques.

Mohammed's commitment to promoting vermicomposting technology and providing training to other farmers has made him an essential player in expanding vermicomposting beyond his village and improving the livelihoods of smallholder farmers in Ethiopia.

SCALING UP OF ORGANIC TECHNOLOGIES FOR PINEAPPLE AND STRAWBERRY

Rwanda

The University of Technology and Arts of Byumba (UTAB) in Rwanda has been implementing the Ecological Organic Agriculture Initiative (EOA-I) since September 2021. In this project, the university implements activities that are geared towards generating research-based knowledge and promoting its practical application in the field of organic agriculture. In the initial phase of the project, a baseline value chain analysis was conducted to identify knowledge gaps, needs, and priorities of various actors, with a special focus on women, youth, and marginalized groups in the pineapple and strawberry value chains in Gakenke, Rulindo, Muhanga, and Kamonyi districts. A one-day workshop was held in January 2022 to validate the baseline findings for dissemination.

The study revealed a number of gaps in the pineapple and strawberry value chains, such as a shortage of materials for mulching, insufficient organic fertilizers, and a scarcity of organic pesticides. To address these gaps, four technologies were developed: intercropping pineapple with *Desmodium intortum* and sweet potatoes for sustainable mulching in organic highland pineapple production; exploring the effectiveness of pest-repellent crops on pest management in strawberry farming; homemade organic fertilizers on pineapple production; and homemade organic fertilizers on strawberry production.

Prior to the establishment of the practice of intercropping sweet potatoes with pineapple, pineapple farmers used *Eragrostis variabilis* to mulch pineapple crops. However, they complained about the disadvantages of this practice, including its labour-intensive nature, low decomposition, and increase in temperature. Currently, experiments on the use of sweet potatoes as a green cover crop and food are showing promising results.

The study found that pathogens and pests cause yield losses and negatively affect the quality of produce, leading to complaints from farmers. To address these issues and support the integration of homemade technologies, the university has developed two technologies for organic fertilizers and organic pesticides capable of fighting against potential pests such as cyclamen mites, aphids, whiteflies, spittlebugs, flower thrips, chilli thrips, armyworms, and related Noctuid caterpillars. Strawberry diseases, such as leaf spots, grey mould, red stele, powdery mildew, Alternaria spot, black root rot, and black spot, were also identified.

Most of the raw materials used, such as *Tithonia diversifolia, Tephrosia vogelii*, Endod, and African marigolds, are locally available around the farmers' gardens. Farmers can also produce other ingredients, such as chilli, Carica papaya leaves, wooden ash, cow dung, and urine, to develop both technologies. The university obtained promising results from laboratory experiments, and they are now ready for application by pineapple and strawberry farmers from Gakenke, Rulindo, Muhanga, and Kamonyi Districts.

Tanzania

MECHANIZATION OF BIOPESTICIDE EXTRACTION FOR RURAL FARMERS IN TANZANIA

The practice of ecological and organic agriculture in Tanzania is increasingly becoming popular among rural farmers. This is because of the easy access to naturally occurring implements and resources needed to run a viable organic farming enterprise. However, as with other crops and livestock keeping, farmers face a big challenge with pests and diseases.

Organizations such as Sustainable Agriculture Tanzania (SAT), Tanzania Organic Agriculture Movement (TOAM), and the Participatory Ecological Land Use Management (PELUM) Association working in Tanzania under the auspices of the Ecological and Organic Agriculture initiative (EOA-I) support farmers in addressing some of the challenges faced when practising sustainable organic farming.

In the Mvomero district of the Morogoro region, farmers have for long used an extract from Neem leaves as a biopesticide in their farms to control a vast range of pests that destroy crops. However, getting the extract from the leaves is an arduous task for these farmers, relying on simple manual labour with crude tools.

According to reports recorded by EOA-I project partners, farmers mainly pound the leaves with a mortar and pestle to extract the biopesticide. Besides the extraction process being labour-intensive, farmers also reported regular skin irritation and chest infections, while the results of efforts only produced small volumes of the extract. In 2021, the EOA-I partners, collaborated with the Sokoine University of Agriculture (SUA) to fabricate two botanical extraction machines, one powered by electricity and one manually operated.

The machines were installed at the SAT Farmer Training Centre in Morogoro, where community members are continuously trained to use them and share in the extraction process. The mechanisation of the leaf pounding process has shortened the leaf pounding process and increased volumes of the extraction, much to the joy of the farmers.

Mercy Meena, a local farmer, used to spend an hour pounding at the mortar only to yield five kilograms of the extract. The manually operated machine can grind up to 50 kilograms of leaves per hour, while the electric machine goes through 500 kilograms of leaves within the same time frame.

“The machines will make our lives much easier. The cost of labour we incurred before and wasted time can now be focused on other profitable activities,” says Meena.

Hundreds of farmers have been trained at the SAT Training Centre on mechanised extraction and the effective application of biopesticide on their farms. This is part of the EOA-I objectives to enhance the capacity of organic farmers through innovations that augment their production and productivity.

Uganda

BORROWING FROM INDIGENOUS KNOWLEDGE FOR PRACTICAL SOLUTIONS: SUSTAINABLE HOUSEHOLD ASH-BASED STORAGE OF FRESH TOMATOES

To address the high cost of living beleaguering her, Dorothy Nankuta, a student at the Uganda Martyrs University, has developed a sustainable preservation formula that can impact the lives of many modest and low-income households. In 2019, Nankuta started self-motivated research to find a solution to preserving the highly perishable tomatoes.

Buoyed by support from Dr Marius Murongo, who linked her to the ecological organic agriculture initiative (EOA-I) for research support, Nankuta started trials to observe the decomposition of fruits when stored under different conditions. The conditions – doused in ashes from oily plants, Eucalyptus, sunflower, simsim and castor oil – are borrowed from witnessed rural preservation practised by her grandmother for other crops.

Nankuta decided to try this tactic on her tomatoes with astonishing results. Tomatoes have an average shelf life of three to five days, but when Nankuta preserved her tomatoes in the oily plants' ashes, the shelf life of the vegetable was longer with varied periods of durability depending on the type of incinerated plant.

The minimum number of days observed in this preservation method per type of ashes was 55 days for simsim ashes, 45 days for Eucalyptus, and 48 days for sunflower and castor oil. The control sample lasted 18 days to decompose. In some of the trials, the tomatoes lasted as far as 75 days.

According to Nankuta, the proposed plant ash preservation could save low-income households the expenses of tomato storage. The research results could also help smallholder farmers avoid losses associated with post-harvest storage of tomatoes.

The low cost and naturally organic nature of ash-based preservatives align with EOA's objectives to find sustainable and affordable innovations that address smallholder and low-income households' needs without damaging the environment.

Nankuta's research was partly supported by resources from the EOA-I under collaboration with Uganda Martyrs University in Nkozi, Uganda. More research is needed to validate these methods.

PILLAR 2 - INFORMATION AND COMMUNICATION

Under Pillar 2 of the EOA initiative, the information and knowledge were repackaged and translated into formats suitable for spreading to diverse target groups, with a focus on women, youth, and underprivileged groups.

EOA-I partners used video, social media, print media, and other forms of training materials to reach a wide range of audiences for the transfer of knowledge and skills on organic agriculture. Using the rainer of Trainers (ToT) method, Business Development Strategies, and other methods, EOA-I partners also trained key stakeholders to make the knowledge transfer a sustainable partner-led process beyond the tenure of the project.

The initiative and partners worked on creating and reviewing the EOA curriculum for possible incorporation into the national formal education programs. Institutions of higher education have been made aware of EOA curricular programs through seminars, strategic meetings, and thematic lectures.

The best experiences and results on the use of EOA research information and knowledge by the farmers were also documented for reference and learnings to guide the scaling and implementation of similar initiatives in the future.

To promote the adoption and dissemination of organic agriculture practices, EOA-I partners implemented a series of beneficiary-centred knowledge exchanges and awareness creation initiatives, some of which are featured in this section of the publication.

Ethiopia

EVIDENCE-BASED FARMER-LED KNOWLEDGE AND PRACTICES DISSEMINATION

In Medagudina village, Holeta district, Oromia region of Ethiopia, Workie Shumye has become a local celebrity in the farming community. Workie runs a small farm based on the principles and practices of the ecological and organic agriculture (EOA) program.

Workie grows 19 crops on the farm, including Swiss chard, Lettuce, Habesha Gomen, Green Beans, Faba Beans, Chilli pepper, Carrots, Leek, Garlic, Potato, Beetroot Maize, Lemon, Lime, Avocado, Rue, Rosemary, Garden cress and Ocimum. She blends mono-cropping, intercropping and crop rotation systems to maintain sustainable soil health and continuous output from the plot. For soil nutrition, Workie uses mulching, compost, and farmyard manure to maintain and enhance fertility on the farm. She uses plant extracts from a mixture of chilli and garlic for pest management and sometimes concocts a milk solution to control disease infestation.

Before joining EOA and picking up the practice of organic farming, Workie was a conventional farmer relying heavily on synthetic fertiliser and chemical pest and disease control. While the complexities of environmental damages from the chemicals were lost to her, she struggled to afford these farming inputs that seemed inalienable to her survival at the time.

Without sufficient funds to buy and apply chemical inputs, her produce diminished, and the unquantified income from her farm could no longer sustain her and her family. She joined EOA-I through the Ethiopian partnership with the Pesticide Action Nexus association (PAN). She was trained on organic farming principles and practices such as soil fertility management, bio-pests and disease control, organic crop management and integrated sustainable mixed farming through the EOA extension system.

Today Workie is a successful lead farmer producing enough food for her family and generating an average income of USD 1,500 a year.

"Feeding my family with healthy food is a priority for me, and what I take to the market is the surplus production," says Workie.

From successful organic farming, Workie has expanded into an integrated crop, and livestock production where biomass from crop production is used to feed the animals and manure from the cattle is added back to the farm. Through the EOA's knowledge dissemination strategy, the success of Workie's farm is evidence drawn upon to provide training and inspiration to more than 300 farmers from around her village and other far parts of the region. There have been a steady increase in the area's volume of organic produce. As a result, EOA, through the Institute for Sustainable Development (ISD), has organized consumer awareness initiatives and created market linkages that have enabled organic farmers from Holeta to sell their produce in Addis Ababa.

Benin

TRAINING AND PROMOTION OF ORGANIC PLANTAIN FARMING CHANGING LIVES OF LOCAL FARMERS IN BENIN

For years, plantain farming in Benin by smallholder farmers has been a secondary and neglected affair. Most people would leave opportunistic plantain trees to grow with little to no care by the roadside, riverbanks and backyard overgrowth. This is in spite of the fact that commercially, plantain is one of the most in-demand food sources in the whole of west Africa.

According to a survey by Platform of Civil Society Actors in Benin (PASCiB), apathy toward this crop among smallholder farmers is caused by high costs and difficulty in getting plantain seedlings and low yields due to poor cropping practices. PASCiB, a renowned organic agriculture extension not-for-profit organization, also found that most farmers obtained suckers from their peers with little regard for the quality or variety of what they are planting.

With the support of the Ecological and Organic Agriculture Initiative, PASCiB set about to train lead farmers on advanced skills for organic farming of banana plantain on and off-season and seed production. The training covered good agronomic practices, dry weather crop irrigation, plant spacing and seed multiplication in local home nurseries.

PASCiB trained more than 300 banana plantain producers and created a network of farmers in the value chain for ease and collaborative marketing of their produce. Each of the 300 trainee farmers was tasked to recruit, train and support 20 other farmers within their local area.

This knowledge and skills dissemination approach saw the number of highly trained plantain farmers expand, creating new demand for seedlings as well as a bigger supply, thus lowering the cost of seed significantly. Easy access to good quality and well-maintained seed, as well as the skills to properly look after the crop, increased the quality and yield of the banana plantain.

The previously neglected crop was now averaging 2,000 more plantain bunches per hectare compared to previous yields from traditional practices. The sale of both seedlings and mature crop produce has changed the livelihood of the farmers, improving both food security and household income. Farmers who had previously relied on seasonal weather to manage their crops can now manage and produce banana plantain both on and off-season, which guarantees them income.

Rwanda

HEAP COMPOSTING FOR INCREASED PINEAPPLE PRODUCTION AND DECREASED COSTS IN RWANDA

In December 2021, 57 representatives of different groups of pineapple farmers from the Northern and Southern Provinces of Rwanda attended a training of trainers on EOA benefits and practices. The TOT was organized by HUGUKA in partnership with the Rwanda Organic Agriculture Movement (ROAM) in the framework of EOA initiative.

One of the EOA practices presented to farmers participating in the training was heap composting. The trainees were impressed by this practice and recognized it as a solution to the problem of soil fertility management.

"For many years, we have been growing organic pineapples and we have never used chemical fertilizers in our pineapple plots. In the beginning, the harvest was so good that we could get 100 kgs on 10 acres of land and this was every week," said Nturanyenabo Felicien, one of the trainees and a pineapple farmer since 1997.

Nturanyenabo Felicien continued by saying that in the last 3 years, he could not get the same production as he used to do at the beginning: "The harvest is decreasing every year, and today, I cannot even have 30 kgs on a weekly basis on the same plot I used to harvest 100 kgs."

Nturanyenabo and his colleagues from both the Southern and Northern Provinces of Rwanda agreed that the use of organic fertilizers is a solution to increase their production.

However, it was very complicated for them to find organic fertilizers. "Before this training, the fertilizer we used to have for our pineapple was farmyard manure and animal waste. However, this one is very expensive and not affordable for every pineapple farmer because we all do not have domestic animals. Those who have them are selling the fertilizer at an estimated price of between 120 and 150 Rwandan francs per kilogram, and the fertilizer for only one pineapple plot requires between 700 kgs and 1 ton of fertilizer every three months", explained Nyiransabimana Pricilla, chairperson of ABIZERWA Cooperative from Nyarusange Sector Muhanga District, Southern Province.

After the TOT, training participants have gone back home and transferred the skills and knowledge to their respective group members, who are now 1,137 farmers. They all started heap composting as fertilizer for their pineapple plots. By today, they have not yet started harvesting but their pineapple plantations are promising to increase productivity. They also said that heap composting is very cheap because they do not even need to buy ingredients, they only consider the cost of the workforce.

Uganda

ADOPTION OF THE ECOLOGICAL ORGANIC AGRICULTURE CURRICULUM BY TERTIARY INSTITUTIONS OF LEARNING IN UGANDA

ESAFF Uganda, an implementing partner under the Ecological Organic Agriculture Initiative (EOA-I) took on the responsibility to promote the adoption of the EOA curriculum among universities and other institutions of learning. This draws attention to the agriculture extension service in Uganda, which is a major component of agricultural production, but the present capacities and skills of the extension workers are inclined towards conventional agriculture. In order to advance the practice of organic farming, there is a need for the agricultural labour force to undergo re-orientation and re-learning processes in terms of farming practices and further develop their competencies in organic farming systems.

ESAFF Uganda embarked on this assignment and revisited the EOA Curriculum developed in 2014 in order to streamline EOA into education systems under the Ecological Organic Agriculture Initiative (EOA-I). ESAFF Uganda developed detailed course content of the existing curricula for the Diploma, Bachelor, and Masters degrees. The campaign behind the review was to increase the adoption of the curriculum by universities and other institutions not only in Uganda but also in Africa as a whole. Once the review was accomplished, the organization conducted a campaign to identify partner institutions to roll out the curriculum.

As such, Lira University, a public university in the country, that was in the process of rolling out an agriculture department at the time, was identified, and bilateral engagements started between the two institutions. On the 12th of October 2022, during its 4th National Organic Week celebrations, ESAFF Uganda paid an official visit to Lira University, where the course content was officially presented to the Lira University Chancellor, Professor Jasper Ogwal-Okeng. Fortunately, the University Vice Chancellor officially approved the partnership between ESAFF Uganda and Lira University and gave a go-ahead to the team to develop the content into a comprehensive agriculture curriculum for the university following the National Council of Education Guidelines in Uganda. Much as this is only an initial step in increasing the pool of organic agriculture experts in the country, it's the most critical and essential one. Currently, the Lira University team is reviewing the earlier developed course content for processing, and hopefully, by the end of 2023, components of ecological organic agriculture will be adopted for teaching in the university.

Once this process is finalized and the EOA course content is adopted into the university curriculum, more young people will be exposed to EOA farming practices as a means of bringing about a change in knowledge and perspective. Additionally, this will aid in re-orienting the extension services program in the country, with the university producing more extension workers skewed toward agroecological farming practices.

The partnership between Lira University an academic institution, and ESAFF Uganda a small-scale farmers' organization also lays a fertile ground for the interaction between members of the academia and farmers who are custodians of the much-needed knowledge, skills, information and fields for research and learning purposes.

PILLAR 3. VALUE CHAIN AND MARKET DEVELOPMENT

One of the key objectives of the EOA initiative under this Pillar is to increase the market penetration of ecological and organic agricultural products at domestic, national and international markets. This was achieved through various activities such as capacity building for farmers and processors, certification of organic products, and marketing support. By promoting the consumption of ecological and organic products, the initiative aims to create sustainable market demand and increase the income of smallholder farmers.

The EOA initiative partners invested time and resources towards policy engagement with key stakeholders to create an enabling business environment for ecological and organic agriculture. This included advocating for supportive policies, creating networks among stakeholders, and promoting public-private partnerships. By creating a conducive business environment, the initiative aims to attract investments and support the growth of ecological and organic agriculture.

For quality control, the EOA initiative partners facilitated capacity building and created linkages with important biosafety agencies across the project countries to ensure that ecological and organic agricultural products meet the required standards and certifications. A record number of farmers' training and stakeholder engagement forums for farmers and processors on good agricultural practices, quality control systems, and certification procedures.

EOA initiative activities are meant to promote sustainable agriculture practices, increase the income of smallholder farmers, and promote the consumption of ecological and organic products. Some of the results obtained from these efforts are highlighted in this section of the publication.

BUILDING ORGANIC CHIA INTO BUSIA OIL CROPS COOPERATIVE

Kenya

Busia is a county in the former Western Province of Kenya that borders Kakamega County to the east, Bungoma County to the north, Lake Victoria and Siaya County to the south, and Busia District, Uganda, to the west. The people in Busia County rely on agriculture as their primary source of income.

The EOA project sought to focus on mainstreaming ecological organic agriculture practices while stimulating market access for smallholder farmers. Several reasons led to the selection of Busia County, one of them being the potential impact of working with smallholder farmers; the other being that the agro-ecological conditions of Busia County are conducive to agricultural production. The proximity to Uganda, where organic farming is widely practised made the cultural connection to organic much more robust than we would have expected anywhere else. Due to its regional appeal, Busia Oil Crops Cooperative was selected as a main value chain actor from a stakeholder mapping exercise.

The cooperative began its operations in 2015 with a membership of 500 farmers and has increased to 800 (417 females, 383 males with 142 youth) producing oil crops such as organic sesame, chia ans soybeans. Recruited farmers were trained in organic practices; to date, the production of these crops was and is still under intensive organic management practices. Farmers practised crop rotational and organic soil fertility management to maintain organic compliance.

Despite these initiatives in growing Organic Sesame, Chia, and soybeans, the cooperative still faced significant challenges in accessing viable markets.

The Kenya Organic Agriculture Network (KOAN), the value chain management pillar implementing partner, conducted a stakeholder and root cause analysis to understand why, despite the efforts of the Cooperative, they still suffered from market access challenges. A key challenge identified was that farmers were getting meagre yields for Sesame, Chia and felt the crop was not providing any profit and hence did not put much effort into them; this had a spillover effect of the cooperative underperforming with interested buyers and eventual loss of interest. Despite having marketing incorporated, the cooperative structure was not aggressive in providing the needed linkages for the farmers, hence the loss of confidence in the farmers which created a vicious cycle that threatened the overall survival of the cooperative.

Through the EOA initiative, the Cooperative was linked to Egerton University's research Pillar, which worked on productivity challenges. In addition, the project ToTs for 30 trainers and 15 inspectors in collaboration with FarmKenya and Egerton University.

As part of the field trials and soil fertility improvement capacity building, KOAN focuses on building the capacity of cooperatives' Internal Control System (ICS). The reason behind this was first, to be organically certified, the cooperative needed a sound ICS. Secondly, from the gap analysis, farmers responded well and positively when they saw the cooperative engage them.

The internal inspectors and trainers who graduated from the ICS training also serve an important role in the dissemination of new reasearch and EOA practices. Lastly, Egertonuniversity strategically

situated their trial, demo and training plots in the main cooperative zones of Lukolis, Amungura, and Kidera for ease of access by members.

KOAN also identified the management gaps and built the cooperative's confidence in the management after taking them through capacity building and organizing exchange visits with other cooperatives. KOAN also built communication skills, where the management was encouraged to work with the county government to engage the membership in county activities. This reached a point where the cooperative organized regular engagements with county extension and marketing officials.

Markets remained a pressing issue; farmers had started getting good harvests of sesame and chia but could not access markets effectively. The cooperative identified Base Organic Foods France as a potential buyer from our training. As these developments continued, it became apparent that despite the interest from the company, the earliest transaction was months away and was contingent upon organic certification. The cooperative made inroads in developing relationships with small processors of sesame oil based in Nairobi. They were able to market their sesame and chia in the short term and keep the members happy and revenue flowing.

It became apparent that the cooperative could not export directly and clean the sesame and chia before export. From the stakeholder assessment exercise with KOAN, Base Organics France recommended the cooperative approach of Fine Aromas, a company they had some experience dealing with in Kenya. Due to their close association with the cooperative, Base Organics France agreed to a tripartite agreement to buy from Fine Aromas, who would buy from Busia Oil Crops. On the other hand, Fine Aromas agreed to work with the cooperative for 3 years to build their export capacity and product portfolio since there was still a lot of untapped potential in sunflower and soybeans.

Unfortunately, in 2022, Base Organics France, due to internal policy change, dropped out of all sourcing contracts outside Francophone Africa and Kenya happened to fall under that list. However, Fine Aromas was able to identify other export buyers and fill the gap. This relationship has taken on new dimensions as Fine Aromas has just completed purchasing and processing the 1st batch of chia from Busia Oil Crops Cooperative. With the news of these engagements, other companies (such as Momentum Limited) have started showing interest in other crops from the cooperative (soyabean and sunflower). The cooperative has also been receiving support from the Kenya Women's Finance Trust Bank in building its financial literacy capacity to engage in purchase order financing for the cooperative eventually. All in all, the cooperative has shown much growth and potential.

Rwanda

RWANDAN FARMERS ENHANCE THEIR SKILLS SKILLS IN VALUE ADDITION TO ACCESS BETTER MARKETS

The Ecological Organic Agriculture Initiative in Rwanda is a collaboration between the Rwanda Organic Agriculture Movement (ROAM) and pillar implementing partners, namely the University of Technology and Arts of Byumba and the Huguka Organization. The initiative is supporting approximately 1,145 farmers in strawberry and pineapple value chains located in four districts of Rwanda namely Rulindo, Gakenke, Kamonyi, and Muhanga.

After conducting an assessment of the challenges faced by farmers in the strawberry and pineapple value chains, including limited knowledge and skills on organic agriculture practices, value addition, and lack of appropriate packaging materials, ROAM coordinated activities related to the value chain and market development under pillar three. Through this effort, a group of 27 out of 120 farmers in the strawberry value chain were supported with capacity building on growing strawberries and training on value addition. The training included processing juice, jam, and wine, and providing packaging materials for these products as a sample for linking farmers to suppliers of the materials.

Irene Nyirabarigira, a member of the CODFM cooperative, shared her experience:

"We grow organic strawberries, and we produce 150 kg of strawberries on a weekly basis, making a total of 53 USD in a week. We were fortunate to receive training from the EOA-I project through ROAM to enhance our skills in value addition, specifically processing strawberry juice, jam, and wine. We have customers in Kigali and in one of the supermarkets in the Muhanga district called Lumina Supermarkets. After the training, we sold the processed jam and have received many positive comments from our customers on the improved quality of the jam. We started as a small factory, but we hope that with the improved skills we gained in the training, we will be able to grow into a big factory, hence improving our income, and livelihood, and accessing more markets and customers. We are grateful to ROAM for connecting us to other partners, and we are looking forward to their continuous guidance."

Through this initiative, ROAM has been able to improve the skills and capacity of smallholder farmers in the strawberry value chain, leading to an increase in income and access to markets. This highlights the potential impact of ecological organic agriculture in improving the livelihoods of smallholder farmers in Rwanda.

Tanzania

INFLUENCING CHANGE FOR AN EOA-FRIENDLY ENVIRONMENT

The National Agriculture Policy 2013 in Tanzania, which is currently under review, expresses support for ecological organic agriculture (EOA) through statements such as "initiatives for regulation and certification of organic products shall be promoted" (section 3.21, pages 24-25). However, little has been done to put these statements into action, primarily due to inadequate public awareness and lack of policy instruments to enforce the regulations.

To address this policy silence, the Tanzania Organic Agriculture Movement (TOAM), in collaboration with other EOA stakeholders, including the Ministry of Agriculture, has undertaken several initiatives. These include organizing two National EOA Conferences, pre-conference meetings, sharing EOA progress reports, and exposing policymakers to EOA-related events, such as the Biofach Trade Fair event in Nuremberg, Germany, in July 2022, which was attended by the Deputy Minister for Agriculture.

Over 650 stakeholders, including farmers, agriculture experts, policymakers, civil society organizations, practitioners, private sector representatives, development partners, and media, attended the conferences from Tanzania, Zanzibar, East Africa, and other foreign countries.

As a result of these collective efforts, the government has increased its agricultural budget for the period 2022–2023 from about $126 million to $409 million. The National Ecological Organic Agriculture Strategy (NAEOAS) is also being formulated, with the first draft now in its completion stage.

The establishment and strengthening of partnerships and networking among stakeholders have contributed to the mobilization of a significant sum of $230,728 to support the development of the National Ecological Organic Agriculture Strategy (NAEOAS). In addition, public awareness of the significance of ecological organic agriculture (EOA) has increased, exemplified by the training of eight extension staff members on EOA from Zanzibar. Furthermore, 29 middle-level agricultural training institutions have reviewed and implemented training curricula, awarding certificates and diplomas in recognition of the importance of EOA.

These collective efforts have demonstrated promising developments towards the advancement of organic agriculture in Tanzania, emphasizing the need for further interventions and follow-up to achieve the desired outcomes.

Uganda

FROM LABORER TO FARM OWNER: ORGANIC TOMATO FARMING CHANGES THE FORTUNES OF A UGANDAN MAN

Kasala Joseph, a 34-year-old man with little formal education, lives in the Lusenke village in the Katikamu Subcounty of the Luweero District. He grows organic tomatoes with the support of Kulika Uganda – a non-governmental organization that trains rural farmers on ecological organic agriculture - in partnership with the Ecological Organic Agriculture Initiative EOA-I.

Kasala initially worked as a farm laborer on a nearby farm where Kulika trained staff on organic agriculture under the EOA-I project. Kasala was introduced to Kulika Uganda Trainers through his employment, to be trained on EOA practices. This training accorded him the foundational education in growing organic tomatoes.

Kasala then decided to venture into fulltime tomato farming as his main source of income. He received assistance in purchasing natural insecticides and tomato seeds resistant to bacterial wilt. He planted organic tomatoes in two plots, each measuring half an acre, using these and chicken dung. By diligently applying the skills learned from Kulika, Kasaala invested some proceeds from his organic farming enterprise into increased production and marketing of organic tomatoes for increased income generation. His enterprise has seen him grow from servant to proprietor of a successful enterprise employing full-time staff with a commendable loyal following of organic customers.

'I have ceased being an insecure garden laborer and have risen to the level of the landowner and manager of my farm', Says Kasala, reflecting on his growth.

Kasala has expanded his activities to engage in crop rotation and produce various crops, including tomatoes, green paper, nightshade, bitter berries, maize, sweet potatoes, and cassava. He is also hiring additional land to accommodate his growing farm enterprise. The good fortune enabled him to marry, an achievement that would have been a big challenge in his previous position.

Kasala's success has made him a champion of organic farming and made a name for himself as an expert and skilled organic farmer among his peers. He helps conduct training and promotion of organic tomatoes in the local markets to improve market access for his produce.

PILLAR 4. MANAGEMENT, COORDINATION, AND GOVERNANCE

The EOA Initiative emphasizes the potential of organic agriculture to enhance food security, increase farmer incomes, and improve environmental sustainability as major milestones under Pillar 4 of the project. The process to achieve these milestones requires an integrated approach for policy and capacity enhancement at multiple levels.

Policy Enhancement:

Working with national partners, EOA-I developed a comprehensive policy framework that outlines the objectives, strategies, and implementation plan for the EOA Initiative.

Reviewed existing agricultural policies and regulations to identify gaps that hindered the achievements and contravened the collectively agreed principles of ecological and organic agriculture between EOA-I and her partners.

Collaborated with in-country policy agencies to establish a regulatory framework for organic certification and labeling to ensure that consumers have access to high-quality EOA products.

The project also promoted the policy of incentivising ecological and organic agriculture through subsidies to farmers to encourage the adoption of EOA practices and their participation.

Capacity Enhancement:

A significant amount of efforts under the EOA-I went towards training extension officers, farmers, and other stakeholders on principles and practices of organic agriculture as captured under pillar one of the project.

Developed EOA research and development programs that focus on improving crop yields, pest management, soil fertility, and water conservation.

Established EOA demonstration farms and centres to showcase the benefits of EOA practices.

Fostered public-private partnerships to promote the adoption of EOA practices and facilitate the transfer of technology and knowledge.

Ethiopia

IMPROVED INTER PILLAR SYNERGIES TO DELIVER PROJECT RESULTS

During the initial phase of the Ecological Organic Agriculture Initiative (EOA-I) in Ethiopia, the pillars implemented project activities without a focus on crop-specific value chains, leading to lack of coordination between partners and the identification of project challenges. One pillar implementer, Mekelle University in northern Ethiopia, was unable to continue its operations due to the outbreak of war in November 2020. Consequently, the research works initiated in farmers' fields and Farmer Training Centers (FTCs) were destroyed, resulting in a challenge in generating EOA technologies to support value chains.

To address the challenges faced in the selection of partners, the Country Lead Organizaion (CLO) took crucial steps towards bringing on board a competent pillar implementer. By working closley with the National Steering Committee, Wollo University was selected to replace Mekelle University, leading to the improved synergy among the pillar implementers and the adoption of a crop-specific approach in conducting value chains.

Moreover, the Ethiopian Association of Organic Agriculture (EAOA), established as a national platform to bring together different actors in the industry, had collapsed due to a lack of resources to support its secretariat services. The CLO provided office space and other resources to support the revival and re-establishment of the association. In 2021, the CLO provided small financing to map potential members, enabling the conduct of a national platform meeting and the production of all necessary documents for the re-establishment of the EAOA. The platform is now reregistered by the Ethiopian Civil Society Agency and has resumed its legal status.

Currently, the platform comprises 20 members, including NGOs, private companies, cooperatives, and government institutions, selected based on their engagement in EOA interventions. The members pay annual membership fees to support the platform's functionality, while the elected board members provide technical and professional support to the secretariat to raise funds.

The improved coordination among the pillar implementers and the re-establishment of the EAOA has been crucial in enhancing the implementation of EOA interventions in Ethiopia.

Rwanda

THE VOICE OF ORGANIC STAKEHOLDERS IN RWANDA

Rwanda Organic Agriculture Movement (ROAM), the Country Lead Organization implementing activities related to management, coordination, and governance, in collaboration with other stakeholders and National Steering Committee members, has facilitated different stakeholder consultation meetings.

In line with the promotion of ecological organic agriculture in Rwanda, ROAM signed a memorandum of understanding with the Rwanda Standards Board (RSB) to promote the implementation of East Africa Organic Product Standards (EAOPS) and certification and to strengthen the development of Participatory Guarantee Systems(PGS) in Rwanda to promote local and regional organic market products.

Due to the instability resulting from the Ukraine conflict, Rwanda's agricultural sector faced challenges, including the high cost of mineral fertilizers. In response, the Rwanda Organic Agriculture Movement (ROAM) advocated adopting organic fertilizers, particularly those produced locally, to reduce dependency on expensive imported fertilizers.

"Our organic fertilizers are now allowed to be distributed and used by farmers after the whole period of testing them, as proved by the list provided by the Ministry of Agriculture and Animal Resources (MINAGRI). Thanks to ROAM for advocating for using ROKOSAN organic fertilizers on different levels. The fertilizers have been tested on two value chains: rice and coffee," said Ndore Rurinda, the Managing Director of ROKOSAN Rwanda.

ROAM, in collaboration with civil society organizations, namely the Nile Basin Discourse Forum (NBDF), and with the support of the UNDP-GEF Small Grants Programme (SGP), facilitated a study conducted by the University of Rwanda, led by Prof. Elias Bizuru, to document the current status of agroecology and ecological organic agriculture in Rwanda.

The study's primary objective was to document the current practices and existing policies on agroecology/ecological organic agriculture in Rwanda, evaluate the potential impact of chemical fertilizers and pesticides, and provide an overview of sustainable wetland use in the context of Rwanda. The study findings have identified several areas requiring further attention from policy and research actions to ensure that ecological organic agriculture is effectively and progressively mainstreamed in sector planning. ROAM and NBDF organized a high-level stakeholder meeting to develop a policy brief, emphasizing science's importance in informing policies.

The study findings confirm the significance of ecological organic agriculture in contributing to the green growth and climate resilience strategy in the agriculture sector and in realizing the vision of Rwanda 2050 and relevant sector strategies. The research also identified the most commonly used pesticides for pest control in the study area, including *cypermethrin, dithane,* and *Roket*. In particular, the US Environmental Protection Agency (US EPA) has classified cypermethrin as a possible human carcinogen (Group C) and highly toxic to fish and water insects, highlighting the need for alternative pest control methods in agriculture.

ROAM, as the Country Lead Organization, is preparing a consultative meeting aimed at convening policymakers, ministries, civil society organizations, development partners, and research institutions to develop an action plan based on the policy brief's action points.

Uganda

THE JOURNEY TO THE NATIONAL ORGANIC AGRICULTURE POLICY IN UGANDA

Based on a 2018 World Bank report, Uganda ranks second to Tanzania in organic agricultural land with 268,729 hectares. However, smallholder farmers in Uganda who are engaged in organic farming encounter challenges in marketing their products and ensuring the standardization and competitiveness of their produce due to the absence of a comprehensive policy framework that can guide them in their organic farming practices.

In Uganda, the quest for an organic agricultural policy dates back to 2004, with numerous organizations attempting and subsequently abandoning the pursuit of such a policy. However, PELUM Uganda and a few other civil society organizations, including Advocacy Coalition for Sustainable Agriculture (ACSA), Uganda Farmers Common Voice Platform for advocacy (UFCVP), and National Organic Agricultural Movement of Uganda (NOGAMU), persisted in their pursuit. In 2018, under the Ecological Organic Agriculture initiative, PELUM Uganda focused on advocating for the development of the National Organic Agriculture Policy (NOAP).

The journey began with a situational analysis, consultative meetings, and a literature review, with PELUM Uganda actively involved in each step of the process. Despite the considerable investments made in the process, it took three years to realize the fruits of these efforts. Finally, in 2021, the long-awaited National Organic Policy was passed and launched.

After successfully launching the National Organic Agriculture Policy in Uganda, PELUM Uganda initiated a dissemination plan to ensure that smallholder farmers and local governments know about the new policy. The dissemination effort involved distributing 2,000 copies of the policy book to 87 districts across Uganda's Eastern, Northern, Southern, and Western regions.

Additionally, PELUM conducted sensitisation campaigns that reached 90,500 smallholder farmers in 87 districts. The organization also held 17 radio and television talk shows to educate farmers about the benefits of the organic policy, resulting in 450 downloads from the EOA website.

The efforts made by PELUM Uganda and other civil society organizations to pursue the National Organic Agriculture Policy in Uganda have resulted in a significant milestone towards developing and promoting organic agriculture in the country. With the policy in place and the dissemination efforts, smallholder farmers and stakeholders in the organic agriculture sector are better positioned to access markets and compete favorably.

The impact of these efforts will continue to be felt for years to come and is a crucial step towards sustainable and resilient agriculture in Uganda.

EOA-I PARTNERS CATALYZE MAINSTREAMING OF ORGANIC AGRICULTURE IN BENIN'S NATIONAL AGRICULTURE STRATEGY

Benin

Before 2016, the government of Benin did not have a national agricultural strategy or policy for developing ecological and organic agriculture. No official government was committed to organizing and promoting ecological and organic agriculture. All efforts to create organic farming among local communities, a mainstay, came from civil society and non-government and research organizations.

Ecological and Organic Agriculture (EOA) Initiative in Benin, run by the Beninese Organization for the Promotion of Organic Agriculture (OBEPAB) in partnership with EOA technical implementing partners, advocated and lobbied for ecological and organic agriculture to be included in the national policy as a sub-sector in agriculture.

EOA partners facilitated engagements with key governments and policy stakeholders in Benin, showcasing research-backed evidence for the benefits of organic agriculture. The advocacy activities of EOA-I partners in Benin align with the initiative's implementation pillar four. Under the implementation within pillar four of EOA-I, the project seeks to facilitate mainstreaming of ecological and organic agriculture into national policies, strategies, and programs in Africa.

In Benin, successful advocacy resulted in the inclusion of ecological and organic agriculture into the "Strategic Plan for the Development of the Agricultural Sector" of Benin 2017–2025, under the "Action Plan for Popularization and Support for Implementing Production Systems That Limit Greenhouse Gas Emissions and the Promotion of Organic and Ecological Agriculture."

With funding from the German Agency for International Cooperation (GIZ) and the International Fund for Agricultural Development (IFAD), the Beninese government has requested OBEPAB, a member of the EOA initiative, to lead the process of writing the national strategy on ecological and organic agriculture for Benin and to present it to the minister of agriculture's office.

EOA-I and partners have also contributed to the organic agriculture section for the Beninese parliament to draft the Agricultural Law on Agricultural Orientation, Food, and Nutrition Security.

These efforts have resulted in Benin's structured and vibrant organic agriculture sub-sector and created synergies amongst key stakeholders to promote organic farming with concerted efforts at the policy level to operationalise and monitor the national strategy on ecological and organic agriculture.


Atelier de validation de la Stratégie
de Production de l'Agriculture
Ecologique et Biologique (SNAEB)
INRAB
PACOFIDE
giz
Cotonou, Palais des Congrès, le 23 Septembre 2022

Get in Touch

Biovision Africa Trust (BvAT)
Secretariat and Executing Agency to the Ecological Organic Agriculture Initiative for Africa
P.O. Box 30772-00100 Nairobi, Kenya
Duduville Kasarani, Opposite Thika Road
info@eoai-africa.org
+254 20 8632000