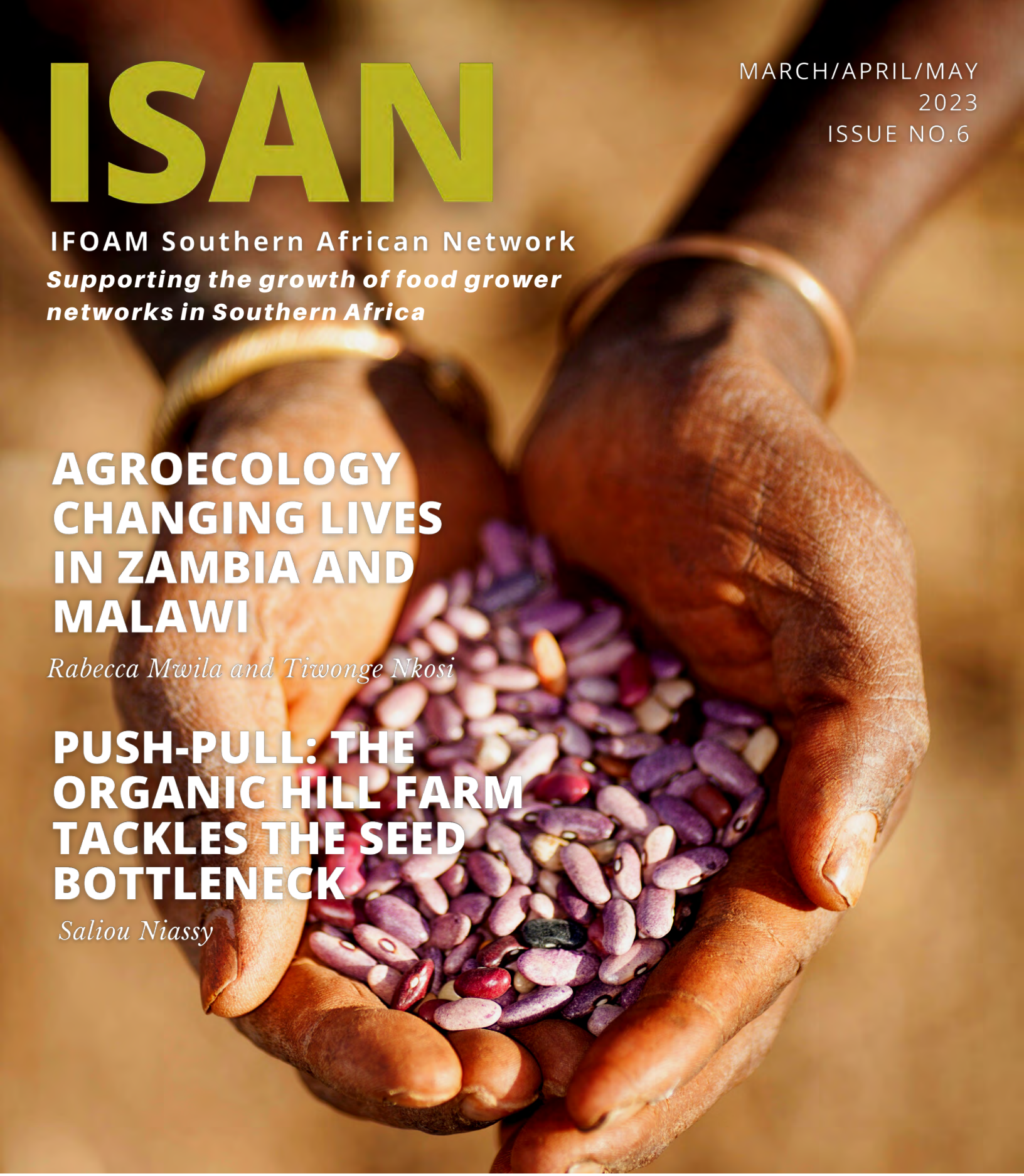
ISAN

MARCH/APRIL/MAY
2023
ISSUE NO.6

IFOAM Southern African Network

Supporting the growth of food grower networks in Southern Africa



AGROECOLOGY CHANGING LIVES IN ZAMBIA AND MALAWI

Rabecca Mwila and Tiwonge Nkosi

PUSH-PULL: THE ORGANIC HILL FARM TACKLES THE SEED BOTTLENECK

Saliou Niassy

IFOAM SOUTHERN AFRICAN NETWORK

KHSA Knowledge Hub for Organic Agriculture in Southern Africa

Read our past issues by clicking here.

ABOUT ISAN

INTERNATIONAL FEDERATION OF ORGANIC MOVEMENTS (IFOAM) SOUTHERN AFRICAN NETWORK

ISAN is a regional network of organisations and individuals actively supporting the development of a sustainable, ecological organic agricultural sector in southern Africa. Its values align with IFOAM–Organics International's (IFOAM_OA) principles of Health, Fairness, Ecology and Care.

ISAN was formed during the second Africa Organic Conference held in Zambia in 2012 to represent Southern Africa Development Community countries: Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Seychelles, South Africa, Kingdom of Eswatini, Zambia and Zimbabwe. To date, the following countries are active in ISAN: Botswana, Lesotho, Malawi, Madagascar, Namibia, South Africa, Swaziland, Zambia and Zimbabwe.

ISAN aims to develop and coordinate programmes and networks of common interest at the regional level working through National Organic Agriculture Movements (NOAMs), the Intercontinental Network of Organic Farmers' Organisations (INOFO) and the Network of Organic Agriculture Researchers in Africa (NOARA), all of which have chapters in the region.

For more information, contact: chair@isan.ifoam.bio

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KHSA Knowledge Hub for Organic Agriculture in Southern Africa

This publication is a collaboration between ISAN and the Knowledge Hub for Organic Agriculture in Southern Africa

EDITOR'S NOTE

By Fortunate Nyakanda, ISAN chair

Dear Readers

Warm greetings to this sixth edition of the ISAN magazine packed with information, innovations and news from our region. Follow our social media pages to contribute your voice to the growing movement of sustainable food and farming practitioners.

There has never been a more urgent need for those in food and farming systems to transition to sustainable practices that support regeneration of ecosystems to halt biodiversity loss and mitigate against climate change, while also supporting the emergence of equitable and decent livelihoods for the millions of African smallholders who produce our food. In this issue, we share how organic agriculture and agroecology are changing people's lives for the better.

We profile a story of a farmer who has branched into retailing from a family kitchen garden and organic farmers who have created livelihoods by multiplying seed and planting materials while promoting push pull technology. The International Centre of Insect Physiology and Ecology (*icipe*) explains how push pull technology can help to combat Fall Armyworm and striga while building soil fertility. This kind of innovative approach is key to reducing the volumes of dangerous agrochemicals used in conventional farming.

Learn how to establish a vibrant market garden within existing resources. And for those interested in exporting organic produce to the European Union, we start to unpack how their new regulations will affect smallholder farmers.

This edition features the Mozambican organic sector, which is growing quickly with

more than 12 producers now accessing the European Union and North American markets.

The negative effects of climate change are becoming more evident in our region. See how agroecological practices are helping to boost productivity and read more on the climate change talks at COP 27 at which agriculture was highlighted as a key lever to tacking climate change.

Please enjoy your copy and encourage others to subscribe so that we can continue growing coverage of the region.

Editor-in-chief: Fortunate Nyakanda
Editor: Stefanie Swanepoel
Junior editors and production:
Odette Mavunga & Hannah Hopper
Layout & design: Hannah Hopper

Send your contributions for the June/July/August edition to secretariat@isan.ifoam.bio by 10 May 2023.
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PRINCIPLES OF ORGANIC AGRICULTURE

Organic agriculture is supported by four key principles - of Care, of Ecology, of Fairness and of Health. These principles extend far beyond production practices to encompass social and economic relations. Click here to understand more about all four organic principles. In this feature, we focus on the principle of Fairness.

Principle of Fairness

This principle emphasises relationships in food and farming systems. Organic agriculture should be built on relationships that ensure fairness with regard to the common environment and life opportunities.

Fairness is characterised by equity, respect, justice and stewardship of what farmers are using, interaction both among people and with other living organisms. This points to the need to conserve, preserve and nature rather than destroying it.

Organic agriculture should provide everyone involved with a good quality of life and it should contribute to food sovereignty and the reduction of poverty. It must aim to produce a sufficient supply of good quality food and other products. Natural and environmental resources that are used for production and consumption should be managed in a way that is socially and ecologically just and should be held in trust for future generations.

Fairness requires systems of production, distribution and trade that are open and equitable and account for real environmental and social costs.

At farmer producer level, organic agriculture should be built on fairness ensuring that no actor is left vulnerable especially the producers and workers who should receive fair prices and wages respectively. The value chain should be transparent to build trust.

Read here to understand the principle of Fairness in practice.

Statistics and Trends

FiBL released its latest 'The World of Organic Agriculture' in early 2023, which provides statistics and trends related to the sector in 2021. The information below is drawn from this report, which can be downloaded here.

- Organic agriculture is practised in 191 countries, and more than 76 million hectares of agricultural land are managed organically by at least 3.7 million farmers.

- Organic retail of organic food and drink sales grew by 4 billion euros and reached almost 125 billion euros.

- There were a reported 3.7 million organic producers in 2021. This is an increase of 4.9 percent compared to 2020. India remained the country with the most organic producers (1.6 million). The majority of small-scale producers are certified in groups based on an internal control system.

- Organic farmland grew to a global total of 76.4 million hectares, including in-conversion land. Nearly 2.7 million hectares of agricultural land in Africa was certified organic in 2021, this is a 17.3% increase from 2020.

World: Organic agricultural land (including in-conversion areas) and regions' shares of the global organic agricultural land, 2021

Region	Organic agricultural land [hectares)	Regions' shares of the global organic agricultural land
Africa	2'663'983	3.5%
Asia	6'504'211	8.5%
Europe	17'844'853	23.4%
Latin America	9'870'887	12.9%
Northern America	3'542'140	4.6%
Oceania	35'985'809	47.1%
World	76'403'777 100%	100%

- Includes fully converted and in conversion areas but excludes wild collection, aquaculture, forest and non-agriculture grazing areas.

Southern Africa Organic agricultural land (including in conversion areas) by country, 2021

Country	Hectares	Organic Share of total agriculture land
South Africa	97 359	0.10%
Madagascar	95 083	0.2%
Mozambique	41 048	0.10%
Eswatini	3 539	0.3%
Zambia	3 376	0.014%
Zimbabwe	1 085	0.007%
Namibia	384	0.001%
Malawi	324	0.006%

FEATURE: ORGANIC FARMING ON THE RISE IN MOZAMBIQUE: A CHANCE FOR REGENERATING SOILS AND BIODIVERSITY

By Sabine Lydia Mueller

Sabine Lydia Mueller has been living in Maputo, Mozambique for over 6 years, where she runs a small organic demo farm in Katembe. Here she experiments with agroforestry and composting techniques for more soil fertility. Together with other sustainable agriculture practitioners, she plans to start an agroforestry association in Mozambique in 2023 to network, share and disseminate knowledge, exchange local seeds and raise funds for agroforestry research and public workshops. She works as a freelance auditor for organic agriculture for Ecocert South Africa, serving clients in Mozambique and sometimes in neighboring countries such as Zambia.

Agriculture remains the mainstay of the Mozambican economy, accounting for more than a quarter of GDP. Mozambique currently has about 33 million inhabitants, 70% of whom depend on agriculture.

The majority of agricultural production comes from subsistence farms with an average size of 1-2 hectares of land. Common practices are slash-and-burn and rain fed agriculture without permanent soil cover. Smallholders use traditional farming techniques and very rarely have access to synthetic pesticides or fertilisers. Everything is done by hand and could therefore be described as natural, but the farmers lack sound knowledge about maintaining or increasing soil fertility and soil life. As a result, yields are usually low and the land is often degraded.

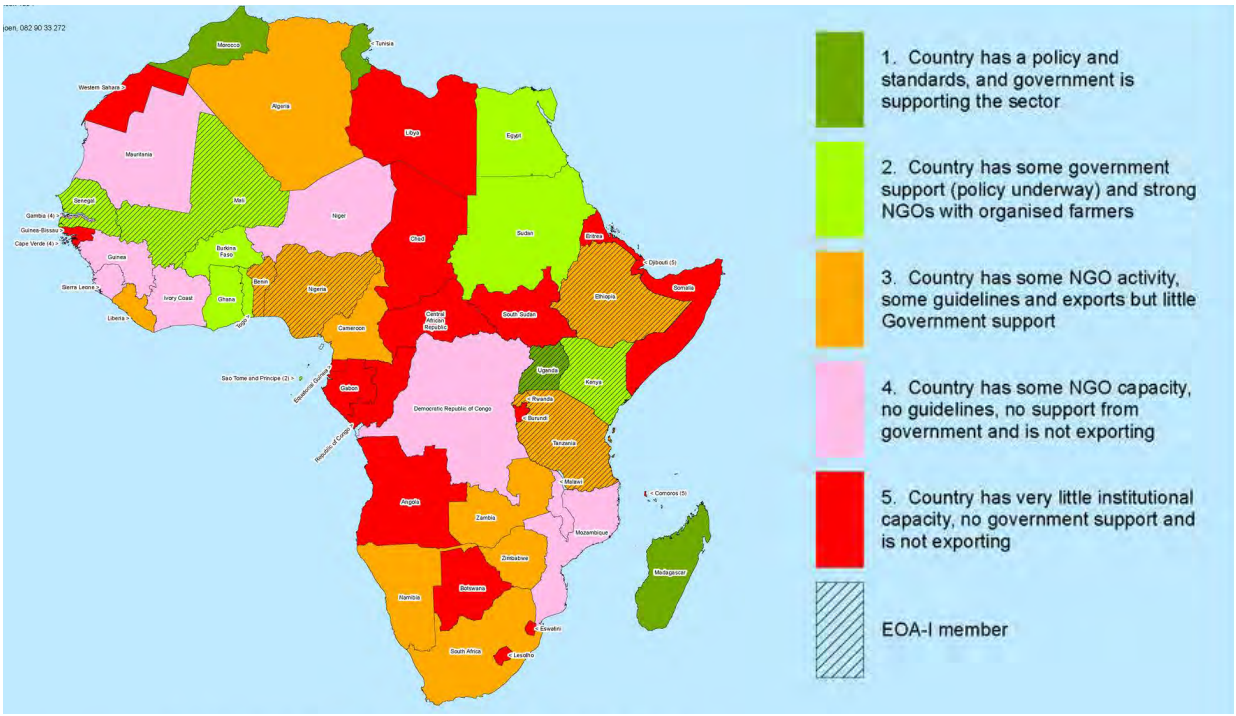
Pesticide use typically has severe consequences. Various cases of food poisoning and even deaths due to wrong use of pesticides and residues of pesticides on harvested produce shocked the country. Recent studies conducted by Solidaridad Network and other NGOs revealed pesticide residues well above World Health Organization-recommended levels.

Nascent ecological awareness and preparations for an organic legislation

Encouraging organic farming standards could provide Mozambique with a natural remedy. Instead of purchasing expensive inputs, the use of compost as fertiliser and integrated pest management combined with crop rotation could be the solution for regenerating land and achieving better harvests.

An assessment for the African Union Commission of North, West, Central and Southern Africa, with a view to mainstreaming Ecological Organic Agriculture (EOA) published in 2019 (Raymond Auerbach et al.) classified Mozambique as a country with a “nascent EOA Awareness” due to the fact that the “country has some NGO capacity, no guidelines, no support from government and is not exporting”.

The map below shows the status of ecological organic agriculture in the 55 countries of Africa. It is the result of a long-term study undertaken by Biological Systems Consulting & Research for the African Union Commission in 2020.



Caption: Ecological organic agriculture status in Africa, adapted from Raymond Auerbach et al.

Since then, noteworthy changes have taken place. In November 2022 a first draft of an organic regulation for Mozambique was presented in screenings in Maputo, Chimoio and Nampula.

Carla da Conceicao Menezes, Head of the Department of Laboratory Research and Biosafety, National Directorate of Agricultural Health and Biosafety (DNSAB) and her team together with the Solidaridad Network had invited approximately 40 key stakeholders to discuss and contribute to the draft. The regulatory process will continue through presentations, socialization and consultation with public and private institutions.

By end-2023, a harmonized proposal should be submitted to the Council of Ministers.

Simultaneously, an inspection body will be established and trained to organize the awarding of Mozambican organic certificates on site.

Organic agriculture – work in progress with difficulties

There are now over a dozen producers in Mozambique who work according to organic farming guidelines and export organic certified products according to the author's research. As key markets for these commodities are in Europe and North America, the goods are mostly certified according to the NOP and EOS standards. However, other sustainable standards such as JAS, Rainforest Alliance, etc. are also being applied in Mozambique.

Compliance with these rules is offered by international certification bodies whose auditors are working in Mozambique.

Daniël Kotzé is the director of Ecocert South Africa, the market leader amongst the certification bodies, with 11 organic clients and 58% market share in Mozambique (and a growing number of new customers). He states “We have clients who export moringa, bananas, dried mangoes, baobab and had

requests to certify sesame, sisal, lychee, cotton, nuts, soybeans, coconuts, coffee, rice and various fruits in Mozambique over the last 2 years."

While these organic producers are complying with the organic laws enforced in the countries of destination, the environment in Mozambique remains challenging.

Meanwhile hundreds of approved pesticides and other agrotoxic substances are pouring into the country from abroad and can be used by anyone, without obligation to declare their quantities or location of use. As a result, organic producers are increasingly exposed to pressure from neighboring conventional farmland. These use synthetic substances not permitted in organic farming as they can drift and so contaminate the organic fields. A national organic regulation for Mozambique would possibly bring more security for these organic producers.

Another setback for organic farming is the fact that many well-funded international NGOs are encouraging Mozambican smallholder farmers to use genetically modified (GM) seeds (e.g. soya, maize and yellow sweet potato), herbicides, pesticides and fertilizers under the guise of fighting malnutrition.

With growing influence, they introduce crops that are not appropriate for the local context and are dependent on synthetic inputs. This creates neo-colonial dependencies similar to cases of international cotton buyers introducing GM cotton seeds throughout grower programs without providing plantation workers with proper training and protection gear.

Perspectives, opportunities and solutions through organic principles

While organic farming is still considered a luxury for the more privileged, it could be a great chance for smallholders to improve soil quality, soil life, and harvests to ensure food security, food sovereignty, and health for everyone. For better results, farmers will need to exchange knowledge and best practices and establish cooperatives to possess more marketing power, a stable supply, and to jointly sell and distribute their produce. Additionally, grower groups offer a successful structure for collective marketing of goods, while smallholders can continue to work their individual land. Organically certified wild harvesting also offers great opportunities for revenue generation among rural populations, while protecting nature reserves and conserving forests.

Holistic, innovative, and circular farming techniques—such as permaculture, agroforestry and other agroecological practices—could be used to better feed the growing human population. Another benefit of the "no inputs from outside" strategy is an increase of farmers' self-confidence and belief that eco-friendly practices can achieve good results. Working together, observing and understanding nature, and applying nature-based solutions would enable a peaceful coexistence of farmers and wild animals and result in greater biodiversity above and below the ground.

Sabine Lydia Mueller in her agroforestry nursery, Katembe, Maputo

FARMER TIPS

JOURNEY TO AN ABUNDANT GARDEN

By Janet Gracie- Scarabhill Farm, South Africa
www.scarabhill.co.za

Below are the steps that I follow whenever planning a garden. This helps me avoid costly mistakes and wasting of energy and water. It also helps to make sure that there is a market for the crops that I am growing.

Garden Planning

- What are you currently growing successfully?
- What is your garden layout?
- What do you like growing?
- How much can you grow in your garden?

Your Market

- For whom are you growing?
- How much of the product do they need?
- What price are they willing to pay?
- How are you going to get the produce to them?

Resources

- What inputs do you have that could be generated from your current garden (fertility)?
- Do you have a water supply, how much is there and how do you distribute it?
- Do you have adequate protection (fencing, shade) for your crops?
- Do you have seed and seedlings?
- How and in what are you going to harvest and distribute your product?

Finances

- Do you know your household expenses?
- Do you know what your inputs will cost?
- If you don't have water and fencing, do you know what this would cost to install?
- What other inputs do you need, other than from your household and garden, and how much will they cost?
- If money is needed to increase your production, where will you go for this funding?
- Do you save money on a regular basis?

Answering these questions will help you create a roadmap to a successful garden. Remember to include yourself as part of your market because if you grow what you like eating then working in the garden becomes part of your life, and not just work. DO NOT GROW IN THE HOPES OF SELLING because this kills the enthusiasm for your hours spent in order to grow “crops”. We want to grow food by design, and make sure that resources (water, energy, seeds, money) are used consciously and not wasted, especially if you have borrowed (from people and from nature) and need to repay.

If you plan carefully and start with what you know and can do, then success will build on success. My most valued inputs into my garden are my mentors and learning from other gardeners. By bringing people into all my activities (learning, planning, planting, looking after, consuming) means that it is not a lonely, hard job, but one that is appreciated by all, including yourself. Happy planning and filling up of your household pantry.

SERIES 1/1: NEW EU REGULATIONS: IMPLICATIONS FOR SMALL HOLDER FARMERS

This is the first in a series of articles that unpack the implications of the changes to the European Union (EU) Organic Regulations for African smallholder farmers.

Introduction

The new regulation EU 2018/848 repeals EC 834/2007 and seeks to strengthen the organic integrity of the value chain, especially for imported products. It has been in force for EU operators since January 2022, but there is a transition period allowed for recognised equivalent Control Bodies (CBs) in Third World Countries until 31 Dec 2024. Trade agreements by EU will be put in place between EU and individual countries from year 2024 and trading under this regulation will start January 2025. There are ongoing discussions on the regulations and interpretations of regulator's requirements will likely evolve as the regulation is applied. The new regulations will affect African farmers far more than those in the EU. Below are the most significant points:

- The control system has changed from equivalence to compliance. African operators will need to comply with the same, very detailed, rules as EU operators.
- More detail is required on internal control systems, inspectors will be stricter, and it is likely that the cost of compliance/certification will increase.
- There are now rules on group composition, size and set up to which operators will need to adhere.
- There is an enhanced focus on product traceability and mass balance checks.
- There is a strong focus on sampling and a 'no residues' policy. High-risk products will be subject to control twice a year and sampling once a year. These products have not yet been defined.
- There is a strong focus on documentation of precautionary measures.

Group certification

Application of the new regulation will have significant consequences for all certified groups. Rules for group certification have been completely redefined and included in the regulation. The new requirements are as follows:

- **Regulation groups are now defined as a Group of Operators** that:
  - Is composed of up to 2 000 members who are:
    - Organic or in-conversion farmers within geographic proximity (at the least in the same country)
    - Each farming on less or equal to five hectares of total land or recording less than 25 000 euro in turnover from sales of organic products.
  - Has a legal identity.
  - Operates an internal control system (ICS).
  - Has in place a joint marketing system.
  - A member shall register only for one Group of Operators for a given product.

- **Turnover** means:
  - Accumulated total sales per accounting year in local currency.
  - Based on the price as actually paid to the member for the products delivered after market price deductions by the cooperative, for example.
  - Price paid for the product before deductions for inputs or service provided to the member.

- **Total landholding means:**
  - Total land holding means all production units operated by the members for the purpose of producing agricultural products, including products from aquaculture and beekeeping. This is:
    - Organic fields as well as non-organic or fallow land for rotation.
    - Forest plots are not included, unless used for organic beekeeping.
  - The total land surface under the management of member should be recorded and registered with ICS and kept up to date for each member.

Farmers with more than five hectares but generating less than 25 000 euro can be part of a Group of Operators. If they are generating more than 25 000 euro, they will need individual certification although can continue supplying to the Group.

Those Groups with more than 2 000 certified members will need to reorganise into smaller Groups, each of which will require legal registration. Legal farmer societies, such as cooperatives, can continue to have other associate members. Groups of Operators should market collectively.

- **Requirements around legal entities**
  - Aim is to have a clearly defined entity that can do business, own certificates and sign Group of Operators membership agreements with farmers and appoint ICS managers. No legal form is excluded but the legal personality must be established by official registration.
  - The EU's intention is to ensure that group certification is focused on smallholder farmers who benefit from joint marketing as opposed to companies. Contract production through which a contractor/exporter organises groups is now not allowed. An exporter can buy from a Group of Operators.
  - Examples of legal entities are:
    - A registered agricultural cooperative or other kind of farmers' association.
    - Any type of organization (foundation, NGO, society) composed of farmers with the purpose of supporting organic farmers and marketing their products.
    - A limited company with a registered business purpose of joint marketing of products from organic farmers with a share in the company. Company is composed (mainly) of farmers.

The Group of Operators should be a registered legal body with detailed rules for its ICS. It should appoint an ICS manager with sufficient authority.

- **Complexity with new/inexperienced Groups of Operators**
  - The ICS can be operated by the processor.
  - While the Group of Operators is responsible for joint marketing of the members' organic products, it can subcontract some processes to the partner company, for example, farm gate collection, quality grading, transport & traceability system and payment.

A FOCUS ON WOMEN

Seeing the economic and social impacts of agroecology in Zambia

By Rebecca Mwila

I have earned my husband's respect and value for my opinions on matters in our marriage because I contribute income to the family says Mary Ndlovu Shaba, a farmer from Kalonga village of Chasefu district in Eastern Province.

Mary, a lead farmer at Mutilakubili Sustainable Agriculture Project (MKASP) in Lundazi, a PELUM Zambia member organization, says the agroecological system of agriculture has contributed to her financial stability. "Before I started practicing agroecology, most of my money was spent on inputs such as chemical fertilisers, seeds and pesticides, which caused financial stress on the family," she said. She added that her complete transformation from industrial agriculture to agroecology came in 2022 when she attended a PELUM Zambia-organised agroecology training. She said that "the training was an eye opener, and it revealed the abundance of the natural resources we could use in our farming."

Mary notes that she has been able to employ practices such as intercropping, ripping and basins coupled with the use of compost, tea manure, mulching, and crop rotation, which have been effective in building soil fertility, keeping water in the soil and controlling pests and diseases.

Mary has ventured into seed multiplication through a programme spearheaded by the Mutilakubili Sustainable Agriculture Project where open-pollinated seed varieties were given to the farmers to multiply and sell to the general public.

Caption: Mary Ndlovu Shaba, a farmer from Kalonga village, Zambia holding Lundazi beans.

She says that, "This year, I got 80kgs of maize which I have planted on a two-hectare portion of land and I will pay back 160kgs and get the rest which I will keep for my seed and sale the rest". Mary notes that the earnings from the sales of the seeds have increased her income which she uses to pay school fees for her seven children while also saving through a village banking group for women.

A FOCUS ON WOMEN

Organic farming changing lives in Malawi

By Tiwonge Nkosi

Several farmers in Malawi have complained that this year is a difficult one considering that the Affordable Input Program (AIP) that they rely on for fertilisers was delayed. But Emily Sambani's story is different. She is one of the lead farmers from Mbemba village under the Mwana Alirenji Organic Farming Project, implemented by Kusamala Institute of Agriculture and Ecology and funded by the William Jackson Food Group in Ntcheu. She joined the project in October 2017 with the objective of making a shift from conventional farming, which required more inputs, to organic agriculture that focuses on using available natural resources.

Emily notes that "a lot of people say when I start using manure I will be harvesting less compared to when I was using chemical fertiliser. To my surprise, the harvest is higher than what I was getting when using chemical fertiliser.

Kusamala's extension officer trained Emily and other farmers in how to use manure, how to grow in beds instead of ridges, how to manage their soil and water better, how to set up home gardens and how to grow in a guild system that helps to produce more on a small piece of land.

Emily started with few ridges in the first year and now she is using permaculture practices on more than acre of land because of the benefits. Mono-cropping maize is a culture in Malawi. The project provided farmers with different types of seeds like maize, cassava and legumes as a way of promoting mixed cropping.

Caption: Emily Sambani in her garden in Mbemba village, Malawi

They also received small livestock like chickens and rabbit, which they pass on to fellow farmers after hatching and kindling respectively. These livestock are used for food and manure in their gardens.

Emily uses these crops for food and sell the surplus. She manages to pay school fees for her children through harvest and livestock sells. Hunger is no longer a problem in her household because she has a home garden planted with a variety of vegetables for food. The rooster and two hens she received from teh project have multiplied to 47 chickens. She sold 12 of them and had the funds to construct a rabbit hutch.

Emily is now a model farmer in her village. People have now organised themselves in groups led by her where they teach each other how to grow organically and do village savings. Her husband has also organised fellow men and formed a group where they are planting bananas on large scale for sale.

AGROECOLOGY – A BONA FIDE SOLUTION FOR CLIMATE CHANGE IMPACTS

By Edwin Mazhawidza, MPhil Organic Agriculture and biopesticides and BSc Natural Resource Management and Agriculture

Agroecology has the potential to offer solutions for the long-term sustainability of agriculture in Zimbabwe by building and enhancing livelihood and food security for smallholder farmers. Agroecology as the holistic study of agroecosystems seeks to mimic natural processes by crafting an approach to resource management that is tailored to site-specific conditions and which must be compatible to the needs and aspirations of farmers. Agroecology draws on local and traditional knowledge to ensure production is environmentally sustainably and culturally sensitive. Traditional and indigenous local knowledge about soil, water, seeds and crop management is technical knowledge and should be enhanced rather than discarded.

> **The effects of climate change in Zimbabwe - unpredictable rainfall, flash floods and lengthy dry spells - are encouraging farmers to redesign their farming systems to rather rely on natural ecosystem functions than on external inputs.**

Farmers in Mashonaland Central Province in Zimbabwe report climate change impacts as droughts, disease outbreaks in animals and plants, leaching, low yields and reduced calving due to poor grazing.

The adoption of agroecological methods has helped farmers to adapt to the effects of climate change. Methods include the use of planting basins for water harvesting, increased adoption of small grains, use of organic fertilisers and increased use of ethnobotanicals to treat animals and enhanced small livestock production. For soil fertility management, farmers are using livestock manure, liquid manure, biochar-based organic fertilisers, composting, vermicomposting and crop rotation.

Another case in point is the Midlands Province where farmers have alluded to climate change as a major driver of environmental degradation. Low and erratic rains in successive seasons in the last few decades have contributed to increased deforestation and the invasion of wetlands for human settlements as people have sought alternative farmlands and sources of livelihoods. Overgrazing has also been exacerbated by climate change as pasturelands have failed to sustain their normal carrying capacities.

The province suffered frequent droughts, pest and disease outbreaks for crops and livestock, accelerated deforestation, unavailability of seed, reduced yields, shortage/unavailability of water and animal feed and starvation.

To mitigate the impacts of climate change, farmers have embraced agroecological practices that include diversification to small livestock, supplementary livestock feeding and practiced rotational grazing. They are making home-made feeds using locally available materials such as groundnuts leaves and masekesa (Piliostigma thonningii) fruits.

Farmers are also producing fodder crops such as lucerne for their livestock. They have diversified to the production of small grains and legumes and short-season varieties. They are also practicing early and staggered crop planting.

Farmer awareness of agroecology is on the increase, with more farmers planning to incorporate one or more agroecological practices into their farming systems in the coming seasons. The high cost of procuring synthetic fertilisers and pesticides coupled with the benefits noticed from adopting agroecological farming practices have persuaded many famers to switch to this approach.

Farmers are increasingly interested in subjects related to natural pest and disease management, sustainable cropping systems and watershed management. There is also greater awareness among farmers of the health benefits of adopting natural farming systems.

The drive for agroecology as an adaptation strategy for climate change will benefit farmers as it is environmentally friendly, socially acceptable and economically viable due to its reliance on locally available resources with minimum capital expenses.

Edwin Mazhawidza, Mashonaland West Mutoko Zimbabwe

BEYOND OUR BORDERS

How can climate change talks pave the way for a more sustainable and just global food system amidst multiple crises?

By Gabor Figeczky IFOAM - Organics International

The United Nations Framework Convention on Climate Change Conference (UNFCCC COP27) was held in Sharm El-Sheikh, Egypt in November 2022. With the ever-clearer impact of climate change being brought home the world over, each successive COP takes on greater urgency. IFOAM – Organics International wanted this round of climate talks to live up to expectations to prioritise climate justice and solidarity in international efforts to address critical issues such as climate finance, loss and damage, global adaptation targets, keeping the 1.5°C goal alive and acknowledging Africa's unique needs and circumstances, especially when integrating food system reform with climate action.

Right now, food systems generate around 30% of all greenhouse gas emissions. Food systems should be part of the solution to the climate crisis. It requires systems-based approaches to realise the potential of food systems to help mitigate climate change. A study published last year provided the first estimate of the global climate impacts of synthetic nitrogen fertilisers to cover the entire production chain, from manufacturing to soil application.

According to its findings, synthetic nitrogen fertilisers generated 1 250 million tons of CO2e in 2018, accounting for nearly a quarter of all direct emissions from agriculture and 1.5 times the emissions from commercial aviation. Since then, prices of synthetic fertilisers have skyrocketed due to the Russian invasion of Ukraine. This underscores the urgent need for a global phase-out of synthetic nitrogen fertilisers and a massive shift to sustainable farming methods such as organic agriculture. The good news is that agriculture is still the only sector in the United Nations climate regime with a dedicated workstream, the Koronivia Joint Work on Agriculture (KJWA). KJWA covered a range of interrelated topics such as soil, livestock, nutrient and water management, food security, the socioeconomic impacts of climate change across agriculture and methods for assessing climate change.

The question for COP27 was whether UNFCCC member states can agree on a new, ambitious mandate for taking this work further. An ideal outcome for its future would have gone beyond sustainable agriculture to address all components of food systems, while also contributing to climate goals and human and planetary health. Unfortunately, according to a joint decision at the COP, the mandate for the successor of the KJWA still narrowly focuses on agricultural production, failing to recognise the importance of food systems transformation to prevent the most severe impacts of climate change. However, with the establishment of a four-year joint work on agriculture and food security, there is still a possibility to increase ambition and take a truly holistic approach in its implementation.

The organic movement needs to work further with like-minded organisations locally, nationally and regionally to engage with the implementation process and ensure it delivers transformative actions. IFOAM – Organics International will continue to unite the movement to push for a more progressive outcome at next year's Global Stocktake and COP28.

FEATURE: PUSH-PULL: THE ORGANIC HILL FARM TACKLES THE SEED BOTTLENECK

By Saliou Niassy, International Centre of Insect Physiology and Ecology (icipe)

Access to seed remains a big challenge for farmers who desire to implement the push-pull technology in Africa. Maize production is seriously affected by stemborers, striga weed, soil erosion and poor soil fertility. The push-pull technology is a one-stop-shop solution that addresses multiple challenges. Fueled by the recent infestation of the Fall Armyworm (Spodoptera frugiperda), the demand for push-pull has increased all over the continent. Currently, Desmodium seeds are imported from abroad at $50 a kg. However, several icipe-driven business models implemented in Rwanda and Zimbabwe have indicated that Desmodium seed could cost as low as $10/kg if locally produced.

This article profiles the work of a young woman entrepreneur Oliver Mrosso from the Usambara region of Tanzania who mobilises outgrowers to produce Greenleaf Desmodium seed to support the expansion of push-pull technology in the country. In her and the surrounding villages in Lushoto District, farmers produce maize and several other crops, including vegetables. Oliver notes that “We face several challenges including soil erosion, lack of rain and rapid population growth leading to a shortage of land for agriculture. I was introduced to the Push-Pull technology developed by icipe, and I found it very efficient in controlling Fall Armyworm, controlling soil erosion, and providing fodder. The good thing is that Greenleaf Desmodium can produce seeds in Lushoto, and farmers are keen to harvest and sell it.”

Oliver established a long-term seed business model to establish a certified seed company with the technical competencies and the suitable facilities to produce push-pull companion seeds in Tanzania and beyond.

The business has managed to produce and supply more than 150 kgs of Greenleaf Desmodium seeds for various groups like research institutes, such as the Tanzania Agriculture Research Institutes and nongovernmental organisations such as Sustainable Agriculture Tanzania, private commercial farmers and smallholder farmers.

> **“This collaboration between our company and the farmers allowed us to produce and sell quality seeds in the markets and address the demand for push-pull. Concomitantly, our project helps address the challenges faced by farmers in Lushoto, including shortage of land, climate change and soil erosion.**

According to Dr Saliou Niassy, Head of icipe’s Technology Transfer Unit, Oliver Mrosso’s initiative is a breakthrough that needs to be promoted among the youths.

An innovative business model
Organic Hill Farming Company Limited works in partnership with a network of smallholder farmers in Lushoto. The company provides extension services to farmers willing to adopt push-pull technologies to control soil erosion and maximise land productivity.

Farmers are also monitored to ensure the quality production of the seeds and evaluation of the soil and yield improvement. Participant farmers are also trained to understand the seed production process of indigenous crop varieties potential of other cultivars as well as organic agriculture. The company serve as sources of improved seed to farmers in remote farming communities.

Benefits to all farmers
The company enabled farmers in the village to address the problems of stemborers and poor soil and soil erosion by using Desmodium and Elephant grass.

The company is also working with more than 150 smallholder farmers training them about organic agriculture practices and commercial production. Seed certification will provide a chance to enter the international market where there is enormous demand for Desmodium seeds, which will benefit the company and farmers.

The goal is to mobilise many farmers towards push-pull agriculture through Desmodium seed production. The company also aims to form good cooperation with organisations such as the Tanzanian Agricultural Research Institutes, icipe, seed producers' associations and Biovision to scale this technology in Tanzania and beyond. Biovision is currently the primary funder of the push-pull project with icipe planning to provide technical backstopping in efforst to combat Fall Armyworm in Tanzania.

Caption: Oliver Mrosso, Organic Hill Farming Company, holding a Desmodium plant

MARKETS

From a Kitchen Garden to Retail Business: The story of Sylvia's Basket

By Sylvia Kuria

I remember it like it was yesterday, my childhood dream of living in the country was finally fulfilled 14 years ago. My family moved to Limuru, a small town in the Nairobi suburbs.

As a city girl, I had always dreamed of living in the country. I was excited to grow a kitchen garden to feed my family with fresh food. Though to be honest, having lived in the city all my life, I was quite new to farming and was unable to differentiate between a weed and a bean! But I had an adventurous spirit ready to learn all I could on how to grow my own food. Soon my 0.5-acre kitchen garden produce was too much for my family to consume so my friends in the city challenged me to deliver vegetables to them.

It was exciting to grow my hobby into a business; this is how the vegetable basket scheme started and Sylvia's Basket was born.

> **You see, when I started my kitchen garden, all I wanted was to ensure I was able to grow safe organic produce for my family to enjoy.**

When my children were young, I wanted to ensure that I knew the quality of their food. Isn't this the wish of every mother on the African continent?

Caption: Syliva Kuria at her shop (above) and out on delivery (below)

Don't all mothers want to give their children the very best? Out of the need for African mothers to access organic produce, I was challenged to grow Sylvia's Basket from a basket delivery scheme to a retail shop, training center, and demonstration farm.

I had also been farming for a long time and suffered under the hands of middlemen who never cared about my organic produce, which they bought at throwaway prices.

I wanted to grow a business where the produce from the farms was directly being accessed by consumers. According to an article on retail businesss in Business Insider magazine (November 13th, 2015), "Retail has high fixed costs, high working capital intensity, fickle customers, low barriers to entry, calling the sector a case study for the worst-possible business." I wish I had read this statement before embarking on this line of business. It was too late in 2021 when we almost closed the shop because of the high fixed costs! But we made it eventually. How, you might ask?

The main reason is that we made a choice to make our organic produce accessible, by making it affordable.

The history of organic markets on the African continent has basically been a cut and paste from Western models. We became convinced that we must make organic produce a premium product, yet our grandmothers only knew how to grow food organically and we always had enough to eat! In Africa, we are lucky that we can grow food all year round, the cost of inputs is generally low, and we have access to organic certification through Participatory Guarantee Systems (locally focused quality assurance systems.

They certify producers based on the active participation of stakeholders and are built on a foundation of trust, social networks, and knowledge exchange). The unfortunate trajectory of making organic expensive has then led to fraud where some greedy farmers will go at any cost to sell "organic" as long as they are making more money out of it. And another unfortunate turn is that niche organic produce is a reserve for the rich and the common man can just as well die from eating unsafe produce that is not regulated.

Sylvia's Basket's success has been attributed to breaking down the barriers that dictate that safe, traceable organic produce is only for the wealthy. I would like to encourage farmers in Africa to take bold steps and farm sustainably ensuring that our products are safe for consumption.

Can retailers strive to make organic produce affordable and thus accessible to the masses? And can the consumers choose to buy food from local farmers promoting local economies and demanding safe produce on their plates?

Sylvia's Basket has a vision for the African continent. When we started with our little farm growing food for our local community and friends many said that we would never make it.

We had the vision to sell organic produce to the masses and we are now delivering produce to more than 100 homes in Nairobi and supporting tens of smallholder organic farmers all over Kenya to access markets for their produce. Our eyes are set on Africa, our children deserve to eat well, and our farmers deserve to make a livelihood from their hard work.

KNOWLEDGE HUB SOUTHERN AFRICA (KHSA)

The Knowledge Hub for Organic Agriculture in Southern Africa (KHSA) is part of the Knowledge Centre for Organic Agriculture in Africa (KCOA), a collaborative country-led partnership funded by the German Federal Ministry of Economic Cooperation and Development (BMZ) and implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and non-governmental organisations across Africa.

The KCOA aims to scale up adoption of agroeoclogical and organic farming practices through five knowledge hubs in Africa. The South African-based Sustainability Institute supports project implementation in southern Africa. Activities are focused in Zambia, led by Participatory Ecological Land Use Management (PELUM) Zambia; in Namibia led by the Namibia Nature Foundation (NNF) in collaboration with the Namibian Organic Association (NOA); in South Africa led by the South African Organic Sector Organisation (SAOSO) and in Malawi, led by Kusamala and Soils, Food and Healthy Communities. The other hubs are implemented by GIZ and country implementing partners in North, West and Eastern and Central Africa.

Below is an update from our country partners on their work related to KHSA.

What's happening in Zambia?

- PELUM ZAMBIA: Preparations for the ASACC Media Awards underway

PELUM Zambia in collaboration with Caritas Zambia, Action Aid Zambia, and Zambia Climate Change Network is preparing for the upcoming Agroecology, Social Accountability and Climate Change (ASACC) Media Awards that will be held on 24 March 2023. Awards are presented to media practitioners who published/broadcast stories in these categories in 2022. Awards include those for best television and news reporting, best short documentary and programme on television and radio and best news and feature stories published in newspapers or online.

- Kasisi Agricultural Training Centre (KATC): Finalising its project plan

KATC is finalising its proposal for its Multiplier Support Programme, which has been shaped by the findings of the baseline study completed in 2022 and aims to support Farmer Training Colleges in Zambia with appropriate knowledge products to support and encourage the uptake of agroecological and organic farming.

What's happening in Malawi?

- Kusamala: IFOAM ToToT

The Kusamala team is preparing for the IFOAM Training of Teams of Trainers that will take place in Lilongwe from 17 to 21 April 2023. These trainings are aimed at lead farmer trainers and focus on building up facilitation skills. The training will be led Patricia Flores, IFOAM-Organics International's Global Academy Manager, and co-hosted and facilitated by members of the Kusamala team.

KNOWLEDGE HUB SOUTHERN AFRICA (KHSA)

KHSA
Knowledge Hub for Organic Agriculture in Southern Africa

What's happening in Malawi?

- Soils, Food and Healthy Communities (SFHC): Preparing to activate its programme

The SFHC team is finalising its implementation plan for its Multiplier Support Programme, which will run with a cadre of farmer research team members who are dedicated to growing skills and knowledge around organic agriculture, nutrition and gender issues with their farming communities.

What's happening in Namibia?

- Namibian Organic Association and Namibia Nature Foundation: CEO programme

The Namibian team is halfway through its Multiplier Support Programme, which is a community-based agricultural extension model in order to increase the quality of organic agricultural extension available to farmers in the Zambezi Region of Namibia

What's happening in South Africa?

- Participatory Guarantee Systems South Africa (PGS SA) and South African Organic Sector Organisation (SAOSO): Pollinator Programme

PGS SA and SAOSO's PGS Pollinator Programme aims to train participants to set up and maintain PGS groups in South Africa to support growth of the organic value chain among smallholders in the country. Pollinators receive ongoing training and support.

For more info about KHSA, visit www.khsa.online

Caption: Multiplier Support Programme training participants at their third session, February 2023, Katima Mulilo

EVENTS AND GOOD READS

Upcoming Events

- **Agroecology Conference, 21-24 March 2023, Nairobi, Kenya**

The first Eastern Africa Agroecology Conference will take place 21-24 March in Nairobi, Kenya. The call for abstracts is open – apply here. To register for the conference, visit the website. This conference has been organised by Biovision Africa Trust (BvAT), Pelum Kenya, Intersectoral Forum on Agrobiodiversity &Agroecology (ISFAA), Ministry of Agriculture (MOA), Kenya Organic Agriculture Network (KOAN) and BIBA Kenya. For more information, email: info@ea-agroecologyconference.org

- **African Regional Apimondia Symposium, 21-24 March 2023, Durban, South Africa**

Venue: Albert Luthuli Convention centre Durban, South Africa
Bees and other pollinators are part of the ecosystem and contribute to sustainable agriculture production. They are a source of nutrients and livelihoods to many. Modern agriculture poses a threat to bees, which are primary pollinators for many crops. This symposium presents a series of papers and updates from different African countries on what is happening with their apiculture sectors. Find out more here.

Good reads

- **REKO_FAIR consumption since 2013**

Thomas Snellman, founder of REKO circle, which is a marketing concept, shares a marketing tool that has worked for over 600 REKO rings with more than 2 million members in more than 14 different countries. To read more download the book in English here or listen to an overview here.

- **Food crisis, Energy Crisis and climate crisis: Tackling the poly crises by changing to organic farming**

Organic farming is an effective response to the climate crisis both through mitigating (reducing) the use of fossil fuels and in building adaptative farming systems. To read more, click here.

- **How to build a rainwater tank**

This is an interesting link for anyone who is enthusiastic about harvesting water for household use and/or in kitchen gardens. Watch here.

- Hard copies of the **Good Food Festival's 2022 publication** are available. This publication can also be found on the festival's website. It is an excellent introduction for anyone wanting to understand issues around seed.

- **Let's be honest about our soils**

This blog unpacks what is happening to our soils. Click here to understand more.

- **All about Biofach 2023**

Click here to find out what happened at the 2023 Biofach.

FIND OUT MORE ABOUT ISAN BY CLICKING HERE