ISAN MAGAZINE

FOR SUSTAINABLE FOOD SYSTEMS

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About ISAN Magazine

ISAN Magazine was born in 2021 out of the Knowledge Hub for Organic Agriculture and Agroecology in Southern Africa, a project funded by GIZ and operationalised by African NGOs through five knowledge hubs making up the Knowledge Centre for Organic Agriculture and Agroecology in Africa. Today, we are working towards financial sustainability, partnering with leading NGOs and movements to bring you news you can use!

ISAN Magazine is dedicated to building a strong network of informed civil society actors and organisations across the southern African region to advocate for organic agriculture and agroecology as a framework for regional food and farming systems.

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Editor's Note

By Fortunate Nyakanda

As climate change intensifies, communities across Africa must adapt and build resilience.

In this issue, we explore how agroecology remains a crucial tool for sustainable farming and food systems, highlighting lessons from Malawi and the broader region of Southern Africa.

We examine the growing role of women in shaping agroecology, from leadership in production and policy to amplifying their voices in decision-making. The expansion of the Africa Women Leaders in Agroecology Initiative to Malawi marks a significant step toward strengthening women's influence in the sector.

On the global stage, Africa must position itself strategically. With insights from the Organic World Congress 2024 and Biofach 2025, we question how the continent can expand its organic market share and enhance its participation in global decision-making structures.

Water remains central to climate resilience, as we see contrasting experiences in Southern Africa—from devastating droughts to floods due to unprepared infrastructure. Meanwhile, evolving food trends emphasise sustainable systems, where chefs, households and grassroots movements all have a role to play.

From cultural heritage in sustainability to biodiversity conservation in farming, this issue showcases innovative approaches that redefine the future of agriculture.

As always, we bring farmers' insights on navigating sustainability challenges, because real transformation begins in the fields.

Enjoy the read!

Organically yours
Fortunate Nyakanda

Infuriating Facts

In a world where nationalism surges, the global order unravels, and an interconnected web of economic, social and ecological crises deepens, we are left to navigate turbulent times. Across Africa, we grapple with the ever-widening chasm of inequality, environmental degradation and political instability—forces that often feel beyond our grasp. Despite our resilience, we find ourselves with little influence or agency over the root causes or the devastating consequences of these crises.

This section, **Infuriating Facts**, brings to light the harsh realities that shape our present and future—events and policies that have profound negative impacts on Africa, yet lie beyond our direct control. Through opinion pieces, feature articles and in-depth news coverage, we explore the interwoven issues that continue to undermine progress and prosperity on the continent, offering a candid look at the systems that perpetuate our struggles. This is a space to confront the uncomfortable truths we must face, even when we cannot change them.

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United States Retreat From Climate Finance Leaves Vulnerable Nations Stranded

By Thabo Molelekwa

The United States' (U.S.) decision to withdraw from key international climate finance initiatives, notably the Loss and Damage Fund and the Just Energy Transition Partnership (JETP), severely impacts vulnerable nations, particularly South Africa. This move undermines global climate action and erodes trust in international cooperation. Developing nations now face heightened challenges in funding their transition to clean energy and adapting to climate disasters.

Update to this story: Since the time of writing, the European Union announced on 14 March 2025 a Euro4.7 billion investment package into South Africa to fund green energy projects, among others. South Africa is the largest trading partner of the European Union in the region. This investment will hopefully offset some of the damage done by the U.S.'s decision to withdraw.

The United States' decision to withdraw from key international climate finance initiatives, notably the Loss and Damage Fund and the Just Energy Transition Partnership (JETP), severely impacts vulnerable nations, particularly South Africa. This move undermines global climate action and erodes trust in international cooperation. Developing nations now face heightened challenges in funding their transition to clean energy and adapting to climate disasters.

Impact on RSA's Just Energy Transition (JET)

South Africa has been a leader in the JET, aiming to shift from coal to renewables while ensuring economic stability. The JETP, supported by wealthy nations including the U.S., was designed to provide financial aid. However, the U.S. withdrawal cuts $1 billion from pledged funds, reducing the total from $13.8 billion to $12.8 billion.

While South Africa remains committed, this funding loss complicates an already challenging process. The Presidential Climate Commission (PCC) recently convened its 17th meeting on 7 March, expressing regret over the U.S. withdrawal from key climate agreements and the JETP. Dorah Modise, PCC Executive Director, affirmed South Africa's dedication to a JET, urging other partners to maintain their support.

A global climate finance problem

The U.S. pullback from climate finance reflects a troubling trend. Past actions, such as leaving the Paris Agreement, have weakened global climate efforts. By withdrawing from the Loss and Damage Fund, the U.S. reduces support for nations severely affected by climate disasters. This decision highlights a broader issue: wealthy nations failing to meet their obligations. The U.S., a major historical polluter, has a duty to assist disproportionately affected nations. Its withdrawal signals a prioritisation of national interests over global stability, threatening international climate agreements.

Modise reiterated the importance of multilateralism, stating, "As South Africa, we regard the United Nations Framework Convention on Climate Change (UNFCCC) and its mechanisms as central to tackling climate change and the only credible platform that brings together all countries at the highest level to discuss and collaborate on climate action and in keeping multilateralism alive."

Overhauling disaster management systems

Increased climate disasters in South Africa have exposed vulnerabilities, especially at the municipal level. Despite existing legislative frameworks, implementation gaps persist, including limited early-warning systems and inadequate coordination. Modise emphasised inclusivity and community engagement, stating, "Ultimately, the success of these recommendations depends on fostering inclusivity, empowering local capacity, and ensuring that policies and practices are aligned with our needs. By prioritising adaptability, equity, and community engagement, South Africa can build a system that not only safeguards its people and infrastructure but also fosters resilience and sustainable development in the face of mounting climate risks."

A roadmap for 2025 and beyond

The PCC's 2025/26 work programme prioritises support for communities affected by the energy transition, including innovative funding mechanisms. Dr. Crispian Olver, PCC Deputy Chairperson, stressed the need for climate resilience and economic development, calling for investment in climate-focused special economic zones.

The U.S. retreat from climate finance is a significant setback for global climate efforts, leaving vulnerable nations like South Africa in a precarious position. This underscores the need for robust global climate cooperation and sustainable funding systems.

Movements & Advocacy Updates

In this section, **Advocacy and Movements,** we shine a spotlight on the groundbreaking work being led by Southern African organisations, national movements and networks that are challenging the status quo and working tirelessly to revolutionise our food and farming systems. These changemakers are not only tackling the urgent need for sustainable practices but are also leading a powerful movement to reconnect us with the land, nature and the very foundations of our food security.

At the forefront of this transformation, they are advocating for agroecological approaches that prioritise environmental health, social equity and economic resilience. Through grassroots initiatives, policy advocacy and education, these movements engage farmers, communities, policymakers, consumers and a wide range of stakeholders in building a just, sustainable and equitable food system for the future. This section highlights the stories, struggles and successes of those driving this vital change, emphasising how local movements are making global impacts.

Advancing Agroecology Advocacy in Malawi

By Isaac Mafuel, Staff Writer

Agriculture is Malawi's economic backbone, but climate change and food insecurity threaten its sustainability. Agroecology—a holistic farming approach that integrates ecological principles offers a viable solution. To understand its progress in Malawi, I spoke with Eston Mgala, Country Director of World of Difference Malawi, and a leading advocate for sustainable agriculture.

With extensive experience in permaculture, agroecology and organic farming, Eston has been at the forefront of promoting sustainable practices. He serves as National Coordinator of the Permaculture Network of Malawi and is part of the African Union's interim Technical Working Group for Ecological Organic Agriculture.

"My work focuses on making agriculture systems more sustainable and beneficial for smallholder farmers", he shared. Despite global recognition of agroecology's benefits, Malawi's adoption remains limited. While many NGOs promote 'climate-smart' and 'sustainable agriculture', these efforts often lack a true agroecological foundation.

"Agroecology is missing in Malawi's National Agriculture Policy", Eston explained. "Some projects apply its principles, but they are not mainstreamed into national policies like Agenda 2063." A major barrier is the exclusion of agroecology experts from policymaking. "Consultants draft policies, and we are only invited to review them," he noted, limiting their influence.

Despite policy challenges, grassroots successes are emerging. Organisations like Soils, Food and Healthy Communities in Mzimba, Church Action and Relief in Development (CARD) in the Southern Region, and the Malawi Agroecology Hub at Lilongwe University of Agriculture and Natural Resources are demonstrating agroecology's potential.

"We see positive impacts in specific areas," Eston said. "But these projects remain isolated. Why aren't agroecological solutions being implemented in flood-prone districts like Nsanje or Chikwawa? These regions need agroecology for disaster risk management and climate adaptation."

Funding constraints also hinder progress. Many projects rely on short-term donor funding, leaving farmers unsupported when funding ends.

We need sustainable models that integrate enterprise development to support agroecology value chains," he emphasised.

Eston outlined key steps to advance agroecology**:**

- **Scaling grassroots implementation:** Increasing agroecology projects across diverse zones to provide evidence of impact.
- **Influencing policy with evidence:** Using successful agroecology projects to inform policy and ensure national adoption.
- **Engaging policymakers**: Agroecology experts should be involved in policy development from the start, not just as reviewers.
- **Securing sustainable funding**: Long-term funding aligned with national priorities is critical for project continuity.
- **Building capacity**: Training farmers and extension workers to ensure broad adoption.

Eston also stressed the importance of learning from countries like Kenya, Tanzania and Uganda, which have integrated agroecology into their policies. "We need to study their approaches and adapt them to our context," he said.

"Agroecology can transform our farming systems, making them resilient, sustainable, and equitable. But farmers, NGOs, researchers, and policymakers must work together to make this vision a reality."

Update: World Organic Congress 2024

The Organic World Congress 2024 was held from 30 November to 6 December 2024 at Nanhua University in Chiyai, Taiwan, under the theme "Cultivating Organic Solutions for True Sustainability." The event included plenary sessions, workshops, side events, an organic exhibition and bio-tours.

Focus areas at the Congress

- Organic culture and lifestyle: Explored how cultural and lifestyle practices enrich the organic movement, including the roots of organic farming, promotion through bio-districts, indigenous agricultural practices and social sustainability.
- Knowledge and practice sharing: Fostered collaboration in organic agriculture, covering organic crop, livestock and aquaculture production, bio-controls, soil health, biodiversity, innovations in conservation agriculture and global adoption.
- Growing organic markets: Focused on expanding organic markets while upholding core principles, including integrating health, ecology, fairness, accessibility, boosting national markets, addressing fraud and biotechnology risks.
- Scaling up organics and agroecology: Explored policies and frameworks to support organic growth, including local, national and global policies, the role of green finance and tools for policy advocacy.

Exploring multiple pathways

Fortunate Nyakanda moderated a plenary on market success pathways, including retail, community-supported agriculture, participatory guarantee systems (PGS) and public procurement. The session emphasised how PGS ensure quality and encouraged farmers to start small, selling directly to consumers, then expand. A key takeaway was the importance of market research in understanding different segments.

Participants learned from indigenous farming communities in the Philippines, focusing on best practices and the role of government research in improving crop varieties. Traditional agricultural and organic methods were highlighted as vital for building resilient seed systems, particularly in addressing climate change.

Side events

Participants engaged in bio-tours of the Taiwanese organic sector, an organic fair and a night market to experience Taiwanese culture. These events provided valuable insights into local organic farming practices.

Raymond Auerbach attended the Pure Land Bio-tour, where they explored a system that stimulates the soil microbiome using humus-rich soil dilutions and various fermented preparations. This method, which has gained thousands of followers in Taiwan and Thailand, was a fascinating highlight.

General Assembly & African representation

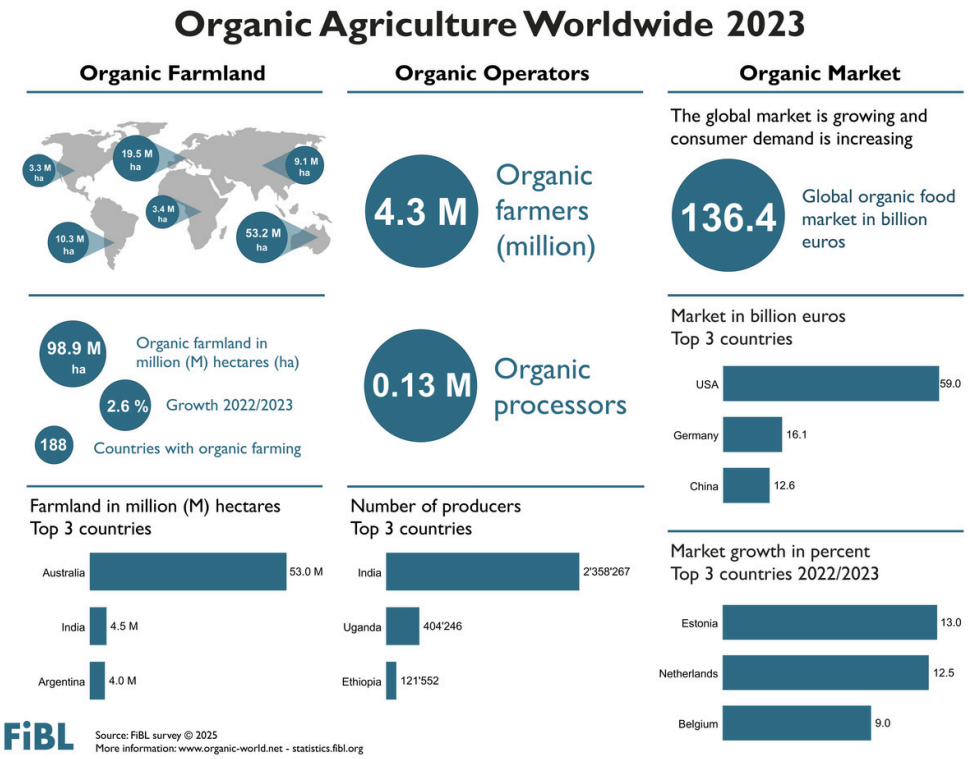
The congress concluded with a General Assembly, where new motions were adopted, and a new executive board elected.

Unfortunately, no African candidate secured a position on the World Board. Lobbying efforts have however, led to the co-option of an African representative and we are honoured to have Rosinah Mbenya, who is also the Country Coordinator of PELUM Kenya, to represent us.
The initial lack of representation signals the urgent need for African nations to unite—starting from regional collaborations—to amplify their voice in global organic movements.

For more details, visit the **IFOAM website** or watch the **video summary**.

Update: Biofach 2025

BIOFACH 2025, the world's leading trade fair for organic food, took place in Nuremberg, Germany from 11-14 February 2025, alongside the BIOFACH Congress. The event featured forums, workshops and presentations on trends, market figures and innovations. Additionally, there were live cooking sessions and presentations on organic school meals. The event also presented market figures and insights on future trends in the organic sector, including forecasts for global and regional markets.



Overview of organic production in Africa

Dr David Amudavi, Executive Director of Biovision Africa Trust, the secretariat for the Ecological Organic Agriculture Initiative of the African Union, presented on key figures related to organic agriculture in Africa.

- >3.4 million hectares of farmland under organic production in 2023.
- About 2.8% of world's organic farmland is in Africa, a 30% increase from 2022.
- About 22.4% of world's organic producers are in Africa; Uganda leads with >404 000 producers.
- São Tomé and Príncipe are one of 21 countries with organic area share of >10% of total farmland. It has 22.% of farmland under organic production, followed by Togo at 8.4%, Sierra Leone at 5.4% and Runion at 5%

Most certified organic products are sold onto the export markets, primarily the European Union and United States, with organic soyabean being a primary export product. Togo leads in export earnings, shipping 174.9 million tons in 2023, followed by Ghana at 69.3 million tons and Tunisia at 60 million tons.

Four countries lead with the largest organic area in hectares:

- Uganda with >505 000 hectares
- Ethiopia with > 438 000 hectares
- Togo with >322 000 hectares
- Burkina Faso with >286 000 hectares.

Dr Amudavi noted that there was a scarcity of data for domestic markets for organic products in Africa.

AWOLA Supporting Women-led Agroecological Enterprise Development in Africa

By Monica Nyaga, AWOLA Gender & Youth Program Officer

AWOLA Cohort 1 mentees graduation Credit: AWOLA

The Africa Women Leaders in Agroecology (AWOLA) Initiative supports women in accessing economic resources, participating in decision making, influencing agroecology policies and scaling up their agro-enterprises. AWOLA is a leadership career development initiative of the PELUM network, with the aim of equipping women working on agroecology, sustainable agriculture and food systems with leadership skills. The initiative was funded by Tudor Trust from 2022 to 2024. PELUM Kenya is the coordinating agency for the AWOLA Initiative with PELUM Uganda and PELUM Zimbabwe as country implementing organisations for Uganda and Zimbabwe respectively. AWOLA looks forward to building a critical mass of women's voices amplified and influencing leadership in different sectors through agroecology.
Read more about AWOLA.

The initiative targets women mentors and mentees who are farmers, policymakers, professional women, agro-entrepreneurs and agricultural value chain actors. Mentorship helps women mentees to overcome the significant challenges they face in this sector, such as climate change impacts, the high cost of farm inputs, unfavourable business policies, internet challenges and maintaining a work-life balance.

Successes to date

The AWOLA initiative is implemented in Kenya, Uganda and Zimbabwe with 36 mentors and mentees in cohorts 1 and 2 from 2023 to 2025. It has also reached a further 2 116 women and youth through monthly motivational webinars, workshops and media engagements. AWOLA recently hosted a Regional Forum to celebrate and reflect on the significant outcomes of its work over the past two years, including enhanced and meaningful participation by women in land committees, agro-markets technical working groups, national multi-stakeholder platforms and regional forums. In addition, mentees' products are in the market and able to compete with other brands. Read more about their Stories of Change.

AWOLA has amplified women's voices through side events during conferences, participation in panel discussions in forums, exhibitions of farm produce and enhanced media coverage.

The Regional Forum culminated in the launch of the AWOLA cohort 3 at an award ceremony recognising the hard work and commitment and effort of each mentor, mentee and members of the steering committee and secretariat, as well as partners and donors such as Both Ends and Tudor Trust, among others.

Expansion to Malawi

AWOLA is expanding the initiative to Malawi, partnering with PELUM Malawi, where women play a critical role in the agricultural value chain. AWOLA Malawi will support mentees in scaling up their enterprises, making their voices heard in decision-making circles and taking up leadership positions in the sector. The Malawi initiative will focus on strengthening leadership capacity related to land rights, the 'right to food' and policy formulation, among others.

Top left: AWOLA mentee in Uganda; Top right: AWOLA mentor and mentee; Bottom: AWOLA Expo. ***Credit: AWOLA***

Zimbabwe team at AWOLA Regional Forum. ***Credit: AWOLA***

Women-led climate action plan launched in Zambia in 2025

In February 2025, Vice President W.K. Mutale Nalumango unveiled Zambia's Women Leaders for Climate Action five-year strategy that will aim to raise US$1 million a year for women-led community and environmental resilience initiatives. Half of the funds will be spent on building capacity of women leaders. **Read more** about this.

A Male Perspective on the Together Strengthening Women's Voices Conference

By Isaac Mafuel, Staff Writer

Contributor at conference Credit: GIZ FemHub

The *"Together: Strengthening Women's Voices for Sustainable Agriculture and Food Systems"* conference, held from 18-20 February 2025 at Nairobi's Movenpick Hotels in Kenya, brought together policymakers, researchers, grassroots activists, farmers and international organisations to discuss the role of women in sustainable agriculture.

The conference opened with a keynote by Susan Kaaria, Director of African Women in Agricultural Research and Development, who highlighted the under-representation of women in agricultural leadership. Despite making up nearly half of the agrifood workforce in sub-Saharan Africa, women often face limited access to resources, land and decision-making power. The discussions emphasised that addressing these disparities is key to achieving food security and sustainable development. As one of the few men in attendance, I was deeply engaged in the discussions on gender-transformative approaches and the need for equitable food systems.

Participants at the Together: Strengthening Women's Voices for Sustainable Agriculture and Food Systems" conference, 18-20 February 2025, Nairobi, Kenya ***Credit: GIZ FemHub***

Gender-transformative approaches

A central theme of the conference was the importance of gender-transformative approaches. A session led by Nora Pistor from GIZ introduced a self-assessment tool to evaluate the gender responsiveness of projects. The tool differentiates between gender-sensitive, gender-responsive and gender-transformative approaches, emphasising the need to challenge norms and power structures that perpetuate inequality.

Participatory theatre for transformative change

An interactive session that I facilitated used participatory theatre to explore gender discrimination in land ownership. Participants enacted real-life scenarios, such as a woman in Malawi denied land rights after her husband's death. The exercise allowed attendees to step into different roles, brainstorm solutions and discuss ways to challenge harmful cultural norms. This creative approach demonstrated how storytelling can inspire advocacy and social change. Download the Facilitators' Guide to Using Participatory Theatre, created by Malawi's Soils, Food and Healthy Communities through its work in the Knowledge Hub for Organic Agriculture and Agroecology in Southern Africa as a facilitation tool.

Women in agroecology

Presentations from India and Kenya showcased women-led agroecological initiatives. In India, the DAY-NRLM program has helped more than 43 million women farmers transition to sustainable practices through self-help groups. Similarly, in Kenya, women are driving agroecology through community-based organisations, improving food security, biodiversity and climate resilience.

Women and land

The GESI (Gender Equality and Social Inclusion) Sprint under the SAFE project presented a gender-responsive land tenure initiative. The SAFE Zambia team is raising awareness about land rights, training communities and issuing land documentation to at least 200 women, enhancing their decision-making power. This initiative serves as a model for addressing systemic barriers to women's empowerment in agriculture.

A panel discussion also explored socio-cultural disputes that hinder women's access to land, credit and markets. Despite contributing up to 70% of Africa's food production, women often lack ownership of production resources. Strategies discussed included a focus on gender-inclusive cooperative policies.

The triple nexus: Climate, nutrition and gender

Experts from GIZ, the United Nations (UN) Food and Agriculture Organization, UN Women and the International Fund for Agricultural Development emphasised how climate change disproportionately affects women, who are central to food and nutrition security. The session called for climate-smart agriculture policies that integrate gender considerations, ensuring women actively participate in climate adaptation and mitigation efforts.

Strengthening female leadership Through CSOs

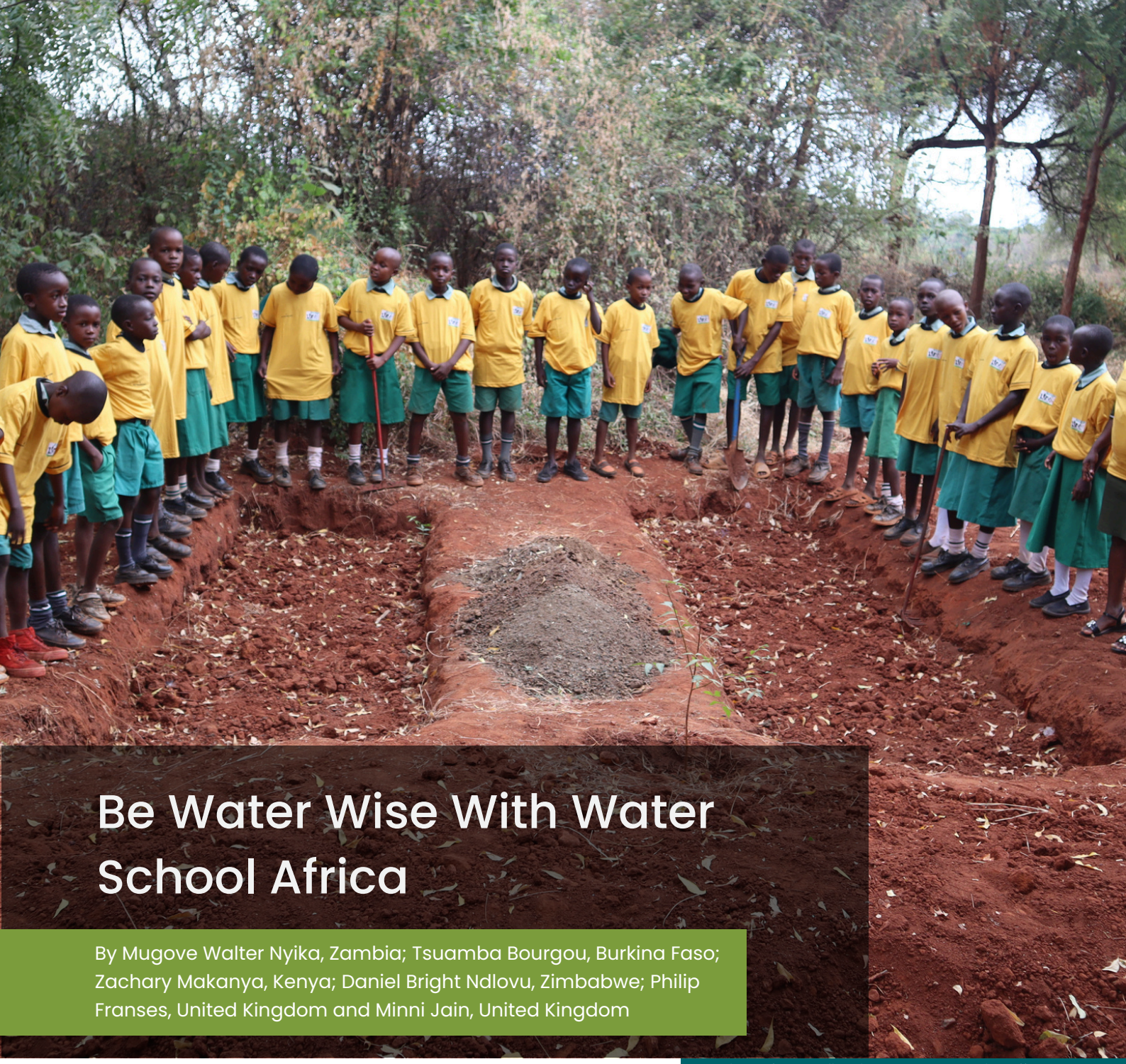
A session on the role of civil society organisations (CSOs) highlighted initiatives like Nigeria's Small-Scale Women Farmers Organization, which empowers women through capacity-building, advocacy and market access. CSOs play a vital role in amplifying women's voices, promoting gender equality and addressing barriers to leadership.

The role of men in gender equality

As a male attendee, I was particularly struck by discussions on engaging men as allies in gender equality. The conference emphasised that men must actively support women's leadership, share domestic responsibilities and challenge patriarchal norms. Gender equality is not solely a women's issue but a societal imperative requiring collective action.

The conference concluded with a powerful call to action, urging stakeholders to:

- **Increase access to resources:** Ensure women have equal access to land, finance and technology.
- **Promote women's leadership:** Support women's participation in decision-making at all levels.
- **Address structural inequalities:** Challenge discriminatory laws and cultural norms that limit women's opportunities.



Be Water Wise With Water School Africa

By Mugove Walter Nyika, Zambia; Tsuamba Bourgou, Burkina Faso; Zachary Makanya, Kenya; Daniel Bright Ndlovu, Zimbabwe; Philip Franses, United Kingdom and Minni Jain, United Kingdom

Children from Ntujia Primary School showing off what they had dug in their school Credit: Water School Africa

Across the world, small communities are leading the way in creating and securing local water sources, often reversing the devastating effects of both floods and droughts. But what if more communities could learn from each other's water wisdom and take action to retain water in the ground locally?

If enough people understand how to capture and store rainwater effectively, we could collectively begin to reverse the impacts of global warming. In time, this could even contribute to cooling the planet, while simultaneously improving access to this vital resource. Find out more about **Water School Africa**.

The Flow Partnership (TFP)

TFP is a United Kingdom-registered NGO that works in genuine partnership with local communities worldwide. It collaborates directly with these communities to implement small-scale, traditional, and modern innovative methods for water retention and management in the landscape.

TFP also provides a platform for community voices to be heard globally by establishing independent Water Schools. These schools serve as spaces where communities can share their successful water recharge methods with the world.

The focus of these Water Schools is Water literacy: Understanding what needs to be done and Water recharge action: Implementing effective water management solutions.

Water School Africa (WSA)

WSA has been set up as a partnership with African communities engaged in natural water retention practices in their local villages /areas / regions. The overall goal of this Pan African Water School is to stimulate community interaction and action to improve an understanding of, and boost capacity in sustainable local, community-based water resource management across the continent of Africa.

WSA is a growing continent-wide movement. The work of the founding partners is detailed below. As WSA grows, it is envisaged there will be local ground partners of the water school, spreading water literacy and water action in local communities across the continent. Farming and a good local life for communities follow once the local water source is in place.

No more talk. Real people taking real action in partnership with each other.

WSA & ReSCOPE, Zambia

ReSCOPE and its partners work with school and college communities to promote productive, multi-purpose and healthy environments that are designed to meet the educational, nutritional and other basic needs of the learners, teachers and parents/farmers. Since 2021, ReSCOPE has been supporting the Haanamoonga community in Monze East, southern province of Zambia to turn their water deficit landscape into a more productive area through water-holding and related techniques.

Some of the young people in this community have taken this work seriously and are leading the way in setting rainwater harvesting structures across the lands of their community.

WSA & the Muonde Trust, Zimbabwe

The **Muonde Trust** is a community-based organisation premised on community-based research and indigenous innovation. As part of the WSA, the Muonde Trust, in partnership with ReScope, conducted a five-day water harvesting project in Hanamonga Village, Monze District, Zambia from 16-20 December 2024. They introduced the concept of dead-level contouring for water flow pathways on the terrain using A-frames, as well as demonstrating the construction of simple, cost-effective A-frames from readily available materials. They successfully pegged 14 contours, one per zone initially.

WSA & the Rural Initiatives Development Programme (RIDEP)

RIDEP is training Kenyan farmers in water harvesting and the fruits of this intervention are seen in improved food productivity increasing food security in the communities.

WSA & Groundswell, Burkina Faso & Mali

In Burkina Faso, through **Groundswell,** communities are building water harvesting structures to harvest runoff water. While in Mali the focus is on the construction of dikes to retain rainwater for rice production on farmland.

Top: Visitors during a learning and exposure visit at the RIDEP Water Hub Bottom left: Partial view of the water retention dam, Worolo, Mali; Water retention basin/Commune of Tibga, Burkina Faso Bottom right: 6. Over 100 farmers learning about water retention ***Credit: Water Schools Africa***

Climate Change

Africa is on the frontline of the climate crisis, where the impacts of climate change are felt more acutely than in many other regions. The continent is experiencing rising temperatures, more frequent and severe droughts, shifting rainfall patterns and extreme weather events such as floods and droughts. These environmental shifts pose significant risks to agriculture—Africa's most important sector, employing over 60% of its workforce, and providing livelihoods and sustenance for millions of smallholders on the continent.

For small-scale farmers, who rely on rain-fed agriculture, the unpredictable climate makes it increasingly difficult to plan and maintain stable crop production. This is where agroecological and organic farming systems offer potential solutions. By focusing on sustainable practices that work in harmony with nature, these farming methods can build resilience against climate change, enhancing soil fertility, conserving water and improving biodiversity. Agroecology, in particular, emphasises localised and community-based solutions, creating farming systems that not only help mitigate climate impacts but also adapt to them.

Infrastructure Resilience Against flooding

Is your city ready for extreme weather? A closer look at infrastructure resilience against flooding in Zambia

By Rabecca Mwila, Staff Writer

Residents making their way through flooded communities. Credit: Zambia Daily Mail

Zambia is experiencing severe flooding in some parts of the country with Lusaka, the capital city, being the worst hit. The flooding is displacing thousands of residents and causing extensive damage to property. According to the Zambia Meteorological Department, the country is experiencing increasing climate variability with more frequent and intense rainfall events. The intensifying downpours have overwhelmed several townships in the city, including Chaisa, George, Kanyama, Mandevu, John Laing and Kuomboka. The impact of the flooding has led to significant economic losses across multiple sectors. Small business owners, marketeers and street vendors have had their property, including shops, equipment and raw materials damaged by floodwaters.

The flood waters have caused temporary closures, disrupting supply chains and leading to revenue loss. Agness Mumbi owns a makeshift snack shop on Chachacha road in Lusaka. In an interview Mumbi says, “I have lost everything, my shop, all the stock, including my customers, because they cannot reach here because there is water everywhere, there are no drainages here”. The shop has been the source of income for her family, which is now in financial distress.

Health Minister Dr Elijah Muchima says the country recorded 238 cumulative cases of cholera as of February 2025, raising health concerns of contamination of flooded areas by pollutants and debris. The biggest concern is that these areas face flooding almost every year, raising questions about Zambia's preparedness for extreme weather events.

Is Zambia’s infrastructure resilient enough to withstand increasingly frequent and intense flooding? A United Nations Habitat report highlights that Zambia's rapid urbanisation has outpaced infrastructure development, making cities like Lusaka particularly vulnerable to flooding. The World Bank also notes that inadequate drainage systems in urban centres increase flood risks, with many cities relying on outdated infrastructure unable to manage heavy rainfall. The Ministry of Infrastructure, Housing and Urban Development’s, Public Relations Officer Francesca Banda says that, “The resilience of our infrastructure especially housing in unplanned settlements remains low as evident in the current rainy season where about 600 families were displaced from their homes and four lives lost.”

“Informal housing settlements make up a significant proportion of urban areas and are not built to withstand extreme weather, leaving the most vulnerable populations exposed to the worst impacts. In addition, the flooding of public infrastructure such as roads, drainages, housing and shopping centres reflects the need to invest more in climate resilient infrastructure.”
- Francesca Banda

In response to the ongoing crisis, President Hakainde Hichilema has assured the nation that his administration is committed to relocating people who have built on waterways in Lusaka to help mitigate the city's flood risk. The President emphasised that the relocation exercise will not be politicised adding that all affected would receive appropriate compensation. Hichilema says the move aims at reducing long-term flood vulnerability.

Environmental expert Beverly Mushili, a lecturer at the University of Zambia, acknowledges government's efforts to prepare for future rainy seasons but highlights significant challenges facing Zambian cities regarding extreme weather readiness. According to Mushili, the combination of unpredictable rainfall patterns, existing infrastructure vulnerabilities and growing climate change impacts necessitate ongoing improvements in infrastructure development, disaster preparedness strategies and urban planning approaches.

Mushili says, “Collaboration of stakeholders, government, NGOs, the private sector, civil society organisations and local communities to implement short-term remedial actions such as improvement of early warning systems, enhancement of infrastructure resilience, and construction and repair of drainage systems in all urban centres is inevitable.” She further emphasised that Lusaka city should have its drainage network expanded and retention ponds constructed with regular cleaning if flooding is to be mitigated, noting that "If the aforementioned remedial measures address the increasing frequency and intensity of climate shocks, particularly flooding, Zambia can enhance its resilience to climate events and build a more sustainable future with the support of the government and key development actors.”

Zambia's infrastructure resilience against flooding requires immediate action. By adopting innovative solutions, improving maintenance practices and increasing funding for flood resilience efforts, Zambia can significantly reduce its vulnerability to flooding while promoting long-term sustainable development.

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Adaptation in action in South Africa's Eastern Cape province with the Adaptation Network

By Vanessa Farr, Mycelium Media Colab

Learning exchange at Bafo and Busi Organic Farming, Eastern Cape Credit: Adaptation netowrk

Food, water, energy, 'waste' and social justice are amongst the themes explored by Mycelium Media Colab's partner, the Adaptation Network. But what do these themes tell us about adaptation, and what do they mean at a soil level? When a small group of Mycelium members joined several members of the Network in an Eastern Cape learning exchange last year, we learned some answers to these questions.

Most of our meetings took place in gardens and small plots. People are cultivating these experimentally, learning by doing and watching. They are figuring out what changes they need to make to planting and watering practices in the face of increasingly unpredictable weather. They tell one another what they see, comparing notes and findings, and taking new and old ideas back to their land.

This is adaptation in action.

What is the Adaptation Network?

The Adaptation Network is Southern Africa's leading platform for climate change adaptation, encompassing membership spanning policy, practice and academia. Since 2009, it has fostered a well-connected and resource-rich environment, enabling members to share knowledge, skills, and experiences.

The Network's mission is to foster an informed, inclusive, just climate response in the region by:

- Increasing communication between practitioners, policy makers and academics around adaptation.
- Facilitating knowledge exchanges to enhance the implementation of effective adaptation plans and strategies at all levels.
- Building capacity through innovative workshops, peer learning events, communication materials and biennial colloquia.

Find out more **here**.

Mycelium Media Colab, a global network of regenerative communication specialists based in South Africa, supported the Adaptation Network in co-creating the learning exchange with some of the Eastern Cape members. Mycelium members provided skills training in storytelling, visiting sites and learning and capturing stories.

Adaptation in action in the Eastern Cape

This group of Adaptation Network members is a highly diverse group of farmers and academics, but we soon found a common thread between them. Whatever crops they're focused on, everyone we met aims for more effective and productive growing without relying on shop-bought inputs such as fertilisers and seed. For many of them, the best act of social justice and solidarity is growing sufficient healthy food, ending malnutrition and hunger in the province.

An early stop on our journey was Bafo and Busi Organic Farming close to East London, run by Busisiwe Mgangxela and her husband Bafo, where we were greeted by a beautiful hand-painted sign proclaiming, 'No GMO grown here!' Already, we were being prepared for meeting with the dynamic Sis Busi, a retired nurse who devotes her life to helping people make the connection between nourishing food grown in healthy soils and human wellbeing. An influential Elder and community-based agroecology activist in the Eastern Cape, Sis Busi is a force of inspiration within the Adaptation Network. She not only grows her own food, but passionately encourages people to connect with heritage farming. She is becoming a formidable agroecology advocate in her province, helping government officials understand why a new generation of farmers wants to honour and practice old farming ways.

We also visited the Isithembiso Multipurpose Organization, run by the community and the dynamic Xolelwa Koncoshe, who is also a retired nurse. One of Sis Xolie's favourite activities is to encourage community elders to keep growing their own food, even when it gets difficult to bend over to plant, weed and harvest. Her solution? Build a raised box or tower garden, that a gardener can easily reach. Looking at the big smiles on the faces of healthy Elders who have reconnected with the soil and their food, we grasped what a big difference a small adaptation makes.

We were treated to a walk around several gardens in the Mxumbu district, where, under the able leadership of Xolisa Dwane, farmers are focusing on learning the art of seed saving and sharing. "Save some, sell some, and eat some," says Xolisa, because this is the only way to be an independent farmer who looks to the future.

Water shortages are an increasing reality, and at the homestead of elderly friends, we were proudly showed an ingenious water-harvesting apparatus. Built from an upcycled tub, discarded plastic bottles, tubing and wire, the farmers were catching every drop from a gutter on their roof for reuse in their lush garden. This is farmer-driven adaptation, and it does not cost the Earth!

Future of Food

The future of food is rapidly evolving, with groundbreaking innovations transforming how we grow, process and consume food. From plant-based alternatives to alternative packaging, these trends are not just shaping consumer preferences but also influencing the agroecological and organic food systems in Africa. As marketers and farmers, understanding these shifts is key to staying ahead in a dynamic and competitive food landscape. This section delves into the emerging trends in sustainable food production and consumption, exploring how new technologies and dietary movements can support the growth of organic farming while meeting the rising demand for healthier, eco-friendly food options. Whether it's the rise of plant-based proteins or the potential of regenerative farming practices, these innovations present exciting opportunities for those committed to the future of food in Africa.

Chef's Corner

Reducing food waste in the kitchen, an exclusive interview with Chef Charity, Zimbabwe

By Odette Mavunga, Staff Writer

Chef Charity, Zimbabwe Credit: Chef Charity

As the world shifts towards sustainable living, reducing food waste has become a pressing concern in the culinary industry. We sat down with Chef Charity, a passionate advocate for sustainable cooking, to learn about her approach to menu planning and minimising food waste in the kitchen. Chef Charity emphasises the importance of planning meals in advance and prioritising the use of ingredients already available in the pantry. "Before I start thinking about new recipes, I take stock of what I have on hand," she explains. "This simple step helps prevent unnecessary purchases and reduces food waste." "I love finding new ways to reinvent leftovers," she says. "For example, last night's roast chicken can become today's lunchtime salad, and extra vegetables can be transformed into a hearty soup. There are so many ways to give leftover ingredients a second life."

The power of vegetable scraps

One of Chef Charity's favorite tips for minimising waste is making vegetable stock from scraps.

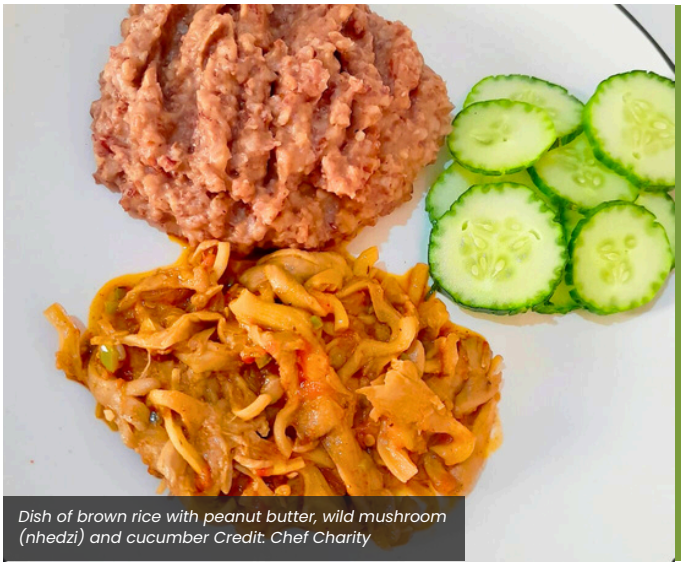
"It's incredible how much flavour you can extract from what would otherwise be discarded," she notes. "By using vegetable scraps to make stock, I not only reduce waste but also create a valuable ingredient for various dishes."

Embracing local and seasonal ingredients

Chef Charity is also a strong advocate for using local and seasonal ingredients in her cooking. "Local and seasonal ingredients tend to be more affordable, flavourful and nutritious," she explains. "By incorporating them into my menu, I support local farmers while preserving traditional food practices."

When asked about her favorite seasonal ingredients, Chef Charity enthusiastically recommends baobab fruit and wild mushrooms. "Baobab fruit is fantastic for making milkshakes," she shares. "It's both nutritious and delicious." She also raves about wild mushrooms, which are abundant during the rainy season. "There's something special about foraging for wild mushrooms in the rain. They add an incredible depth of flavour to any dish," she says.

By adopting Chef Charity's strategies for reducing food waste and incorporating local, seasonal ingredients, you can enjoy delicious, nutritious meals while making a positive impact on the environment.



Dish of brown rice with peanut butter, wild mushroom (nhedzi) and cucumber Credit: Chef Charity

RECIPE: HOMEMADE VEGETABLE STOCK

Ingredients

- Vegetable scraps (onion tops, carrot peels, tomato cores, etc.)
- Water
- Salt and pepper

Method:

- Collect vegetable scraps and place them in a pot.
- Add enough water to cover the scraps, along with a pinch of salt and pepper.
- Bring to a boil, then reduce heat and simmer until the scraps have softened.
- Allow to cool, then blend until smooth.
- Strain the stock and discard the solids.

Use this versatile stock to enhance the flavour of rice, soups or stews.

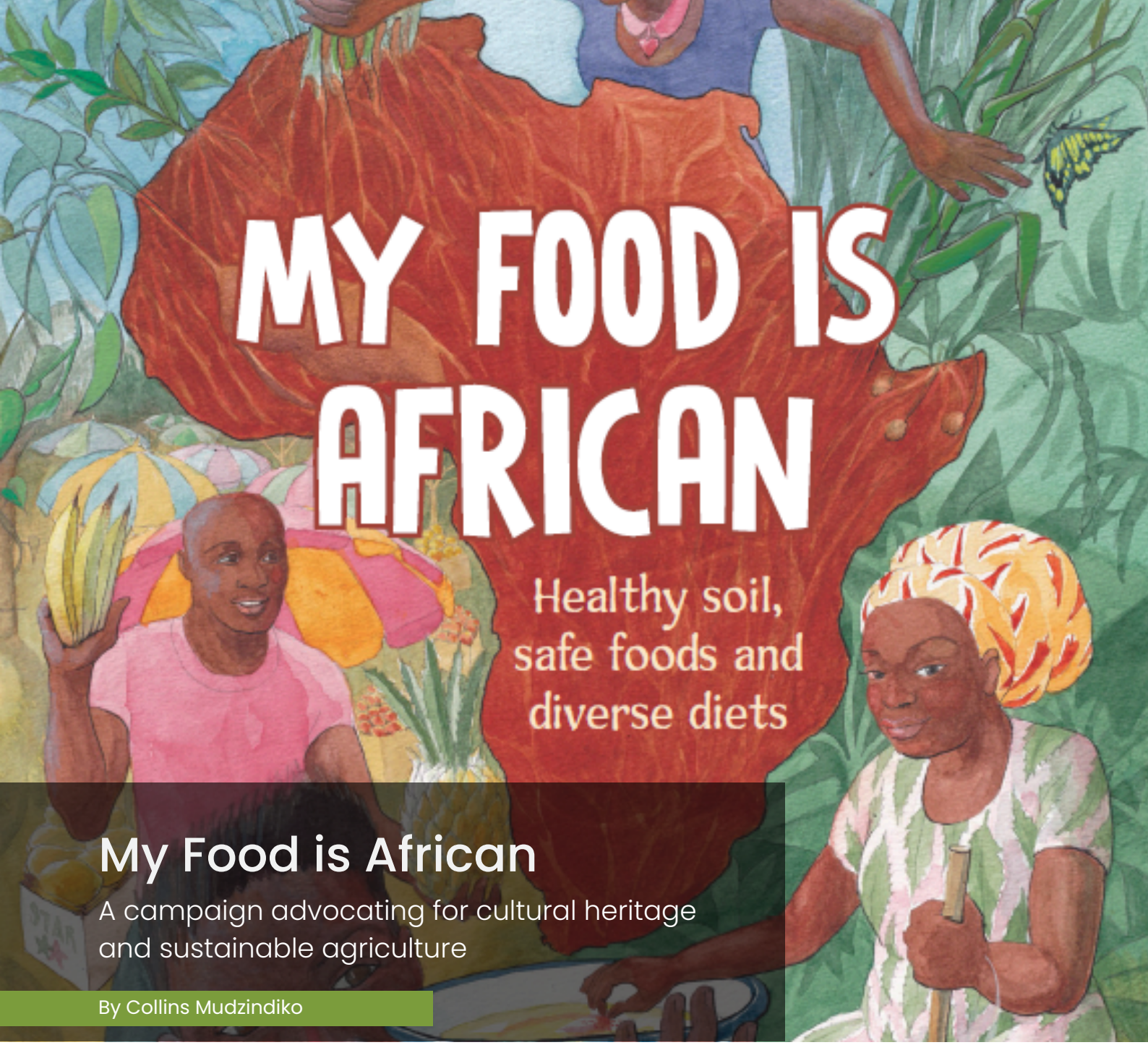
RECIPE: WILD MUSHROOM DISH

Ingredients:

- 200g wild mushrooms
- 1 tomato, chopped
- 1 onion, chopped
- 2 cloves garlic, minced
- 1 tsp BBQ spice
- 1 tsp salt
- Fresh parsley, chopped
- 3 tbsp cooking oil

Method:

- Shred mushrooms into desired pieces and wash thoroughly.
- Heat oil in a saucepan for a few minutes.
- Add mushrooms and salt, then fry for a few minutes.
- Add chopped onions and tomatoes, allowing them to simmer.
- After 10 minutes, add garlic and BBQ spice. Simmer for another 5 minutes.
- Garnish with fresh parsley and serve with brown rice and peanut butter.



My Food is African

A campaign advocating for cultural heritage and sustainable agriculture

By Collins Mudzindiko

In a world increasingly dominated by globalised food systems and industrial agriculture, the 'My Food is African' campaign has emerged as a powerful voice advocating for the preservation and celebration of African culinary traditions. One of the primary pillars of the campaign is the promotion of African food as a cultural heritage. The 'My Food is African' initiative shines a spotlight on the continent's diverse culinary practices rising from the use of ancient grains like millet and sorghum to the intricate flavours of traditional African dishes. By sharing traditional recipes, cooking techniques, and the stories behind each dish, the campaign fosters a deeper appreciation for Africa's culinary roots. According to Bertha Nherera, the campaign coordinator and advocate for the 'My Food is African' initiative, which is managed by Participatory Ecological Land Use Management (PELUM) in Zimbabwe, food is not just about sustenance, it reflects culture, history and identity.

"The main objective of this campaign is to raise awareness about the consumption of our traditional foods, our seeds, our cuisines, our cultures and identity as Africans," said Nherera.

Beyond cultural preservation, the campaign also emphasises the importance of supporting local agriculture and creating a sustainable food system for the future. In many African countries, challenges such as climate change, land degradation and the dominance of imported food products have created a disconnect between farmers and consumers.

The movement encourages smallholder farmers, who are the backbone of many African economies, to embrace sustainable farming practices and diversify their crops, thereby helping to safeguard food security.

As part of the campaign, partnerships with agricultural organisations aim to improve access to resources, training, and markets for African farmers, with a particular focus on empowering women and youth in the agricultural sector.

"By embracing indigenous food systems and promoting local agriculture, we can fight food insecurity and support rural communities and the youth, who are the future of tomorrow," said Nelson Mudzingwa, an agroecology advocate.

"The future of African agriculture lies in our ability to reclaim and cherish our indigenous food and traditional systems."
- Nelson Mudzingwa

By advocating for the value of local produce, the campaign also seeks to strengthen Africa's food economy and reduce dependence on imported food products. Through the support of local chefs, food entrepreneurs and artisans, the campaign creates new markets for African products, boosting local economies and offering opportunities for job creation, particularly for women and youth.

According to Charles Dhewa, the Chief Executive Officer of Knowledge Transfer Africa, many indigenous foods are available in mass markets. This is beneficial as it opens up new economic avenues for agroecological farmers. "There are a lot of indigenous foods in our mass markets, yet there is a need for infrastructural support to stimulate economic activities around agroecological markets," said Dhewa, "Advocating for proper support across the traditional food value chain is critical for the economy and growth of the campaign," he added.

Additionally, the campaign is making strides in advocating for policy changes that prioritise food sovereignty and the rights of African farmers. With the rising dominance of multinational food corporations, many African nations face challenges in protecting local food systems and ensuring that farmers have control over their land and resources. The 'My Food is African' movement calls on governments to strengthen policies that protect smallholder farmers, support indigenous agriculture, and ensure the fair trade of African food products.

The 'My Food is African' campaign is more than just a celebration of African cuisine—it's a call to action. By advocating for cultural heritage, sustainability and economic empowerment, it invites everyone to join a movement that celebrates the diverse, rich and resilient food traditions of Africa. As the campaign grows, it encourages all Africans to embrace their culinary roots, support local farmers and take pride in the foods that are intrinsically tied to their identity.

Ultimately, the My Food is African campaign reminds us all that food is much more than what we eat—it's a powerful tool for change, rooted in culture, sustainability, and the shared responsibility to protect and nourish the land and people for generations to come.

For more information on the campaign and how to get involved, click here.

FOOD & FARMING SYSTEMS

In this section, we explore the diverse approaches to sustainable food and farming systems that are shaping the future of agriculture. From agroecology to regenerative systems, we break down the key principles and practices that contribute to healthier soils, ecosystems and communities. Through showcasing best practice examples from around the region, we highlight innovative solutions that restore and protect the land while ensuring food security. This is an opportunity to learn from those leading the way in sustainable and regenerative practices and to gain insights into how these systems can be adopted and adapted for a more resilient, sustainable food future.

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Rewild Mpumalanga, Transforming Lives and Landscapes

Article by Project Biome

SEF team working in Mashobotho, Mpumalanga, South Africa

Rewilding refers to restoring land to its natural state, often through reintroducing animal and plant species that have been lost or reduced, restoring natural processes to kickstart or boost ecosystem functioning, and repairing damaged ecosystems. In the early scientific understanding of the concept, a landmark scientific paper in 1998 noted three key features of rewilding: "large core protected areas, ecological connectivity, and keystone species". These three 'c's have been complemented by three further 'c's – climate resilience, compassion and co-existence. Read more about these here.

Rewild Mpumalanga, a collaborative initiative led by GeaSphere in South Africa's Mpumalanga province, is rewilding landscapes through clearing of invasive vegetation to rewild lands and rivers and by creating livelihood opportunities. The initiative is supported in its efforts to scale by a range of organisations, including Avovision and Project Biome.

The context for Rewild Mpumalanga

Mpumalanga, in eastern South Africa, is famed for its stunning geography, from dramatic mountain peaks to the expansive Lowveld plains. It borders KwaZulu-Natal, the Kingdom of Eswatini and Mozambique, and is home to significant cultural and natural landmarks, such as the 240-million-year-old Sudwala Caves, the ancient Makhonjwa Mountains and the iconic Kruger National Park, a sanctuary for Africa's Big Five.

However, while half of the province's land remains natural, much of it is ecologically degraded. Mining and commercial forestry have led to habitat loss and water quality issues. Mpumalanga's vital freshwater ecosystems, including more than 150 000 wetlands and key rivers, are crucial to South Africa's water security.

This environmental degradation compounds the hunger crisis in rural areas, where malnutrition contributes to 30% of child deaths under five and 28% of deaths in those aged 40-46. Over 66% of households rely on social grants, with more than half living below the poverty line, and 61% facing hunger and food insecurity.

Rewilding efforts, like Rewild Mpumalanga, aim to regenerate ecosystems, restore soil and waterways, and create sustainable livelihoods, addressing both environmental and socio-economic challenges.

Rewild Mpumalanga's origin story

Rewild Mpumalanga, an initiative by GeaSphere, an environmental NGO, is dedicated to protecting the endangered grasslands and forests of South Africa's Mpumalanga province. GeaSphere originated from a 1999 meeting in Nelspruit, where local stakeholders gathered to address the growing environmental impact of timber plantations. These monoculture plantations of alien species, such as eucalyptus and pine, threaten biodiversity, water resources and ecosystem resilience. Officially registered in 2003, GeaSphere works to mitigate these impacts and protect the region's vital ecosystems. GeaSphere founder, Philip Owen, was inspired to take on this work through his growing realisation of the levels of degradation of the natural landscape.

"We abuse nature to the point where it might not be able to return to a functional state".

GLOBAL CHARTER FOR REWILDING THE EARTH

The International Union for the Conservation of Nature (IUCN) with 150 rewilding experts developed a set of 10 principles to guide rewilding initiatives.

- The ecosphere is based on **relationships**. Widespread societal embrace of rewilding is to accept, celebrate, and activate the principle of 'relationship'.
- Making **hopeful stories come to life**. Storytelling about a more vital future but also about successful projects, empowering others to support and join in.
- Embracing **natural solutions** and thinking creatively. Projects should be ambitious, innovative, proactive, strategic, opportunistic and entrepreneurial.
- **Letting nature lead**. Emphasis on nature's healing powers; interventions should decline over time.
- Working at **nature's scale**. Rewilding can happen place by place and at various scales.
- **Protecting the best, rewilding the rest.**
- **Taking the long view.**
- Building **local economies.** Ensure that new livelihoods and opportunities arise.
- **Recalling ecological history and acting in context**. Based on deep knowledge of eco-cultural history of place.
- Use **evidence-based adaptive management**. Learn from others and use best available evidence and learn from failure.
- **Working together.** Build coalitions and partnerships based on respect, trust and common interest.

Philip notes that as a boy playing in the local rivers, there were “plentiful fish, eels, otters, ducks almost every stone you picked up in the riverbed was home to a crab; today, often when you step into the river, you step into fine mud and silt, evidence of accelerated soil erosion, which is smothering the once abundant aquatic life”.

GeaSphere started Rewild Mpumalanga to combat invasive plants and bush encroachment, to restore the capacity of the natural environment and ultimately to reintroduce appropriate wildlife species. Invasive plants and bush encroachment are major threats to the landscape. “Plants like lantana” (a perennial flowering plant from the verbena family that originates from tropical regions) “are smothering the life out of these mountains”, says Philip.

The project was initially supported by people who are part of the GeaSphere ‘Tribe’ on ClubHouse, a social audio application that GeaSphere uses as an advocacy/networking tool.

A growing rewilding movement

In 2023, Rewild Mpumalanga expanded its impact by partnering with other organisations and individuals, including Project Biome. Project Biome connects socio-ecological organisations, identifying resource gaps and providing technical and managerial support to help scale their rewilding and regenerative efforts. Through this partnership, Rewild Mpumalanga collaborated with AvoVision, which facilitated invasive clearing labour through the government’s Social Employment Fund (SEF), a Presidential Stimulus Package aimed at tackling unemployment in South Africa. In 2024, the first 10 labourers began working with Rewild Mpumalanga. Today, there are 100-odd SEF workers in teams clearing invasive plants across 7 sites.

The initial focus area was the Houtbosloop Valley, but soon the project expanded to include the nearby Schoemanskloof Valley taken up by private landholders and community leaders and in Bushbuckridge, led by existing initiatives such as Ratanang Colab.

Key Partnerships and Collaborations

- **Project Biome** is a global network of change-makers driving regenerative solutions through collaborative innovation and a focus on scaling impactful projects. Its virtual Solutioning Hive addresses economic, ecological and social crises by vetting stakeholders and projects, bringing in capacity and resources to help organisations overcome barriers and accelerate regenerative initiatives. Project Biome is supporting Rewild Mpumalanga with promotion of the project, attraction of strategic stakeholders, training and provision of tools and personal protection equipment.

- **AvoVision** transforms communities through education and business development, empowering businesses to tackle South Africa's challenges of poverty, inequality and unemployment. Their programmes drive socio-economic development, aligned with the UN Sustainable Development Goals and South Africa’s National Development Plan 2030. With expertise in community education and small business development, AvoVision is creating lasting social change across the country AvoVision holds the SEF contract with government and undertakes monitoring and reporting on funds spent in collaboration with GeaSphere.

- At Husqvarna, sustainability is at the core of their mission. This commitment drives their transition to resource-efficient solutions with low carbon emissions, the creation of longer-lasting products, and the promotion of biodiverse initiatives. They are providing Rewild Mpumalanga with high-quality equipment and training, including instruction on chainsaw use.

Geasphere also continues collaborating with forums such as the Schoemanskloof Sudwala Sub-catchment Forum and organisations such as Chimp Eden and Roots and Shoots (both affiliated with the Jane Goodall Institute), Mikon Chickens, among others. They have also established a connection with the IUCN Rewilding Thematic Group and are actively implementing the IUCN Rewilding Principles in their work, serving as a real-world case study.

> *The project goes beyond restoration; it creates jobs, boosts food security and fosters local enterprise through sustainable practices.*
>
> *Our collaborations, like the biochar trial with Mikon Chickens, are helping build a circular economy, while the community increasingly recognises the long-term benefits of a restored environment, from ecotourism to improved agriculture and healthier ecosystems.*
>
> - Philip Owen, GeaSphere

Rewild Mpumalanga founder: GeaSphere: Houtbosloop Valley site

GeaSphere, operating in the Houtbosloop Valley, focuses on restoring natural ecosystems while supporting local communities. Through a combination of rewilding, re-greening, and reconnecting both people and the land, this initiative seeks to reverse the environmental damage caused by decades of invasive plant growth and land use change. By focusing on ecological restoration, it aims to bring back biodiversity, improve soil and water health, and foster sustainable livelihoods.

The focus of the project is the removal of invasive species like lantana and jacaranda, which have overrun large areas of the Houtbosloop valley. These species outcompete native plants, reduce water availability and disrupt the ecosystem, negatively impacting biodiversity and the livelihoods of local communities.

Invasive species not only threaten the environment but also exacerbate poverty by reducing agricultural productivity and access to clean water. Through this work, the project is restoring critical resources and creating jobs, particularly for women and youth, who are most affected by these challenges.

Left: SEF team transporting biomass Right: SEF team ready for action in Houtbosloop Credit: Rewild Mpumalanga

The SEF team working with Ratanang Colab to remove invasive vegetation Credit: Ratanang Colab

Rewild Mpumalanga partner: Ratanang Colab

Ratanang Colab, based in Bushbuckridge, focuses on environmental restoration through land regeneration, agroecology, river health and clearing high-water usage invasive species like lantana camara, black wattle and gum trees. The initiative also addresses water shortages and works to revive medicinal plants.

Ratanang Colab is establishing an agri-hub to train the community in organic food production, composting, biochar, herb cultivation and indigenous knowledge systems. Supported by the Social Employment Fund through Project Biome and AvoVision, Ratanang Colab has made significant progress in reducing invasive species and regenerating native flora.

The project has earned strong community support, with local volunteers participating in clean-ups. Its efforts have raised awareness of environmental and economic challenges in Bushbuckridge, fostering a resilient, empowered community and promoting sustainable development in the region.

> *Rural communities are often the least cared for in this chaotic time of climate change, and they are the ones that need to adapt quicker than others.*
>
> *We need to use natural asset-based approaches to rewild and regenerate landscapes to support livelihoods. From this area, we can showcase how to do it to the rest of the country, and then Africa, and then the world.*
>
> - December Ndlovu, Ratanang Colab

There is a momentum now, a force that is moving, people are so excited because they can see the difference in the landscape. The SEF workers are becoming highly skilled - not just in how to remove invasive plants, but how to spot them and how to navigate wildlife, like beehives and crocodiles! You can see their pride in their hard work. This initiative is making a real difference in the communities in this area.

- Dee Malcomess,
Falls Fish Farm

Rewild Mpumalanga partner: Falls Fish Farm

Having previously worked with Philip Owen on an anti-poaching initiative, Falls Fish Farm readily agreed to assist GeaSphere in their rewilding work into the Schoemanskloof Valley. Lantana, bugweed and black wattle hinder wildlife movement, dry out the land and prevent indigenous species from propagating. While clearing, the SEF team also collects recyclable waste like glass and tins. The team has tackled the significant volumes of roadside litter, organising it into recyclable categories and coordinating with landowners for removal.

Positive community support has followed, with local residents eager to see the team tackle lantana on their properties. Upcoming tasks include clearing road reserves along Weltevreden and Sterkspruit Roads, with landowner cooperation for water, lunch breaks and waste disposal. Challenges include internet connectivity for timekeeping, unpredictable weather, and ensuring water and shade for the team in the hot summer months. Despite these hurdles, the project is making significant strides in clearing invasive species and fostering community involvement.

Clearing invasive plants is hard work! And often Nature provides some unexpected surprises - a crocodile on the way to work or a flooded river to cross! Credit: Rewild Mpumalanga

Indigenous vegetation returning on Klipinnibos Nature Farm

Rewild Mpumalanga partner: ReCover

Recover, located on Klipinnibos Nature Farm in the Mpumalanga mistbelt, is dedicated to restoring the land and ecosystems of the Schoemanskloof Valley. Born from the need to rehabilitate a neglected 60-hectare farm, the project has focused on clearing invasive species and restoring vital wetlands and grasslands. Since its inception in 2019, ReCover has cleared over 17 hectares of invasive trees, actively engaged with neighbouring farms, and initiated successful collaborations with plantation companies to protect water sources and grasslands. The project also supports wildlife, with species like bushbuck, caracal and leopard returning to the regenerating spaces.

ReCover's long-term mission is to restore various biomes, including high-altitude grasslands and Mpumalanga montane forest, through clearing invasives, promoting regrowth and actively reseeding where necessary. Future plans include establishing an indigenous plant nursery and utilising biochar for soil remediation.

> *We need to remove the invasive vegetation to allow for natural rewilding where possible. In some places, this is super quick.*
>
> *Six months after clearing invasive trees in the water line, an old spring started flowing again, rehydrating the soil and filling the irrigation dam. Sometimes though the soil is dead and needs nurturing. I would love to see more landowners get involved with Rewild Mpumalanga, get teams clearing on their lands and enabling large-scale restoration.*
>
> - Lisa Steyn, ReCover

> *This project has not only brought job creation to our community but also opened our eyes to the importance of preserving our environment and making a living through what we once considered waste. The work we are doing is more than just clearing invasive vegetation — it is about restoring hope, creating jobs, and building a future where we can once again thrive alongside nature.*
>
> - Carol Nkalanga, Mashobotho

Rewild Mpumalanga partner: Mashobotho

The Mashobotho team works in the lower Schoemanskloof Valley on land significantly overtaken by invasive vegetation causing water sources to dry up. Water scarcity negatively impacts the community and threatens the survival of livestock and wild animals. GeaSphere connected with Carol Nkalanga, who embraced the opportunity to be part of the Rewild Mpumalanga project. She immediately recognised what it would mean to unemployed community members to have access to dignified work that contributed to solving both environmental and socioeconomic challenges. Specifically, the opportunity the team members would have to upskill themselves and become proficient in environmental services.

Many in the community were unaware of the harm caused by invasive plants or how to differentiate them from indigenous species. Despite ongoing challenges, including the lack of full community support, the long-term environmental changes are evident, and the project is catalysing change. It is raising awareness about the need to preserve the landscape and the associated opportunities to create work opportunities. In the process, the natural balance is being restored, and the community is enabled to develop itself.

Right: Mashobotho SEF team Left: SEF team transporting biomass Credit: Rewild Mpumalanga

GeaSphere Guide To Making Flame-Capped Biochar

Biochar is made by heating organic materials (like wood waste, agricultural waste, or invasive plants) at high temperatures (400-750°C) with minimal oxygen. This process, known as pyrolysis, creates a carbon-rich product that enriches soils, enhances nutrients, and supports soil microorganisms. It is also used to remediate polluted soils, especially those contaminated with heavy metals.

Step 1

Gather the biomass and stack it, allowing it to dry out completely.

Step 2

Chop it into smaller pieces, about 25cm in length and 3cm thick or smaller.

Step 3

Prepare the drum by tilting it and starting a fire at the bottom, adding enough biomass to ignite the flame.

Step 4

Add biomass in layers, waiting for each layer to burn evenly into char (not ash) before adding the next.

Step 5

When the drum is nearly full, carefully tilt it upright and add final layer of biomass. When white ash starts forming, cap the drum with a lid or put the fire out using water.

Step 6

Leave to cool for at least 12 hours. Inspect the biochar and remove any partially charred biomass. Crush the biochar to the size needed for intended use.

WHAT YOU WILL NEED

- Biomass - any kind from garden to agricultural waste.
- Open-topped 55-gallon/220-litre drum (preferably with lid)
- About 30 litres of water.
- Matches/lighter to start fire.
- A spade or fork.

SAFETY FIRST!

- Work in a well-ventilated room or work outside.
- Use heavy-duty gloves and appropriate personal protection equipment.
- Have basic firefighting equipment or buckets of water on hand.

Optional inoculation

If using biochar as a fertiliser, mix it into compost and allow to sit for 1-2 weeks. The biochar will absorb the beneficial microorganisms and nutrients from the compost.

**This guide has been adapted with permission from Geasphere, the original poster can be downloaded here.*

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Challenges faced

The scale at which clearing needs to be done to allow for natural rewilding, or in some cases remedial planting of local species, can be daunting. A mass of ecological workers is needed! Funding the scaling up of the Rewilding Mpumalanga initiative is a significant challenge. Project Biome and AvoVision have contributed meaningfully through the securing of the government contract for the SEF workers, and Project Biome's provision of personal protection equipment (gloves, overalls) and tools, and support in monitoring and reporting. Additional funding is needed for logistics such as dedicated project vehicles, currently project partners are using their personal vehicles.

Successes and achievements to date

The provision of part-time work through the SEF contract has benefitted 100 community members over the past year, and a Rewild Mpumalanga partner notes the difference in the team's confidence, their pride in being part of a team and sense of hope for the future from when they first started. More than 120 hectares have been cleared in less than a year.

"Our rewilding project has made a huge difference in the lives of the entire community. We are better able to put bread on the table for our families and we're protecting our environment. Invasive plants can fuel wildfires, increasing the risks we face. This project has taught us to respect and understand the balance of nature, and how our efforts can help restore it for future generations."
- Angel Maseko, SEF team leader

Other partners noted that scepticism about the project has been overcome through the hard work and discipline shown by the SEF teams, who often are working on private land. Greater social cohesion is being built across socioeconomic barriers, with people increasingly stopping to commend the SEF workers and to provide them with cooldrinks and snacks. There are also additional livelihood opportunities opening up. An opportunity arising from cleared biomass is the production of biochar, which boosts local incomes through sales.

Three artisanal biochar pits have been established, and a recent collaboration with Mikon Chickens to test biochar as a chicken bedding and feed additive highlights how local businesses are embracing sustainable practices. These efforts are fostering a circular economy, where restoration supports local enterprise development.

The return of indigenous plants, particularly medicinal plants, to their traditional habitats is another sign of natural rewilding. And several ancient stone terraces built by the lost Bakoni peoples have been discovered in the invasive vegetation clearing process, sparking pride in preserving this rich heritage.

The project's impact reaches beyond restoration, with community members actively engaging in waste removal and river cleanups. People are recognising the long-term benefits of a restored environment, including ecotourism, better agricultural yields and healthier ecosystems.

"The biggest achievement of Rewilding Mpumalanga is that here, we are walking the talk, creating safe spaces for wildlife and improving community cohesiveness".
- Philip Owen, GeaSphere

Rewild Mpumalanga gained 2nd prize in South Africa's Presidential Awards with the Small Enterprise Development Agency in 2024 as an innovative business addressing climate change adaptation and biodiversity loss.

What's next?

Philip highlights that Rewilding Mpumalanga is expanding beyond its initial focus areas, with plans to refine environmental services and showcase their efficiency. He believes demonstrating the model's benefits for both people and nature can inspire others.

Project Biome's Solutioning Hive is a virtual innovation hub dedicated to uniting diverse expertise—from ecological design and green technology to enterprise development and biomimicry—to unlock the potential for radical, actionable solutions. Email Project Biome to find out more about their work.

YOUTH OUTLOOK

African Leadership Magazine wrote in early 2025 that one of the most overlooked assets in sub-Saharan Africa is human capital. The article notes the median (average) age in the region is just 19.7 years. This is the youngest population on any continent in the world. It is estimated that by 2025 (this year!), that more than 60% of the population will be under the age of 25 years. If supported in making their voices heard and in contributing to the workforce and economy through entrepreneurial activities, youth could help drive economic transformation in Africa.

ISAN Magazine is committed to showcasing the work of young media professionals, sharing stories of young entrepreneurs and opening up spaces where youth can make their voices heard on sustainability matters.

Finding inspiration in the food system Bargnbay, Zambia

By Womba Mufundi, AfriFOODLinks ambassador

Grocery runs can be a chore, but the evolution of technology has made it easier than ever to do our shopping from the comfort of our homes. Enter Bargnbay, a tech startup that has revolutionised the largest traditional food market in Lusaka, Zambia, making it accessible right from your smartphone. I had the opportunity to speak with Silon Banda, one of the four founders of Bargnbay, who manages the day-to-day operations alongside co-founder Twiza Sichula. The idea for Bargnbay emerged during the COVID-19 pandemic when a viral Facebook PDF listing prices at Soweto Market sparked a demand for fresh produce deliveries.

AfriFOODlinks

The AfriFOODlinks project is revolutionising urban food systems from Africa to Europe, with a special focus on empowering young leaders through its Youth Ambassadors Programme. Read more about the project here.

Bargnbay emerged as a solution to address an unprecedented problem in Lusaka's urban food system and inevitably earning themselves 4th place position in the Zambia Information and Communications Technology Authority (ZICTA) Innovation Programme in 2022.

Since its inception in 2021, Bargnbay has provided a unique service, particularly benefiting women with busy schedules and households to manage. The app also boosts the revenue of marketeers by increasing their daily sales through in-app orders.

Silon shared the vision for Bargnbay, which is transforming the market system by digitalising it, linking households and businesses to fresh produce without the hassle of visiting a supermarket. This innovation not only reduces the time produce spends on market stalls, increasing demand and supply for farmers but also significantly reduces food waste.

Their fair pricing system also ensures that vendors and farmers receive fair pricing for their products by eliminating the need for in-market agents and providing a transparent pricing system. Silon envisions increased use of technology among marketeers to enhance sales and expand to other provincial markets. He hopes for formal recognition, seeing the commercialisation of Bargnbay as a viable business that can significantly contribute to the national food supply chain.

Bargnbay is a youth-led tech startup that thrives on the dedication of young people committed to improving the urban food system. Its journey from a pandemic response to a cornerstone of Lusaka's food market is a testament to the power of innovation and community support. By embracing technology, Bargnbay not only eases the shopping experience but also strengthens the local economy, supports small businesses, and promotes sustainable practices in the food system.

Connect with Bargnbay on Facebook or download the app from the Play Store.

BEYOND OUR BORDERS

Across the globe, farmers and communities are pioneering innovative approaches to food production, blending modern techniques with traditional practices to create sustainable, resilient systems. From indigenous knowledge in Latin America to cutting-edge agroecology methods in Asia, and in many countries in Africa beyond Southern Africa, these examples offer valuable lessons for Africa. By integrating cultural wisdom with new agricultural technologies, we can learn from others how to build more sustainable food systems that respect the environment, enhance biodiversity and ensure food security. As we look beyond our borders, we can draw inspiration from these diverse models to strengthen our own farming practices and cultivate a more resilient agricultural future.

Unity, Harmony And Ancestral Wisdom: A Journey To Benin

By Rachel Kearl, Project Biome

At the start of the year, I had the profound privilege of traveling to Benin, Africa to attend the international symposium that the University of Nature hosted at the headquarters of GRABE-Benin ONG. This remarkable organisation, led by Prince Apolinaire Oussou Lio, is dedicated to biodiversity conservation, bolstering indigenous knowledge, empowering youth through education and leadership training, offering deep care for the elderly and orphans, preserving cultural heritage and agricultural practices, and protecting forests and sacred sites. A small group of people, brought together by Rutendo Ngara, co-founder of Earthrise Collective and board member of Project Biome, were honoured to attend and will be forever transformed by this extraordinary experience.

The Convening: A gathering of minds

The University of Nature symposium united an inspiring collective of academics, traditional leaders, community advocates and international delegates from Switzerland, the Netherlands, the United States, Brazil, and beyond. Officially launched with a traditional prayer by His Majesty Zangnigan, King Houekpetodji of Ké in the Ouémé Valley, alongside Cacique Ninawa of the Huni Kui in Acre, Brazil, the event embodied the power of unity across borders and cultures. The topic of the symposium, S*pirituality and Environmental Protection,* was facilitated by luminary scholars such as H. André Degbegni and Hounnongan Missihoun Adjamanwledegbo, inspiring profound discussions.

The symposium focused on four key themes:

- Nature's Teachings through the Wisdom of the Ancestors.
- Contribution of Land Jurisprudence to the Protection of Biodiversity.
- The Spiritual Fâ System & Protection of Nature
- Impacts of Climate Change on Biodiversity.

Traditional music and dance performances punctuated the event, reminding everyone of the rich heritage that binds the community. Various workshops were held, including demonstrations of agroecological practices such as intercropping and composting, which have revitalised local farmlands.

Interactive youth sessions highlighted GRABE's efforts to equip and empower young people with entrepreneurial skills, emphasising eco-friendly enterprises. Panels discussed strategies for mitigating climate change and biodiversity loss in the region. These discussions aimed to generate actionable, scientifically informed solutions rooted in indigenous practice and emphasised that only through unity—of knowledge systems, communities and cultural traditions—can we create and support a thriving world where life is at the centre.

GRABE-Benin ONG

GRABE-Benin ONG is a standout example of this unity in action. It acts in favour of nature and supports indigenous peoples in conserving sacred sites and preserving the knowledge that sustains both the land and its people.

GRABE is committed to the elevation of social development, cultivating environmental awareness in the community and promoting wellbeing for all. Its vision—*To see the planet green and healthy again, with happy days for all existing beings, those of current and future generations*—resonates in a world grappling with ecological challenges.

Prince Apolinaire, BRABE-Benin-ONG

A High Dignitary of the Royal Court of the Tolinou Indigenous community of Benin, Nigeria and the Diaspora and as the president of GRABE-Benin, Prince Apolinaire's leadership and expertise in community development serve as a beacon of hope. As a Naturalist Geographer and expert in Earth Jurisprudence, he advocates for the conservation of natural resources through ancestral knowledge and intergenerational dialogue. His Tree-Life programme focuses on restoring sacred forests, protecting traditional seeds and promoting reforestation.

Prince Apolinaire's work bridges indigenous and modern knowledge, integrating all social strata to create sustainable, holistic solutions. Over the last few decades, an impulse has risen to form a global consensus around the term 'bioregionalism'. This is a philosophy and movement that suggests that political, cultural and economic systems are more sustainable and just if they are organised around naturally defined areas called bioregions.

Bioregions are defined through features, such as watershed boundaries and soil and terrain characteristics. They include cultural input—local communities, knowledge and solutions. Through GRABE-Benin ONG, I witnessed what a true bioregional initiative looks like—rooted in the local, eco-regional wisdom of nature's guardians and adapted for modern impact.

Collective of academics, traditional leaders, community advocates and international delegates from Switzerland, the Netherlands and the United States at the University of Nature symposium, Benin, 2025

What is and has been a way of life for generations in Prince Apolinaire's community is, in fact, the holistic living system based on harmony with nature that the modern bioregionalism movement seeks to understand and emulate.

Beyond the symposium

Our journey took us into the heart of Benin's vibrant cultural heritage. During Voudon Days, we visited neighbouring communities, were welcomed graciously by local kings with traditional food and immersed in ceremonies of music, dance and prayer. Often misunderstood by the wider world, these festivities celebrate the elements of creation with deep respect and honour.

Love is the foundation—love for all expressions of life, love for ancestors, love for benevolent spiritual guides and love for humanity. These celebratory days offer a powerful reminder that unity with the natural world begins with reverence and connection.

The joy and beauty of dance is one powerful expression of this reverence and connection. Dance is in the everyday movement of life and also takes on a sacred role, serving as both prayer and tradition. Movement, rhythm and spirit merge to create an embodied dialogue between the visible and invisible worlds.

My reflections

My visit was a profound experience that underscored the teaching that our path to harmony with nature and the realisation of our true selves lies in coming together—across borders, disciplines and traditions.

It also reinforced the importance of stewardship—not just of natural resources, but also of cultural identity and community resilience. Prince Apolinaire and his team are not just building an organisation; they are nurturing a movement rooted in hope, collaboration and sustainability. As I departed Benin, I carried with me not just memories, but also a renewed commitment to advocate for initiatives that honour the interconnectedness and interdependency of life. GRABE Benin stands as a testament to what can be achieved when vision meets action. If you're planning to visit Benin and want to visit GRABE-Benin ONG, consider connecting with their team where you can also learn more about their projects and how you can contribute to their mission. www.grabebenin.org

Rachel Kearl is the Steward of Soul and Emergence at Project Biome, which seeks to catalyse a global social and ecological movement of human reconnection to planetary regeneration.

In other news about Benin....

Benin was one of nine African countries that the African Union's Ecological Organic Agriculture Initiative worked in to support the uptake of agroecology and organic farming practices. The EOA-I aims to promote sustainable, eco-friendly farming practices across Africa.

The initiative has had a significant impact in Benin, where smallholder farmers have benefited from specialised training in organic plantain farming. Through the support of the EOA-I, the Platform of Civil Society Actors in Benin (PASCiB) has trained more than 300 farmers in advanced farming techniques. These include proper agronomic practices, irrigation methods, plant spacing, and seed multiplication, empowering farmers to enhance both the quality and yield of their crops. As part of the training programme, each of the 300 farmers was tasked with teaching 20 other farmers in their local communities, creating a network of skilled plantain producers. This approach has significantly improved the availability of high-quality seedlings, lowered costs and boosted production. Read more about this initiative in Benin.

Seeds of Change: How Fattoria Roggero Blends Farming, Conservation and Community in Turin, Italy

By Francesca Allemano, AfriFOODLinks ambassador

Today, I would like to tell you about a place I have known since high school: Fattoria Roggero, a family-run farm located in the moraine hills of Rivoli (Turin). This farm, dedicated to beekeeping, biodiversity conservation, and sustainable production, represents a model of connection between agriculture and respect for the environment. My dear friend Claudia Roggero has helped me discover the deeper value of their work. Through the #AfriFOODLinks project, I've had the chance to learn more about Fattoria Roggero's impact and their commitment to making a difference.

AfriFOODlinks

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Beekeeping is central at Fattoria Roggero, not merely for honey but as a vital support for biodiversity. "Bees are essential pollinators, sustaining plant life and our environment," Claudia explains. By placing bees in mountain areas, they promote biodiversity in a chemical-free habitat, ensuring hive health. In collaboration with Coldiretti Torino and the Chamber of Commerce, Fattoria Roggero conduct regular environmental checks to ensure a safe space for the bees.

This focus on biodiversity also benefits food security. Bee pollination enhances crop quality, creating a resilient agricultural system. "With my thesis, I explored how beekeeping and agriculture, though often separate, together enhance sustainability," Claudia shares.

Claudia envisions the future of agriculture in small, multifunctional farms that integrate production with conservation and education.

Education is a key aspect at Fattoria Roggero, which hosts year-round educational activities for children and adults, aiming to promote respect for nature and spread the values of sustainability. "We want new generations to understand that nature doesn't follow the fast pace we often impose," Claudia explains. "For example, through the teaching garden, we teach children the value of time and patience: they plant seeds, transplant, wait for the plants to grow, and discover that not everything is immediate. This concept strongly contrasts with the 'everything now' mentality that characterises our daily lives."

A direct relationship with consumers is another cornerstone of Fattoria Roggero. By offering on-site sales, they allow people to see production up close and make informed choices.

"Educating consumers, especially young ones, is key to fostering responsible food choices," says Claudia. The farm also supports work placement programmes for individuals with disabilities or those facing unemployment, showcasing a strong social commitment. This approach to education for all ages is central to Fattoria Roggero's philosophy, a vision I truly admire.

My conversations with Claudia have been inspiring. Their commitment to beekeeping, biodiversity and continuous education shows that quality goes beyond taste, embracing the ethics and sustainability behind each product.

Here is their Instagram, where they upload pictures of their farm and activities:
#ThroughFood #FOOD2030EU #OurFoodStories #ByYouth #OurFutureOurPerspective #OurFutureOurVoices #YouthIncluded #YouthInIt #FoodFuture #TheFutureIsFood

FARMERS' TIPS & VOICES

In this section, we hear directly from the farmers shaping Africa's agroecology and organic farming landscape. Their experiences, challenges and innovative solutions offer valuable insights for others in the field. From practical tips on sustainable practices to inspiring success stories, these voices highlight the power of local knowledge in building resilient, sustainable farming systems across the continent. Through their firsthand accounts, we explore how farmers are overcoming obstacles such as climate change, market access and soil health, while staying true to agroecological and organic principles. Their resilience and creativity in adapting to new methods and technologies is helping to create a more sustainable future for agriculture in Africa, proving that every small change can have a significant impact on the broader movement.

Seeds: The first betrayal: How farmers lost their freedom and how to take it back

By Charles Ziwa

"The man who cannot save his own seeds has already sold his farm."

There was a time when farmers were the masters of their own destiny. They saved seeds, selecting the strongest, most resilient plants year after year, cultivating crops perfectly suited to their land. But today, most farmers no longer own their seeds—they rent them. Modern agriculture has convinced farmers to trade independence for convenience, urging them to buy hybrid and genetically modified (GM) seeds season after season. What seemed like progress was a slow and calculated betrayal.

The trap of hybrid and GM seeds

The introduction of hybrid and GM seeds was hailed as a revolution—promising higher yields, disease resistance and uniform crops. But hidden within these promises were shackles that few recognised until it was too late:

- Sterile or weak second-generation seeds: Unlike traditional seeds, hybrid varieties do not reproduce true to type, forcing farmers to purchase new seeds each season.
- Patent control: Many modern seeds are patented, making it illegal for farmers to save or replant them without permission from corporations.
- Chemical dependence: GM seeds are often engineered to work with specific fertilisers and pesticides, creating a cycle of dependency on agrochemical companies.
- Loss of local adaptation: Unlike heirloom varieties, hybrid and GM seeds are not naturally adapted to local climates and soils, making crops more vulnerable to environmental changes.

By the time farmers realised the implications, they had already become customers rather than cultivators. If hybrid and GM seeds are chains, then heirloom and landrace seeds are the keys to freedom.

What are heirloom seeds?

Heirloom seeds are open-pollinated, naturally adapted seed, passed down through generations. They carry the strength of the past and the promise of the future. Key characteristics of these seeds:

- They reproduce true to type, allowing farmers to save and replant them season after season.
- They adapt to local soils and climates, producing stronger and more resilient crops.
- They are not owned or patented by corporations —they belong to the farmers who grow them.

What are landrace seeds?

Landrace seeds go even further. Unlike heirloom seeds, which are carefully preserved, landrace varieties continuously evolve, adapting to the conditions of their specific environment year after year. This makes them some of the most resilient and adaptable crops in the world.

Breaking free: the path back to seed sovereignty

- Start saving seeds: Every farmer should master the art of seed saving. The best seeds come from the strongest, healthiest plants—those that have survived drought, pests or disease. These seeds carry genetic wisdom, strengthening future harvests.
- Build seed banks and exchanges: A single farmer saving seeds is powerful, but a community of farmers exchanging seeds is unstoppable. Local seed banks and swaps allow farmers to share knowledge, preserve biodiversity and resist corporate control.
- Support indigenous and traditional seeds: Many heirloom and landrace seeds are disappearing, replaced by uniform, mass-produced varieties. Farmers must actively seek out and plant traditional crops before they are lost forever.
- Reject corporate dependency: Every time a farmer buys patented seeds, they surrender control. The future belongs to those who own their means of production, and that starts with the ability to grow without permission from seed companies.

The future is in our hands

A farmer who cannot save his own seeds does not own his future. The greatest betrayal was convincing farmers that they needed to buy what they once had for free. But the path back to independence is clear—reclaim the power of seed sovereignty.

"The soil still remembers. The seeds still hold the wisdom of generations. And the farmers who choose to listen will once again own their land, their harvest and their destiny."

Fight Fall Armyworm naturally with sand or ash

By Charles Ziwa

Fall armyworm (FAW) first appeared in Africa in 2016 and it has quickly spread across the continent. It is an insect pest originating from the Americas and poses a serious threat to cereal crops, including maize and sorghum. Use of synthetic pesticides to combat FAW has resulted in increased expenses for farmers, growing pesticide resistance, as well as harm to the human health and the environment.

Protect your maize crops the eco-friendly way! Sprinkling ash or fine sand into maize whorls helps dehydrate and suffocate fall armyworm larvae, stopping them in their tracks. This method is affordable, effective and chemical-free—a simple solution for healthier crops.

How sand and ash kill FAW

- Physical abrasion: When applied to the maize whorls (the folded leaves at the plant's center), sand and ash damage the larvae's soft bodies by wearing down their protective outer layer (cuticle). This leads to dehydration and eventual death.
- Blocking movement: The fine particles get into tight spaces where larvae hide, restricting their movement and feeding. This reduces crop damage significantly.
- Choking effect: Sand and ash can clog the larvae's breathing pores (spiracles), suffocating them.
- Drying and dehydration: Wood ash, in particular, absorbs moisture, drying out the larvae and leading to their death.
- Deterrence: The alkaline compounds in ash can irritate or repel larvae, discouraging them from feeding or staying in the whorl.

How to apply sand or ash

- Use best timing: Apply early in the morning or late in the evening when larvae are less active.
- Apply properly: Open the maize whorl and sprinkle a handful of fine sand or ash directly inside. Ensure it reaches deep into the plant where larvae hide.
- Apply frequently: Reapply after rain or heavy dew, as moisture can wash away the ash and reduce its effectiveness.

Why use sand and ash?

- Low cost: Easily available on most farms.
- Eco-friendly: No harmful chemicals, safe for the environment.
- Safe for plants: Won't harm crops when used correctly.

Enhance your pest control strategy

For even better results, combine the sand and ash application with:

- Intercropping to naturally repel pests.
- Early planting to avoid peak pest seasons.
- Biological control methods to sustain long-term pest resistance.
- Weed management to eliminate alternative hosts for the fall armyworm.

By using simple, natural materials like sand and ash, farmers can effectively protect their crops in a sustainable and cost-effective way!

KCOA

Knowledge Centre for Organic Agriculture and Agroecology in Africa

KCOA is a collaborative country-led partnership that aims to scale up the adoption of organic and agroecological farming practices through a network of five Knowledge Hubs in Africa. KCOA partners are based in 18 countries and with the involvement of over 30 civil-society organisations.

Scan to discover more!

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How to turn trash to treasure: Start composting today

By Rabecca Mwila, KHSA Digital Knowledge Officer

The secret behind thriving farms isn't what you think... As concerns over environmental degradation, pesticide resistance and soil depletion grow, farmers worldwide are transitioning from conventional farming to sustainable farming methods such as **agroecology** and **organic farming**.

This blog appears on the Knowledge Centre for Organic Agriculture and Agroecology in Africa (KCOA) knowledge platform. You can access many other blogs and innovative knowledge products by registering for free on this platform. kcoa-africa.org

While some farmers are struggling with rising fertiliser costs and declining soil quality, others are discovering an ancient secret that's transforming their fields: the art of building living soil through composting. The use of locally available farm materials to make compost makes it cost-effective and environmentally friendly.

Does your soil need help?

Take a moment to pick up a handful of soil from your field. Does it feel alive? Is it dark and crumbly, filled with earthworms and natural life? Or is it becoming harder, drier, and less productive each season? The truth is that many farmlands across Africa are losing their natural fertility because:

- Chemical fertilisers are slowly depleting soil life, organic matter, reducing soil fertility over time. This leads to soil compaction, making it harder for roots to penetrate and absorb nutrients.
- Beneficial microorganisms are disappearing. Chemical fertilisers can kill beneficial microbes that help decompose organic matter and improve soil health. A reduction in micro living organisms in the soil weakens the structure of the soil and depletes soil nutrients
- Overuse of chemical fertilisers causes an excess of certain nutrients such as nitrogen and phosphorus while depleting others, leading to soil nutrient imbalance.
- Over time, soils become dependent on chemical inputs, as natural fertility declines.

Why use compost?

- It enriches soil with essential nutrients (nitrogen, phosphorus, potassium) for plant growth.
- It increases organic matter, improving soil texture and structure.
- It enhances microbial activity, promoting a healthy soil ecosystem.
- It provides a natural, slow-release source of nutrients, reducing the need for synthetic fertilisers.
- It prevents soil degradation caused by chemical overuse.
- It helps soil hold moisture longer, reducing the need for frequent irrigation.
- It diverts organic waste (food scraps, crop residues, manure) from landfills.
- It helps reduce greenhouse gas emissions, particularly methane from decomposing waste.
- It lowers the risk of water pollution from chemical fertiliser runoff.
- It reduces carbon footprint by promoting natural soil carbon storage.

Everything you need to create rich, fertile soil is already on your farm. Download the poster guide to composting from Zambia's Kasisi Agricultural Training Centre.

Doing It for Yourself

Carrot & Cowpea Stew (serves 4-6)

By Maureen Vere

Ingredients

- 250g cooked cowpeas
- 2 medium sized carrots – chopped into small cubes
- 1 medium sized onion – finely chopped
- I medium sized tomato – finely chopped
- 3 tablespoons sunflower oil
- ½ teaspoon salt
- 1 teaspoon ground cumin
- 2 cloves garlic – crushed

Instructions

- Place sunflower oil into a medium-sized saucepan on low heat.
- Place chopped onion and garlic into saucepan and stir until soft.
- Add the tomatoes and salt until they are well mixed with the garlic and onion.
- Add carrots and simmer for 5 minutes.
- Add cowpeas and cumin and stir until well mixed.
- Simmer for 10 minutes.
- Serve hot with mashed potatoes, sadza or bread.

Resources & Events

For more information head to: https://agritech-expo.com/

Good Reads

Principles to Practice

Principles to Practice by Kate Massarella, Judith E. Krauss, Wilhelm A. Kiwango and Robert Fletcher (eds.)

This book brings together a diverse group of authors to explore the potential for transforming biodiversity conservation, focusing on one particular proposal called convivial conservation: a vision, framework and set of principles for a more socially just, democratic and inclusive form of biodiversity governance. Read online or download for free here.

The Agroecology Investment Guide

The Agroecology Investment Guide: Why investing in agroecological enterprises makes sense by Biovision Africa Trust

The guide highlights the business case for investing in enterprises that adhere to the 13 principles of agroecology. Its goal is to accelerate the transition toward healthy, equitable, and resilient food systems by mobilizing additional investments into these enterprises through showcasing their social, environmental, and economic benefits and offering insights into innovative funding models. Download it here.

Courses

- **FAO elearning Academy course Agroecology for Africa**

The FAO Plant Production and Protection Division (FAO-NSP) and the FAO eLearning Academy, in collaboration with the Alliance for Food Sovereignty in Africa (AFSA) and the McKnight Foundation, have launched a new certified course: "Agroecology for Africa." This course is designed to strengthen knowledge and skills in agroecology, providing valuable insights into sustainable farming practices tailored to Africa's unique contexts. Click here to enrol.

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