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Faith, food and the future:

Indigenous food systems for
climate and community resilience

A Research Report

About this paper

This paper brings together research, case studies and community voices from across Southern Africa to show how indigenous food systems using agroecological farming methods build climate resilience, strengthen cultural identity and advance food sovereignty. It responds to concerns that industrial agriculture, land dispossession and climate shocks are eroding biodiversity, nutrition and the cultural and spiritual relationships that have long sustained communities.

Drawing on academic research, interviews with community and faith leaders and analysis of policy frameworks, the paper places indigenous food systems at the centre of debates on climate justice, sustainable consumption and cultural resilience. It offers practical recommendations for faith communities, policymakers, farmers and regional actors to protect and revitalise these systems through agroecological practices, knowledge transmission, legal protection and economic support.

Produced for the Southern African Faith Communities' Environment Institute (SAFCEI), a regional multi-faith organisation committed to eco-justice and climate action, the paper affirms that recognising and protecting indigenous foods and the systems in which they are produced is an act of justice for people and the planet. By elevating indigenous food systems, Southern Africa can nurture sustainable, nutritious, equitable and spiritually grounded food systems that honour both heritage and the Earth. This is the first document in a series of three reports on *Faith, food and the future*: Research report, Policy recommendations and Examples of indigenous foods.

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forming the basis of the earlier working paper on which this study builds, for her drawings and illustrations. We also thank Stefanie Swanepoel for bringing all the initial research together, her further research, and the grounding of this paper in science and faith, as well as for her editing work. We are grateful for the active participation of faith leaders in this study, who generously shared their time and knowledge.

The cover photograph used shows Matilda Fakazi, an African Traditional Faith Leader, holding her grandmother Maizie's seeds, an inheritance she now plants with her community in the Western Cape to help feed others.

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Rape Vegetable.

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List of acronyms

AFSA	Alliance for Food Sovereignty in Africa
CBD	Convention on Biological Diversity
CER	Centre for Environmental Rights
FAO	Food and Agriculture Organization (United Nations)
SAFCEI	Southern African Faith Communities Environment Institute
UNDP	United Nations Development Programme
UPOV	International Convention on the Protection of New Varieties of Plants

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Executive summary

Indigenous food systems in Southern Africa hold the keys to climate resilience, food sovereignty and cultural renewal. This paper—*Food, Faith and Future: Indigenous Crops for Climate Justice and Community Resilience*—draws on interviews, participatory research with faith leaders, case studies and a literature review to demonstrate how indigenous food systems offer ecological, nutritional and spiritual alternatives to industrial agriculture and climate-vulnerable food systems.

Indigenous food systems integrate ancestral farming knowledge, drought-tolerant crops, communal seed saving and ceremonial practices that honour land, water and biodiversity. Crops such as sorghum, millet, cowpea, amaranth, marula and Bambara groundnut provide climate-resilient nutrition while sustaining cultural identity and local economies. School feeding programmes using indigenous foods have improved child nutrition by up to 20% in one year, while farmers growing them have reported higher incomes and stronger household food security.

Faith communities emerge as powerful allies, bringing moral authority and grassroots networks to advocacy for land justice, agroecology and seed sovereignty. Linking indigenous knowledge with spiritual values, they can drive policy reforms and public awareness to protect these food systems from threats such as the expansion of industrial agriculture, corporate seed monopolies, restrictive intellectual property laws and climate shocks.

The paper calls for:

- Legal reforms to protect farmer-managed seed systems and communal land rights.
- Investment in agroecology, seed banks, local markets and processing infrastructure.
- Recognition of women's leadership in food and seed systems.
- An acknowledgement of the contribution towards ecological stewardship made by indigenous knowledge systems in the region and the vital relationships between indigenous landscapes, foods, culture and spirituality.
- Integration of indigenous food systems into climate adaptation, biodiversity and nutrition policies.
- Regional cooperation for seed exchange, research and advocacy.

Indigenous food systems offer more than food security—they embody justice, resilience and cultural continuity. Strengthening them is essential for sustainable livelihoods, ecological health and climate justice in Southern Africa.



Pumpkin seeds shared during the seed exchange at the FLEAT III training in Zambia.

Introduction: indigenous and traditional foods in context

Southern Africa faces intertwined crises of climate change, food insecurity and cultural loss driven by industrial models of extraction, production and consumption tied to narrow notions of progress. Indigenous food systems offer rooted, resilient responses grounded in justice, tradition, culture and ecological wisdom – they are the bridge between ecological and human health. They are not only sources of nutrition, medicine and livelihoods; they embody spiritual relationships between people, land, water and seed. Many crops carry ceremonial roles—used in ancestral offerings, rain-petitioning rites and first-fruits festivals—affirming reciprocity and care between communities and the Earth (Constant & Tshisikhawe, 2018; Chirikure et al. 2018). Farming, harvesting and cooking are often accompanied by prayers, songs and rituals, integrating ecological stewardship with moral and spiritual obligations (Mash, 2024). As faith leaders in Southern Africa affirm, these foods connect people to the Creator, to ancestors and to the seasons of life, making their protection a matter of both ecological justice and spiritual duty. Carrying ancestral farming knowledge, agroecological practices and spiritual ties to land, water, seed and community, these systems are not relics of the past but pathways to sustainable livelihoods, nutritious diets and climate-resilient ecosystems.



This paper demonstrates how indigenous food systems—in which food is farmed according to agroecological principles and practices from farm to fork—can help secure climate resilience, biodiversity protection, food and nutrition security and cultural identity. It calls on faith leaders, policymakers, farmers and regional actors to protect and revitalise these systems through agroecological practices, legal recognition, knowledge transmission and economic support. It aims to be a practical tool for advocacy and action aligned with faith communities’ ethical duty to protect life, honour the interconnectedness of creation and uphold justice, compassion and care for vulnerable—including future generations. Industrial agriculture and climate change violate these principles, rupturing humanity’s relationship with land, water, forests and seed. Faith leaders are uniquely placed to mobilise communities to champion indigenous food systems for ecological balance, cultural renewal and climate resilience.

The research combined multiple methods, including a literature review and in-depth interviews with experts and faith leaders on the links between indigenous food systems and health, nutrition, cultural and spiritual traditions and climate resilience. Participatory sessions with faith leaders and surveys gathered perspectives and enabled knowledge sharing around traditional food crops, while experiential research at an indigenous food and seed festival grounded the findings in lived realities. Preliminary findings were presented to faith leaders via Zoom in validation sessions, followed by an online survey for feedback.

Sunflower grown by small scale farmer
Royd Michelo in Chongwe, Zambia.

What are indigenous food systems?

food systems incorporate foraging for and cultivation of indigenous and traditional foods and their preparation, consumption and use for medicinal, cultural and spiritual practices. They are characterised by rich genetic diversity and significant ecological knowledge evolved over—spanning cultivation, storage, preparation and ceremonial use (van Zonneveld et al. 2023).

Indigenous foods originate from specific regions and include wild or semi-wild species foraged or lightly managed for centuries (e.g. baobab, marula) as well as domesticated crops cultivated by African communities over centuries (e.g. sorghum, finger millet) (Akinola et al. 2021). Defined by their African origin, pre-colonial use and cultural significance, they can be classified as conventional indigenous crops when cultivated (e.g. sorghum, cowpeas) and less conventional when left to grow naturally (e.g. calabash) (Akinola et al. 2021).

Traditional foods include both indigenous species and crops introduced through trade, migration or colonisation—such as maize, cassava and sweet potato—that have become naturalised over time, adapting to local ecosystems and woven into traditional seed saving, plant breeding and food customs. Their deep cultural integration over generations means many are now referred to as indigenous foods (Akinola et al. 2021). SAFCEI's faith leaders describe these foods as "seeds of continuity passed through generations" and "foods rooted in the wisdom of elders who understand soils, water and ecological health."

This paper includes indigenous and traditional foods because together they sustain ecosystems, farming practices, cultural identity and spiritual traditions (van Zonneveld et al. 2023). The term indigenous foods is used in the paper to refer broadly to both indigenous and traditional foods produced within indigenous food systems for nutrition, medicine, cultural and spiritual use.

“Eating traditional foods is more than filling the body; it is awakening the spirit. These foods carry the memory of our people—the wisdom of our ancestors flowing through the soil into the grain, the leaf, the root. When we grow, prepare and share foods like sorghum and morogo, we are not only nourishing ourselves. We are calling forth stories, igniting conversations between generations, and remembering the sacred ways of living in harmony with the land and with one another.”

— Matilda Fakazi, African Spirituality Faith Leader, Zimbabwe

Centuries of colonialism and the rise of industrial agriculture marginalised these foods, stigmatising them as ‘poor man’s food’ and eroding the knowledge systems sustaining local diets. Today, more than half the world’s calories come from just three crops—wheat, maize and rice—while 90% of diets rely on fewer than 20 species (Akinola et al. 2020). Reviving indigenous food systems is thus critical for nutrition, food sovereignty, cultural renewal and ecological resilience.

Why indigenous food systems matter

Indigenous food systems link human and ecological health. Research increasingly shows their nutritional, economic, cultural and environmental benefits. As the EAT-Lancet Commission (2019, in SAFCEI 2022) notes, food can be the “single strongest lever to optimise human health and environmental sustainability”—but only if it regains its central role in connecting people, land, culture and spirit.

Nutrition and health

Indigenous food systems globally draw on over 7 000 historically cultivated or foraged species, many rich in protein, vitamins, minerals and fibre, filling nutritional gaps left by industrial staples like maize and wheat (Mgwenya et al. 2025). Crops such as Bambara groundnut, cowpea, amaranth, *morogo* (collective name for wild vegetables) and wild fruits supply essential amino acids, reducing risks of anaemia, childhood blindness and other diet-related illnesses, while school feeding programmes using indigenous crops have improved children’s nutrition by 20% in just one year (Mgwenya et

al. 2025). Many also have medicinal properties, supporting health in the face of rising diet-related diseases (Nepfumbada et al. 2021). But as diets shift from whole grains, wild greens and legumes toward sugar-rich, ultra-processed foods, health outcomes worsen. High sugar intake and industrial diets displace nutritious traditional foods and drive weight gain, stunting, metabolic disorders and escalating rates of obesity, hypertension and diabetes across Africa (Dake, 2021; Popkin & Ng, 2020). Reversing this nutrition transition requires restoring diverse, culturally rooted food systems built on indigenous crops.

Livelihoods and economic justice

Indigenous food systems—from seed saving to processing and marketing—create rural jobs and strengthen household incomes. In South Africa, farmers cultivating indigenous crops reported 25% higher incomes and an 18% drop in food insecurity (Mgwenya et al. 2025). Crops like rooibos, moringa and marula already reach international markets, while other neglected indigenous crops could drive new value chains, local processing industries and women’s economic empowerment—if backed by investment, research and fair market access (Lefebvre et al. 2023). A justice-focused food systems approach goes beyond livelihoods to demand seed and food sovereignty and resist global value chains that extract wealth from local producers. Farm-to-market sales, small trader networks and women-led enterprises retain more value locally, yet formal investment and trade policies still favour export crops and large agribusinesses. Building resilience requires public procurement for schools and hospitals, value addition near farms and market systems that prioritise women and marginalised communities.

Ecological health

Indigenous crops sustain genetic diversity, making farming systems less vulnerable to pests, diseases and climate shocks (Mgwenya et al. 2025). Practices like intercropping, crop rotation and low-input farming maintain soil fertility, conserve water, support pollinators and reduce the need for chemical pesticides (Akinola et al. 2020; Mgwenya et al. 2025). For generations, Indigenous communities have actively managed landscapes for resilience and abundance (Anderson, 2005; Pascoe, 2014).

Climate resilience

Many indigenous crops are drought-tolerant, thrive in poor soils and require fewer external inputs (Mgwenya et al. 2025). For instance,

sorghum uses 30% less water than maize, while cowpea naturally adds nitrogen to the soil—up to 140 kilograms per hectare per year—reducing fertiliser costs and improving soil health (Mgwenya et al. 2025). Their genetic diversity helps buffer food systems against climate extremes (Akinola et al. 2020).

Cultural and spiritual significance

Indigenous foods sustain ceremonies, festivals and ancestral rituals that affirm community identity and values of reciprocity, care and respect for the land. Grown through agroecology, they carry spiritual meaning and preserve intergenerational knowledge for future adaptation (Mgwenya et al. 2025).

“Nature is us and we are nature; land, seed and the food it produces give us what we need to stay alive and healthy; in turn, we need to keep it pure and the spirit in it alive to continue the relationship of reciprocity.”

— Abraham Mnguni, African Traditional Faith Leader, South Africa

Sites of celebration: Indigenous food, culture and identity

Across Southern Africa, indigenous seed and food festivals have become vital spaces for celebrating cultural heritage, strengthening agroecology and defending food sovereignty. Bringing together farmers, elders, youth, activists and policymakers, these events combine storytelling, rituals, seed exchanges and cooking demonstrations with cultural performances and policy dialogues—linking land, food and spiritual traditions.

In South Africa, Zambia and Zimbabwe, recent festivals highlighted women's roles as custodians of seeds and cultural memory, showcased drought-tolerant crops and heirloom recipes and promoted farmer-

managed seed systems as alternatives to industrial agriculture. Agroecology tours, dialogues on seed rights and land justice and youth-led activities connected food heritage with climate resilience, nutrition and local economies. Beyond celebration, these gatherings serve as platforms for resisting corporate control over seeds, restoring ecosystems, and reviving ancestral knowledge. They also create platforms for policy dialogue on seed sovereignty. Zimbabwean farmer, Amina Chiwocha, noted that “we learn about seed restoration and embracing traditional systems as they are better suited to our climate and environment” at these festivals.

Agroecology, indigenous food systems and lived spirituality

Agroecology is a way of farming and managing food systems that works with nature rather than against it, integrating ecological principles, local and scientific knowledge, and low-input methods such as crop diversity and soil care to improve production, protect biodiversity and support healthy communities (Food and Agriculture Organization [FAO], n.d.). Agroecology acknowledges context recognising that different cultures and ecosystems require different application of agroecological practices and principles.

Indigenous food systems are inherently agroecological, aligning closely with the FAO's (n.d) 10 elements of agroecology as they are rooted in ecological knowledge, cultural heritage and community practices:

- **Diversity:** Wide range of crops, wild foods and livestock enhancing biodiversity, diets and ecosystem health.
- **Knowledge co-creation:** Intergenerational knowledge sharing through oral traditions and farmer-to-farmer learning.
- **Synergies:** Intercropping, agroforestry and mixed farming creating beneficial ecological interactions.
- **Efficiency:** Low-input practices like seed saving, organic fertilisation and water harvesting reducing external inputs.
- **Resilience:** Climate-adapted crops (e.g. drought-tolerant sorghum, cowpea) buffering against shocks.
- **Recycling:** Composting, manure use and crop residue recycling enhancing soil fertility and reducing waste.
- **Human and social values:** Food sovereignty, equity, solidarity and women's leadership in seed and food systems.
- **Culture and food traditions:** Foods sustaining ceremonies, rituals, cuisines and cultural identity.

“

Context is everything with indigenous foods. A plant's qualities—whether for nutrition, medicine or anything else—come from the ecosystem where it grows. Knowing a plant in one place doesn't mean you truly know it when it grows somewhere else. That's why it's so important to protect the knowledge about these plants and the lands and waters they belong to.”

– Abraham Mnguni, African Traditional Faith Leader, South Africa

- **Responsible governance:** Community seed banks, customary laws and participatory decision-making protecting land, water, forests and genetic resources.
- **Circular economy:** Local markets and barter systems keeping value chains short and community centred.

Advocating for agroecological frameworks in Southern Africa thus means demanding recognition and support for indigenous food systems as models of sustainability, justice and cultural resilience.



Spinach at the Kapete Ecological Centre, Zambia.

“

Indigenous food is born from the covenant between the Creator, the land and the people. It is not just what we eat but how we honour the Earth that feeds us. It must be grown in ways that protect the soil, heal the water and celebrate the seasons of life. When we farm in harmony with nature, we do more than produce food – we keep alive the ceremonies, the prayers and the sacred bonds that connect our communities to God, to the ancestors and to the living Earth.”

– Matilda Fakazi, African Spirituality Faith Leader, Zimbabwe

Within these systems, land, water and seed are viewed as sacred, so caring for soils, springs and biodiversity is both a material necessity and a moral duty. Indigenous food systems sustain biodiversity, nourish communities and guide ethical relations with nature through rituals, taboos and seasonal practices passed down through generations (Mash, 2024).

Agricultural activities integrate ecology, spirituality and social life through rituals such as Venda's *U saka* ceremony of mixing seeds with medicines before sowing, *U luma* offering first fruits to ancestors before communal consumption affirming reciprocity with land and ancestors and *Thevhula* closing the harvest with thanksgiving and petitions for rain (Constant & Tshisikhawe, 2018); KwaZulu-Natal, South Africa's *Umkhosi Wokweshwama* first fruits ceremony (McAllister, 2004), Zimbabwe's *Mukwerera* rain-petitioning rites (Chirikure et al. 2018) and Zambia's *Kuomboka* festival marking seasonal migrations of the Lozi people (The Editor Zambia, 2025). All of these rituals centre around indigenous food and its preparation. Communal labour traditions like *ilima/letsema* in South Africa and *Humwe/nhimbe* in Zimbabwe blend farming with ritual, shared meals and ancestral offerings, strengthening social ties (McAllister, 2004). Throughout Africa, knowledge passes through storytelling, initiation schools, apprenticeships and seasonal ceremonies (Constant & Tshisikhawe, 2018).

International agreements such as the Convention on Biological Diversity (CBD) highlight the role of indigenous food systems in conserving biodiversity, sustaining livelihoods and upholding cultural rights.



Farmer Royd Michelo mixing azolla with maize to enrich the animal feed with amino acids, vitamins and minerals.

“

Indigenous food and seeds are deeply intertwined with spiritual practices, representing connection, reciprocity, nourishment, ceremony, creation, prayer and gratitude.”

– Dipuo Jose, Christian Faith Leader, South Africa

Women and indigenous food systems

Women are at the heart of indigenous food systems as farmers, gatherers, seed custodians and knowledge keepers (United Nations Environment Programme, 2017; Rural Women's Assembly, 2023). They maintain diverse crops, household seed banks, wild food harvesting and food traditions that sustain nutrition and culture (CBD, 2013).

The concept of rematriation—returning indigenous seeds to their communities of origin—highlights women's roles in preserving seeds, ceremonies and songs sustaining cultural sovereignty (White, 2020; Alliance for Food Sovereignty in Africa [AFSA], 2022).

Unlike repatriation, rematriation restores seeds to reciprocal relationships with communities, ensuring their histories and traditions are reclaimed alongside the seeds themselves (Valeriotte, 2021; Karp, 2025). Its purpose is to “restore human and plant relationships and reconnect with Mother Earth” (Karp, 2025:1).

Yet, despite this leadership, women remain underrepresented in decision-making on land rights, natural resources and climate policy (United Nations Development Programme [UNDP], 2021). Securing land tenure and elevating women's voices are essential for food sovereignty, biodiversity conservation and climate resilience.

Aduscillin Kanyanga Michelo,
Community Faith Leader and
Farmer, Kapete Ecological
Centre, Zambia.



Overview of common indigenous foods

The following section outlines common indigenous foods found in Malawi, South Africa, Zambia and Zimbabwe, describing their production, preparation and use, as well as their documented benefits.

Indigenous foods in Malawi

Malawi is rich in indigenous foods such as sorghum, millet, cowpea, groundnuts, pumpkin leaves, sweet potato leaves, amaranth, blackjack, baobab and tamarind, which have long been central to diets and cultural activities. These foods carry deep spiritual and seasonal significance, marking life stages, harvest celebrations and rainmaking ceremonies. They reflect generations of knowledge rooted in resilience, reciprocity and adaptation to local ecologies.

Indigenous foods in South Africa

South Africa hosts a wide range of indigenous foods—sorghum, millet, cowpea, Bambara groundnut, amaranth, spider plant, marula and Baobab—long central to cultural identity, rituals and communal life. These foods embody a living knowledge system grounded in reciprocity with land, water and seed.

Indigenous foods in Zambia

Zambia is rich in indigenous foods such as sorghum, millet, cowpea, amaranth, spider plant, okra, Bambara groundnut and Chikanda, which have long been central to local diets, cultural rituals and communal gatherings.



Sorghum.

Cultural and ceremonial significance of Bambara nut

In Malawi, Bambara nut is entwined with deeply symbolic beliefs. Amongst other things, it is thought to invite death to a household—yet, paradoxically, women who have already lost a child are believed to be spared further tragedy if they grow the crop, speaking to its layered spiritual significance. It is closely associated with women and carries taboos that influences who cultivates and consumes it. Bambara nut is closely linked to fertility, death, protection, love and traditional medicine (Maphosa & Jideani, 2024).

The cultural connection with sorghum

Sorghum, cultivated in Africa for more than 8 000 years (Pereira & Hawkes, 2024), holds deep cultural and spiritual significance. Among Nguni communities, the *amadlozi* (ancestral spirits) are honoured as mediators between people and God (*uNkulunkulu*), with sorghum beer (*umqombothi*) offered at initiations, weddings, funerals, family gatherings and shrines. Preparing and sharing these foods affirms the sacred bond between people, land, seed and water, linking ancestral respect with care for creation. Brewing *umqombothi* is traditionally done by women, though taboos restrict them during menstruation or pregnancy when their increased 'heat' is believed to disturb fermentation.

These foods carry deep spiritual and seasonal significance, featuring in harvest celebrations, initiation ceremonies and rainmaking rituals that link food production to ancestral stewardship and ecological care. Rooted in generations of farmer knowledge, they sustain food security, cultural identity and community cohesion.

Indigenous foods in Zimbabwe

Zimbabwe's landscapes and traditions are sustained by a diverse array of indigenous crops deeply woven into its cultural and ecological fabric. From nutrient-rich grains to wild leafy vegetables, they support food security, biodiversity and local economies—especially during lean seasons.

Table 1 provides an overview of the benefits, production and preparation of common indigenous and traditional crops found in Malawi.

Table 2 provides an overview of the benefits, production and preparation of common indigenous and traditional crops found in South Africa.

Table 3 provides an overview of the benefits, production and preparation of common indigenous and traditional crops found in Zambia.

Table 4 provides an overview of the benefits, production and preparation of common indigenous and traditional crops found in Zimbabwe.



The original *chilanga mulilo* tradition

Among the Bemba people of Zambia, *chilanga mulilo*—literally 'showing the fire'—was a pre-marriage ritual marking the groom's formal welcome into his bride's family (Simataa et al. 2024). For the first time, he ate food prepared by his future mother-in-law, symbolising trust, respect and family ties. Traditionally involving only close relatives and women trained in marriage customs (*banachimbusa*), the cooking process was accompanied by songs conveying moral and cultural teachings, reinforcing respect, diligence and hospitality (Simataa et al. 2024).

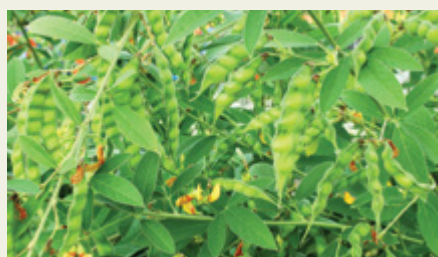


Mukwerera a rain-petitioning ceremony

Mukwerera is a traditional Zimbabwean ceremony calling on the ancestors for rain, led by the *svikiro*, who is believed to intercede with the spirits. When drought threatens, people seek the *svikiro*'s permission to hold the ritual. At sunset, elderly women carry corn porridge (*masvusvu*) and tobacco to the sacred site, offering them to the spirits before returning home. At sunrise, the community gathers to sing and dance under the *svikiros*' direction (Sango, n.d.).

Table 1: Benefits & production of bambara nut, finger millet, pigeon pea and pumpkin, Malawi

Production	Preparation & use	Benefits
	Bambara Nut (<i>Arachis hypogaea</i> L.) Common names: <i>nzama</i> in Malawi (Source, unless cited otherwise, is Crop Trust, n.d.)	
• Grown mainly by women on small, rain-fed household. • Thrives in low-fertility soils with minimal rainfall (300–500 millimetres/year). • Nitrogen-fixing legume that improves soil fertility and suits intercropping with cereals like maize and millet. • Yields: 600–1 000 kilograms per hectare under optimal conditions. • Drought tolerant, pest- and disease-resilient, suited to arid climates.	• Consumed as boiled, roasted and salted nuts, also made into milk, yogurt, butter and cheese (Ngwira et al. 2019) and ground into flour for bread and cakes. • Stalks and groundnut cake fed to cattle (Ngwira et al. 2019). • Preparation methods like boiling reduce anti-nutritional factors. • By-products explored for biofuel and fishmeal production.	• Good levels of protein, essential amino acids, iron, calcium, dietary fibre. • Supports household food security; potential for women's income generation. • Drought tolerant, improves soil fertility, low-input crop ideal for smallholders. • Linked to fertility rituals. • Used for treating ear infections, lung conditions, heart disease, nausea and infertility (Maphosa & Jideani, 2024).
	Finger Millet (<i>Eleusine coracana</i> L. Gaertn) Common names: <i>mchewere</i> (Source, unless cited otherwise, is Ngwira et al. 2019)	
• Grown mainly in plateau areas. • Thrives in sandy loam soils (pH 5.5–7.5), moderate fertility and annual rainfall of ~1 000 millimetres. Highly drought- and salinity-tolerant; matures in 4–5 months. • Traditionally intercropped and resistant to pests and diseases. • Plants are cut at ground level, sun-dried and threshed using sticks or animals.	• Made into flour for porridge (phala), stiff porridge (nsima), pancakes and bread. • Used in traditional beverages. • Recommended for lactating mothers and as a gluten-free alternative.	• High in calcium, iron, protein, fibre and antioxidants; gluten-free. • Linked to reduced risks of diabetes, hypertension and heart disease. • Grown for household consumption and sale; income generation for women farmers. • Reliable yields under low-input and drought conditions; early maturing and suitable for marginal lands.



Pigeon Pea (*Cajanus cajan*)

Common names: *nandola*

(Source, unless cited otherwise, is Ngwira et al. 2019)

- Grown mainly by smallholder farmers for food, cash, and export.
- Accounts for 53% of Malawi's pulse production.
- Intercropped with maize, groundnuts, soybean, cotton or grown in pure stands.
- Deep-rooted, drought tolerant, adapted to low-input systems; fixes nitrogen, improving soil fertility and breaking soil hardpan.

- Consumed as split peas (dhal), whole grains in stews, or ground into flour.
- Provides fodder for livestock after harvest.
- Intercropped systems allow food supply when other legumes are out of season.

- Protein-rich, supports household food security.
- 65% consumed on-farm, 25% exported, 10% sold domestically, key cash crop.
- Improves soil fertility, prevents erosion, adapts to drought conditions.
- Continuous food supply due to multiple harvests per season.



Pumpkin (*Cucurbita maxima*)

Common names: *chibwabwa*

(Source, unless cited otherwise, is Jere et al. 2020)

- Grown widely by smallholder farmers for household consumption.
- Provides multiple food sources: leaves, fruits and seeds.
- Preferred by local communities for taste, availability and health benefits.

- Leaves are cooked with peanut flour to make nkhwani otendera, a popular traditional dish eaten with stiff maize porridge (nsima).
- Fruits consumed as vegetables or cooked into stews; seeds are roasted or eaten as snacks.

- Rich in vitamins (A, B-6, C), calcium, iron, zinc, magnesium and dietary fibre.
- Supports overall immunity and eyesight.
- Preferred over exotic vegetables for flavour and health qualities.
- Easily grown, low-cost, and important for household nutrition security.

Table 2: Benefits & production of sorghum, aramanthus, marula and mopane worm, SA

Production	Preparation & use	Benefits
	Sorghum (<i>Sorghum bicolor</i> (L.) Moench) Common names: <i>amazimba</i>, <i>amabele</i> and <i>mabele</i> (Source, unless cited otherwise, is National Academies of Sciences, Engineering and Medicine, 1996)	
• Cultivated mainly by smallholder farmers under rain-fed conditions. • Can mature in 75 days and produce up to 3 harvests a year. • Traditionally intercropped with legumes that fix nitrogen, improving soil fertility and enhancing yields, ensuring dietary diversity. • Seeds typically managed through communal saving and sharing, maintaining diverse local varieties.	• Ground into flour for soft or stiff porridges (<i>sadza</i>, <i>nshima</i>, <i>bogobe</i>), flatbreads, pancakes or boiled whole like rice. • Brewed as traditional beers (<i>umqombothi</i>, <i>doro</i>, <i>chibuku</i>) and into non-alcoholic drinks (<i>mahewu</i>, <i>togwa</i>). • Grains roasted or popped like popcorn; some varieties chewed fresh or processed into syrups. • Stalks/ leaves used for fodder, fuel and building materials.	• Yields more food energy per unit of effort than almost any other grain. • Thrives in marginal soils, is highly drought tolerant because of deep roots, dormancy during dry spells and in-built moisture-saving mechanisms like leaf rolling. • Resilient under heat and variable rainfall and, intercropped with cowpea, contributes biological nitrogen, ground cover and system diversity (Namatsheve et al. 2020). • Higher protein content than maize and less fat, high antioxidant and anti-inflammatory properties (Pereira & Hawkes, 2024).
	Aramanthus (<i>deflexus</i>, <i>thunbergia</i> most common) Common names: <i>morogo</i>, <i>imifino</i>, <i>morotho</i>, <i>lerothe</i>, <i>murudi</i> and <i>pigweed</i> (Source is Mashamaite et al. 2022)	
• Indigenous leafy vegetable found across sub-Saharan Africa. • Grows in diverse conditions—backyards, fields, disturbed soils—and tolerates drought, heat and poor soils. • Propagated from seed; usually gathered wild or semi-cultivated, with low formal investment limiting wider production. • Considered a 'climate-smart' crop with potential for use on marginal lands.	• Leaves and young shoots are harvested 4–6 weeks after germination. • Eaten boiled or stewed like spinach, often with tomato, onion or groundnut, and served with maize or sorghum porridge. • Leaves are sun-dried for preservation; fermented or pickled in some regions.	• High in vitamins (A,C), protein, fibre, calcium, iron and antioxidants. • Traditional uses include treating fever, anaemia, diabetes and infections; bioactive compounds show anti-inflammatory, antioxidant and antimicrobial properties. • Drought-tolerant, pest-repelling properties, supports biodiversity; grows with minimal inputs.



Marula (*Sclerocarya birrea*)

Common names: *morula*, *mufula*, *ukanyi*

(Source, unless cited otherwise, is Hlangwani et al. 2023)

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|---|---|---|
| <ul style="list-style-type: none"> • Thrives in sandy loam soils, bushveld and savanna, often alongside acacias and baobabs (SouthAfrica.co.za, n.d.). • Most fruit is still harvested from wild or semi-wild trees. • Blooms September–November; fruit ripens December–June depending on region (SouthAfrica.co.za, n.d.). • Mature trees yield up to 500 kilograms of fruit annually, with higher yields from older trees. • Fruits and leaves provide food for elephants, giraffe, kudu and other wildlife (SouthAfrica.co.za, n.d.). | <ul style="list-style-type: none"> • Eaten fresh or processed into juices, jams, syrups, chutneys, beer (<i>byala vutshila</i>, <i>mphahlo</i>), wines and liqueur. • Seeds/nuts are eaten directly or cold-pressed for oil, used in cosmetics and cooking, and traded globally. • Bark is boiled for cleansing steam, pulped for treating dysentery, used in malaria prevention, and brewed as a tea or coffee substitute; leaves chewed to ease heartburn (SouthAfrica.co.za, n.d.). • Soft wood carved for utensils; bark produces rope and dye. | <ul style="list-style-type: none"> • Fruit has six times the vitamin C of oranges, and is rich in fibre, minerals, amino acids; nuts high in protein and healthy oils. • Bark contains antihistamines; used to treat infections, diarrhoea, malaria, heartburn; leaves and fruit applied in traditional remedies. • Supports local and commercial trade; source of income for women; industries in cosmetics, beverages, carvings and dyes. • Contributes to biodiversity and feeds a wide range of wildlife (SouthAfrica.co.za, n.d.). • Central to fertility practices, gender rituals (<i>Venda</i>), and identity across South Africa, Botswana and Namibia. |
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Mopane Worm (*Gonimbrasia belina*)

Common names: *masonje* in South Africa

(Source: Nemadodzi et al. 2023)

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|---|---|--|
| <ul style="list-style-type: none"> • Harvested twice yearly in southern Africa from specific trees, usually in December–January and March–May, collected by hand at the late larval stage. Collection and trade move from rural gatherers to distributors and local or urban markets. Growing demand has led to imports from neighbouring countries. | <ul style="list-style-type: none"> • Commonly degutted, boiled, sun-dried and stored for months. Sold in bulk or small packets. • Cooked in stews and relishes served with staple porridges or ground into flour for nutrient-dense complementary foods. • Widely traded in informal markets and increasingly available in supermarkets. | <ul style="list-style-type: none"> • Protein- and fat-rich; key minerals and vitamin B. • High in polyunsaturated fats; good potassium-to-sodium ratio for heart health. • Long-lasting and nutrient dense. • Major rural income source, especially for women. • Encourages host tree conservation but vulnerable to overharvest. |
|---|---|--|

Table 3: Benefits & production of cowpea, okra, spider plant and chikanda, Zambia

Production	Preparation & use	Benefits
	Cowpea (<i>Vigna unguiculata</i> (L.) Walp) Common names: <i>likhobi</i> (Lozi), <i>nkhaka</i> (Bemba), <i>khobwe</i> (Nyanja) (Source: Mwila et al. 2022)	
• Grown mainly by smallholder farmers. • Thrives in low-input systems, tolerates poor soils and dry conditions, and improves soil fertility through nitrogen fixation. • Grown intercropped with maize, sorghum, groundnuts and other staples. • Prioritised in Zambia as a key crop for diversification and climate resilience.	• Leaves cooked as a relish, often with groundnut paste. • Grains boiled or processed into flour for traditional dishes. • Young pods eaten fresh as vegetables. • Residues used as animal fodder, supporting dairy and cattle rearing systems.	• Provides protein, iron, vitamins and micronutrients critical for household nutrition. • Dual-purpose varieties offer food, fodder and soil fertility benefits. • Contributes to climate adaptation and sustainable farming systems through intercropping and crop rotation. • Supports dietary diversity and reduces dependence on maize.
	Aokra (<i>Abelmoschus esculentus</i>) Common names: <i>delele</i> (Source: Elkhailifa et al. 2021)	
• Cultivated by smallholder farmers across Zambia, especially in warm, lowland areas. • Thrives in well-drained soils with minimal inputs, drought- and heat-tolerant. • Often intercropped with maize, sorghum or groundnuts to optimise land use. • Increasingly promoted for climate-resilient farming and nutritional diversification.	• Fresh pods cooked into soups and stews, valued for their thickening properties. • Dried pods ground into powder for off-season use. • Leaves sometimes eaten as vegetables; seeds occasionally roasted for oil extraction.	• Rich in vitamins (A, C), folate, calcium and dietary fibre. • Mucilaginous properties aid digestion and are used in traditional medicine for gut health. • Provides income opportunities through fresh and dried produce markets. • Drought tolerance and low-input requirements make it ideal for smallholder farmers facing climate stress.



Spider Plant (*Cleome gynandra*)

Common names: *Lulamba*

(Source: Chatara et al. 2023)

- Grown widely by rural households across Zambia, often in backyard gardens or intercropped with cereals.
- Tolerant to drought and poor soils, regenerates easily after harvesting, and needs minimal inputs.
- Seeds are traditionally saved and exchanged among women farmers.

- Leaves cooked fresh or dried for later use, often with groundnut paste or tomato-based sauces.
- Consumed as a vegetable relish alongside staple cereals like nshima (maize porridge).

- High in vitamin A, calcium, iron and antioxidants, addressing micronutrient deficiencies.
- Traditionally valued for medicinal properties, boosting immunity and treating fatigue.
- Supports household nutrition during the dry season when other vegetables are scarce.
- Provides women farmers with local income.



Chikanda (*Disa, Habenaria, Satyrium varieties*)

Common names: *African polony, Terosina*

(Source: Gattuso, 2019)

- Harvested from wild orchid species in Zambia's Miombo woodlands.
- Traditionally collected by rural communities, though concerns over overharvesting have prompted calls for sustainable management.
- Some initiatives exploring community-based cultivation to reduce pressure on wild populations.

- Dried tubers ground into flour, mixed with peanuts and spices, and cooked into a loaf-like delicacy known as 'African polony'.
- Consumed during ceremonies, communal gatherings and increasingly sold as street food in urban areas.

- Significant cultural heritage food linking forests, nutrition and identity.
- Provides livelihoods for rural harvesters and traders, especially women.
- Offers potential for eco-friendly enterprises if sustainably managed.
- Raises awareness about conservation needs for Miombo woodland ecosystems, but significant threat of overharvesting.

Table 4: Benefits & production of teff, sugar plum and termite mushrooms, Zimbabwe

Production	Preparation & use	Benefits
	Teff (<i>Eragrostis abyssinica</i>) (Source: Icon Foods International, 2025)	
• Teff is an annual summer crop widely grown for both human consumption and livestock feed. • Best planted between September and November when soil temperatures reach 15°C. • Highly adaptable, growing in most soils but sensitive to heavy clay soils. • Nutritional requirements are low. • Teff can be cut two to three times per season for hay production. • Thrives in diverse soils and growing conditions, offering flexibility for smallholder and commercial farmers.	• Ground into flour for flatbreads, porridges and baked goods. Naturally gluten-free, making it suitable for diverse diets. • Cultivated as a top hay crop for livestock, popular for grazing, haymaking and wrapped silage. Drying and baling take only a short time after cutting, reducing the risk of weather damage. Teff hay protein levels range between 15–25% depending on the growth stage.	• Contains 11% protein, higher than rye, sorghum and brown rice, with high lysine content important for energy conversion, collagen formation, calcium absorption and lowering cholesterol. • Rich in calcium and iron; 100 grams of teff bread provides about 45% of daily iron needs. • High in insoluble fibre supporting digestion, gut health and acts as a prebiotic feeding beneficial gut bacteria. • May reduce risks of heart disease, bowel disease, kidney disease and type 2 diabetes.
	Sugar Plum (<i>Uapaca kirkiana</i>) Common names: <i>nsuku, mazhanje, chilundu, muhaka, kabofa, mazanje, umhobohobo, mpotopoto, mahobohobo</i> (Source: Wellsforzoe, n.d.)	
• Evergreen or semi-deciduous tree reaching up to 12 metres in height. • Indigenous to Africa and widely cultivated in local agroforestry systems. • Forms a mutual association with mycorrhizae, improving soil quality and preventing erosion on hillsides. • Termite-resistant wood suitable for long-term growth and multipurpose use.	• Fruits eaten fresh, sold widely in local markets, brewed into wine, or made into cakes that are fried and eaten. • Root infusions prepared to treat indigestion and dysentery. • Roots produce a blue dye; wood used for carpentry, charcoal production and fencing.	• Juicy, honey-like fruit provides an important seasonal food source and income for rural households. • Supports local markets through fruit sales, wine production and value-added products. • Supports traditional healthcare practices for digestive issues. • Enhances biodiversity, soil fertility and sustainable farming systems.



Termite Mushrooms (*Termitomyces schimperi*)
(Source: Naturally Zimbabwe, 2025).

- Termitomyces mushrooms can only be harvested, not planted and cannot grow without termites that cultivate them underground in ‘fungal gardens’. - Mushrooms appear after the first rains, coinciding with termite swarming, often emerging overnight in large numbers. - Harvesting occurs in mid-January; mushrooms appear suddenly and must be picked promptly before they deteriorate or are eaten by insects.	- Tough roots and central hard caps are removed before cooking or preservation. Traditionally fried in oil, grilled, boiled in salted water before sun-drying, or preserved by freezing after light frying. Drying allows long-term storage without electricity, although it alters flavour. - Enjoyed fresh or in stews and soups.	- High in protein, carbohydrates, fats, vitamins and minerals, making them a nutrient-rich food source. - Provides essential vitamins and minerals for balanced diets and improves household nutrition. - Offers seasonal, accessible and protein-rich food for communities with limited access to meat or commercial protein sources. - Maintains termite–ecosystem relationships and supports biodiversity.
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See SAFCEI’s 2025 publication—*Faith, food and the future: Indigenous crops – production, use and benefits*—for more on indigenous crops, their production, use and benefits in the region.

The varied and significant benefits of indigenous and traditional food systems provide an appropriate and much-needed response to climate change.



Non-GMO Organic Maize Seeds.

Climate change, food systems & indigenous resilience

Southern Africa is one of the world's climate crisis hotspots. Despite contributing little to global greenhouse gas emissions, the region is already experiencing rising temperatures, prolonged droughts, extreme weather events and biodiversity loss at nearly double the global rate (Scholes & Engelbrecht, 2021). Industrial agriculture, fossil fuel use, deforestation and urbanisation drive much of this crisis, while the global North remains responsible for the majority of emissions (Centre for Environmental Rights [CER], 2024). Low adaptive capacity magnifies the risks. Many countries face chronic food insecurity—with more than 50% of people in some areas experiencing hunger or malnutrition, alongside deep socioeconomic inequalities, water scarcity and informal infrastructure (SAFCEI, 2022). Women bear an unfair burden: denied secure land rights and income opportunities yet responsible for household nutrition, they are often the first to confront climate shocks and food shortages (UNDP 2021; Southern African Development Community 2022).

Industrial food systems compound these vulnerabilities. Maize—the region's primary staple—is highly susceptible to heat and drought, while livestock production faces declining meat, milk and wool yields under rising temperatures (Scholes & Engelbrecht, 2021). The Intergovernmental Panel on Climate Change warns that even 1.5–3°C of warming risks severe disruption or collapse of these systems (Scholes & Engelbrecht, 2021). Industrial farming also drives biodiversity loss, soil degradation and dependence on global supply chains vulnerable to conflict, price shocks and extreme weather (FAO, 2025).

Indigenous food systems for mitigation and adaptation

Indigenous and traditional food systems offer a multidimensional response to these intertwined crises. Rooted in agroecology, they rely on practices such as intercropping, seed saving, soil regeneration and rainwater harvesting

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Indigenous foods have more resilience to climate change, meaning that a shift towards indigenous food and systems means sustainable and resilient ways of solving the food crisis. ”

– Mu-Aalima Amyna, Muslim Faith Leader, South Africa

(Constant & Tshisikhawe, 2018; Ngongoma & Mbulawa Interview).

- **Mitigation:** Indigenous foods often grow in intact ecosystems or low-input systems needing little fertiliser, pesticides or mechanised tillage—all major greenhouse gas sources (Ngongoma and Mbulawa Interview). Localised food systems also cut emissions from fertilisers and long-distance transport, strengthening climate adaptation and reducing fossil fuel dependency (Ngongoma & Mbulawa interview).
- **Adaptation:** Drought- and heat-tolerant indigenous crops succeed in marginal lands unsuited to commercial staples, strengthening food security as climate shocks intensify (Lefebvre et al. 2023; van Zonneveld et al. 2023). Many can be replanted each season, reducing dependence on costly hybrid seeds and agrochemicals.
- **Resilience:** Indigenous farming integrates ecological knowledge, seasonal cycles and rituals, sustaining soils, water systems and biodiversity while diversifying diets to address malnutrition and micronutrient deficiencies (Constant & Tshisikhawe, 2018; van Zonneveld et al. 2023).

Climate justice and sustainable consumption

Indigenous food systems embody climate justice because they serve those least responsible for emissions, yet most affected by climate shocks—rural communities, women

and smallholder farmers. They also offer a reimagining of sustainable consumption for contexts marked by scarcity rather than excess.

The concept of sustainable consumption emerged in the global North after World War II, as rising production and consumerism collided with ecological limits, leading to frameworks such as the UN Sustainable Consumption and Production Agenda (1994) and the 2030 Sustainable Development Goals. However, in Southern Africa, where more than 50% of people in some countries face chronic food insecurity (SAFCEI, 2022) and the region carries a disproportionate burden of climate change (CER, 2024), sustainable consumption cannot simply mean 'consuming less'. For millions, the challenge is having enough to eat, enough income, enough water, enough security—not overconsumption.

Here, sustainable consumption must mean sufficiency with dignity: ensuring access to nutritious, culturally meaningful food while minimising ecological harm and strengthening

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Indigenous food can help to store carbon as they are available on the land without disturbing the ecosystem; they can mitigate the impact of climate change. ”

— Mxolisi Ngongoma, Christian Faith Leader, South Africa

local resilience. It calls for shifting power away from industrial agriculture, urban-centric markets and Western consumer ideals that drive extraction, waste and inequality. Rooted in climate justice, it recognises that those least responsible for ecological harm face the highest risks with the fewest resources to adapt. Indigenous food systems offer this alternative vision: one grounded in reciprocity, balance with nature, cultural connection and collective stewardship, where consumption is not about individual excess but about sustaining life, ecosystems and future generations.

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A good life within planetary boundaries is living in harmony with Earth's natural system, ensuring social justice, and fulfilling human well-being. Indigenous food practices foster reciprocal relationship with nature, honouring the land and acknowledging the sacredness of food. ”

— Dipua Jose, Christian Faith Leader, South Africa



Elevated flower bed at Kasisi Agricultural Training Centre in Zambia.

Policy and Governance landscape

Existing international, regional and national frameworks offer powerful entry points for advancing indigenous food systems—if they are strategically mobilised. Advocates can use these policies to frame indigenous foods as essential for achieving multiple policy goals, from food and nutrition security to climate resilience, biodiversity protection and cultural rights. For example, linking indigenous seed systems to the **United Nations Declaration on the Rights of Peasants** or the **African Model Legislation on the Protection of Local Communities** grounds advocacy in legally recognised rights to land, seeds, and traditional knowledge. Similarly, the **FAO International Treaty on Plant Genetic Resources for Food and Agriculture** and the **Committee on World Food Security Guidelines** provide mechanisms to push for the protection of farmers' seed-saving practices and the inclusion of indigenous crops in food security programmes.

Policies can also be used to challenge harmful regulations, such as the UPOV 1991 framework (see below), which restricts seed sharing and undermines communal seed systems. By contrasting this with rights-based frameworks like **United Nations Declaration on the Rights of Indigenous Peoples** and the **Voluntary Guidelines on the Right to Food**, advocates can call for reforms that prioritise smallholder farmers, biodiversity and cultural heritage over corporate seed monopolies.

At the regional level, frameworks like the **Comprehensive Africa Agriculture Development Programme 2026–2035**, the **Southern African Development Community's Food and Nutrition Security Strategy**, and the **Pan-African Parliament Model Law on Food and Nutrition Security** can be used to argue for budget allocations, school feeding programmes, and climate adaptation plans that integrate indigenous crops. Aligning indigenous food systems with **Agenda 2030's Sustainable Development Goals**—such as Zero Hunger, Climate Action and Life on Land—can further strengthen advocacy by positioning indigenous foods as a solution to global crises.

Finally, advocates can use these policies to mobilise multi-sectoral coalitions, linking food, health, education, environment and trade actors around shared goals. This creates opportunities to embed indigenous food systems in climate adaptation plans, public procurement policies and biodiversity strategies, ensuring they receive funding, research support and public recognition.

See SAFCEI's 2025 publication—*Faith, food and the future: Policy pathways for ecological justice through indigenous food systems*—for more on supporting and hindering policies for indigenous food systems.



FLEAT Zambia III participants.



Pumpkin at Kasisi Agricultural Retreat Centre in Zambia.

The International Convention for the Protection of New Varieties of Plants (UPOV)

was designed by European governments and breeder associations to grant exclusive rights to plant breeders over new varieties, aiming to incentivise research and innovation. While the 1978 version allowed limited farmers' rights—such as saving and exchanging seeds—the 1991 revision drastically curtailed these, cementing benefits for private-sector breeders and marginalising smallholder farmers who have long sustained agrobiodiversity (AFSA, 2024). UPOV 1991 grants breeders 20+ years of exclusive control over propagating material, limits farmers to replanting on their own land

(with no sharing or exchange), imposes high registration fees, and requires varieties to meet strict criteria of distinctiveness, uniformity and stability—criteria ill-suited to genetically diverse, climate-resilient indigenous seeds (AFSA, 2024) that form the basis of indigenous food systems. It also fails to require disclosure of genetic material origins, raising risks of biopiracy. For Africa's indigenous food systems, this threatens seed sovereignty, biodiversity and climate resilience by sidelining communal seed networks, promoting monocultures and concentrating control in corporate hands (AFSA, 2024)—undermining the cultural, spiritual and ecological relationships embedded in indigenous food systems.

Challenges for indigenous food systems

Demonstration of how to create and maintain a flower bed at the Kasisi Agricultural Training Center, Zambia.



Despite their evident ecological, nutritional and cultural value, indigenous food systems in Southern Africa face multiple threats:

- **Corporate control and land dispossession**

marginalise these systems as multinational seed and agribusiness corporations drive policies favouring industrial agriculture, synthetic inputs and export crops over traditional smallholder systems (Mkindi et al. 2020; AFSA, 2024). The Gates Foundation-backed Alliance for a Green Revolution in Africa, for example, has entrenched corporate power (Mkindi et al. 2020) and projects like Canadian oil and gas company, ReconAfrica's, have been accused of land grabbing in their prospecting of the Okavango Delta in Northern Namibia, disrupting local people's land use, affecting small scale agriculture, water ways and forests (Groenendal, 2021). This erodes not only land access but also gouges out the knowledge and cultural systems underpinning indigenous food systems.

- **Policy silos and low political priority**

marginalise drought-resilient indigenous crops, as agriculture, health, environment and climate policies remain fragmented and focus on industrial 'climate-smart' solutions instead (Mgwenya et al. 2025). Investment in research and development is minimal—and often extractive—while subsidies and research agendas largely exclude indigenous crops. A lack of storage, processing and market infrastructure further limits their uptake (Mgwenya et al. 2025).

- **Market and awareness barriers:** Weak markets, low consumer awareness and limited processing infrastructure undermine production viability. Most indigenous and traditional crops remain for subsistence only with limited opportunities for value addition or urban market penetration (Mgwenya et al. 2025). Seasonal availability and sometimes reliance on wild harvesting equates to inconsistent supply to markets

designed around all-year supply (Mgwenya et al. 2025). Also imported and industrially produced foods often undercut indigenous products on cost and shelf life (Mgwenya et al. 2025), as they tend to externalise environmental and social costs.

- **Erosion of indigenous knowledge:**

Colonialism, missionary activity and modern education have disrupted intergenerational knowledge of seed saving, rituals and sustainable harvesting, weakening the cultural systems that sustain biodiversity and food security. Limited documentation of their benefits and use compounds this problem (Mgwenya et al. 2025).

- **Perceptions:** Colonisation entrenched perceptions of indigenous and traditional foods as “poor people’s food”, creating a legacy of stigma and status bias that persists today (Mgwenya et al. 2025). Some crops have even been classified as weeds, while westernised diets, loss of culinary knowledge and youth preferences for commercial staples over the bitter taste of many wild vegetables have further displaced traditional diets.

- **Urbanisation and the nutrition transition:**

Urbanisation is reshaping what people eat and how they view food. As more families move to cities, traditional foods are being pushed aside for convenience and modern tastes. Studies show increasing rural-to-urban dietary shifts in Sub-Saharan Africa: for instance, staple foods and leafy vegetables are consumed less often, and diets lean more toward refined grains, fast foods and convenient snacks (Dake, 2021). Ultra-processed foods—white bread, chips, biscuits, sweets, sugary drinks and cakes—are high in salt, sugar and unhealthy fats but low in nutrients. Their growing popularity, driven by ‘Big Food’ multinationals, supermarkets and fast-food chains, has transformed diets, especially in urban areas. With migration, younger generations grow up separated from elders and land, so knowledge of wild foraged foods, seasonal harvesting, seed saving and traditional cooking is lost. Sometimes they view ancestral practices as outdated, eroding cultural continuity and ecological ethics (Barnwell et al. 2021).

- **Risk of co-option and unsustainable use:**

Without systemic change, promotion and scaling of indigenous food production risk these foods being commodified through monoculture production or as export-driven ‘superfood’ markets, making them inaccessible to local communities and eroding cultural ties (Ngongoma & Mbulawa interview; Kesselman interview).

“ We need to grow more indigenous food in large quantities so that they can be available and easily accessed and affordable by the local people. ”

— Theresa Nanyangwe, Christian Faith Leader, Zambia



Seed bank at Kasisi Agricultural Training Centre, Zambia.

Recommendations

For faith leaders and eco-justice communities

Faith communities can play a critical role in promoting indigenous foods, agroecology and climate justice through teaching, advocacy, land stewardship and collaboration at multiple levels.

Awareness, teaching and advocacy

- Integrate indigenous foods, food sovereignty, climate justice and agroecology into sermons, prayer gatherings, awareness campaigns and media outreach.
- Link extreme weather events to the need for climate-resilient indigenous crop and use faith leaders' influence to advocate for equitable land reform, seed sovereignty and sustainable food systems in all government forums.
- Co-host interfaith summits and dialogues to develop strategic roadmaps, toolkits and joint statements on agroecology and the harmful impacts of industrial food systems.
- Develop multimedia campaigns and cooking demonstrations to familiarise consumers with preparation methods and nutritional benefits of indigenous crops (Shelembe et al. 2025).

Practical actions at local and organisational levels

- Establish seed- and knowledge-sharing networks, community seedbanks and farmer training programmes on seed saving, agroecology and indigenous food systems.
- Offer indigenous foods at congregational events, revitalise food-related ceremonies and model healthy, culturally rooted diets.
- Make faith-owned land available for small-scale agroecological cultivation, farmers' markets and local food initiatives.
- Support local procurement from small-scale agroecological farms and lobby for better conditions for small traders and informal markets.
- Facilitate intergenerational knowledge transfer through community workshops, storytelling and ritual practices (Constant & Tshisikhawe, 2018).

- Encourage school and household gardens to increase children's exposure to traditional foods and farming practices (Shelembe et al. 2025).

Strategic alliances and policy engagement

- Partner with food sovereignty and climate justice movements to strengthen advocacy for indigenous food systems.
- Engage governments to regulate seed and agrochemical industries, protect community knowledge from biopiracy and support climate adaptation strategies centred on indigenous crops.
- Advocate for funding, policy coherence and training to scale indigenous food systems, ensuring women and marginalised groups have equitable access to land, resources and decision-making.

Sustainable livelihoods and climate adaptation

- Mobilise donor funding and partnerships for sustainable employment in recycling, upcycling and ecological restoration.
- Promote initiatives that integrate food, land, and climate justice with income generation and local economic resilience.

For policymakers

Evidence, data and policy integration

- Gather evidence on biodiversity, nutrition and economic contributions of indigenous and agroecological food systems.
- Integrate indigenous foods into climate adaptation, food security, biodiversity and nutrition strategies.

Legal and institutional reforms

- Reform seed laws to protect farmer-saved seeds, prevent UPOV 1991 adoption and secure community control over genetic resources.

- Protect farmers' rights to save, exchange and market seeds and ensure meaningful participation in policy processes.
- Incorporate gender perspectives into laws and policies, protecting women's rights to land, seeds and indigenous knowledge.

Funding, infrastructure and incentives

- Allocate public funding for agroecology training, extension services, research and infrastructure, including processing technologies and storage.
- Strengthen local markets through dedicated trading spaces, price support mechanisms and links to institutional buyers such as schools, hospitals and prisons (Shelembe et al. 2025).
- Develop structured training programmes on indigenous crop cultivation, intercropping and agroecological techniques (Shelembe et al. 2025).
- Establish demonstration farms to showcase successful indigenous farming systems (Shelembe et al. 2025).

Education, awareness and market development

- Promote public campaigns and school-based education to increase awareness and demand for indigenous foods.
- Develop curricula on indigenous crops and agroecology for schools, colleges and extension services.
- Strengthen consumer protection and food labelling to highlight nutritional and sustainability benefits.
- Promote value addition through processing, preservation and product development to improve household incomes (Shelembe et al. 2025).

Conservation and climate resilience

- Support regional seed banks and data platforms to conserve and promote indigenous crop diversity.
- Provide flexible food safety regulations for small-scale and traditional producers while maintaining health standards.
- Encourage agroecological agriculture practices centred on indigenous crops.

For regional collaboration

- Create cross-border networks for seed exchange, farmer training and indigenous food festivals to strengthen cultural agricultural ties (AFSA 2022).
- Coordinate regional trade policies to enable free movement of indigenous seeds and foods across Southern African countries (Lefebvre et al. 2023).
- Launch regional multimedia campaigns on the nutritional, cultural and climate resilience value of indigenous crops (Shelembe et al. 2025).
- Establish a Southern African Development Community Indigenous Crops Taskforce to harmonise research, data collection and policy development (Lefebvre et al. 2023).
- Develop regional market linkages for indigenous food products, ensuring benefits for smallholder farmers, especially women (Shelembe et al. 2025).
- Share best practices on community seed banks, demonstration farms and farmer-led agroecology schools across borders (Shelembe et al. 2025).



FLEAT Zambia III participants engaged in a conversation on agroecology policies.

Conclusion

Reviving indigenous food systems is not only about what people eat—it is about restoring relationships between land, culture and community. Rooted in ancestral knowledge and agroecology, these systems nourish biodiversity, strengthen local economies and offer climate-resilient alternatives to industrial agriculture. Faith and eco- communities, policymakers and regional actors share an ethical and practical responsibility to protect and promote indigenous food systems through legal reform, investment and knowledge transmission. The future of food and climate justice in the region depends on recognising indigenous food systems as living systems of resilience, identity and care—essential to building a just and sustainable world.

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