AGRICULTURE & DEVELOPMENT

Roots of Change:

How Regenerative Agriculture Is Lifting rural communities in Uganda Out of Poverty

A Special Report on Sustainable Development in Uganda

Innovations for Development

In the red-soiled hills of Bwamiramira sub county Kibaale district a farmer named Agnes tends rows of coffee plants that now shade a canopy of banana trees, napier grass, and nitrogen-fixing legumes. A few years ago, her yields were falling, her soils were thinning, and her family struggled to eat three meals a day. Today, her income has more than doubled, her land is more fertile than it has been in a generation, and she is teaching her neighbours to do the same. Agnes is not an anomaly. She is the face and hope of a quiet but potential revolution capable of sweeping Uganda's smallholder farming communities—one rooted not in chemical inputs or industrial machinery, but in working with nature rather than against it.

Regenerative agriculture—a farming philosophy that prioritises soil health, biodiversity, and ecological balance—is emerging as one of the most promising pathways out of poverty for Uganda's rural poor. With over 70 percent of Ugandans depending on agriculture for their livelihoods, and with climate change threatening to unravel decades of development gains, the stakes could not be higher. But across the countryside of Kibaale district, smallholder farmers are demonstrating that healing the land and healing livelihoods are not just compatible goals—they are inseparable ones.

A Crisis in the Soil

Uganda's agricultural crisis is, at its core, a crisis of soil. Decades of deforestation, overfarming, and dependence on synthetic fertilisers have stripped millions of hectares of topsoil, leaving land less productive and farmers more vulnerable. Smallholder farmers—who cultivate plots typically measuring less than two hectares—have been hit hardest. Declining yields have pushed families deeper into poverty, while rising costs of chemical inputs have consumed an ever-greater share of already-thin margins.

At the same time, Uganda's vulnerability to climate variability is intensifying. Erratic rainfall, prolonged droughts, and increasingly frequent flooding have disrupted planting seasons and decimated harvests. For families already living on the edge, a single failed season can tip a household into acute food insecurity. It is in this context that regenerative

agriculture has entered the conversation—not as an abstract ideal, but as a practical, proven set of techniques that farmers across the country are already putting to work.

What Regenerative Agriculture Looks Like on the Ground

Unlike industrial farming models that treat soil as an inert substrate for chemical inputs, regenerative agriculture seeks to restore the living ecosystem beneath the surface. In Uganda, this manifests in a constellation of interlocking practices that together transform how land is managed and how income is generated.

Agroforestry and Intercropping

Planting trees alongside crops—a practice known as agroforestry—is one of the cornerstones of the regenerative approach in Uganda. Shade trees planted over coffee reduce moisture loss and temperature extremes, while their fallen leaves build organic matter in the soil. Banana plants provide an additional income stream and act as windbreaks. Napier grass planted along contours prevents erosion. In the Kibaale and Luwero districts, Innovations for Development with support from Foundation for Community Development & Empowerment (FCDE) has trained over 1,500 coffee, cocoa and banana farmers in agroforestry techniques and facilitated the planting of more than 24,000 trees—a programme that is simultaneously restoring landscapes and bolstering livelihoods.

Composting, Bio-Slurry, and the Death of the Chemical Bill

For many smallholder farmers, the single greatest financial burden is the cost of synthetic fertilisers. Regenerative agriculture offers a way off this treadmill. Composting of crop waste and animal manure, together with bio-slurry produced from household biogas digesters, delivers comparable or superior soil nutrition at a fraction of the cost. One farmer working with the project reported saving UGX 1,000,000 annually—roughly the equivalent of several months' household expenditure—simply by switching from purchased chemicals to on-farm organic inputs. The urine from cattle kraal, rich in nutrients from animal waste, has also been deployed as a liquid fertiliser, turning what was once a waste product into a farm asset.

Integrated Farming Systems

Perhaps the most transformative shift in regenerative farming is the move from monoculture to integration. Across the sub country, over 20 farmers are combining crop production with poultry, dairy cattle, and apiculture. These integrated systems create multiple, overlapping income streams that buffer households against weather shocks and market volatility. If a crop fails, the dairy milk continues. If diary prices fall, the poultry provides income. This diversification is not merely a financial strategy—it also improves soil health, as the waste from one enterprise becomes the input for another, creating a closed loop of productivity.

Water Management and Solar-Powered Irrigation

With rainfall becoming less predictable, access to water is increasingly central to agricultural resilience. The initiative is introduced rainwater harvesting infrastructure,

and contour bunding—earthworks designed to slow the flow of water across slopes, allowing it to percolate into the soil rather than rush away as runoff. These interventions allow farming to continue during dry spells and reduce the risk of crop failure that has long trapped farmers in poverty cycles.

The Numbers Tell the Story

The evidence emerging from the regenerative programme is striking. Key outcomes documented include:

- Yield increases of over 50 percent in coffee and banana production among farmers who have adopted agroforestry and soil-restoration practices.
- More than 90 percent of beneficiaries in specific projects reporting that their households now eat three meals a day—a threshold that had previously been out of reach for many families.
- Average monthly household incomes doubling among participating farmers, driven by both increased yields and reduced input costs.
- Significant cost savings through the substitution of synthetic fertilisers with organic alternatives, with individual farmers reporting annual savings equivalent to several months of household expenditure.
- Improved food security at the household level, with surplus production enabling farmers to access markets and generate additional income.

These are not marginal gains. In a context where the World Bank has identified agriculture as the primary driver of both growth and poverty reduction in Uganda, outcomes of this magnitude have the potential to reshape the country's development trajectory.

The Organisations Leading the Way

A growing ecosystem of organisations is driving this transformation—each approaching the challenge from a different angle, but united by a shared conviction that restoring ecological health and reducing poverty are two sides of the same coin.

Okere City – The OASIS Project

In the Okere sub-county of northern Uganda—a region still bearing the economic and ecological scars of decades of conflict—the OASIS Project is supporting 500 smallholder farmers in the adoption of climate-smart regenerative practices. The project provides training in composting, efficient irrigation, and integrated farm design, helping communities that were once dependent on food aid to become self-sufficient and market-oriented. The OASIS model demonstrates that regenerative agriculture can work even in the most challenging post-conflict contexts.

Sucafina Uganda – Agroforestry and Coffee

In Uganda's coffee-growing heartland in the southwest, Sucafina is working with thousands of smallholder farmers to transition from conventional to regenerative production. The company's programme integrates agroforestry training, shade-grown coffee cultivation, and sustainable soil management, with the dual goal of improving farmer incomes and producing coffee that can command premium prices on international markets. With over 44,000 trees planted and a training network of more than 2,500 farmers, Sucafina's Uganda programme is one of the most comprehensive agroforestry initiatives on the continent.

Bethany Land Institute

Founded on the conviction that land restoration and human flourishing are inseparable, the Bethany Land Institute operates a working farm and training centre in central Uganda. The institute combines practical agricultural education with a deep philosophical commitment to ecological stewardship, training farmers, community leaders, and young people in regenerative practices that have the potential to transform landscapes across the region.

Regenerate Africa

Focused on Uganda's high-value export crops—coffee and cocoa—Regenerate Africa connects smallholder farmers with financial resources, technical training, and market linkages that reward sustainable production. By demonstrating that regenerative agriculture can unlock premium international markets, the organisation is making the economic case for ecological farming in the most direct way possible: through higher prices paid directly to farmers.

St. Jude's Family Projects

St. Jude's Family Projects addresses one of the most persistent drivers of rural poverty—youth unemployment—by providing young Ugandans with training in sustainable agriculture. Through hands-on education in regenerative farming techniques, the organisation is creating a generation of young farmers who see agriculture not as a subsistence option of last resort, but as a viable, dignified, and increasingly profitable profession.

A National Opportunity

The momentum behind regenerative agriculture in Uganda is no longer confined to the margins of development discourse. It is increasingly aligned with national policy ambitions. Uganda's government has set a target of achieving upper-middle-income status by 2040—an aspiration that the World Bank has identified as fundamentally dependent on agricultural transformation. Regenerative agriculture, with its proven capacity to boost yields, reduce costs, and build resilience, fits squarely within this strategic framework.

What is perhaps most significant about the regenerative agriculture movement in Uganda is what it suggests about the future of development itself. For decades, rural poverty has been addressed primarily through the lens of productivity—maximising yields through

external inputs, mechanisation, and market integration. Regenerative agriculture offers a different proposition: that lasting prosperity must be built on a foundation of ecological health, and that the two are not in tension but are, in fact, mutually reinforcing.

The challenge now is scale. The programmes described here are reaching thousands of farmers—but Uganda has millions. Expanding regenerative agriculture to the national level will require sustained investment in farmer training and extension services, supportive policies that recognise and reward ecological land management, access to appropriate credit and markets for smallholder producers, and sustained political will to see the agricultural sector genuinely transformed.

A Revolution Growing from the Roots Up

Back in Rubirizi, Agnes is not waiting for national policy to catch up. Her farm is already a demonstration site for neighbours who come to see how intercropping, composting, and integrated systems can transform a struggling plot into a thriving enterprise. Her children eat well. Her soils are improving. Her income is growing. And the trees she has planted will continue to build fertility and store carbon long after she is gone.

This is the quiet logic of regenerative agriculture: that the most durable path out of poverty is one that restores the earth rather than depleting it. In Uganda, that path is already being walked. The question is whether the rest of the world—development institutions, governments, investors, and consumers—will recognise what is growing from the roots up, and choose to accelerate it.

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SOURCES AND FURTHER READING

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