

Special Edition | October 2025

ATOMS & BITS



Beyond Funding: How FUNGUO is Nurturing a Thriving Innovation Ecosystem in Tanzania

INSIDE THIS ISSUE

03

Editor's Note

Why we partnered with UNDP to document FUNGUO's journey and impact

04

Tanzania at a Glance

Six numbers that show how our economy transformed

05

Partners' Voices

Government, private, and development partners reflect on their collaboration with the FUNGUO Innovation Programme

08

Exclusive Interview

Inside FUNGUO's catalytic funding approach to social and economic development

13

Startups Spotlight

Eighteen companies changing how East Africa works, farms, pays, and heals

47

Beyond the Hurdles

Female founders leading innovation across sectors

48

Special Ops

YouthIgnite sparks student entrepreneurship. How universities create startups

50

Innovation Week Tanzania

Eleven years of connecting entrepreneurs, investors, and ideas

54

Company Directory

Complete profiles of all 74 FUNGUO-supported businesses

59

What's Next

Where Tanzania's innovation ecosystem heads after four years of intensive support

The young man who collects plastic bottles in Dar es Salaam isn't looking for charity. He's looking for customers. The university student who can't get a bank loan doesn't need financial literacy training. He needs someone to recognize that his government stipend makes him creditworthy. The rural women growing seaweed don't want to be taught entrepreneurship. They want fair prices for what they already know how to make.

In Tanzania, I found entrepreneurs who had already solved problems nobody else noticed. They had customers. They had revenue. They had businesses that worked. **What they didn't have was anyone willing to back them with serious money.**

“

That changed when development partners decided to trust what was already working. They gave grants to businesses with proven customers. No strings attached. No equity taken. No complicated requirements. Only capital for people who had already figured out how to turn problems into products other people want.

The results fill this special edition. We track seventy-four businesses that collectively hired over **10,000 people and attracted TZS 6.5 billion** in additional investment. These solutions were created by people who understood their problems better than anyone because they lived with them daily.

You will, for example, find the student who couldn't get pocket money anywhere and decided to build a fintech platform that now serves **3,400 university** borrowers with zero defaults.

Women who sold seaweed for pennies now help manufacture products that compete with international brands. An entrepreneur who saw building materials in plastic waste now processes **30 tonnes** monthly for construction companies.

That's catalytic funding in action.

It reminds us that the best business ideas often aren't waiting to be invented. They are already working at a small scale, waiting for someone to provide the capital to serve more customers.



“

This edition offers timeless insights for anyone starting businesses, making investments, or designing policies in emerging markets.

— **Isai Mathias**





11.8 Million Aged 15-24

Tanzania's UN-defined youth population equals the entire population of Belgium. This generation will drive economic transformation as entrepreneurs, innovators, and business builders over the next three decades.



Dira 2050

Government targets high-income status and \$1 trillion economy within 25 years, requiring sustained policy reforms and private sector growth to meet demands of rapidly urbanizing and youthful population.



Internet reaches 72% of population

Nearly three out of every four Tanzanians can go online regularly through mobile networks. This approaches universal access and enables broad participation in digital services and e-commerce opportunities.



76% use formal financial services

Three-quarters of adults now participate in regulated banking and mobile money systems, up from 65% in 2017, showing progress toward financial inclusion.



37% own smartphones

Over 25 million people carry devices capable of advanced applications, while basic phone users represent potential market for future technology adoption.



331 million-person regional market

Tanzania's position within the East African Community provides access to over a quarter billion consumers. This makes successful local companies competitive across multiple countries and justifies larger investments.



60 higher education institutions

Universities and colleges educate more than 252,000 students annually across engineering, business, technology, and science programs. They graduate over 45,000 skilled professionals each year for the innovation economy.

Sources: NBS 2022 Census, Tanzania Development Vision 2050, TCRA 2025, FinScope Tanzania 2023, Tanzania Commission for Universities 2023

UNDP Tanzania



Mr. Shigeki Komatsubara, Resident Representative

At **UNDP**, we view the FUNGUO Programme as a powerful vehicle for accelerating Tanzania's journey toward inclusive and sustainable development. It embodies our Youth Catalyst vision by combining **catalytic financing**, capacity development, and policy engagement to unlock the potential of young innovators and entrepreneurs. Through FUNGUO, we are fostering a vibrant ecosystem where ideas can grow into impactful enterprises, partnerships can drive systemic change, and innovation can serve as a force for equity and resilience. Its holistic approach—bridging gaps in finance, skills, and policy—reflects UNDP's firm belief that **locally-led innovation** is key to building a more prosperous and sustainable Tanzania.

Embassy of Finland



Theresa Zitting, Ambassador

Finland's partnership with UNDP through the FUNGUO Innovation Programme reflects our shared vision for green innovation as a pathway to sustainable prosperity. Through initiatives such as the **#GreenCatalyst**, we are supporting Tanzania's transition towards a greener, more inclusive economy—empowering forestry MSMEs with the skills, funding, and market access they need to thrive. This collaboration builds on Finland's global expertise in **sustainable forestry**, fostering cross-border knowledge exchange and dialogue. FUNGUO's focus on youth and women-led ventures resonates strongly with our values, demonstrating how innovation can drive both climate action and equitable growth.

European Union in Tanzania



H.E. Christine Grau, Ambassador

The European Union is proud to continue the support of the FUNGUO Innovation Programme through UNDP as implementing body and in cooperation with the government of Tanzania. It is an initiative that truly embodies our shared vision for **locally driven, sustainable development**. FUNGUO is an excellent example of our successful partnership, **catalysing Tanzanian innovation** and unlocking opportunities for young entrepreneurs and women-led enterprises, thus implementing the **Investing in Young Businesses in Africa (IYBA) Team Europe Initiative**. Beyond financial support, our engagement reflects Team Europe's commitment to strengthening Tanzania's innovation ecosystem—creating space for dialogue, collaboration, and inclusive growth. By bridging critical financing gaps and nurturing a culture of innovation, FUNGUO contributes to shaping a more resilient and self-reliant Tanzania and promoting its inclusive economic development.

British High Commission



H.E. Marianne Young, Ambassador

Through the FUNGUO Innovation Programme, the **United Kingdom** is proud to contribute to Tanzania's growing innovation ecosystem. We see innovation as a powerful engine for job creation, inclusive economic growth, and sustainable development. FUNGUO's work empowering entrepreneurs, especially young people and women, to **turn bold ideas into scalable ventures**—aligns strongly with our vision for a prosperous and resilient Tanzania. Our partnership goes beyond funding; it is about unlocking pathways for collaboration, strengthening systems, and amplifying local solutions that **deliver lasting impact**.

COSTECH Tanzania



Dr. Amos Nungu, Director General

Our partnership with the FUNGUO Innovation Programme reflects our shared resolve to strengthen Tanzania's science, technology, and innovation ecosystem. Through this collaboration, **COSTECH** continues to identify and support grassroots innovators while building a stronger national system that turns ideas into impact.

As we co-host **Innovation Week Tanzania**, we are providing a vibrant platform where government, academia, industry, and entrepreneurs exchange ideas, share experiences, and forge partnerships that **address national development priorities**.

Vodacom Tanzania Foundation



Ms. Zuweina Farah, Director

Our partnership with the FUNGUO Innovation Programme is built on a shared belief that digital innovation is a catalyst for inclusive social and economic transformation. Through initiatives such as Innovation Week Tanzania and our own **Future Ready Summit**, we connect young innovators and founders to technology-driven solutions that address real challenges in sectors like agriculture, health, and education.

Beyond events, **Vodacom Tanzania Foundation's** collaboration with FUNGUO provides mentorship, access to digital tools, and market linkages that help innovators scale their impact. As a private sector partner, we view FUNGUO's catalytic model as vital to advancing Tanzania's digital economy, ensuring technology becomes a force for equity and opportunity for all, including women, youth, and persons with disabilities. Together, we are shaping a more inclusive, connected, and prosperous future for every Tanzanian.

ICT Commission, Tanzania



Dr. Nkundwe Mwasaga, Director General

Our collaboration with the FUNGUO Innovation Programme reflects a shared commitment to embedding digital transformation as the driver of Vision 2050 at the heart of Tanzania's innovation and entrepreneurship agenda. Through platforms such as Innovation Week Tanzania and **Tanzania ICT Conference**, we work to strengthen the digital infrastructure, digital innovation ecosystem, cybersecurity, and policy environment that enable startups to thrive. FUNGUO's catalytic role in **nurturing investor-ready digital enterprises** directly supports our vision of a digitally inclusive and globally competitive Tanzania, where innovation fuels economic diversification and job creation.

CRDB Bank Foundation



Ms. Tully Esther Mwambapa, Managing Director

CRDB Bank Foundation recognizes FUNGUO as a pivotal catalyst in Tanzania's innovation ecosystem, and we are proud to collaborate with the programme in enabling Tanzanian startups to transition **from catalytic grants to commercial capital**—addressing the critical 'missing middle' in the funding landscape. Strengthening the country's startup ecosystem is a shared responsibility, and we remain committed to playing our part by providing patient capital, expertise, and networks that complement the efforts of other ecosystem actors. This partnership reflects our mission to advance financial inclusion by empowering startups to achieve sustainable growth and drive Tanzania's economic transformation."

ANZA Entrepreneurs



Mr. Joshua Elias, Managing Director

ANZA's partnership with the FUNGUO Innovation Programme is driven by a shared commitment to supporting scalable, impact-driven ventures. Together, we provide **catalytic capital and hands-on business development services** that help startups refine their models, access markets, and attract investment. FUNGUO's collaborative spirit and ecosystem lens resonate deeply with our approach—bridging gaps between innovation, impact, and inclusion. This partnership continues to unlock new pathways for entrepreneurs to build sustainable businesses that transform communities and drive economic resilience.

Westerwelle Foundation Tanzania



Mr. Isaack Shayo, Country Director

Westerwelle Foundation Tanzania partners with FUNGUO to catalyze innovation and entrepreneurship within universities. A vivid example of this collaboration is the **#YouthIgnite Student Founders Fellowship**, which empowers student entrepreneurs across 10 universities with practical skills, mentorship, and seed capital—enabling them to scale their ventures and graduate as job creators rather than job seekers. This partnership embodies our shared commitment to nurturing young innovators and building scalable, impact-driven ventures that strengthen Tanzania's innovation ecosystem.

Zanzibar Startup Association



Mr. Ikram Soragha, Chief Executive Officer

The **Zanzibar Startup Association** is proud to partner with FUNGUO in advancing the startup agenda across the islands and the mainland. FUNGUO's ecosystem building approach complements our advocacy for a **stronger policy and legal framework** that enables startups to thrive. Through this collaboration, we are amplifying the voices of young innovators and women founders, connecting them to opportunities for funding, mentorship, and visibility.

Sahara Ventures



Mr. Jumanne Mtambalike, CEO

As a long-standing partner in Tanzania's innovation ecosystem, **Sahara Ventures** sees the FUNGUO Programme as a true catalyst for systemic change. It bridges the gap between visionary entrepreneurs and the support systems they need to thrive whether through funding, mentorship, or policy advocacy. Our **collaboration with FUNGUO** focuses on nurturing a pipeline of high-impact startups and strengthening the capacity of local hubs across the country.

Beyond Funding: How FUNGUO is Nurturing a Thriving Innovation Ecosystem in Tanzania

By combining catalytic financing, technical assistance, and strategic convenings and linkages, FUNGUO is creating fertile ground for startups to grow, and for Tanzania's innovation economy to flourish.



An exclusive conversation with Joseph Evarist Manirakiza, Programme Manager at FUNGUO Innovation Programme

In Tanzania's fast-evolving innovation landscape, one name stands out as both a catalyst and a connector — FUNGUO. What began as a bold experiment to unlock **financing for impact-driven startups** has now become a national ecosystem enabler, bridging the gap between ideas and opportunity. Through **catalytic funding**, strategic partnerships, and a deep commitment to inclusive growth, the FUNGUO Programme—an initiative by UNDP Tanzania with support from the European Union, Finland, and the UK—has helped dozens of startups move from promise to proof, shaping a new narrative of home-grown innovation. In this exclusive interview, Atoms & Bits Magazine sits down with Joseph Evarist Manirakiza (or "**JOE**" as the ecosystem calls him), the Programme Manager, to unpack the journey, the lessons learned, and the growing momentum behind Tanzania's thriving startup movement.



A&B

Let's start with the basics. What exactly is FUNGUO, and how did it come to be?

Joe

FUNGUO is a Swahili word for "KEYS", which is symbolic because it is meant to unlock the potential of Tanzanian startups. The programme was born from a genuine ecosystem need. When the **UKaid**-funded Human Development Innovation Programme ended, Tanzania's innovation community recognized we couldn't afford to lose that momentum. We needed something more sustainable, more ambitious. Broader ecosystem consultations led to this flagship multi-partner initiative that's quite **unique in East Africa**. We're co-funded by the European Union through the Business Environment, Growth and Innovation (**BEGIN**) Programme, the UK's **FCDO** through the African Technology & Innovation Partnerships (**ATIP**), and the Government of Finland, with **UNDP** Tanzania as the implementing partner. This **multi-donor structure** isn't just about pooling resources—it brings different perspectives and expertise that strengthen our approach.

A&B

How does FUNGUO position itself within Tanzania's startup ecosystem?

Joe

FUNGUO is strategically positioned in what we often refer to as the “missing middle” of Tanzania’s startup ecosystem—the space between early-stage incubation and larger-scale investment where many promising ventures tend to stall. **Our role is deliberately catalytic.** We bridge critical funding gaps for scalable, impact-driven startups that struggle to access suitable forms of capital. At the same time, we focus on building a strong pipeline of investment-ready ventures that can attract follow-on financing from larger investors and development partners. Beyond financing, **FUNGUO works hand in hand with key ecosystem actors**—innovation hubs, government agencies, financial institutions, and academia—to strengthen the overall support system and advocate for a more enabling policy environment. This integrated approach allows us not only to deploy catalytic funding but also to nurture a more resilient and inclusive innovation ecosystem—one where Tanzanian innovators can thrive, scale, and contribute meaningfully to the country’s sustainable development agenda.

It is worth noting that the word “catalytic” is intentional. **We provide risk-free capital specifically designed to make startups investor-ready.** A startup might use our funding to hire experienced staff, improve its business model, enhance its financial and control systems to meet financiers’ and investors’ standards, etc. Always with the goal of preparing them for private capital, never replacing it.

A&B

We read somewhere that FUNGUO operates under three pillars. Can you explain this integrated approach?

Joe

Absolutely. Too often, innovation support focuses narrowly on funding. We recognized early that sustainable impact requires a systems approach.

Our first pillar is Innovation Financing—that’s the catalytic investments I mentioned, complemented with targeted technical assistance to de-risk ventures and help them attract follow-on funding.

The second pillar is Innovation Service Delivery. We collaborate with innovation hubs, incubators, accelerators, and business development service providers to produce more investor-ready startups.

These Enterprise Support Organizations (**ESOs**) are the backbone of the ecosystem, “catalysts for growth” as we call them in the newly published ESO Scoping study report that we co-authored with Deloitte.

The third pillar is Enabling Environment. We work with policymakers and stakeholders to promote innovation-friendly policies and regulations. We do this through strategic platforms and supporting initiatives aimed at improving business environment for innovators and startups.

A&B

Since 2021, you've received over 2,700 applications and committed TZS 6.5 billion. What else has been FUNGUO's most significant achievements?

Joe

The numbers tell part of the story: we’ve reached over **2,700** startups and MSMEs which responded to the **4 calls for applications**, and out of those we committed funding to **74** competitively selected ventures. Close to **60%** of the funded startups fall under the “green” or climate-smart” businesses; around **40%** are in agribusiness and close to **70%** are either tech- or tech-enabled businesses. 45% of funded startups have grown their revenue by over **50%** while the remaining 55% have grown between 10 and 50%. **73%** reported to have expanded their businesses to new local markets, including **26%** who have gone international. In terms of jobs, FUNGUO investees have so far sustained/created over **10,000 jobs** for the Tanzanian youth.

As far as unlocking capital is concerned, over 65% of startups in the first 3 cohorts indicate to have **raised additional funding** since FUNGUO support. The unlocked additional funding exceed **4 times the catalytic funding** provided through FUNGUO. In terms of numbers, **67%** of funded startups reported to have raised additional grants and **32%** reported to have raised equity. Of the total additional capital unlocked, **equity** takes a lion’s share with 75%, followed by **grants** at 19% and lastly by **debt** at 6%. These numbers tell us that catalytic funding really works.

But achievements go beyond individual companies and financial metrics. FUNGUO has helped shape the broader ecosystem. We supported the Capital Markets and Securities Authority in drafting and launching Tanzania's first Crowdfunding Guidelines—a game-changer for early-stage funding. We have the first crowdfunding platform licensed under the guidelines as one investee from the 4th cohort – CashMe Tanzania. We contributed to the National Innovation Framework through COSTECH and championed the establishment of the Tanzania Hubs Network, which strengthens coordination and peer learning among enterprise support organizations.

We are working with COSTECH and Vodacom Tanzania to sustain and scale the largest Tanzanian Innovation ecosystem platform, the Innovation Week Tanzania whose 11th edition was in May this year.

A&B

What other initiatives is FUNGUO championing?

Joe

In a bid to enhance the pipeline development efforts, we have established the **#YouthIgnite Student Founders Fellowship** to support university students who have already started businesses and enable them to graduate with their own jobs and employ their peers, rather than joining the long job-hunting queues. In the first pilot **we are working with 10 universities**, supported their innovation hubs and hub managers to better support the student founders. 1300 student entrepreneurs responded to the first call to join the fellowship, **300 were selected for ideathons**, 30 out of which managed to progress to the bootcamp, and **20 startups emerged as winners** of seed cash and technical support. 18 of these businesses are still running and generating revenues, which proves that the model works. The plan is to refine this initiative and scale it up to **work with all universities in Tanzania**.

FUNGUO is also seen as mostly focusing on urban centres, most Dar es Salaam, and not the rural areas. The Finland-funded **#GreenCatalyst** Initiative is about to change that. It is catalyzing innovation and entrepreneurship in the forestry value chain, by identifying and supporting promising startups and MSMEs in **Iringa, Njombe, Ruvuma and Lindi**, complementing another Finland-supported larger initiative, the Forestry, Land Use, and Value Chains Development in Tanzania (**FORLAND**) project.

A&B

Could you give us an overview of FUNGUO's sectoral distribution, geographic reach, and gender focus? What overall picture does this paint?

Joe

FUNGUO is sector-agnostic, and that's by design because we wanted to be able to support promising innovative impact-driven startups across board. However, we are seeing a gradually slight dominance of startups in agribusiness, with close to **40%** of the portfolio being classified under this category. This includes sustainable farming and agritech, supply chain optimization, etc. The other emerging sector is Climate & Environment, with close to **35%** of the portfolio representing waste management and circular economy, renewable energy, etc. Financial inclusion is also upcoming, dominated by financial technology digital payments and alternative lending. We are also seeing a number of startups within the Digital Marketplaces and Shared Economy, Education & Skills Development, Health & Healthcare categories.

Geographically, FUNGUO investees are spread across 13 regions in Tanzania, including Zanzibar. **Dar es Salaam** is still leading with 54% of the portfolio being located in the city, followed by **Mwanza** at 14% and **Morogoro** at 12%. More work need to be done to grow the startup ecosystem beyond Dar es Salaam. Luckily the **#GreenCatalyst** initiative is focused on the **Southern Highlands** Zone.

Gender wise, we need to do a much better job. The target was to at least have 40% of the portfolio made of women-founded/women-led startups, but we haven't got there yet as we are still slightly below 30%. It's very clear that setting quotas alone doesn't solve the problem. Despite various efforts including targeted outreach, enhanced spotlight of women-led investees, the challenge still persists. For instance, last year we had an initiative focused on spotlighting the challenges and opportunities of women leading startups, with FUNGUO investees as case studies. This culminated in a mini documentary "Beyond the Hurdles" which showcased great achievements of Women entrepreneurs in our portfolio despite all of them facing some systemic barriers. We are still exploring other avenues to increase the number of women-led businesses in our portfolio, potentially including targeted funding windows.

A&B

You also coordinate initiatives like Innovation Week Tanzania and the Research, Innovation and Entrepreneurship Partnership (RIEP). Why invest in these platforms?

Joe

Innovation doesn't happen in isolation. Entrepreneurs need to connect with investors, learn from each other, access mentorship, understand policy developments. Platforms like Innovation Week Tanzania (IWTz), which features the "Future Ready Summit (FRS)" in partnership with Vodacom, the Tanzania Annual ICT Conference (TAIC) by the ICT Commission, **Sahara Sparks** by Sahara Ventures, the Science, Technology and Innovation Conference & Exhibition (STICE) by COSTECH now more recently the Tanzania Startup Week (TSW) by the Tanzania Startup Association, create those crucial connections.

The Research, Innovation and Entrepreneurship Partnership is particularly exciting (RIEP)—it's a **UK-India-East Africa initiative** promoting cross-border collaboration among academic institutions, incubators, and startups. Tanzania has much to learn from and contribute to the global innovation conversation. Last year, with the support of the FCDO's East Africa Research and Innovation Hub, we ran a student hackathon dubbed "Reimagining Innovation for Sustainable Ecosystems Through Industry 4.0 (RISE 4.0 Hackathon)" which involved students and faculty from Kenya, Tanzania and India. The shortlisted teams pitched at the Kenya National Innovation Week in Nairobi, and the winning teams were sponsored to spend 2 weeks at Indian Institute of Technology Madras in Chennai, India, engaging in various activities and witnessing how startups are supported from an academic environment. We also convened in Dar es Salaam, in partnership with COSTECH and UDSM, a Faculty Exchange Programme under the theme "Bridging Borders for Innovation: Unlocking Research Impact through Technology Transfer and Commercialization". This brought together 25 universities from Kenya, Tanzania, UK and India (virtually), Kenya National Innovation Agency and the South African Technology Innovation Agency with the sole purpose to facilitate cross-border knowledge exchange, learn from each other on both successes and challenges in the innovation-to-commercialization journey.

As you can see, these platforms do also open up the Tanzanian Innovation Ecosystem to the world. For instance, two key highlights from this year's IWTz2025 included hosting the **President of the Republic of Finland, H.E. Alexander Stubb** who officially launched the FUNGUO's #GreenCatalyst initiative, and having the **former Chief Business Officer of Google X, Mo Gawdat**, give a keynote speech titled "Rewriting Tomorrow: AI for Good, Growth, & Global Change".

A&B

Looking at the broader picture, what would you change about Tanzania's innovation support ecosystem?

Joe

Four priorities stand out. First, **improve business education** at secondary and tertiary levels, and support entrepreneurship initiatives. Too many entrepreneurs lack basic knowledge about financial management and customer development. Our **#YouthIgnite** initiative in universities is a start, but we need systemic change. Gone are the days where graduates would leave school and transition straight into jobs – there are not enough jobs for every young man and woman and enabling them to create their own jobs through business looks like a viable path.

Second, **strengthen intellectual property protection** and infrastructure. Innovators need confidence their ideas have legal protection. There are also a lot of research at our universities that could translate into products and services, if there was a proper IP infrastructure, adequate IP policies and financing.

Third, a **legal framework that recognises the uniqueness of startups** and incentivizes investment in them. The progress on Tanzania Startup Policy is a great step in the right direction.

Fourth, **increase efforts in startup pipeline development and venture building**, including but not limited to more structured ideation, incubation and acceleration programs, blended catalytic funding and more diverse financial instruments that bridge our offerings and commercial investment. The gap between catalytic funding and Series A is still too wide.

Better coordination among ecosystem support organizations would help enormously. That's why initiatives like the Tanzania Hubs Network matter –reducing duplication and strengthening collective impact, while facilitating peer learning.

A&B

FUNGUO works with multiple partners. How do you manage these relationships, and what value does each bring?

Joe

By design **FUNGUO is a multi-partner initiative**, supported by multiple funders. Each funder brings unique priorities and expertise but collectively driven by the common goal of supporting the growth of the Tanzania innovation ecosystem.

But we don't only work with funders. **We work closely with government ministries**—Education, Science and Technology through COSTECH, President's Office - Planning & Investment, and ICT—ensuring **our work aligns with national priorities**. We coordinate with leading ESOs who know the ground reality, some of them working with in implementation of key programme activities. **We closely work with private sector players**, including banks and telcos; and engage with private investors who can provide follow-on funding.

We are cognizant of the fact that **an innovation ecosystem cannot be built by one entity** or one programme – it's a collective responsibility. The key is to ensure complementarity and enhance synergies.

A&B

Before we conclude, what advice do you give startup founders about FUNGUO funding or navigating the funding landscape?

Joe

Build investable businesses, don't be grant-dependent. That mindset shift is crucial.

Implement solid control systems from day one. **Conduct rigorous market validation** before seeking funding—talk to real customers, test your assumptions, understand your competition. **Build complementary management teams** rather than trying to handle everything yourself.

Most importantly, understand that catalytic funding is a stepping stone, not a destination. Use our support to develop the strengths and financial performance that private investors require. **Your goal should be to outgrow us.**

A&B

What's next for FUNGUO?

Joe

We're continuously evolving. **We're deepening sector-specific work** like the #GreenCatalyst Initiative and exploring new partnerships that can bring additional resources and expertise. Ultimately, **our goal is to make ourselves obsolete**—to build an ecosystem where Tanzanian startups can access appropriate capital at every stage without needing programs like ours. We're not there yet, but every cohort of successful companies, every policy improvement, every strengthened ESO brings us closer. Then we can transition into a sustainable facility providing other types of financial instruments required by a mature startup ecosystem.

Tanzania's innovation potential is immense. With the right support, the next generation of African innovation leaders will emerge from places like Dar es Salaam, Mwanza, Arusha, and Zanzibar. **FUNGUO is proud to play a catalytic role** in making that vision reality.





Seventy-four companies received FUNGUO investment between 2022 and 2025.

We selected eighteen that demonstrate impact across agriculture, manufacturing, and digital innovation. Why? Magazine space required choosing representatives across different themes and regions.



Each company solved problems limiting economic development. **Farmers earned more. Waste became valuable. Local production replaced imports. Technology improved efficiency.** Previously underserved populations gained access to energy, employment, and financial services.

Catalytic funding combined with technical support enabled entrepreneurs to scale innovations and build businesses that create lasting change.

Growing Food on Limestone Rock

Aatif Aquaponics Feeds Zanzibar Using Land Where Traditional Farming Fails

Rashid Ali Rashid saw opportunity where others saw limitations. Working from a modest **200-square-meter** plot in **2018**, he began cultivating premium vegetables using no soil whatsoever. His aquaponic system combines fish farming with soilless plant cultivation, creating a closed-loop environment where fish waste provides nutrients for crops while plants purify water for fish.



Rashid Ali Rashid

The results challenged every assumption about **Zanzibar agriculture**. **Rashid's system** produces year-round harvests using **90%** less water than conventional farming while avoiding pesticides use completely. Cherry tomatoes, sweet basil, colored peppers, and specialty herbs grow faster and larger than soil-based alternatives. Each square meter yields multiple harvests annually rather than seasonal crops dependent on unpredictable rainfall.

Annual sales reached **Sh125 million by 2024**, or six times higher than **pre-FUNGUO** operations. The company now employs **17 people** with plans for 12 additional positions as it expands to a newly acquired **10-acre** site. Five-year projections target **\$5 million** in annual revenue if hydroponic systems cover the full property.

FUNGUO's intervention proved transformational for a company that had nearly collapsed during the COVID-19 pandemic. From **2020 to mid-2022**, Zanzibar's tourism-dependent economy devastated local demand, forcing Rashid to contemplate closing operations entirely. **"Support from FUNGUO** was the turning point," Rashid explains. "We have gone from dreaming of scaling to actually making it happen."

Beyond direct operations, **Aatif Aquaponics** has become a knowledge hub for sustainable agriculture. The company has trained over 400 young farmers in smart farming techniques, entrepreneurship, and access to finance over the past three years. This capacity-building function extends **FUNGUO's** impact well beyond the original catalytic grant recipient. It creates multiplier effects throughout Zanzibar's agricultural sector.



The investment also unlocked additional funding opportunities. Following infrastructure improvements and demonstrated growth, the company secured **€100,000** from the **German DeveloPPP** venture program in 2023. This pattern aligns with **FUNGUO's** theory of change: strategic grants that de-risk ventures for other investors while building commercially sustainable operations.

Quality commands premium pricing from hotels, restaurants, and supermarkets seeking consistent supply of fresh, organic horticultural products. Meanwhile, traceability and food safety standards appeal to international tourists.

Aatif shows how innovation can transform geographical constraints into competitive advantages. It presents an interesting model for building resilient food systems adapted to climate change and water scarcity challenges.



Stronger Than Concrete, Made From Trash

Arena Recycling Turns Beach Plastic Into Building Materials

A single concrete block costs **Sh800** in Dar es Salaam while lasting **15–20 years** before cracking, water damage, or structural weakness forces replacement. Timber alternatives rot within months in coastal humidity. Steel reinforcement corrodes from salt air. Meanwhile, hundreds of tonnes of plastic waste enter Tanzania’s environment daily, creating pollution that fishermen pull from nets and tourists photograph on beaches.



Hellena Sailas

Hellena Sailas recognized the connection between these problems during beach cleanups in **2018**. As a **21-year-old** medical laboratory technologist volunteering with environmental groups, she witnessed plastic accumulation firsthand while understanding that construction desperately needed better materials. Her solution transforms waste into building products that outlast conventional alternatives by decades.

Arena has collected over 500 tonnes of plastic waste while producing more than 25,000 eco-bricks and 10,000 square meters of pavement blocks. The company employs over 50 people and maintains collection networks where 71% of waste pickers are women.

Arena Recycling Industry now converts **30 tonnes** of plastic waste monthly into Building Materials using patented Sand-Polymer Technology. Their eco-bricks combine **80%** recycled plastic with **20%** sand to create waterproof, anti-fungal blocks that resist termites and corrosion while lasting over **60 years**. Each brick is a result of processing approximately one kilogram of plastic waste that would otherwise contaminate soil or water.

Its educational infrastructure projects showcase practical applications. **Arena** has constructed eight sanitation units using eco-bricks in public schools, directly improving facilities for **7,300 students**.

FUNGUO’s investment proved catalytic for scaling operations beyond artisanal production. “The funding we received from **FUNGUO** allowed us to purchase additional recycling machines, which doubled our production capacity,” explains founder **Hellena Sailas**.



The manufacturing process eliminates water and cement requirements while producing materials three times more durable than concrete. Product lines include **Wood Plastic Composite decking boards, sand-plastic composite tiles, and recycled roof tiles** that serve different market segments while maximizing waste material utilization.



How Tanzania's First Traceable Honey Brand Changed Beekeeping

When **Tanzania International Bee Co. Ltd** was founded in 2021, the company operated without a defined brand identity in a market where rural beekeepers remained trapped in cycles of poverty. Despite producing honey from some of Africa's richest Miombo woodlands, most **beekeepers earned less than \$1 per kilogram** while middlemen captured most of the value.

The turning point came when FUNGUO Innovation Program provided a catalytic grant that enabled the company to establish Tanzania's leading honey brand, **Jambo Asali**. The support allowed the business to develop a strong identity, build processing infrastructure, and introduce traceability systems that positioned Tanzanian honey on the global map.

Today, beekeepers supported by Jambo Asali earn between \$2.5 and \$3.4 per kilogram, **more than triple their former earnings**. Through direct purchase agreements and transparent pricing, value flows directly to producers rather than middlemen.

National honey output has grown from 32,000 metric tonnes, targeting **100,000 MT annually by 2030**. Historically, only 5% of this honey was exported, with 95% consumed locally. Through Jambo Asali, export volumes are now steadily increasing, meeting growing global demand for natural Miombo honey celebrated for its purity and distinctive floral flavor.

The company addresses three long-standing challenges in the honey sector: inconsistent quality, exploitative intermediaries, and limited technical capacity among producers. By deploying modern processing units, providing training, and establishing standardized quality control systems, Jambo Asali has elevated Tanzania's honey to meet international export standards.

Operating in Kigoma, Katavi, Tabora, Singida, and Njombe, **the company currently supports over 2,000 beekeepers with plans to reach 10,000 by 2030**. This expansion aligns with national goals under Tanzania's Beekeeping Research Master Plan, which aims to double production while promoting sustainable forest management.



Beyond economic transformation, modern beekeeping practices promoted by Jambo Asali now protect more than **12,000 hectares** of Miombo woodland, reducing deforestation pressures and enhancing biodiversity. The initiative demonstrates how conservation and enterprise can coexist to create shared value.



FUNGUO's Investment Readiness Program played a pivotal role in this transformation. Through technical assistance in governance, operational structuring, financial planning, and business model improvement, Tanzania International Bee Co. Ltd gained capacity to attract further investment and forge export partnerships. This **support strengthened the company's ability to manage complex regional supply chains** while maintaining direct relationships with producers.

Today, Jambo Asali stands as a flagship of Tanzania's honey export industry, demonstrating how targeted investment, local innovation, and traceability technology can drive inclusive growth. The company's success provides a replicable model for unlocking the untapped potential of Tanzania's beekeeping sector, which still realizes only a fraction of its capacity.

As global demand for authentic, traceable, and sustainable honey continues rising, Jambo Asali proves that Africa's natural resources, when paired with innovation and ethical business, can compete and thrive on the world stage.

The sweet revolution that began with a vision in 2021 has evolved into a national success story, uplifting communities, protecting forests, and showcasing Tanzania's excellence to the world.



How a Marine Scientist Transformed Tanzania's Seaweed from Export Commodity to Local Superfood

Beneath the turquoise waters surrounding Zanzibar, **25,000 farmers** tend underwater gardens that produce **23,000 tonnes** of seaweed annually. For decades, **99%** of this nutrient-rich harvest traveled directly to processing facilities in Europe and America, where it becomes high-value supplements and food additives sold for **\$15 to \$20 per kilogram**. Meanwhile, the predominantly female farmers who cultivate this ocean superfood earn just **\$0.3 to \$0.5 per kilogram**. They also rarely consume the crops they grow despite seaweed containing **92 of the 102** essential minerals needed for human health.



Nancy Iraba, a marine scientist with a **Master's degree** from the University of Dar es Salaam, recognized the profound injustice in this system.

Women who spent their days waist-deep in **coastal waters**, carefully tending seaweed farms that could prevent thyroid disorders, boost immunity, and support heart health, were themselves unable to access these benefits. The value creation happened thousands of miles away, leaving coastal communities dependent on volatile export prices determined by foreign buyers.



In 2020, **Iraba** co-founded **SeaWeed Café** to capture value locally while improving nutrition and livelihoods across Tanzania's coastal regions. Her company processes fresh seaweed into diverse food products including gels, powders, lettuce alternatives, and smoothie ingredients that retain full nutritional potency while serving local and regional markets.

This change began with education and technical training. Nancy's team has worked directly with **300 women seaweed farmers**, teaching climate-resilient cultivation techniques that increase yields while adapting to changing ocean conditions. These methods include deep-water farming technology for adverse weather and improved harvesting practices that maintain quality while reducing post-harvest losses.

Value addition also proves transformative for participating farmers. Processed seaweed products generate **2-5 times** more revenue per kilogram compared to raw exports, fundamentally altering the economics of coastal livelihoods. This multiplication effect means women who previously earned subsistence incomes can now support families, invest in education, and build financial security through consistent market access.



FUNGUO role + outcomes + future potential

FUNGUO's investment proved essential for scaling production and market development. Programme support enabled infrastructure improvements for processing facilities while providing business development assistance that connected Healthy Seaweed Co. Limited with buyers and certification bodies. This led to Seaweed Cafe becoming the first seaweed for food brand in Tanzania **certified by the Tanzania Bureau of Standards (TBS)**, underpinning commitment to consumer safety. The company's products are now stocked in over 65 stores across Dar es Salaam, Zanzibar, Mwanza, and Moshi.

The company currently serves women seaweed farmers across Zanzibar, Tanga, and Mtwara, with **expansion plans targeting 1,000 farmers by 2030**. This growth strategy focuses on building sustainable supply chains that guarantee stable pricing while maintaining environmental stewardship. Each hectare of seaweed cultivation sequesters half a ton of carbon dioxide annually, contributing to climate mitigation while generating income.



The company's product innovation drives market expansion beyond traditional seaweed applications. **SeaWeed Café** has developed **13 distinct food product lines** that introduce seaweed to consumers who would never purchase raw marine vegetables. These include familiar formats like **smoothie powders and salad ingredients** that integrate seamlessly into existing dietary patterns while delivering concentrated nutrition.



International recognition validates both impact and commercial potential. Iraba won the **2022 GoGetta Impact Award**, highlighting her contribution to sustainable blue economy development. The company exports to five African countries plus European and American markets, demonstrating scalability beyond domestic consumption.

Environmental benefits extend throughout marine ecosystems. **Sustainable seaweed farming requires no freshwater, fertilizers, or pesticides** while actually improving water quality through nutrient absorption. This regenerative agriculture approach supports biodiversity while creating carbon-negative food production systems suited to climate adaptation strategies.

Tanzania's blue economy strategy identifies marine aquaculture as essential for coastal development, food security, and climate resilience. Seaweed Cafe demonstrates how local value addition can capture economic benefits while supporting environmental conservation. When **communities process their own raw materials**, families earn stable wages, young workers find nearby employment, and money moves between neighbours.



How One Daughter's Innovation Saved Millions for Veggie Vendors

Every morning, **greengrocers** in markets all over Tanzania have to face the same harsh truth. By noon, the African sun will start to wilt their carefully arranged tomatoes, peppers, and leafy greens. By the end of the day, almost half of their stock may have gone bad, which means they lost money that could have fed families or sent kids to school. This 40% spoilage rate costs Tanzania's mostly female vendors 26 billion shillings a year.

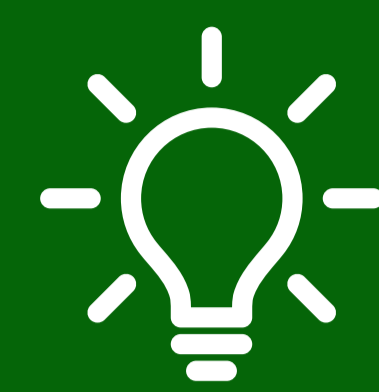
Editha Mshiu watched her mother endure this cycle throughout her childhood in rural Kilimanjaro. Years later, as a trained horticulturalist, she recognized that traditional cold storage solutions would never reach the thousands of small-scale vendors who needed them most. Why? Electricity remains unreliable or unaffordable for most rural and peri-urban markets, while conventional refrigeration systems cost more than many vendors earn in months.



Editha Mshiu

Her solution emerged from an unexpected source of inspiration.

The human body maintains constant temperature through skin that releases moisture when overheated, creating natural cooling through evaporation. **Mshiu's team** engineered **smart fabric technology** that replicates that biological process, using phase-change materials and recycled plastics to create electricity-free cooling systems for vegetables.



The **FreshPack Box** maintains temperatures up to six degrees below ambient air temperature using only water-based evaporation. Vegetables stored inside stay fresh for three to four additional days compared to traditional storage methods. For sellers operating on razor-thin margins, those extra days mean the difference between profit and loss, or between sustainable livelihoods and persistent poverty.

What is the Box's impact at scale?

Since **FUNGUO investment** enabled rapid commercialization, Freshpack Technologies has, so far, distributed 13,260 cooling units across Tanzania, directly empowering 12,939 vendors. The company calculates that these deployments have protected \$90,216 in vendor income during 2024 alone while preventing 2,073 tons of food waste from entering landfills.

Environmental benefits extend beyond waste reduction. Preventing vegetable spoilage eliminates the greenhouse gas emissions generated when organic matter decomposes in uncontrolled conditions. Freshpack's intervention has saved us from having nearly 4,000 tons of carbon dioxide emissions this year. It contributes to climate mitigation goals while supporting economic development.

The FUNGUO programme's support proved essential for scaling production and market penetration. Catalytic grant funding enabled engineering refinements that improved cooling efficiency while reducing manufacturing costs. Business development assistance helped establish distribution networks across multiple regions, while programme validation provided credibility essential for vendor adoption and partnership development.

Recognition has followed impact.

Freshpack Technologies won the Total Energies Startupper of the Year Challenge 2024, securing an additional 20 million shillings in expansion funding. The company was also shortlisted for the Royal Academy of Engineering Africa Prize 2025, competing for £60,000 among the continent's most promising engineering innovations.



Success particularly resonates through **Tanzania's agricultural** value chains because post-harvest losses represent systemic barriers to food security and rural development. Research shows that **reducing spoilage creates multiplier effects throughout food systems.** It can help stabilize prices for consumers while increasing incomes for producers and traders. When women vendors can preserve their products longer, entire households benefit from increased and more predictable earnings.



The **technology** addresses broader infrastructure challenges facing sub-Saharan Africa. Rather than waiting for expensive cold chain infrastructure to reach rural markets, **Freshpack** is showing how locally appropriate solutions can leapfrog traditional development pathways. The portability and affordability of their cooling systems make them accessible to the informal market vendors who handle the majority of fresh produce distribution across Tanzania.



Current expansion plans target regional markets throughout East Africa, where similar post-harvest challenges constrain agricultural development. Success at home provides proof of concept for scaling across environments with comparable infrastructure limitations and market structures.

More than 3,000 women have benefited directly from Freshpack interventions, which means Tanzania is making progress toward gender equity in agricultural value chains. When women control more predictable income streams, research consistently shows improved outcomes for nutrition, education, and household wellbeing.

The company's trajectory illustrates how targeted innovation can address multiple development challenges simultaneously. By solving the immediate problem of vegetable spoilage, Freshpack creates cascading benefits for food security, climate resilience, gender equality, and rural economic development.



When Wood Fails, Plastic Endures

EcoAct Turns Plastic Waste Into 50-Year Construction Materials

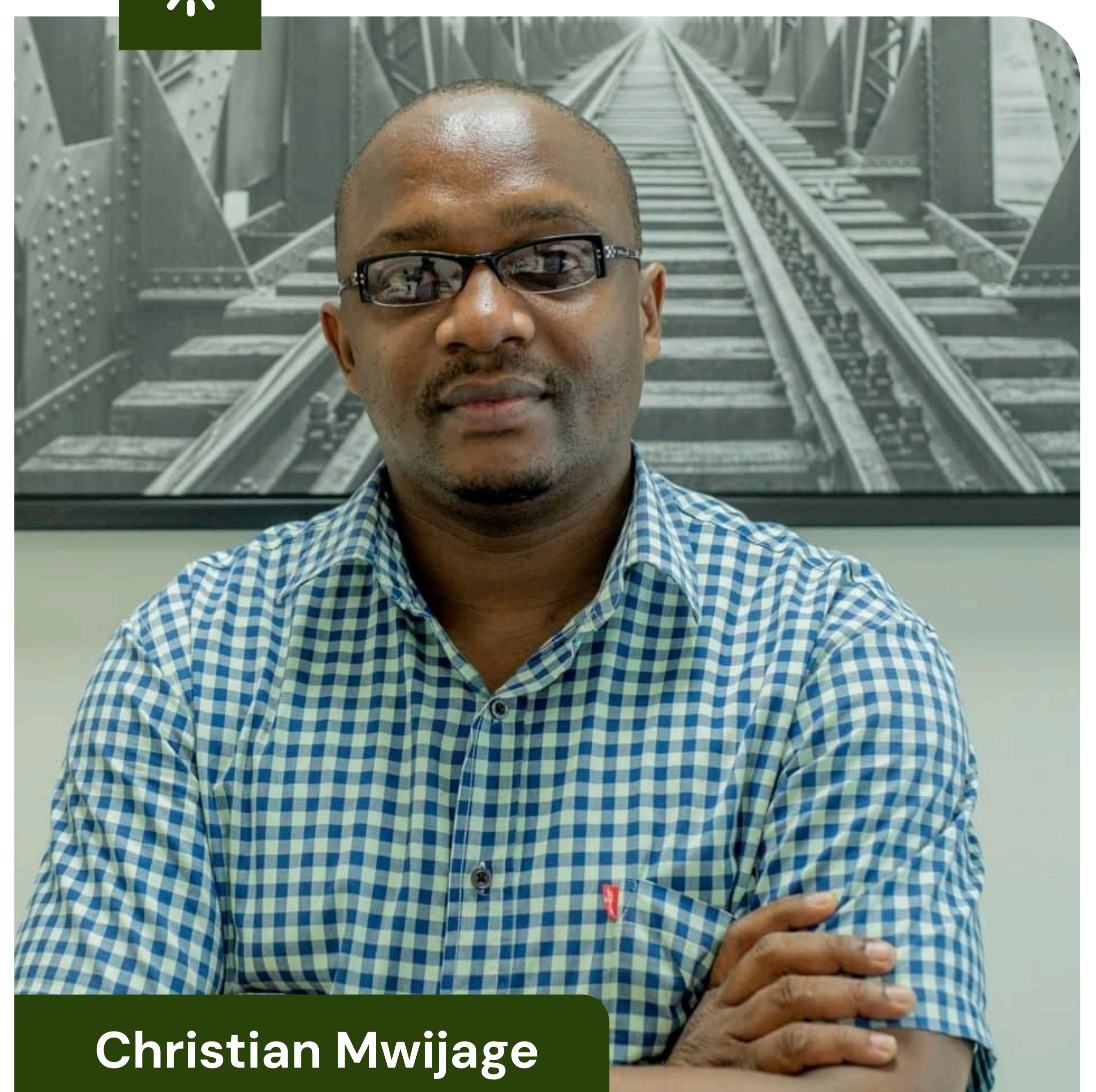
Most **wooden structures** don't last long in **Tanzania's climate**. Walk through any neighborhood and you'll see the evidence.

Outdoor benches with legs eaten hollow by termites. **Garden furniture** that cracked after one rainy season. **Playground equipment** so rotted that schools remove it for safety. **Wooden fence** posts that snap at ground level, leaving entire barriers useless.



This makes construction **expensive** and **frustrating**. Restaurant owners may replace poolside tables every two years because humidity warps wood beyond repair. Schools budget annually for new playground equipment because termites destroy wooden structures faster than children can use them. Property owners paint and repaint outdoor wooden floors that still rot within months. Builders import nearly \$1 million worth of timber primarily from South Africa and Austria because local wood costs more yet delivers unreliable quality.

At the same time, Tanzania generates approximately **40,000 tonnes** of waste daily, with about **12%** being plastic that contaminates coastlines and landfills. Most of this plastic just sits there, creating environmental problems while construction companies struggle with wood that doesn't work in tropical conditions.



Christian Mwijage

Christian Mwijage saw these as the same problem with one solution. Working in the beverage industry, he witnessed both challenges firsthand. In 2017, he founded EcoAct Tanzania to convert post-consumer plastic waste into construction materials that outlast wood by decades.



Tanzania to convert post-consumer plastic waste into construction materials that outlast wood by decades.

The company's "Waxy II technology" uses chemical-free thermal extrusion to transform mixed plastics into timber that costs **32%** less than wood yet lasts over **60 years**. **Unlike wood, it does not rot, absorb water, or need chemical treatments.** EcoAct produces construction beams, fencing, furniture, road signage, bridges, telecommunications masts, and playground equipment that actually survives outdoor use.

Its customers include **real estate developers, telecommunications contractors, road contractors, wildlife conservation agencies, farmers, and government agencies like TANROADS.** The company serves anyone who needs durable materials that won't require constant replacement or maintenance headaches.

FUNGUO role + outcomes + future potential

FUNGUO investment enabled EcoAct to scale manufacturing and increase processing capacity to 30 tonnes of plastic waste monthly. The funding improved equipment and helped maintain quality standards that earned Tanzania Bureau of Standards (TBS) certification for government contracts.

This scaling also created employment for **over 40 people**, focusing on women and youth. **EcoAct's "Garbage Medical Insurance"** program provides healthcare coverage to several low-income households in exchange for plastic waste collection. Partners like **Mbezi Recycling** and **Growth Youth Net**, on the other hand, help collect waste from beaches and urban areas.



The results solve both original problems. **EcoAct** removes **360 tonnes** of plastic waste annually that would otherwise contaminate soil and water. Each tonne of plastic timber saves approximately 15 trees from harvesting. This means the enterprise has prevented deforestation on **650 acres** while avoiding **4,500 tonnes** of CO2 emissions.



Construction companies now get materials that maintain structural integrity without weather damage or pest destruction. **Schools** install playground equipment that resists termite damage and doesn't need annual replacement. Government agencies reduce long-term maintenance budgets. **Property developers** eliminate ongoing replacement costs that wooden structures demand.

Market interest extends beyond Tanzania. Neighboring African countries and Asian nations have approached EcoAct seeking similar technology solutions. The company generated **USD 37,500** in local sales revenue, proving that solving environmental problems can create viable businesses.

EcoAct turned two separate problems into one profitable solution. **Waste** becomes valuable input, **construction** gets better materials, and jobs get created in the process. **The approach works because it addresses real needs that people actually face every day.**



Six Hours After Sunset

Solar Schoolbags Turn Cement Waste Into Study Light for Rural Tanzania

Every month in Tanzania, over 200,000 empty cement bags pile up in construction sites and waste streams. In rural areas across the same country, millions of children finish their homework by 6 PM not because they want to, but because darkness makes studying impossible. Soma Bags connects these two problems with a solution that charges during the school walk and lights up bedtime reading.



The Mwanza-based manufacturer transforms discarded Twiga cement bags into solar-powered schoolbags that provide 6–8 hours of LED light each evening. Children carry the bags to school like any other backpack while integrated solar panels absorb energy. After sunset, students remove the detachable LED light for homework, reading, or device charging in households where electricity remains unavailable.

This dual approach addresses Tanzania's circular economy needs and educational infrastructure gaps simultaneously. Construction companies traditionally pay for cement bag disposal while rural families spend substantial income on kerosene lamps for evening light. Soma Bags eliminates both costs while creating employment in waste collection, processing, and manufacturing.

The production process begins with systematic cement bag collection from construction sites across urban areas. Teams wash and prepare bags before combining them with colorful kitenge fabric for interior lining. Women comprise over 70% of the 50-person workforce, operating sewing machines that attach solar panels, LED systems, and reinforcement materials to create durable schoolbags designed for rural transportation conditions.



As a **FUNGUO Innovation Programme investee**, Soma used its catalytic grant to unlock critical scaling across equipment, workforce, and production capacity. Funding supported the acquisition of 60 industrial machines capable of processing 15,000 cement bags monthly into finished products. The investment facilitated workforce expansion from artisanal production to standardized manufacturing, where employees are trained on quality control and efficient solar component integration.



Technical assistance proved equally valuable for business development.

FUNGUO connected Soma Bags with supply chain optimization training that reduced production costs by 13% while increasing daily output by 36%. Investment readiness support helped the company attract additional funding from Renew Capital, demonstrating how catalytic grants create conditions for follow-on investment.

Soma Bags now processes over 15,000 discarded cement bags monthly. It removes waste that would otherwise contribute to urban pollution. Each bag provides consistent lighting for rural students who previously relied on expensive, dangerous kerosene lamps or stopped studying after dark. Parents can even use the extra night light for productive activities. In short, the company is contributing to environmental conservation, improving education quality, and fostering economic growth.

The company's solar technology addresses practical educational needs in off-grid communities. Students use the LED lights for evening homework, exam preparation, and reading, which would otherwise require costly fuel-based lighting. Parents report improved academic performance when children can extend study hours safely beyond sunset.

Product diversification demonstrates business model flexibility. Soma Bags expanded beyond schoolbags to produce motorcycle covers, safari bags, and other accessories using similar upcycling methods. This diversification reduces dependence on education sector contracts while maximizing waste material utilization.

Its employment impact extends beyond direct manufacturing.

Soma Bags operates collection networks that create income opportunities for waste gatherers in urban areas while providing a steady raw material supply for production. This model shows how circular economy approaches can generate employment at multiple value chain stages.



Innocent Joseph



Market recognition, on the other hand, validates Soma's commercial potential. European partners signed a \$250,000 five-year contract with Belgium's Omnicol to supply upcycled backpacks for EU markets. We believe the agreement indicates broad export opportunities are available for Tanzanian circular economy products. Indeed, high-level diplomatic visits from UK, EU, German, Polish, Irish, and Finnish ambassadors highlight international interest in Soma Bags' waste-to-product innovation.

The regulatory environment supports circular economy initiatives through Tanzania's National Environment Policy (2021) and waste management frameworks. Government recognition of companies like Soma Bags as environmental stewardship examples encourages private sector participation in waste reduction programs.

Revenue growth following FUNGUO support reached 22% in one quarter, indicating strong market demand for affordable, functional products that address rural household needs.

Soma Bag's combination of environmental benefits, educational impact, and commercial viability attracts development partners and private investors interested in scalable social enterprises.



Rural Electrification Expertise Builds EV Infrastructure

Battery Recycling Expert Starts Tanzania's Electric Car Charging Company

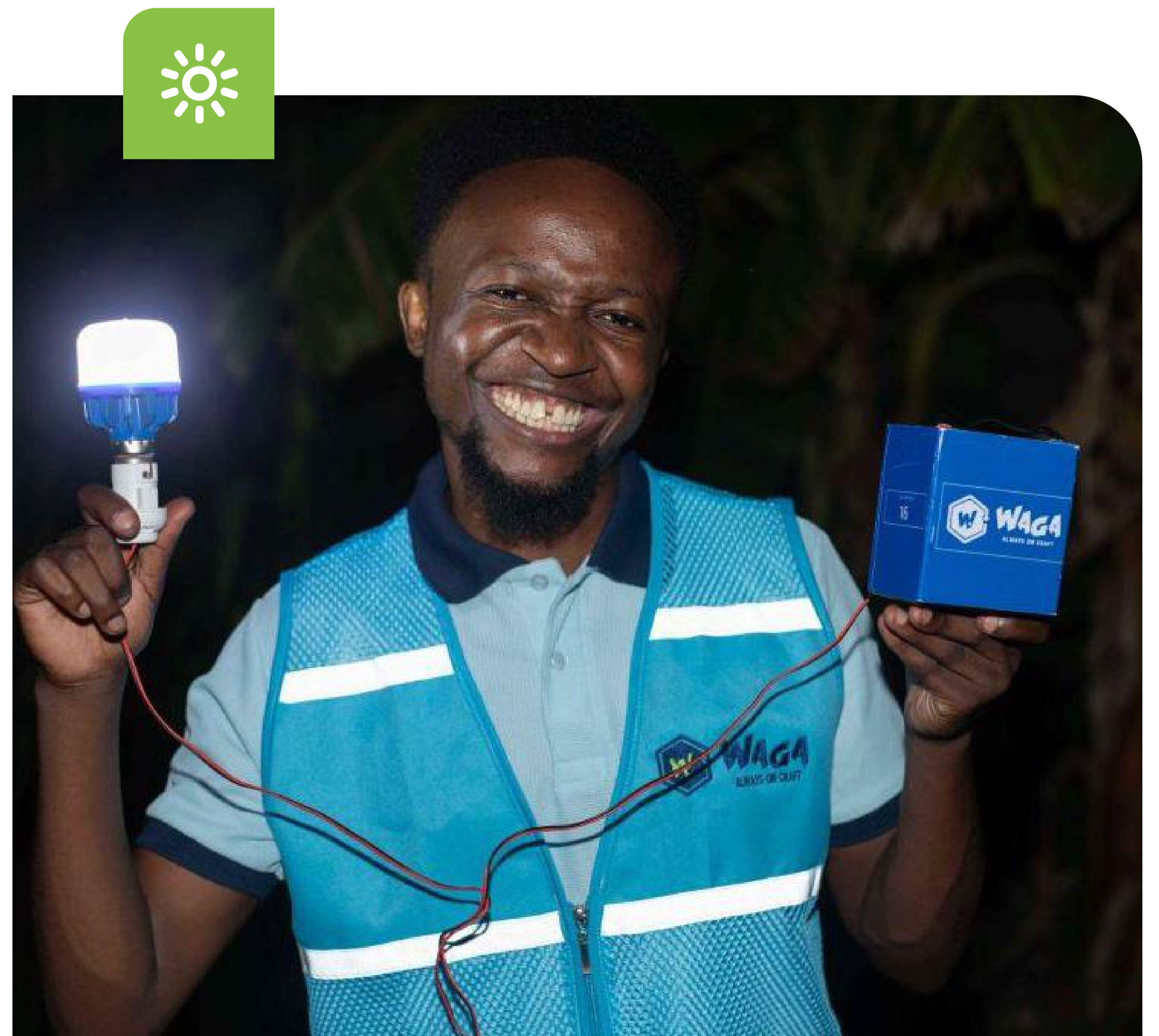
Before WAGA Technologies existed, families like those in Mafinga District spent up to **30% of their income** on kerosene and candles that poisoned indoor air equivalent to smoking two packs of cigarettes daily. Students abandoned homework at sunset, street vendors closed early, and healthcare clinics lost vaccines during power outages.



Gibson Kawago grew up in this reality, watching his brother struggle to complete schoolwork under kerosene lamps that damaged his eyesight and burned his throat. At **age 12**, Kawago began collecting discarded batteries and experimenting with sticks, rubber bands, and wire to create basic power sources that could light a single bulb for hours.

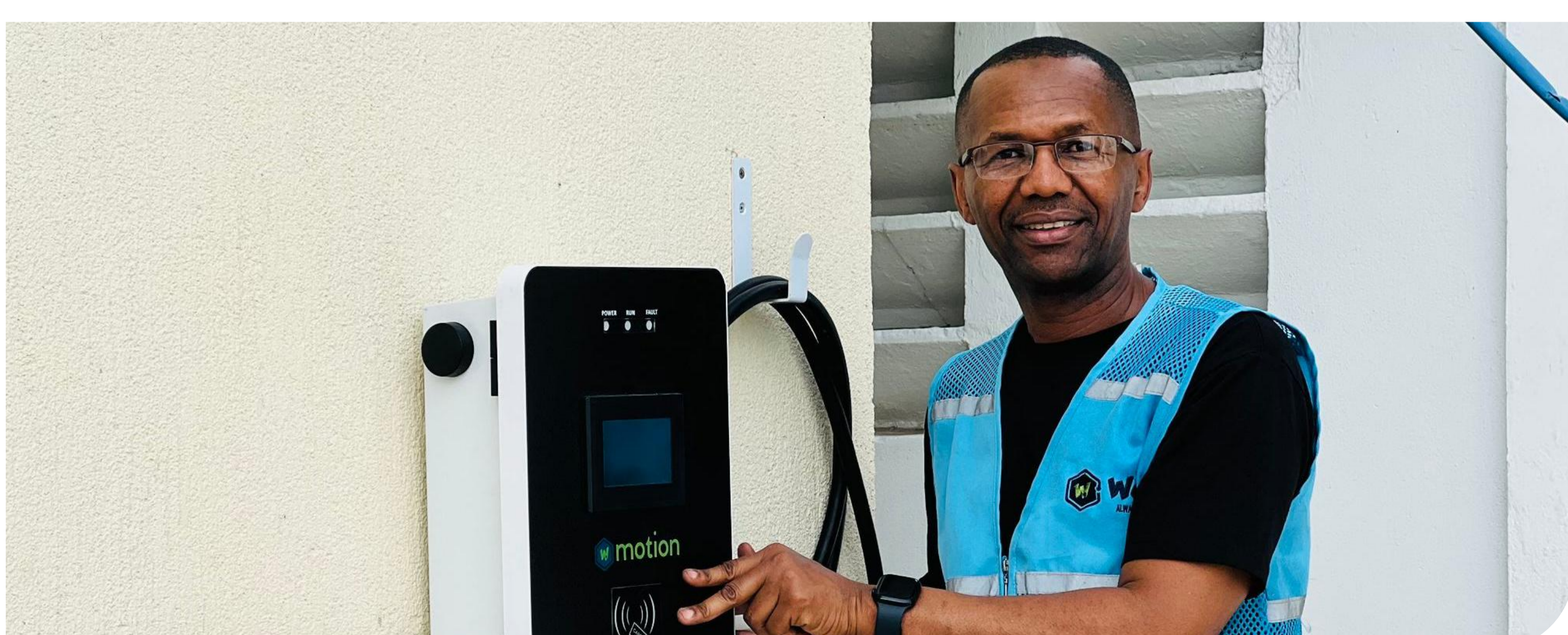
Today, his Mbezi Beach workshop processes **400 lithium-ion cells daily** through six-hour diagnostic cycles that determine each battery's remaining useful life. Technicians test voltage retention, thermal patterns, and charge cycles before assembling cells into PAWA Packs that provide **12 to 48 hours of reliable electricity** for rural households.

Because WAGA Technologies exists, families now **reduce energy expenses by 60%** while children complete homework after dark, businesses operate beyond sunset, and clinics can maintain vaccine storage during power interruptions. The company **employs 35 technicians and collectors** who retrieve discarded batteries from electronics shops throughout Kariakoo, Mwanza, Dodoma, Iringa, and Arusha.



Gibson Kawago - Founder of WAGA

FUNGUO investment proved catalytic when WAGA needed to scale beyond prototype development. Programme funding enabled equipment upgrades that **increased daily processing from 40 to 400 cells**. Hence transforming workshop operations into commercial manufacturing that **diverts 30 tonnes of electronic waste monthly** and serves Tanzania's energy access gaps.





The scaling creates employment for women and youth who previously lacked formal income opportunities while addressing Tanzania’s **100,000 tonnes of annual electronic waste**. Each PAWA Pack **costs 60% less** than conventional solar alternatives yet delivers superior reliability for rural productivity needs.

The Knowledge Transfer

Kawago’s mastery of battery behavior now addresses a different infrastructure challenge. Tanzania’s **10,000 electric vehicles** compete for fewer than 15 charging stations. This creates bottlenecks that limit adoption despite electricity costing 93% less than petrol.

In **January 2025**, Kawago launched **WAGA Motion** to apply battery management expertise gained from processing electronic waste. The same understanding of charge patterns, thermal control, and degradation cycles that serves rural households now informs EV charging infrastructure designed for Tanzania’s power grid conditions and humidity challenges.

A pilot station near Mlimani City tests mobile payment integration and backup power systems that automatically switch to solar energy during electricity interruptions. Selected EV owners provide feedback while engineers develop charging management software suited to Tanzania’s mobile money ecosystem and power supply conditions.

“Many people who want to bring electric vehicles into Tanzania ask themselves, ‘Where will I charge my car?’ So, the goal of WAGA Motion is to accelerate the transition to e-mobility for Tanzanians,” Kawago explains. The approach leverages technical competencies developed through FUNGUO-supported scaling at WAGA Technologies.



Off-grid expertise that electrifies households without any electricity connection now enables charging infrastructure that functions despite urban power interruptions. **WAGA Motion** applies backup power knowledge gained from serving remote areas to ensure EV charging remains available even when city electricity fails.

FUNGUO investment in electronic waste recycling created technical foundations that unlocked unexpected business models. Rural electrification expertise now serves urban mobility needs, demonstrating how catalytic funding generates multiplier effects beyond original programme objectives.



Handcrafted from Waste

Green Venture Combines Traditional Carpentry with Plastic Recycling to Furnish Tanzania

Edgar Edmund runs his hand along the smooth surface of a dining table that will never rot, warp, or need refinishing. Made entirely from discarded plastic bottles and bags, this piece reveals how **Green Venture Tanzania** has altered furniture manufacturing through fusion of ancient carpentry techniques with modern recycling technology.

Ten years after founding the company at **age 15**, Edmund has built Tanzania's leading plastic-to-furniture operation that produces handcrafted indoor and outdoor pieces indistinguishable from traditional wood furniture. The Arusha-based company transforms **500 kilograms** of plastic waste daily into planks that local artisans shape into beds, chairs, tables, and garden sets using time-honored carving and molding methods.

From Streets to Showrooms

The furniture journey begins with **130 freelance waste collectors** who gather sorted plastic from households, markets, and streets at 50 cents per kilogram. These materials feed into Green Venture's extrusion process, where different plastic types get heated and molded into lumber planks. Local carpenters then purchase these planks to create custom furniture pieces that command premium prices in both domestic and export markets.

This two-stage approach creates employment at multiple skill levels. Nine full-time workers operate the plastic processing equipment, but the actual craftsmanship happens when experienced carpenters apply traditional woodworking techniques to the recycled lumber. The result is furniture that maintains the aesthetic appeal of carved wood but offers superior durability for Tanzania's challenging climate.



Edgar Edmund

Built for the Long Game

Green Venture furniture solves practical problems that plague traditional wooden pieces in tropical environments. Hotel pools no longer require annual furniture replacement because plastic lumber resists water damage completely. Safari lodges in **Serengeti National Park** choose Green Venture outdoor sets because termites cannot destroy the material. Schools purchase playground equipment that survives both student use and seasonal rains without maintenance costs.

The furniture's **50-year lifespan** eliminates recurring replacement expenses that burden businesses operating on tight margins. Restaurant owners report significant cost savings when dining tables remain stable through multiple rainy seasons without deforming or cracking. Tourism operators value furniture that maintains its appearance despite constant exposure to sun, rain, and humidity.



Scaling Traditional Skills

FUNGUO's catalytic funding enabled Green Venture to acquire **industrial shredders** that doubled processing capacity. This equipment upgrade improved lumber consistency, allowing carpenters to apply traditional techniques more effectively. **Better quality control** means furniture pieces meet durability standards while maintaining the handcrafted aesthetic that customers prefer over mass-produced alternatives.

The investment also strengthened Green Venture's partnership network. Splitvision Sweden provides technical expertise that improves extrusion processes, ensuring lumber quality meets furniture-grade standards. **Twende Innovation Center** supplies workspace and business support in Arusha. The Segal Family Foundation connects the company with community organizations that coordinate waste collection networks.



Market Recognition Beyond Borders

Revenue exceeding **\$40,000** annually comes from diverse customer segments spanning hospitality, education, residential, and export markets. Tourism operators purchase outdoor furniture that withstands harsh weather without losing visual appeal. Individual households order custom pieces that offer wood aesthetics with plastic durability. Export customers in countries like Kenya value furniture that ships without damage concerns.

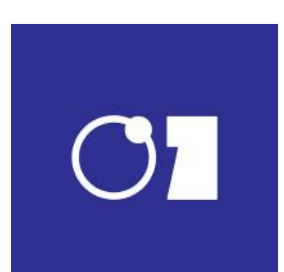
This commercial success validates Edmund's original vision of creating sustainable livelihoods through environmental solutions. Indeed, Green Venture has **processed over 40 tonnes of plastic waste** since launch, preventing materials from contaminating landscapes where tourists come to experience Tanzania's natural beauty.



Teaching the Next Generation

Environmental education programs **reach 5,000 students** annually through school partnerships that also serve as waste collection points. These initiatives teach waste separation while creating supply chains that support furniture production. Students learn how discarded materials become valuable products, connecting environmental responsibility with economic opportunity.

Future expansion targets **15 full-time and 200 part-time positions** as production scales to serve additional regions. The company plans geographic growth that leverages existing waste streams and carpentry skills throughout East Africa. "Traditional craftsmanship and modern recycling can build sustainable businesses together," **Edgar tells Atoms & Bits.**



Nine Products, One Tree

Two Women Build Tanzania's First Premium Coconut Brand While Doubling Farmer Incomes

The morning air carries the sweet aroma of fresh coconut oil across **Laurencia Mushi's** production floor in Dar es Salaam. Workers move between steel tanks and pressing equipment, transforming raw coconuts into premium oils destined for local shelves. Outside, trucks arrive carrying coconuts directly from coastal farmers who now earn 40% more per nut than they did three years ago.



Laurencia Mushi

Mushi and her business partner **Glory Mtui** built **Glo Africana** to solve a problem affecting thousands of coconut farmers along Tanzania's coast. Despite coconut trees covering over **250,000 hectares** from Lindi to Tanga, farmers received minimal income from their harvest. Middlemen controlled pricing, processing facilities remained outdated, and most coconuts left Tanzania as raw commodities rather than finished products.

The two entrepreneurs recognized an opportunity hiding in plain sight. Tanzania imports cooking oils worth over **\$150 million** annually while coconut farmers struggle with low prices and limited market access. **"We saw farmers selling coconuts for 200 shillings each to traders who would resell them for 500 shillings in Dar es Salaam,"** Mushi explains. **"The value was being created, just not where it should be."**

Glo Africana now processes coconuts into high-quality oils, cosmetic products, and food ingredients using modern equipment that meets international standards.



The company purchases directly from farmers, cutting out intermediaries who previously captured most of the value chain profits. Their processing facility transforms fresh coconuts into virgin coconut oil, refined cooking oil, and coconut flour within **24 hours** of harvest.

This approach required significant capital investment in processing equipment, quality control systems, and supply chain coordination.

FUNGUO's catalytic funding enabled Glo Africana to acquire modern pressing machines, expand storage capacity, and establish **direct relationships with 180 coconut farmers** across four coastal regions. The investment allowed them to increase daily processing capacity by **90%** while maintaining strict quality standards.

The results demonstrate how local processing creates economic value that stays within Tanzania. As of August 2025, **Glo Africana processes 500 coconuts** daily during peak season. It generates employment for 23 people in processing, packaging, and distribution. Farmers participating in its direct purchase program **earn 300–400 shillings per coconut** compared to the previous 200 shillings from middlemen.

However, improvements extend beyond pricing.

The company provides farmers with guidance on harvest timing, post-harvest handling, and transportation methods that preserve coconut quality.

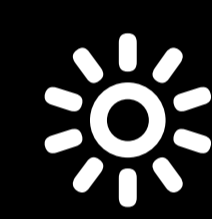
This technical support increases the percentage of harvested coconuts suitable for premium oil production **from 60% to 85%**. It creates additional income opportunities for farmers who previously saw damaged coconuts go to waste.



Local retailers report strong demand for **Glo Africana** products, particularly among urban consumers seeking healthier cooking alternatives. The company supplies 15 supermarkets in Dar es Salaam and has expanded to Arusha and Mwanza. Similarly, their virgin coconut oil sells for competitive prices while generating higher margins than imported alternatives.

Environmental benefits accompany economic gains. Local processing reduces transportation emissions from shipping raw coconuts to processing facilities abroad. Coconut shells and husks become inputs for local charcoal production and agricultural mulch, thus creating additional revenue streams for farmers while reducing waste.

Going forward, expansion demonstrates scalable impact potential. **Glo Africana** plans to extend direct purchasing to **400 farmers** by **2026**, potentially affecting income for over **2,000 family members** in coastal communities. Their processing model provides a template for value addition in other agricultural sectors where Tanzania exports raw materials despite having domestic processing capabilities.



Indeed, its success has attracted attention from development partners and private investors interested in agricultural value chain development. The company also recently secured additional funding to establish a second processing facility in Mtwara. Hence, bringing processing capacity closer to major coconut-growing areas.

This transformation from commodity exports to finished products reflects Tanzania's broader economic development strategy. When local companies process agricultural outputs into consumer goods, the resulting employment, skills development, and technology transfer create foundations for sustained industrial growth.

Glo Africana proves that developing local processing capacity generates benefits extending far beyond individual companies. We believe their success encourages other entrepreneurs to identify agricultural commodities suitable for domestic value addition. This can potentially redefine how Tanzania participates in global agricultural markets.

Two Years, One Purchase

Medical-Grade Reusable Pads Reach 20,000 Tanzanian Girls

A single purchase lasting two full years challenges the entire economics of menstrual health in Tanzania. While most menstrual products require monthly replacement, **Fursa Pads** withstand **24 wash cycles** across **24 months**, fundamentally changing how families budget for women's health needs.

FHT Company Limited manufactures these reusable pads using four-layer construction: soft absorption material, leak-prevention technology, waterproof backing, and chemical-free fabrics sourced locally from bamboo fiber and cotton.

Unlike imported disposables containing synthetic materials, **FHT products** carry approval from the **Tanzania Medicines and Medical Devices Authority (TMDA)**. They meet quality standards typically reserved for pharmaceutical products.

The business operates through a dual-track model addressing different market segments simultaneously. Commercial sales serve urban customers able to afford the **15,000–25,000 shilling** upfront cost, while the **Fursa Foundation** manages subsidized distribution to schools and rural communities. This structure maintains revenue streams while expanding access beyond purely commercial reach.

Manufacturing employs 85% women across production, packaging, and distribution roles. This creates stable employment in an industry traditionally dominated by imports. The company also sources raw materials locally to support domestic textile suppliers while reducing dependence on foreign manufacturing. On top of that, clinical testing and regulatory compliance ensure products meet international safety standards despite local production.



FUNGUO's investment enabled scaling across production capacity, quality systems, and market penetration. Funding supported:

- Industrial sewing machines capable of consistent four-layer pad design
- Bulk raw material procurement that reduced unit costs by 30%, and
- Training programs for the predominantly female workforce.

In addition, technical assistance connected **FHT** with regulatory experts who guided the TMDA approval process.

The enterprise's distribution networks extend beyond traditional retail channels.

It operates sales agent programs creating income opportunities for women in urban and rural areas, while institutional partnerships with schools and NGOs combine product distribution with comprehensive menstrual health education. These programs address knowledge gaps in communities where menstrual health remains poorly understood.

We have seen measurable outcomes demonstrate impact across health, education, and economic dimensions. FHT has reached **over 20,000 schoolgirls** through direct sales and institutional partnerships. Users report reduced infections and increased comfort.

Fursa Pads have enabled fuller participation in school and work activities compared to makeshift alternatives, such as cloth pieces or paper.

Their reusable design eliminates recurring purchase requirements while providing predictable costs for family budgeting. Each pad set replaces what would otherwise require monthly disposable purchases over two years. Each set generates substantial savings for households where menstrual product costs strain limited budgets.

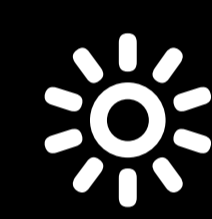
We also found employment benefits extend beyond direct manufacturing. FHT provides entrepreneurship training for 300+ women through foundation programs. It helps build business skills alongside health education. Its sales agent network additionally creates micro-enterprise opportunities, which are particularly valuable for women seeking flexible income sources.



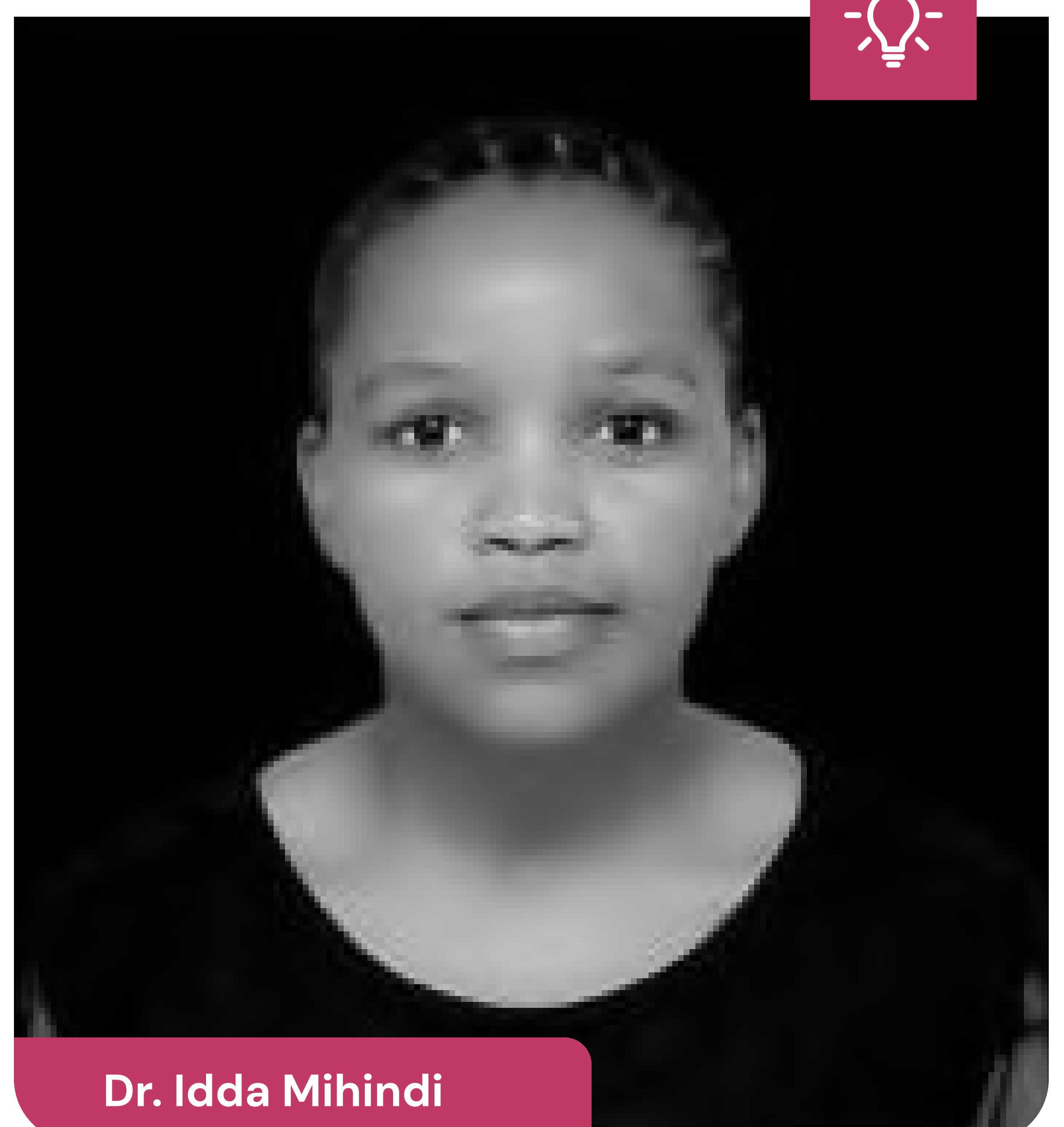
Educational partnerships amplify individual product reach. School collaborations include comprehensive sessions addressing hygiene practices, biological education, and stigma reduction. These programs create knowledge benefiting entire families and communities, extending impact beyond individual users.

FHT's regulatory approval helped establish precedent for locally manufactured menstrual health products in Tanzania. **TMDA** certification shows that organic alternatives can meet international medical standards, potentially encouraging further investment in women's health product development.

Founder Dr. Idda Mihindi's medical background informed product development decisions, ensuring designs address both health requirements and user comfort. Her clinical experience treating menstrual health complications guided pad material selection and production methods that prioritize infection prevention.



The company's success metrics continue expanding toward **50,000 users by 2026** while maintaining quality standards and affordability. Its model proves local manufacturing can serve health needs while creating employment, supporting domestic suppliers, and reducing import dependence in essential women's health products.



Dr. Idda Mihindi



Printed, Not Imported

Tanzania's First 3D Medical Device Factory Serves 2,100+ Patients

The **Mkono-1** prosthetic hand charges like a mobile phone but functions like a human grip. Manufactured entirely in Dar es Salaam using reinforced plastic materials and small electric motors that control finger movement, it costs **60-70%** less than imported alternatives while delivering comparable functionality to devices previously accessible only to wealthy patients.

Such dramatic cost reductions address a continental crisis: **83%** of African amputees lack prosthetic access due to prohibitive import prices and limited local alternatives. Rover Labs responded by building Tanzania's first medical device factory, recognizing that 3D printing technology could manufacture multiple products using identical equipment and materials.

The **workshop** produces battery-powered prosthetics alongside specialized diabetic insoles and waterproof sports braces using the same industrial printers. Where international manufacturers require separate production lines for different devices, **Rover Labs** switches between products by changing digital design files and raw materials, enabling rapid customization without major retooling costs.

This flexibility transforms patient care timelines. Traditional prosthetic fittings require months of appointments and international shipping, assuming patients can afford devices costing more than annual salaries. Rover Labs patients receive 3D body scans—digital measurements taken using laser technology—generating precise device specifications within hours, often walking out the same day with functional devices.



Dr. Atish Shah

Product sophistication matches international standards despite local production. The **Mkono-1** incorporates computer chips controlling finger movements through small electric motors. Diabetic insoles feature pressure-relief zones with antimicrobial coatings—materials that prevent bacterial growth and infections. Sports braces use lightweight but strong composite materials weighing **40%** less than traditional plaster alternatives while remaining adjustable and completely waterproof.

Roverlab's presidential support coincided with **FUNGUO's TZS 180 million** investment enabling transition from prototype development to commercial manufacturing. Funding supported medical-grade equipment purchases, regulatory compliance processes, and quality certification requirements necessary for hospital sales and clinical applications.

The investment's impact shows in patient outcomes.

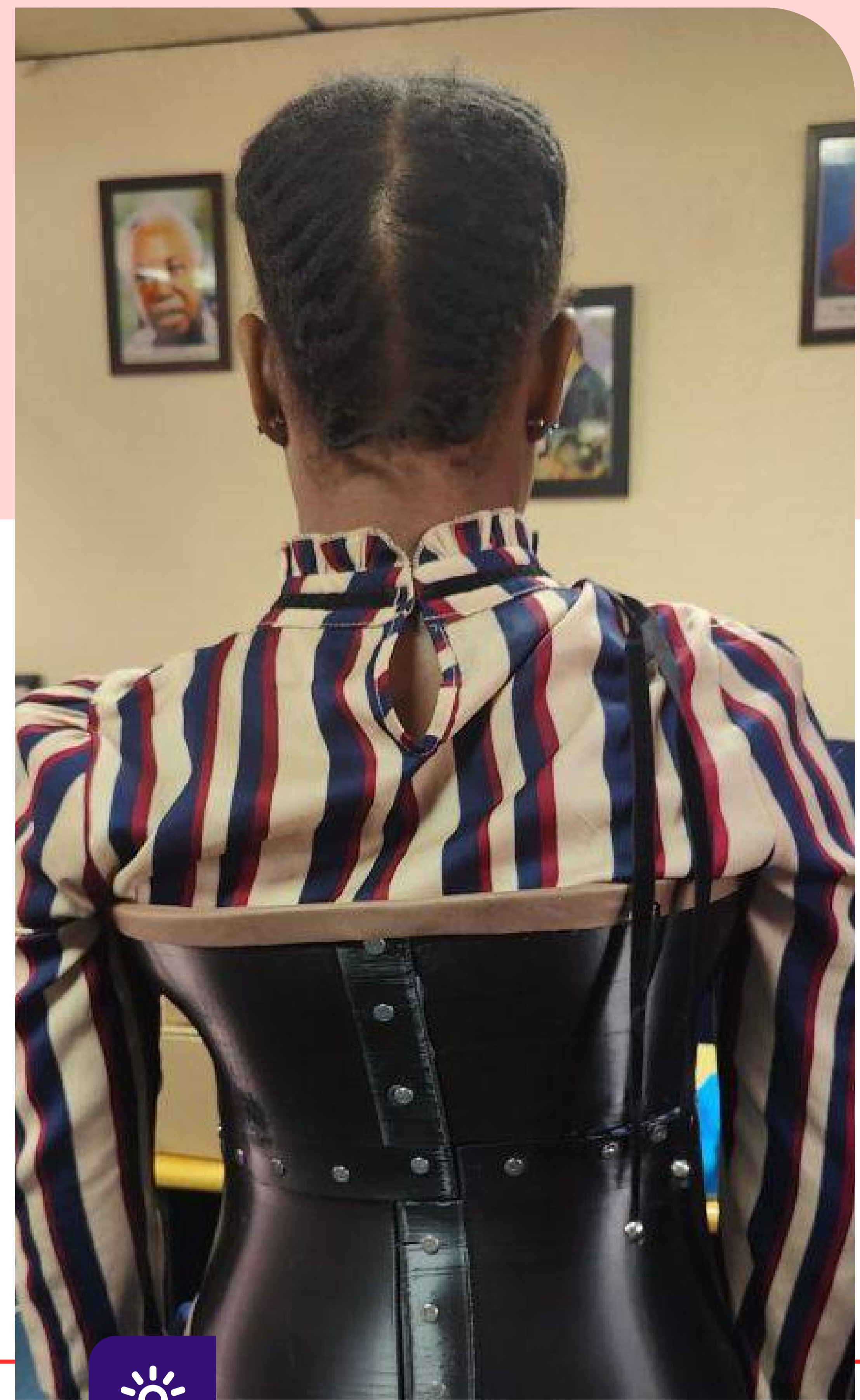
Over 2,100 individuals have received devices ranging from prosthetic limbs restoring mobility after accidents to custom insoles preventing diabetic foot amputations. Athletes return to competition weeks ahead of schedule using precision-fitted braces designed for specific injury types and sport requirements.

Employment creation builds technical expertise previously unavailable in Tanzania's manufacturing sector. The facility trains twelve engineers, technicians, and quality control specialists in medical device production, 3D printing applications, safety testing to ensure materials don't harm the body, and regulatory compliance procedures. These skills transfer to other advanced manufacturing sectors while establishing foundations for additional healthcare technology development.



International partnerships amplify local capabilities through knowledge transfer and research collaboration. The University of Strathclyde provides advanced materials research and biomedical engineering expertise while Rover Labs offers real-world testing environments for academic innovations, creating bidirectional benefits enhancing both product development and university research programs.

Regulatory achievements establish important precedents for medical device manufacturing in Tanzania. Official licensing demonstrates that domestic production can meet international quality standards typically associated with imported medical technologies, creating frameworks for additional local manufacturers entering healthcare technology sectors.



Market expansion targets underserved populations across multiple medical conditions. **Rural patients** access devices through mobile scanning technology eliminating expensive travel for fittings. **Urban hospitals** increasingly specify locally manufactured options for cost-conscious patients requiring prosthetics, limb supports, or therapeutic aids previously available only through expensive imports.

Future development focuses on surgical instruments, diagnostic equipment housings, and rehabilitation devices. Each product line leverages existing 3D printing infrastructure while serving different patient populations and market segments across East Africa's healthcare systems.

Rover Labs demonstrates how strategic investment in local medical device manufacturing creates sustainable enterprises serving domestic markets while building industrial capabilities that reduce healthcare import dependence and establish Tanzania as a regional leader in medical technology innovation.



Dr. Never Mwambela

Plant Biodefenders found a different weapon in the microscopic world. The company produces **VURUGA** Biocide using a beneficial fungus commonly used in food fermentation. When farmers spray this liquid on their crops, millions of tiny fungal spores attach to fall armyworm caterpillars and penetrate their bodies, killing the pests from within while leaving beneficial insects like bees completely unharmed.

This biological approach delivers advantages impossible with chemicals. The same fungal spores that eliminate pests also break down organic matter in soil, releasing nutrients that plants absorb more easily—essentially providing fertilizer alongside pest control. The formulation attracts pollinating insects essential for crop reproduction, creating a system that enhances rather than disrupts natural farming processes.

Dr. Never Mwambela developed this technology during her doctoral research at Nelson Mandela African Institute of Science and Technology, supported by the UN Food and Agriculture Organization. Her laboratory work identified the specific fungal strain and liquid formulation needed to create an effective biological pesticide suited to African farming conditions and climate.

Triple Action Formula

Single Product Kills Pests, Feeds Plants, Attracts Pollinators

A single insect species costs African farmers \$1.5 billion every year. Fall armyworm, an invasive caterpillar from the Americas, arrived on the continent in 2016 and began devouring maize, sorghum, and other staple crops faster than farmers could respond. Chemical pesticides offered little help—many products sold across Africa contain insufficient active ingredients or are completely fake, according to agricultural research across West African markets.



The research remained academic until **FUNGUO's \$50,000** investment in **2022** enabled commercial production. This funding supported fermentation equipment where fungal spores multiply under controlled conditions, plus regulatory approval processes required for agricultural products and market development reaching farmers who had never used biological alternatives to chemicals.

Commercial adoption validates the biotechnology approach. Over 18,000 farmers now purchase VURUGA Biocide regularly, including 7,600 women who have used the product for three consecutive growing seasons.

These customers have protected 300,000 hectares of cropland while maintaining quality standards for 160,000 tonnes of cotton exports and coffee destined for international markets.

Production scales efficiently to meet growing demand. Daily output of 1,000 liters supports 50% annual sales growth, with products packaged from 40ml sachets affordable for smallholder farmers to 5-liter containers for commercial operations. This pricing strategy ensures market access across economic segments while generating sustainable revenue streams.

International recognition confirms both scientific validity and commercial potential.

Dr. Mwambela won the 2024 Agroecological Food Futures Prize in Rwanda, defeating over 200 competing scientists across East Africa and receiving \$20,000 from Biovision Foundation. She also won EU-Coimbra Young Scientist Award from Sub-Saharan Africa and awarded a prize and 3 months research scholarship at University of Barcelona, Spain in 2024. German President Frank-Walter Steinmeier personally reviewed the technology during his October 2023 Tanzania visit, demonstrating diplomatic interest in agricultural biotechnology solutions.

Recognition catalyzed significant funding expansion. Plant Biodefenders secured **€300,000** from German development agency DEG alongside additional loans totaling **\$22,000**. This capital supports production expansion toward **2,000 liters** daily and distribution network development across multiple regions where fall armyworm threatens food security.



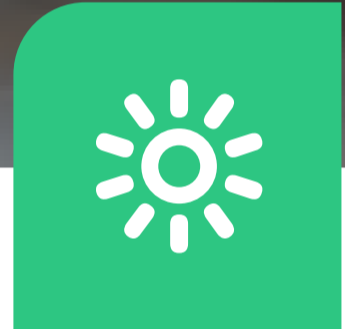
Six patents cover the biopesticide formulation process, soil enhancement applications, and disease control systems for livestock. Six registered products demonstrate business diversification beyond crop protection into animal health and human wellness using similar biotechnology platforms. These innovations contribute to food security, improve livelihoods, and support export markets for coffee, cotton, and avocado.

Educational programs multiply impact beyond direct sales. Field schools train 8,500 farmers annually on sustainable pest management practices, while laboratory services provide soil testing and pest identification supporting evidence-based agricultural decisions that improve yields regardless of product purchases.



Coffee sector expansion represents significant growth opportunity. Ongoing trials with Tanzania Coffee Research Institute validate effectiveness against coffee-specific pests, opening access to premium international markets where organic certification commands higher prices for sustainably produced beans.

Plant Biodefenders demonstrates how university research can create commercially viable solutions to continental challenges. The company's success establishes biotechnology manufacturing as a realistic development path for African countries, creating skilled employment while addressing food security through methods that strengthen rather than degrade agricultural ecosystems.



MazaoHub has systematically addressed each link in this broken chain. The company now operates East Africa’s most comprehensive digital agriculture platform, currently serving **80,305 farmers** through an integrated system that handles everything from soil analysis to crop marketing. Their approach transforms farming from an isolated, risky venture into a connected, data-driven business.

MazaoHub operates through three integrated models. First, Soil Intelligence delivers five-minute soil profiles using portable sensors—pH, salinity, texture, organic matter, and nutrient balance—captured with GPS and farmer IDs. The app converts results into crop-specific, climate-aware prescriptions with dosages, timing, and costed input lists.

Second, their farm management software plans seasons, generates input orders, schedules tasks, sends application alerts, tracks field observations, and logs costs, yields, and carbon metrics. It manages inventory, invoices, and repayments while connecting farmers to verified suppliers and insurers.

Tech and Touch Changes Everything

How 80,000+ Farmers Stopped Guessing and Started Earning More

When **MazaoHub** began operations in **2022**, most Tanzanian farmers operated in isolation. They bought inputs from unknown suppliers, applied fertilizers based on guesswork, sold crops to middlemen at low prices, and had no access to credit or insurance. A typical smallholder farmer might spend **\$200** on fertilizer without knowing if their soil needed it, lose **40%** of their harvest to poor storage, and sell the remainder for half its market value.

Third, Farmer Excellence Centers function as franchise farm clinics co-run with agrovets and agribusinesses. Each hub offers soil testing, input fulfillment, data-driven agronomy guidance, demo plots, mechanization booking, produce aggregation, and buyer linkages through CropSupply.com. Extension officers provide face-to-face support while the platform synchronizes data for monitoring, risk scoring, and market access.

MazaoHub has processed 298,783 soil samples, but the real transformation begins when data flows through an end-to-end service that steers every farm decision. Farmers using the full platform consistently report average yield gains of 150%, fertilizer cost reductions of 30%, and a 5× increase in organic matter application.

Critically, the same digital trails—geo-tagged soil tests, crop plans, input invoices, scouting logs, and harvest receipts—unlock formal credit. Partner banks can underwrite loans on production realities instead of guesswork, while CropSupply.com converts verified hectares into visible supply that vetted buyers can contract in advance.

The company serves distinct customer segments.

Individual smallholders subscribe at roughly \$25 per season for soil testing, crop-specific recommendations, input lists, and in-season advisory. Producer groups and cooperatives step up to around \$500 per season for member onboarding, bulk procurement orchestration, and auditable ledgers that make it straightforward for lenders to extend working capital. Commercial farms purchase higher-tier packages that add dedicated agronomists, precision scheduling, and harvest logistics integrated with off-takers.

Enterprise customers—financial institutions, input manufacturers, and public agencies—plug into the same infrastructure. Banks access verifiable farmer histories, field-level progress dashboards, and risk scores. Input companies gain demand forecasting and last-mile distribution management. Government agencies use anonymized, real-time panels to monitor productivity, subsidy effectiveness, and climate-risk alerts.

Under CropSupply.com, hotels, schools, food processors, and exporters place structured orders matched to mapped farmers and collection points.

Each lot carries traceability: field coordinates, soil profile, input usage, and harvest timing. This transparency earns smallholders access to premium channels typically reserved for large estates.

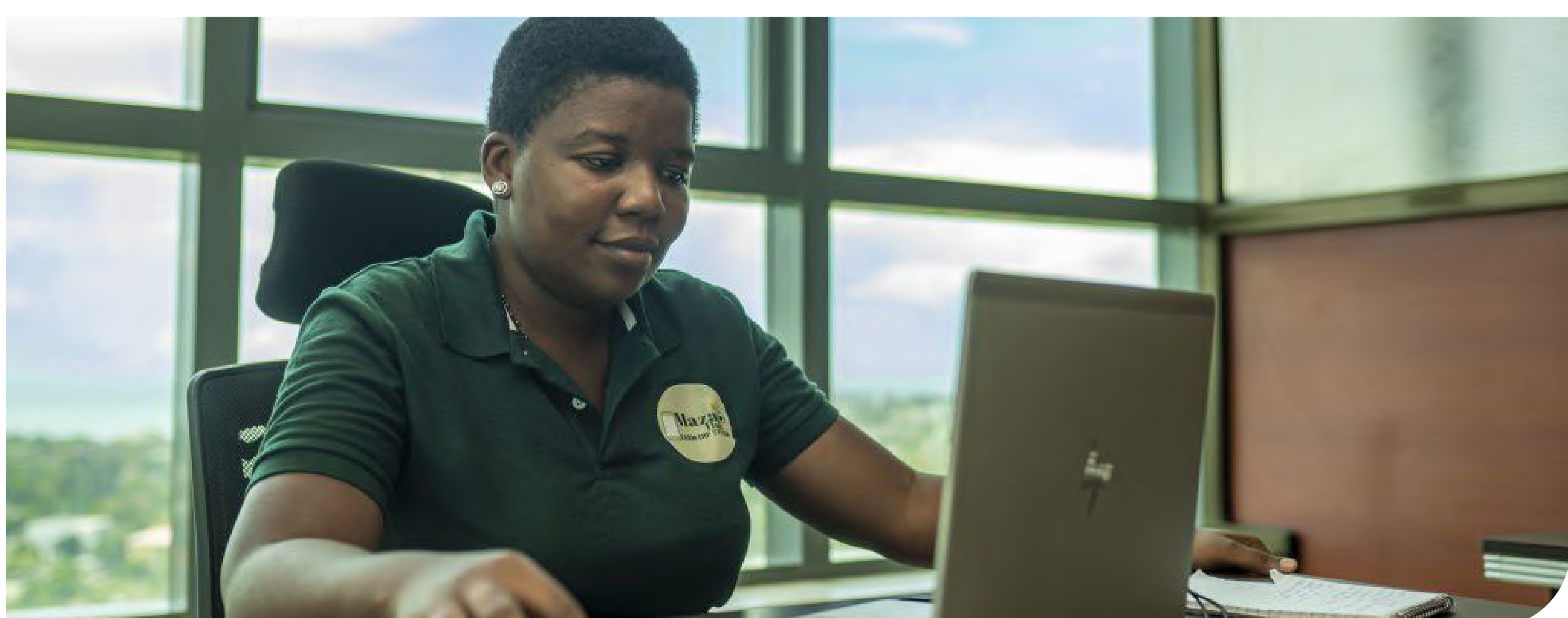
FUNGUO provided the first catalytic funding in 2022, when MazaoHub was still building its platform and hardware. That support produced the first pilot batch of solar-powered soil testing kits, deployed them in field trials, and validated five-minute soil diagnostics linked to GPS and farmer IDs. FUNGUO funding helped stand up core software modules so hardware and platform could work as one system in real farms. This early evidence reduced technical risk, proved farmer demand, and created the data trail that lenders and investors want to see.



Geophrey Tenganamba

That foundation directly enabled commercial capital. In April 2024, Catalyst Fund invested \$200,000, followed by Nordic Impact Funds with \$300,000, then Mercy Corps Ventures. In January 2025, Livelihood Impact Fund added further funding. In July 2025, MazaoHub closed an oversubscribed \$2 million round led by Catalyst Fund, Nordic Impact Funds, Mercy Corps Ventures, Livelihood Impact Fund, Elea Foundation, and Impacc, with participation from DOB Equity.

MazaoHub has expanded from 4 regions to 15 regions in Tanzania while piloting in Kenya, Uganda, and Zambia, validating the Tech and Touch model's scalability. The company has established partnerships with 1,136 agrodealers and cooperatives, creating a strong network that reaches remote farming communities while maintaining service quality standards.



Pay As You Glow

Mobile Money Transforms Power Access for Off-Grid Communities

Kerosene lamps and candles flicker in thousands of Tanzanian homes each evening. They cast weak light that strains children's eyes during homework and limits family activities after sunset. This happens because only 52% of our households are electrified, with rural areas far below that national average. Solar panels could solve the problem, but a basic solar kit costs more than many families earn in three months.

RUMO Energy eliminates this affordability barrier by allowing families to rent solar lanterns—portable devices containing LED lights and phone charging ports—through small weekly payments until they own the equipment. This rent-to-own approach transforms an impossible **\$100 purchase** into manageable **\$2–5 weekly** payments that align with irregular rural incomes from farming and livestock.

The payment flexibility matters because rural families don't earn steady monthly salaries like urban workers. Harvest seasons, milk sales, and casual labor provide income in unpredictable bursts throughout the year. Traditional solar companies require large upfront payments that ignore these cash flow realities, leaving millions without access despite strong demand for reliable lighting.

Mobile payment technology makes the rent-to-own system practical in areas where banks are scarce and cash transactions dominate. Customers use their phones to make weekly payments without traveling to distant offices or coordinating with company representatives. This digital approach reduces transaction costs while providing convenient payment options that fit rural lifestyles.



Patrick Mkoma

Distribution happens through 150 local women entrepreneurs called "Wakala"—agents who sell and service solar equipment within their own communities. These women understand their neighbors' financial constraints, explain product benefits in local languages, and provide ongoing technical support when equipment needs repair or replacement. Rather than relying on distant sales centers, RUMO embeds commerce within existing social networks.

Wakala agents earn commission on each sale while building sustainable businesses around clean energy distribution. This creates local employment opportunities that don't require women to leave their communities or neglect family responsibilities. The agent network solves the last-mile distribution challenge that prevents many solar companies from reaching remote rural areas profitably.

FUNGUO's second cohort investment in 2023 enabled RUMO to scale beyond pilot operations in Dodoma region.

The funding supported inventory acquisition for agent networks, training programs that taught business skills alongside technical knowledge, and mobile payment platform development that automated the rent-to-own payment process.

Technical assistance helped RUMO refine its business model through market testing and customer feedback collection. This support proved crucial for a company targeting customers who had never used solar technology or participated in formal payment plans. The program's guidance helped RUMO adapt products and services to actual customer needs rather than assumed preferences.

Measurable outcomes validate the model across social, economic, and environmental dimensions. RUMO has brought electricity access to 10,000 people while creating 157 jobs through agent networks and support operations.

The solar lanterns have eliminated **450 tons** of carbon dioxide emissions by replacing kerosene lamps and small diesel generators used for lighting and phone charging.

Market recognition confirms both social impact and commercial viability. **RUMO** won Tanzania's 2024 Affordable Energy Enabler of the Year award, while **founder Patrick Mkoma** earned inclusion in Meaningful Business's global **Top 100 leaders** list. This recognition attracts additional investors and partnership opportunities essential for continued scaling.



The success also attracts attention from development organizations seeking proven models for rural energy access. **RUMO's** combination of appropriate technology, flexible financing, and community-based distribution addresses multiple barriers that have prevented previous solar initiatives from achieving sustainable scale in Africa's poorest communities.



Expansion targets **12,000 Wakala** agents serving 1 million people across Sub-Saharan Africa by **2030**. This ambitious vision requires additional funding, technology platform refinements, and partnership development across multiple countries where similar energy access challenges persist.

With appropriate support, **RUMO Energy** can further establish community-driven distribution as a viable path for rural electrification. Its sustainable business model serves populations earning **less than \$2 daily** while generating commercial returns sufficient to attract private investment and enable continued expansion across the continent's energy-poor regions.

The Invisible Market

Student Fintech Serves 3,432 Borrowers With Zero Defaults

Every semester, most university students in Tanzania have to deal with money problems. The government provides education loans worth over \$230 million annually through the Higher Education Students' Loans Board (HESLB). But students, especially freshmen, must wait up to two months between enrollment and their first payment. During this gap, many skip meals, drop courses, or abandon their studies entirely due to unpaid tuition and housing costs.

Traditional banks ignore this population completely. Students lack the collateral, credit history, and steady income that conventional lenders require. Yet these same students receive predictable government stipends and have strong incentives to maintain good financial standing so they can continue their education. El-dizer Financial Services recognized this disconnect and built Tanzania's only student-focused fintech around it.

The company operates through a digital lending platform that provides emergency credit precisely timed to bridge gaps in government funding. When students need money for tuition, housing deposits, or medical emergencies before their HESLB payments arrive, El-dizer advances the funds and automatically recovers them once government disbursements reach student accounts. This timing-based lending model eliminates traditional collateral requirements while protecting students from unregistered street lenders who charge up to 40% interest and demand collateral such as phones, laptops, or academic certificates.

El-dizer's product suite addresses different financial pressures throughout the university experience. Uni-Loan provides emergency credit for tuition and living expenses during the HESLB waiting period (2 months between disbursements). Pay Later allows students to buy laptops and smartphones that are essential for their coursework by offering flexible payment plans. Intern-Loan specifically serves medical students during their final year of practical training, when they work at hospitals for weeks before receiving their first salary.



Elibariki Laizer



This business model works because it aligns with rather than fights against existing financial flows. Instead of competing with government student loans, **El-dizer** complements them by smoothing cash flow irregularities. Students don't need to choose between **El-dizer** and **HESLB** funding. They use both systems to manage different timing needs throughout their academic careers.

Technology enables scale while maintaining risk control. The startup's Chuo Credit mobile app automates loan applications, approvals, and disbursements that founder **Elibariki Laizer** previously handled manually. Students submit requests through their phones, receive instant credit decisions based on their academic status and repayment history, and access funds within hours rather than days or weeks.

A crucial partnership with NMB Bank in February 2023 automated the repayment process through direct deductions from government stipends.

This arrangement eliminated default risk while simplifying the customer experience. Students now sign one contract covering their entire university career rather than reapplying for each loan. The bank agreed to this automated system because El-dizer had already achieved a zero default rate through its manual operations.

El-dizer has disbursed Sh367 million to 3,432 students across multiple colleges as of June 2025. The zero default rate confirms that students are a reliable borrower segment when products match their specific financial patterns and needs.

Looking ahead, El-dizer aims to establish Tanzania's first youth-focused bank serving customers from university through their early career stages and to ensure that every student can access essential learning devices such as laptops through affordable installment payments. This initiative will enhance academic performance in today's digital world while driving technological inclusion.

The student lending data generated by El-dizer provides credit history and spending insights that most graduates lack when applying for business loans, mortgages, or other financial products from traditional institutions.

This success attracted attention from development finance organizations seeking innovative approaches to youth financial inclusion.

El-dizer participated in the EU-funded PesaTech Accelerator program and joined FUNGUO's third cohort. FUNGUO's business development support helped founder Laizer transition from operating alone in his home to managing a formal team with dedicated office space and increase customers served from an average of 85 students per two months before FUNGUO program support to more than 500 students per two months currently.

The market expansion potential extends far beyond current operations. Tanzania's more than 800,000 university students across 49 institutions represent a massive, underserved financial market. Each student experiences predictable financial needs—emergency credit, device financing, internship support, and the transition to post-graduation employment—creating multiple touchpoints for financial service delivery.

El-dizer's data collection creates additional business opportunities impossible for traditional lenders. By tracking student spending patterns, academic performance, and repayment behavior, the company builds detailed financial profiles that could inform lending decisions long after graduation. This customer lifetime value approach transforms student lending from a niche product into the foundation for comprehensive financial relationships.



Where Are Tomorrow's Workers?

Platform Trains and Connects Tanzania's Job Seekers

Every morning, thousands of university graduates search for work through WhatsApp groups, street connections, and family networks. This informal job hunting indicates a broader economic reality, where 82% of Tanzania's non-agricultural workers operate outside formal employment structures. Most lack verifiable skills documentation or direct employer access.

Niajiri attacks this employment gap through digital skills verification and employer matching. The Dar es Salaam-based company operates a comprehensive workforce development system that assesses job seekers, provides targeted training, and connects them with employers seeking specific capabilities. Rather than simply posting job listings, **Niajiri** functions as a skills development and verification engine.

The platform addresses a fundamental mismatch between education outputs and employer needs. Universities produce graduates with degrees but often lack practical workplace skills that companies require. Traditional recruitment relies on networks and personal connections rather than demonstrated competencies. This system excludes many qualified candidates while leaving employers struggling to find suitable talent.

Founder **Lilian Secelela Madeje** built **Niajiri** around comprehensive skills assessment and development rather than basic job posting. Job seekers complete detailed evaluations covering technical abilities, soft skills, and workplace readiness. The platform then provides targeted training modules addressing identified gaps. Employers access pre-assessed candidates with verified skill profiles rather than sorting through unvetted applications.



Machine learning algorithms match candidates with opportunities based on actual capabilities rather than resume keywords. This technological approach reduces hiring time for employers while improving job placement success rates for candidates. The system learns from placement outcomes to refine future matching accuracy.

FUNGUO investment enabled platform development and market expansion beyond initial operations. The funding supported technology infrastructure capable of handling skills assessment, training delivery, and employer matching at scale. Technical assistance helped Niajiri refine its business model and establish partnerships with training providers and employer networks.



Lilian Secelela Madeje

Revenue generation operates through dual-sided pricing that reflects value delivery to both job seekers and employers.

Candidates pay **Sh2,500** for comprehensive skills development and job matching services through the “**Chombeza**” package. Employers pay **Sh500,000 monthly** for unlimited access to assessed candidates through enterprise packages. This pricing structure ensures sustainable operations while maintaining affordability for individual users.

International recognition validates both the business model and social impact approach. **Niajiri** won the Eastern Africa Startup Awards for Best EdTech Startup in **2023**. US Vice President Kamala Harris met with the company during her Tanzania visit, highlighting American interest in African workforce development innovations. Such recognition attracts additional partnerships and investment opportunities.

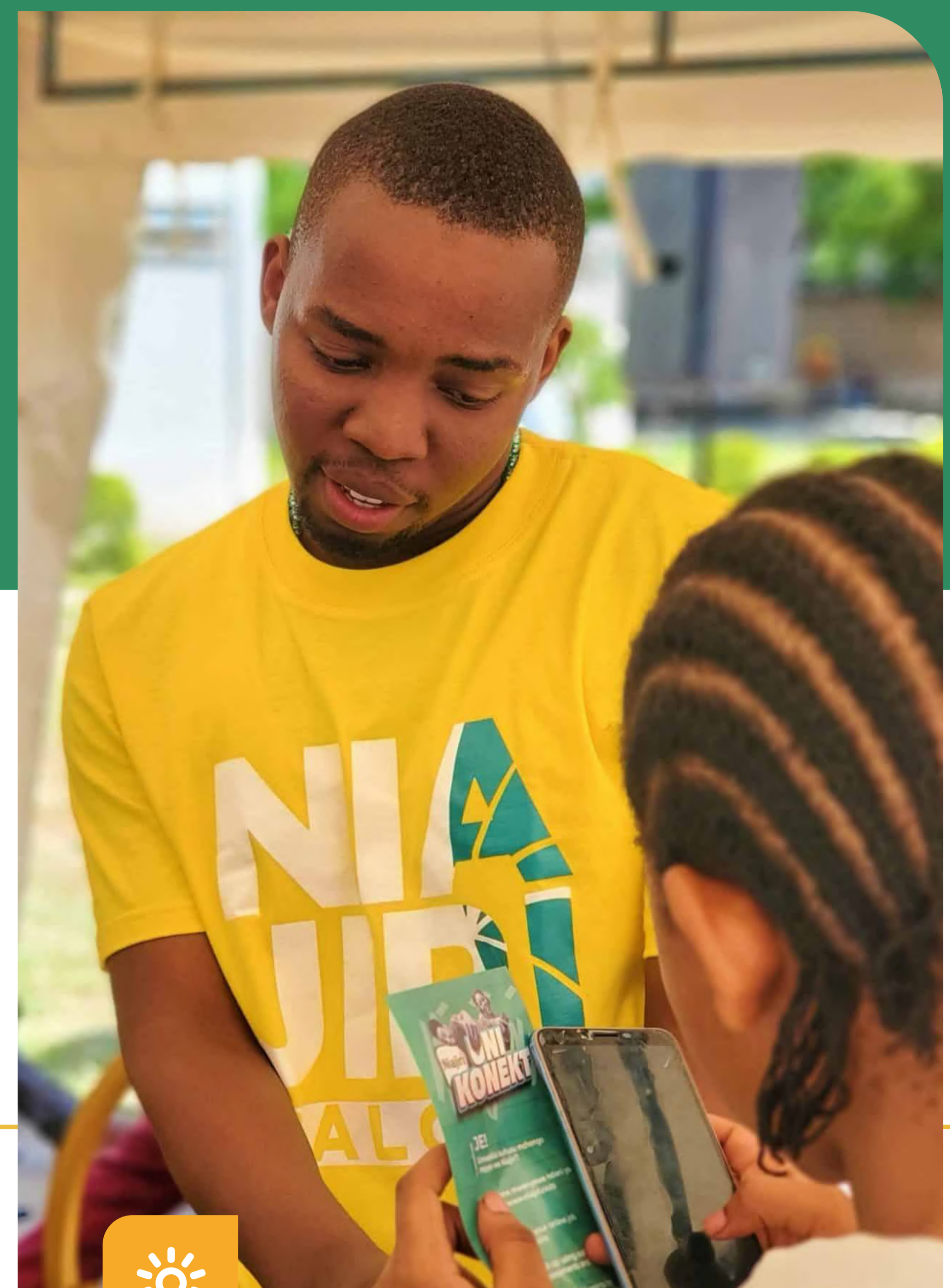
The Segal Family Foundation partnership provides ongoing support for platform expansion and impact measurement.

This international backing enables Niajiri to scale operations while maintaining focus on employment outcomes rather than purely commercial metrics. Foundation support particularly emphasizes reaching underserved communities with limited access to formal employment networks.

Platform growth metrics indicate significant user engagement across multiple stakeholder groups. Niajiri maintains 19,000+ Instagram followers while serving active job seekers and employer clients. This social media presence helps attract both candidates and companies to the platform while building brand recognition in Tanzania’s competitive digital employment space.

Their skills development curriculum, on the other hand, covers both technical competencies and workplace soft skills often missing from traditional education. Training modules address communication, project management, digital literacy, and industry-specific capabilities. This comprehensive approach prepares candidates for actual job requirements rather than theoretical knowledge.

The job board “**Michongo**” aggregates opportunities from multiple sources while providing employers with candidate quality assurance through platform assessment processes. This reduces recruitment costs for companies while increasing job access for qualified candidates who might otherwise miss opportunities due to limited network connections.



Vision 2050 alignment positions Niajiri within Tanzania’s long-term development goals emphasizing human capital development and economic transformation. The platform directly addresses workforce preparation challenges that could limit the country’s transition to middle-income status by **2050**.

Niajiri establishes skills verification and employer matching as viable approaches to addressing Tanzania’s employment challenges. It has created a sustainable business model around workforce development while generating measurable employment outcomes for graduates entering increasingly competitive job markets.

Mababu Magic

How Two Sisters Stopped Tanzania From Giving Away Its Chocolate

Every kilogram of raw cocoa beans leaving Mbeya's Kyela District carried enough value to produce chocolate worth **\$40** in European shops. Farmers who tended the trees, harvested the pods, and fermented the beans received \$1.5.

The other **\$38.5** traveled to processing facilities in Belgium and Switzerland, where Tanzanian cocoa became premium chocolate sold back to Africa at prices most farmers could never afford.

Sisters Naomi and Miriam Mwasambili returned to their grandparents' homeland in **2017** with a different vision. Rather than accepting Tanzania's role as a raw material supplier, they would build the country's first single-origin tree-to-bar chocolate operation. Miriam brought a decade of experience as executive pastry chef at Michelin-starred London restaurants while Naomi contributed strategic thinking as a PhD-holding social entrepreneur.

Mababu Chocolate now produces over **30 distinct** varieties using exclusively Tanzanian cocoa. Each bar carries full traceability from specific farming cooperatives through their **Dar es Salaam** processing facility. The premium positioning allows retail prices that generate margins impossible through commodity sales while maintaining quality standards that satisfy international markets.



Through their **"Ready for Business"** program, **Livy Africa** organizes scattered smallholder farmers into cooperatives that implement quality improvements. Technical training covers fermentation timing, drying methods, and post-harvest handling that increases the percentage of beans qualifying for premium grades from **60% to 85%**.



Naomi Mwasambili

Economic impact flows through multiple channels simultaneously. Farmers participating in Livy Africa's direct purchase program earn 40% more per kilogram than traditional commodity sales. The processing facility employs 23 people in skilled manufacturing roles while supporting hundreds of indirect jobs. Export contracts now ship Tanzanian chocolate to premium markets across Europe, North America, and Asia.

Product diversification amplifies value extraction from the same agricultural base. The company's **EcoFarm Tanzania** line processes local harvests into superfoods and supplements. **Naturals by Livy** creates skincare products from indigenous botanicals. Tanzania Cocoa Tours generates tourism revenue while educating visitors about farming and processing.

FUNGUO's catalytic support proved essential for scaling beyond pilot operations. As a **Cohort 2 investee**, the company received both financial backing and technical assistance that enabled expansion of processing capabilities and farmer training programs. The program's validation provided credibility essential for attracting additional partnerships and export contracts.

Building Businesses When the Odds Stack Against You

Dr. Never Mwambela sits in her laboratory in Arusha, surrounded by petri dishes containing the fungal spores that could transform African agriculture. Her research into biological pest control has earned international recognition, patents, and a €300,000 investment from a European development agency. Yet three years ago, she struggled to convince anyone that a woman scientist could commercialize biotechnology solutions for farmers.



Globally, approximately **9 in every 10** startup investments flow to male founders. Women entrepreneurs face three systematic barriers: limited access to capital, exclusion from business networks, and markets that undervalue their innovations. Among FUNGUO's 61 investees, 30% are led by women who have overcome these obstacles to create measurable economic impact.

The Compound Challenge

Women in Tanzania produce most of the country's cash crops, yet the majority live in poverty. This contradiction exposes how economic participation doesn't guarantee economic empowerment when women lack control over value creation.

Nancy Iraba experienced this as a marine scientist watching nearly all of Zanzibar's seaweed harvest ship to processing facilities overseas. Women farmers captured almost none of the value they created. "We were growing superfoods but could not afford to buy supplements for our own families," she explains. Converting this problem into **Seaweed Cafe** required resources and networks that took years to build.

Capital access creates particularly acute constraints. Women in Tanzania own fewer assets that banks accept as loan collateral, creating circular barriers where they cannot access capital to build assets that would enable future capital access.

Hellena Sailas experienced this when founding Arena Recycling Industry. Despite developing proven technology for converting plastic waste into durable building materials, scaling production required equipment purchases that exceeded her personal resources. "The funding we received from FUNGUO allowed us to purchase additional recycling machines, which doubled our production capacity."

Male-dominated industries create informal systems where opportunities circulate through relationships that exclude women by default. Dr. Mwambela's scientific credentials opened academic doors but provided limited access to agricultural value chains dominated by men. Converting research into commercial applications required building entirely new professional networks across farming communities, input suppliers, and government agencies.

Women-led companies also receive less media coverage and industry recognition than comparable male-led ventures, limiting their ability to attract customers, partners, and subsequent funding rounds. This visibility gap compounds capital access problems by reducing market credibility.

Students Who Skip Job Applications

Scolla Jonathan transformed her approach to business during the YouthIgnite Student Founders Fellowship. **The Tengeru Institute of Community Development (TICD)** student participated in the 2025 program that trained **300 students** across ten universities.

Six months earlier, she designed machines that processed only peanuts. Customer interviews during the fellowship revealed farmers needed equipment that handled multiple crops.

“

“As an entrepreneur, you must be dynamic,” Scolla explains. **“If one business model does not work, you adjust and try again.** I started with the peanut processing machine, but now I want to create multipurpose machines for different agricultural processes in the future.”

Her company, Skyverse Solutions, now manufactures and leases farmer-friendly machines that simplify peanut post-harvesting activities. The Skyverse Peanut Root-Breaking Machine transforms manual labor into mechanized processing, reducing physical strain by **60%** while doubling throughput. In Dodoma alone, the business serves dozens of rural farmers daily.

Scolla’s transformation illustrates YouthIgnite’s approach to entrepreneurship training.

Students don’t simply write theoretical business plans. They conduct actual customer research, build real prototypes, and validate market demand before receiving funding. The program produces working businesses rather than academic exercises.

Its scale shows serious commitment. From **1,276 applications** across ten colleges, 300 students received intensive business training. These participants learned market research techniques, financial planning methods, and customer validation processes through hands-on projects. Thirty advanced to residential bootcamp programming where they refined business models based on market feedback.

Winner Takes All (And So Do 19 Others)

Twenty students received funding totalling **Sh78 million**. These entrepreneurs didn’t win based on presentation skills or academic performance. Selection criteria emphasized market validation, customer traction, and revenue potential. Winners demonstrated actual demand for their products rather than hypothetical market opportunities.

Robinson Eliona, for example, launched a platform connecting students with accommodation providers. His customer research revealed specific pricing and location preferences that shaped product development. The business generates revenue while solving an actual problem students face regularly.

We saw real businesses emerge from structured training rather than inspiration alone. Students who completed FUNGUO and StartHub Africa’s **YouthIgnite** programming demonstrate measurable improvements in market research ability, customer communication skills, and investment readiness.



Cross-Border Research Gets Commercial

FUNGUO coordinates another initiative that transforms how universities approach research commercialization. **The Research, Innovation and Entrepreneurship Partnership (RIEP)** brings together faculty from Tanzania, Kenya, South Africa, India, and the United Kingdom (UK) for practical exchanges on technology transfer.

Recent sessions in Dar es Salaam brought researchers from **IIT Madras** to share how they converted laboratory discoveries into profitable spin-off companies. **University of Leeds** faculty explained their technology transfer processes that generate millions in licensing revenue annually. Tanzanian academics gained direct exposure to functioning systems rather than theoretical presentations.



The partnership addresses a widespread challenge across African universities.

Research institutions produce innovations in agriculture, health technology, and engineering but lack systematic approaches for commercializing discoveries. **RIEP** provides template agreements for university-industry partnerships, intellectual property protection frameworks, and business development tools designed specifically for research commercialization.

Universities participating in RIEP report increased patent applications and new industry partnerships following faculty exchanges.

This cross-border collaboration creates networks that enable researchers to access diverse markets and regulatory environments across participating countries. **Faculty return to their institutions with operational knowledge** about technology licensing, startup incubation, and intellectual property management that they apply across multiple research projects.

A Decade of Innovation Week Tanzania



Exhibition booths filled Julius Nyerere International Convention Centre (JNICC) during Innovation Week Tanzania's final day on May 16, 2025.

Young researchers explained AI farming tools to visiting ministers while startup founders pitched business plans to potential investors. University students demonstrated water purification technologies as telecommunications executives explored partnership opportunities. Such interactions stretched across all 6.2 acres of the \$15 million JNICC facility.

A decade of growth had transformed a modest conference into Tanzania's primary innovation platform.



500 People in One Room

The 2015 version looked entirely different. That inaugural Innovation Week gathered about **500 people** in the same venue for panels and networking sessions. Most attendees traveled from Dar es Salaam universities, with occasional participants from Arusha and Mwanza. The **Human Development Innovation Fund (HDIF)** and **COSTECH** organized programming using British development assistance with minimal local commitment beyond logistical support.

Institutional ownership changed gradually, then suddenly. Early editions relied heavily on external funding and coordination.

The 2019 event attracted **over 2,000** participants across multiple regions. **By 2021**, Innovation Week drew **7,500 people** to **177 events** spanning nine regions including **Morogoro, Mbeya, and Zanzibar**. Each geographic expansion happened because local institutions chose to organize satellite events, not because central planners mandated coverage targets.

The Handover Test

When HDIF's program cycle concluded in 2021, IWTz faced an institutional transition. Many wondered whether the event could continue under different coordination arrangements.

But fortunately, Tanzania demonstrated a collaborative approach.

Prime Minister Kassim Majaliwa declared Innovation Week an official annual event while **UNDP's FUNGUO program** assumed coordination with continued **European Union (EU)** and **British government** support channeled through new mechanisms.

The handover ceremony revealed the collaborative governance model that enables institutional resilience.

Christine Musisi from UNDP, **EU Ambassador Manfredo Fanti**, and **COSTECH Director General Dr. Amos Nungu** shared speaking time with **Deputy Minister Juma Omar Kipanga** and private sector representatives.

No single institution claimed ownership. Each partner committed specific resources while maintaining independent objectives.

Joseph Manirakiza, HDIF's then-outgoing Country Director, captured the transition's significance during his farewell remarks. "The journey we modestly started back in 2015 will not end with the completion of the HDIF programme," he told the closing ceremony audience. His confidence proved justified as new partnerships replaced the previous coordination structure.

Beyond Dar es Salaam

Geographic distribution accelerated through local initiative. Universities and innovation hubs in secondary cities began organizing their own Innovation Week programming without waiting for central approval.

Mwanza provides the clearest example. In 2021, **Ennovate Hub, MITz Kits, SIDO, and St. Augustine University** organized 15 events that attracted **1,200 participants**. Regional officials opened and closed programming with commitments to support local innovators, addressing regional priorities while connecting to national themes.

From Sponsor to Partner

Vodacom Foundation's involvement shows how private sector engagement evolved from sponsorship to strategic partnership. The foundation evolved from event sponsor (2019–2021) to a strategic partner when it launched the Future Ready **Summit (FRS)** in 2024.

Instead of competing with IWTz, Vodacom integrated its event schedule with existing activities. Foundation Director Zuweina Farah describes this collaborative approach as essential for addressing development challenges.

Over five days, the combined platform addressed artificial intelligence policy, digital transformation, urban development, climate adaptation, and similar cross-cutting issues through programming that brought together policymakers, private sector leaders, development partners, academia, and youth.



Results Over Relationships

Programming evolved from networking toward outcome-focused activities.

Current agendas include **panels** where government officials announce regulatory changes, capital raising sessions where investors can commit funding to specific companies, and research presentations where university students engage corporate executives about partnership opportunities. These sessions produce measurable results beyond relationship building.



15 Cities, One Platform

Today's Innovation Week spans **15 locations** including **Dodoma, Ifakara, Mwanza, Tanga, Zanzibar, Moshi, Njombe, Bukoba, Mtwara, Kigoma, and Mara**. The Tanzania Hubs Network (THN) coordinates startup activities while ANZA Entrepreneurs manages investor connections.

StartHub Africa handles regional partnerships. **COSTECH** provides technical oversight. **The ICT Commission (ICTC)** manages regulatory guidance. **CRDB Bank Foundation** organizes financial sector programming while the **Zanzibar Startup Association (ZSA)** coordinates island-specific activities.

Dr. Amos Nungu articulates the institutional philosophy underlying this distributed model. "Innovation must move beyond profit to serve people and the planet," the COSTECH Director General explains. "Public-private partnerships are where innovation meets action and opportunity. It is up to all of us to mobilize around a shared purpose."

Building to Last

This approach creates multiple forms of institutional resilience.

Diverse funding sources maintain continuity when donor priorities shift. Multiple private partners prevent single-company dependency. Distributed ownership across institutions maintains political support during government transitions. Regional capacity building accommodates local institution growth without centralizing control.

FUNGUO's stewardship exemplifies how development programs can build lasting capacity. The program supports local partners in developing independent capabilities through angel investor networks, university incubators, and regional startup associations. This strategy creates sustainable local ownership beyond program duration.



500 People in One Room

First, design collaborative arrangements from the beginning to prevent single-institution dependency. **Second**, encourage geographic distribution to build diverse stakeholder investment. **Third**, evolve programming toward concrete outcomes to maintain participant engagement. Fourth, develop multiple funding sources to survive donor priority changes.

Deputy Resident Representative John Rutere summarizes this institutional approach. "At **UNDP**, our **FUNGUO** Program is designed to spark innovation among young Tanzanians. The program gives them access not only to tools, but to the environment and support networks they need to tackle real societal challenges and scale impact."

Innovation Week's evolution from temporary event to permanent institution demonstrates how collaborative design creates sustainable platforms. The key insight applies beyond Tanzania's specific context. Successful innovation programs distribute ownership across multiple stakeholders with complementary interests and independent reasons to ensure continued operation.



What began as a **five-day donor-funded** conference has become an **integral part** of **Tanzania's annual Innovation calendar**. Thanks to support from diverse institutions committed to long-term national development.

1st Cohort



Aatif Aquaponics

Agribusiness

Smart farming system growing vegetables and fish together using 90% less water.



AgriLife Limited

Agribusiness

Insect farming converting food waste into protein feed serving livestock farmers.



Agrosoko Limited

Agribusiness

Mobile platform eliminating middlemen, connecting farmers directly to urban buyers.



Aquacom Tanzania

Agribusiness

Solar-powered fish farming systems tripling production for small-scale farmers.



EcoAct Tanzania

Recycling

Converts plastic bottles and bags into construction timber 30% cheaper than imports.



FixChap Company

Gig-economy

On-demand handyman marketplace connecting skilled workers with urban customers.



Gas Fasta

Energy

On-demand cooking gas delivery serving urban households within hours.



KCG Aquatec

Agribusiness

Cage fish farming technology increasing tilapia production 5x in Tanzania's lakes.



LyfPlus Limited

HealthTech

Telemedicine platform connecting 10,000+ rural patients with specialist doctors via smartphone.



Mastermind Ventures Limited

Agribusiness

Cashew processing plant adding value while creating rural jobs.



Mtabe Innovations

EdTech

Online tutoring platform connecting secondary students with qualified teachers.



Ngwala Inventions Limited

Agribusiness

Solar-powered crop spraying machines reducing pesticide costs 50% for 200+ organic farmers.



Niajiri Platform Limited

Workforce Development

Job matching service connecting university graduates with entry-level employment.



Plant Biodefenders Limited

Agribusiness

VURUGA organic pesticides protecting farmland while preserving beneficial insects and soil.



Safari Wallet

Fintech

Travel payment platform helping tour operators receive international bookings efficiently.



Sheria Kiganjani

LegalTech

Digital legal services platform reducing costs by 80% for low-income Tanzanians.



Shuleyetu Innovations

EdTech

School management software improving administrative efficiency and parent engagement for hundreds of private schools.



UjuziNet

EdTech

Digital learning platform offering agricultural training and multimedia education services.



Smartcore Enterprise

EdTech

Blended learning platform making quality secondary education accessible in schools nationwide.



Bantu Technologies

Waste Management

Carbon-neutral charcoal briquettes from organic waste serving households while reducing deforestation pressures in Zanzibar.



Soma Bags Limited

Manufacturing

Solar-powered school bags made from recycled materials benefiting students nationwide.

2nd Cohort



Tanzania International Bee Co. Ltd

Agribusiness

Modern beekeeping techniques helping farmers increase honey production and incomes



Livy Africa Limited

Agribusiness

Key exporter of ethically sourced chocolate with a cocoa processing facility helping farmers earn more from their harvests.



Techy8 Company Limited

ICT

Women-founded IT consulting helping businesses adopt digital technologies and improve efficiency.



Glo Africana Manufacturers

Agribusiness

Coconut-based cosmetics and food products generating 200+ jobs from local raw materials.



TIBALABS

HealthTech

Low-cost medical devices including energy-efficient breathing machines for premature babies.



Kwanzaa Ventures

Agribusiness

Fortified yogurt combining seaweed and sweet potatoes to combat child malnutrition.



Toolboksi Technologies

ICT

Handyman marketplace standardizing pricing and quality for skilled workers.



Simplitech Ltd

Fintech

Digital tax compliance platform helping startups and SMEs meet government requirements.



Yebi Health

HealthTech

Medical supply chain platform ensuring hospitals and individuals have essential medicines in stock.



Twende Technologies Ltd

ICT

Motorcycle taxi booking app improving safety and efficiency for urban and peri-urban riders daily.





Settlo Technologies

Fintech

SME financial management software connecting businesses to loans and expense tracking.



Kisesa Recyclers

Recycling

Cardboard waste transformation creating biodegradable packaging for 100+ local businesses.



Rumo Energy

Energy

Solar home systems bringing electricity to rural households through flexible payments.



FHT Group Company

WASH

Local sanitary pad manufacturing creating 40+ jobs while serving thousands of women monthly.



Hashtech Tanzania Limited

ICT

IoT and e-ticketing solutions reducing transportation fraud 90% while improving safety.



WAGA

Energy

Electric vehicle charging and battery recycling service converting laptop batteries into portable power banks for rural and urban areas.



Kilimo Maendeleo

Agribusiness

Develops a platform providing access to finance and insurance for producers, plus access to markets for off-takers and farmers.



Healthy Seaweed Co. Ltd

Agribusiness

Seaweed processing into nutritious food products supporting women coastal farmers and addressing chronic diseases.



Arena Recycling Industry

Waste Management

Processes plastic and metal waste creating while sustainable jobs.

3rd Cohort



Africa Harvest Enterprises

Agribusiness

Converts agricultural waste monthly into biochar fertilizer increasing yields 40%.



Otapp Agency Company

Fintech

All-in-one booking platform for transport and events in Tanzania.



PHEMA Agri

Agribusiness

Livestock management app helping 300+ pig farmers optimize feeding schedules and health tracking.



Roverlabs Tanzania Limited

HealthTech

3D-printed prosthetics and assistive devices 80% cheaper than imported alternatives.



Wakulima Agri-Food Company

Agribusiness

Sweet potato processing creating nutritious products to reduce childhood stunting rates.



Anuflo Industries Limited

Manufacturing

Reusable menstrual products reaching 10,000+ women, reducing period poverty costs 70%.



Swahilies Company Limited

Fintech

Business management suite combining accounting, inventory, and payments for SMEs.



CollectTech Limited

WASH

Water management app helping utilities reduce billing errors 80% for 50,000+ customers.



El-dizer Financial Services

Fintech

Student loans enabling university students complete education with 100% repayment rate.



Green Venture Limited

Waste Management

Plastic waste recycling producing eco-friendly furniture and creating local jobs.



Freshpack Technologies

Agribusiness

Smart cooling technology reducing vegetable vendor losses from 40% to under 10%.



EvMak Tanzania

Fintech

Supports MSMEs by integrating online and offline payment methods, financial management tools, and business insights.



Sanavita Company Limited

Agribusiness

Nutritious flour products addressing malnutrition in children and pregnant women.



Bluefin Solutions Ltd

ICT

Develops corporate event management software streamlining 100+ business conferences annually.



YES Eco & Organic Co. Ltd

Agribusiness

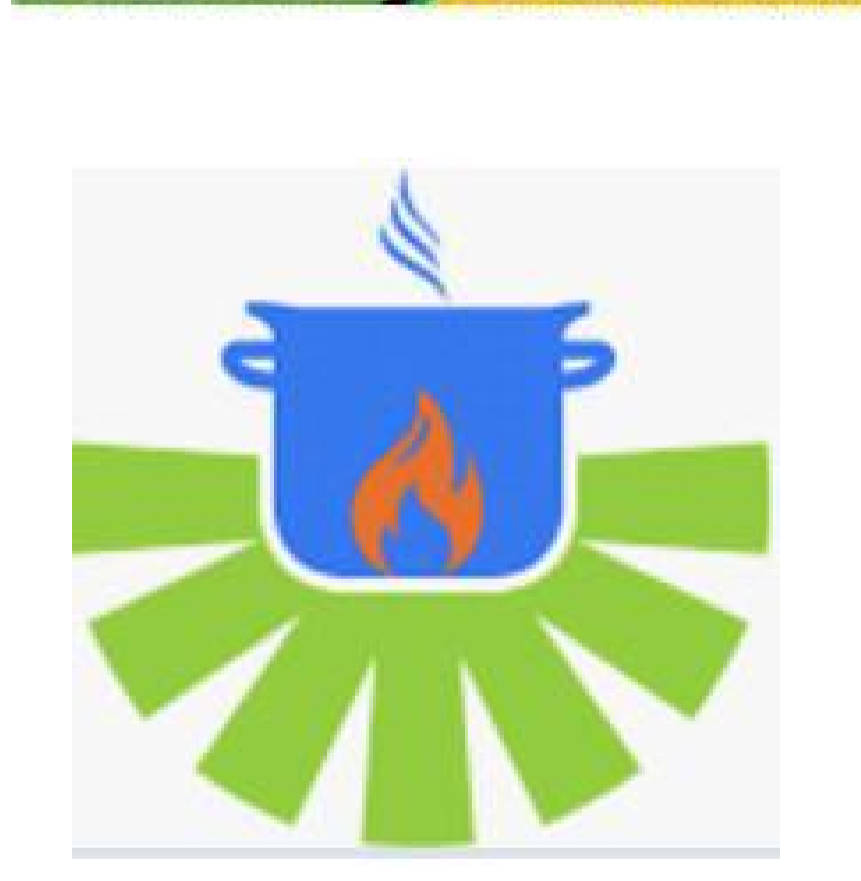
Agricultural waste processing technology converting farm residues into organic fertilizer.



BIZYTECH

AgTech

Digital agriculture platform serving farmers with weather data, loans, and market access.



Chabri Energy

CleanTech

Clean cooking solutions reducing household and institutional charcoal consumption 60%.



Green Composting Ltd

Waste Management

Organic waste collection service transforming hotel and business waste into compost in Zanzibar.



Timasu Products Company

CleanTech

Activated carbon from coconut shells providing water filtration solutions for households.



MedPack

HealthTech

Hospital inventory software reducing medicine stockouts 85% improving patient care nationwide.



Amala Technologies Limited

Fintech

Core banking software helping 15+ microfinance institutions serve rural customers efficiently.

4th Cohort



EKIMA Interactive

EdTech

Immersive learning platform combining AR, VR, and AI with offline access serving 40+ schools across Tanzania.



Africa Healthtech Limited

Digital Health

AI telemedicine platform connecting patients with doctors and health education.



Lishe360

Agribusiness

Fortified nutrition products distributed by 240+ women agents reaching 260,000+ caregivers nationwide.



BioNutra Company Limited

HealthTech

Data-driven nutrition protocols reversing chronic diseases for patients using African superfoods.



MITZ

ICT

Digital platforms and multimedia content helping 200+ institutions improve education and healthcare delivery.



CutOff Recycle Limited

Waste Management

Human hair waste conversion technology producing organic fertilizers priced 60% below chemical alternatives.



Kaypee Motors

Manufacturing

Electric mini trucks assembled in Tanzania reducing transport costs 60% for SME fleet operators.



Nyirenda's Company Limited

WASH

Prepaid smart water meters cutting billing errors 70% for utilities serving households.



Preyo Company Limited

Waste Management

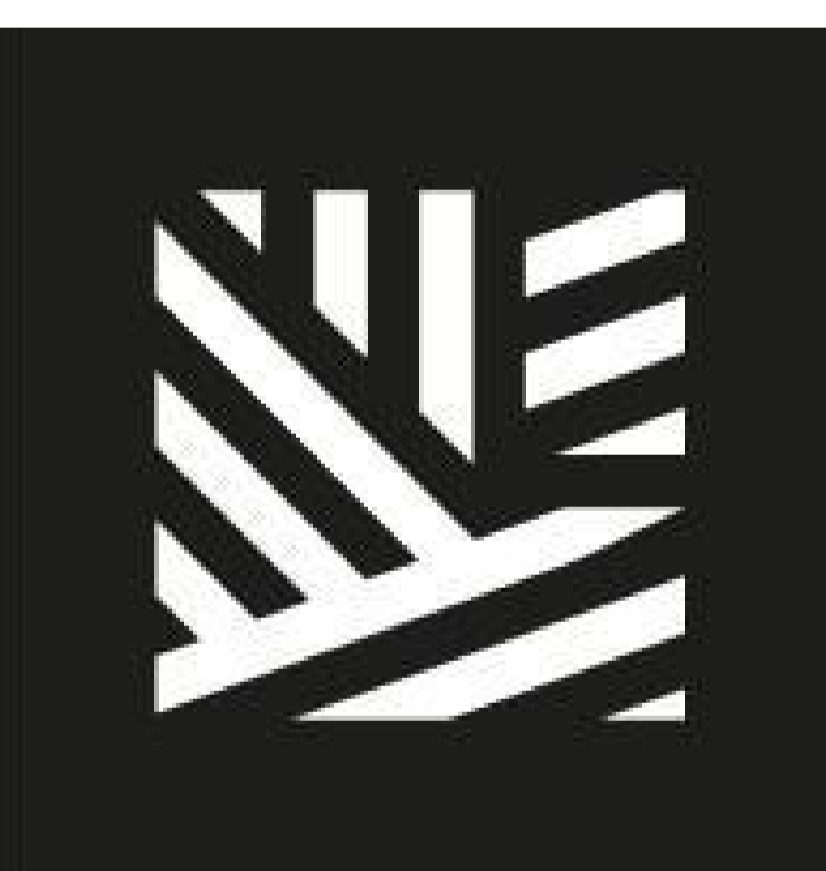
Plastic recycling facility creating green jobs.



Mclives Ltd

Food Processing

Fortified porridge and snacks reducing malnutrition costs for students and commuters.



Black Swan

Financial Technology

AI credit scoring using mobile money data helping financial institutions lend to invisible customers.



CashMe Tanzania Limited

Financial Services

Invoice discounting platform providing 48-hour liquidity to SMEs through peer-to-peer lending marketplace.



Neurotech

Digital Commerce

Infrastructure helping MSMEs sell products, accept payments, and issue receipts in chat.

How catalytic funding builds the investment infrastructure for Dira 2050

Tanzania's transformation from lower-middle income status to the upper-middle income economy envisioned in the national development vision depends fundamentally on private sector capability to drive productive investment. The catalytic funding model pioneered through programmes like **FUNGUO** goes beyond temporary development assistance. It creates institutional mechanisms that align with the country's strategic requirements for the next quarter-century.

Tanzania Vision 2050 anticipates a population of 140 million people, with more than half living in urban areas. This demographic shift creates both enormous employment pressure and unprecedented market opportunities. The Vision's emphasis on industrialization, technology adoption, and productive sector transformation requires financing mechanisms that can close the gap between traditional banking and venture capital at scales that match these realities.

The institutional infrastructure emerging around catalytic funding addresses this challenge systematically.

Tanzania's Capital Markets and Securities Authority (**CMSA**) published crowdfunding regulations in 2024 that establish legal frameworks for domestic capital mobilization. These regulations, developed with input from FUNGUO's policy advocacy work, create pathways for Tanzanian investors to finance early-stage businesses using locally generated capital rather than depending on international donors or VCs.

This regulatory foundation supports the **Dira 2050** strategic pillar of digital transformation and innovation. The document explicitly calls for positioning Tanzania as a regional hub for technology development and digital platforms. Achieving this requires financing mechanisms that can evaluate technology-enabled businesses and provide appropriate risk capital.



Catalytic funding programmes have developed these evaluation capabilities over four years of operation, creating expertise that can be applied at larger scales as domestic capital markets mature.

The East African Community's Vision 2050 targets **per capita incomes of \$10,000 by 2050**, requiring sustained productivity growth across member states. Tanzania's catalytic funding experience offers a replicable model for other EAC partners. Regional coordination on evaluation criteria and investment standards could create larger pools of risk capital while reducing administration costs.

Current discussions about the EAC's seventh development strategy for 2026–2031 include provisions for harmonizing innovation support mechanisms across member states. Tanzania's experience positions the country to influence these regional standards, potentially creating export opportunities for Tanzanian firms specializing in early-stage business evaluation.

On another front, the integration of catalytic funding principles into commercial banking represents structural development with long-term implications.



FUNGUO

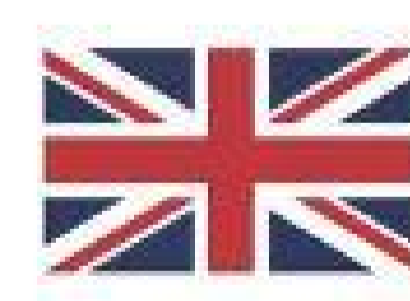
Programme



Co-funded by
the European Union



SUOMI
FINLAND



UK International
Development
Partnership | Progress | Prosperity



ATOMS & BITS