



Ministero degli Affari Esteri
e della Cooperazione Internazionale



INITIATIVE ON
Nature-Positive
Solutions



CLIMATE RESILIENT
AFRICA FUND



AgriTech4Kenya Innovation Challenge

Innovations Booklet



AgriTech4Kenya Innovation Challenge

Accelerator Cohort

AgWise



CGIAR
SUSTAINABLE
FARMING



AgWise is a data-driven agronomic recommendation engine for key crops such as maize, rice, potato, cassava and wheat. It leverages the latest data science and modeling techniques, combined with field data, to deliver customized advice on fertilizer requirements, optimal planting dates, and suitable cultivars.

Priority Area: Sustainable agricultural production



Kenya

*Products were developed by
CGIAR Centers in support of the
Excellence in Agronomy Initiative,
which has now transitioned to SFP.*



Siyabusa Mkuhlani
Data Scientist
the International Institute
of Tropical Agriculture
(IITA)



Wuletawu Abera
Senior Scientist
Alliance of Bioversity
International and CIAT



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Biogel by Anziboo

ANZIBOO

Anziboo empowers farmers by enabling them to sustainably cultivate bamboo for high-value biotechnological innovations. Their solution focuses on converting bamboo into eco-friendly fertilizers that releases nutrients gradually. By working directly with farmer associations, Anziboo ensures community ownership and long-term environmental benefits.

Priority Area: Sustainable agricultural production



Fasika Legesse
CEO



Joe Kamau
Co-founder and CFO

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BlinkEarth



BlinkEarth is a digital monitoring service that helps farmers generate carbon credits through sustainable agricultural practices. Using technologies like GIS, machine learning, and mobile tools, the platform tracks carbon sequestration, validates it, and facilitates the sale of carbon credits. This enables farmers to earn additional income while improving soil health and reducing greenhouse gas emissions. BlinkEarth empowers smallholder farmers to access global carbon markets.

Priority Area: Sustainable agricultural production



Rwanda



Ignace Turatsinze
CEO



Francois Regis Ishimwe
Chief Technology Officer



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Jani AI



JANI AI is a cloud platform that offers end-to-end digital traceability of the food supply chain from farm to fork in Africa. Their platform provides Farmer Management, Product Cataloging, and Inventory Management software. JANI targets off-takers, exporters, food processors, and cooperatives in the farming industry.

Priority Area: Improved market access and supply chain efficiency



Brighton Mboya
Co-Founder & CTO



Reggie Okoko
Project Manager



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Bromecure



The chitosan nanoencapsulated bromelain is an innovative product. It has high anthelmintic, anti-coccidiosis and antibacterial efficacy that matches existing commercial drugs. This herbal product effectively manages helminthosis, coccidiosis, and bacterial diseases in livestock, offering an alternative to conventional, often ineffective drugs. Bromecure has shown high efficacy, with up to 98% success in treating livestock diseases and enhancing growth rates.

Priority Area: Livestock health and diseasemanagement



John Kagira
Team Leader, Principal Investigator



Naomi Maina
Co-investigator



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Everlend



Everlend is a B2B digital platform that allows smallholder farmers access first generation climate resilient food crops for planting on credit and pay back after harvest. Everlend also offers digital green loan market information within two hours, using a proprietary technology through a network of agents. The platform is also an online marketplace for farmers.

Priority Area: Sustainable agricultural production



Emmanuel Twesigye
CEO & Co-Founder



Peron Nateisa
Communication & Marketing
Officer & Co-Founder



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EcoRich Solutions



Ecorich Solutions pioneered the use of an innovative technology called the Wastebot. This power-driven, sensor-based innovation is designed to efficiently convert organic waste into organic fertilizer in just 24 hours. The Wastebot is a smart and automated system that takes organic waste and transforms it into nutrient-rich organic fertilizer through a rapid and controlled process.

Priority Area: Sustainable agricultural production



Joyce Rugano
Founder & CEO



Virginia Simiyu
Accounting Officer



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L.E.A.F. by Regrowth

Regrowth
ANIMAL-BASED INTELLIGENCE

Regrowth provides a solution tracks animal behavior, growth rate, and other parameters to provide real-time data for the farm manager. This is achieved by an on-site modular IoT station able to identify individual animals, and ML protocols that analyze the data to present management indications. Our field trials showed a reduction of 90% in animal mortality, 60% in antibiotic use, and 30% in feed consumption, all while maintaining the same production values.

Priority Area: Livestock health and disease management



Pierfrancesco Di Giuseppe
CEO and Co-Founder



Michael Odintsov Vaintrub
R&D Manager and Co-Founder



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SunRider by SowPrecise



SowPrecise Africa is an innovative agri-tech startup based in Kenya, committed to addressing the challenges faced by smallholder farmers in arid and semi-arid lands (ASALs). They focus on providing affordable, sustainable, and scalable irrigation solutions through their flagship product, SunRider. SunRider is a solar-powered, mobile irrigation service that operates on an ownership-free, on-demand basis.

Priority Area: Water use efficiency and sustainable irrigation practices



Linda Kamau
CEO and Co-Founder



Pius Musyoka
Chief Operations Officer
and Co-Founder



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Zaoletu by Zaoshinani



Zaoletu which means 'our yield', is a SaaS platform that automates processes in agricultural societies and provides smallholder farmers a quick and easy channel to access financial services. Zaoletu is revolutionising the way smallholder farmers and cooperatives engage with the agricultural ecosystem in Kenya. It not only digitises the entire value chain but also equips farmers with real-time insights and financial services tailored to their needs.

Priority Area: Sustainable agricultural production



Kamathi Limukii
CEO & Co-Founder



Mueni Kioko
Co-Founder



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On Demand Good Agriculture Practices Information - Sprout

Availing digital advisory content through an easily searchable content hub for farmer support organizations. The content is customizable to suit end-user needs, including local language adaptations. This approach ensures that the information is both accessible and relevant, maximizing its impact on smallholder farmers.

Priority Area: Sustainable agricultural production



Kenya

Scaling Partner: Mercy Corps AgriFin



Elly Atieno
Associate Scientist



Shadrack Nyawade
Senior Research Associate



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Bee venom collector device by Patvention

Patvention Ltd manufactures and sells ethical and efficient bee venom extraction equipment that enhances beekeeper income while promoting colony health. The device uses gentle stimulation techniques to improve venom extraction by 30%, reducing bee stress by 80%. The company aims to contribute to Kenya's agricultural development by supporting ethical practices and creating a reliable supply chain for bee venom.

Priority Area: Sustainable agricultural production



Kenya



Patrice Wachira
CEO



Geoffery Mwangi
IT Manager



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Bioblend by Umuntu Agrobiotics



Umuntu Agrobiotics helps small holder farmers double their yields using beneficial soil Microorganisms. The company offers an organic soil amendment solution that enhances soil fertility, addressing the challenges posed by climate change and declining soil health. By using locally sourced materials, including soil and milk waste, Umuntu Agrobiotics creates a product that can be easily applied by farmers using familiar methods.

Priority Area: Sustainable agricultural production



Paul Tamale
CEO & Founder



Lincoln Abasize
Head of Production



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ChuckLens by FeatheryCare



CluckLens is an AI-driven system designed to automate the monitoring and management of poultry farms. It uses cameras connected to a central system to continuously capture real-time data on bird behavior and health. This data is analyzed using a cluster of artificial intelligence models, which detects and alerts farmers to potential issues such as heat stress, abnormal behaviors, or other signs of distress.

Priority Area: Livestock health and disease management



Mawunyo Avornyo
Head of Operations



Elpidio Tossou
Head of Marketing



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Gallant flower by Daystar University



The introduction of Galinsoga Parviflora (Gallant Soldier) in the poultry feed value chain will enhance climate change resilience to ensure food security, reduce cost of production due to feed shortages, provide variety of nutrients to support life on land and reduce poverty. The research study will be conducted at Daystar University poultry farm at Athi River in Machakos County in Kenya.

Priority Area: Sustainable agricultural production



Kenya



Hellen Ngema
Principal Investigator



Gregory Nalinya
Co-Investigator



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ApiTrace by The Source Plus

ApiTrace works to bridge the gap between climate risks and market acceptance, through a traceability and monitoring system. It is driven by blockchain, GIS, machine learning, big data, and integrates offline use. It provides insights to counter contamination risks, allows for the tracking of honey, pinpointing harvest details and enables comprehensive screening, and certifications for small-scale farmers.

Priority Area: Sustainable agricultural production



Eileen Mburu
GIS Expert



Bronson Eranogwa
Blockchain Developer and
Climate Risk Analyst

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Dairy Sense

As an AgriTech solution, Dairy Sense uses advanced sensors and AI to perform real-time non-invasive milk quality assessment. Our tool provides dairy farmers with an affordable, efficient alternative to the traditional way of ensuring high milk quality instantly. Farmers have actionable insight, which means they make informed decisions, reduce waste and increase production.

Priority Area: Sustainable agricultural production



Daniel Litunya
Co-Founder



Kristian Onjala
Chief Technology Officer (CTO)

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Bootcamp Cohort

Digilivestock Solutions Ltd

Through digital identification, livestock is linked to the rightful and legitimate owner and specific location for traceability. Livestock, upon registration is given a tag with a unique digital identity that cannot be replicated elsewhere. Upon exit, through death or slaughter, tag with digital identification is returned to the company for digital exit. The digital identification database is managed solely by the company.

Priority Area: Livestock health and disease management



Benard Kipkoge
Co-Founder



Benson Likhotio
Operations Officer



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Bootcamp Cohort

FarmonAI

FarmonAI is an innovative system that uses AI and thermal imaging to detect diseases in livestock, aiming to improve early diagnosis and enhance animal health management. By capturing heat patterns from specific body parts of animals, the system analyzes these thermal changes to identify potential health issues before visible symptoms arise. This early detection allows farmers to take preventive measures, reducing the spread of diseases.

Priority Area: Livestock health and disease management



Zimbabwe



Rudo Duri
Technical Advisor



Tinotenda Duri
Systems Integration

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Bootcamp Cohort

Flux – Enhanced Rock Weathering



Flux is unlocking the potential of Enhanced Rock Weathering in Africa to improve the lives of smallholder farmers, funded by carbon finance. They spread crushed silicate rocks on crops, which improves yields and captures carbon certifications for small-scale farmers. Through the sale of carbon credits to global corporates, Flux is able to provide smallholder farmers in Kenya with the rock powders free of charge.

Priority Area: Sustainable agricultural production



Susan Adongo
Community Engagement
Project Lead



Benjamin Moller
Senior Scientist



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Bootcamp Cohort

Nanex

Nanex is an innovative organic formulation designed to preserve dry produce, prevent pests, and protect against fungal and aflatoxin contamination. Using sublimation technology, Nanex absorbs moisture without coating produce with toxic chemicals, ensuring food safety. Packaged in convenient sachets, it offers smallholder farmers an affordable and easy-to-use solution for post-harvest management.

Priority Area: Sustainable agricultural production



Ainembabazi Samantha
Co-founder and COO



Gift Mugisha
Co-founder and CEO

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Bootcamp Cohort

Safariwatch Animal Telematics

Safariwatch Animal Telematics solution uses sensors in livestock management to count, track, and monitor the health and behavior of animals, providing early warnings of health issues.

**Priority Area: Improved market access
and supply chain efficiency**



Tabitha Karuri
Business Developer



Harrison Kiarie
CEO



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Soil Doctors



Soil Doctors manufactures and promotes carbon sink planters designed for farmers in arid and semi-arid regions who aim to grow trees on dry, degraded land. These planters help reduce irrigation costs and labor, improve tree survival rates, and support the regeneration of soil health. It's an all-in-one technological input that maintains moisture content, and provides nutrients in young trees, and is more affordable and guarantees 85% survival rate of trees in dry areas.

Priority Area: Sustainable agricultural production



Kenya



Charles Mwangi
Founder & CEO



Irene Kihia
Technical Officer



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VunaPay



VunaPay is a digital platform that facilitates instant payments to smallholder farmers for produce delivered to cooperatives, addressing the challenge of delayed payments. By leveraging mobile technology and partnerships with key financial and telecom institutions like Safaricom, KCB Bank, and the Government's Commodities Fund, VunaPay has created a seamless platform that allows farmers to receive immediate payouts for their delivered produce.

Priority Area: **Equitable Finance and investment mechanism**



Kenya



Joldine Kinya
Customer Success Manager



Koya Matsuno
Chief Operating Officer



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Xtaka

x-taka
Waste to Value

XTaka is an innovative solution that uses a novel technology to tackle the diaper waste problem in Africa. By transforming diaper waste into hydrochar, a carbon-rich material used in agriculture and energy sectors, Xtaka provides a sustainable and eco-friendly alternative to conventional waste management methods like landfills and incineration. Their solution reduces environmental pollution while offering practical applications in organic farming.

Priority Area: Sustainable agricultural production



Dennis Muguta
Founder & CEO



Benedict Njoka
Finance Lead



AgriTech4Kenya Innovation Challenge

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