Republic of Rwanda
Ministry of Agriculture & Animal Resources

ACAT
African Conference on Agricultural Technologies

AATF
PROSPERITY THROUGH TECHNOLOGY

The African Conference On Agricultural Technologies (ACAT) 2025 Report

9-12 June, 2025
Kigali Convention Center
Kigali, Rwanda

Nextgen Ag-tech Solutions for Africa's Farmers

Nextgen Ag-tech Solutions for Africa's Farmers

Practical, farmer-centered innovations to close persistent technology gaps and advance food security, agro-industrialization and intra-African trade.

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Welcome to the ACAT 2025 Report

ACAT 2025 took place at a critical moment, following the adoption of the Kampala CAADP Strategy and Action Plan (2026–2035), which sets the course for Africa's agricultural transformation over the next decade. Building on the momentum of ACAT 2023, the conference reaffirmed stakeholders' commitment to advancing agricultural science, technology and innovation (STI) as well as scaling agricultural technologies in Africa. Under the theme **"NextGen Ag-Tech Solutions for Africa's Farmers,"** it focused on practical, farmer-centered innovations to close persistent technology gaps and advance food security, agro-industrialization and intra-African trade.

Held in Kigali, the conference brought together over 800 participants, among them policymakers, researchers, private sector leaders and farmers from 35 countries to engage along four key sub-themes: **farmer-centric design, enabling environment, last-mile delivery** and **stewardship**. Discussions led to consensus on policy priorities and practical solutions to accelerate ag-tech adoption among smallholder farmers.

We thank the Government of Rwanda for hosting ACAT 2025, with special appreciation to His Excellency President Paul Kagame, Rt. Hon. Prime Minister Dr. Édouard Ngirente and Hon. Dr. Mark Cyubahiro Bagabe, Minister of Agriculture and Animal Resources – for their exceptional hospitality and leadership. We are equally grateful to our partners, researchers, farmers, youth, private sector leaders, and all participants for their engagement and contribution in shaping a bold, shared vision, for the future of African agriculture.

As you read this report, we hope it inspires continued collaboration and bold action toward transforming African agriculture.

Key Messages

Breakthroughs in conventional breeding, biotechnology, digital tools, mechanization, and climate-smart practices are reshaping Africa's food systems. Crop varieties resulting from conventional breeding and Biotechnology are tackling pests and diseases, AI-driven platforms are putting real-time data into farmers' hands and drones, electric tractors, and precision irrigation are redefining productivity. These innovations prove that Africa has the solutions to transform its agriculture, only needs strategies to drive adoption and scaling.

However, persistent barriers including insufficient rural infrastructure, weak policy and regulatory environment and inadequate implementation of regionally harmonized frameworks continue to slow ag-tech uptake and scaling and undermine technology deployment across borders. Farmers, especially youth and women face financing hurdles and lack the training to adopt new tools effectively. Without inclusive policies and stronger extension systems, the promise of ag-tech risks bypassing those who need it the most.

Scaling agricultural innovation in Africa requires consistent and deliberate efforts particularly through the following actions:

Co-creating ag-tech solutions with farmers to boost adoption, closing the digital divide, and challenging outdated top-down approaches while noting that scaling participatory, value chain-based extension and training models, such as farmer-to-farmer learning and smart villages, are key to driving sustainable ag-tech uptake.

Key Messages

Fostering a new kind of public-private partnerships that are long-lasting and result in sustained investments in robust ag-tech infrastructure, agricultural training, fostering multi-sector collaboration, advancing regional policy harmonization, and ensure equitable access to inputs, innovations, and support services, especially for youth, women, and rural communities.

Scaling successful integrated technology packages and strengthen last-mile delivery to ensure these solutions reach farmers where they matter most. Combining improved seeds, fertilizers, mechanization, digital services, and effective market systems is essential to transforming African agriculture.

Advancing transparent and ethical frameworks for integrating traditional knowledge into formal ag-tech research, ensuring respect for farmers', women's, and youth's intellectual property, data sovereignty, and benefit-sharing. Equitable IP protection can drive innovation, open-source licensing models, stronger legal capacity in local institutions, and training to help stakeholders negotiate fair, inclusive agreements that foster collaboration and broaden access to innovation are crucial.

Effectively implementing continental policy frameworks, including CAADP 2026–2035, the Kampala Declaration, and African Continental Free Trade Area (AfCFTA) to unlock ag-tech commercialization by creating an enabling environment for private sector growth and increased investments.

Empowering the youth as key drivers of ag-tech development and adoption across the continent. Catalysing targeted investments in youth-led innovations, mentorship, access to finance, and supportive policies, alongside stronger linkages with investors and institutions that build skills and leadership are essential.

High-Level Reflections

No single country, institution, or actor can transform African agriculture alone. African governments must work hand-in-hand with private sector players, research institutions, civil society, and most importantly, with the farmers themselves to birth and sustain a new era of farming, food production, processing, distribution and sales.

H.E. Dr. Goodluck Ebele Jonathan,
Former President of the Federal Republic of Nigeria & AATF Goodwill Ambassador

Today, hard work alone is no longer sufficient. Agriculture must be sustainable and attractive, especially for our young generation. To achieve this, we need to integrate technology and innovation across our efforts to transform the sector. Technology and innovation are essential pillars of modern agriculture and are no longer optional.

Rt. Hon. Dr. Ngirente Édouard,
Prime Minister, Republic of Rwanda

High-Level Reflections

We must be bold. The future of our agriculture will not be inherited. We are here to define the investments we want, to shape the partnerships we need, and to reform the policies that must evolve to support inclusive and scalable innovation in African agriculture.

Hon. Dr. Mark Cyubahiro Bagabe,
Minister of Agriculture and Animal Resource, Rwanda

We appreciate our partners who have allowed us to bring so many young people to ACAT this year and who have a laser-sharp focus on ensuring a new generation of young people are finding a passion for farming.

Prof. Aggrey Ambali,
Chair, Board of Trustees, AATF

AATF reaffirms its commitment to walk this path with you—as your partner, your resource, and your ally in building a resilient and food-secure Africa powered by science and African excellence. As innovators, we commit to being the bridge to link public and private sector to the farmer.

Dr. Canisius Kanangire,
Executive Director, AATF

ACAT 2025 in Numbers

816
delegates from **38 countries** in attendance

160+
youth

128
speakers

29
exhibitions of products and technologies

8
live technology demonstrations

Program Highlights

4 Plenaries

Four High-level Plenaries affirmed a bold shift toward inclusive, tech-driven agricultural transformation, calling for coordinated partnerships, enabling policies, scalable innovation, and sustained investment to empower youth and put farmers at the center of Africa's agri-future.

4 TIPs

Four Technical Interactive Panels (TIPs) explored key enablers of agricultural innovation – user-centered design, rural digital infrastructure, sustainable ag-tech business models, licensing and IP frameworks, and inclusive commercialization – emphasizing the need to co-create with farmers, build trust-based ecosystems, and scale locally relevant solutions through strategic investment, institutional reform, and cross-sector collaboration.

5 SDATAs

Five Strategic Dialogues on Agricultural Technologies in Africa (SDATA) – *Youth, Private Sector, Research, Ministerial, and Farmers* – called for an inclusive, technology-driven, and sustainable agricultural transformation led by Africans and grounded in African realities.

8 Demos

Eight Live Technology Demonstrations showcased practical, scalable ag-tech innovations – ranging from AI tools to electric tractors—that underscored the potential of technology to drive inclusive, climate-smart agricultural transformation across Africa.

Plenaries and Projects Showcase

High-Level Opening Session – Enabling Environment: Investment and partnership for Ag-Tech Solutions

The opening plenary set a bold tone for ACAT 2025, emphasizing that meaningful agricultural transformation hinges on bold innovation and strategic partnerships. Leaders called for a shift from fragmented efforts to integrated, scalable solutions rooted in the realities faced by farmers.

> ***The right policy environment has been essential to bringing in new research institutions that have provided quality seed, drones and other solutions that are advancing agriculture in Rwanda.***
>
> ***Hon. Eric Rwigamba,*** *Minister of State, Ministry of Agriculture and Animal Resources, Rwanda*

The session highlighted practical innovations transforming agriculture across Africa—from ILRI's data platforms for dairy and pastoralist systems to drone-enabled pest management, and RNAi-modified cassava presented in the "Delivering Improved Cassava, Maize and Potato to farmers in Rwanda' project showcase. Rwanda's open-door policy and investments in youth, finance, and digital farming were showcased, alongside efforts like the Alliance for Science's youth engagement hub and the Alliance for Cowpea Improvement in Africa (ACIA) initiative. Together, these examples underscored the power of partnerships, technology, and enabling environments to drive scalable impact.

> ***Putting farmers first is more than a buzzword. Farmers are often overlooked, but they are the unsung heroes and the center of our food systems. By making sure farmers are at the center, Rwanda is ready to partner and shape an Africa where no farmer is left behind, innovations are aligned to farmers needs, and agriculture is unchallenged lasting prosperity.***
>
> ***Hon. Dr. Mark Cyubahiro Bagabe,*** *Minister of Agriculture and Animal Resources, Rwanda*

Session Sponsored by:

CropLife INTERNATIONAL

Project Showcase: Delivering Improved Cassava, Maize and Potato to Farmers in Rwanda

This project showcase demonstrated how strong partnerships are driving the delivery of biotechnology solutions to tackle some of Africa's most pressing crop challenges.

Working with governments, research institutions, and private sector actors, AATF and partners have developed improved varieties of cassava resistant to brown streak virus, potatoes resistant to late blight, and maize tolerant to fall armyworm, stem borer, and drought. These innovations respond to long-standing threats that undermine farmer incomes and food security. Success has been enabled by an expanded enabling policy environment—13 African countries now have national biosafety frameworks, up from just 6 in 2011—as well as critical steps in regulatory consultations, local trials, seed multiplication, and farmer demonstrations. The outcomes include cleaner harvests, higher yields, and the engagement of youth and women in biotech seed systems, supported by training programs, cross-country exchanges, and collaborative scaling with value chain players. At the heart of this success is the power of partnerships, ensuring technologies move from the lab to the field and into the hands of farmers.

Path Forward

- **Governments must foster trust-based, cross-sector partnerships** to break down silos, drive long-term collaboration, and align efforts across the agricultural value chain for greater impact.
- **Create enabling ecosystems for innovation** through strong policies, regulatory frameworks, structured markets, and targeted incentives – such as tax incentives, intellectual property rights protection, and regulatory sandboxes - that support smart agriculture, digital technologies, and sustained private sector engagement.
- **Invest in both financial and human capital** to empower youth and smallholder farmers – through access to capital, mentorship, skills training, and science communication – to drive the next generation of agri-tech innovation.
- **Empower farmers as co-creators** by centering them in innovation and investment, leveraging their insights to ensure solutions are practical, scalable, and grounded in real-world needs.
- **Strategically leverage public-private partnerships** to reduce agricultural risk, deliver measurable returns, and expand market access, particularly for small and medium enterprises (SMEs) and underserved communities.

Farmer-Centric Design: Developing Need-Based Solutions

A farmer-centric paradigm is key to transforming African agriculture. The session emphasized co-creating with farmers, bundling practical technologies, and building systems that empower rural communities. Crucially, stakeholders must move beyond pilots to scale solutions that put farmers at the center of research, investment, and policy, serving those who feed the continent.

Innovations such as TELA maize, Bt cowpea, drones, and digital platforms hold transformative potential for African agriculture. Strategic investments, supportive policies, and capacity-building are key to translating this potential into widespread, sustainable impact.

> ***First, we need to remember that research is not worth anything until it gets in the fields. Second, my grandfather would say 'Go get in the fields.' No one understands anything until they are with farmers in the fields.***
>
> ***Ms. Julie Borlaug,*** *President, Borlaug Foundation*

> ***Science is not the core research of knowledge. Citizens voices are also sources of knowledge.***
>
> ***Mr. Ishmael Sunga,*** *CEO, Southern African Confederation of Agricultural Unions (SACAU)*

Session Sponsored by:

HEIFER INTERNATIONAL

Project Showcase: Enhancing Livelihoods through Agro-processing Technology

This project showcased how AATF is tackling the systemic challenges faced by Africa's 33 million smallholder farmers—ranging from limited extension services and low returns on investment to poor mechanization, inefficient agroprocessing, and environmental burdens. Through its business model, AATF integrates bundled solutions that go beyond improved seed access to boost farm productivity, link farmers to markets, and promote value addition. Interventions include capacity building in good agronomic practices, mechanization, digital tools, and agribusiness skills; piloting efficient cassava processing technologies such as the high quality cassava flour (HQCF) machine in Nigeria; and promoting cleaner energy use for processing.

The results are significant: over 5,000 farmers trained (40% women and youth), yields more than doubled from 9 MT/ha to 25 MT/ha, 30,000 hectares brought under mechanization, and new cassava products introduced into markets. What makes this work is the integrated approach, combining improved genetics, mechanization, processing innovations, training, and partnerships, proving that sustainable rural transformation depends on bundled, inclusive, and scalable solutions.

Path Forward

Co-create with farmers in the field using on-farm pilots, demos, training, and engaging farmers in testing the technologies incorporating their local insights into technology development.

Deliver bundled technologies. Package seeds, mechanization, processing, markets and gender inclusion into integrated offerings supported by digital tools and smart villages.

Scale proven innovations through partnerships. Identify technologies validated in local contexts and deploy them via multi-stakeholder networks including farmer cooperatives, research institutions, private sector and NGOs.

Strengthen extension and knowledge exchange combining in-person training with digital advisory services, SMS alerts and farmer-to-farmer networks. Expand the pool of extension workers and equip them with the practical tools to provide timely, actionable guidance to farmers.

Last Mile Delivery: Commercialization and Scaling of Ag-tech Solutions

This high-level plenary session spotlighted outstanding innovations delivering last-mile agricultural solutions across Africa. Rwanda's Home Grown School Feeding Program feeds 4.5 million students with fortified, climate-resilient crops from community-managed gardens, while Bayer's $35 million investment in Zambia and the Better Life Farming Platform are strengthening seed systems and farmer services. Michigan State University (MSU) highlighted cross-continental knowledge partnerships and resilient potato varieties, and RAB & BK TecHouse's digital PPP is improving input access.

For agribusiness initiatives to be successful, scalable, and sustainable, they must prioritize the needs of women farmers, focus on value addition, be rooted in the community, and be demand driven.

Dr. Eliud Birachi, *PABRA Programme at Alliance for Bioversity-CIAT*

Gates Ag One's Alliance for Cowpea Improvement in Africa and examples like M-PESA and Orange mobile money platforms demonstrated how scalable, tech-enabled platforms can empower smallholders.

The discussion emphasized the importance of enabling environments, government leadership, and strategic collaboration to scale ag-tech and strengthen food systems. Panelists stressed the need to improve value chains, support intra-African trade, and invest in both human and financial capital to deliver farmer-centered, scalable technologies that boost productivity and resilience.

Successful deployment of agricultural technology requires more than just a successful pilot. There is a need for robust scaling strategies that address viability, feasibility, and operational challenges. Solutions must be adaptable to the realities of the target environment, including infrastructure limitations, and literacy levels.

Ms. Zoë Karl-Waithaka, *Managing Director and Partner, Boston Consulting Group (BCG)*

Session Sponsored by:

Alliance Bioversity & CIAT

PABRA

Project Showcase: Climate Smart Remote Sensing Project in Rice Value Chain Project

The showcase demonstrated how cutting-edge technology can transform farming in Africa. At its core are 20 weather stations equipped with ground-based monitoring systems, which collect real-time environmental parameters every two minutes—generating over 10 million data points each month. By combining this rich dataset with remote sensing tools and AI-driven analytics, the project is empowering rice farmers with precise, timely, and localized insights to guide climate-smart decisions. From anticipating rainfall patterns and managing

water resources to optimizing planting schedules and reducing risks of crop failure, farmers are gaining tools that directly boost productivity and resilience. The integration of advanced data systems with practical on-farm use ensures that climate-smart agriculture moves from concept to practice, helping smallholder farmers navigate the challenges of climate change while strengthening food security and livelihoods.

Path Forward

- **Turn data into action by using climate-smart tools** like remote sensing and weather stations to provide farmers with localized, real-time advice.
- **Embed agriculture in social systems** by creating national committees, strengthening fortified seed systems, and building school–community linkages that drive both nutrition and local farmer markets.
- **Design for farmers first.** Apply the 6-Element Commercialization Strategy to ensure technologies are easy-to-use, affordable, and supported by in-field presence, distribution networks, and offline-ready digital tools.
- **Scale through partnerships** leveraging North-South and South-South collaborations, PPPs, and platforms like RAB & BK TecHouse to connect seed suppliers, aggregators, agro-dealers, and farmers. Use AfCFTA to harmonize regulations and unlock regional markets.
- **Build farmer-centered innovation ecosystems** by establishing centers of innovation at universities and through PPPs where youth can co-create solutions, pitch to investors, and apply their knowledge directly in farming systems—ensuring continuous capacity building and farmer ownership.

Stewardship: Cultivating a Sustainable Future with Ag-Tech Solutions

Ag-tech cannot thrive without responsible stewardship – anchored in clear regulations, risk mitigation, and inclusive governance. The final plenary session delivered a strong set of recommendations for ensuring the ethical, sustainable, and scalable development of agricultural technologies across Africa.

Key priorities included harmonizing regulatory frameworks, responsibly managing intellectual property, and ensuring transparency to build trust among farmers, enterprises, and consumers. Speakers also highlighted the importance of continuous innovation that supports ecological health and community empowerment while operating within planetary boundaries.

The plenary called on governments to de-risk the sector by aligning policies, offering financial incentives, and supporting insurance and subsidy schemes across the agricultural value chain.

> ***We are lowering the risk perception of agriculture, so the Government of Rwanda has extended derisking solutions to help reduce the cost of finance. Crop and livestock insurance is important as well and should be embedded in the requirements of funders.***
>
> ***Ms. Stella Rusine Ntez,*** *Chief Economist, Ministry of Finance and Planning, Republic of Rwanda*

Session Sponsored by:

CropLife INTERNATIONAL

Project Showcase: AUDA-NEPAD's Genome Editing Programme: Progress and Milestones

The showcase demonstrated how AUDA-NEPAD is advancing Africa's ability to harness cutting-edge science for food security and livelihoods, with significant progress already achieved. Key deliverables include a landscape analysis of science, policy, and communication on genome editing across the continent, with the inception report completed, a consolidated draft synthesis under review, and a validated stakeholder-endorsed report and searchable database underway. The scope of this analysis goes beyond policy mapping to include infrastructural, institutional, and technical capacities for product development and commercialization, as well as identifying staple and indigenous crops

where genome editing can deliver the greatest impact. On the communication front, a branded video tool has been developed to engage three key audiences – high-level policymakers and ministers, regulators and scientists, and farmers alongside faith-based organizations – ensuring inclusive dialogue and understanding. The programme is also creating clear accessibility and decision pathways for regional validation through AUDA-NEPAD's specialized technical and permanent representatives' committees. Together, these milestones position genome editing as a practical, evidence-based tool to address Africa's agricultural challenges and unlock new opportunities for rural transformation.

Path forward

- **Prioritize transparency and product integrity** to build farmer confidence in technology benefits and associated risks.
- **Safeguard equitable access to innovation** through ethical licensing frameworks and IP systems that prevent monopolies and benefit all, especially smallholders.
- **Invest in regenerative and inclusive agricultural models** that improve productivity while supporting environmental health.
- **National ag-tech strategies** should actively increase youth access to finance and engage them as leaders in innovation, policy and digital transformation.
- **Governments must advocate for agriculture, de-risking** throughout agriculture value chains by providing incentives for private sector and scaling risk mitigation tools like crop and livestock insurance.

Closing Session

The closing session brought ACAT 2025 to a powerful conclusion, presenting a unified communique and a clear path forward. From the voices of youth, farmers, researchers, ministers, and the private sector, a strong call emerged for an inclusive, tech-driven, and African-led agricultural transformation. The momentum will continue through ongoing SDATAs, fostering accountability and cross-sector collaboration between ACAT gatherings.

ACAT was reaffirmed as the continent's premier platform for ag-tech transformation – with the next convening set for May 2027.

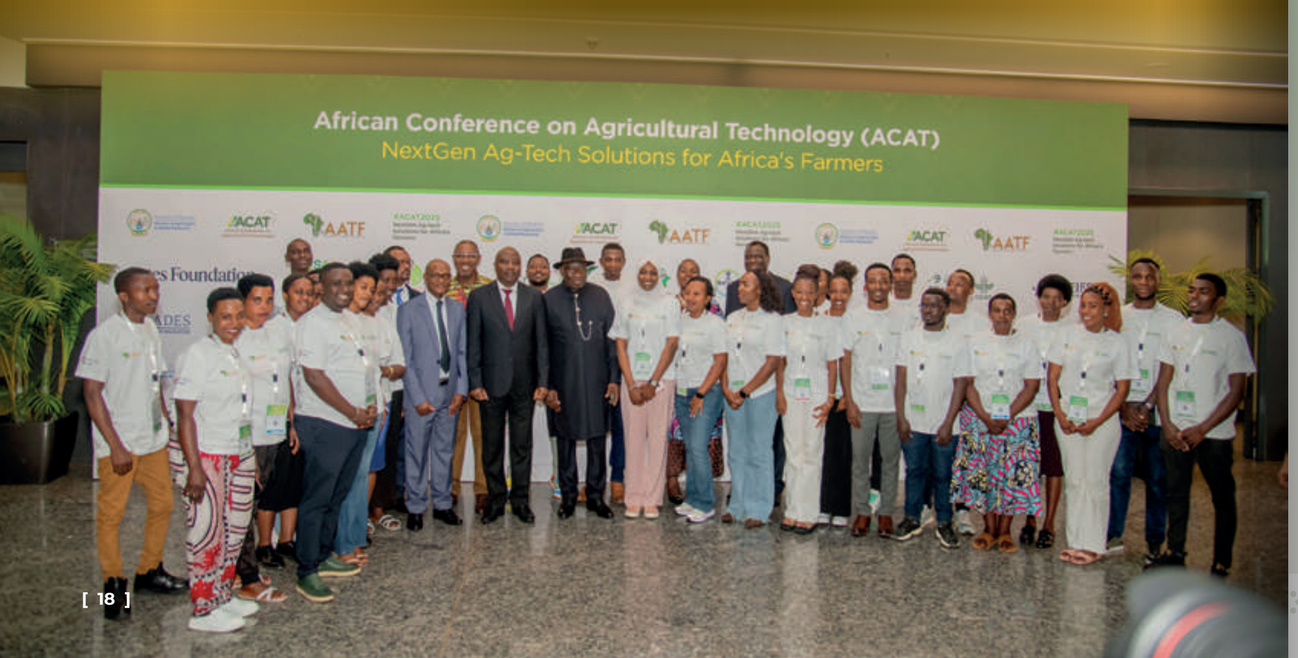
> ***We must prioritize the youth and adopt a long-term perspective to unlock Africa's agricultural potential and achieve prosperity.***
>
> ***H.E. Dr. Goodluck Jonathan,***
> *AATF Goodwill Ambassador & Former President, Federal Republic of Nigeria*

ACAT 2025 made one thing clear: Africa has the vision and the solutions. The time is now to break down silos, invest in youth, and deliver bold, sustainable action that transforms agriculture for all.

Path forward: Commitments from ACAT 2025

- **Transforming African agriculture requires new partnerships** and inclusive collaboration models that leave no one behind, are as long-lasting as our desired impact and align with our continental vision – shared progress depends on shared participation.
- **Farmers must be central to all future dialogues and initiatives**, including ACAT 2027 where farmers should be integrated in every session.
- **Africa's transformation is hindered by fragmentation**. We must break silos, invest in centers of excellence to pass knowledge to the next generation and build systems grounded in trust and transparency.
- **Good stewardship will move Africa's ag-tech beyond pilots** to scale, harmonizing regulations for coordinated impact across the continent.
- **Africa's youth are eager to lead in agriculture**, sustained mentorship together with meaningful, rewarding pathways will bear fruit for youth-led agribusiness.
- **The perception that agriculture is high-risk must change**, momentum built at this convening must continue to advocate for agriculture, a sector that feeds us and brings wealth, for us to come together again and share our progress at ACAT 2027.


Technical Interactive Panels (TIPs)



TIP 1: User-centred Design

A vital shift toward inclusive, farmer-led innovation is key to sustainable agricultural transformation. The session demonstrated that engaging farmers as equal partners brings greater impact through insights from their lived experience.

True transformation requires co-designed solutions rooted in farmers' knowledge, tailored to local contexts, and supported by trust-based value chain partnerships, institutional reform, and ecosystem-wide collaboration.

Approaches such as those applied by One Acre Fund and AfricaRice illustrate the success of participatory and consumer-driven approaches, showcasing user-centered design, continuous feedback, and contextual adaptation significantly improved adoption rates and market relevance.

> ***If we want to have farmer centric technology, we should place farmers at the center of evaluating the performance.***
>
> ***Prof. Bernard Slippers,*** *Member, AATF Board of Trustees*

Ag-Tech Frontier: Crossing the Valley of Death

Achieving Smallholder Productivity Growth Through Rethinking Scaling provided a snapshot of the Global Agricultural Productivity (GAP) report highlighting how Africa can drive smallholder productivity growth by rethinking scaling strategies, as underscored in the GAP report. With Africa needing to significantly increase its Total Factor Productivity (TFP), fragmented approaches – where farmer needs, research, deployment, and policy operate in silos with poor communication and no scaling strategy – are inadequate. Instead, an orchestrated, user-centered design model that integrates networks into system design, considers multiple user personas beyond just farmers, embeds scaling strategies from the outset, leverages real-time data for validation, and fosters co-creation across stakeholders is required. This shift from fragmented to orchestrated approaches is the pathway to overcoming the "valley of death" in ag-tech innovation and achieving sustainable, scalable impact for Africa's smallholders.

Path Forward

Prototype with farmers in real time, replacing one-off consultations with continuous feedback cycles using demo plots, farmer-led trials and journey mapping to adapt technologies before scaling.

Integrate traditional and scientific knowledge by training extension agents and farmer leaders to blend modern science with indigenous knowledge, while leveraging digital tools that are offline-ready and locally contextualized.

Reform institutions to embed participatory design as standard practice, while investing in farmer organizations to sit at the table as decision-makers, not end-users.

Design for systems, not individuals ensuring solutions account for the entire ecosystem – market demands, social dynamics, and agroecological contexts.

Apply consumer preference studies to align breeding priorities and innovation pipelines with what both farmers can produce, and consumers can afford.

TIP 2: Building Robust Digital Infrastructure in Rural Areas

The session highlighted the transformative potential of digital agricultural technologies in enhancing productivity and inclusivity across Africa's food systems, emphasizing the need for trust-building, continuous farmer engagement, and practical training to ensure effective adoption.

Digital solutions such as Zipline's drone delivery systems, the International Trade Centre (ITC)'s export data platforms, AATF's localized weather intelligence, and AI-powered advisory tools demonstrated how innovation can thrive when supported by strong public-private partnerships like BK TecHouse's collaboration with RAB.

> ***Rural areas need both availability and accessibility to robust digital infrastructure.***
>
> ***Dr. Bellancile Uzayisenga,*** *Plant & Microbial Biotechnology Programme Coordinator & Senior Principal Research Fellow, Rwanda Agriculture and Animal Resources Development Board, (RAB)*

Innovators urged governments to enable more creative financing to meet the needs of African SMEs through government incentives for private sector investment, blended financing, and microloans.

To achieve scale, these technologies must be co-designed with farmers, tailored to local contexts, and delivered through inclusive ecosystems that blend modern tools with indigenous knowledge.

> ***It's not about how fancy a solution is but how accessible. Sustainable solutions are challenging because going digital is expensive. How do we improve farmers productivity, market linkages, and fair pricing? If they have excess to spend on digital, then the solutions are more sustainable"***
>
> ***Mr. Deo Massawe,*** *CEO, Bank of Kigali (BK) TecHouse*

Ag-Tech Frontier: Technology and Productivity for Smallholder Farming

Technology and productivity for smallholder farming highlighted Africa's urgent need to close its productivity gap, with the region currently recording the lowest returns globally for every dollar invested or hour worked, making it less attractive to global investors.

To reverse this trend, innovations such as improved seeds and the application of AI capabilities to optimize farming decisions show how farmer productivity can be significantly improved and costs reduced. For example, in Lamu, Kenya, farmers who adopted Bt cotton hybrids achieved double the value compared to open-pollinated varieties in Homa Bay. These examples underscore how scaling the right technologies, enhanced through data-driven tools like AI, can transform productivity, raise farmer incomes, and build the investor confidence needed to unlock Africa's agricultural potential.

Path Forward

Invest in digital infrastructure by expanding rural connectivity and setting up farmer-centered digital hubs and centers of excellence so that tools like AI, blockchain, and precision agriculture can reach farmers where they live and work.

Co-create through public-private partnerships to scale proven solutions by anchoring them in PPP models that bridge research, private sector and farmer organizations.

Keep technology simple and local. Design digital platforms in local languages, use off-line ready tools, and build in farmer-to-farmer training so that solutions are accessible and trusted.

Align education with agriculture by integrating agricultural relevance into youth education, especially in tech and engineering fields.

Link tech to productivity gains by using data-driven tools to demonstrate measurable increases in yields, water efficiency, and market access creating proof points for farmer adoption.

TIP 3: Developing Sustainable Business Models for Ag-Tech

The third TIP highlighted Africa's growing momentum to scale ag-tech, stressing the need to build sustainable, locally driven business models to overcome challenges like limited R&D, weak infrastructure, and fragmented markets.

Despite these hurdles, the session highlighted the immense opportunity to build on emerging models of success. Rwanda's investment in R&D, Zipline's scalable drone delivery system, and AATF's work on Bt cowpea in Nigeria demonstrated how localized innovation, supportive ecosystems, and visionary leadership can drive meaningful agricultural transformation across the continent.

Harnessing the creativity of young innovators was further highlighted as crucial. Speakers called for concrete support to help youth develop and scale solutions tailored to local needs. With the right platforms and policies, young entrepreneurs can become powerful drivers of agricultural transformation.

> ***Next-Gen AgTech needs more than ideas – it needs policy support, IP protection and youth at the table. Innovation thrives when ecosystems collaborate.***
>
> ***Dr. Nomathemba Mhlanga,*** *Country Representative, FAO*

Ag-Tech Frontier: Cost of Delay on Implementing Research Outcomes

Cost of Delay on Implementing Research Outcomes highlighted how regulatory and policy delays in approving next-generation ag-tech impose heavy economic and social costs.

In Kenya alone, five years' delay in Bt maize, Bt cotton and late blight-resistant potato adoption is estimated to have cost farmers and consumers about USD 157 million in forgone benefits.

Beyond lost income, delays mean higher pesticide use, greater import dependence, slower yield growth, and missed opportunities for climate and food-security gains, especially for smallholders and poor rural consumers and national resilience.

Path Forward

Champion supportive policy and IP frameworks with clear policies and strong IP protections to foster innovation and derisk entrepreneurs.

Accelerate investment in R&D and open data systems by increasing funding for research, prototyping, and data infrastructure to support scalable, locally relevant technologies.

Scale solutions through regional cooperation by facilitating cross-border partnerships and aggregation models that open new markets and boost adoption of homegrown ag-tech.

Strengthen public-private and tech collaborations by aligning efforts across government, industry, and tech firms to build dynamic ecosystems and integrated services for farmers.

Empower youth through targeted platforms by providing innovation hubs, funding, and mentorship that support youth-led solutions and make agriculture a viable career path.

TIP 4: Licensing and IP: Access to Proprietary Traits and Germplasm

The final TIP spotlighted the growing momentum to accelerate agricultural innovation in Africa by unlocking the full potential of research through smarter licensing, stronger incentives, and inclusive commercialization pathways. Discussions emphasized the need to streamline intellectual property (IP) processes, improve financial and institutional support for researchers, and strengthen public trust in biotechnology, highlighting opportunities to build systems that better serve both innovators and farmers.

> ***We need to promote inclusive, open-source licensing models for plant materials to democratize access and foster collaboration among farmers and researchers. Ethically managed IP should drive, not hinder, innovation.***
>
> ***H.E. Ambassador Prof. Muhammadou M.O. Kah,***
> *Member, AATF Board of Trustees*

Several forward-looking initiatives demonstrated how this vision is already taking shape. Tanzania's Technology and Innovation Support Centers (TISCs) are helping researchers navigate IP and access commercialization support, while AATF's royalty-free licensing model ensures technologies reach smallholders equitably. Corteva's benefit-sharing approach recognizes inventors while ensuring access to high-yielding seeds. An innovative, affordable all-terrain vehicle designed for rural delivery underscored the importance of practical, locally adapted solutions.

Panelists called for expanded public-private-farmer partnerships and IP systems tailored to Africa's unique context – laying the groundwork for a more innovation-driven, farmer-centered agricultural future.

Ag-Tech Frontier: Mechanizing the Last Mile

A viable, all-terrain machine to unlock rural food production showcased Prosparity's Systems Solution Set, a breakthrough approach to mechanizing the "last mile" and overcoming Africa's farm power and transport crises. Recognizing that seed commercialization and farm productivity are limited not only by mechanization but also by inadequate roads and poor market access, Prosparity has developed solutions to link farmers directly with regional buyers. Central to this is the Service Rover Vehicle (SRV), an all-terrain, multipurpose machine with supercar-inspired technology, capable of servicing twice as many farms at double the speed and load of a conventional truck.

Locally built and easy to operate, it functions as a truck, seeder, planter, and multi-crop thresher, enabling year-round revenue and empowering women and youth while generating four times the net value at a quarter of the operating cost. Complementing the SRV is the Fleet Kit System, designed and manufactured in Africa, which provides low-tech, trainable vehicle and container kits. By selling rights, supplies, and support, Prosparity enables agribusinesses to build, manage, and maintain their own fleets, creating scalable, locally owned solutions to tackle mechanization and transport barriers and transform rural farming systems.

Path Forward

- **Raise IP awareness and build capacity,** especially among youth, to treat intellectual property as a tool for protecting and scaling innovations.
- **Provide institutional incentives and recognition for researchers and innovators** by showcasing impact stories and embedding reward systems.
- **Strengthen public-private-farmer collaboration** to ensure innovations are responsive to real-world needs and that farmers are included in decision-making processes.
- **Support the commercialization journey** through innovation hubs, flexible licensing models, and funding mechanisms to bridge the gap between research and application.
- **Adapt and demystify IP and biotech regulations** to build public trust, align with traditional knowledge systems, and foster broader adoption of science-based solutions.

Strategic Dialogues on Agricultural Technology in Africa (SDATA)

Ministerial Dialogue – The Investments We Want: Attracting Ag-Tech Investment

The Ministerial dialogue advanced a shared vision for ag-tech-driven transformation, reaffirming Africa's deep reservoir of innovation and talent. Ministers underscored the need to strengthen coordination, safeguard genetic resources, and align national efforts with continental priorities.

Throughout the dialogue, countries shared powerful examples of ag-tech leadership: Rwanda's innovation-friendly policies, drone surveillance, and digital extension tools; Nigeria's satellite-guided emergency food strategies; Malawi's gender-responsive digital platforms; Ghana's Feed Ghana program and farmer service centers; and Zanzibar's investment in food reserves.

The discussions reflected a shared commitment to evidence-based policymaking, youth empowerment, and cross-sector collaboration. The Kampala Declaration emerged as a key roadmap, emphasizing collective investment in technology, infrastructure, and education for inclusive, sustainable agricultural growth.

We must be bold. The future of our agriculture will not be inherited; it will rather be built by the decisions and commitments we make here today.

Hon. Dr. Mark Cyubahiro Bagabe, *Minister of Agriculture, Republic of Rwanda*

We need to link long-term national funding to universities and attract young people to farming, create an enabling environment for technology uptake, and make sure our collaborations are catalyzed and coordinated at the national level. If we are saying our economy is agrarian, let's truly be agrarian.

Hon. Jessie Kabwila, *Minister, Ministry of Higher Education, Republic of Malawi*

Ministers committed to:

- **Enhance budget allocations towards ag-tech related rural infrastructure development** and agricultural training at public universities, in line with Commitment 6 of the Kampala Declaration requiring at least 10% of annual public expenditure allocation to agrifood systems.
- **Catalyzing and fostering multi-sectoral collaboration** to drive participatory and co-creation initiatives between the public sector, research institutions, civil society, the private sector and farming communities, as well as increase agriculture expenditure and mobilize the US$ 100 billion CAADP target.
- **Advancing regional harmonization and alignment of national aspirations with continental blueprints**, including the CAADP Kampala Declaration and create an enabling environment to drive ag-tech commercialization.
- **Ensuring equitable access to agro-inputs** and climate-smart innovations, adequate extension, and long-term food security and mainstreaming youth, women, and rural farmers in government policies and strategies.

Farmers Dialogue: Digital Divide and Promoting Ag-tech Literacy

The Farmers Dialogue explored practical approaches for empowering smallholder farmers in Africa through technology and innovation. Conversations centered on bridging the gap between traditional farming practices and modern digital solutions, emphasizing co-creation, accessibility, and practical education models to ensure adoption, scalability, and inclusivity.

Success stories showcased practical ways technology and innovation are transforming agriculture. The AGRIST AI-powered bell pepper harvesting robot in Japan demonstrated how automation and data collection can improve efficiency and reduce reliance on guesswork, with plans for more affordable versions suitable for African smallholders. The East African Farmers Federation's farmer-centered research and climate funding initiatives illustrated how partnerships can deliver sustainable digital solutions directly to smallholders. The Rwanda Institute for Conservation Agriculture presented a hands-on education model, with 80% practical training, equipping young farmers to implement innovative practices in their communities. These examples underscored the importance of co-creation, practical learning, and locally adapted solutions in driving adoption and impact.

Technology must be designed to meet the specific needs of women, people with disabilities, and marginalized communities.

Mrs. Tigist Endashaw Bealem, *Consultant - Climate Action Policy Advocacy, Federal Democratic Republic of Ethiopia*

The divide that we have can be bridged if we use the technology available and speak the language that we, farmers, can understand.

Mr. Pacifique Nshimiyimana, *Founder & CEO, Real Green Gold Ltd*

Path Forward

- **Co-create digital tools** with farmers to ensure usability, relevance, and long-term adoption.
- **Invest in demonstration models** like smart villages and farmer-to-farmer learning to build trust and drive interest.
- **Make ag-tech affordable and inclusive**, especially for women and youth, through targeted financing and design.
- **Revamp education models** to focus on hands-on, practical training that equips youth for modern agriculture.
- **Direct climate funding and investment to smallholder farmers** to ensure sustainable, scalable digital solutions.

Researchers Dialogue – Integrating Traditional Knowledge Systems with Modern Technology Solutions

Indigenous agricultural wisdom should play a vital role in shaping Africa's agri-biotech future. Experts, researchers, and traditional knowledge holders came together to demonstrate how ancestral practices – refined over generations – offer sustainable, low-cost, and ecologically sound solutions to challenges in food security, soil health, biodiversity, and climate adaptation.

Africa's wealth of traditional ecological knowledge presents a powerful complement to enrich scientific innovation, and the session emphasized the opportunity to scale its impact through thoughtful integration, documentation, and validation.

Participants shared promising innovations, including bioeconomy models that blend traditional and modern knowledge, inclusive innovation hubs, and co-creation frameworks

that position communities as equal partners. Ethical integration emerged as a core theme, with benefit-sharing mechanisms and culturally relevant digital tools – such as AI interfaces and charcoal fridges – highlighting how modern innovation can respectfully build on indigenous systems.

> ***Integrating traditional knowledge with agricultural technology demands adaptability, accessibility, sustainability, scalability, and trust.***
>
> ***Dr. Bessy Kathambi,*** *Environmental Management and Governance Consultant*

Path Forward

- **Integrate traditional knowledge into national policy,** ensuring indigenous practices are embedded in research agendas, budgets, and development strategies, and protected through legal frameworks.
- **Empower knowledge holders through formal recognition** as equal innovators and inclusion in policy development and benefit-sharing mechanisms.
- **Invest in documentation and validation** through robust scientific methods to record, verify, and safeguard indigenous ag practices and seed varieties.
- **Foster collaborative innovation hubs** that bring together traditional knowledge holders, scientists, and entrepreneurs to co-design locally relevant solutions.
- **Promote ethical and inclusive innovation** through culturally responsive design and transparent, community-led approaches that foster trust and accountability.

Youth Dialogue: Leveraging Ag-Tech for Sustainable Agriculture

Young people emphasized the need for peer and intergenerational knowledge exchange, supported by digital tools, academia, and private mentorship. They called on fellow youth to move beyond short-term grants and build viable, scalable agribusinesses. Donors were urged to de-risk youth engagement by investing in the growth of enterprises, not just personalities. Further, the youth called for structured opportunities and to be recognized not just as beneficiaries, but as co-architects of Africa's agricultural future.

Call to Action: Empowering Youth for Ag-Tech Transformation

To unlock Africa's agricultural future, governments, development partners, private sector and research institutions must put youth at the center of innovation and growth.

This means:

- **Investing in intergenerational learning:** Facilitate education through peer-to-peer exchange and intergenerational knowledge transfer, leveraging academia, digital platforms, private sector mentorship, and hands-on experiences.
- **Backing youth with trust, not just talk:** Development partners and donors must go beyond showcasing a few individuals and instead build long-term, holistic support systems that nurture entire youth-led enterprises.
- **Bridging finance and innovation:** Financial institutions must work with youth to remove barriers to capital, if the money exists, make it truly accessible.
- **Making agriculture aspirational and attainable:** Increase access to scholarships, jobs, internships, mentorships, and grants to draw youth into agriculture and empower them to lead.
- **Reframing youth as pillars of agricultural growth:** Youth must not only be included but recognized as key drivers of transformation, when agriculture grows, so do youth opportunities.

> ***We want country-led and people-led impact. We work with youth and farmers who know what they want. I see an opportunity here at #ACAT2025 for coordinating all the efforts on agricultural technology that is happening across Africa.***
>
> ***Dr. Joshua Ariga,*** *Senior Program Officer, Gates Foundation*

> ***People tell me that it is risky to trust in young agripreneurs, but what is riskier is us trying to start a business. I ask you to trust in us. Trust in young entrepreneurs and it will work out.***
>
> ***Mr. Norman Mugisha,*** *CEO, Afrifarmers Market*

Private Sector Dialogue – Enhancing the Commercialization and Scaling of Climate Smart and Modern Agricultural Technologies and Innovations to the Last Mile

The dialogue highlighted practical innovations including climate-smart practices, drought-tolerant seeds, digital platforms, and insurance models that incentivize resilience. The sector urged closer collaboration with financial institutions, piloting of technologies at the community level, and stronger partnerships among private actors, research institutions, and government bodies—particularly for women and smallholder farmers.

Participants showcased effective commercialization models advancing ag-tech adoption across Africa. Agriculture Planet Enterprise (APE) reached 5 million farmers—60% women—through community engagement and digital tools. A public-private partnership between Rwanda and Morocco established a

100,000 MTN/year fertilizer facility and tailored farmer solutions. In Uganda, community-based technology testing enabled farmers to validate innovations before wider rollout. Co-investment approaches, including 50-50 cost-sharing insurance schemes and blended finance with World Bank and EU support, offered promising financing models. Unlocking climate finance through mechanisms like the Rwanda Green Growth Fund was highlighted as essential for de-risking and scaling innovation.

> ***Unlocking climate finance can involve working with groups like Rwanda Green Growth Fund and groups that allow derisking.***
>
> ***Ms. Fantus Farris Mulleta,***
> *Private Sector Specialist, International Finance Corporation (IFC)*

Path Forward

- **Improve farmer trust in insurance** through transparent payout systems and awareness campaigns.
- **Strengthen financial access by partnering with banks and fintech** to offer inclusive, risk-managed financing for smallholders.
- **Demonstrate technologies locally** through small-scale, in-community pilots to drive adoption.
- **Harmonize seed regulations** and enhance cross-border collaboration for seamless agricultural tech transfer.
- **Scale inclusive solutions**, ensuring women and marginalized groups benefit from climate-smart innovations.

Session Sponsored by:

ASARECA
Transforming Agriculture for Improved Livelihoods

Special Events

ACAT 2025 featured dynamic partner-led side sessions that advanced the themes of collaboration, youth empowerment, and local innovation.

Empowering Young Agri-Innovators: Mentorship, Pitches & Partnerships

AGRA, FAO, Equity Bank, I&M Bank and Heifer International hosted youth-focused sessions titled ***Empowering Young Agri-Innovators: Mentorship, Pitches & Partnerships***, engaging 160 youth from across the continent. These sessions provided a platform for mentorship, showcasing innovations, agribusiness pitching, and strategic networking.

Two key themes emerged: the need for concrete actions to support youth in agriculture – including investments in financial and human capital – and the critical role of mentorship, branding, and market access in youth-led agri-innovation.

The Minister of Agriculture and Animal Resources, Rwanda, Hon. Dr. Mark Cyubahiro Bagabe attended to listen to youth pitches, underscoring government commitment to Africa's youth.These efforts equipped young participants with the skills, visibility, and partnerships essential for transforming African agriculture.

TAAT – Fostering Functional Seed Systems for Delivery of Next-Gen Ag Innovations in Africa

The Technologies for African Agricultural Transformation (TAAT) session highlighted the importance of functional seed systems in delivering next-generation agricultural innovations across Africa. The program showcased its achievements in scaling climate-resilient technologies – such as improved crop varieties and livestock breeds – to over 20 million farmers, resulting in an estimated 25 million tonnes increase in food production. Funded by the African Development Bank, TAAT emphasized investments, enabling policies, and strategic partnerships as critical to strengthening seed systems and transforming food systems across the continent.

Gates Ag One – Alliance for Cowpea Improvement in Africa (ACIA)

Gates Ag One introduced the ACIA, a collaborative initiative aimed at accelerating locally driven crop innovation through strategic partnerships. ACIA brings together researchers, breeders, seed producers, and farmers to develop farmer-responsive, climate-smart solutions to combat major cowpea pests, addressing both in-field and storage challenges. ACIA is committed to enhancing food security, farmer livelihoods, and environmental health across the continent. The session underscored the importance of partnerships in delivering localized, nutritious solutions, with the Deputy Minister of Education, Ghana, Hon. Clement Abas Apaak, expressing his strong support for the initiative. He noted how pleased he was to see cowpea featured at such a prominent continental and international platform, emphasizing its everyday significance in Ghana, where "every household and market has cowpea." Hon. Apaak highlighted Ghana's school feeding policy, which mandates that every public secondary school includes cowpea in the weekly menu—benefiting between 1.4 and 1.5 million students. This reflects the government's recognition of cowpea as a readily available, affordable, and protein-rich food.

Technology Demonstrations (Demos)

ACAT 2025 featured live technology demonstrations that showcased how cutting-edge solutions are revolutionizing African agriculture. These practical showcases gave participants a front-row view of scalable innovations designed to address real challenges in productivity, climate resilience, and farmer livelihoods.

Revolutionizing Agriculture: Autonomous Drones for Smarter Farming – Zipline Rwanda Ltd

Zipline showcased its groundbreaking autonomous drone delivery system, highlighting its application in transforming livestock farming across rural Rwanda. This demonstration focused on the rapid, on-demand delivery of swine semen, bovine artificial insemination kits, and animal vaccines to agro-veterinary outlets (agro-vets). The live demonstration walked participants through every stage of the process—from order placement and inventory management to packaging, drone launch, and precision delivery—showcasing a system designed for both speed and reliability. What typically takes up to six hours by road can now be achieved in under 45 minutes, ensuring timely access to critical reproductive and veterinary products.

Impact Highlight: Cutting delivery times from hours to minutes, unlocking faster animal health services and stronger livestock systems.

The future of mechanization: Volkswagen's Electric Tractors in Action – GIZ

Volkswagen demonstrated its next-generation cutting-edge electric tractors, highlighting their power, efficiency, and sustainability. Attendees witnessed real-time field performance while experts explained key specifications. The showcase emphasized how these electric tractors can reduce emissions, lower operating costs, and support environmentally responsible farming. Designed to educate and engage, the session invited participants to interact with the machines and ask questions directly. With a strong focus on promoting sustainable agriculture, Volkswagen's demonstration made a compelling case for how electric machinery is poised to transform the future of modern farming.

Impact Highlight: Clean power meets modern mechanization—lower costs, zero emissions, and sustainable farming at scale.

AquaEdge: Precision Irrigation Made Easy – Agriedge

The AquaEdge team demonstrated their innovative mobile application designed to revolutionize on-farm water management through precision irrigation. AquaEdge combines an intuitive user interface with powerful analytics and real-time data from on-field sensors to help farmers optimize irrigation schedules. The demonstration highlighted how the app personalizes irrigation recommendations based on specific crop needs, climatic conditions, and soil moisture levels, enabling farmers to make data-driven decisions that enhance yields and conserve water. AquaEdge empowers users to enhance productivity, reduce costs, and promote sustainable agriculture.

Impact Highlight: Turning every drop into higher yields—precision irrigation that saves water, cuts costs, and maximizes farm returns.

Automatic Weather Station for Climate-Smart Decision support - AATF & MSU

AATF and the CLIMDES-MSU Group from Michigan State University demonstrated their innovative Automatic Weather Station (AWS) network and Decision Support System (DSS). The AWS network collects real-time, high-resolution environmental data—temperature, humidity, rainfall, solar radiation, and wind speed—from key agricultural zones to enable localized climate monitoring. This data fuels the AI-driven DSS, which integrates weather, soil, and crop information to deliver predictive analytics and actionable recommendations. The demonstration showcased how this system enhances climate resilience, supports data-driven agricultural decision-making, and promotes sustainable farming practices by translating complex climate data into practical, user-friendly tools for farmers, researchers, and policymakers.

Impact Highlight: Turning raw climate data into predictive insights, the system equips farmers, researchers, and policymakers to act ahead of climate shocks rather than react to them.

GAP IQTM: A next gen data intelligence platform for accelerating sustainable productivity growth - Virginia Tech

The GAP IQ™ team showcased their cutting-edge platform designed to transform complex agricultural productivity growth data into actionable intelligence. By integrating diverse datasets and applying AI-driven analytics through an intuitive user interface, GAP IQ streamlines the Total Factor Productivity (TFP) data value chain, making insights easily accessible to policymakers, investors, researchers, and decision-makers. The demonstration aimed to raise awareness about the platform's next development steps, explore opportunities for including specific focus areas or countries, and gather feedback from potential users. GAP IQ is poised to accelerate data-driven, sustainable agricultural productivity growth across diverse regions.

Impact Highlight: By simplifying complex productivity data, GAP IQ empowers decision-makers with actionable intelligence that accelerates sustainable growth at scale.

FAO technology-driven Agrifood Systems transformation – FAO Rwanda

FAO Rwanda presented a comprehensive demonstration of climate-smart technologies and digital solutions advancing agriculture in Rutsiro District, Rwanda. Through FAO's support and technologies, farmers have gained the ability to independently access artificial insemination services, leading to significant improvements in pig genetics and overall livelihoods. FAO's vertical farming systems use hydroponic technology to grow crops efficiently with minimal water and space, making them ideal for urban and land-constrained environments. Additionally, FAO's digital literacy training equips farmers with essential skills for market access, financial management, and advisory services. Aquaponics was featured as a scalable, sustainable model for year-round food production.

Impact Highlight: From vertical farming to aquaponics, FAO's integrated solutions are reshaping livelihoods by making farming smarter, more resilient, and accessible even in land- or resource-constrained settings.

Experience the Future of Farming: Meet the Virtual Agronomist – Innovative Solutions for Decision Agriculture (iSDA)

iSDA showcased the Virtual Agronomist, an innovative AI-powered advisor transforming agricultural support across Africa. Accessible via WhatsApp, this tool delivers tailored, field-specific advice on nutrient management, pest and disease diagnostics, weed scouting, and harvest monitoring for 22 crops. Already used on over 250,000 plots in five countries since March 2024, it has helped farmers boost yields by an average of 50% in a single season at a fraction of traditional extension costs. The demonstration highlighted the transformative potential of Virtual Agronomist and iSDA's open-source 30m-resolution digital soil map in delivering hyper-local, AI-driven advice, while inspiring attendees to partner with iSDA to scale this cost-effective solution to millions more farmers.

Impact Highlight: With yields rising by up to 50% in a single season, Virtual Agronomist proves how AI-driven, low-cost advice can scale impact faster than traditional extension systems.

Development and Implementation of a Rabbit Artificial Insemination System – Kigali Rabbit Farm Ltd

Kigali Rabbit Farm showcased the Development and Implementation of a Rabbit Artificial Insemination (AI) System designed to enhance rabbit production and productivity. The demonstration covered the entire AI process—from semen collection and advanced evaluation to preservation methods and precise insemination protocols tailored for rabbits. It also highlighted hormonal treatments for ovulation synchronization and included training programs to equip farmers and technicians with practical AI skills. Through interactive, hands-on sessions, Kigali Rabbit Farm emphasized the system's role in boosting reproductive efficiency, improving genetic quality, and reducing disease transmission, offering a transformative and sustainable solution for rabbit farming.

Impact Highlight: The system drives genetic improvement and disease control, setting a new standard for efficiency and profitability in rabbit farming.

Seed Technology-Pathogen Detection, LAMP PCR - Rwanda Agriculture and Animal Resources Development Board (RAB)

Rwanda Agriculture and Animal Resources Development Board (RAB) demonstrated the use of a portable, affordable Real-Time LAMP machine for detecting cassava mosaic viruses, Ugandan Cassava Brown viruses (UCBSV) and the Cassava Brown Viruses. This machine, costing around $8,000, uses four to six primers and requires nucleic-free water, PEG buffer, and other materials. It can operate for up to five hours without power and provides results in 40 minutes. The technology has been effective since October 2020 in detecting diseases in seedlings, ensuring farmers receive healthy cassava seeds. The machine is praised for its affordability, portability, and ease of use, making it a valuable tool for cassava seed inspection and agricultural production. This Real-Time LAMP Machine can be used on different crops viruses such as in maize, Irish potato and sweet potato.

Impact Highlight: Fast, portable, and affordable, the technology ensures only virus-free cassava seeds reach farmers, safeguarding food security from the ground up.

Exhibitors

Africa Solidarity Fund (FSA) is a multilateral financial institution established in 1976 to advance economic development and regional integration across Africa. Headquartered in Niamey, Niger, FSA delivers credit guarantees and financial risk mitigation tools that unlock financing for both public and private sector projects in its 23 African member countries. FSA actively supports high-impact investments in priority sectors including infrastructure, health, education, energy, and agribusiness, recognizing agriculture as a cornerstone for food security, job creation, and inclusive growth. To strengthen its regional footprint, FSA operates two resident missions in Mauritius and Côte d'Ivoire, enabling closer engagement with financial institutions and development partners. Through strategic partnerships and innovative financial solutions, FSA's mission is to enhance economic resilience, improve access to capital, and accelerate sustainable growth across the continent.

The African Agricultural Technology Foundation (AATF) is driven by the vision of a prosperous and food secure Africa, where smallholder farmers' livelihoods are transformed by innovation. Founded in 2003, AATF believes that the agricultural sector is the foundation of Africa's economic growth and development. The organization was created in response to a need for an effective mechanism to support access to technology for smallholder farmers in Sub-Saharan Africa. It was formed in response to the need for an effective mechanism that would facilitate and support negotiation for technology access and delivery and formation of appropriate partnerships to manage the development & deployment of innovative technologies for use by smallholder farmers in SSA. AATF is active in 24 countries of East, Southern and West Africa, currently addressing challenges bedeviling key staples in Sub-Saharan Africa that include maize, rice, cassava, cowpeas, bananas and potatoes.

AgriEdge is a science-driven AgTech spin-off from Mohammed VI Polytechnic University (UM6P), transforming agriculture through digital solutions powered by data analytics, AI, and agronomic expertise. Its platform integrates five tools: FertiEdge for optimized fertilization, reducing nitrogenuse by 20% and increasing yields by 24%; AquaEdge for satellite-based precision irrigation, improving water efficiency by 30%; CarboEdge for farm-level carbon footprint monitoring; YieldEdge for AIpowered yield forecasting; and TrialEdge for digitizing agronomic trials management at both operational and corporate levels. AgriEdge supports over 90,000 farmers in 14 countries across 2 million hectares, enabling them to produce more with fewer resources. As an ecosystem enabler, it drives capacity building through AgTech roadshows, farmer field schools, and its open innovation initiative, the Farming Innovation Program, while promoting knowledge exchange through its flagship events: Agri Analytics Days and Agri Carbon Days. Active in Africa, Europe, and North America, AgriEdge advances inclusive innovation aligned with the UN Sustainable Development Goals.

AGRA stands for the Alliance for a Green Revolution in Africa. It is an African-led and Africa-based organization focused on improving the lives of smallholder farmers in Africa. AGRA's mission is to transform agriculture from a struggle for survival into a thriving business, ultimately contributing to Africa's economic growth and food security.

The Africa Organization of Technology in Agriculture (AOTA), established under Law No. 04/2012, is a non-governmental organization driving agricultural transformation through disruptive innovation and funding initiatives for rural development. AOTA promotes innovative agribusiness models, generates and disseminates agri-innovation knowledge, provides business development services, and facilitates funding access for high-growth agribusinesses to uplift smallholder farmers and improve livelihoods. By leveraging advanced technologies and export-oriented strategies, AOTA aims to unlock a trillion-dollar market. Its flagship initiative, the International Conference on Business Models in Agriculture (IBMA), fosters open dialogue and ground-breaking ideas, uniting over 3,000 global minds to catalyze economic change in agriculture. Guided by open lab principles, AOTA seeks to transform agro-industries, elevate smallholders to the middle class, and boost trade and investment in developing nations, fostering prosperity and sustainable rural development.

The Centre for Tropical Livestock Genetics and Health (CTLGH) is a collaborative research initiative established to enhance livestock genetics for sustainable agriculture in tropical regions. Founded through a partnership between the University of Edinburgh's Royal (Dick) School of Veterinary Studies, the International Livestock Research Institute, and Scotland's Rural College, CTLGH focuses on genetic innovations to improve productivity and resilience in tropical livestock. By advancing genomic tools and technologies, the Centre aims to address challenges such as disease resistance, climate adaptability, and nutritional efficiency in cattle, poultry, and small ruminants. CTLGH works closely with local communities and global organizations to ensure that research outputs benefit smallholder farmers, promoting food security and economic development. Through interdisciplinary research and capacity-building initiatives, the Centre plays a critical role in supporting sustainable livestock systems, aiming to improve livelihoods, enhance biodiversity, and address the impacts of climate change in tropical regions.

ECOBasic Seed Company is a leading early-generation seed enterprise dedicated to producing and supplying high-quality foundation seeds to seed companies, government agencies, and developmental partners across Nigeria. Established to address the critical gap in the seed value chain, ECOBasic plays a pivotal role in ensuring seed security by delivering genetically pure, high-performing seeds of key crops such as maize, and PBR Cowpea. With state-of-the-art processing facilities and a strong team of experts, the company supports sustainable agriculture through innovation, partnerships, and capacity building. ECOBasic is committed to enhancing food security and increasing farmers' access to improved seed varieties that drive productivity and resilience in West Africa's agricultural sect. Established since September, 2021.

The Food and Agriculture Organization of the United Nations (FAO) is a specialized agency of the United Nations dedicated to leading international efforts to end hunger and ensure food security. Its mission is to improve nutrition, increase agricultural productivity, and improve the quality of life for rural populations.

Heifer International is a global non-profit organization that works to end hunger and poverty while caring for the Earth by providing livestock and environmentally sound agricultural training to communities. Heifer's mission is to support rural households and communities become self-reliant through sustainable development and locally-led solutions.

Inqaba Biotec East Africa Ltd is a premier supplier of molecular biology, genomics, and life science solutions, serving academic, research, clinical, and industrial laboratories across East Africa. As a regional extension of Inqaba Biotechnical Industries (Pty) Ltd, a pioneering African genomics company headquartered in South Africa, we are committed to empowering scientific discovery and innovation on the continent. We offer a broad portfolio of high-quality products and services, including DNA sequencing, PCR and qPCR reagents, oligonucleotide synthesis, molecular diagnostic tools, and a wide range of laboratory equipment. With strong partnerships with global biotech leaders, we bring the latest advancements in life sciences directly to the East African research community. Our mission goes beyond supplying tools—we are dedicated to strengthening local scientific capacity through training, technical support, and collaboration. Whether supporting world-class research, improving diagnostic workflows, or advancing biotechnology education, Inqaba Biotec East Africa is your trusted partner in progress. Driven by innovation, backed by science, and rooted in Africa, we strive to bridge the gap between global technology and local impact.

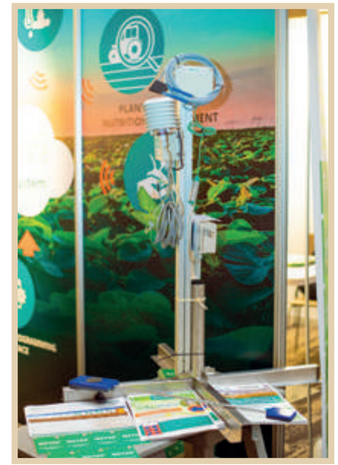
The International Livestock Research Institute (ILRI) is an international non-profit institution working to improve peoples' lives in the Global South through livestock science that contributes to equitable and resilient livestock systems in order to deliver food systems transformation with climate and environmental benefits. Co-hosted by Kenya and Ethiopia, ILRI has regional and country offices across South and Southeast Asia as well as Central, East, Southern and West Africa. Visit us at ILRI.org.

iSDA (Innovative Solutions for Decision Agriculture) is a non-profit reimagining how smallholder farmers access agronomic advice. Backed by the Bill & Melinda Gates Foundation, iSDA combines cutting-edge technology - like generative AI - with world-class agronomic science to deliver expert, field-level guidance at scale. At the heart of iSDA's work is Virtual Agronomist, a next-generation AI advisor delivering personalised support via WhatsApp to farmers across Kenya, Uganda, Tanzania, Malawi, and Zambia. Since launching in 2024, it has supported over 250,000 plots and helped farmers achieve average yield increases of 50%, at 10x lower cost than traditional extension services. This is made possible by iSDA's open-access digital soil map - the first of its kind at 30m resolution- enabling precise, low-cost insights into soil health and nutrient needs. iSDA welcomes partners to help scale our mission: expert advice for every farmer, everywhere.

The Latvian Rural Advisory and Training Centre (LLKC) is the leading organization in Latvia providing professional advisory and education to farmers, foresters, fisheries specialists and rural entrepreneurs. With an extensive regional network and significant experience in managing and coordinating international agricultural projects and partnerships, LLKC offers knowledge and support throughout the country and worldwide, helping to develop environmentally friendly and competitive business.

Pessl Instruments GmbH, based in Weiz, Austria, has been developing smart monitoring solutions for over 40 years. Under the **METOS by Pessl Instruments** brand, our wireless, solar-powered systems and **FieldClimate** platform provide real-time insights for weather forecasting, soil analysis, water management, plant protection, and more. While our core expertise lies in **precision agriculture**, we also support **meteorology**, **hydrology**, **research**, and **smart city** applications. Our technology empowers farmers, researchers, and businesses to optimize operations, reduce risks, and increase efficiency. With 15 subsidiaries and over 200 distribution partners worldwide, we ensure strong global support. We collaborate with key partners like **Lindsay Corporation** to deliver integrated, sustainable solutions that enhance productivity. We create scalable, cost-effective solutions for monitoring farms and the environment. Our platform supports seamless sensor integration, making it adaptable to a wide range of applications and driving innovation in smart field management.

The Ministry of Agriculture and Animal Resources (MINAGRI) is a ministry of Rwanda with headquarters at



Kigali, Rwanda. It was established by the Government of Rwanda to aid promote agriculture and livestock sector of the country. MINAGRI has the mission of promoting the sustainable development of a modern, efficient and competitive agriculture and livestock sector, in order to ensure food security, agriculture export and diversification of the productions for the benefit of the farmer and the economy of the Country.

The Open Forum on Agricultural Biotechnology in Africa (OFAB) Project facilitates constructive conversations among key stakeholders and decision-makers on agricultural biotechnology. For both policymakers and the larger public, OFAB facilitates quality engagements and conversations on the safety and benefits of modern biotechnology. OFAB, an AATF project, is being implemented in ten African countries: Kenya, Uganda, Tanzania, Nigeria, Ghana, Burkina Faso, Ethiopia, Mozambique, Malawi, and Rwanda.

Pan-Africa Bean Research Alliance (PABRA) is a leading collaborative network, committed to enhancing the production, marketing and consumption of beans across Africa. Coordinated by the Alliance of Bioversity International and CIAT, PABRA brings together researchers, extension workers, farmers and the private sector across 31 African countries. Since 1996, PABRA has released over 650 high-yielding, climate-smart, and micronutrient-rich bean varieties tailored to diverse agro-ecological zones and consumer preferences. Its approach integrates gender equity, youth empowerment, and nutrition-sensitive agriculture in the value chain. At this exhibition, PABRA showcases innovative bean-based technologies, including high-iron bean varieties, value-added pre-cooked beans, composite flours and complementary products from beneficial insects and IPM by our partner, International Centre of Insect Physiology and Ecology **(ICIPE)**

QualiBasic Seed Company (QBS) was established in 2017 with the main objective being to produce and supply quality foundation Seed (basic seed) to seed companies in East and Southern Africa, with the aim to be their preferred supplier of Foundation Seed, to the ultimate benefit of Africa's farmers. QBS supplies high quality foundation seed with high genetic integrity, phytosanitary security and industry-leading seed quality standards to seed companies, as well as providing technical support to help seed companies with production and marketing of their certified seed. QBS helps to solve problems and mitigate risk for our clients by helping them manage the inherent risk of producing foundation seed that significantly improves the output of their certified seed. By choosing QBS, our clients are assured of not only meeting their production goals but also achieving enhanced seed quality and improved yields. QBS is headquartered in Nairobi, Kenya with subsidiaries in both Zambia and South Africa.

The Rwanda Agriculture and Animal Resources Development Board (RAB) is a key institution dedicated to transforming Rwanda's agricultural sector. Established by Law N°38/2010 and currently governed by Presidential Order N°074/01 of 09/12/2022, RAB is mandated to enhance productivity, quality, and sustainability in agriculture and animal resources. Its mission is to drive sector growth through innovative research, agricultural and animal resources extension services, and improved policy coordination. By integrating research, extension, and policy within a unified structure, RAB fosters collaboration, streamlines processes, and ensures that research and extension activities directly address Rwanda's agricultural challenges. RAB's vision is to ensure food security and improve livelihoods by transitioning from subsistence to modern, market-driven farming systems. Through its work, RAB contributes significantly to Rwanda's socioeconomic development, empowering farmers with the tools, knowledge, and support needed to sustainably manage natural resources, increase productivity, and boost the quality and competitiveness of Rwandan agricultural products.

Rwanda Fertilizer Company (RFC) is a joint venture between OCP Africa and the Government of Rwanda, established in 2019 to drive the transformation of Rwanda's agriculture through innovative fertilizer solutions customized to the specific nutrient needs of different soils and crops. RFC operates a state-of-the-art blending factory Based in the Bugesera Special Economic Zone with an annual production capacity of 100,000 metric tons. The company plays a strategic role in enhancing soil health and boosting productivity nationwide, leading key initiatives such as the development of a national soil fertility map, the deployment of the OCP School Lab, and the establishment of fertilizer demonstration plots. To date, soil testing has been conducted in 13 districts, and over 30,000 farmers have been trained in best agronomic practices. RFC's product portfolio includes a range of high-quality fertilizers NPK 17-17-17 (TWEZE), NPSB, NPS, TSP, DAP, and Urea developed to boost crop yields hence achieving optimal farm productivity. While currently focused on serving Rwanda's domestic market, RFC is strategically positioned for regional expansion across the East African Community (EAC), with a mission to empower farmers and strengthen long-term food security

Rwanda Institute for Conservation Agriculture (RICA) is an internationally recognized, accredited higher education institute in Rwanda, that specializes in conservation agriculture and One Health principles. A unique English-language institution, RICA combines research, education, and extension services to train Rwanda's next generation of leaders in agriculture, while supporting national priorities for agricultural development.

Sasakawa Africa Association (SAA) is an international non-governmental organization (INGO) dedicated to transforming agriculture and improving livelihoods

across sub-Saharan Africa. Established in 1986 by Ryoichi Sasakawa, former U.S. President Jimmy Carter, and Nobel Laureate Dr. Norman Borlaug, SAA promotes sustainable, inclusive, nutrition-sensitive, and market-driven agricultural development. Active in 17 countries, with country offices in Ethiopia, Mali, Nigeria, and Uganda, SAA collaborates with governments, research institutions, universities, the private sector, and farming communities to deliver practical, science-based solutions. Its initiatives focus on climate-smart agriculture, technology transfer, and strengthening value chains, with a strong emphasis on empowering smallholder farmers—particularly women, youth, and people with disabilities. With nearly four decades of experience, SAA remains committed to building food security, enhancing productivity, and fostering resilience in rural Africa. As a gold sponsor of ACAT, SAA proudly supports collaborative efforts driving agricultural transformation across the continent.

Technologies for African Agricultural Transformation (TAAT), a central pillar of the African Development Bank's Feed Africa strategy, facilitates food systems transformation in Africa by providing access to path-breaking ag innovations, policy harmonisation, and robust seed systems.

TomorrowNow is a climate-tech accelerator transforming Africa's small-scale farming landscape through Digital Agrometeorological Intelligence. We bridge the gap between cutting-edge science and on-farm decisions - translating next-gen weather and climate data into actionable agronomic advisories through strategic partnerships, digital platforms, and product innovation. Our mission is to empower 100 million smallholder farmers with accurate, actionable, and accessible weather and climate insights that drive resilience and productivity. Through the Global Access Platform (GAP), we enhance accuracy, broaden access, and reduce costs—equipping National Met and Agricultural Services, agritech innovators, and farmer organizations to provide timely, localized, and actionable data and advisories. TomorrowNow fosters thriving, resilient communities of data-informed farmers, better prepared for weather shocks and more confident in planting, growing, and harvesting."

The University of Rwanda (UR) is the largest and leading public higher education institution in Rwanda, established in 2013 through the merger of existing institutions. It's a multi-campus university with its main campus in Kigali and other locations. The UR is known for its commitment to research, innovation, and community engagement, playing a vital role in Rwanda's socio-economic development.

Vanguard Economics is a consulting and implementation firm specialised in locally led socio-economic research, advice, and project management in Africa. We help our clients - private corporations, bilateral and multilateral donors, philanthropies, and governments - deliver innovative products, services, projects, and policies that address the unique challenges and opportunities on the continent. **Afakiosk** is a subsidiary of Vanguard Economics that helps farmers, commodity traders, and food processors address mycotoxins and other food safety concerns. Our testing and training solutions help companies produce and deliver safe foods, and our data helps institutions and organisations design appropriate programs and policies.

The Global Agricultural Productivity (GAP) Initiative is one of the core pillars of CALS Global in the College of Agriculture and Life Sciences (CALS) at Virginia Tech. Through the support of our partners and robust research and analysis, the GAP Initiative at Virginia Tech motivates action and investment in agricultural productivity growth to ensure every farmer has access to every proven productivity-enhancing tool. The heart of the GAP Initiative is the GAP ReportTM. The GAP ReportTM draws on expertise from agricultural economists, the private sector, international agencies, civil society organizations, conservation and nutrition groups, universities, and research institutions to contextualize TFP growth trends and the importance of sustainable agricultural productivity growth across all scales of production.

The GenFarm Project, a joint initiative by **Volkswagen** and the **Deutsche Gesellschaft für Internationale Zusammenarbeit** (GIZ), is transforming rural agriculture through sustainable, clean-energy solutions. Currently piloted in Gashora, Bugesera District in Rwanda's Eastern Province, the project is designed to boost productivity, reduce post-harvest losses, and promote climate-smart farming practices that align with global environmental goals. GenFarm is built on three core pillars: **Electric Tractors** that offer efficient, eco-friendly mechanization for smallholder farmers; an **Empowerment Hub** that provides hands-on training and shares best practices in modern agriculture; and **e-Mobility Solutions** that ensure clean, reliable transport from farms to markets. Together, these components create a scalable model for inclusive, green agricultural development—one that is not only future-focused but also rooted in empowering local communities across Africa.

Western Seed Company Ltd (WSC) is a Kenyan-based agricultural company headquartered in Kitale, Trans-Nzoia County. Established in 1986 and operational since 1997, WSC has grown from a small enterprise to a medium-sized company, serving over 300,000 smallholder farmers in Kenya and 200,000 in Rwanda. It is the only private seed company in East Africa with its own maize research and conventional breeding program, focusing on developing high-yielding seed varieties suited to diverse agro-ecological zones. WSC's R&D team, established in 1993, remains at the core of its innovation, working to enhance seed quality and farmer livelihoods. The company operates across East Africa, with branches in Rwanda, Tanzania, and a subsidiary in Zambia, all producing and distributing WSC's seed varieties. WSC envisions expanding its presence across Africa to deliver advanced seed technologies that empower small-scale farmers and drive agricultural transformation across the continent.

List of Abbreviations

AATF	African Agricultural Technology Foundation
ACAT	African Conference on Agricultural Technology
ACIA	Alliance for Cowpea Improvement in Africa
AfCFTA	African Continental Free Trade Area
AGRA	Alliance for a Green Revolution in Africa
Ag Tech	Agricultural Technology
AHyRA	Alliance for Hybrid Rice in Africa
AI	Artificial Intelligence
AI	Artificial Insemination
AICCRA	Accelerating Impacts of CGIAR Climate Research for Africa
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AUDA-NEPAD	Africa Union Development Agency - New Partnership for Africa's Development
AWS	Automatic Weather Station
BCG	Boston Consulting Group
BK TecHouse	Bank of Kigali TecHouse
Bt	Bacillus thuringiensis (used in genetically modified crops)
CAADP	Comprehensive Africa Agriculture Development Programme
CEO	Chief Executive Officer
CGA	Cereal Growers Association
CIAT	International Center for Tropical Agriculture
CLIMDES	Climate Smart Decision Support Systems
DSS	Decision Support System
EAFF	East African Farmers Federation
FAO	Food and Agriculture Organization of the United Nations
GAP	Global Agricultural Productivity
GGGI	Global Green Growth Institute
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GSG	Global Stewardship Group
Ha	Hectare
HQCF	High-Quality Cassava Flour
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics

IFC	International Finance Corporation
IITA	International Institute of Tropical Agriculture
ILRI	International Livestock Research Institute
IP	Intellectual Property
iSDA	Innovative Solutions for Decision Agriculture
ITC	International Trade Centre
LAMP PCR	Loop-Mediated Isothermal Amplification Polymerase Chain Reaction
MINAGRI	Ministry of Agriculture
MSU	Michigan State University
MT	Metric Ton
NGO	Non-Governmental Organization
OFAB	Open Forum on Agricultural Biotechnology in Africa
PABRA	Pan-Africa Bean Research Alliance
PPP	Public–Private Partnership
RAB	Rwanda Agriculture and Animal Resources Development Board
RFC	Rwanda Fertilizer Company
RICA	Rwanda Institute for Conservation Agriculture
RNAi	Ribonucleic Acid interference
R&D	Research & Development
SACAU	Southern African Confederation of Agricultural Unions
SCIFODE	Science Foundation for Livelihoods and Development
SDATA	Strategic Dialogues on Agricultural Technology in Africa
SMEs	Small and Medium-sized Enterprises
SMS	Short Message Service
SRV	Service Rover Vehicle
STI	Science, Technology, and Innovation
TAAT	Technologies for African Agricultural Transformation
TFP	Total Factor Productivity
TISCs	Technology and Innovation Support Centers
UCBSV	Ugandan Cassava Brown viruses

ACAT 2025 Speakers

Day 1 – Farmer-Centric Design: Developing Need-Based Solutions

Showcase & Morning Plenary – Farmer-Centric Design: Developing Need-Based Solutions

- Moderator: **Mr. Eugene Anangwe**, Founder & CEO, East Africa Media Group
- **Dr. Canisius Kanangire**, Executive Director, AATF
- **Hon. Dr. Mark Cyubahiro Bagabe**, Minister of Agriculture, Republic of Rwanda
- **Dr. Daniel Kyalo Willy**, Senior Manager, AATF
- **Mr. Ishmael Sunga**, CEO, Southern African Confederation of Agricultural Unions (SACAU)
- **Ms. Elizabeth Nsimadala**, President, EAFF
- **Mrs. Césarie Kantarama**, Farmer & President of the Board, Ingabo Syndicate-Rwanda
- **Ms. Sharon Akanyana**, Founder and Managing Director, Ishyo Foods Ltd
- **Mr. Obai Khalifa**, Deputy Director, Agricultural Development, Gates Foundation
- **Ms. Verena Ruzibuka**, Country Director, Rwanda, Heifer International
- **Ms. Julie Borlaug**, President, Borlaug Foundation
- **Mrs. Lucia Zigiriza**, Senior Partnership Officer, AGRA
- **Prof. Aggrey Ambali**, Board Chair, AATF

Technical Interactive Panel 1: User-centred design

- Moderator: **Dr. Lilian Ndung'u**, AgTech and Policy Advisor, Tony Blair Institute for Global Change
- **Dr. Milindi Sibomana**, Chief Agriculture Officer, One Acre Fund
- **Ms. Margaret Awinja**, Coordinator, Western Region Farmers Network
- **Mr. Anthony Kioko**, CEO, CGA
- **Prof. Maggie Gill**, Board of Trustees Member, AATF
- **Dr. Kayode Sanni**, Project Manager and Director of The Alliance for Hybrid Rice in Africa (AHyRA), AATF
- **Dr. Jessica Agnew**, Associate Director, CALS Global & Managing Editor, GAP Report, Virginia Tech
- **Prof. Richard O. Oduor**, Research, Innovation and Outreach, Kenyatta University
- **Prof. Hlami Ngwenya**, Head of Research Chair, Communication for Innovation Center for Sustainable Food Systems and Development, University of Free State
- **Prof. Bernard Slippers**, Board of Trustees Member, AATF
- **Prof. Firew Mekbib**, Chair, National Variety Release, Federal Democratic Republic of Ethiopia
- **Dr. Jean Claude Rubyogo**, Director, Pan-Africa Bean Research Alliance (PABRA)

Technical Interactive Panel 2: Building robust digital infrastructure in rural areas

- Moderator: **Dr. Emmanuel Okogbenin**, Director, Programme Development and Commercialization (PDC), AATF
- Moderator: **Ms. Joyce Njuguna**, Monitoring Evaluation & Learning Officer, AATF
- **Dr. Bellancile Uzayisenga**, Plant & Microbial Biotechnology Programme Coordinator Senior Principal Research Fellow, Rwanda Agriculture and Animal Resources Development Board, (RAB)
- **Mr. Deo Massawe**, CEO, Bank of Kigali (BK) TecHouse

- **Mr. Emmanuel Assiak**, Chief Investment Officer, Fund for Export Development in Africa (FEDA)
- **Dr. Ndambe Magnific**, Deputy Vice Chancellor of Research, RICA
- **Mr. Omid Kassiri**, Managing Partner, East Africa, McKinsey & Company
- **Mr. Pierre Kayitana**, General Manager, Zipline Rwanda
- **Mr. Gabriel Macharia**, Data Management Officer, AATF
- **Mr. Paul Kwengere**, Board Member, International Trade Council
- **Mr. Faissal Sehbaoui**, CEO, AgriEdge

Farmers Dialogue: Digital divide and promoting Ag-tech literacy

- Moderator: **Mr. Kagotho Kamau Anthony**, Senior Advisor – Ag-Tech, Tony Blair Institute, Rwanda
- **Mr. Junichi Saito**, President & CEO, AGRIST Inc.
- **Ms. Elizabeth Nsimadala**, President, EAFF
- **Mr. Pacifique Nshimiyimana**, Founder & CEO, Real Green Gold Ltd
- **Mr. Naboho Wiledyo**, Farmer, People's Republic of Burkina Faso
- **Mrs. Tigist Endashaw Bealem**, Consultant - Climate Action Policy Advocacy, Federal Democratic Republic of Ethiopia

Day 2 – Enabling Environment: Investment and partnerships for Ag-Tech Solutions

Showcase & High-Level Opening Session Morning Plenary – Enabling Environment: Investment and partnership for Ag-Tech Solutions

- Moderator: **Mr. Eugene Anangwe**, Founder & CEO, East Africa Media Group
- **Dr. Canisius Kanangire**, Executive Director, AATF
- **Dr. Gebregziabher Gebreyohannes**, Senior Scientist in Quantitative Genetics/Animal Breeding, ILRI & Former State Minister of Livestock and Fisheries, Ethiopia
- **Dr. Yuichiro Asai**, President & CEO, Asai Nursey, Inc
- **Dr. Sheila Obim**, Executive Director, Alliance for Science
- **Prof. Jean Jacques Muhinda**, Regional Director East & Southern Africa, AGRA
- **Hon. Eric Rwigamba**, Minister of State, MINAGRI
- **Ms. Brenda Gunde**, Lead Global Technical Specialist ICT4D, Sustainable Products, Markets and Institutions Division, IFAD
- **Dr. Stella Simiyu**, Director Regulatory Affairs & Stakeholder Relations, CropLife Africa Middle East
- **Ms. Katie Taft**, Communications and Engagement Lead, Gates Ag One
- **Mr. Hannington Namara**, Chairperson, Rwanda Bankers Association
- **Prof. Aggrey Ambali**, Board Chair, AATF
- **H.E. Dr. Goodluck Jonathan**, AATF Goodwill Ambassador & Former President, Federal Republic of Nigeria
- **Hon. Dr. Mark Cyubahiro Bagabe**, Minister of Agriculture, Republic of Rwanda
- **H.E. Dr. Édouard Ngirente**, Prime Minister, Republic of Rwanda
- **Dr. Athanase Nduwumuremyi**, Coordinator – Roots & Tubers Program and Senior Scientist, RAB
- **Mr. Abed Mathagu**, Project Manager, RABP – CMP

Technical Interactive Panel 3: Developing sustainable business models for Ag-Tech

- Moderator: **Ms. Sofia Tesfazion**, Director Resource Mobilisation, AATF
- **Dr. Eugene Mutimura**, CEO, National Council of Science and Technology, Republic of Rwanda

- **Dr. Jonga Munyaradzi**, Seed Production Manager, AATF
- **Dr. Said Rutabayiro Ngoga**, Division Manager for Technology Innovation, Rwanda Information Society Authority
- **Ms. Martha Haile**, Founder, Abze
- **Dr. Sheila Obim**, Executive Director, Alliance for Science
- **Mr. John Agboola**, Foundation Manager, AGCO Corporation
- **Mr. Peter Wamboga-Mugirya**, Director for Communication and Partnerships, Science Foundation for Livelihoods and Development (SCIFODE)
- **Dr. Nomathemba Mhlanga**, Country Representative, FAO

Ministerial Dialogue – The Investments We Want: Attracting Ag-Tech Investment

- Moderator: **Mr. Vitumbiko Chinoko**, Project Manager - OFAB, AATF
- Chair: **Hon. Dr. Mark Cyubahiro Bagabe**, Minister of Agriculture, Republic of Rwanda
- **Dr. Canisius Kanangire**, Executive Director, AATF
- **Dr. Clement Adjorlolo**, Principle Programme Officer, Agriculture and Rural Transformation
- **H.E Dr. Goodluck Jonathan**, AATF Goodwill Ambassador & Former President, Federal Republic of Nigeria
- **Dr. Getaw Tadesse**, Acting Managing Director, Akademiya2063
- **Hon. Eric Rwigamba**, Minister of State, MINAGRI, Republic of Rwanda
- **Hon. Clement Abas Apaak**, Deputy Minister, Ministry of Education, Republic of Ghana
- **Hon. Jessie Kabwila**, Minister, Ministry of Higher Education, Republic of Malawi
- **Dr. Ezebuiro N. Christpeace**, Head – Special Project Delivery and M & E (PROD-ME), Federal Ministry of Innovation, Science and Technology, Federal Republic of Nigeria
- **Dr. Mohamed Dhamir Kombo**, Director of Agriculture and Food Security, Ministry of Agriculture, Irrigation, Natural Resources, and Livestock, Republic of Zanzibar

Researchers Dialogue – Integrating traditional knowledge systems with modern technology solutions

- Moderator: **Prof. Hlami Ngwenya**, Head of Research Chair, Communication for Innovation Center for Sustainable Food Systems and Development, University of Free State
- **Dr. Bessy Kathambi**, Environmental Management and Governance Consultant
- **Mrs. Gift A. Kadzamira**, Director General, National Commission for Science and Technology
- **Dr. Omar Mukama**, Lead GCP inspector of Clinical Trials, Rwanda Food and Drugs Authority
- **Dr. Allan Liavoga**, Technical Advisor, North American Millers Association
- **Ms. Bakang K. Kgasudi**, PhD student, Botswana University of Agriculture and Natural Resources
- **Dr. Katrin Glatzel**, AATF Board Member & Public Policy Specialist

Day 3 – Last Mile Delivery: Commercialization and Scaling of Ag-tech Solutions

Showcase & Morning Plenary – Last Mile Delivery: Commercialization and Scaling of Ag-tech Solutions

- Moderator: **Ms. Isabelle Lydia Masozera**, Founder, Masozera Africa
- **Dr. Kayode Sanni**, Project Manager and Director of The Alliance for Hybrid Rice in Africa (AHyRA), AATF
- **Mr. Sam Ngabire**, Coordinator, Home Grown School

Feeding Project, Ministry of Education, Republic of Rwanda
- **Ms. Mildred Nadah Pita**, Head of Public Affairs, Science and Sustainability, Bayer
- **Mr. Chavdar Trifonov**, CEO, EA Agro Ltd
- **Mr. Momar Dieng**, Chief Strategy and Partnerships Officer, AIMS Global Network
- **Prof. Karimbhai M. Maredia**, Ph.D. Professor and Director of International Programs, MSU
- **Dr. Eliud Abucheli Birachi**, Project Leader and Market Economist, Pan-Africa Bean Research Alliance (PABRA)
- **Mr. Amath Pathé Sene**, Managing Director, AFSF
- **Ms. Zoë Karl-Waithaka**, Managing Director and Partner, Boston Consulting Group (BCG)
- **Dr. Mel Oluoch**, Director for Strategic Partnerships, Sasakawa
- **Dr. Telesphore Ndabamenye**, Director General, Rwanda Agriculture and Animal Resources Development Board (RAB)
- **Dr. Oliver Kamana**, Permanent Secretary, MINAGRI

Technical Interactive Panel 4: Licensing and IP: access to proprietary traits and germplasm

- Moderator: **Prof. Francis Nang'ayo**, Senior Manager, Regulatory Matters, AATF
- **Dr. George Smith**, Senior Associate Dean for Research, MSU
- **Dr. Damaris Odeny**, Plant Geneticist, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)
- **Dr. Deogracious Protas Massawe**, Principal Research Coordination Officer, Tanzania Commission for Science and Technology
- **Mr. Eric Lane**, Co-Founder and Principal, Prosparity Systems
- **Dr. Solomon Assefa Gizaw**, Head, TAAT Clearinghouse International Institute of Tropical Agriculture (IITA)
- **H.E. Ambassador Prof. Muhammadou M.O. Kah**, AATF Board
- **Ms. Keziah Chomba**, Legal Officer, AATF
- **Dr. Nyagatare Guillaume**, Principal, University of Rwanda, College of Agriculture

Youth Dialogue: Leveraging Ag-Tech for Sustainable Agriculture

- **Ms. Martha Haile**, Co-Founder, Hello Tractor & Founder, Abze
- **Ms. Elizabeth M. Namaona**, CEO, Civil Society Agriculture Network
- **Mr. Christian Irakoze**, Co-founder, Eza Neza
- **Mr. Norman Mugisha**, CEO, Afrifarmers Market
- **Ms. Mildred Nadah Pita**, Head of Public Affairs, Science and Sustainability, Bayer
- **Mr. Henry Lagat**, Lead, Generation Africa, AGRA
- **Mr. John Agboola**, Foundation Manager, AGCO Corporation
- **Dr. Joshua Ariga**, Senior Program Officer, Gates Foundation

Private Sector Dialogue – Enhancing the Commercialization and Scaling of Climate Smart and Modern Agricultural Technologies and Innovations to the Last Mile

- Moderator: **Prof. Hlami Ngwenya**, Head of Research Chair, Communication for Innovation Center for Sustainable Food Systems and Development, University of Free State
- Moderator: **Prof. Egide Karuranga**, Business Strategy Analyst, Education2050
- **Dr. Telesphore Ndabamenye**, Director General, Rwanda Agriculture and Animal Resources Development Board (RAB)

- **Hon. Dr. Mark Cyubahiro Bagabe**, Minister of Agriculture, Republic of Rwanda
- **Ms. Linda Busienei**, Programs Manager, Acre Africa
- **Dr. Geoffrey Ongoya**, Technical & Business Development Manager, Koppert Biological Systems
- **Ms. Iheoma Okpara**, Plant Manager, The Rwanda Fertilizer Company (RFC)
- **Ms. Paques Sidonie Kouam-Gwet**, Investment Lead, Global Green Growth Institute (GGGI) Regional Center for Africa
- **Mr. Innocent Namuhoranye**, Chairman, National Seed Association of Rwanda (NSAR) & CEO, AgriSeeds Ltd
- **Mr. Emmanuel Onyango**, Corporate Communications Manager, Asili Agriculture
- **Ms. Fantu Farris Mulleta**, Private Sector Specialist, International Finance Corporation (IFC)
- **Dr. Joshua Okonya**, Program Officer, Agricultural Technology and Innovation, ASARECA
- **Ms. Julian Barungi**, Project Coordinator, Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA), ASARECA

Day 4 – Stewardship: Cultivating a sustainable future with Ag-Tech Solutions

Showcase & Morning Plenary – Stewardship: Cultivating a sustainable future with Ag-Tech Solutions

- Moderator: **Ms. Isabelle Lydia Masozera**, Founder, Masozera Africa
- **Prof. Olalekan Akinbo**, Ag. Head, Genome Editing Programme, African Union Development Agency-NEPAD
- **H.E. Ambassador Prof. Muhammadou M.O. Kah**, AATF Board
- **Dr. Chris Holdgreve**, CEO, Global Stewardship Group (GSG) & Executive Director, Excellence Through Stewardship (ETS)
- **Prof. Johnnie Van Den Berg**, Program Manager: Integrated Pest Management, North-West University, South Africa
- **Dr. Olusegun Adedayo Yerokun**, Deputy Vice Chancellor, Academic Affairs, RICA
- **Prof. Emmanuel Ikani**, Former Executive Director, National Agricultural Extension and Liaison Services, Zaria, Nigeria
- **Dr. Gregory Jaffe**, President, Jaffe Policy Consulting LLC
- **Ms. Stella Rusine Ntez**, Chief Economist, Ministry of Finance and Planning
- **Ms. Evelyn Lusenaka**, Director Stewardship Africa Middle East, CropLife Africa Middle East
- **Dr. Solange Uwituze**, Deputy Director General, Rwanda Agriculture and Animal Resources Development Board

Closing Session

- **Mr. Vitumbiko Chinoko**, Project Manager - OFAB, AATF
- **Ms. Nancy Muchiri**, Senior Manager, Communications & Partnerships, AATF
- **Dr. Canisius Kanangire**, Executive Director, AATF
- **Prof. Aggrey Ambali**, Board Chair, AATF
- **H.E. Dr. Goodluck Jonathan**, AATF Goodwill Ambassador & Former President, Federal Republic of Nigeria
- **Dr. Alexandre Rutikanga**, Chief Technical Advisor, MINAGRI
- **Hon. Dr. Mark Cyubahiro Bagabe**, Minister of Agriculture, Republic of Rwanda
- **H.E Dr. Édouard Ngirente**, Prime Minister, Republic of Rwanda

Links to Resource Materials

- **Communiqué:** The final communiqué from ACAT 2025 is available **ACAT2025 Communique**
- **SDATA** summary report **SDATA Melting Pot Report 2025**
- **Speaker Presentations** are available here: **ACAT2025 Speaker Presentations**
- **Daily video highlights** are available here: **ACAT2025 Daily Video Highlights**
- **Event Photos:** Photos from the event for external use are available below:

Day 1 Photos | Day 2 Photos | Day 3 Photos | Day 4 Photos

- *https://www.newtimes.co.rw/article/27108/news/agriculture/major-agric-conference-in-kigali-discusses-improving-farmers-access-to-technologies-*
- *https://www.jornalnoticias.co.mz/2025/06/09/ruanda-propoe-uso-de-drone-para-logistica-agric*

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