Why Africa's food future is digital

AI generated picture

By Boaz Blackie Keizire

In Africa today, we cannot miss the fact that Africa's food systems are under immense pressure. With a population projected to reach 2.5 billion by 2050, and with over 280 million people facing hunger today, the continent is at a crossroads and must find solutions to feed its people while creating dignified livelihoods for its youth. Yet, within this crisis lies a generational opportunity: to transform food systems through artificial intelligence (AI), data-driven policy, and youth-led innovation.

This is why last year's Food Systems Forum was so critical to everyone who lives on planet earth — young, old, male or female — must pay attention to this discussion. At AGRA, we know that the future of African food systems is not only digital—it is youthful, inclusive, and policy-driven. But this transformation will not happen by chance. It requires bold leadership from governments, strategic investments in digital infrastructure, and a reimagining of how we engage Africa's largest demographic asset: its youth.

According to the 2025 State of Food Security and Nutrition in the World (SOFI) report, food insecurity worsened across Africa between 2022 and 2024, with women and youth disproportionately affected.

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Meanwhile, over 12 million young Africans enter the labour market each year, yet only three million formal jobs are created. The agri-food systems, which employs over 70 percent of the continent's workforce, remain undercapitalised, under-digitised, and under-leveraged.

Climate shocks, rising debt, and declining development assistance have further constrained governments' ability to respond. From where I stand and based on our work, the stakes are high, but so is the potential.

I had a discussion with my 14-year-old son on how much he knows the work I do, and I was amazed how he was up to date with Africa's food systems. The revelation was that for young people AI is no longer a futuristic concept—it is a present-day tool reshaping how we grow, distribute, and consume food. From predictive analytics for climate-smart food systems to AI-powered market platforms, the technology is already proving its value. For policymakers, the question is not whether to adopt AI, but how to scale it equitably and sustainably.

AI is no longer a luxury—it is a necessity. In Nigeria, for instance, AGRA-supported digital platforms are using machine learning to deliver personalised agronomic advice to over 87,000 women and youth farmers. In Ghana, digital voucher systems for fertiliser subsidies have reduced leakages and improved targeting, increasing input use efficiency. Our AGRA's 2024–2028 Strategy emphasises real-time data systems to guide interventions, track climate impacts, and align food production with nutrition goals. These are not pilot projects, they are scalable models that governments can adopt and expand.

Youth are not just beneficiaries, but builders of solutions. Africa's youth are not waiting—they are innovating. AGRA's Youth Agripreneurs Platform, is a continental AI-powered hub offering e-learning, mentorship, and market access to young agripreneurs across seven countries.

At theFood Systems Forum, AGRA showcased youth-led enterprises and policy dialogues, positioning young people as co-creators of the continent's food future. Despite several barriers compromising progress, we are optimistic. In Mali, where youth are the driving force of the economy, representing more than 50 percent of the population, AGRA supports the government in advancing youth-friendly policies, digital platforms, and targeted awareness campaigns to bridge the unemployment gap and reduce vulnerability to exclusion and extremism.

The missing multiplier is the policy and governments. Policy is the most powerful lever for change. AGRA's work is translating continental frameworks such as the African Union's Comprehensive Africa Agriculture Development Programme (CAADP) and the Kampala Declaration into real action. We are going further— in translating policy into practice. In Ethiopia, for example, AGRA and partners like International Livestock Research Institute (ILRI) are supporting the development of a national food systems roadmap that integrates digital agriculture and youth employment targets. In Ghana and Rwanda, we are working with ministries to embed AI into national agricultural investment plans. AGRA's work across 12 countries shows that when governments lead with clarity, results follow. In Rwanda, a National Food Systems Coordination mechanism now aligns donor investments and embeds food systems thinking into national and local government planning. In Ghana, AGRA-supported reforms have led to the commercialisation of 41 new crop varieties and over US$80 million in government co-investment. AGRA's models and approaches are helping governments identify and remove regulatory bottlenecks, harmonise policies, and build institutional capacity.

At the UNFSS+4 in Addis Ababa, Africa Youth Session, we showcased how young voices actually shape continental food policy. We demonstrated how it looks to embed youth in decision-making—from grassroots collectives to high-level forums. This is not tokenism—it is transformation. When youth are empowered with data, tools, and trust, they become the architects of Africa's food future.

Governments are not just stakeholders—they are system stewards. They set the vision, coordinate actors, and create the enabling environment for innovation. To unlock the full potential of AI and youth in food systems culture, African governments must act decisively. Policymakers must invest in rural digital infrastructure to ensure connectivity and data access. We need to embed AI and data systems into national food systems strategies and monitoring frameworks. Governments must reform education systems to integrate digital food systems, entrepreneurship, and work-based learning. Our public systems must be ready to create enabling environments for youth-led startups through tax incentives, grants, and regulatory support. We have to institutionalise coordination units in governments to align food systems efforts across ministries and partners.

Africa's food future is not a distant dream—it is a present imperative. It is a young woman in Kaduna using AI to optimise her harvest. A youth-led startup in Kisumu building a climate-smart supply chain. A policymaker in Addis Ababa crafting a data-driven national food strategy.

This is the future that all of us must build. We are not doing this alone, we are working with many other partners, and we invite governments, donors, and the private sector to be ready to do more in scaling what works. Because when policy, technology, and youth align, transformation is not only possible—it is inevitable.

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