

	Questions	Responses
1	What actions are being taken by SAA to mitigate the effects of dwindling funding supports from donors?	Dr. Mel SAA SPO At Sasakawa Africa Association (SAA), we take several actions to mitigate the effects of dwindling donor funding for agricultural development by pursuing the following approaches: 1. Diversification of Funding Sources • Broadening donor base: Seeking partnerships with non-traditional donors such as philanthropic foundations, regional development banks, and corporate CSR programs. • Private sector engagement: Developing co-financing models with agribusinesses, especially around market access, value chains, and climate-smart agriculture. 2. Strategic Partnerships • Collaborating with national agricultural research and extension systems (NARES), universities, international research institutes (e.g., CGIAR centers), Private Sector, and NGOs to share resources and jointly implement projects. • Strengthening alliances with regional platforms like AFAAS, FARA, Africa Union and AUDA-NEPAD to leverage pooled funding and visibility. 3. Cost Efficiency and Value for Money • Streamlining operational costs and prioritizing high-impact, scalable interventions. • Shifting towards digital extension and virtual training to reduce logistics and field costs. 4. Investment in Proposal Development and Visibility • Enhancing resource mobilization capacities internally, including more proactive donor engagement and proposal writing. • Using evidence-based reporting and success stories to attract and retain funders. 5. Strengthening Local Ownership and Co-funding • Encouraging governments, farmer organizations, and local institutions to co-fund or take partial ownership of programs, particularly extension and input systems. 6. Piloting Sustainable Financing Models • Exploring social enterprise models (e.g., private service provision model with farmers, paid training, input services, mechanization hubs). • Testing results-based financing or impact investment partnerships tied to measurable outcomes.
2	Thank you for the insightful presentations. As a graduate intern with Sasakawa Africa Association in Nigeria, I've seen firsthand how digital tools often bypass nutritionally vulnerable populations due to literacy, gender, and access gaps. In scaling agricultural extension across Africa, how can we design digitally inclusive systems that not only deliver improved agronomic practices, but also effectively drive behavioral change around	Kristin Davis IFPRI Thank you for your comment. I think you can get a lot of answers from the presentation by my colleague Eliot Jones-Garcia, who shared his email during the presentation. It is very important as Eliot said to probe and test digital approaches to make sure that no one is left out and any information shared is not biased. Models need to be constantly stress tested with users. "Red teaming" is a procedure used to test models for gender bias and incorrect information based on gender. As Eliot mentioned, Farmer.Chat takes the questions from farmers to update their model and provide better answers. Extension staff must be aware of gender equality and social inclusion.
3	AFAAS, how can we make all value chain actors function in unison to deliver all extension service ?	Lillian Lihasi AFAAS AFAAS is fostering unified value chain engagement in extension delivery by promoting multi-actor platforms, strengthening coordination through its Country Fora, and championing inclusive, demand-driven approaches that align the roles of farmers, researchers, private sector, policymakers, and financial actors toward shared outcomes. This coordinated model ensures that knowledge flows, inputs, finance, and markets are integrated, making extension more impactful and sustainable. – AFAAS convening power at continental level and through Country fora at national level seeks to bring together all value chain actors to function in unison in delivery of extension service.

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4	How can commercial farming work amidst climate change and push for conservation agriculture?	Robert Anyang SAA Uganda Commercial farming can thrive amidst climate change by adopting climate-smart and conservation-oriented approaches that enhance productivity while protecting natural resources. This involves integrating regenerative agriculture practices such as minimum tillage, cover cropping, crop rotation, and agroforestry to build soil fertility and sequester carbon. Precision agriculture and digital tools can optimize water use, reduce emissions, and improve input efficiency. Additionally, climate-resilient seed varieties, biofertilizers, and renewable energy for irrigation enable farmers to maintain yields even under erratic weather patterns. Commercial viability is achieved by linking farmers to green markets, carbon credits, and sustainability-driven buyers, offering financial incentives for conservation. Public-private partnerships and blended financing models can help de-risk adoption. Thus, climate resilience and conservation are not barriers but opportunities for transforming commercial farming into a sustainable, profitable, and future-proof enterprise.
5	Traditionally, extension work has mostly focused on providing new knowledge to smallholder farmers. What roles do AFAAS and SAA play with regard to real-time market information and access to credit for farmers?	Lillian Lihasi AFAAS AFAAS' mission is to promote lesson learning and add value to initiatives in agricultural extension and advisory services through sharing of information and increased professional interaction. To address this, AFAAS is strengthening its data and knowledge management systems, in addition to strengthening linkages between AEAS providers, digital innovation platforms, financial and market actors across the country fora to ensure real time information sharing. Digital tools are known to offer the prospect of overcoming AEAS challenges to improve the efficiency, relevance, reach, and impact of AEAS, providing opportunities to boost agricultural output, strengthen value chains, and ensure sustainable food systems. Currently, AFAAS with support from AGRA and the Gates Foundation is strengthening its digital presence through actualizing Public private partnerships (PPP) AI-Enabled Agricultural Advisory Platform. This will compliment the existing dissemination models in ensuring real time dissemination and access to relevant and context specific knowledge by all.
6	Dedicated and consistent capacity building is crucial in the new reimagining of extension in Africa. what actionable plan is in place to bring extension professionals updated to ensure high performance for realisation of the noble objectives of the reimagining?	Kristin Davis IFPRI Indeed capacity strengthening is at the heart of extension, capacity at individual, organizational, and system level. We worked on this for years at GFRAS and AFAAS with the New Extensionist Learning Kit (https://www.g-fras.org/en/knowledge/new-extensionist-learning-kit-nelk.html). In terms of action plans, this needs to happen at country or organizational level. Ask your AFAAS country forum what they are doing, and learn from other countries who have put focus on professionalization and continuous learning (e.g. South Africa and Uganda). See New UFAAS Board to work towards Professionalisation of Agricultural Extension and Advisory Services - UFAAS as an example. Here is a paper from Nigeria on the topic: https://newprairiepress.org/cgi/viewcontent.cgi?article=1335&context=jiaee.
	Can Lillian give us examples of where Agriculture Extension has worked well from which we can learn.	Lillian Lihasi AFAAS This has varied from one place to another based on their context. It is important to note that participation, integration of services, and strong market linkages are key success drivers for effective agricultural extension. Take an example of the "One Stop Center Model" which worked very well in Rwanda – The Rwandan government integrated extension, inputs, mechanization, and market services into community-based hubs. This improved smallholder access to timely advisory services and created stronger links to agribusiness value chains. On the other hand, the Sasakawa Africa Fund for Extension Education (SAFE) is a success in Ethiopia, SAFE helped extension agents deliver improved maize varieties alongside agronomic advice, boosting yields in some communities. Besides this, the Digital Green model in Ethiopia is an approach to take lessons from. In comparison to the conventional approaches, the extension model by Digital Green, that involves training of extension agents to use short, locally relevant videos in farmer trainings, increased adoption rates of improved practices. The use of videos translated to local languages by Access Agriculture is also a success story in disseminating knowledge to the last mile. The FAO supported Farmer Field Schools (FFS) model, are a success story, initially in Kenya, Tanzania, and Uganda, and has now scaled widely. This participatory model, empowers farmers to learn by doing.

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7		<u>Emmanuel Okogbenin AATF</u> On the African continent, Ethiopia has been very successful in extension. It tripled its extension service such that by 2018, it had a third of Africa's extension workers (Dorosh and Minten 202; Fuglie et al 2020) . It achieved the highest rate of agricultural growth rate of any country in sub Sharan Africa since 2000 (FAOSTAT 2022). Each additional \$1 in agricultural value added in the economy generated additional \$0.29 in non-farm GDP thereby driving the economic transformation of Ethiopia. You are right with the hybrid model you described. They are all complementary. However, some information are best passed through digital tools than by non-digital traditional approaches. Ref: Dorosh, P. and Minten, B. (eds) (2020). Ethiopia's Agrifood System: Past Trends, Present Challenges, and Future Scenarios. Washington, DC: International Food Policy Research Institute (IFPRI). FAOSTAT. (2022). FAOSTAT database. https://www.fao.org/faostat/en/. Accessed 14 April 2023. Fuglie, K., Gautam, M., Goyal, A., & Maloney, W. (2020). Harvesting Prosperity: Technology and Productivity Growth in Agriculture. Washington, DC: World Bank.

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8	Reflecting on Dr. Emmanuel Okogbeni's contribution, I find his perspective both thoughtful and highly practicable especially regarding the role of digital tools in transforming extension services. However, I still wonder: how do we ensure that as we scale these digital solutions, we don't unintentionally widen the gap for nutritionally at-risk and disconnected communities? One idea I've been reflecting on is a hybrid model that combines digital tools with more inclusive, low-tech approaches like radio messaging, farmer group dialogues, and community-based facilitators to ensure equitable access and behavioral impact at the last mile.	<u>Eliot Jones-Garcia IFPRI</u> Thanks for the great question. I think the answer is both. First, there is a need for hybrid, on-the-ground support. Second, that support should be informed by further research into how digital infrastructures connect with and build on local knowledge networks. At present, much technology-focused work overlooks decades of valuable insights generated by colleagues in organizations such as AFAS. Anyone interested in collaborating on this is welcome to reach out — we are planning additional research in October. <u>Dr. Emmanuel Okogbeni AATF</u> Thanks for your questions: Regarding scaling digital tools, at AATF, we explore field day events, agricultural shows and big programs involving community-based organizations (CBOs), farmer associations to demonstrate highly interactive digital tool sessions that sometimes include training, and then get feedback. We invite reps or leaders of farmers groups to help disseminate digital tool applications. In addition to exploring digital tools, We engage the AATF communications team to give strong visibility, publicity and awareness through diverse platforms to innovative agricultural technologies developed to improve agriocultural productivity. Some of the digital tools being used in extension are easily accessed by farmer on their phones, and those farmers can reach us for support through phones and WhatsApp.
9	The emerging technologies are tailored towards crop production. What about livestock?	<u>Kristin Davis IFPRI</u> Indeed this is one of the biases that we face in agricultural extension. We need to take more of a food systems approach, recognizing that we need innovations in crops, in livestock, in technology, and even social and policy innovations. Many farmers in Africa raise both crops and livestock and this is why it is important for extension officers (or digital assistants) to have access to advisories on livestock as well as crops.
10	How can we transform the less educated and less tech accessed farmers of Africa to an intelligent system?	<u>Emmanuel Okogbenin AATF</u> The system must be user friendly. We have also ensured that the system is set up in multiple languages to facilitate easy use by the less educated.
11	•How best (interventions) we can make Ai Extension be accepted into agricultural extension such it does not appear as if its coming into replace Extension Officers but rather compliment and fill in the gaps for realtime and context fit solution to smallholder farmers. •How best can we track adoption and impact of	<u>Kristin Davis IFPRI</u> I think this is the responsibility of extension organizations and AFAAS country fora. We need to educate our staff and make them aware that AI is a tool to help, not a threat to our jobs. There is sometimes a lot of hype for AI that is not based on evidence. We need to carefully share information and recommendations. On adoption and tracking, again this is something that I believe AFAAS and GFRAS should be doing and keeping track of. International conferences such as AIAEE - Conference and the European Seminar on Extension Education are also important venues for information sharing on different approaches and the evidence for which ones work.

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12	How can we improve the accuracy of AI, since it just keeps and processes what is fed onto it. How can that trash be deleted so as to avoid confusion?	<u>Kristin Davis IFPRI</u> The large language models that support AI need to be fine-tuned. What we are doing with the Generative AI for Agriculture (https://www.ifpri.org/project/generative-ai-for-agriculture-gaia/) and AgriLLM (https://ai71.ai/news/8/agrillm-unveiled-cop29-transforming-global-food-security-with-ai) is to test and fine-tune the models. We get real life questions and answers from extension around the world in different languages to update the model with more and better (and more natural) information.
13	How can governments, NGOs and other stakeholders adapt commercialization of Agriculture extension, what would be the driving force, how can it be sustained, who should pay for extension, what should farmers pay for extension, what enterprise pulls extension payment?	<u>Robert Anyang SAA Uganda</u> Commercializing agricultural extension requires a paradigm shift by governments, NGOs, and other stakeholders—from delivering extension as a free public good to treating it as a value-adding professional service embedded within agricultural market systems. Governments can adapt by transitioning from being direct providers of extension to becoming enablers and regulators of private and community-based extension systems. NGOs, in turn, can play a catalytic role by piloting and de-risking innovative service delivery models such as Commercial Community-Based Facilitators (CCBFs), supporting training, digital integration, and business development. These actors should collectively invest in hybrid models—blending public, private, and producer-led delivery systems—where embedded agents, cooperatives, or value addition centers (VACs/OSCs) deliver tailored advisory, input linkage, and market access to farmers. The driving force behind commercialization lies in farmers’ growing demand for timely, reliable, and person.
14	Thanks to IFPRI team for the great presentations. What are the specific policy recommendations, for/against potential benefits/harm of AI driven systems.	<u>Kristin Davis IFPRI</u> We may not have general policy recommendations for/against AI driven systems. Evidence is as yet nascent since the use of AI in agriculture is relatively new, and we have not yet had a chance to produce a lot of evidence-based policy recommendations. But some of our work with policy recommendations can be found here: https://www.ifpri.org/landing/blog-series-ai-for-food-systems-research/ And here is an important piece about how policymakers feel about the use of AI to write blogposts: Trust the messenger? The role of AI transparency in policy research communication IFPRI.
15	Are there specific issues with the insurance firm since Agriculture is climate dependent?	<u>Robert Anyang SAA Uganda</u> Agricultural insurance faces a range of specific challenges due to the inherently climate-dependent nature of farming. Climate variability—manifested through droughts, floods, erratic rainfall, and other extreme weather events—makes it difficult for insurance companies to predict and manage risk. The increasing frequency and severity of these events due to climate change further complicates the ability of insurers to design sustainable products and remain solvent, especially in regions where reliable reinsurance options are limited. One major issue is the lack of accurate, long-term weather data, which hampers the ability of insurers to develop well-priced and responsive insurance products. This data gap often leads to products being priced too high—making them unaffordable for smallholder farmers—or too low, which exposes the insurer to unsustainable losses. In response, many providers opt for index-based insurance models, such as rainfall or satellite vegetation indices, to reduce verification costs.
16	What strategy is in place to expand these digital solutions across the African continent?	<u>Robert Anyang SAA Uganda</u> One of the key challenges in extending digital or innovative technologies to smallholder farmers is ensuring that data and information are collected accurately and in a timely manner, especially in rural settings with low digital literacy and infrastructure gaps. To address this, we draw on successful examples from Uganda such as Akorion (EzyAgric platform), which demonstrated that trusted, local intermediaries are critical for bridging the data gap. EzyAgric empowered Village Agents/CCBF equipped with smartphones and mobile apps to profile farmers, capture geotagged field data, monitor cropping cycles, and offer services such as input delivery, weather alerts, and digital payments. This model worked well because: • Village Agents/CCBF are embedded in the community and trusted by farmers, which ensures higher response and accuracy. • Data is collected offline and synced when connected, ensuring timeliness even in low-network areas. • Farmers receive immediate value from the data they provide such as access

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17	What will it take to ensure that Africa starts employing and utilizing sufficient extension workers?	Dr. Mel SAA SPO To ensure that Africa employs and utilizes sufficient agricultural extension workers, a multi-pronged, systemic approach is needed. The issue is deeply rooted in policy, funding, capacity building, technology integration, and institutional reform. Below is a comprehensive breakdown: 1. Policy and Government Commitment a. National Policy Frameworks • Governments must develop or revise agricultural extension policies to recognize extension as a strategic public service. • Establish clear national targets for extension worker-to-farmer ratios (e.g., FAO recommends 1:500–1,000, while many African countries have 1:3,000–1:10,000). b. Budget Allocation • Commit consistent national budgetary support for extension services—many countries allocate less than 1% of the agricultural budget to extension. • Extension should be treated as a core investment, not a donor-driven activity. 2. Education, Recruitment, and Training a. Training Institutions • Strengthen and expand agricultural training institutions (TVETs, universities, colleges). • Incorporate modern topics such as climate-smart agriculture, digital agtech, agribusiness, and gender-sensitive extension. b. Recruitment and Career Path • Governments and private sector actors must recruit new workers regularly, with incentives for youth and women. • Create clear career development pathways, competitive remuneration, and recognition systems. 3. Decentralized and Demand-Driven Extension Models a. Farmer-Centric Approaches • Involve farmer organizations and local communities in identifying extension priorities. • Move towards participatory, problem-solving models instead of top-down information dissemination. b. Decentralized Delivery • Transfer some responsibilities to district/county-level governments with adequate funding and oversight. • Encourage pluralistic models, combining public, private, NGO, and farmer-led services. 4. Leveraging Digital Technologies a. Digital Extension Platforms • Promote the use of mobile apps, SMS platforms, radio, video, and AI-powered tools to reach more farmers at lower cost. • Invest in digital literacy for both extension agents and farmers. b. Data and Decision Support Tools

	Questions	Responses
		• Equip extension agents with tablets or mobile devices for real-time diagnostics, market info, and advisory content. 5. Public-Private Partnerships (PPP) a. Corporate Involvement • Encourage agribusinesses and input suppliers to provide extension services as part of their market development. • Ensure alignment with national priorities and accountability mechanisms. b. NGO and Development Partner Support • Leverage donor funding to scale innovative pilots, with sustainability plans for government takeover. 6. Monitoring, Evaluation, and Accountability • Develop extension worker performance metrics (e.g., farmer adoption rates, satisfaction). • Use geo-tagged data, feedback mechanisms, and digital reporting to track effectiveness. • Promote transparency to avoid ghost workers and misuse of resources. 7. Gender and Youth Integration • Address structural barriers preventing women and youth from joining the extension workforce or accessing services. • Design tailored recruitment, training, and extension approaches that speak to their needs. 8. Regional Collaboration and Knowledge Sharing • Strengthen regional organizations and platforms, such as the Sasakawa Africa Association (SAA), Forum for Agricultural Research in Africa (FARA), AFAAS (African Forum for Agricultural Advisory Services), and CAADP (Comprehensive Africa Agriculture Development Programme) to: • Share successful extension models (e.g., Ethiopia’s Development Agent system; approximately 72,000 extension personnel). • Coordinate regional benchmarks and training standards. Suggested way forward It will take a long-term, coordinated effort involving national governments, the private sector, donors, training institutions, and farming communities to build and maintain a robust agricultural extension system across Africa. The key lies in professionalizing the sector, scaling innovations, and making extension attractive and accessible—both for those delivering it and those receiving it.