

## Questions and Responses raised in the Q&A box during Extension Event

	Questions	Responses
1	What report was just quoted that produced the 70% accelerated growth in Africa?	<b>Dr. Kristin Davis:</b> <b>he Digitalisation of African Agricultural Report, found at <a href="https://www.cta.int/en/digitalisation-agriculture-africa">https://www.cta.int/en/digitalisation-agriculture-africa</a></b>
2	Thank you for sharing that Kristin. Also What Nigerian company was mentioned? I would also like to know where you want research scholars to focus to help this movement for digi-tech	<b>Dr. Kristin Davis:</b> Hi Olawunmi. My colleagues David Spielman, Els Lecoutere, Simrin Makhija, and Bjorn Van Campenhout have an excellent article in Annual Review of Resource Economics Information and Communications Technology (ICT) and Agricultural Extension in Developing Countries. They identified research needs as (1) The potential of ICTs to leverage social networks for agricultural extension, including social networks that are otherwise information poor. This includes the use of big data to better target information content using machine-learning algorithms similar to those used by Facebook or Twitter. (2) The use of ICTs to increase agent monitoring to boost motivation and performance, including evaluating the effectiveness of increased monitoring. And sorry I don't know the Nigerian company mentioned by Dr. Dunford.
3	Controlling post harvest loss in Nigeria is a great work to be achieved but how? I think e-extension service is required for possible collection of data before execution of the project thank you.	<b>Dr. Kristin Davis:</b> Hi, thanks for your comment - as with my earlier response, ICTs and e-extension hold promise for knowledge sharing and monitoring. Big data hold promise and I hope we can discuss more during the panel and Q&A.
4	Even as a farmer, I have observed there are inconsistencies with application of urea and maize productivity and improved quality of livelihood. connecting knowledge is key I agree.	<b>Dr. David Laborde:</b> Indeed, knowledge is key, and I will even add "local" knowledge since quality of soils, plant varieties, could vary a lot and there is a need to fine tune messages and recommendations to local conditions. In addition, other inputs are needed, and I will emphasize the role of irrigation. Fertilizer without water does not help plant to grow. This is why some packages of services need to be provided at the same time to unlock existing potentials. Otherwise, we move from one limiting factor to another.
5	David, you talk of Africa importing more of its fertiliser, but consumes a small share. Do you have the data - volumes? From your research, what does it mean to the smallholder farmer?	<b>Dr. David Laborde:</b> If we combine all nutrients (N, P, K) the global consumption is between 190 and 200 million tonnes. Africa consumption is about 7 mio tonnes (so less than 4%), of which 1/3 is concentrated in the North African countries. Now, Africa as a whole is producing about 14mio tons of nutrients, so the continent is a net "exporter", but the regional pattern matters since North Africa produces about 12mio of nutrients (Morocco has phosphates, Algeria is producing ammoniac from natural gas etc). On the other side, it means that Africa, South of Sahara imports 2.6 mio tons of nutrients. More detailed information are available in our online dashboard: <a href="https://www.foodsecurityportal.org/node/1947">https://www.foodsecurityportal.org/node/1947</a>
6	Lack of digital skill is caused by lack of knowledge and regular training of extension agent, step down training and lack of access to smart technology due to lack of fund. in this all extension agent need a support from relevant organizations.	<b>Dr. Kristin Davis:</b> Muhammad, I agree. We found with the Feed the Future Developing Local Capacity Project (DLEC - <a href="https://view.ceros.com/ifpri/dlec-project-in-review/p/1">https://view.ceros.com/ifpri/dlec-project-in-review/p/1</a> ) in Nigeria that many extension staff had never been trained since they were hired decades ago! Capacity efforts are needed on all fronts. We need continuous education to keep staff relevant.
7	Its a comment: Commercialization of agriculture requires to handle agriculture from a demand approach while addressing VC management challenges along the way. That's how other businesses have succeeded. Let us stop complicating agriculture VC but manage the value chains in their simplistic modes while building the capacity of all key stakeholders to work with the farmers sustainably using the Village Agent Model. Thanks. James Murangira Uganda.	<b>Mr. Joseph Bbemba:</b> James, this is a spot on observation. Most times we think it is only farmers that need their capacities to be enhanced, yet we need to provide support to all the VC actors in terms quality, building trust, storage. The farmers dynamics need to be understood by the other VC actor service providers to develop and provide realistic products and services that aid production and overall allow trust to evolve.
8	How much is the cost of offering the messages to the farmers through Akilimo, do they pay for it?	<b>Dr. Bernard Vanlauwe:</b> The AKILIMO tools are deployed in very different ways, depending on the scaling model of the scaling partners. We are not scaling ourselves but always working with scaling partners who have their own models for sharing information with farmers. <b>Dr. Yvonne Pinto:</b> The importance of a mutually supportive ecosystem of all value chain actors is the only way to enable farmers to play their full role and meet their full potential.
9	With the varying exposure to internet facilities throughout Africa, how best can digitalization be scaled out for all farmers to access the services and addressing the bottlenecks related to the adoption?	<b>Mr. Max Olupot:</b> Mix/Blended tools and approaches.
10	Access might not only be about the technology per se, but rather the infrastructure and Language. Many of these digital tools are programmed in English as the default language. How are the different players addressing the less talked about challenge?	<b>Mr. Joseph Bbemba:</b> Maureen, while language is indeed a challenge some of the services have been translated into local language by some service providers. Such information includes Market and weather information, the advisory services especially when questions are asked are responded to in the local languages. The other critical issue is the interpretation and use of such information and its timeliness

11	Decentralization has not benefited the smallholder farmers in Africa, I must say. In Nigeria, they have been at the receiving end. There's a challenge I have discovered in Nigeria. Everyone is an extension agent, especially those interested in selling products to farmers or needs data from them which bring about confusion most times. There's always no synergy. My question is, shouldn't advisory service providers have license, at least to make us more professional.	<b>Mr. Max Olupot:</b> Certainly, but its a process . Professionalism can be driven from a need basis like South Africa has done. Governments should provide enabling policy for this to happen. AFAAS is suporting CFs to lead this process. ...
12	Some countries may do not have enough law to protect privacy data or other legal and institutional system related with ethics. What is your plan to establish such system including ICT workers rights from exploitation like ghost work before expanding digital technology?	Policy is in the realm of Government, the World Bank is helping many countries to establish their Digital Economies, this includes data policies including privacy, cybersecurity and inclusivity.
13	Due to the high cost of smart phone and equipment is SAA have a plan to the extension agent more especially in those live in rural areas.	<b>Mr. Joseph Bbemba:</b> SAA has actually supported Extension Agents to access these smart phones. But it should be noted that the recipients of these phones should be interested and willing to respond and share information with the farmers else the gap can still be felt.
14	Are there some successful examples of digital solutions that made tremendous impact in extension?	<b>Dr. Bernard Vanlauwe:</b> At least two examples can be identified that have delivered impact at scale: (i) Rice agronomy advisory tools (Rice Crop Manager and Rice Advice) . Rice Crop Manager (RCM) is a decision-support tool designed for use by agricultural extension workers. It is accessible online on personal computers, tablets, or smartphones. In the Philippines, more than 2.1 million recommendations have been generated for farmers from 2014 to 2019 and monitoring, evaluation and learning from 2018 revealed that 27% of farmers have adopted the RCM recommendations across all regions. <a href="https://marlo.cgiar.org/projects/Rice/studySummary.do?studyID=2834&amp;cycle=Reporting&amp;year=2019">https://marlo.cgiar.org/projects/Rice/studySummary.do?studyID=2834&amp;cycle=Reporting&amp;year=2019</a> RiceAdvice is a free Android application that provides farm-specific advice on rice management practices to farmers. Impact assessment using randomized control trial in northern Nigeria showed that RiceAdvice increased yield by about 0.5 t/ha and net income by \$212 per hectare. On average, RiceAdvice increased yield without increasing the quantity of fertilizer. <a href="https://marlo.cgiar.org/projects/Rice/studySummary.do?studyID=2851&amp;cycle=Reporting&amp;year=2019#:~:text=Based%20on%20Philippines%20Department%20of,5%2C901%20per%20hectare%20per%20crop.">https://marlo.cgiar.org/projects/Rice/studySummary.do?studyID=2851&amp;cycle=Reporting&amp;year=2019#:~:text=Based%20on%20Philippines%20Department%20of,5%2C901%20per%20hectare%20per%20crop.</a>
14	Are there some successful examples of digital solutions that made tremendous impact in extension?	<b>Dr. Bernard Vanlauwe:</b> (ii) A cassava agronomy advisory platform (AKILIMO) The AKILIMO advisory tools have been disseminated through over 6,000 trained extension workers of over 200 partners from public and private sector organisations, who disseminated the tools to over 430,000 smallholders, of which over 260,000 have subscribed to using the service. The AKILIMO content has also been integrated into the platforms of digital advisory companies like Arifu, VIAMO and eSOKO.