

Digital agriculture solutions offer hope to smallholder farmers



AATF explores digital agriculture solutions that could impact livelihoods of smallholder farmers in Africa. Digital technologies and innovations have been identified as key solutions to improving farmer productivity.

Access to market and increase in agricultural productivity have been identified as the most viable areas where adoption of digital agriculture solutions has the greatest potential to positively impact the livelihoods of smallholder farmers in Sub-Saharan Africa (SSA), according to agricultural experts. The experts, including key stakeholders from the public and private sectors, met during a 2-day workshop on Digital Agriculture convened by the AATF in Nairobi.

The aim of the workshop was to identify key opportunities, blockages and challenges along the agriculture value chain and to evaluate which existing digital solutions are most scalable in SSA and if adopted by smallholder farmers would cause the greatest impact on their livelihoods.

Access to markets was identified as a critical area for digital agriculture solutions to enhance linkages between producers and key value chain actors and as a result increase revenue for farmers by enhancing their direct bargaining power in the value chain during trade. The participants suggested different digital solutions already in existence that could be scaled to link farmers to markets through aggregated distribution; cooperative or aggregated selling and mobile price information.

The opportunities identified to enhance market access included certification and quality assurance, seed trade facilitation and quality management. Further, the experts noted that for farmers to increase productivity value, they need to increase their yields or produce high quality produce.

To this end, farmers must purchase and use certified seeds and fertilizers which are often expensive for individual smallholder farmers. Thus, aggregating demand and purchases might make critical inputs more accessible for farmers to increase their productivity.

“From the workshop deliberations, the above two opportunities were considered likely most impactful for value chain transformation with biggest benefits on small-holder farmers and stakeholders,” said Dr. Emmanuel Okogbenin, the Director of Technical Operations at AATF.

He added that AATF, in alignment with its new strategy (2018 – 2022), will seek to promote digitization of the value chains to rapidly reach and deliver production technologies to small-holder farmers with the required information needed to adequately guide their application for better productivity and improved access to markets.

“Digital technologies for precision agriculture will be used to strengthen productive systems to optimize resource use management, explore economies of scale to advantage and stimulate low costs. AATF will need to ensure the right digital technologies are targeted and facilitated to reach farmers to ensure strong impact including creating a functional environment with necessary regulatory frameworks and policies to support deployment, capacity building (e-literacy, and digital skills) for small holder farmers and youths in the rural areas,” said Dr. Okogbenin.

AATF is empowering smallholder farmers across Sub-Saharan Africa with a wide choice of agricultural innovations that generate wealth and health for their families and communities.

Digital technologies and innovations have been identified as key solutions to revolutionizing processes crucial for improving farmer productivity power at low cost, support data-enabled farming, increase access to information, knowledge, input and markets to generate more social, economic and environmental benefits for farmers.