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IMPACT

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FARMERS' GRIT LEADS TO SUCCESS

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KEY MILESTONES 2023

PG07

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- Promoting sustainable farming practices
- Connecting underserved communities to digital.
- Winner of BAP 2023! Kikazi Agri Products
- Bean Book and PRM Training

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Agricultural extension services are often considered as **major "enablers"** for financial inclusion in the agriculture sector.

TOAST-TO-THE-YEAR 2023

ADC Party Pictorial & Poem / PG25

OUR INNOVATIONS HUB IS OPEN TO THE PUBLIC



Bridging the Digital Literacy Gap



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A Happy New Year 2024 from AgriDigest

In this edition of "The Agribusiness Digest," we're thrilled to bring you an array of exciting features that promise to captivate your interest and keep you eagerly turning the pages. Here's a sneak peek at what awaits you:

CSA Unveiled: Discover the latest insights into our Climate Smart Agriculture (CSA) initiatives, exploring sustainable practices, seasonal highlights, and the vibrant community that makes it all possible.

Toast-to-the-Year Party 2023: Get ready to relive the magic of our unforgettable New Year's celebration! We've curated a visual feast, capturing the spirit and energy of the Toast-to-the-Year Party 2023. Brace yourself for a nostalgic journey through the most memorable moments.

A Conversation with Ronald Ssekajja: Dive deep into the world of innovation at the heart of our organization. Join us in an exclusive Q&A session with Ronald S, where he shares insights, challenges, and the future landscape of ADC's commitment to pioneering solutions.

A Glimpse into 2023 Data: Numbers tell a story, and in this section, we unravel the impact of ADC's endeavors throughout 2023. From key milestones to transformative projects, get a comprehensive look at the data that shapes our narrative and fuels our aspirations for the future.

Stay tuned for an engaging and informative journey through these highlights and more in the upcoming edition of "The Agribusiness Digest." Your source for the latest, the impactful, and the inspiring!

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BY SILVER TUMWA



FARMER'S GRIT LEADS TO SUCCESS

in climate-friendly farming

In the quiet corners of rural villages, a determined farmer named Mr. Katongole is making waves with his innovative approach to farming that not only boosts crop yields but also helps combat climate change.



Katongole, The True Champion of Sustainable Framing Practices under the CSA Project



Roland Ainebyona, Business Advisor for ADC demonstrating how to maintain a healthy coffee plant through pruning

With guidance from Roland Ainebyona, a Business Advisor from the Agribusiness Development Centre (ADC), Katongole has become a true champion of sustainable farming practices. Katongole's journey began with demo gardens, where he embraced climate-smart agriculture techniques, emerging as a visionary land steward. Thanks to his commitment, the Climate-Smart Agriculture Coffee Demo Garden has become a hub of inspiration,

with Katongole playing the role of a welcoming host.

In Ntungamo District, the Kiyaga Coffee Cooperative has eagerly joined forces with Katongole at his climate-smart agriculture coffee demo garden. With open arms, Katongole shares the secrets of climate-smart farming that he learned from the ADC with support of

Agricultural Business Initiative (aBi). Together, they explore sustainable farming, mastering techniques such as trench crafting for water conservation and soil preservation, integrated pest management, and the use of organic fertilizers. These practices have become essential components of their transformed farming methods.

The impact of their efforts is like watching a garden bloom, as the entire community undergoes a profound transformation. Inspired by climate-smart methods, farmers not only harvest abundant crops but also take on the role of environmental stewards. The Climate-Smart Agriculture Demo Garden is no longer just a classroom; it has become a sanctuary where positive change takes root and

promises to flourish over time.

The Agribusiness Development Centre, funded by the Agricultural Business Initiative (aBi), is spearheading this ambitious project in collaboration with over 30 local farmer groups, mirroring Katongole's Kiyaga coffee farmers' cooperative. The initiative aims to integrate practical climate-smart agriculture into the fields of over 1000 small farmers in East and Western Uganda. Their mission is to guide these land stewards through changing seasons, empowering them to navigate challenges like droughts and floods, ensuring bountiful harvests and economic prosperity.



Namisindwa Arabica Coffee Farmers Association, Manafwa District.



Climate SMART Agriculture (CSA)
Training & Intervention Project

DEMO FARMS.

A partnership of



KEY MILESTONES 2023

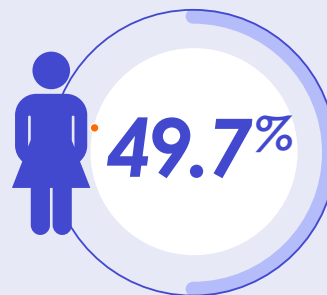
35,305



FARMERS/LEARNERS
trained through ADC Platforms



BAP/PRM* Training and
Apprenticeship Beneficiaries



Over 17,574
Women Trained



Agribusiness
Enterprises Trained



SOMA

4 Languages

11 Courses

13,000 Learners

5,016 Completed



Digital Hubs

4 Hubs

3 Regions

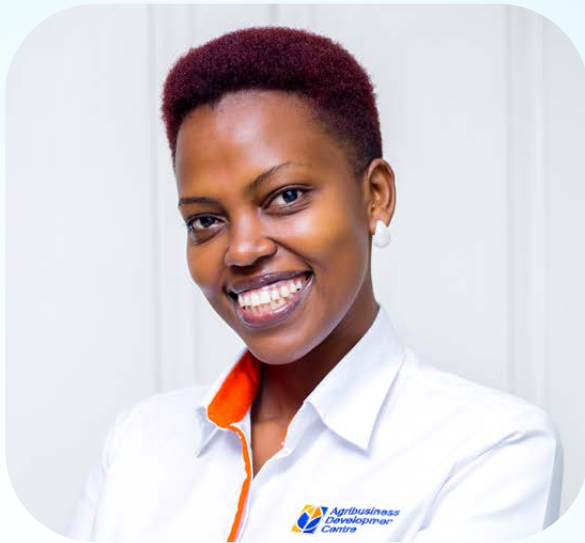


IVR

4 Courses

2,667 Completed

CONGRATULATIONS TO THE NEWLY PROMOTED & NEWEST STAFF MEMBERS



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Officer



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Programs Coordinator



DANIEL IKAABA

Business Advisor
General

Innovate. Collaborate. Transform.



NEWS TIT-BITS.

Promoting sustainable farming practices



Mr. Irumba Pascal, a Host Farmer of HODFA, has received an Irrigation Kit from #ADC. This is part of the CSA project funded by aBi Development aiming to promote sustainable farming practices. The kit will improve Mr Pascal's **irrigation capabilities** and enhance his crop yields.

The Rabo Foundation Team & ADC Advisory Committee during their visit to ADC.



The team from Rabo Foundation and the ADC Advisory Committee came together during a strategic planning session ahead of 2024 at the head office on Plot 1 Mackinnon Road, Nakasero, Kampala City, Uganda. The goal is to promote resilient and sustainable agribusinesses.

Connecting underserved communities to digital.



Executive Director, Josephine Mukumbya, and Daniel Ndide, our IT Lead, represented ADC and participated in the **2nd Annual Community Pass Summit**, organized by Mastercard at Serena Hotel / Marina Bay, Kigo. The event's central focus was on the theme of 'Connecting Underserved Communities to the Digital Economy'.

Connecting underserved communities to digital.



ADC's #Hilnnovator team had a remarkable presence at the Women in Agribusiness Expo in Jinja on Thursday, 7th of December, 2023. It was an incredible partnership with UN Women, Private Sector Foundation, DFCU and UWEAL. Together, we celebrated and **empowered women in Agribusiness!**

NEWS **TIT-BITS.**

Launched Bean Book and PRM Training.



Last year, 2023, Bean Book, and Price Risk Management (PRM) training for Coffee and Cocoa farmers and stakeholders in the value chain was successfully held. This program, meticulously crafted by the Agribusiness Development Centre (ADC), empower businesses to navigate price risks and promote sustainable practices. The intensive training journey focused on market dynamics, growth, and networking, providing valuable opportunities for farmer groups and SMEs in the Coffee and Cocoa Value Chains.

Gender Diversity Management Training (GDM)



On 12th Oct. 2023, We hosted a Gender Diversity Management (GDM) Training on behalf of GOPA, attended by 50 Women-led SMEs from all regions of Uganda. The training emphasized the importance of diversity and inclusion in enhancing SMEs' contributions to the economy.

GIZ/GOPA Award



ADC received an award for extraordinary efforts during the ECOS project stakeholders conference on October 5th, 2023. Stacy Wagala, project manager at GOPA, commended ADC, stating, "ADC has been a driving force in the agricultural sector." We are grateful for your continued support and dedication to the success of Agricultural SMEs.

Winner of BAP 2023! Kikazi Agri Products



Business Acceleration Program (BAP) was launched on August 18th, 2022, in partnership with dfcu Limited and Rabo Foundation, to attract women-led agribusinesses, Grace Akatuha, of Kikazi Agri Products was announced winner of BAP 2023 and rewarded a cheque of 5,000,000/- to support her remarkable journey with Kikazi Millet, Congratulations to Grace Akatuha Founder of Kikazi Millet for this well-deserved recognition.



BY ANDREW ATAHO

Ronald K. Ssekaja talks

INNOVATION



Passion
Technologies
Agriprenuers
Bridging Gaps
Scaling
Value Chain
Growth
Profitability

Ronald K. Ssekajja, ADC's Project Manager for Innovations spoke to *AgriDigest* to discuss Innovation in Agribusiness.

Ssekajja who is a trained technologist is passionate about promoting group business and Agritech innovation. This is an edited transcript of the interview, which covered everything innovation in agribusiness.

Why Agribusiness?

How did you end up here?

I ended up here because there is a high demand for innovation within the agricultural value chain to increase productivity. It is important to share the knowledge acquired from the tech and innovation space with different practices and businesses within agriculture. This will ultimately result in increased productivity and profitability for those involved in this particular field.

What are the challenges in Agribusiness as far as innovation is concerned?

The main challenge that we face is adaptability, along with a lack of belief. A large number of people do not believe that things can be done, so changing their mindset is the biggest challenge. Of course, there are also challenges in terms of access to finance, which is why organizations like ours are stepping in to provide these technologies and innovations at a subsidized rate, and sometimes even for free. This way, people can utilize and adopt these technologies, and later on, commercialize them. We are trying to bridge the gap and ensure

that people initially believe in these platforms and technologies. We are also supporting people to access finance by using these different technologies and helping them to adopt them in their production, such as agriculture production, as well as in their business ventures, for those who are involved in agriculture at different levels in the various value chains.

How is the innovation spectrum looking, from your eyes of your organisation (ADC) as a leader in Agribusiness?

I think the prospects for agriculture are very promising, but there is a significant amount of slow growth due to differing opinions between people and the government's view of agriculture. However, it's worth noting that many young people and smallholder farmers are scaling up and growing in this field. Although there are several challenges, the industry is growing steadily.

What are notable innovations has ADC introduced to stimulate Agribusiness?

ADC has introduced many innovative solutions, particularly in the field of

CONTINUED FROM PREVIOUS PAGE >

*“The **main challenge that we face** is adaptability, along with a lack of belief. A large number of people do not believe that things can be done, so changing their mindset is the biggest challenge”*



RONALD SSEKAJJA, PROJECT MANAGER INNOVATIONS

learning. We have also launched a number of initiatives to enhance implementation. To improve learning, the e-learning and virtual learning channels. The e-learning platform, SOMA, offers over 10 courses covering topics such as agronomy, financial literacy, and farming as a business. The virtual channels, on the other hand, are more like podcasts, and can be accessed by those without internet connectivity. These channels enable young people and farmers to learn new skills and improve their knowledge, which in turn enhances their work practices.

Moreover, ADC has expanded its services to help people access markets and finance, which are significant challenges in the agricultural value chain. One such service is the DFCU Katale, a marketplace that connects users with various input providers. ADC also provides guidance on how to handle price risk and contracting

aspects for those involved in export and trade. With ADC's comprehensive catalogue of services, people can access a range of resources to improve their agricultural practices and business operations.

Any words of inspiration to youth aspiring to be successful Agri-preneuers?

As young individuals, it is important to keep an open mind and seek access to available support. We should engage in government and development partner programs, such as Mastercard, that aim to facilitate our involvement in agricultural value chains and other businesses. Through working together, unionizing, forming cooperatives, and embracing innovations and technologies, we can become more productive and profitable in the field of agriculture.

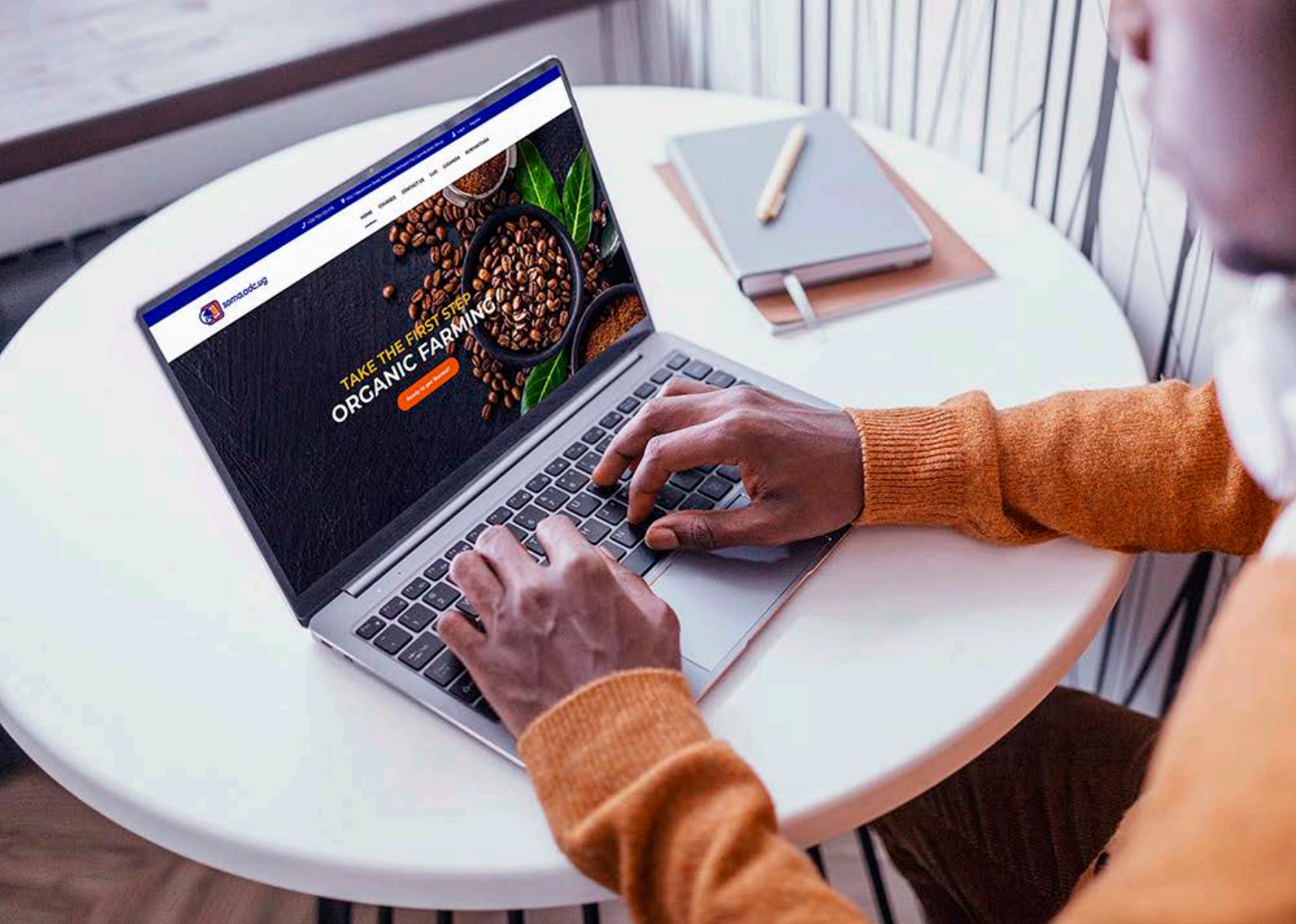


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The SOMA elearning innovation

AN ARTICLE PUBLISHED BY THE
AGRICULTURAL YEARBOOK 2022

Agricultural extension services are often considered as **major “enablers”** for financial inclusion in the agriculture sector.



In Uganda, besides availing knowledge on good agronomic practices and livestock management skills to farmers, extension services have played pivotal roles by providing smallholders with the information, knowledge, guidance and link required to tap emerging agricultural financing opportunities to improve their production, productivity, marketing and incomes, thereby reducing poverty and increasing food and livelihood security (Davis et al., 2020).

Since colonial times, Uganda's agricultural extension service has been changing substantially in structure and function due to constant pressure to respond to the ever-changing production systems and needs, and adjustments in economic structures, which render old systems inappropriate (Obaa et al., 2005). The situation has been exacerbated by policy reversals that are rarely informed by

critical needs assessment and experiences gained but more by political pronouncements (EPRC, 2018). For instance, the 2001 Act that put in place the National Agricultural Advisory Services (NAADS), with statutory mandate to operate a demand-driven public-private extension service delivery approach, was never repealed by Parliament at the time of transferring all the roles of extension back to the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF) under the Single Spine Extension System. In addition, the changed roles of NAADS from what were enacted to procurement and distribution of inputs, seeds, seedling etc. was not legislated to be made part of its legal mandate. As a result, NAADS faced several challenges to achieving its goal of enhancing production and productivity (ibid). Key among these was unregulated contracting of private

agents to supply inputs without involving the National Agricultural Research Organisation (NARO) for technical backstopping and quality control, thus undercutting linkage of technology development to farmers- the end-users of agricultural technologies.

Despite the various changes, progress in delivery of agricultural extension service in Uganda has remained inadequate (Barungi et al., 2016). Not all categories of people, particularly vulnerable groups (i.e. women, youth, persons with disabilities, refugees and elderly persons), are able to access extension services due to factors such as corruption, low pay of extension agents, funding challenges and the top-bottom approach (AfranaaKwapong and Nkoya, 2015). This article therefore describes the operation, potential, progress and challenges of implementing in Uganda the innovative electronic agricultural extension platform- the SOMA e-extension product- pioneered by the Agribusiness Development Centre (ADC) to facilitate provision of extension via digital technology.

THE SOMA ELECTRONIC AGRICULTURAL EXTENSION INNOVATION

The SOMA system is an e-learning innovative solution that enables farmers, agribusinesses, students, traders, extension agents and cooperatives to have access to virtual learning services free of charge. Recognising that Uganda's high extension worker to farmer ratio (i.e. 1 to 1,800) imposes prohibitive cost in physically training farmers and, in the circumstance, is not practical to provide effective agricultural extension service without technology, the Agribusiness Development Centre (ADC) innovated a solution that is both mobile and web compatible.

The solution dubbed "SOMA" was developed in 2018 and started operating in 2019 to address some of the key extension bottle necks, namely higher cost per learning involved in farmer training, language barriers, and difficulty of accessing hard to reach areas. In these regards, developing the SOMA e-learning solution provided opportunity to bridge the gap between demand and supply of ADC

technical advisory services in a cost-effective way due to the self-based learning platform design. "SOMA" in Kiswahili means "To read", which can also be interpreted as "To learn". It is a web-based e-learning portal developed by the ADC that can be accessed via browser at the address www.soma.adc.ug.

PREREQUISITES FOR INITIAL ENROLLMENT TO THE PLATFORM

SOMA is structured to offer end user farmers or interested individual access to valuable online training free of charge. For effective use or implementation, users enrolling to the platform should have basic prerequisites, particularly digital literacy, telephone number and email address, and access to internet service or smart gadgets (phone/ tablet).

(i) Basic digital literacy: A prospective farmer intending to enroll on the SOMA online platform should have basic knowledge on how to use a computer or smart phone. In practice, ADC will train leaders of SACCOs, farmer cooperatives etc. on basic computer and internet use. The leaders will in turn transfer the knowledge to the other farmers. As much as this approach has been effective in terms of knowledge transfer and cost, more is needed in sensitisation of farmers on digital literacy. Therefore, Government, development partners and other stakeholders need to create an enabling environment mostly by promoting internet accessibility and access to smart gadgets for the farmers and their leaders.

(ii) Active email address and telephone number. The SOMA platform requires new learners to submit their details at registration, including active email and telephone numbers to receive the log in details (username and password) and to ease follow up. ADC however made email entry requirement optional because most farmers do not have email addresses. Alternatively, prospective learners were advised to register with either their MTN or Airtel numbers.

(iii) Smart gadget and good internet accessibility. Since SOMA is an online training platform, smart phones, tablets and computers are essential in accessing and working on this web-based application. Because most farmers do not have smart gadgets, ADC has availed temporal smart gadgets like tablets during training to facilitate their learning process. To expand and ease access, Government needs to urgently establish farmer learning ICT hubs in all regions of Uganda.

PREREQUISITES FOR WIDER SCALE IMPLEMENTATION OF THE SOMA PRODUCT

To ensure nation-wide accessibility of SOMA for farmers and other users and relevance and recognition of training outcomes, there is need for a wider scale implementation of this initiative with particular focus on effective delivery structure, uninterrupted accessibility and limited time down, and scope and certification of training contents.

(i) An improved delivery structure. SOMA has been packaged to aid easy implementation, with over 20 activations done in 2022 in Central and Northern Region, through virtual support, one on one engagements and regular follow up with tele-sales which attracted over 5,000 users and 2,000 completions on different modules. ADC has learned that activations are still the best mode to deliver SOMA to all parts of Uganda because large numbers are reached and trained in minimal time unlike the one-on-one engagement and tele-sales follow up which take longer periods and resources. Using activations, farmers are mobilised and reached through their organised groups, most of which are already working with ADC in most parts of Uganda. Traders are trained collectively at their different nearby business or community halls, students are mobilised through their administrative units (e.g. schools).

ADC has collaborated with about seven technical and high institutions including Makerere University, Makerere Business School and Uganda Christian University, Mukono. This has given the institutions added advantage as well since some of their learning modules, especially for the agribusiness students, will

benefit from this ADC digitisation programme of. This means that their materials can be uploaded on the platform thus easing access for other students.

(ii) Wider scope of content within the platform. With wider content base and through availing necessary knowledge, SOMA will be one of the modern innovations that will revolutionize the agriculture sector in Uganda, given its capacity to house more content and capability to connect to other platforms through its easy application interface capabilities. Initially the platform had only three courses based on needs of different stakeholders as well as users of the platform. Feedbacks from implementation highlighted the demand for more courses on agronomy and digitisation of courses that guide learners on marketing and financial linkages. ADC has accordingly responded, and has also taken steps to integrate with other platforms, such as EASTWEST SEED and Sente Africa, to provide users with more options and drive utility.

Despite this success, there are still only few professional digital content creators in Uganda's agricultural sector. Nonetheless, ADC recognises the Content Development Support Programme (CDSP) created by the Government to enhance creative content development in the country. This programme facilitated ADC to digitise and publish eight courses, namely Good Governance and Leadership; Financial Literacy for Managers; Financial Literacy for Farmers; Crop Economics; Arabica Coffee Agronomy; Robusta Coffee Agronomy; Climate Smart Agriculture; Green Growth and Gender Inclusion. Based on this experience, Government is urged to provide more funds to support capacity building for Ugandan production companies and individuals for the development of audio-visual content and scripts.

(iii) Limited down time and stable uninterrupted internet accessibility. With the limited financial resources, ADC has consistently kept the SOMA platform functional, with necessary latest versions of technology required to meet the demand

of users. Over the past five years, however, ADC registered several challenges in delivering the service due to the poor network infrastructures across the country. Poor network connectivity affected the learning process of farmers; hence most farmers dropped off and lost interest in learning. To alleviate this challenge, ADC has strived to improve the learning speed of learners by translating course contents in local languages to speed up the learning and understanding processes. To improve e-agricultural extension outcomes, therefore, Government needs to invest in research and development, and speed up rural electrification and provision of affordable internet accessibility by extending the national backbone infrastructure project across all districts of the country.

(iv) Accreditation of the training content. The growth in Uganda's farmer education subsector has created many challenges including a drop in quality of both physical and online agricultural training content delivery. While in Uganda accreditation process for educational materials is applied to all higher education institutions, this is challenging for agriculture and sectors that offer educational materials to farmers. The

existing gaps has been due to the absence of a specialised dedicated professional Government or non-government agency that can review and regulate the training materials delivered to farmers either online or physically. These gaps too need to be urgently addressed by Government.

OPERATION OF THE SOMA eAGRICULTURAL EXTENSION PLATFORM

The SOMA platform, illustrated in Figure 24, fosters a self-paced learning experience to users who may not easily access physical training when they are scheduled. The platform affords the learner opportunity to review and reference different learning points for better understanding. The SOMA content is mainly delivered in English, with some already translated into Luganda and Luo and other translations planned. The platform also has a forum section that allows learners to discuss and share knowledge /experience. The platform is implemented through organised activations and a Trainer of Trainers (ToT) workshop with different organisations. To use the platforms, farmers go through five logical steps outlined below.

Figure 24: Implementing structure of ADC's agriculture extension platform - New and Existing Customers journey



Step 1: Accessing the SOMA App. SOMA is a web-based application that is accessed through the URL: www.soma.adc.ug on an enabled device preferably smart phone, tablets, and computers with active internet connection. The platform can be accessed by Farmer-Based Organisations (FBOs), Investment Clubs, Village Savings and Loan Associations (VSLAs), Small and Medium Enterprises (SMEs), Academia, and any interested individuals.

The largest obstacle at this stage is lack of smart phones among farmers to facilitate easy access. To overcome this challenge, ADC introduced the Interactive Voice Response (IVR) technology into the SOMA App to enhance accessibility of learning content within SOMA in audio mode. The ADC also provides online support to the learners to access the platform.

Step 2: Registration of a digital account.

Before a prospective learner starts learning on SOMA, s/he is required to first access the website as earlier discussed, and registration for an account is mandatory for all individuals who want to learn on SOMA. Registration is an online process that starts from "Join for free" button on SOMA homepage <https://www.soma.adc.ug/register/>, followed by filling in required information like name, phone number, district, level of education, email address and language preference into an online form. Since most farmers do not have email addresses, ADC has made the requirement for email address optional on the platform. After filling in all mandatory required fields, farmers submit the form for validation.

Step 3: Logging in with a password and username. After submitting the registration form, a prospective learner will receive an email from ADC or a message from 8884 in the inbox of the telephone number or email provided at registration. This message contains a computer-generated username, password and a link for direct access to SOMA website. An individual is expected to copy the log in details, i.e. username and password in a safe notebook. To log in, one clicks or taps the log in button <https://www.soma.adc.ug/user-account/> at the top right hand side of the screen, or access through

the menu in order to feed in the username and password in their respective fields. The challenge at this stage comes with inability of many farmers to enter the correct username and password. To overcome this constraint, the ADC has made both credentials the same to ease the log in process, but this is also influenced by low level of information technology competence.

Step 4: Course selection. Once a user has logged in successfully, he/she will be able to access the different courses from the "MENU" button, and will then click/tap on the courses to view the different courses available on SOMA outlined earlier. Course selection on the platform is based on the needs and interests of individuals or farmer groups.

From the SOMA online database 2022, 80 percent of farmers who enrolled for a course on SOMA for the past four years have demonstrated interest and consistency, which has promoted a high level of completion. However, farmers are encouraged to take their time and learn at their convenience since this platform is developed to aid self-paced learning unlike for IVR where training automatic calls are scheduled according to the most convenient time of farmers. The ADC has dedicated course instructors for all courses on SOMA and platform facilitators who are always available to offer technical assistance and support to learners online.

Step 5: Course completion and certificate Award. Upon selection of the course of choice for learning, a user views the course outline with corresponding period it takes for one to complete a particular course. Learners are encouraged to always start from lesson one where they can learn by either listening to the video or reading the lesson notes or both. After learning a lesson, the user should mark it as completed from the complete orange button below every lesson.

ADC emphasizes this to enable the system track learners' progress. After completing a lesson, one proceeds to do a simple

assessment 3-5 quizzes with multiple answers and later workable practical exercises. Once a learner reaches the quiz for some lessons, the system is programmed to time the period at which answering should be finished, which on failure to submit within allotted time, usually not more than 10 minutes, the system reshuffles and brings different questions. On successful submission of the quiz for marking, the system marks and grades with pass mark of 70 percent. Where a learner failed the assessment, the system requests them to revisit the lesson and retake the quiz with up to three attempts.

The same process is done for all courses and lessons, ending after completing all the lessons and passing all the quizzes and exercises. Upon course completion, farmers are issued a hard copy certificate by ADC as incentive for learners to complete their courses. Besides issuing certificates, best performing farmers are also provided with other awards, such as T-shirts, notebooks, pens, to encourage hard work. As a result of these rewards, more farmers have joined the platform.

PROGRESS IN THE SOMA IMPLEMENTATION SO FAR

Since 2019, the ADC has been implementing the SOMA e-learning platform and has registered progress in creating awareness, provision of digital gadgets, enrolment and progress in digital literacy. Due to constraint and slow absorption, the ADC has so far established only two learning hubs, each with eight full sets of learning kits in in Kyotera and Buikwe and capacities of 10 user thin clients⁴. With more interventions, cooperatives in these two areas can now access training remotely,

evidencing the need for Government to invest in establishing more learning hubs and availing related training gadgets etc.

(i) Awareness creation. In a bid to promote SOMA, ADC has engaged and collaborate with several stakeholders, and in 2019 held stakeholder engagement workshops in the four main Regions of Uganda- Central, Western, Eastern and Northern (Table 4). These workshops were held with cooperatives and exporters to create awareness of the existence of the ADC SOMA e-learning platform and the services it offers. In this regard, over 10 cooperatives have been trained and linked to finance and market.

Since 2020, ADC also conducted several workshops with various with farmers and cooperatives, and with other stakeholders across the four regions, including traders, women groups and learning institutions (Table 4). In 2020, for instance, ADC organised a learning workshop with different players in various agricultural value chains through SOMA to equip them with market price risk management training which included two special workshops to manage price risk of coffee and cocoa. The number of workshops increased in 2021 due to the growing interest of various stakeholders across the regions in taking up the e-learning opportunity offered by the ADC. The growth in interest was further evident in 2022.

(ii) Provision of digital gadgets. During the SOMA activation campaign and workshops, the ADC provided gadgets (Tablets) to farmers to use temporarily in the workshops; and due to limited number of gadgets available (less than 50 pieces of

Table 4: Awareness creation by the ADC for the SOMA eLearning platform

| Period of operation | Type of stakeholders | Number of workshops/forum held | | |
|---------------------|--|--------------------------------|-------------|---------|
| | | Farmers | Other users | Regions |
| 2019 | Cooperatives, Exporters | 4 | 2 | 4 |
| 2020 | Traders, Farmers | 5 | 3 | 2 |
| 2021 | Learning institutions, cooperatives, traders | 5 | 2 | 3 |
| 2022 | Learning institutions, cooperatives, traders | 6 | 10 | 4 |

Source: Adopted from the ADC report, 2022.

smartphones), ADC often encouraged 2-3 participants to share a tablet. Even with this very limited number of gadgets, ADC has over the years continued to provide training to farmers amidst the growing numbers of users. Further support is needed to make the requisite gadgets widely available to ease training and participation.

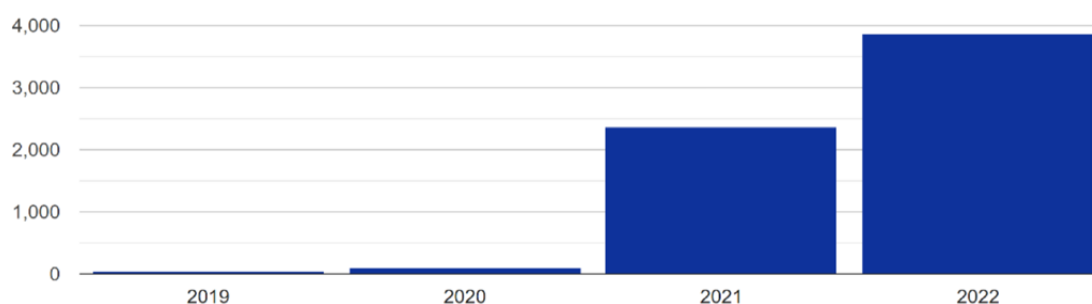
(iii) Enrolment on the SOMA e-learning platform.

Enrollment is a vital initial process to the ADC and the learner in the use the SOMA e-learning platform. This process involves capturing the details of interested prospective learners into the system, and facilitates data reporting and insightful analytics on progress. Learner enrollment also enables them to generate login details to access the learning site and courses. Record of registration on the platform since 2019 is summarised in Figure 25 below. In 2019, the first year of implementation of the SOMA platform, only 41 users (1% of current total) registered, due largely to the then low market penetration with the innovation. In the second year (2020), registration increased to 117 as a result of the intensive marketing strategy adopted. Enrollment then grew

exponentially to 2,380 in 2021 as a result of partnership and application upgrade; and in 2022 the ADC registered the highest enrollment of 3,891 users, due to impetus gained and also to introduction of new modules (courses), system speed advancement and frequent activations carried out. With more support and collaboration, the future outlook is promising.

(iv) Progress in digital literacy of users. In the ongoing effort to digitise farmer groups, ADC has set up digital learning hubs and provided for training remote kits that are enabling building of digital literacy among farmers and other stakeholders. Along with the farmer groups, ADC has agreed to training schedules where a team from ADC trains all farmer group members on how to utilise Information Communication Technology (ICT). Thus far, over 1000 farmers have been equipped with digital literacy skills and over 6000 are actively enrolled onto the SOMA e-learning platform (Table 4).

Figure 25: SOMA e-Learning enrollment (2019-2022)



Digital training by the ADC

| Period of operation | Type of digital literacy provided | Number of users | |
|---------------------|-----------------------------------|-----------------|-------------|
| | | Farmers | Other users |
| 2019 | Computer & Internet Use | 35 | 15 |
| 2020 | Computer & Internet Use | 30 | 00 |
| 2021 | Computer & Internet Use | 320 | 100 |
| 2022 | Computer & Internet Use | 440 | 60 |

Source: Adopted from the ADC report, 2022.

farmers interested to take ADC's trainings through SOMA. In the first year of launch (2019), 50 users were trained, but the COVID-19 pandemic disrupted rollout resulting in only 30 users being trained in 2020. In 2021, however, the number of users trained recovered to 320 farmers, while 100 other users accessed digital literacy training. In 2022 training further recovered, with up to 500 trained on digital literacy.

Despite the growth in farmer enrollment training, however, ADC remains constrained by limited resources to establish hubs, acquire more electronic gadget to support the training, and to further promote the SOMA e-learning given that the previous set target for the project has not yet been achieved. There need, therefore, to build more partnerships and for Government to establish more computer hubs; provide more gadgets for use in training farmers that can be made more attractive to farmers by installing weather forecast programmes; and subsidise the internet to make it affordable to farmers and establish computer hubs. These will go a long way in empowering farmers and value chain actors to transform Uganda's agricultural sector.

CHALLENGES IN IMPLEMENTING 'SOMA' eLEARNING IN UGANDA AND LESSONS LEARNT.

Over the years of implementation of the SOMA e-learning platform, ADC has encountered various challenges alluded to earlier, and have also registered significant lessons that, when addressed, will greatly enhance delivery of e-based extension services to farmers, value chain actors and other stakeholders in Uganda. The key challenges include limited digital infrastructure and learning hubs, lack of gadgets for use by learners, and undeveloped local content of instruction materials.

(a) Inadequate digital infrastructure.

The current major gaps that exist in extending, adoption and use of SOMA e-learning platform are lack of internet and reliable electricity connectivity particularly in hard to reach areas. Although several projects have been piloted by Government to facilitate the creation of ICT Innovation ecosystem and marketplace with

innovative digital products for Ugandan, only 12.16 million people have access to affordable internet in the country (UBoS, 2021), and access is highly disrupted by lack of and unreliable electricity supply. This a challenge that Government needs to work on expeditiously.

(b) Lack of gadgets to aid access to the SOMA e-learning platform.

Currently, most small-scale farmers in rural areas of the country do not have access to gadgets such as tablets, computers, and smartphones to enable them use the SOMA platform. In addition, farmers do not know where to access information to allow them access services online, while others cannot afford smart gadgets. This deficiency is a major drawback on spreading the use of the platform countrywide and especially rural areas.

(c) Lack of locally developed online learning content and curriculum.

Content development is a critical area that is too often overlooked, and creating and sharing of local content in Uganda has not been an easy process. For effective implementation of the SOMA e-learning initiative where negative attitudes towards new technologies and long held traditions of communities, bodies with relevant contents tend not to share it with others. Worse, academic institutions in Uganda have not invested in developing local contents aligned with national curriculums that can be utilised for e-learning. This lack of local content is a serious drawback not only for the SOMA initiative but e-learning in general. Further basing on experiences from the last four years of implementation of the SOMA e-learning innovation, the ADC has also registered key lessons, the address of which will strengthen implementation and adoption of the SOMA platform and other e-learning initiatives in the country. Critical to this is intensification of investment and collaboration.

(i) Strong financial investment. Financial constraint is one of the key limitations for effective implementation of innovations in agriculture. Sufficient financial resources are needed to support the full roll out of the

SOMA innovation to all parts of the country and to facilitate content creation that, in particular, involves translation of courses into local languages and transcribing IVR for those without smartphones; and nationwide activation campaigns. Establishment of more ICT learning hubs and acquisition of gadgets for farmers are key priorities for effective SOMA implementation for agriculture.

(ii) Investment in digital literacy. Form implementation, it was also evident that the extension services offered to farmers should first target change channels and agents before full roll out as a key strategy for effective digital literacy training. The urgent need for improvement of digital literacy should also involve training of farmers on the different ICT functionalities to deepen their ICT knowledge and embrace. that is too often overlooked, and creating and sharing of local content in Uganda has not been an easy process. For effective implementation of the SOMA e-learning initiative where negative attitudes towards new technologies and long held traditions of communities, bodies with relevant contents tend not to share it with others. Worse, academic institutions in Uganda have not invested in developing local contents aligned with national curriculums that can be utilised for e-learning. This lack of local content is a serious drawback not only for the SOMA initiative but e-learning in general.

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(iii) Strong stakeholder collaborations. To ensure effective implementation and wide-scale adoption of the SOMA e-learning extension service system, there is urgent need for extensive collaborating with all stakeholders, including farmers and learning institutions, to collaborate in availing contents for digitalization. In addition, collaboration with Government Ministries, Departments and Agencies is required to strengthen the agricultural institutions and policies that promote and support technology adoption in agriculture for effective implementation of the platform and for wide outreach.

POLICY OPTIONS AND WAY FORWARD

In four years of implementation of the SOMA e-learning agricultural extension service delivery, the goal of delivering high-quality agricultural extension to every farmer in Uganda in relatively cost-effective manner remains unfulfilled. Technology use presents opportunity for this goal to be met, and the e-agricultural extension solution availed by the ADC holds huge potential to improve the agriculture extension services, access to market and finance in Uganda. This, however, will only be possible if the innovation is implemented under supporting policies, collaborations and strategies that focus on overcoming existing key challenges.

In designing the online courses, every learning style should be taken into consideration. For example, while one student, in this case a farmer, may benefit from visual multimedia presentation of

coursework and lessons, another may better absorb information when presented in text form. An effective e-learning course should therefore always take these variations in learning styles into account when the lessons are being created. Even then, to deepen outreach of this innovation now being implemented, the following five priorities outlined below need to be seriously considered and quickly implemented.

(i) Fast tracking awareness about the benefits of electronic training. In this regard, Government needs to create an enabling environment through the ICT Ministry to disseminate information on the benefits of digital training as this will ease intervention by ADC and other players.

(ii) There is a need for online support and follow up on users of the SOMA platform after activation to engage and support them in their learning experience. Government should intervene to establish and equip ADC farmer Call Center to address the challenge.

(iii) Digital literacy training among users and prospective needs to be made an investment

priority for the country. The digital literacy training requirements that Government should invest in are computer hubs, smart phones, tablets and effective and affordable internet services to improve farmer readiness and access to this innovation.

(iv) The ADC should increase the number of SOMA Agents advocating for the platform in every community, and have a physical presence of a member instructor to guide and keep users.

(v) Government should prioritise investment in digital infrastructure, specifically improvement of internet accessibility and power supply in the local areas where smallholder farmers are based to facilitate effective use of the platform. With progress made and commitments demonstrated so far, there is hope in expanding use of the SOMA e-learning system and other digital platforms to promote agricultural transformation in the country.

“SOMA has been packaged to aid easy implementation, with over 20 activations done in 2022 in Central and Northern Region, through virtual support, one on one engagements and regular follow up with tele-sales which attracted over 5,000 users and 2,000 completions on different modules.”





**TOAST-TO
THE-YEAR
2023 PARTY**

An incredible time that combined team-building activities, gifting, awards, farewells and **an abundance of joy!**

At our Head Office, Nakasero, on December 15th, 2023, we hosted a remarkable toast-to-the-year party graced among others, ADC Friends including William Sekabembe, the former ED at DFCU, George Ochom, MD of dfcu Limited, Paul Van Alperdoorn, Chairperson of the Board of Directors, James Semwanga, Director. It was an incredible time that combined team-building activities, gifting, awards, farewells and an abundance of joy as the team warmly concluded 2023.

On this same special day, ADC bid farewell to former DFCU Executive Director, William Sekabembe. In his farewell speech, he entrusted ADC with the task of revolutionizing the agricultural industry and also commended the team's hard work.





#WeAreADC

Jingle Bells at home, Cheers to the special day filled with cocktails of hard work, gifts and laughter.

Dancing to a successful 2023 was Aaron, Ronald, Roland, Katia, Sharon, Catherine, Lynnette, Jannet, Wilber, Simon, Silver, Sharon, Daniel, George, Francis and Stephen.

William Ssekabembe, a visitor, yet family in our journey, 'Farewell thee' we bid him

George William Ochom a fun and humorous visitor engineered more wine sipping as the dancing continued! To the tunes of Faith.

Our Director's speech, a powerful call to action to claim ADC's rightful place in the Agribusiness Space.

James Semwanga, words full of motivation and encouragement of grace.

Happiest of the day was Paul Van Alperdoorn, Chairperson of the Board of Directors, smiled from a mile yet so close.

The Jingle bells did make the best noise as Catherine and Simon elevated the day with raps and a memory dance.

Thank you, Josephine Mukumbya! you lead to promote sustainable agribusiness in Uganda. We commit to realizing the benefits of your leadership.

ANDREW ATAHO





AGRIDIGEST GALLERY.

For more about these pictures and corresponding stories, follow us on Twitter, Facebook, Instagram or www.flickr.com.

EMPLOYEE OF THE YEAR 2023



SHARON NAMBASA

BUSINESS ADVISOR (CENTRAL REGION)
& TEAM LEADER, NSSF HI-INNOVATOR PROGRAM

ADC conducted the ESG training for over 50 enterprises funded by GIZ-E4D through GOPA.



The Environmental Social Governance (ESG) training took place on June 6, 2023, with more than 50 enterprises in attendance. The training aimed to ensure accountability and the implementation of systems and processes to manage a company's impact on the environment.

ADC & United Ventures conduct Sales & Marketing Training Workshop for Businesses in BAP.



United Ventures and ADC carried out a training workshop in Sales and Marketing for businesses that have completed the business acceleration program.

ADC Attended the G-25 Africa Coffee Summit.



Katia Mugenzi represented ADC at the G-25 Africa Coffee Summit that took place in August 2023, with the theme of transforming the African coffee sector through value addition. On the sidelines, Katia met with some of the UCDA officials. As an Agribusiness Development Centre, we are thrilled to be part of this ongoing journey.

ADC Carried Out SOMA Activations at UCU Mbale



During SOMA Activations at Uganda Christian University, Mbale, Remigyo Kijambu, Head of Agency Banking at dfcu Group Mbale, emphasized the importance of financial literacy training to the students.