



Unlocking Public and Private
Finance for the Poor



UGANDA 2021 REPORT

Inclusive Digital Economies



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Digital Country Lead

Since the onset of the COVID-19 pandemic, the subsequent lockdowns, and the associated restrictions, we have witnessed first-hand the looming crisis of the widening digital divide. While most of us continued to work, stay connected, study and access health services using digital solutions, this was not true for many people especially those with limited or no access to the Internet or even enabling tools such as smartphones.

Indeed, this digital divide has demonstrated the urgency of our vision of building an inclusive digital economy and made it even more critical than ever before.

Through our strategy, 'Leaving No One Behind in the Digital Era' launched in 2019, UNCDF continues to work with the government, private sector, and academia to catalyse innovations and scale digital solutions that address systemic constraints in the social and economic sectors. Using a market systems development approach, we worked to incentivize digital finance and digital innovation enablers to enter markets they may otherwise overlook to ensure that everyone has access to and are able to use digital solutions to improve their livelihoods.

We have continued to put the needs of underserved communities at the forefront

Foreword

of our work and to track the progress, gaps and challenges affecting them. This report shares highlights of some of our notable work from 2021.

Using the Inclusive Digital Economies Scorecard, we worked with the Ministry of Information Communications Technology and National Guidance, and other MDAs to assess the inclusiveness of the digital economy in Uganda. I am glad to report that the results of this scorecard are already being used by the ministry to set priorities for the digital transformation programme of the National Development Plan III.

We are also cognizant of the fact that increased public trust in digital technology including personal data will further catalyze the adoption of digital solutions across all sectors. Through partnership with the Personal Data Protection Office under the National Technology Authority of Uganda (NITA-U), we are developing a data protection portal that will ease registration of data controllers, data collectors and data processors as well as the reporting, processing, and resolving of data protection and data privacy complaints and breaches.

As you will read in this report, we continued to work with the public and private sector partners to promote viable business models that drive increased usage of digital services within the rural communities targeted by the programme.

From our interactions with the communities, we also learned and unlearned various things. Notable among the lessons is the need to strengthen gender mainstreaming throughout all our programming to ensure that digital economies are truly inclusive. Inadequate digital skills for both innovators and users of digital solutions also remains a challenge. Addressing these challenges will be a major focus for 2022.

This work was made possible by the support of our funders SIDA, implementing partners, the advisory board, the digital transformation technical working group, the UNCDF team and all our customers that continue to provide meaning to our work.

The successes registered so far demonstrate your commitment that if we all continue working together, we shall indeed achieve an inclusive digital economy that leaves no one behind.

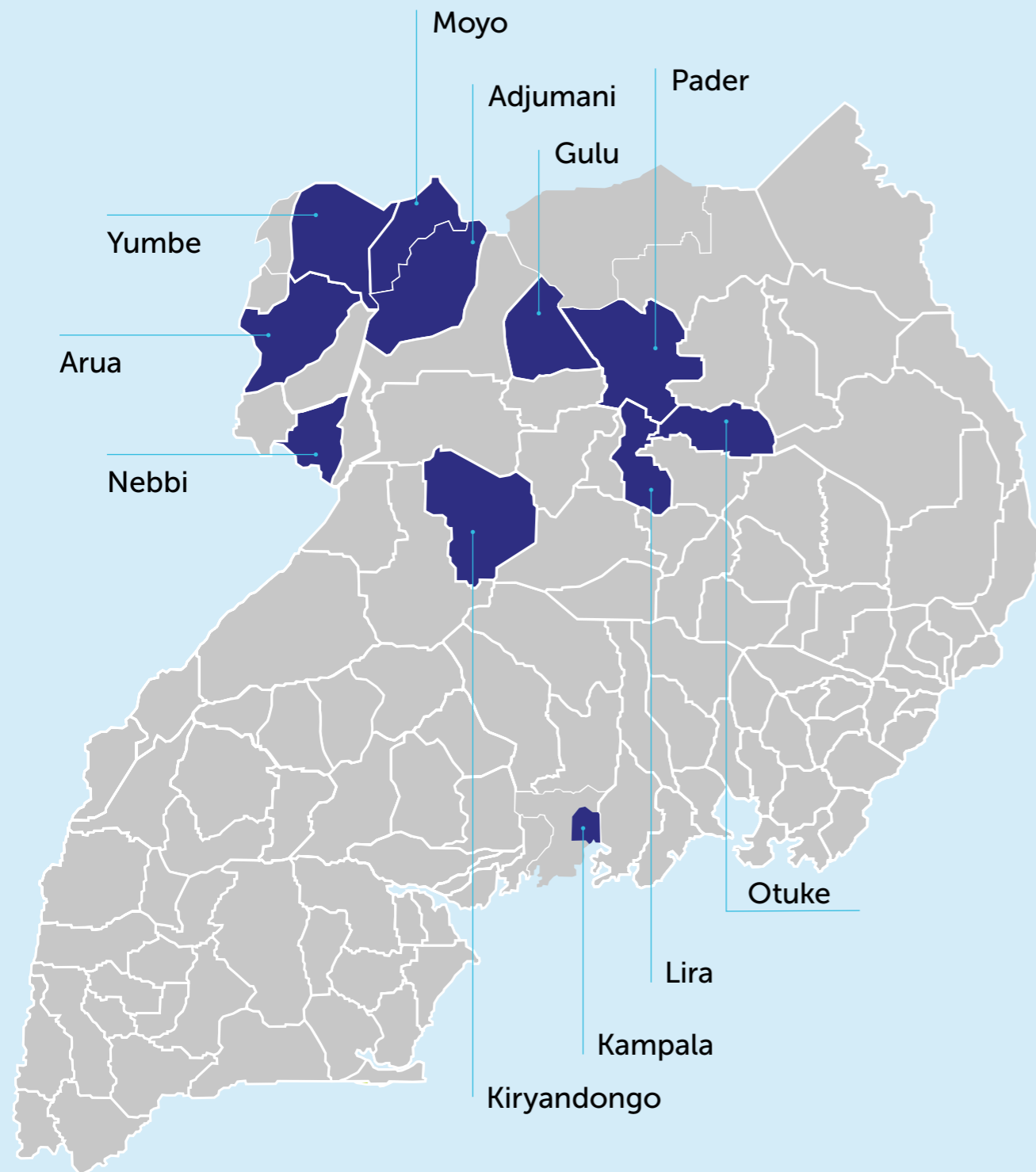
Thank you!

Cover: Suzan Auma, a farmer in Barr Rwot Lira, uses the **Akello Banker** platform to order farming inputs.

“**Akello Banker** helped us to reduce our to and fro movements to buy farming inputs during the COVID-19 pandemic. As a single mother, I needed to avoid catching the virus because no one would take care of my children if I got admitted in hospital.”



Our Work in Uganda



2021 at a Glance

551,219
Active Customers
of new or improved
digital services

36%

796,394
Customers with
improved skills and capabilities
(financial, digital, soft and hard skills)

43%

1,498,242
Registered Customers
of new or improved digital
services

42%

12
New or
improved
digital services
and business
models scaled

5
New or
improved digital
services and
business models
piloted



Goal

To directly enable at least one million people living in rural communities in Uganda to lead productive and healthy lives, by expanding access to and usage of digital services (including finance) that contribute to achieving the Sustainable Development Goals.



Target Segments



Workstreams

UNCDF works with partners to establish the digital infrastructure, innovation ecosystem, enabling policy framework, and skills that result in a more inclusive and sustainable digital economy.



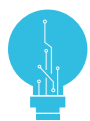
SKILLS

Recognizing from the start how users acquire the necessary skills (digital and financial) to adopt new digital services, and leveraging digital services to increase their soft and hard skills



INFRASTRUCTURE

Building on our past work in digital finance, understanding the importance of digital payments as the basis for sustainable and economically impactful digital services



INCLUSIVE INNOVATION

Supporting local entrepreneurs and MSMEs to build inclusive services for the local digital economy, making sure that the value offered by digital services improves the livelihoods of those living within the market and is not spirited away to global platform providers



POLICY AND REGULATION

Working with governments via our existing in-country contacts and relationships to develop policies that support and provide the necessary incubation for an inclusive digital economy

Theory of Change

This programme envisages to influence change at the sector, stakeholder, and client levels

Goal

Inclusive digital economies support women, youth, refugees, migrants and MSMEs to enhance market participation, resulting in poverty reduction, improved livelihoods and economic growth

Sector Outcome

Growth of inclusive digital services. Systemic change - more customers using digital service (indirect results)

Client Outcome

Changes in the way customers access and use digital services

Stakeholder Outcome

Changes in the service delivery as a result of digital interventions

Output

Piloting/scaling of digital interventions. Improved capacity/knowledge of stakeholders, and users of digital solutions

Activities

Technical assistance, grants, and financing of stakeholders. Relationship building activities such as stakeholder engagement, research, workshops, technical working groups, etc.



Hon. Kabbyanga Godfrey Baluku, Minister of State for National Guidance and Dr. Aminah Zawedde, Permanent Secretary, Ministry of ICT & National Guidance launch the IDES Uganda Report

The Government of Uganda Welcomes the Inclusive Digital Economy Scorecard (IDES) Report, 2021

The Ministry of ICT & National Guidance, in collaboration with the UN Capital Development Fund (UNCDF), released the Inclusive Digital Economy Scorecard (IDES) 2021 report for Uganda. IDES is a policy tool that facilitates governments to set their digital transformation priorities. The tool identifies the key market constraints hindering the development of an inclusive digital economy and helps to set the right priorities with public and private stakeholders to foster a digital economy that leaves no one behind.

The IDES 2021 report provides an overview of the development and inclusiveness of the digital economy of Uganda based on data collected up to the end of May 2021. The data was collected with the participation of various Government of Uganda ministries, departments, and agencies. The inclusiveness of Uganda's digital economy was assessed based on four dimensions of the digital economy, namely; policy and

regulation, infrastructure, innovation, and skills.

The report calls for urgent intervention in addressing both basic and digital skills, policy initiatives that ensure ownership and the capacity to use appropriate ICT, and a systemic approach that ensures a strong innovation ecosystem is developed.

The IDES was developed in consultation with a reference group comprised of partners from the European Commission, GSMA, UNCTAD, UNDESA, UNDP and UNCDF. It was improved based on the feedback and recommendations of various countries including Burkina Faso, Nepal, Solomon Islands and Uganda.

You can access the report [here](#).

Watch the recording of the launch event [here](#).

Building the Digital Rails (Digital Infrastructure)

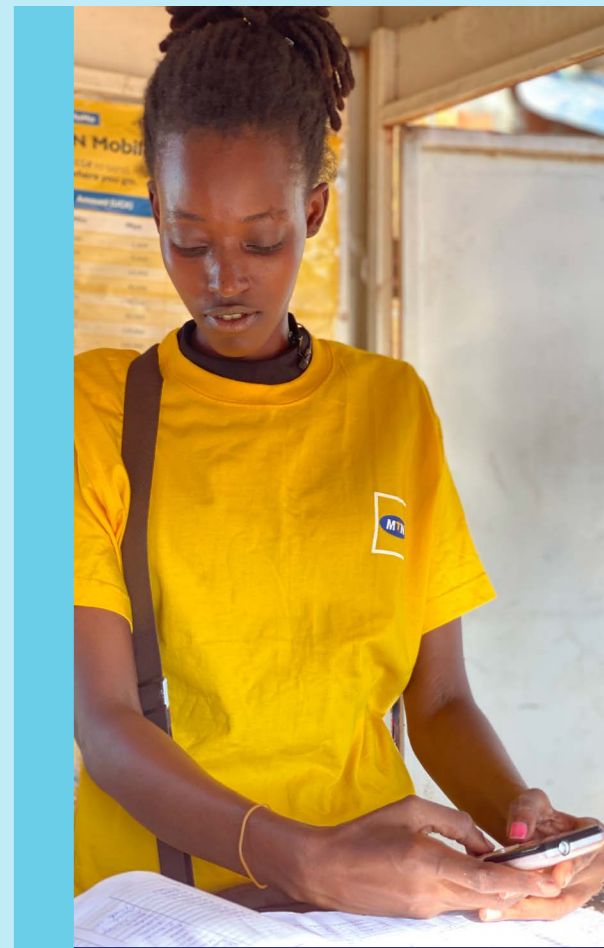
Using a market systems development approach, UNCDF supports a range of companies to digitalize financial and other services.

UNCDF works to improve distribution of digital inclusion related services and products that foster an open payment ecosystem. This includes infrastructure-development and improvement of last mile distribution of services such as mobile money, airtime, and solar for lighting.

In 2021, the existing UNCDF partnership with mobile network operators Airtel Uganda

and MTN Uganda to increase mobile phone penetration, improve network coverage and develop relevant and affordable products for rural communities in Northern Uganda was accelerated with a vision to improve digital infrastructure in the rural communities of Northern Uganda.

The private sector is innovating in the same space and have come up with innovative sustainable last mile distribution models aimed at enabling access to digital services and products such as off-grid energy solutions, digital accounts, farming inputs, and electronic airtime.



Mbabazi, an MTN mobile money agent in Omugo Refugee Settlement uses extra float when low on float to serve customers. Extra float is a system that provides agents with e-float overdrafts to allow them to re-balance using their mobile phones. The innovative solution was introduced to help mobile money agents to address the hurdles of liquidity management mostly in rural communities. The solution has significantly reduced the need for agents in rural communities to travel longer distances looking for float to serve their customers.



UNCDF partners with Airtel Money to scale digital financial inclusion

Airtel Uganda will onboard 300 new Airtel Money agents, 400 Airtel Pay merchants, 500,000 active Airtel Money customers to reach the targeted one million newly registered Airtel Money customers in Northern Uganda. The partnership aims to support the Uganda National Financial Inclusion Strategy 2017 – 2022, to ensure women, youth and rural populations at large are reached by services of the finance sector while building the digital infrastructure necessary to broaden savings, investment, insurance and reduce barriers to access to financial services. The Airtel Uganda and UNCDF partnership aims to increase digital financial services access and usage and improve financial security through financial inclusion. [Read more.](#)



NITA-U and UNCDF announce partnership to develop a data protection portal

The Personal Data Protection Office under the National Technology Authority of Uganda (NITA-U) and UNCDF entered into a partnership to develop a data protection portal that will ease registration of data controllers, data collectors and data processors as well as the reporting, processing, and resolving of data protection and data privacy complaints and breaches.

The data protection portal aims to: i) offer electronic seamless registration for data collectors, data processors and data controllers; ii) give a platform for data subjects to easily file a complaint with the Personal Data Protection Office; iii) act as a platform to promote knowledge about personal data protection and privacy best practices, guidelines, and tips.

[Read more](#)

Supporting the Innovation Ecosystem

UNCDF works with Ugandan start-ups to help them get more visibility, access finance, markets (international and local) and support from accelerator hubs. UNCDF supports Startup Uganda, the industry association for start-up enablers in Uganda, to build its capacity to deliver on its mandate as the convener, capacity builder, policy advocate and growth engine for Uganda's startup ecosystem.

→ Key Activities for Startup Uganda (2021)

- » An **innovation challenge** on financial health, last mile distribution and digital literacy was conducted and ended with **three final winners**. The winners kicked off pilots of their solutions with seed funding of **\$17,000 each**.
- » The "Startup Uganda Investor Days" quarterly pitch competitions have offered startups an opportunity to pitch to international and local investors. **Five start-ups** have gone up to the preliminary due diligence phase with investors.
- » **Ten innovation hubs** received training on programme/project development and fundraising in a bid to build their sustainability.



Kampala Innovation Week 2021

Leading innovators and thought leaders from across the continent came together from 22nd to 26th November for the Kampala Innovation Week (KIW) 2021. The innovation week was hosted as a hybrid event under the theme, "Harnessing the Power of Innovation & Entrepreneurship for Uganda's Digital Transformation and Job Creation". KIW 2021 brought together innovators, entrepreneurs, investors, government MDAs and development partners to discuss wins, misses and opportunities for growth in the innovation space. [Learn more.](#)

Sector Updates

Agriculture

UNCDF works towards digitalizing value chains in agriculture to improve convenience for smallholder farmers and rural populations.

Since July 2020, UNCDF has been working with various Ugandan technology companies to develop, scale and apply home-grown digital technologies to combat the systemic constraints in agriculture in rural communities. The solutions, which are initially being applied in Northern Uganda aim to unlock the systemic constraints in the agriculture sector with the ultimate goal of improving the productivity of smallholder farmers and consequently boosting the livelihoods of vulnerable families and communities.



In value chains critical to low-income farmers and alongside development partners,

UNCDF has supported

30+ companies to extend digital services required to improve farmers adaptation outcomes.

UNCDF aims to:

- Provide targeted support to local companies using digital technology to deliver inclusive services at the last mile in energy and agriculture
- Build credibility with banks, MNOs and other companies providing critical connectivity, payments, data, APIs and other services required for Agtech
- Enhance food security for vulnerable segments in emerging economies by increased production and income
- Enhance process efficiency and access to finance for agri MSMEs including community-based organisations
- Support public and private sector and develop digital solutions that cut the costs of uncertainty, asymmetries of information, and securitization of transactions amongst large numbers of small, widely dispersed players

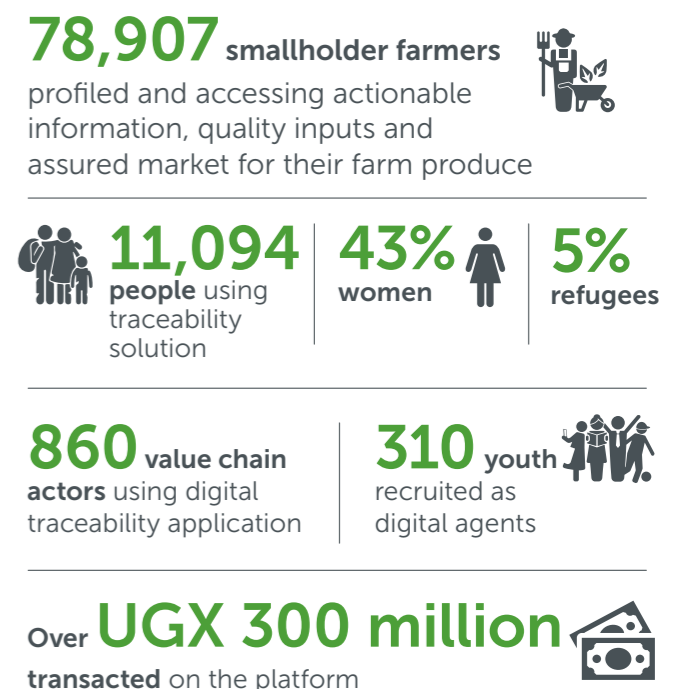
Digital Solutions for Farmers

Services	Illustrative farmers adaptation needs (in addition to those needed for production)	UNCDF Partners
Climate Services	Weather forecasts, advisory and early warning products that enable them to anticipate changes	Quest Digital
Extension Services	Accessible training, information and advice on agricultural practices and technologies	Quest Digital, Hamwe East Africa, Cabral Tech, and Nilecom consortium
Inputs	Access to the right inputs at the right time	Famunera, Nilecom, Quest Digital
Financial Services	Savings, loans to invest in new practices and technologies, smooth cash flow during growing season to realize higher prices, and insurance	Ensibuuko, Akello Banker, Hamwe East Africa, Mobipay
Precision Agriculture	Customized services, such as information or water-efficient irrigation	MobiPay, Aptech, Cabral Tech
Post Harvest and Markets	Improved market access, traceability, logistics, storage, and processing to enhance revenue and reduce loss	Hamwe East Africa, SafeBoda

Digital traceability

Using the 'My Koop' digital platform, UNCDF and Hamwe East Africa are addressing the lack of transparency and inefficiency in the agriculture value chain by employing technology that provides forward and backward traceability of the entire value chain for both food and animal products. The organizations are profiling smallholder farmers and recruiting value chain actors (aggregators, off takers, input suppliers) to enable them to use a digital traceability application, capture farmer's yield at bulking centres, and enable payments for farm produce via mobile money. As more farmers and value chain actors see the usefulness of a digital traceability solution, and more farmers use the solution or similar solutions, this will ultimately lead to increased incomes for the farmers.

→ Key Results





Farmers' call center





The Kilimo Farmers' call center by Cabral Tech Ltd provides customized agriculture advisory and extension services to the hardest-to-reach smallholder farmers using mobile technology. The project aims to provide agricultural advisory and extension services to smallholder farmers, improve market linkages, ensure access to and usage of high-quality agro-inputs, and also promote good farming practices through voice calls, Short Message Services (SMS), Unstructured Supplementary Service Data (USSD) and Interactive Voice Response System (IVRs).


The Kilimo Farmers' call centre provides the following services;


- Access to advisory and extension services
- Market linkage and access to market information
- Linkage to agricultural services
- Ensuring use and access to agriculture inputs
- Promotion of good farming practices

→ Key Results

93 active digital extension agents  79 women

 **70,377** farmers profiled by the digital extension agents  25,265 women  40,702 youth  6,473 refugees

249 input dealers recruited for the platform  92 women

 **47,460** farmers using the platform and have received extension and agro-advisory services  42% women

26,670 connected to output markets through the platform **8** local languages supported in the call center

Digital Extension Services

Working with Quest Digital Finance Limited (Akello Banker), UNCDF works to ultimately increase productivity and strengthen access to markets within the agro sector. The project set out to achieve the following:

- Farmers have access to timely and reliable information
- Farmers have improved access to agro advisory, e-extension services, quality input provision and financial services
- Farmers have access to high yielding varieties, proper irrigation techniques and post harvesting equipment
- Farmers have increased productivity, improved quality produce and access to new markets
- Improved operational efficiency of existing producer organizations and cooperatives
- Improved value chain linkages




→ Key Results

 **68,520** farmers profiled/registered by digital extension agents  over 50% women

 Over **UGX 182 million** worth of transactions on the platform

 **21,868** farmers matched to quality input suppliers

335 active digital extension agents

457 input dealers onboarded  134 women

Through the financial and technical support from UNCDF, the Akello Banker digital platform was deployed in Northern Uganda targeting

80,000 farmers, 100 digital extension agents, and 300 value chain actors.

Connected Farmer

This digital agriculture initiative in partnership with a Nilecom-led consortium (Nilecom, Mezzanine, and Cordaid) in West Nile continues to empower rural farmers to access agronomy information, inputs and markets using basic, feature or smart mobile phones. The consortium aims to adapt and scale up the UgFarmer digital agriculture application to improve efficiency, access and utilisation of actionable information, markets, management of payments and inventory.

Acknowledging the critical role of farmer organizations, the project seeks to support cooperatives and producer organizations to perform better, thereby creating positive dividends for 100,000 farmers (60,000 women and 40,000 men) by addressing bottlenecks in their service delivery.

→ Key results


43 Digital Community Entrepreneurs were trained and supported with smart phones and user guides which they can use to refresh their memory. The training aimed to build capacity of the DCEs, Agro-input dealers and cooperatives on the functionality and capabilities of the UgFarmer platform and how to maneuver the various modules available to them from the platform.

A memorandum of understanding was signed with two grain offtakers; Bushbucks Coffee Limited for buying sesame and SunAfric Company Limited for sunflower.

A gender lens study was conducted to get a deep dive on one of the findings of the baseline study that out of every ten people who do not have a mobile phone, seven are female. The major issues raised were affordability, lack of trust from the male partners, high maintenance costs and conflicting financial needs of the households, among others.

43 DCEs
were recruited

 40%

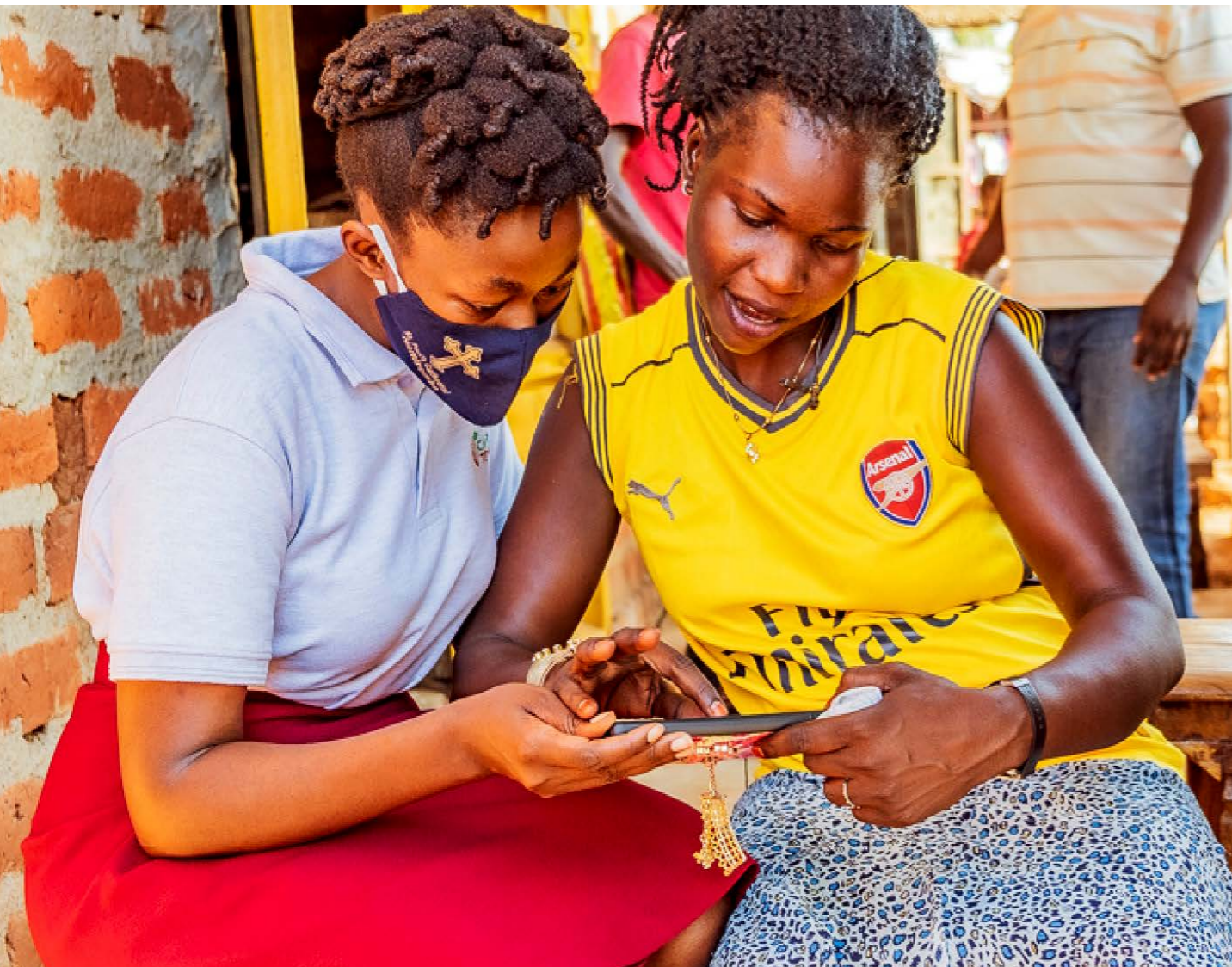
 **60,463 farmers**
(42% female) digitally profiled
in the districts of Yumbe and Nebbi

50 input dealers onboarded
to the traceability platform

**30 bulking
centers** mapped

40 agro-input shops
identified and digitally profiled in
the districts of Maracha, Moyo,
Obongi, Zombo, Yumbe, Moyo,
and Koboko





The Impact of Mobile Money Taxation in Uganda

UNCDF partnered with PHB Development to explore the impact of the 0.5% mobile money withdrawal tax especially on digital financial services for the informal sector. Results of the study indicate a strong correlation between income levels and access to mobile money alternatives. In other words, the introduction of the tax seems to have led to many users migrating to agent banking, where no comparable taxes are applied to withdrawals. At the same time, people with lower incomes tend to have less access to agent banking, indicating that the burden of this tax does fall disproportionately on the poor.

The study also looked at people's perceptions about digital taxation, awareness of current mobile money fees and taxes and willingness to pay for DFS and mitigation mechanisms. Qualitative interviews with dozens of stakeholders and key informants from all sectors and activity-based costing with stakeholders in the most affected sectors were conducted as part of this study. [Learn more about the study.](#)

Leveraging data for innovative digital lending solutions for smallholder farmers

In partnership with the Food and Agriculture Organisation (FAO), UNCDF is piloting an innovative digital lending model that will enable access to credit for smallholder farmers in rural areas of Uganda.

Working with fintechs (Ensibuuko and eMata) and with lending capital from Uganda Development Bank (UDB), the alternative lending model leverages digital data on the transactions and track record between farmers and farmer organizations or savings and loans groups. Through this project, UNCDF aims to increase access to affordable loans for farmers and prove a business case for advancing low-cost loans to farmers using alternative credit scoring models.

→ Key Activities

- » Market scoping was conducted in West Nile and Northern Uganda to inform go-to-market strategy and credit scoring matrix.
- » Ten field staff were recruited to support the expansion plans.
- » Digitisation of VSLAs and opening of savings accounts for members commenced.
- » Continued due diligence process between UDB and Ensibuuko.

The Digital Community Entrepreneur Model: Closing the Digital Gap in Rural Uganda

UNCDF has set-up community-based solutions to enhance and expand the last-mile distribution network for digital services and products. In empowering rural communities to have better access and usage of digital platforms, UNCDF has worked with two implementing partners to help scale the Digital Community Entrepreneur (DCE) model for distribution of digital products and services at the last mile. Mobipay and Ensibuuko Tech Limited are the main implementers of the DCE model creating and increasing access of digital inclusion related services and products within the rural communities.

DCEs in rural communities play a key role in the last mile distribution of digital inclusion related services and products, and financial and digital literacy.

The DCEs (lead farmers), mostly youth and women, are working to increase access of the basic fundamentals required to digitize the agriculture value chain. Over 800 opinion leaders / lead farmers have been recruited as DCEs within proximity communities, and 450,000 smallholder farmers registered and trained on basic financial literacy.

By using rural-based young lead farmers with high business acumen and a support management structure to improve digital and financial literacy, the DCE model drives the uptake of DFS and the usage of other digital innovations. This in turn contributes to increased farm productivity, improved farm management efficiencies, access to energy, improved access to markets, and consequently increased incomes for the farmers. Thanks to this approach, UNCDF and partners have been able to create a critical mass of adopters of the digital services.

There is no doubt that the DCE model has a lot of potential to be replicated at scale. UNCDF is currently using the model to drive access to and usage of digital solutions in rural communities in Uganda. [Learn more.](#)



Irene Joyce Alum, 21, is driving the use of digital services in her community by teaching people how to use digital products and services that improve their wellbeing. She earns a commission from the sale of digital products (phones, airtime, data top-ups, and mobile money) which supplements her income as a tailor.

→ Key Results

Partner: Mobipay



429 Recruited
Digital Community
Entrepreneurs

112 Female



251,678
Registered
farmers

88,380
Female

13,874
Phones
sold to farmers



15,383
Solar
connections
made to farmers



Partner: Ensibuuko



461 Recruited
Digital Community
Entrepreneurs

266 Female



245,344
Registered
farmers

151,093
Female

4,039
Active VSLA
using digital ledger
system

9,419
Phones
sold to farmers



6,502 Solar
connections
made to farmers

DCE revenue
(90,000-150,000)
per month



MobiPay
AgroSys Limited

Unlocking
Finance

Education

UNCDF uses innovative models and approaches to facilitate continuity of education, enable access to educational content, improve the learning experience of students and teachers, provide flexible school fees payment solutions for parents, ease recruitment processes and the management of schools using digital tools.

e-recruitment Solution for Teachers

The Education Service Commission of Uganda partnered with UNCDF and its implementing partner, Cremotin, to digitalize the government recruitment system which will support them to manage the recruitment of the education personnel more effectively and efficiently. The objective of this exercise is to ease the recruitment process. Embracing digital technologies can solve many of the issues the ESC faces because of paper-based processes, and offers significant benefits not only to the ESC staff, but also the teaching and non-teaching staff, and the education system in general.

[Read more](#)



→ Key Results

The digital platform was developed and is ready to host positions

Training of ESC e-recruitment champions, users and digital hub managers

The e-recruitment platform was pre-tested with private digital hubs

Digitalization of Continuous Professional Development (CPD) for Teachers


Working with Continuum Financial Group (CFG), UNCDF aims to demonstrate the opportunities of digital tools for teachers' e-learning. E-learning holds the potential to enhance teachers' capacity and bridge the rural-urban divide by targeting rural-based teachers.

CFG, working closely with the Teacher Instructor Education and Training (TIET) Department of the Ministry of Education and Sports (MoES), is currently implementing a project aimed at digitalizing the continuous professional development of teachers.

The first phase of the project is the digitalization of the Certificate in Teacher Education Proficiency (C-TEP), a course designed by TIET targeting instructors for teachers and administrators in Teacher Training Institutions (TTIs). The course participants will go through a self-paced online study using the U-Learn digital platform.

[Read more](#)

→ Key Results

 Repurposed existing teacher training material for a digital platform

 Initial demo of the platform done





Digitalizing School Payments and School Management

Working with Service Cops, UNCDF has deployed a digital solution that offers a flexible school fees payment method, ability to save for school fees during the term and access to affordable loans for school fees.

The partnership has extended SchoolPay, a digital school fees payment solution, to Northern Uganda to enable equitable access to education opportunities by providing flexible digital education services including digital flexible payment plans, school fees savings and loans, student pocket money management, student education insurance while at the same time helping schools to better manage their finances and processes.

→ Key Results

A savings module has been deployed.  The SchoolPay solution has been zero rated by MTN

101 Schools (47% rural) registered in Northern Uganda 

A school management solution to track attendance of teachers was deployed in ten schools

Service Cops released an open API that allows school websites to process school fees payment through schools' websites. [Learn more:](#)

Health

UNCDF works to bring together key actors in the health sector to develop and scale inclusive digital solutions that will enhance the speed and accuracy of decision making in health service delivery and ensure that quality health care reaches everyone.

Community Health Information Systems for Health Services Access in Rural Communities

UNCDF is working with BRAC Uganda and Medic to engender sustainable digital health approaches to enhance the impact of the existing Ministry of Health community health structures towards achieving universal health coverage. Due to the significant shortage of trained health workers in Uganda, community health workers, notably Village Health Teams (VHTs), have become the cornerstone of Uganda's primary health system. Working primarily in a voluntary capacity, VHTs are community members who receive basic health care training to provide home visits and health management services. They are a critical link between the formal health sector and their communities. UNCDF partners, BRAC Uganda and Medic, are piloting the use of a Community Health Information System popularly known as the VHT App to facilitate VHTs in their routine essential care, education, data collection and reporting.

[Read more](#)



→ Key Results



300 VHTs (76 Women) trained to use the VHT digital platform

68 VHTs trained on financial services and products



4,198 health services by VHTs were reported (2,195 were provided to women)

The VHT Digital tool was deployed in **3** districts (Nebbi, Koboko and Maracha)

The Ministry of Health with the support of the Global Fund selected the project and tool to inform the country scale up of VHT reporting tool



Leilah Akubar, a VHT in Koboko, has to carry a big book (register) in addition to a weighing scale, a blood pressure machine and sometimes food supplements to a household when called upon to provide primary health care services. Once at the household, she goes through the big book to find a particular household, identify where to register a pregnant mother for instance or sick child, and write a referral form to a health facility if necessary. Replacing paper-based reporting with a digital reporting system reduces Leilah's load by half. It also reduces the inconsistencies and inaccuracies in diagnosis and reporting.

Digital Solution for Health Stock Management

One of the critical challenges that the health sector in Uganda faces is drug stock outs and expiry of medicines. Some of the underlying constraints in the medical supply chain are procurement financing and processes, limited supply capacity, inadequate communication and road infrastructure, inadequate distribution resources and planning methods, inadequate of personnel staffing and training, and poor coordination among stakeholders, among others. Working with Medical Access Uganda Limited (MAUL) and Signalytic, UNCDF has deployed a solution that digitalizes the stock management of essential drugs and medical supplies. This project, which complements the Government of Uganda's Ministry of Health to improve access to essential medicines, is currently being piloted at Health Center IIs and IIIs in Kiryandongo District. Health Center IIs and IIIs are health facilities at the parish level and the first point of contact for treating common diseases in Uganda.

[Read more.](#)

→ Key Results

The digital solution is hosted in **20** health facilities



24 users (Health facility and district staff) trained on the digital platform

The project model has **attracted interest** from stakeholders and discussions for scale-up are ongoing

Medical drones for last mile delivery of health services

Drone technology has the potential to solve several challenges that make the delivery of health care services particularly difficult in West Nile. With geographical barriers like difficult terrains and very remote areas, drones can solve a piece of the logistical puzzle. They can transport test samples within drastically reduced timelines, kickstarting timely treatments. The Infectious Diseases Institute at Makerere University, with funding and technical assistance from UNCDF has been piloting the use of medical drone technology in the West Nile districts of Moyo and Adjumani. This project will support surveillance mechanisms, early reporting of any health threats or outbreak indicators within the systems, including rapid response to emergencies. The project uses two different drone types: a multi-rotor for short distances of up to 30 km, and a fixed-wing drone for distances over 30 km.

The pilot project aims to assess the efficiency and effectiveness of drone deliveries as a viable solution for Uganda's health sector. This is done in close collaboration with the health service teams on the ground, to ensure that the drones solve part of the puzzle, contributing to the sustainability of this solution.

[Learn more](#)

Video https://www.youtube.com/watch?v=2KZe_xQU0UA



Results Measurement

The Results measurement is at the core of the Market Systems Development Approach that guides our work. UNCDF continuously monitors and tracks progress so that effective learning and adaptive management can be used.

→ Key Activities

- » **Trained 18 implementing partners and 11 UNCDF staff on result measurement tools** such as developing result chains, measurement plan, reporting templates and data quality assurance.
- » **Conducted internal partner and programme reflection sessions** to take stock of what is working and not working midway the programme. The findings fed into the quarterly, annual workplans and the sector theories of change.
- » **Rolled out the data collection process** to measure the landscape of programme scope in Northern Uganda to inform the level of registration, adoption and active status of the clients on digital services. This landscape study will also inform the key players in offering digital services, scope, type of services and for how long they have offered it.



2022

Enhancing digital skills

Ensuring that everyone has the right skills for an increasingly globalized world is at the core of the UNCDF digital strategy. In addition to equipping the users of the developed digital solutions with the skills to use them, UNCDF will focus on promoting digital skills of underserved communities. UNCDF is developing a digital literacy training toolkit and is scheduled to conduct digital literacy training targeting teachers, health workers, women, youth, and refugees.

Open payments APIs

With the ubiquity of mobile payments, there is need to make it easy and seamless for innovators to access and embed mobile payments into their innovations / solutions. In 2022, UNCDF aims to work with Airtel on making their Airtel money APIs open.

Open data markets for KYC

KYC authentication is a major issue for most digital innovators. This, even more with the passing of the data protection and privacy Act. In 2022, UNCDF would like to foster KYC as a Service, leveraging available and authenticated KYC databases. This will enable innovators to easily authenticate customers digitally, without the burden of collecting and holding personal data.

Focus

Strengthening gender mainstreaming in all projects

UNCDF acknowledges that digital economies are not inherently inclusive. In some contexts, digital solutions can potentially reinforce gender gaps if gender disparities are not clearly visible in planning data. UNCDF will focus on ensuring that the digital economies we create are truly inclusive, contribute to equitable growth and bring long-term benefits to the underserved. This is guided by UNCDF women's economic empowerment approach which aims to decrease the digital divide for women and girls, use technology to improve women's economic opportunity and to help transform women into the builders of emerging digital economies.

Promoting climate smart agriculture

Climate change threatens food security in Uganda, and the world over. Climate smart agriculture practices are not widely adopted partly due to policy and a lack of private sector engagement to provide inputs and extension services. Beyond making point solutions for climate smart agriculture more efficient and customized, digital solutions can also strengthen value chains and thereby incentivize their adoption by farmers. UNCDF work in digital agricultural already demonstrates its ability to deliver digital solutions that are relevant to climate smart agriculture such as e-extension services, traceability, financial services for solar pumps, etc. UNCDF will focus on incorporating climate smart agriculture practices in new and existing digital agriculture interventions.

Key Publications

DIGITALIZATION OF VILLAGE SAVINGS AND LOANS ASSOCIATIONS (VSLAs)

A case presented by Ensibuuko Tech Limited
West Nile, Uganda

INCLUSIVE DIGITAL ECONOMY SCORECARD REPORT UGANDA 2021

JULY 2021

Farmer Call Centre

CASE STUDY
March 2021

Digital Extension Services Improve Farmer Productivity

Using a Farmer Call Centre and Digital Extension Agents in Delivering Extension and Agronomic Services: A Case Study of Kilimo Farmers' Call Centre in West Nile, Uganda

Digital Relevance in Staff Recruitment in Education

CASE STUDY | DECEMBER 2021

DIGITALIZING A VILLAGE HEALTH TEAM IN UGANDA

CASE STUDY
January 2022

Equipped. Supervised. Motivated. The Future VHTs

MAKING DIGITAL WORK

Applying a Market Systems Development Approach to Build Inclusive Digital Economies

MAY 2021

REPORT

The Impact of Mobile Money Taxation in Uganda

November 2021

Bridging Uganda's Digital Divide:

Gender Mainstreaming in Digital Agriculture

DIGITALIZING INVENTORY MANAGEMENT IN RESOURCE-CONSTRAINED HEALTH FACILITIES

February 2022

Digital Traceability in Agriculture

CASE STUDY
JULY 2021

Does it improve productivity and marketing of farm produce?

The benefits of traceability are widely recognized. Yet for smallholder farmers in developing countries, especially farmers producing horticultural and other fresh food products, traceability requirements can represent barriers to trade. UNCDF in partnership with Hamwe East Africa has developed a digital traceability platform that is enabling smallholder farmers in rural communities in Northern Uganda to adopt global traceability standards and practices.

Videos

Innovative Digital Solutions for Rural Uganda – Finance
<https://www.uncdf.org/article/6947/innovative-digital-solutions-for-rural-uganda---finance>

Innovative Digital Solutions for Rural Uganda – Challenges
<https://www.uncdf.org/article/6950/innovative-digital-solutions-for-rural-uganda---challenges>

Innovative Digital Solutions for Rural Uganda – Health and Education
<https://www.uncdf.org/article/6949/innovative-digital-solutions-for-rural-uganda---health-and-education>

Innovative Digital Solutions for Rural Uganda – Agriculture
<https://www.uncdf.org/article/6948/innovative-digital-solutions-for-rural-uganda---agriculture>

Akello, The Digital Citizen
<https://www.youtube.com/watch?v=kC83hScmlDA>



LEAVING NO ONE BEHIND IN THE DIGITAL ERA

The UNCDF strategy 'Leaving no one behind in the digital era' is based on over a decade of experience in digital financial inclusion in Africa, Asia, and the Pacific. UNCDF leverages digital finance in support of the Sustainable Development Goals (SDGs) to achieve the vision of promoting digital economies that leave no one behind. The goal of UNCDF is to empower millions of people by 2024 to use services daily that leverage innovation and technology and contribute to the SDGs. To achieve this vision, UNCDF uses a market development approach and continuously seeks to address underlying market dysfunctions that exclude people living in the last mile.

THE UN CAPITAL DEVELOPMENT FUND

The UN Capital Development Fund (UNCDF) makes public and private finance work for the poor in the world's 46 least developed countries. With its capital mandate and instruments, UNCDF offers "last mile" finance models that unlock public and private resources, especially at the domestic level, to reduce poverty and support local economic development. UNCDF's financing models work through two channels: financial inclusion that expands the opportunities for individuals, households, and small businesses to participate in the local economy, providing them with the tools they need to climb out of poverty and manage their financial lives; and by showing how localized investments—through fiscal decentralization, innovative municipal finance, and structured project finance—can drive public and private funding that underpins local economic expansion and sustainable development. By strengthening how finance works for poor people at the household, small enterprise, and local infrastructure levels, UNCDF contributes to SDG 1 on eradicating poverty and SDG 17 on the means of implementation. By identifying those market segments where innovative financing models can have transformational impact in helping to reach the last mile and address exclusion and inequalities of access, UNCDF contributes to a number of different SDGs.

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