

Digital  
Transformation  
Center Rwanda

# QUARTERLY REPORT

APRIL - JUNE 2025

## KUSANYA E-WASTE PROMOTING RESPONSIBLE DISPOSAL



Republic of Rwanda



Enviroserve Rwanda Green Park  
Rwanda E-waste recycling facility



# **QUARTERLY** REPORT

# INTRODUCTION

Welcome to the latest edition of our quarterly report, where we present a comprehensive overview of the Digital Transformation Center Rwanda's recent endeavors and achievements. This report showcases our initiatives focused on driving innovation, empowerment, and progress within Rwanda's digital landscape.

In this edition, we highlight impactful projects spanning various focus areas, designed to address critical challenges and foster positive change in our communities. From empowering women through digital literacy and capacity-building initiatives to harnessing Artificial Intelligence (AI) for climate action, our commitment to leveraging technology for social good and sustainable development is clear.

Inside, you'll find insights into our work across key areas, including ecosystem-building activities, public sector innovation, and efforts to foster digital inclusion. From the National Robotics Program to the Innovate Africa Challenge on AI for Climate Action, each initiative marks a step forward on our collective journey toward a digitally empowered and inclusive Rwanda.

We extend our gratitude to our partners, stakeholders, and collaborators, whose support and dedication have been crucial to our success. Together, we are committed to advancing Rwanda's digital transformation agenda and shaping a brighter, more inclusive future for all.

# 1. PUBLIC SECTOR INNOVATION

## 1.1 Citizen Engagement: - Mbaza

This project seeks to connect citizens and government more efficiently, fosters participatory governance, enhance service delivery, and build the foundations for sustainable, scalable citizen engagement practices across the country.

A technology tool enabling interaction between citizens and the government is currently under development and is expected to be launched by October 2025.

## 1.2 Interactive Voice Response (IVR) platform for SGBV based at HDI

The IVR will enable citizens, especially women and girls, to get information about SGBV in general, different forms of SGBV, and support structures. The solution will ensure that even people who cannot read or use other forms of media can dial in and listen to the information in the form of voice responses. The IVR platform will be launched in July 2025.

## 1.3 smart city Hub

- Transport sub-sector working group session

The Smart City Hub hosted a transport sector working group as organized by the Ministry of Infrastructure on the 18th of June 2025. The session focused on providing insights into the status of the transport sector activities in the country and establishing how improvement can be made on urban mobility in Kigali and other urban areas across the country. The need for this meeting stems from a growing concern over uncoordinated efforts in public transport and urban mobility, despite the many projects already underway. The sector working group session provides a central platform for coordination, harmonizing ongoing initiatives, reducing overlaps, clarifying standards, with each of the stakeholders. The working group brought together stakeholders from government, private sector, development partners, and civil society to review progress on completed and ongoing projects, share knowledge, and develop a joint roadmap for smart urban mobility. This includes promoting data sharing, identifying gaps, and creating aligned strategies to guide policy, investment, and innovation in Rwanda's transport sector.



- Promoting economic activities in secondary and satellite cities

In line with the NST2 focus areas of promoting job creation, enhancing public service delivery, increasing private investment and increasing tourism revenue; the Smart City Hub initiated an exercise to make cities more visible, accessible and attractive for investment through increasing their web presence.

This exercise is aimed at;

- Boosting private investment through marketing potential investment opportunities in secondary cities.
- Expanding tourism and exports in the secondary cities through promoting local products unique to each city.
- Decentralize economic activity and reduce pressure on Kigali.

So far the draft for City of Kayonza is published and being validated prior to officially adding it to the website.

### Economic and Investment Opportunities

- KUSANYA E-WASTE campaign

In partnership with Enviroserve, the Ministry of ICT, the Smart City hub is carrying out an e-waste awareness campaign named "KUSANYA E-WASTE" aimed at;

- » Helping the public differentiate what qualifies as e-waste and what doesn't
- » Educating the public on the health and environmental dangers of improper e-waste handling
- » Promoting responsible recycling with focus on advocating for the utilization of the Enviroserve e-waste recycling facility
- » Encouraging informed behavior change through digital platforms and live demonstrations such as road-shows.

This campaign was officially launched on the 28th of May 2025, which marked the commencement of the KUSANYA E-WASTE campaign.



## 2. SOLUTIONS & INNOVATION

### 2.1 Data and Artificial Intelligence for Crop-type Mapping and Crop Yield Prediction

The project's objective is to develop and pilot a remote-sensing-based crop-type mapping AI tool to identify agriculturally used areas and classify different types of crops (rice, beans, Irish potato, maize) in four Rwandan districts. The tool is expected to provide information on crop type areas available at the latest until midseason to inform decisions around food sufficiency, planning, market linkages and post-harvest management. Furthermore, effort is a prerequisite to enable the estimation of agricultural production and to react timely e.g. in the case of over or underproduction of important crops. The AI Hub implements this project together with CIAT & Bioversity Alliance, Rwanda Space Agency and Ministry of Agriculture and Animal Resources.

In the last three months, a mapathon was hosted at the Digital Transformation Center Rwanda with students and lecturers from the University of Rwanda and Carnegie Mellon University Africa. MINAGRI field staff was trained for a field data collection campaign which was conducted over several weeks. Both datasets were combined to create open high-quality data for crop classification. Together with additional data from the National Institute of Statistics (NISR), this data is currently being used to train the crop classification model which will build a cornerstone of the crop-type area mapping tool.



### 2.2 AI and Natural Disaster Risk Reduction Management

A new project aiming to scale and improve monitoring in high-risk locations for floods and landslides through research, development, and modern technologies has been set up. The AI Hub supports the German and Rwandan company Hesotech, a winner of the Digital & Green Innovation Accelerator, in the implementation of its solution in partnership with Rwandan authorities particularly the Ministry in charge of Emergency Management (MINEMA). Furthermore, the AI Hub offers local business support to the company.

In the last three months, project implementation has started, stakeholder consultations have been conducted and an agreement with MINEMA on the project implementation has been reached. Particularly, this includes an agreement on the continued operation of the system for the next 5 years.

## **2.4 Digital Information System for sustainable and modernized Agriculture (DISA)**

The DISA project has the objective to improve localized service and information provision to farmers, farm advisors and decision makers. The project has MINAGRI as major political stakeholder. One output is a piloted information service on the major crop disease “late blight” through a model based on real-time monitoring of temperature and relative air humidity at two locations. The model was validated on farm level by RAB and farmer organizations showing 20-80% reduction of fungicide usage. Furthermore, the system includes a geospatial application with layers for major agricultural parameters and crops which is hosted by RSA together with the late blight model.

In the past months, the whole system was migrated to RSA’s server and will form part of MINAGRI’s Agricultural Management Information System (AMIS). The project’s current phase ended with this quarter. An approach to test how to make the late blight application accessible to farmers via a chatbot is currently being prepared at the Digital transformation center.

## **2.5 Drones Training and Capacity Building Program with the University of Rwanda**

The Drones Training and Capacity Building Program is a national initiative led by the University of Rwanda through its Drones Knowledge and Skills Hub, in partnership with GIZ Rwanda, MINICT, and RISA. The program targets university students, professionals, and early-stage entrepreneurs, with a strong focus on female participation (70% of the cohort). It aims to build foundational and applied competencies in drone operations, safety, and data applications across sectors such as GIS, agriculture, real estate, media production, and environmental monitoring. The training covers UAV hardware, flight planning, post-processing, regulatory compliance, and sector-specific use cases, while also fostering innovation and entrepreneurship. A key deliverable is the facilitation of a technical cooperation agreement between the University of Rwanda and CURAT in Côte d’Ivoire to promote regional academic collaboration.

The project is in its inception phase, with implementation scheduled from June 2025 to February 2026. Contract finalization processes with the implementing partner are currently underway. Preparatory activities include defining training outcomes, participant selection frameworks, baseline skills assessments, and curriculum finalization. The first training cohort, composed of up to 50 participants with majority women representation, is expected to begin in August 2025. Initial preparations have also started toward drafting a Memorandum of Understanding (MoU) between the University of Rwanda and CURAT to guide joint research and academic exchange.

## 2.6 Drone Based Mosquito Bio-larviciding for Malaria Control

the project targets persistent malaria transmission in Rwandan District of Bugesera, particularly in rice-growing wetlands across Mareba, Ruhuha, Ngeruka, and Nyarugenge sectors. While Rwanda significantly reduced malaria cases between 2005–2011, a resurgence since 2012 has been linked to increased irrigation, dam construction, and changing climate patterns, which created ideal mosquito breeding conditions. To address residual outdoor transmission and insecticide resistance, the Ministry of Health and partners adopted bio-larviciding as a supplemental intervention alongside traditional methods like LLINs and IRS. This project uses drones to apply *Bacillus thuringiensis* var. *israelensis* (Bti), a proven biological larvicide, to disrupt mosquito breeding in targeted wetlands and support an integrated vector management strategy.

The implementing partner secured formal consent from the Rwanda Biomedical Centre (RBC) and Bugesera District authorities to conduct drone-based mapping and spraying through July 2026. A flight permit was obtained from the Rwanda Civil Aviation Authority, facilitating successful mapping of the four target marshlands. Preliminary orthomosaic outputs estimate that 278–329 hectares will require larviciding, depending on malaria prevalence and settlement proximity of target areas. Detailed GIS and meteorological analysis are underway to finalize spraying schedules, estimate Bti volumes, and support cost modelling, reporting, and monitoring & evaluation activities.

## 2.7 Drone Usecase identification Challenge

The drone usecase ideathon is an initiative aimed at fostering innovative and impactful applications in the drone sector in Rwanda. The program focuses on identifying, refining and advancing usecases in key sectors such as Climate, Biodiversity and agriculture.

The drone use case identification launch attracted 130 applications from innovators with 40% in Agriculture, 10% environmental conservation, 10% in film and photography, 8% in logistics and delivery and others in cross-cutting themes.

Following the robust ideathon and exchange that lasted for several weeks, the top 3 use cases have emerged to be an advanced drone-based airport operation and plane navigation use case, an advanced mining-based use case that reduces unfortunate mining related accidents while also increasing mining efficiency, and also a solution that seeks to map and monitor water bodies for civil and industrial use, while also aiding in the discovery of water sources.

## 3. DIGITAL LITERACY & CAPACITY-BUILDING

### 3.1 Apple Labs

This is a project to support the establishment of Apple Accredited Training Centers for Education (AATCE) in six institutions in Rwanda (AUCA, Ines, Kepler, UOK, RCA, AIMS).

On February 4th, we successfully launched three AATCEs at AIMS, AUCA, and Kepler. The first cohorts have already begun their training, and we anticipate their graduation by August at the latest. Meanwhile, we are actively supporting RCA, UOK, and INES through the training of trainers and other necessary processes to ensure their accreditation by May 2025. This will bring all six centers to full accreditation by that time.

### 3.2 Cyber Security Academy

We will be supporting the National Cyber Security Authority to set up the cyber academy. The academy will have the necessary infrastructure to train cyber professionals that will meet Rwanda's cyber skills job requirements and help create a local cyber industry.

We will be supporting NCSA in the renovation of the cyber hub space at the former KIST. Work is expected to begin in the next week or two, as the contractor has already been selected. Renovations of the Cyber Hub are scheduled for completion by the end of April, with an official launch planned for late May 2025. The launch will take place in collaboration with the National Cyber Security Authority and CISCO.

A contractor has been engaged to deliver a Cybersecurity Essential Skills training program for 50 university students and recent graduates. The training sessions are set to start in the first week of May 2025.

## 4. EVENTS & ECOSYSTEM

### 4.1 Drone Community of Practice

The Drone Pilot Training Program was initiated to equip 20 participants with both technical skills and a broader understanding of drone applications, while fostering a community of professionals capable of supporting local projects and contributing to Rwanda's growing technological ecosystem. The program aimed not only to train drone pilots but also to strengthen the local talent pool in line with national priorities for digital innovation and emerging technologies.

The first phase of the program, focused on theoretical training, was successfully completed in early 2025. Participants gained foundational knowledge on drone components, flight principles, aviation regulations, safety protocols, and mission planning. This phase was critical in building the technical literacy needed to transition into hands-on field operations.

The second phase, currently concluding, has provided intensive practical flight training. Trainees engaged in supervised drone missions, flight simulations, and data collection exercises using multirotor systems. The practical phase has enabled participants to apply their knowledge in real-world scenarios, preparing them for drone pilot certification.

To formally conclude the program, a high-level closing event is scheduled for 25 July 2025. The event will bring together key stakeholders from government, private sector, and development partners to recognize the achievements of the trainees, showcase selected use cases, and highlight opportunities for continued engagement in Rwanda's drone ecosystem. Following this event, the activity will be formally marked as closed, with future efforts focusing on follow-up support for graduates and potential scale-up of the training initiative.

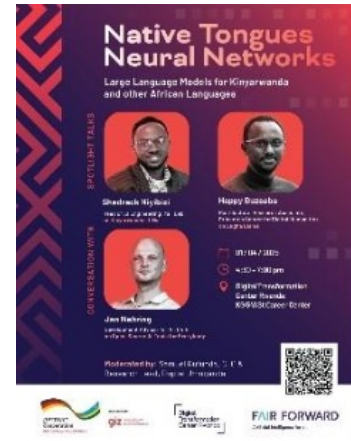
### 4.2 : AI Communities of Practice

Three initiatives advanced capacity building this quarter. At the start of the quarter, **MbazaNLP** brought together NLP researchers (Dr. Jan Nehring and Happy Buzaba) working on low-resource languages to share their academic experiences, alongside innovators – **Yali Labs** – developing large language models fine-tuned for Kinyarwanda.

The **AI Saturdays Kigali** also resumed its' activities by inviting aspiring developers and engineers to join a free 12-week weekend training program, Intro to AI, covering skills from beginner to advanced levels.

Finally, a community event held with **PyCon Rwanda** introduced participants to the local Python programming community.

Together, these efforts help expand digital skills and contribute to broader initiatives like **1MillionCoders**.



### 4.3 FemAI

FemAI Leaders for Africa is a collaborative initiative by Women Political Leaders (WPL), the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), and Smart Africa. The program is designed to amplify the voices of African women political leaders in AI-informed policymaking across the continent. FemAI equips these leaders with the knowledge, networks, and platforms needed to influence AI policy through three key strategies: in-country labs, global AI labs held at international conferences, and the AI Champions Network.

This year, in-country labs are being implemented in Ethiopia, Nigeria, Rwanda, Tanzania, and South Africa. The first lab took place in Tanzania in May, bringing together around 30 women parliamentarians and 50 other women from the AI ecosystem.

Preparations are underway for the upcoming in-country lab in Rwanda. Currently, research is being conducted to assess Rwanda's AI governance landscape from a gender-sensitive perspective and to identify a relevant policy topic to engage with Rwandan women Members of Parliament.

### 4.4 Cyber Security Hub

We will be supporting the National Cyber Security Authority to set up the cyberhub. The hub will have the necessary infrastructure to train cyber professionals that will meet Rwanda's cyber skills job requirements and help create a local cyber industry.

The cyberhub renovations are now complete, and the renovated facility has been officially handed over to NCSA. We are currently supporting the first cohort of the Cyberhub Essential Skills Program, comprising 50 learners. This group is expected to complete the 20-day training program by early July 2025.

#### **4.5 Digital Inclusion Council**

In collaboration with MINICT, we will support to set up the digital inclusion council (DIC), which will become a one stop center(platform) for Rwandans seeking to acquire digital skills.

We have concluded a contract with a consultant who successfully worked on the Digital Skills Academy landing page and the platform for One Million Coders initiative with Udacity. Additionally, we have organized and held working group meetings with training providers and job linkage organizations. We are currently implementing each working group's action plan to involve them in the process and ensure they understand their contributions to the One Million Coders goal.



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