Issue 9

:FARM AND ENVIRONMENT MAGAZINE

FARM AND ENVIRONMENT MAGAZINE – COMBINED
January & June 2026

Your Hub for Agriculture and Environment News and Success Stories.
FEM is the product of EcoAgriMedia Ltd

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How a Young Innovator's Drones are Saving Rwanda's Harvests

Muyombano Happy Axel co-founded Ampere Vision Rwanda

Happy Axel receiving his award

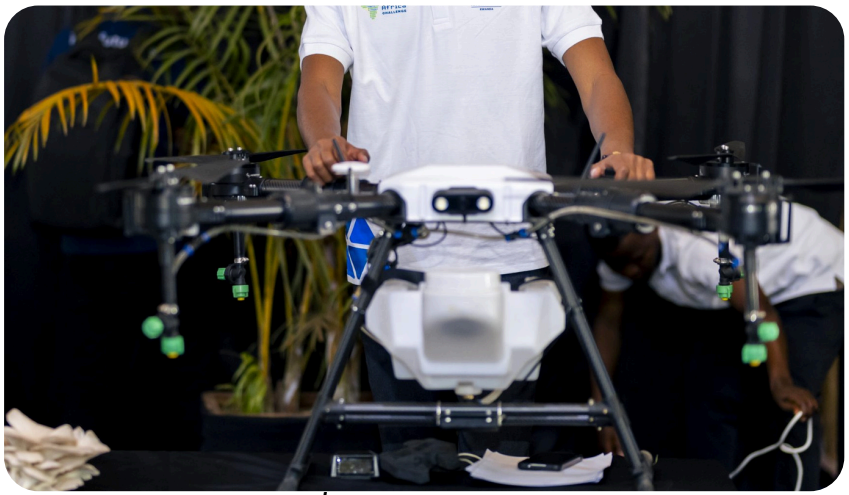
For many smallholder farmers in Rwanda, fighting crop pests has been an exhausting, ground-level battle with heavy knapsack sprayers. Slow manual application often allows insects to destroy crops before treatment is finished. However, in districts like Kamonyi and Huye, pest control is moving from the soil to the skies.

Muyombano Happy Axel co-founded Ampere Vision Rwanda in 2024 to tackle pre-harvest crop losses. Inspired by a devastating 2017 pest outbreak in Huye and his interest in robotics, Axel sought a tech-driven solution. "Manual application is too slow and imprecise," Axel says. Traditional spraying also poses environmental risks and direct chemical exposure for farmers.

Ampere Vision flips this reality by using precision drones to deploy a targeted mist of pesticides or foliar fertilizers. This ensures even coverage, reduces chemical waste, and protects human health. Initially, farmers were skeptical about aircraft flying over their fields. To build trust, the startup organized live public demonstrations and partnered with local cooperatives.

Today, members of the KOUBITE cooperative in Kamonyi report lower input costs and reduced crop losses. Operating with one 10-liter drone, the startup supports 107 smallholders. As the second runner-up in the AYuTe Africa Challenge Rwanda 2026, Ampere Vision secured RWF 15 million to acquire two high-capacity 40-liter drones.

To keep services affordable, the startup built a bundled model with partners like Heifer International, YARA, and Hello Tractor. Over the next few years, Ampere Vision plans to expand into East Africa and introduce drone-based crop health analytics. Axel urges young innovators: "Take action instead of striving for perfection. Test your concepts and improve your solutions."



drone

Mutoni GoodLuck Transforms Agricultural Produce into Value-Added Haircare Innovation

Mutoni GoodLuck, founder of Goodness of God Ltd,

Mutoni GoodLuck receiving her award

Rwanda's agribusiness is shifting as young entrepreneurs move from primary farming toward value addition. A prime example is Mutoni GoodLuck, founder of Goodness of God Ltd, a company transforming local crops into natural cosmetics. Her brand, KURA, processes onions, ginger, garlic, and rosemary into chemical-free hair oil designed to tackle breakage and scalp issues.

Mutoni's journey began in 2019 due to personal hair damage. After studying natural cosmetics in Tanzania, she focused on utilizing Rwanda's local agricultural resources. By 2024, her research turned into a commercial reality. "I started by solving my own challenges, but realized the solution could create opportunities for farmers," she explained.

The enterprise provides a structured market for smallholders, stabilizing their incomes and reducing post-harvest losses. The company trains farmers in good agronomic practices and introduces digital tools for early pest detection, ensuring a consistent and quality supply chain. "Agriculture should not stop at harvesting," Mutoni emphasizes.

In 2026, the company won first place in the AYuTe Africa Challenge Rwanda, securing RWF 30 million. Organized by Heifer International, the prize is funding equipment upgrades and increased crop procurement.

Looking ahead, Goodness of God Ltd is exploring expansion into regional and international markets like Nigeria and Canada, aiming to establish a competitive African beauty brand. Mutoni urges youth to reconsider the sector: "Agriculture is not a low-value activity; it has strong potential for industrial growth. Start with available resources and solve real problems."

KURA Products

How a Digital Platform Is Changing the Way Muhazi Farmers Sell Their Harvest

RWAMAGANA, Rwanda For many smallholder farmers in Rwanda, the hardest part of farming is not the harvest, but finding reliable buyers and reducing post-harvest losses. In Muhazi Sector, Rwamagana District, members of the DUHUZIMBARAGA MUHAZI Cooperative are beginning to change that difficult reality.

Formed in 2015, the cooperative unites 26 farmers (including 14 men, 12 women, and 7 youth) growing tomatoes, capsicum, and cucumbers on 4.5 hectares. For years, limited market access and weak handling infrastructure led to post-harvest losses of up to 40%. “Sometimes our produce remained unsold, and transport challenges caused significant damage,” said cooperative president Nyamurasa Jean Marie Vianney.

The turning point came through a partnership with Afri Farmers Market Ltd, supported under the Innovation Challenge Fund within the CDAT project, led by RAB and the Ministry of ICT. Afri Farmers Market built a digital platform linking farmers to markets, while providing agronomic advice, input access, and direct purchasing. “Previously, we lost up to 40% of our harvest,” Nyamurasa noted. “Now, everything we produce is sold.”

Consequently, seasonal revenues grew from under 4.5 million RWF to around 8 million RWF. Individual members are thriving too. Nsengiyumva Janvier bought a cow and poultry, while youth member Iwiduhaye Grace launched a 100-chicken venture. “Agriculture can create real opportunities,” Grace said.

Afri Farmers Market combines its e-commerce platform with practical logistics, collecting harvests directly from fields to cut transport risks. “We use technology to connect farmers to markets and ensure quality,” said Alex Kyeyune, Head of Agriculture.

As digital tools close old gaps, the Muhazi cooperative plans to expand its fields and buy its own transport, proving that efficient market access is the ultimate key to boosting rural incomes.

Cooperative President Nyamurasa Jean Marie Vianney

DUHUZIMBARAGA MUHAZI Cooperative member.

How One Entrepreneur is Turning Rwanda's Coffee Value Chain into Jobs for Youth

Muhorakeye Annet, the founder of Elite Cafe Training Center

In Rwanda, coffee is no longer just an export crop; it is becoming a major platform for youth employment and skills growth in high-value agribusiness. As the country gains global recognition for premium coffee, a new wave of young entrepreneurs is changing how youth plug into the sector.

One of them is Muhorakeye Annet, who founded Elite Cafe Training Center in 2022 in Niboye Sector, Kicukiro District. The center emerged to bridge a critical gap in professional coffee training, especially for young people seeking skills in barista work, roasting, and value addition.

Coming from a hospitality background, Annet noticed coffee's power to connect people and enhance customer experience. This inspired her to understand the entire value chain. Back then, standard training only covered basic preparation, ignoring the technical and business sides. This motivated her to build a practical springboard for youth. Starting with limited equipment, the center has since expanded.

Coffee processing at Elite Cafe Training Center.

Today, it offers professional barista training, coffee roasting, event catering, packaged coffee, and natural juices. Their "farm-to-cup" model ensures trainees master the full value chain, preparing them for jobs or self-employment.

"The goal is for graduates to work immediately with a clear understanding of what they do," Annet says, emphasizing that customer care and ethics are core to the curriculum.

So far, Elite Cafe Training Center has trained nearly 1,000 young Rwandans. Many now work in hotels and cafés, while others launched their own ventures. The business gained massive momentum after winning a RWF 25 million YouthConnekt award, which funded equipment upgrades and expansion.

As agribusiness drives Rwanda's economy, this model shows how coffee can expand beyond farming into entrepreneurship and youth empowerment. Moving forward, the center aims to widen its reach, equipping more youth with skills to thrive in the coffee industry locally and internationally.

Muhorakeye Annet wins the YouthConnekt award worth RWF 25 million.

Kigali Considers Cable Cars to Reduce Traffic and Promote Cleaner Transport

The City of Kigali is conducting feasibility studies for an innovative cable car transport system designed to alleviate growing traffic congestion and promote green mobility. Government authorities confirmed that research is currently underway to determine the project's technical, financial, and environmental viability.

The proposed system offers a modern alternative to road transport, aiming to decrease street-level gridlock and significantly cut vehicle emissions. Speaking to journalists on January 21, City Mayor Samuel Dusengiyumva noted that the government is leading the initiative.

"The public will receive updates once the research finishes. This project will create a new system to facilitate movement while decreasing air pollution," he stated.

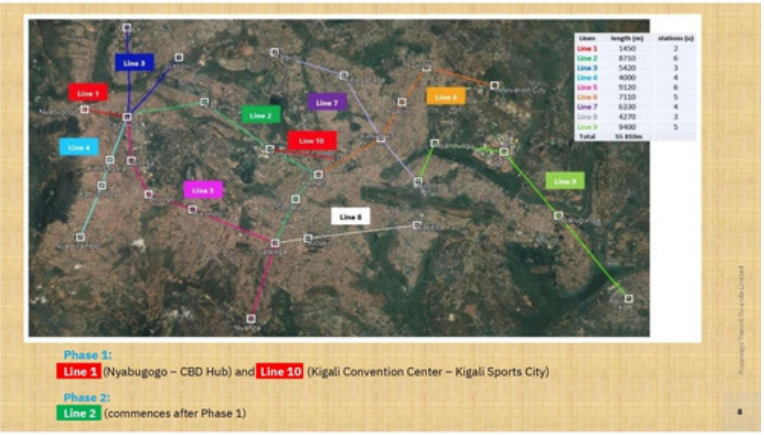
Ropeways Transit Rwanda Limited (RTRL) is spearheading the feasibility work alongside Doppelmayr, an Austrian leader in aerial ropeway systems. The African Development Bank (AfDB) supported the effort with a US$500,000 grant last year to fund a pilot study evaluating demand and routing options.

If approved, Rwanda would become the first African nation to deploy cable cars as a primary urban transport mode.

The initial phase proposes a 5.5-kilometre network costing roughly US$100 million. Two strategic routes are planned: one connecting Nyabugogo Bus Terminal to the CBD, and another linking the Kigali Convention Centre to the Remera sports hub.

Construction is slated to begin toward the end of 2026, with operations starting by 2028.

The system is expected to handle over 50,000 daily passengers, reducing average trips to just 15 minutes. RTRL CEO Muyiwa Omololu confirmed that talks with prospective investors, including Aliko Dangote, are proceeding as the city looks toward a sustainable, high-altitude future.



Rwanda, ACES Partner to Build Climate-Smart Cold Chain Network for Farmers

Issa Nkurunziza, UNEP - U4E, Clean Cooling Network Africa Lead; Professor Toby Peters, Executive Director of ACES; Dr. Olivier Kamana, Permanent Secretary of MINAGRI; and Dr. Leyla Sayin, Director of the Executive Office, ACES. Following the signing of the MoU, the team engaged in strategic discussions on the next phase of implementation. Photo: CCN - Mireille Isimbi

Rwanda is accelerating efforts to reduce post-harvest losses and improve market access for smallholder farmers through a new partnership focused on expanding cold-chain infrastructure.

On March 26, 2026, the Ministry of Agriculture and Animal Resources (MINAGRI) and the Africa Centre for Excellence in Sustainable Cooling and Cold-Chain (ACES) signed a Memorandum of Understanding (MoU) to rehabilitate and operationalize ten cold-room packhouses across Rwanda.

The facilities will be located in Rulindo, Rwamagana, Gatsibo, Ngoma, Nyanza and Karongi districts and are expected to benefit more than 400,000 smallholder farming households. The initiative aims to build a national network of climate-resilient food systems that links farmers to markets while reducing losses of perishable crops and improving overall food quality.

Each packhouse measures 120 square metres and features advanced cold storage systems. Processing areas will maintain temperatures between 12°C and 15°C, while storage chambers will operate at minus 4°C. The facilities will run entirely on solar energy and comply with international food safety standards, including HACCP, Rwanda GAP and Global G.A.P.

"Our shared commitment is to transform agriculture into a modern, competitive and market-driven sector," said Dr. Olivier Kamana, Permanent Secretary at MINAGRI.

He emphasized that improved cold-chain systems will reduce food losses and create new income opportunities for rural households.

Professor Toby Peters, Executive Director of ACES, noted that the project addresses a key challenge in Africa: moving fresh produce efficiently from farms to markets through integrated cooling, logistics and skills development.

The initiative aligns with Rwanda's Vision 2050, NST2 and PSTA5 strategies, supporting food security, green growth and rural transformation.

Kayonza youth venture turns fodder into a growing commercial industry

Eric Murenzi, the director of PYAM

Harvested livestock fodder ready for conservation in Rwanda's Eastern Province, boosting local agribusiness and dairy productivity.

KAYONZA, Rwanda, A youth-led agribusiness in Rwanda's Eastern Province is reshaping livestock feed production into a commercial opportunity, reflecting the rapid transformation of the country's dairy value chain.

In Nyawera Sector, Kayonza District, the Powers of Youth in Agriculture Modernization (PYAM), established under the Rwanda Dairy Development Project Phase II (RDDP2), is addressing a persistent challenge in dairy farming: limited access to quality fodder, especially during dry seasons. Founded in April 2026 by young entrepreneurs, PYAM commercializes improved forage production while strengthening the feed supply to dairy farmers.

"Our goal is to respond to the growing demand for quality fodder and help farmers increase milk production by making feed more accessible," said Eric Murenzi, speaking on behalf of the company.

Within its first months, PYAM expanded to 51 hectares under improved forage varieties like Chloris gayana and Desmodium, creating a dual-income model through hay and seed multiplication. In its first cycle, it produced 8,000 bales of hay sold at 2,000 Rwandan francs each, generating nearly 16 million francs. The company also projects four tonnes of seed, expected to yield around 20 million francs once commercialized.

Beyond production, PYAM has become a significant rural employer. During peak seasons, more than 300 workers are engaged in planting, harvesting, and transport, with employment expected to surpass 500 as operations expand.

Murenzi attributed the early success to support from RDDP2, which provided technical training and start-up financing. "The support we received was decisive. It helped us start, strengthen our capacity and move forward," he said.

For many young people in Kayonza, the initiative is changing perceptions of agriculture, demonstrating that fodder production can be a profitable agribusiness. As PYAM scales up, it is increasingly positioning itself as part of Rwanda's broader dairy value chain helping farmers reduce feed shortages, improve milk yields, and stabilize production throughout the year.

In Kayonza, livestock feed is becoming a traded commodity driving rural incomes and youth employment.

Rwanda to Invest $9 Million in Western Province Climate Projects

Group photo

KARONGI – In a decisive move to fortify Rwanda's Western Province against the escalating threats of climate change, the Government of Rwanda, in collaboration with the African Development Bank (AfDB), has officially launched a $9 million resilience initiative.

The project, which commenced operations on February 18, 2026, is specifically designed to address the catastrophic flooding, severe soil erosion, and frequent landslides that have historically plagued the high-risk districts of Rusizi and Karongi.

Western Rwanda has borne the brunt of climate-related disasters in recent years, suffering through tragic fatalities, the destruction of critical infrastructure, and significant economic setbacks for local communities. This new initiative seeks to break that cycle by implementing Nature-Based Solutions (NbS) as a primary defense mechanism. Key interventions include the large-scale restoration of damaged territories, the securing of vulnerable riverbanks through targeted indigenous tree planting, and the repair of broken water management systems that currently exacerbate runoff issues.

Beyond environmental protection, the project serves as a vital economic engine. It is structured to generate immediate employment opportunities for local youth and advance gender equality by ensuring women are central to environmental restoration activities, such as reforestation and river rehabilitation.

"Climate change disasters continue to damage Western Rwandan communities," stated Aissa Sarr Toure, the AfDB Country Manager for Rwanda. "The AfDB is using this project to fund sustainable, natural solutions which help reduce flood risks while creating jobs and improving local welfare."

Eng. Richard Nyirishema, Director General of the Rwanda Water Board, emphasized the strategic importance of the launch. "This project works toward our national goal of protecting high-risk communities. We are using nature-based solutions to protect essential infrastructure and agricultural lands."

Rwandan Cooperative Roots Growth by Blending Trees with Crops

ECC's tree nursery cultivates a variety of trees, including fruit trees like mango and avocado

NYAMUGARI CELL – In the village of Gasarabwayi, a quiet revolution is taking place. Here, environmental restoration and economic development are no longer seen as competing interests, but as two sides of the same coin. The Environmental Conservation Cooperative (ECC), established in 2011 in Kayonza District's Mwili Sector, has become a premier model for how agricultural production can thrive alongside rigorous conservation practices.

What began with 36 dedicated members has evolved into a sophisticated enterprise focused on preserving natural resources while elevating local incomes. "Our objective was to help conserve the environment while increasing income for our members," explains Eric Kanyarwanda, President of the ECC.

Central to their success is a diverse tree nursery that cultivates everything from high-value fruit trees like mango and avocado to vital agroforestry species such as grevillea and calliandra. These seedlings are distributed to local farmers to improve soil health, provide shade, and combat the region's historical struggle with erosion. What sets ECC apart is its community-first philosophy; rather than focusing solely on sales, the cooperative donates a significant percentage of its nursery stock to restore degraded public lands.

Beyond the nursery, the cooperative manages four hectares of integrated farmland. By utilizing organic methods, they achieve impressive yields—averaging up to five tons of maize and 700 kilograms of beans per hectare. This dual-stream income ensures the cooperative remains financially resilient.

Looking ahead, the ECC is scaling its impact through the Kayonza Irrigation and Integrated Watershed Management Project (KIIWP2). With access to matching grants, they plan to expand production and reach more farmers across the district. For the members of ECC, these trees represent more than land rehabilitation; they are the literal roots of a greener, more resilient future for Rwanda.

Eric Kanyarwanda, President of the ECC

Rwanda Youth Innovators Showcase AgriTech Solutions at AYuTe Challenge 2026

Group photo

On April 30, 2026, the AYuTe Africa Challenge Rwanda was held at Camp Kigali, bringing together five youth finalists presenting innovative technology solutions aimed at transforming agriculture. The competition, organized by Heifer International Rwanda, awarded a total prize pool of RWF 65 million to support business growth and scaling of agri-based innovations.

The initiative targets young entrepreneurs aged 18 to 35 and reflects growing investment in youth-led agricultural transformation. This year's prize pool increased from RWF 50 million in 2025 to RWF 65 million, signaling stronger support for agri-tech innovation.

From over 1,200 applicants, finalists were selected and underwent a five-day bootcamp training to refine their ideas before pitching to a panel of judges.

The top three winners included Mutoni Goodluck, who secured first place with RWF 30 million for her plant-based hair care products made from ginger and garlic, designed to promote natural beauty while linking farmers to raw material markets.

Isidore Niyigirimpuhwe of Techplus Trust Ltd won second place with RWF 20 million.. for developing an intelligent poultry innovation system that improves chick production efficiency and farm productivity.

Axel Muyombano of Ampere Vision took third place, winning RWF 15 million for a drone-based application that helps farmers efficiently spray pesticides and fungicides, reducing costs and crop losses.

Minister of Agriculture and Animal Resources, Dr. Telesphore Ndabamenye, emphasized government commitment to supporting youth innovation in agriculture, including mentorship and access to partners for market expansion.

Verena Ruzibuka, Country Director of Heifer International Rwanda, said youth and technology are central to agricultural transformation, noting that the AYuTe platform connects innovators with investors and industry leaders.

Organizers said the challenge aims to leverage data-driven and technology-based solutions to improve agricultural productivity while strengthening market access for farmers across Rwanda.

Mutoni Goodluck wins RWF 30M for her plant-based hair oil innovation.

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From Waste to Wealth: The Rwandan Village Turning Worms into 'Liquid Gold'

Liquid Gold": Vermiwash produced in Rukoyoyo sells at 1,500 Frw per litre and has transformed the lives of 26 innovative farmers

Kaberuka Gilbert, president of the Rukoyoyo Farmer Facilitator Group, showcases "Liquid Gold" a high-value organic fertilizer produced from waste that generates 30,000 Rwf in weekly sales for the local cooperative.

KAYONZA, RWANDA In the village of Rukoyoyo, a pioneering collective of twenty-six farmers is proving that agricultural prosperity stems from biology rather than expensive chemicals. By converting common household waste into a potent organic liquid they have nicknamed "Liquid Gold," these innovators are transforming both their soil health and their bank accounts.

This initiative is a flagship success of the Kayonza Irrigation and Integrated Watershed Management Project (KIIWP2). Before receiving this specialized training, the village relied on "heap composting" a traditional, labor-intensive process that took nearly four months to yield results and often required costly synthetic additives to be effective. Today, the process is far more efficient.

Using Tiger worms to break down food scraps, crop residues, and ash, the farmers now produce ..nutrient-rich vermicompost in just eight weeks.

The standout product is "Vermiwash," a liquid runoff that has become a high-value commodity. The group harvests an average of seven litres per week, retailing at 1,500 Rwandan Francs (Rwf) per litre. This generates 30,000 Rwf in weekly sales a transformative sum for a rural cooperative.

"We now develop reliable income from waste," says Kaberuka Gilbert, president of the Farmer Facilitator Group. Supported by the Ministry of Agriculture and the Rwanda Agriculture and Animal Resources Development Board (RAB), this model is a blueprint for climate-smart farming, proving that sustainable development is right beneath our feet.

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Rwanda Launches Greenhouse Insurance to Strengthen Climate-Resilient Agriculture

Group photo

A new greenhouse insurance product has been launched in Rwanda by the Rwanda Agriculture and Animal Resources Development Board (RAB) on May 7, 2026, in Kigali at the National Institute of Statistics of Rwanda (NISR). The product falls under the national agriculture insurance scheme "Tekana Urishingiwe Muhinzi Mworozi" and is designed to protect farmers from climate-related risks, structural damage, pests, and diseases.

The insurance covers greenhouse steel structures, irrigation systems, and high-value crops such as tomatoes, cucumbers, and green peppers, including produce in transit. To make it affordable, the Government of Rwanda will continue to subsidize 40% of the premium, while farmers will contribute 60%.

Project Manager Joseph Museruka said greenhouse farming is a key pillar in achieving the Strategic Plan for Agriculture Transformation (PSTA 5), especially in boosting vegetable productivity and quality. He noted that the product responds to growing investor demand for safer high-tech farming systems.

"Greenhouse farming is a costly investment, and risks such as strong winds and heavy rains can lead to major losses. This insurance reduces fear of investment loss and encourages more farmers, especially youth, to adopt the technology," he said.

The launch aligns with government plans to expand export crop land from 79,409 hectares to 97,100 hectares by 2029. Since 2019, the "Tekana" scheme has supported over 200,000 farmers annually and paid out more than RWF 9.3 billion in claims to farmers and livestock keepers.

Government officials urged farmers to enroll before planting seasons, while financial institutions were encouraged to use insurance as collateral for agricultural loans. Insurance partners including Old Mutual, Radiant, Sonarwa, and BK Insurance were also called upon to ensure efficient claims services to support a more resilient agricultural sector.

Project Manager Joseph Museruka described greenhouse farming as a key driver for the Strategic Plan for Agriculture Transformation (PSTA 5),

From 10 Chickens to a Family Cow: How a Gisagara Mother Defeated Malnutrition

eanine Nyirahabimana, a mother living in Southern Rwanda,

Gisagara, Rwanda ,Jeanine Nyirahabimana, a mother living in Southern Rwanda, began her journey toward escaping poverty with just 10 chickens. Today, that flock has grown into a successful home-based business that ultimately saved the life of her child and secured the financial future of her family.

Prior to 2023, Nyirahabimana and her family faced an extreme lack of the most essential requirement for life: proper nutrition. Due to the absence of an adequate diet, her son suffered from malnutrition at six years of age. At the time, the basic components of a balanced diet such as an assortment of eggs and fresh vegetables were luxuries to a family who could barely afford to put food on the table every day.

The day that transformed Nyirahabimana's life was when she received a grant from the Partnership for Resiliency and Inclusive Small Livestock Market (PRISM). This initiative provided her with 10 chickens and the essential training required to operate a small-scale farm.

"My family depended on those eggs," Nyirahabimana explained. "Before receiving those eggs, my child had malnutrition; now we have eggs at home and the health of my child has improved. We now have different kinds of daily meals."

The training extended far beyond poultry. Nyirahabimana learned to grow mushrooms and maintain a kitchen garden.

This knowledge eliminated her need to purchase food at the grocery store, as she began producing fresh, organic vegetables on her own property. Furthermore, she discovered she could sell mushrooms as a high-protein meat alternative, creating a new stream of profit.

The small farm expanded rapidly.

The original 10 chickens grew to a total of 34.

With the income generated from selling eggs, vegetables, and mushrooms, Nyirahabimana joined a community savings club. Eventually, those savings allowed the family to achieve a dream: purchasing a cow. This livestock now provides manure to fertilize crops and acts as a "livestock bank" for the family's future.

Beyond health and finances, Nyirahabimana now pays her children's school fees and is a vital contributing member of her household.

Albert Nkundabagenzi turns crop residues into biochar to boost soil fertility

Through her success in Gisagara, she stands as a powerful example of how small-scale enterprises create safety cushions for rural families.

How 10 Piglets Helped a Vulnerable Rwandan Household Become Landowners

The pig that started it all for Therese and Etienne

Therese Mukantwari and her husband, Etienne Ndikuryayo, rebuild their future through small livestock farming in the hills of Huye District.

Huye District, Rwanda,Therese Mukantwari and her husband, Etienne Ndikuryayo, are steadily transforming their lives from hardship to stability through a simple but powerful investment in livestock. Once among the most vulnerable families in their community, they relied on irregular casual labor that could barely meet their daily needs. Today, their story reflects resilience, learning, and the impact of small livestock farming.

Their journey changed in 2023 when Therese joined the Partnership for Resilient and Inclusive Small Livestock Markets (PRISM), a program supporting vulnerable households with livestock and practical training. She received one pig along with initial feed support, marking the beginning of a new chapter.Instead of treating the pig as a one-person responsibility, the couple applied lessons from the training and approached it as a shared family business.

They worked together to feed, monitor, and care for the animal, strengthening both productivity and household cooperation.

The pig soon produced its first litter of three piglets, followed by a second litter of ten.

This rapid growth shifted their perspective from basic survival to planning for long-term investment. As their livestock numbers increased, so did their confidence and income opportunities.

The family began selling pigs gradually to meet urgent needs, including improving their housing conditions. Later, a larger sale enabled them to purchase land worth 300,000 Rwandan Francs an important milestone that secured their future.

Their growing income has also improved their children's education. One child is now in university, highlighting the broader impact of their efforts.

From a single pig to land ownership, their experience demonstrates how knowledge, teamwork, and small resources can drive meaningful and lasting change.

From 10 Chickens to a Thriving Poultry Business for a Rwandan Farmer

Esther Mukamurigo joined PRISM in 2023 and received 10 chickens to boost her livelihood.

Ruhango District, Rwanda,Esther Mukamurigo, a member of the "Twuzuzanye Cyunyu" group, has transformed her livelihood through poultry farming. Before 2023, she depended on irregular casual work that could not consistently support her family or meet basic needs.

Her situation changed when she joined the Partnership for Resilient and Inclusive Small Livestock Markets (PRISM), a program supporting vulnerable households with livestock and practical training. Through the initiative, Esther received 10 chickens, which became the foundation of her business.

Beyond livestock, the program provided training in modern animal husbandry, including hydroponic fodder and azolla farming. These methods helped her reduce feed costs and improve productivity. Esther applied these skills and began to see results quickly.

MUKAMURIGO Esther, a member of the TWUZUZANYE-CYUNYU group.

Beyond livestock, the program provided training in modern animal husbandry, including hydroponic fodder and azolla farming. These methods helped her reduce feed costs and improve productivity.
Esther applied these skills and began to see results quickly.

From her first flock, she collected over 500 eggs and chose to reinvest the income into expanding her poultry operation.

She increased her flock from 10 to 100 chicks, generating more than 250,000 Rwandan Francs in her first production cycle.

She later used part of the profits to purchase six goats, diversifying her income sources.

Today, Esther manages over 600 chickens and is planning to build a larger poultry house with a capacity of 2,500 birds.

Her progress reflects a shift from subsistence activities to a more structured and growing agribusiness.

Her efforts have also improved her household nutrition, providing regular access to protein such as eggs. Through group-based savings, she can access small financial support when needed.

Esther is also supporting other families by sharing poultry, contributing to wider community benefits.

Her journey demonstrates how small livestock, combined with knowledge and reinvestment, can create sustainable economic opportunities for rural households.

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Modern irrigation and training reshape farming in eastern Rwanda

Iringirimana Samuel at his chilli farm in Kigarama Sector, Kirehe District.

Kirehe District, Rwanda Farming in Kabeza village, Nyamugali Sector, is being transformed through irrigation rehabilitation and training under SAIP II, improving yields and shifting toward commercial agriculture. The initiative is part of broader efforts to strengthen food security and climate resilience in eastern Rwanda.

Beatrice Nzamwita, mother of five and cooperative member, recalls past difficulties: “I used to practice mixed cropping without knowledge, making it hard to feed my family.” She notes that improved extension services also helped her understand better crop management practices.

Through SAIP II she got training in vegetable and fruit production and modern maize techniques. Her yields increased from under 100 kg to enough for household needs and school fees.

Irrigation rehabilitation restored water flow and enabled dry-season farming. The reservoir now holds about 500,000 m^3, supporting year-round cultivation and reducing reliance on rainfall.

In Kigarama Sector, Iringirimana Samuel benefited from irrigation and training. He started with 18 ares of chilli peppers, facing seed and irrigation costs. Training improved his farming methods, post-harvest handling, and business approach. He expanded from 18 ares to over 3 hectares and reduced costs. He also reports more stable incomes and improved market access through cooperative selling.

Maize yields rose from 2.5 to 4 tonnes per hectare following irrigation improvements, strengthening the agriculture-based local economy.

SAIP II, implemented by RAB with World Bank support, aims to boost production, market access, and rural resilience.

In Kirehe, impact is visible in higher yields and changing mindsets. “Agriculture is no longer just survival,” says Beatrice. “It is a path to a better future.” in Kirehe District.

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How Organic Farming Helped a Ngoma Farmer Double Crop Yields

Albert Nkundabagenzi turns crop residues into biochar to boost soil fertility

Albert Nkundabagenzi did not take the traditional route after earning his Social Sciences degree. Driven by a passion for sustainability, he sought hands-on expertise at the world-renowned Songhaï Centre of Excellence in Benin. This United Nations-designated institute specializes in agroecology, teaching a holistic model where "waste" does not exist. The system integrates renewable energy, aquaculture, and organic recycling to create a self-sustaining loop.

Nkundabagenzi brought these principles back to Rwanda, establishing Ferme du Lac in 2015. Located on a two-hectare site in the Rulenge Sector, the farm is a masterclass in integrated agriculture. It combines crop production with livestock, beekeeping, and fish farming, allowing each activity to biologically enhance the others.

The productivity gains have been remarkable. In 2018, his maize yield was 900 kilograms per quarter hectare; by 2024, that figure surged to 1.5 tonnes. His cabbages have seen similar growth, with average head weights increasing from 1kg to nearly 3kg. Nkundabagenzi attributes this to long-term soil health improvement via organic fertilizers applying roughly 1.5 tonnes per quarter hectare, most of it produced directly on-site.

"The goal is more than food," he explains. "It is about enhancing living standards and creating sustainable solutions." To date, he has trained 150 local farmers in natural pest control and the use of biochar organic material heated in low-oxygen conditions to improve soil structure.

While the farm holds a Participatory Guarantee System (PGS) certification, market awareness remains a hurdle. However, the national trend is clear: the Rwanda Agriculture and Animal Resources Development Board (RAB) reports that organic fertilizer usage hit 89.1% in the 2025A season, up from 48.2% in 2017. As Rwanda moves toward its PSTA 5 goals for 2029, Ferme du Lac stands as a beacon for the future of resilient, green, and profitable Rwandan agriculture.

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Rwanda Launches Greenhouse Insurance to Strengthen Climate-Resilient Agriculture

Maridadi Jean de Dieu, cassava farmer and Farmer Field School facilitator, standing proudly in his flourishing cassava field

In Ndego Sector, Kayonza District, cassava is no longer seen as a marginal crop for survival during drought periods. It has become a key commercial commodity supporting household incomes, food security, and market integration.

This transformation is strongly linked to the Kayonza Irrigation and Integrated Watershed Management Project Phase II (KIIWP2), which has supported farmers with improved planting materials, fertilizers, irrigation support, and continuous training through Farmer Field Schools.

Maridadi Jean de Dieu, a cassava farmer and Farmer Field School facilitator, cultivates nearly three hectares and also produces improved cassava cuttings for other farmers. “Through RAB, I received improved cassava cuttings and now I help other farmers access quality planting materials,” he said.

He explains that KIIWP2 has gone beyond input distribution by strengthening farmers through follow-up support and capacity building. As a result, he now records yields of up to 15 tonnes per hectare and has signed a supply agreement with Kinazi Cassava Factory. “From cassava alone, I can earn about 5 million francs a year,” he added.

Jean de Dieu also notes that improved varieties such as Gikungu and Buryohe are more resilient to drought and better suited to local conditions. With training support, he reports yields of up to 40 kg per cassava plant under good management practices.

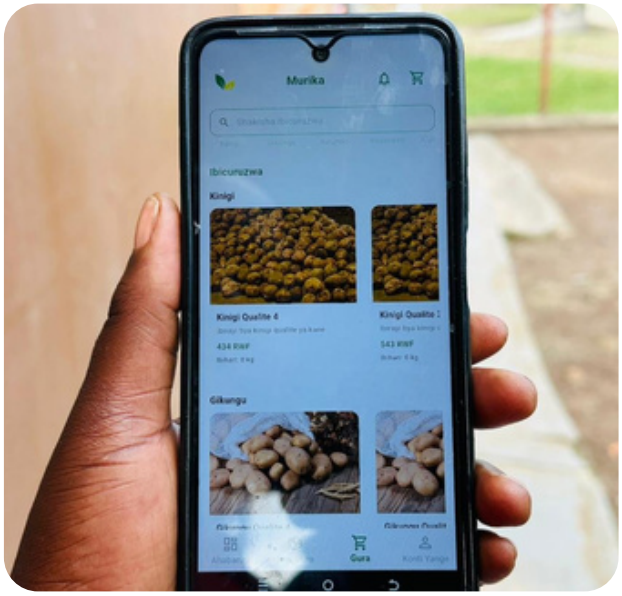
According to KIIWP2 Monitoring and Evaluation Specialist Faida Olivier, thousands of hectares are already under soil conservation measures, although irrigation expansion remains a key challenge in Ndego.

Agricultural Extension Specialist Sibomana Jean Claude highlighted that after trials of different varieties, cassava adoption increased significantly following RAB recommendations, with millions of cuttings distributed to farmers. He noted improved food security and better market access in the area.

Despite persistent drought risks, KIIWP2 is expected to expand irrigation coverage further. Cassava in Ndego is now widely recognized not only as a subsistence crop but also as a profitable cash crop driving rural transformation.

Cassava field

Digital Harvest: How Agtech Is Retooling Rwanda's Potato Value Chain



Murika App

MUSANZE, Rwanda for years, Augustine Maniriho sold his potato harvest by waiting for informal traders to arrive at his farm in northern Rwanda, haggling over prices, and watching buyers dictate the worth of his crop. "We had little said over the price," Maniriho said. "Many of us felt we were losing money."

In Rwanda, potatoes are a critical staple, yet smallholders battle volatile market information, predatory middlemen, and brutal post-harvest losses. Now, Murika Farms Ltd is changing that story through a tech-driven ecosystem. Backed by an ICF matching grant under the CDAT project managed by RAB, the startup invested RWF 134 million to deploy the Murika App and five mechanical grading machines.

Instead of subjective haggling, the machines sort potatoes into standardized quality categories before sale. "Standardized grading brings transparency, so farmers negotiate from a stronger position," said Byiringiro Sad, Tech Lead. Graded produce is listed on the Murika App, where buyers check verified quality ,volumes, and fixed prices, complete with digital payments and EBM tax invoices.

Operating from Musanze Hanga Hub across Rubavu, Nyabihu, Burera, and Kigali, Murika Farms connects over 6,000 farmers across 11 cooperatives, where women make up 54 percent. The platform has enabled RWF 230 million in transactions, boosting farmer incomes by 18 percent and cutting losses by 13 percent. It has also created 45 off-farm youth jobs and trained 700 farmers in digital literacy.

"Now we can sort potatoes properly, keep seed-quality tubers, and sell the rest at better prices," Maniriho explained. As Rwanda commercializes agriculture, this blend of hardware and digital tools demonstrates how data can de-risk smallholder farming, turning it into a stable trade.

said Byiringiro Sad, Tech Lead at Murika Farms.

END