Growing green

How agroforestry and carbon markets
are transforming farming in eastern Kenya

Kenya

AGRA
Sustainably Growing
Africa's Food Systems

Table of contents

Authored by Patrick Nyaga with contributions from Mary Nyale, Nura Aman, Libby Plumb and Bertha Lutome.

Front cover photo: Janet Ngiri at her farm in Tharaka Nithi County. Photo: Farm Africa/ Bertha Lutome.

Introduction

Farm Africa's agroforestry project launched in 2020 in eastern Kenya in partnership with AGRA allows farmers to integrate carbon-based incentives within the practice of sustainable agriculture. The farmers earn extra income by planting agroforestry seedlings through the ACORN/Rabobank programme.

The trees capture carbon, and through Acorn's Carbon Removal Units (CRUs), farmers monetise the stored carbon. Each CRU represents one tonne of carbon removed, which Acorn sells to corporations for emission offsetting.

Through the programme, the project has successfully enrolled 21,658 farmers, covering a total of 14,175 hectares. By the close of 2023, 7,375 farmers had sold a total of 24,945 CRUs and received payment in the form of cash and in-kind through seedlings.
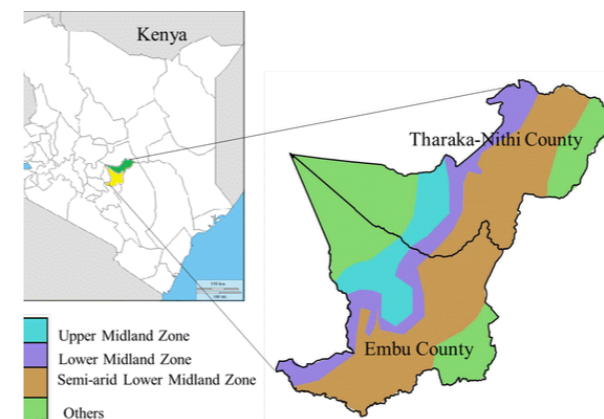
Project key objectives

1. Climate change mitigation
2. Sustainable agroforestry model
3. Community development and financial empowerment
4. Training and awareness for VBAs on sustainable farming practices and carbon credit mechanisms.

This project combines traditional farming with modern carbon markets, benefiting both the environment and local communities. It enhances soil fertility, boosts biodiversity, provides extra income, and helps mitigate climate change.

It aims to mitigate climate change through sustainable agroforestry, integrating trees and crops for environmental and agricultural benefits.

The project empowers communities by creating income opportunities, enhancing local economies, and providing training on sustainable practices and financial literacy, enabling individuals to improve livelihoods and contribute to long-term environmental sustainability.

Project location

Kenya

Tharaka-Nithi County

Embu County

Upper Midland Zone
Lower Midland Zone
Semi-arid Lower Midland Zone
Others

Background

Kenya has emerged as a leader in climate action within Africa, demonstrating increasing climate ambition over the past five years. The country has positioned itself as a hub for carbon markets under both Article 6 of the Paris Agreement and the Voluntary Carbon Market (VCM). As of 2023, Kenya had issued approximately 52.4 million carbon credits through its Clean Development Mechanism (CDM) and VCM initiatives, establishing itself as the largest CDM portfolio holder in eastern Africa.[1]

The country's commitment to climate action is reflected in its updated Nationally Determined Contributions (NDC) issued in December 2020, which pledges to reduce greenhouse gas emissions by 32% (46 MtCO2e) by 2030 relative to the business-as-usual scenario. This commitment is supported by robust policy frameworks, including the Climate Change Act of 2016 and the recently adopted carbon market regulations in 2024.

The project operates within this enabling environment and aligns with global principles of climate justice and equity, ensuring that climate action contributes to sustainable development while supporting those most vulnerable to climate change. The initiative particularly focuses on smallholder farmers who practise subsistence agriculture but face decreasing productivity and limited financial resources to invest in sustainable farming practices.

The project's governance includes representatives from Farm Africa's Village-Based Advisors (VBAs), farmers, county government, Kenya Forestry Service, Department of Environment, local government, and KALRO. This multi-stakeholder approach ensures strong community engagement, support, and oversight in decision-making processes.

1 Eastern African Alliance on Carbon Markets and Climate Finance Carbon Market Profile - Kenya

(Bottom left) Pius Munene at his farm in Kenya. Photo: Bertha Lutome

Climate change mitigation

Categorisation of farmers in terms of CRUs generated
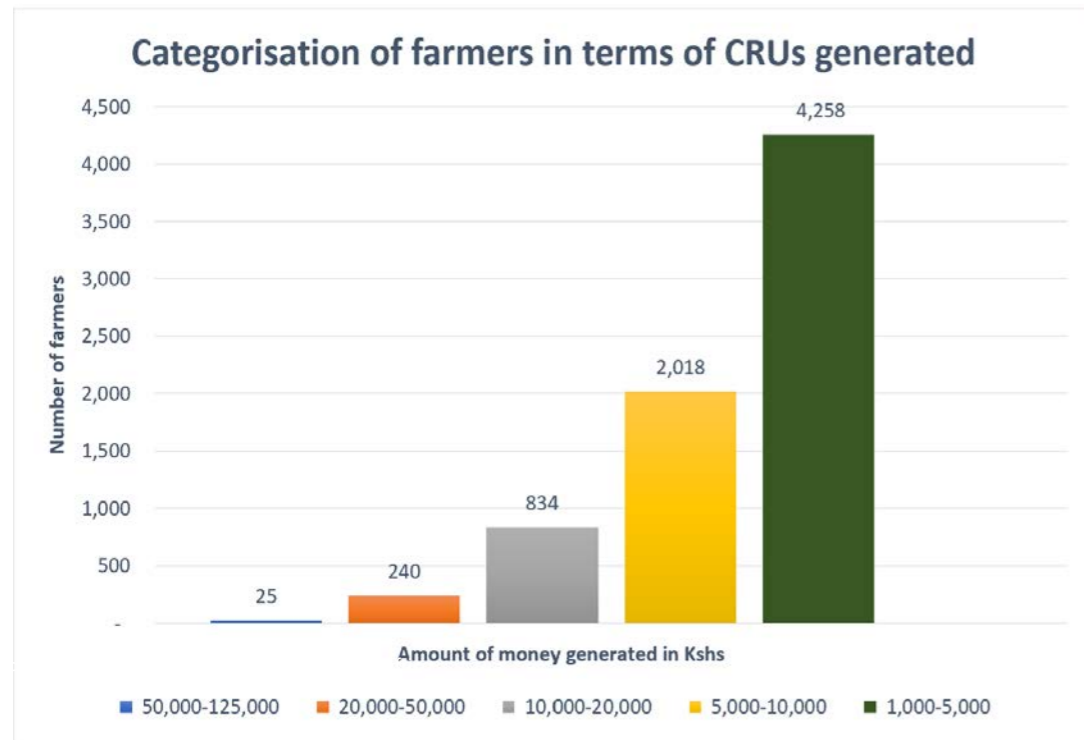
The agroforestry project represents a comprehensive approach to climate change mitigation that operates through multiple interconnected mechanisms. The project's core strategy revolves around the implementation of sophisticated agroforestry systems that maximise carbon sequestration potential while delivering substantial environmental benefits to the local ecosystem.

The project depends on afforestation and reforestation practices as a carbon capture pathway. Carbon sequestration efforts rely on a well structured system that strategically incorporates various carbon capture pathways to maximise efficiency and sustainability.

Through the strategic planting and management of diverse tree species, the project creates robust carbon sinks that continue to expand over time. The selected tree species, including both native and economically valuable varieties, are chosen for their optimal carbon sequestration capabilities and their ability to thrive in local conditions.

The carbon removal process is meticulously monitored and verified through advanced remote sensing technologies and ground-truthing methods. This dual verification approach ensures the accuracy and reliability of carbon measurements, making the project's carbon credits highly credible in international markets. The project has demonstrated remarkable success in this area, with verified emissions reductions of 24,945 tCO2e during the monitoring period.

According to Kaizen International, a consultancy firm in Kenya, the project generates significant environmental co-benefits that enhance its climate mitigation impact. The established agroforestry systems create valuable ecosystem services that contribute to climate resilience. These include improved soil organic carbon content, enhanced water retention capacity and reduced soil erosion. The diverse tree canopy creates beneficial microclimates that protect crops from extreme weather events and help maintain soil moisture levels, reducing the impact of climate variability on agricultural production.

Impact

The project's impact on local weather patterns has been notable, with farmers reporting improved microclimate conditions that benefit both crops and livestock.

The increased tree cover moderates temperatures, reduces wind speed that reduces wind erosion, and improves humidity, benefiting agricultural production. This microclimate modification helps farming communities adapt to climate change.

Agroforestry systems improve water infiltration, reduce runoff, recharge groundwater, and increase water availability for agriculture. Tree roots access water from deeper soil layers, reducing crop competition.

The project's biodiversity efforts support wildlife, maintain ecological balance, and reduce pesticide use, cutting greenhouse gas emissions. The project's success has led to the adoption of a five-year regenerative agriculture for food system transformation strategy in Tharaka Nithi and Embu Counties.

Independent verification by Preferred by Nature confirmed its adherence to the Acorn Framework standards with over 14,175 hectares planted trees, ensuring measurable climate benefits.

14,175
hectares of land planted with trees.

24,945tCO2e
emmission reductions.

21,658
farmers participating in the project.

> "I have trained more than 200 farmers on the importance of incorporating trees with crops."

Purity Njue
Village-Based Advisor

Photo: Farm Africa / Bertha Lutome

Sustainable agroforestry model

The sustainable agroforestry model represents a sophisticated integration of traditional farming knowledge with modern agricultural science and environmental conservation principles. This model has been carefully designed to create a resilient and productive agricultural system that delivers multiple benefits while ensuring long-term sustainability.

The model is based on a well-designed tree-crop integration system, incorporating diverse tree species for specific functions. Fruit trees like avocado (Persea americana) and mango (Mangifera indica) offer nutritional and economic value, while nitrogen-fixing species such as Calliandra calothyrsus and Gliricidia sepium improve soil fertility.

Stanley Riungu's farm with agroforestry aspect. Photo: Farm Africa/ Bertha Lutome

Timber species like Grevillea robusta contribute to carbon sequestration. The spatial arrangement of trees within the farming system has been optimised to maximise benefits while minimising competition with crops. Border plantings help define property boundaries and provide windbreaks, while scattered trees throughout the farm create beneficial shade patterns and improve soil conditions. The alley cropping system allows for efficient use of space while maintaining crop productivity.

Soil management under this model has shown remarkable improvements. The combination of leaf litter, root systems and nitrogen fixation has led to enhanced soil organic matter content, improved soil structure and increased nutrient availability. Farmers have reported significant reductions in fertiliser requirements, leading to both economic savings and environmental benefits. In Embu, 27.9% of farmers apply between 50 and 100 kg of fertiliser per acre, while 39.3% use more than 100 kg of fertiliser per acre.

The improved soil conditions have also enhanced water retention capacity, making farms more resilient to drought conditions with regenerative agriculture in Embu and Tharaka Nithi increasing soil organic matter by 30-50%, reducing the use of fertiliser by 20-40%, and improving water retention by 30-50%.[1]

In Embu, mulch and microdosing of fertiliser had the highest benefit-cost ratio (BCR) of 4.02, while the use of manure, mulch and microdosing gave the highest net benefit of Kshs. 147,604 per hectare. In Tharaka Nithi, mulch and microdosing had a BCR of 5.00, and manure, mulch and microdosing resulted in the highest net benefit of Kshs. 186,378 per hectare.

Water conservation was the most crucial factor for sustainability in both counties (83.1%), followed by soil health management (80.1%), biodiversity conservation (41.2%), integrated pest management IPM (44.9%), and education/training (51.5%).

---

1   Climate-Smart Agricultural Technologies for Smallholder Farmers in Kenya- KCSAP

(Bottom left) **Simeon Kanampiu**, a farmer and Village-Based Advisor in Tharaka Nithi County has adopted the method of incorporating trees in maize plantation Photo:Farm Africa/ Bertha Lutome

Impact

The model includes market linkages and value chain development to ensure that farmers can effectively monetise their diverse production.

Integrating livestock into the agroforestry system enhances productivity by providing fodder from trees and manure for soil improvement, reducing external inputs. Tree shade also boosts livestock welfare and productivity.

Biodiversity within the system supports natural pest control, reducing pesticide use and minimising crop-specific pest impacts, strengthening resilience. Water management is optimised through better soil structure, organic matter, and strategic tree placement, reducing runoff and improving water availability for crops.

The model's regenerative approach ensures long-term sustainability, with continuous improvements in soil, biodiversity, and ecosystem services, expanding benefits over time.

30-50%
increase in soil organic matter in Embu and Tharaka Nithi Counties

20-40%
reduced use of fertiliser

Community development and financial empowerment

The project has catalysed significant social and economic transformation within participating communities, creating a comprehensive model of rural development that extends far beyond traditional agricultural interventions. This holistic approach to community development has generated lasting impacts on local livelihoods and social structures.

> "I now sell my trees countrywide, empower people to open nurseries and create jobs."

Jacob Kiriungi
Founder, Umoya Tree Nursery, Tharaka Nithi

Self-sufficiency

The project's innovative carbon credit system has created a sustainable revenue stream for farmers, with 80% of the credit value flowing directly to them, providing significant supplementary income.

This income has enabled farmers to invest in farm improvements, education, and other development priorities, creating a positive cycle of economic growth and increasing their financial security.

Farmers have reported substantial increases in disposable income through a diversified production system, reducing seasonal income fluctuations. Sustainable practices have lowered input costs, and carbon credit payments provide predictable additional income, further improving profit margins.

Community financial institutions have evolved in response to the project, with farmer groups establishing savings and credit systems to help manage increased incomes. These local financial mechanisms have improved access to credit for agricultural investments and supported small business development within the community.

The project has also generated significant employment opportunities, In Embu, VBAs mainly earned from aggregating farm outputs (41%) and input market linkages (34%). In Tharaka Nithi, spraying (69%) and machinery services (59%) were the top earners supported by agroforestry ecosystem services.

Women's empowerment has been a key outcome, with 69% of women practising agroforestry in Embu and 47% in Tharaka Nithi hence generating income from diverse sources, such as fruit sales, seedling production, and carbon credits. This economic empowerment has led to more women participating in community decision-making processes, strengthening their roles in the community.

The project has strengthened social cohesion through group-based knowledge sharing, collective marketing, and mutual support, enhancing resilience to challenges. Market development has established linkages for agroforestry products, improving bargaining power and access to premium markets.

Financial literacy and business training have improved farmers' decision-making and financial planning. 98.4% of VBAs in Tharaka Nithi and 91.2% from Embu County keep records, a positive indicator of their committment to maintaining reliable data across different seasons.

> "I onboarded more than 150 farmers. Some of those who received carbon credits used the money to pay school fees, purchase more fruit trees with the aim of selling fruits in the future, while others purchased seeds."

Simeon Kanampiu
Village-Based Advisor

Simeon Kanampiu at his farm in Tharaka Nithi. Photo: Farm Africa/ Bertha Lutome

69%, 47%
women farmers practice agroforestry in Embu and Tharaka Nithi Counties

98.4%, 91.2%
Villaged-Based Advisors keep records in Tharaka Nithi and Embu Counties.

(Top right) Jacob Kiriungi at his tree nursery. Photo: Farm Africa/ Bertha Lutome

How tree planting transforms land

Farmers are encouraged to plant more trees to improve soil, biodiversity, and incomes through carbon credits and tree products.

Farmers from Embu County with tree seedlings. Photo: Bertha Lutome.

The tree planting initiative in Embu and Tharaka Nithi counties has gained significant momentum, fostering a culture of sustainability and environmental stewardship among both young and elderly farmers.

This project encourages the integration of trees into farming practices, with farmers receiving a variety of seedlings, including fruit and ornamental trees, to diversify their agricultural practices. This transition from monoculture farming to agroforestry is having a profound impact on both the environment and the economic opportunities available to farmers.

Why farm with trees?

Farming with trees offers numerous benefits. Environmentally, trees play a crucial role in preventing soil erosion, as their roots hold the soil together, reducing the risk of floods. This is particularly important in the regions of Embu and Tharaka Nithi, where heavy rainfall can easily lead to soil degradation.

In addition, trees improve soil fertility by adding organic matter, enriching the soil's nutrient content, and enhancing its ability to retain moisture. This is vital for crop production, especially in areas that experience varying rainfall patterns.

Beyond environmental advantages, agroforestry brings agricultural benefits as well. Trees provide shade, which helps protect crops from the harsh effects of direct sunlight, reducing crop stress and improving yields.

Moreover, the introduction of trees increases biodiversity, creating a balanced ecosystem that supports the growth of various plant species and attracts beneficial insects. These insects, including pollinators, help protect crops from pests and diseases, ensuring healthier plants and higher productivity.

Farmers in Embu County participating in tree distibution exercise. The exercise which took place in Embu and Tharaka Nithi Counties saw more than 5,000 farmers receive fruit, ornamental and agroforestry tree seedlings. Photo: Bertha Lutome

How do farmers get paid?

As trees grow and absorb carbon dioxide, they generate Carbon Removal Units (CRUs), which can be sold to companies offsetting their carbon emissions. This provides farmers with an additional income stream, along with earnings from selling other tree products.

Impact

The Farm Africa Agroforestry project in eastern Kenya has demonstrated remarkable success in creating transformative impacts across environmental, economic, and social dimensions. Through its innovative approach combining carbon finance with sustainable agriculture, the project has achieved significant environmental gains while improving livelihoods and strengthening community resilience.

The project contributed to climate change mitigation by reducing emissions by 24,945 tCO2e and facilitating the sale of 24,945 Carbon Removal Units (CRUs). These efforts improved soil health, with soil organic matter increasing by 30-50%, enhanced water retention, and a 20-40% reduction in fertiliser needs, resulting in cost savings for farmers. Agroforestry systems created microclimates that protect crops, boost biodiversity, and improve ecosystem functions through better water infiltration and reduced runoff.

Economically, the project has been transformative. The carbon credit system, with 80% of the value going to farmers, has provided a reliable income stream.

24,945
Carbon Removal Units (CRUs) sold

Agricultural productivity also improved, with Rosebeth's bean yield rising from 20kg to 88kg and maize production growing from eight bags to 18 bags per acre.

The creation of tree nurseries has been another key economic outcome, particularly in providing employment opportunities. Vuma Tree Nursery, for example, now employs six full-time workers and has expanded from 5,000 to 130,000 seedlings in just seven months, offering sustainable job prospects, especially for young people in the region.

The project enrolled 21,658 farmers, building community through knowledge-sharing groups. Village-Based Advisors spread best practices and conservation techniques. Women gained economic independence and a stronger voice in decision-making, demonstrating the project's potential to scale up both environmentally and economically.

The diverse production systems have created income opportunities, particularly for women. Youth engagement in agriculture has risen, as modern farming techniques attract younger generations.

"My family is financially and food secure, based on the number of fruit trees that I have planted alongside the cash crops."

Peter Kabuthe
Farmer, Embu County

Photo: Farm Africa / Bertha Lutome

Building capacity and expertise

The training and awareness component of the project represents a comprehensive capacity building programme that combines traditional knowledge with modern agricultural science and environmental conservation principles. This multifaceted approach has created lasting impact through behavioural change and skill development among participating communities.

Project council

The governance structure of the project council is composed of Super Village-Based Advisors (VBAs), local administration, and technical officers from the Department of Agriculture. Farmers are organized into groups, each consisting of 20 to 25 farmers, with each VBA overseeing 10 to 12 farmer groups. Within each farmer group, a chairperson is responsible for scheduling and communicating farming meetings to the VBAs, in alignment with the farmers' schedules.

The communication channels between the VBAs and farmers include meetings, training sessions, farmer field days, and existing WhatsApp groups. On average, each Super VBA represents 10 to 12 VBAs, with each VBA supporting approximately 200 farmers.

Communication with project participants is facilitated through the Village-Based Advisors, who, as members of the local community, have a deep understanding of the needs of

the farmers they serve. These advisors play a crucial role in providing last-mile delivery of inputs and services.

Building on lessons learned during the first year, the project has enhanced its communication and governance structures by incorporating Super VBAs as representatives and advisors for the VBAs and members of the council. This revision aims to further strengthen the decision-making process, ensuring it is inclusive of the farmers' perspectives. During project council meetings, the VBAs gather input from farmers, and these insights, along with other project-related topics, are discussed by various stakeholders to make decisions that reflect the needs and views of the farmers.

To continue improving communication and participant engagement in decision-making, the governance structure will undergo further updates to ensure broader involvement and greater transparency.

Capacity building VBAs

In collaboration with the technical teams from the County Department of Agriculture and Environment, the project has developed a comprehensive training program based on a cascading model of knowledge transfer. Village-Based Advisors (VBAs) serve as the primary knowledge disseminators within their communities. These VBAs undergo intensive training in agroforestry techniques, sustainable agricultural practices, and climate change principles. Their responsibilities extend beyond technical training, encompassing community mobilization and continuous support for participating farmers.

The curriculum development process is highly participatory, integrating input from farmers, local knowledge, and scientific expertise. This approach ensures that the training materials are relevant, practical, and culturally appropriate. The curriculum covers a broad range of topics, from fundamental agroforestry principles to advanced carbon credit mechanisms, providing farmers with a comprehensive understanding of all aspects of the project.

Impact

The impact of this enhanced governance and training approach has been significant in fostering greater community engagement and empowering farmers with the knowledge and skills needed to improve their agricultural practices.

By utilizing Village-Based Advisors (VBAs) as primary knowledge disseminators, the project has created a strong, sustainable knowledge-sharing network that ensures information is effectively communicated at the grassroots level.

The comprehensive, participatory curriculum has not only equipped farmers with practical and relevant skills in agroforestry, sustainable agriculture, and climate change mitigation but has also built their capacity to engage in innovative practices such as carbon credit mechanisms.

This model of training and governance has led to increased farmer participation, stronger community ties, and improved adoption of sustainable agricultural practices, ultimately contributing to enhanced productivity, resilience, and environmental stewardship.

Pius Munene a farmer from Embu County at his farm. Photo: Farm Africa / Bertha Lutome

Lessons learnt

The agroforestry project highlights the importance of financial incentives, local leadership, and training. Sustainable agroforestry requires long-term commitment, with returns taking time.

❯ **Financial incentives drive adoption and sustainability**

The project demonstrated that direct financial benefits through carbon credits (with 80% going to farmers) provide powerful motivation for farmers to adopt and maintain agroforestry practices.

❯ **Diversification enhances resilience and income security**

The project showed that diversifying crops like tea, coffee, avocado, and macadamia, along with carbon credits, creates multiple income streams, reducing financial risk and increasing farm resilience.

❯ **Local leadership and knowledge transfer**

The Village-Based Advisor (VBA) model proved highly effective for sustainable knowledge dissemination. Rosebeth's experience as a VBA, where she educated over 1,000 farmers, demonstrates how local leadership can amplify project impact and ensure continuity of knowledge within communities.

❯ **Youth engagement requires modern approaches**

The project showed that incorporating modern technologies and demonstrating clear economic benefits makes agriculture more attractive to young people. Simon Mwangagi's tree nursery illustrates how agricultural initiatives can create appealing career paths for youth.

❯ **Long-term commitment is essential**

The project highlighted that agroforestry requires patience and sustained commitment. Initial investments in tree planting and training may not yield immediate returns, but as demonstrated by the success stories, the long-term benefits – from improved soil health to carbon payments and increased yields – justify the initial waiting period.

Conclusion

The Farm Africa Agroforestry project in eastern Kenya effectively combines climate action, sustainable agriculture, and community development. It achieved emissions reductions of 24,945 tCO2e and sold 24,945 Carbon Removal Units, improving yields, diversifying income, and providing financial benefits to farmers.

Through the Village-Based Advisor model and farmer groups, the project ensures sustainable knowledge transfer. It has attracted youth to agriculture and empowered women, promoting social equity.

Grevellia tree seedling at Umoya tree nursery. Photo: Farm Africa / Bertha Lutome

By blending traditional farming with carbon markets, the project offers a replicable model for other regions.

The success in Kenya demonstrates that agroforestry, supported by carbon finance and community engagement, can address climate change and promote rural development.

Peter Kabuthe's story

Peter Kabuthe at his farm in Embu County. Photo: Farm Africa / Bertha Lutome

Peter Kabuthe's desire to conserve the environment and generate more income through farming has transformed his life dramatically.

The 60-year-old father of two from Embu County in Kenya practised monocropping on the same piece of land year after year. His journey, however, took a turn when he discovered the advantages of cultivating his six-acre piece of land with tea, coffee, avocado and macadamia trees and using new sustainable farming techniques to secure financial security and environmental sustainability.

Peter recalls the early years of farming when he faced reluctance from local tea buyers who did not advocate for intercropping tea with other crops.

"Initially, some tea buyers did not want us to mix tea with other crops or trees but they later encouraged us to do so after some time. Farm Africa through the Acorn project also trained us on the benefits of planting fruit trees and other crops on the same piece of land. With this, I know that if tea does not give me enough money, then

macadamia and avocado will do so. They offered me 50 avocado tree seedlings; I now have 100 avocado trees. I will add more so that my farm becomes a demo farm," says Peter.

In 2023, Peter's commitment to sustainable farming was rewarded when he was enrolled into the carbon credits programme and received payments in two instalments.

"I used the money that they paid me to purchase a 50kg bag of organic fertiliser and six bags of cow food, and employed three temporary workers to plant the tree seedlings for me, hence increasing the number of workers to 13. Now that I have 400 macadamia seeds, I am hopeful that my harvest will increase from six tonnes to 10 tonnes, hence creating more revenue and employment," Peter asserts.

Peter's desire is to nurture more young people in the region to plant trees, so as to fill the gap on lack of enough mentors for young people interested in agroforestry.

Rosebeth's increased productivity

Rosebeth Karauki, a 42-year-old mother of four from Mwimbi ward in Tharaka Nithi County has rebuilt her life, following her connection with Farm Africa and the Acorn project. Her transformation journey is evidence on how continuous training sessions on sustainable agricultural practices lead to job creation and boost food security.

Her engagement with Acorn through Farm Africa began in October 2022. The connection prompted the green gram and millet farmer to expand her farming business by growing maize and beans, creating a kitchen garden, and rearing chickens and livestock. Her resilience and previous experience as a farm led to her appointment as a Village-based Advisor (VBA).

"The Acorn project has really helped me. I got into it in the first phase in March 2023 and it has made what was hard for me to achieve easy since I have received payment from the project.

Rosebeth has increased her network and expanded her market reach through onboarding of farmers into the project. Photo: Farm Africa / Bertha Lutome

> "The best thing is that the farmers themselves go round telling others about the benefits of trees and not cutting them down and therefore, more people receive knowledge without me being there"

When I was paid the first amount, I paid school fees for my child, now she cannot stay out of school. My other child was joining campus when another payment was made. I used all that money to purchase a laptop for her. Then I used another payment to buy my daughter a phone.

The other money that will come in soon will be used to pay school fees for my children who are in primary school," says Rosebeth.

Furthermore, her role as a VBA has led to change in the community since she has educated more than 1,000 farmers on the importance of incorporating trees with other crops. This move has seen the majority of farmers from her region receive carbon credits.

"I am happy to be a VBA because I talk to so many farmers and encourage them to plant trees. The area is dry but most of them practise mulching. I have received success stories from many farmers who were paid carbon credits and managed to pay school fees for their children. This has motivated them to plant more trees and has also inspired those who were not recruited into the programme to seek recruitment," explains Rosebeth.

Rosebeth's farming career experienced a transformation from practising regenerative agriculture, which allows inter-cropping systems of maize and high-yielding, nitrogen-fixing climbing beans. She also trains farmers on the preparation of kitchen gardens.
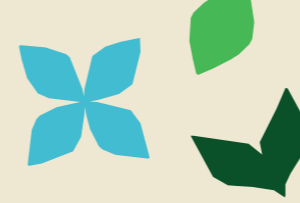
Simon creating employment while fighting climate change

Simon Mwangangi, a 32-year-old computer scientist from Embu County in Kenya, is the visionary behind Vuma Tree Nursery. He felt drawn to his passion for climate action and tree planting in defiance of his academic background. This zeal prompted him to establish a flourishing tree nursery that now plays a powerful role in combatting climate change and creating employment opportunities for young people in the region.

Located on a one-acre piece of land with little access to water, Vuma Tree Nursery hosts over 40 varieties of trees, with more than 130,000 tree seedlings. The nursery is categorised into agroforestry, fruit trees and ornamental trees, each serving a unique environmental and economic purpose.

"I decided to be in agroforestry because I will create job opportunities. This tree nursery is less than a year old, and I have already employed

six people who work here daily. When additional labour is required, the capacity increases to more than ten workers in a day," Simon explains.

The nursery's impact goes beyond employment. Simon takes pride in seeing people purchase tree seedlings, especially in a dry region like his. "I am sure that I am playing a big role in the fight against climate change, and feel very motivated when people purchase tree seedlings from me despite this part of the region being very dry. I am convinced that they have the desire to make the county greener and better."

Support from Farm Africa and Acorn

The Agroforestry project by Farm Africa and Acorn has been instrumental in Simon's success, particularly in marketing his tree seedlings.

Starting with just 5,000 seedlings and two employees, Simon gradually expanded to 130,000 seedlings and six full-time workers within seven months. He emphasises the importance of prioritising fruit trees over timber trees for long-term environmental impact. "I realised that if we focus on indigenous trees, people will one day cut them down for charcoal or income. But fruit trees are different; they are less likely to be cut because they offer ongoing benefits and therefore, people will leave healthy lives and earn a living from selling of fruits," he explains.

His forward-thinking approach ensures the longevity of tree cover while offering sustainable economic returns. Looking ahead, Simon envisions Vuma Tree Nursery as a platform for large-scale employment and environmental impact. "In the next five years, I see myself employing close to 100 people with tree nurseries spread across five sub-counties," he shares.

Simon encourages young people to consider agroforestry as a workable career path and seek guidance from people who have succeeded from venturing into to business. His story is evidence of how Farm Africa and Acorn can drive meaningful change in both livelihoods and environmental conservation.

> "In the next five years, I see myself employing close to 100 people with tree nurseries spread across five sub-counties,"

Simon at his tree nursery. Photo:Farm Africa/ Bertha Lutome

(Bottom right) Simon Mwangangi and his employees at the tree nursery in Embu County. Photo: Farm Africa/ Bertha Lutome.

Bonfree Mugambi at a farm in Embu.
Photo: Farm Africa/ Bertha Lutome

Address:

Devsons Court, Apartment 09,

Argwings Kodhek Close, Hurlingham, Nairobi, Kenya.

www.farmafrica.org

infokenya@farmafrica.org

+254 721 576531

FARM AFRICA