

Kakuzi Production Overview

Kakuzi PLC's diverse agriculture portfolio also includes forestry, livestock, arable, and blueberry operations. Additionally, the tea operations in Nandi Hills also contribute to the business ESG footprint.

Below is a comprehensive breakdown of output from each of our production divisions.

Products	2021	2022	2023
Macadamia Production	492 tonnes	659 tonnes	600 tonnes
Avocado Production	8,468 tonnes	14,231 tonnes	14,140 tonnes
Tea Production	1,665 tonnes	1,495 tonnes	1,817 tonnes
Blueberry Production	42 tonnes	28 tonnes	12 tonnes
Livestock Production	4,397	4,065	4,506
Commercial Forestry	1,553ha	1,591ha	1,600 ha
Boma Rhodes Hay Bales Production	55,798	268,255	134,927





Avocado Farming

The area dedicated to avocado production has increased by 24%, growing from 798 hectares to 987 hectares over the past five years. This expansion is driven by our conversion from pineapple to avocado production.

These varieties have helped the company extend the harvesting seasons from April to September, with Pinkerton and Carmen being early-maturing fruits whose season starts in February. This has enabled Kakuzi to produce much more fruits for both local and international markets.

During the year, the company undertook internal maturity testing at its Quality Control Room within its Global GAP-certified Packhouse in Makuyu to ensure that it complied with the prescribed maturity and related market access standards. The avocado production is Halal, SMETA, GLOBAL GAP, GRASP, SPRING and Rainforest Alliance certified, while the avocado packhouse is FSSC 22000 and hallal certified.

This has helped Kakuzi's avocados to secure a favourable position in the international market for quality production. The company is committed to maintaining this status through a strict adherence to phytosanitary, environmental, social, and governance standards across all its operations.

Through the extension services department, Kakuzi provided free maturity testing services to smallholder farmers to ensure that only avocado fruits with a minimum dry matter standard of 24% were harvested. Additionally, the department has been training smallholder farmers on good agricultural practices, economically empowering them and their households, ultimately strengthening the country's economy.

In the avocado orchards, Kakuzi has implemented sustainable farming practices to minimise environmental impact. These practices include efficient water management, soil conservation, integrated pest management, and responsible use of chemicals. Kakuzi ensures full control over the entire value chain, providing complete traceability and delivering a high-quality product from seedling to plate.

We continue to explore sustainable solutions, such as using biological products for pest and disease control and implementing pruning techniques for more efficient operations. In 2023, through trials led by the Technical Department, we increased the exportable portion of the avocado, known as the pack-out, from 80% to 85%. We also work closely with various government bodies to undertake product trials to assist the national avocado industry.



Case Study: Free extension services lead to more production and income for Mr Murigi

As the avocado craze swept through the Mt. Kenya region a few years ago, Francis Murigi from Makuyu in Murang'a County made a strategic shift to Hass avocado farming. This variety enjoys a competitive export market and offers favourable pricing, motivating farmers like Murigi to capitalise on its potential.

His avocado journey started in 1997 on a two-acre piece of land he had bought at Punda Milia in Makuyu. He started by planting five Fuerte avocado seedlings, an old variety in Kenya that is often seen as the standard avocado. Only two survived, and the rest were destroyed by goats. "I initially started with the Fuerte variety, and I only planted five trees. Only two survived. At that time, Kakuzi had not introduced the avocado farming programme for smallholder farmers," Murigi said.

When the two trees matured and started producing fruits, he discovered their huge economic potential. Brokers were moving from farm to farm looking for matured fruits, and farmers who had ventured into farming earlier were reaping the rewards. "I decided to add more trees (the same variety)," he said.

However, he lamented that, despite the promising benefits, and after literally labouring to take care of the trees and even grafting them with the new Hass variety, he had no profits to show because there were people who were more informed than him who took advantage of his lack of knowledge.

"I used to sell the fruits to brokers at a throwaway price. Later I came to learn that they were making a killing. They took advantage of me," he said. This changed when Murigi joined the Kakuzi avocado smallholder programme four years ago. This initiative aims to economically empower avocado smallholders by teaching them improved agronomic practices, technical assistance, and international market standards. "That was when I realised that avocado farming would be more profitable than the food crops, I was planting," he said.

He added that since joining the Kakuzi programme, he has been enjoying free extension services, which have translated into better crop husbandry and output, resulting in more income from avocado farming. Further, Kakuzi extension officers have been visiting his farm regularly, offering training sessions in line with the international market requirements.

Currently, Murigi has a total of 40 Hass variety trees which he has integrated with other food crops like maize and beans in his farm. Thirty of these trees are mature and actively producing fruits. In 2023, he harvested about 14,140 tonnes of fruits, which he delivered to Kakuzi. "These avocado trees are a godsend because of the high returns I have been getting lately from the investment," said Murigi.

"Payments are made in two instalments; the first payment is made within seven days of delivery of fruits while the second payment (bonus) is paid at the end of the year. This is advantageous to me as I am assured of a steady income twice a year," he said. The second payment is a profit share and is market related.



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Macadamia Production

Spanning over 1,356 hectares of fertile land, these orchards are increasing in their production as they mature. To improve production and reduce pest pressure a process of using an organic compost has been deployed. Macadamia husks are combined with other farm waste and composted on site. Once the correct level of decomposition has been achieved, this compost is taken back to the orchards to enrich the soil.

The nut shells are also not wasted, these find a new purpose as fuel for boilers or are sold within the local community as biofuel.

The dry season in Makuyu necessitates the use of irrigation to maximise macadamia yields. Approximately 30% more yield is achieved through the careful use of irrigation. By implementing effective water conservation techniques like rainwater harvesting and dam storage, we can avoid the depletion of rivers and precious groundwater resources. With a focus on precision and innovation, we have been able to reduce our water consumption by 20% within Kakuzi's Macadamia Division.

Through embracing the principles of a circular economy, we are constantly looking for ways to maximise resource utilisation and minimise waste in our macadamia production processes. So far, we have successfully repurposed macadamia waste and converted damaged kernels into animal feed. This not only generates additional revenue streams but also helps repurpose waste and promote environmental sustainability.

We remain committed to teach aspiring farmers the techniques to grow the same crops we do but importantly, what they need to do if they want to access high value markets. Currently we work with three local self-help groups to promote quality macadamia production in the surrounding communities.

Our macadamia division employs 600 to 700 workers, with a significant majority being women. We prioritise employee well-being through our comprehensive training programmes covering health, safety, substance abuse awareness, and sexual harassment awareness and prevention.



Case Study: Food Security Enhancing sustainability through Macadamia Oil Production



Edible oil production from Kenyan grown crops can boost food security but importantly reduce our dependence on imported edible oil. Given the scale of macadamia cultivation in Kenya the ability for this to become a major source of healthy edible oil is undeniable.

Process of Macadamia Oil Production

The process of macadamia oil production involves a series of carefully orchestrated steps, starting with the selection of the correct kernels and ending with the final packaging of the extracted oil. Through cold pressing and filtration, Kakuzi PLC ensures that only the highest-quality oil reaches consumers, emphasising purity and premium product standards.

Significance of Macadamia Oil Production

Beyond the tangible benefits of revenue generation, the production of macadamia oil holds strategic importance for Kakuzi PLC and we believe, Kenya.

Import substitution, reducing 'food miles', healthier oil sources and potentially providing better incomes for local farmers for their macadamia nuts could have a significant impact on rural communities. We believe in time that Kakuzi can assist farmers' groups to produce their own oil and enter the market as a complement to what is already produced. Economic empowerment and community development driven by a thriving macadamia industry is an aspiration we hold.

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Bees and Honey Production

By strategically placing beehives within the orchards, Kakuzi not only supports vital pollination processes but also generates additional income through honey production.

Bees play a crucial role as pollinators, ensuring the success of crop yields and contributing to environmental conservation. The presence of active bee populations serves as an indicator of a healthy ecosystem, and promotes food security.

Through engagement with local communities, Kakuzi promotes sustainable beekeeping practices while empowering communities through expertise, training, and donated beehives. These efforts contribute to environmental conservation and economic empowerment, aligning with Kakuzi's ethos of responsible agricultural practices.

In addition to traditional methods, Kakuzi plants sunflowers around the beehives, providing alternative food sources for bees during avocado non-flowering periods. This innovative approach ensures hive retention and promotes biodiversity within the orchards.

3,000
kilograms

Plans are underway to expand the beekeeping operation to 1,000 hives and production to 3,000 kg of honey by December 2024.





Blueberry Production at Kakuzi

Kakuzi's blueberry production endeavours have seen significant advancements, particularly with the introduction of new blueberry varieties aimed at enhancing yield and quality. The transition from the initial cultivar (Stella Blue) to newer varieties has proven fruitful, with yield and quality targets being met and promising projections for growth in 2024.

Cultivation practices have evolved to ensure optimal conditions for blueberry plants, with cultivation taking place under polytunnels. This system allows for greater control over environmental factors, resulting in higher yields of superior-quality fruit.

Innovative practices such as hydroponic cultivation in pots minimises water usage, with rainwater also being utilised in the irrigation process. Stringent sorting and packing procedures ensure food safety and quality.

In terms of market distribution, exports account for 65% of production, with the remaining 35% serving the local market and neighbouring regions, including Nigeria, Ivory Coast, and Eastern and Central Africa.

As we continue to grow, we are refining our blueberry production processes, and we remain dedicated to fostering sustainable practices and delivering premium-quality products to both local and international markets.

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Commercial forestry

Kakuzi manages a diverse range of forestry activities across 1,600 hectares of commercial forestry and 300 hectares under indigenous trees. The main trees planted are Eucalyptus grandis, which serve as the core component of our operations. Annually Kakuzi harvests and replants approximately 70 hectares of blue gum, ensuring sufficient volume for production while maintaining sustainability.

Kakuzi's forestry products include sawn timber and sustainability grown round poles, which are used for various applications such as building construction, furniture manufacturing, and fencing. Additionally, the company engages in community partnerships through its Company Community Partnership (CCP) programme, producing furniture for local communities.

Impact

6,000 to 7,000 cubic meters of round poles are sold annually and 1,000 to 1,500 cubic meters of sawn timber are sold annually and sustainably grown.

Our strategic approach to environmental sustainability in commercial forestry includes planting Eucalyptus away from water sources and enriching riparian areas with indigenous species. This practice not only mitigates the Eucalyptus's water consumption impact but also contributes to biodiversity conservation. Additionally, our forestry operations support local communities by providing employment opportunities, particularly during peak seasons when up to 500 employees are directly employed. Additionally, the company engages in community development initiatives, such as the Nginye Valley reforestation project, which aims to enhance indigenous forests and important water catchments.

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Livestock Keeping

In 2023, we maintained a relatively constant number of cattle with average sales of 800 head. The growing demand for our livestock products has prompted us to enhance our grazing conditions. By ensuring feed availability year-round, we are committed to maintaining a healthy herd, which is essential for our continued success.

We recognise that our livestock herd is the largest contributor to our carbon footprint, however, the importance of this venture to our operations requires us to continue and mitigate this through our other agricultural operations.

Our livestock operations play a crucial role in maintaining water catchment areas for all our dams, which serve as a water source for our main crops. Additionally, livestock helps create a balanced ecosystem by ensuring that both plant and animal populations are in harmony. We employ mobile night enclosures, known as mobile bomas, to evenly distribute cattle manure across the land. This practice improves soil fertility, soil health, and biological diversity.

We undertake livestock breeding, ensuring that all our animals are born and raised on the farm. To ensure sustainability, we maintain an equal annual number of births and sales. From birth to slaughter, we track our animals through a robust record-keeping system. This system includes assigning an ID number to each animal for easy identification and recording of all actions taken. We maintain a computer system to facilitate easy traceability.

As part of our value addition efforts, we established an eatery called the "Boran Barn." In partnership with local entrepreneurs, this only sells our own grass-fed meat.

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Tea Production

During the year, Kakuzi maintained 510 hectares under tea production, sustaining the same area as in 2021 and 2022. Our performance indicators and targets for the tea division were achieved and surpassed, particularly in areas related to environmental conservation, workforce productivity, fleet efficiency, crop yield, and social programmes.

In our commitment to enhancing workforce productivity, we established a grievance reporting mechanism to address employee concerns. During the year, we planted 1,568 indigenous trees in tea fields to control soil erosion and minimise soil disturbance.



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