

Kakuzi production overview

Kakuzi PLC has a diverse agricultural portfolio that contributes to the business's ESG footprint. Below is a comprehensive breakdown of output from each of our production divisions.

Products	2022	2023	2024
Macadamia	372 tonnes	600 tonnes	723 tonnes
Avocado (Own Estate)	14,231 tonnes	14,140 tonnes	12,537 tonnes
Tea	1,495 tonnes	1,817 tonnes	2,009 tonnes
Blueberry	28 tonnes	12 tonnes	56 tonnes
Livestock	4,065	4,506	4,290
Commercial forestry	1,591ha	1,600ha	1,656ha

Macadamia Production

In 2024, Kakuzi expanded its macadamia production area from 1,356 ha to 1,404 ha, increasing output to 723 tonnes, up from 600 tonnes in 2023. This growth was driven by land expansion, improved agronomic practices, and the maturation of previously planted orchards. Our projection for 2025 is to increase the production volume to between 800 and 850 tonnes.

Year	Production Area (ha)	Output (Tonnes)
2023	1,356	600
2024	1,404	723

Sustainable Agricultural Practices

We sustained higher macadamia yields in 2024 compared to 2023, while promoting sustainability through responsible pest control, soil health enhancement, and efficient water usage.

For pest control, we conducted regular field

inspections to monitor pest pressure. Biological control methods were the preferred intervention, with chemical pesticides used only when pest levels exceeded thresholds and no alternatives were viable.

We conducted soil and leaf nutrient analyses to support soil health and determine specific fertilisation needs. We applied natural fertiliser made from macadamia shells, which enhanced soil organic matter and significantly reduced reliance on synthetic fertilisers.

Water efficiency was achieved using micro-sprinkler irrigation systems. These systems ensured precise water delivery to each tree's root zones, minimising water wastage and supporting optimal tree health.

Circular Economy Initiatives

We continued promoting circular economy





principles within our macadamia operations. While macadamia husks were returned to the fields for organic fertiliser, the hard shells were used as biomass fuel in the drying process.

Additionally, cut grass from the orchards was left to decompose on-site, enriching the soil and increasing organic matter content.

These practices reduced waste and supported environmental conservation, which is consistent with our broader sustainability strategy.

Our integrated approach enabled the development of multiple product lines and revenue streams, enhancing profitability within the macadamia division.

Raw macadamia nuts were primarily exported to international markets. In contrast, value-added roasted nuts available in salted, non-salted, honey-coated, chips cereal mix, and fine flour variants, were distributed within the local market. Furthermore, other grades are processed into macadamia oil, a premium product that allows us to minimise waste and increase overall income.

Value Addition and Market Diversification

Product Type	Target Market	Notes
Raw nuts	Export	US, Europe, China, Japan, Middle East
Roasted variants	Local	Salted, non-salted, honey-coated, cereal mix and fine flour
Macadamia oil	Local & niche	From our orchards produce



Avocado (Own Estate) Production

In 2024, Kakuzi recorded an avocado production volume of 12.5 million tonnes, a decline from 14.15 million tonnes in 2023. This drop was mainly attributed to excessive rainfall during the April–May long rains, which led to waterlogging and tree mortality, particularly in newly established orchards.

Traceability and Risk Analysis

Traceability remains a critical aspect of our avocado operations. Each orchard maintains detailed records of pest and disease control, fertiliser applications, and chemical use. This practice enables full traceability from farm to market, maintaining consumer trust and product integrity.

The Company proactively conducts risk analysis, beginning with Maximum Residue Level (MRL) testing before harvest to verify that no chemical residues are present and hygiene protocols are implemented throughout the packhouse. We also vet our suppliers, requiring them to demonstrate accredited processes and retain product samples to monitor fruit condition during transit. In the unlikely event of a quality issue, we have a robust product recall system. Notably, no product recalls were reported in 2024.

Smallholder Engagement

We work directly with contracted smallholder farmers, bypassing middlemen and marketing agents. This approach provides farmers with direct benefits and fair compensation. We offer farmers regular training and capacity building to improve agronomic practices. Furthermore, we conduct pre-harvest maturity checks to verify that fruit meets market requirements before harvesting begins.

Sustainable Farming Practices

Kakuzi practices Integrated Pest Management (IPM) in all avocado orchards. The IPM system incorporates biological control methods, sex pheromones to disrupt pest breeding, pruning for improved tree aeration, and carefully timed cover sprays with appropriate pre-harvest intervals to minimise chemical residues.

Soil health is preserved through calculated fertiliser application based on crop needs. Organic matter, such as pruning and fallen leaves, is left under trees to decompose, enriching the soil and reducing the need for synthetic fertilisers.

Practice	Purpose
MRL testing	MRL testing verifies chemical-free harvests.
Hygiene protocols	Maintain food safety standards
Product recall procedures	Enable a timely response to quality issues
Supplier vetting and sample retention	Monitor post-harvest quality and transportation risks





Water Use Efficiency

Our avocado orchards are fully equipped with micro-jet irrigation systems. Each tree has a dedicated micro-sprinkler delivering water directly to the root zone.

This system has significantly reduced water use while improving efficiency. Water application is tailored to the tree's growth stage: complete water replacement is applied during flowering, while water is reduced post-harvest to stress the trees and trigger flowering.

Kakuzi has invested in 19 earth dams that store up to 13 million m3 of rainwater annually, ensuring consistent water availability across seasons.

Growth Stage	Watering Strategy
Flowering	100% water replacement
Post-harvest	Minimal water to induce flowering

In 2024, 98% of avocado produce was exported, with the remaining 2% serving the local market. Our primary export destinations included France and the Netherlands in Europe, with secondary markets in China and India.

Kakuzi's export operations comply with local and international regulations. Domestically, the Company collaborates with the Horticultural Crops Directorate (HCD), the Kenya Plant Health Inspectorate Services (KEPHIS) for phytosanitary inspection and clearance, and the Kenya Ports Authority (KPA) for logistics. Internationally, we meet all destination-specific requirements, including mandatory pre-export fumigation for markets such as China. Packaging and handling procedures follow phytosanitary guidelines to maintain product integrity across all value chains.

Infrastructure and Expansion

Our packhouse is equipped with innovative fresh technology that preserves fruit ripeness and quality throughout the handling process. A dedicated on-site borehole and water tank support the availability of clean and sustainable water for processing activities. Our food safety systems remain robust and were validated. As part of our gradual expansion strategy, we plan to increase our avocado production area by 120 hectares over the next two years. In 2024, the total land under avocado cultivation stood at 963 hectares. This phased expansion strategy is designed to support business growth while ensuring environmental conservation and resource efficiency.

Tea Production

Kakuzi manages an expansive estate of 510 hectares of mature tea plantations in Nandi Hills, which form a central part of our agricultural operations. These tea plantations are carefully maintained, with ongoing replanting efforts to support long-term productivity and land rejuvenation.

We surpassed our 2024 green leaf target of 1,574.7 tonnes by producing 2,009 tonnes, an impressive 27.6% increase compared to the previous year.

Sustainability and Environmental Stewardship

Indigenous tree plantations across the estate are strictly protected from harvesting, and a five-year enrichment program to enhance biodiversity is underway.

The tea factory where our tea is processed is powered by renewable energy, with solar contributing 16% of the total energy mix in 2024.

Challenges and Future Outlook

In 2024, Kakuzi faced external challenges, including rising input costs for fuel and fertilisers, and climate-related disruptions.

Despite these hurdles, we implemented budgetary controls and adapted operations to maintain financial and production stability.

Area under cultivation

510ha

Output in tonnes

2,009



Blueberry Production

Blueberry production at Kakuzi grew by 36% in 2024, reaching 56 tonnes, a significant increase from 12 tonnes in 2023. This was driven by the strong performance of high-yielding varieties. These varieties have consistently produced high-quality fruit that meets the stringent requirements of international markets.

Market Distribution

Below is a breakdown of Kakuzi’s international and local markets’ export distribution of blueberries in 2024.

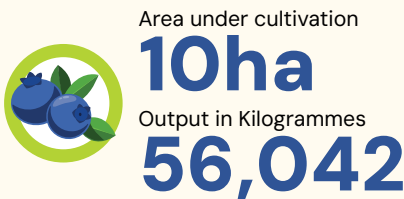
Market	Exported Quantity (Kg)
International	34,500
Local & Regional	21,542
Total	56,042

Post-Harvest Handling and Cold Chain Management

To maintain the premium quality and freshness of the fruit, Kakuzi implemented a strict cold chain management system. The time between harvesting and placement into cold storage is kept under 30 minutes. Once in storage, the berries are held at a consistent temperature of approximately 0.5°C until they are dispatched. This approach helps that the berries retain their freshness and quality throughout the supply and distribution process.

Traceability and Ethical Compliance

Traceability is established at the point of harvest. Each blueberry batch is labelled on-site with details such as the harvester, the packer, and the palletisation data. This system guarantees transparency and accountability throughout the supply chain. Planting materials are sourced from internationally accredited organisations that conform to global standards. Audits are conducted by certified bodies, including SMETA and GRASP, to verify ethical labour practices.



Integrated Pest Management

We have implemented an Integrated Pest Management (IPM) strategy to control pest populations sustainably. This includes maintaining field sanitation to eliminate pest hosts and deploying pheromones to trap and reduce insect pests. Using pheromone traps further supports pest control efforts and minimises the need for chemical interventions.

Water and Nutrient Management

For efficient use of resources, Kakuzi uses the NetaJet automated irrigation system. This system delivers precise quantities of water and nutrients directly to the roots, optimising plant health and minimising waste. Rainwater is harvested from greenhouse rooftops during the rainy season and stored in on-site dams for later use. Blueberry cultivation takes place on a substrate a soilless medium allowing for controlled water and nutrients application. This method is similar to hydroponics and can produce up to 30% higher yields than conventional soil-based cultivation.

Quality Assurance and Customer Service

Kakuzi has a well-established product recall procedure for blueberries. In the event of an issue, the affected product is promptly recalled and isolated. Depending on the nature of the issue, the product can be reworked or safely discarded.

The Company addresses customer concerns through product replacement or, where necessary, the issuance of credit notes. In 2024, only one customer case was reported involving the mishandling of 63 packets, which was satisfactorily resolved through product replacement.

Production Area and Future Expansion

Currently, Kakuzi produces blueberries on 10 hectares of land. Plans to expand this area systematically to 100 hectares over the next six to 10 years are in place. This measured approach to expansion is designed to maintain high production quality while effectively managing associated risks.



Beekeeping

As part of Kakuzi's deep-rooted commitment to sustainable agriculture, biodiversity conservation, and responsible production, beekeeping and honey production have emerged as key components of our ESG agenda. While still growing, beekeeping is essential in supporting crop yields, enriching natural ecosystems, and providing high-quality, traceable honey for the market. This is a perfect example of circular value creation within our agribusiness model.

Bees are strategically integrated into Kakuzi's avocado, macadamia, and blueberry orchards for honey production and, more importantly, as critical pollinators. In the blueberry blocks, we are piloting the use of stingless bees, which have proven to be highly effective in enhancing pollination outcomes in this delicate crop. The traditional honeybee continues to boost flowering success rates and improve fruit set, directly impacting quality and yield in our macadamia and avocado fields.

By maintaining over 3,263 hives across the Kakuzi ecosystem, including 776 in macadamia alone, we are committed to an environmentally sound method of pollination while producing a natural product with traceable origins.

Production Overview

In 2024, total honey production across all divisions stood at 1,974 kilogrammes. A total of 1,405 kilogrammes (1.4 tonnes) of processed honey was obtained from the hives in the macadamia orchards and the remaining from the avocado orchard and blueberry farm.

Metric	2024 Figures	2025 Targets
Bee Production (Processed Honey)	1,974kgs	2,800 kg
Total Hives across Kakuzi Ecosystem	3,263	3,500

Consistent Quality and Traceability from Farm to Market

Our honey production process is rooted in on-farm practices that protect product purity and ecological integrity. This is achieved by implementing key measures such as pre-harvest inspections of all hives to make certain that only mature honey is collected, free from immature bee larvae (manna). Additionally, the hive is well maintained for proper queen exclusion using regulation mesh to prevent egg-laying in honey chambers and regular pest control (against wax moths, ants, and honey badgers).

To maintain the integrity of nectar sources, foraging is directed primarily towards safe, pesticide-free flora such as macadamia flowers and natural vegetation. Pest control in surrounding orchards follows strict guidelines, using only approved substances, and is conducted during pollinator-safe hours—early morning or late evening. During the macadamia off-season, sunflowers and other nectar-rich crops are planted to for consistent bee nutrition throughout the year.

To further support colony health, accessible water points are positioned near hives, minimising stress and enhancing both pollination and productivity. Honey processing is carried out under stringent quality standards using manual spinners and approved sieves to remove wax and other contaminants, upholding a clean, traceable product from hive to shelf.



Traceability Measures

We trace every jar of honey back to its origin through a robust identification and documentation process. To achieve this, every hive is tagged with a unique code, e.g., KT/005/2024, indicating location (Kitito), hive number, and year of installation. Honey is then harvested, processed, and packed by field and batch, with detailed harvest logs maintained. Most importantly, packaging is marked with packing dates, and any customer complaints are traced back to specific processing events and locations.

Processing & Value Addition Techniques

Kakuzi exclusively sells processed honey, avoiding comb honey to enhance shelf life and quality. For quality purposes, we select mature honeycomb and spin it manually, which is preferred over electric, to maintain honey integrity. We add value by honey-coating macadamias, increasing profitability and product diversification. Kakuzi also sells the extracted beeswax to interested buyers, while some is reused to prime empty hives, reducing the need for commercial comb starters.

Worker Safety in Honey Production

Honey harvesting is typically conducted at night (up to 10:00 p.m.) when bees are less aggressive. For worker safety, we induct and train all staff on occupational risks, provide protective clothing, including full bee suits, gumboots, and leather gloves, and provide on-site security support during harvesting activities to prevent injuries or wildlife encounters.



To maintain the integrity of nectar sources, foraging is directed primarily towards safe, pesticide-free flora such as macadamia flowers and natural vegetation.



Livestock Keeping

Kakuzi's livestock operations have been part of our diversified agricultural business since the early 1980s. What began as a cattle production venture has since evolved into a multi-livestock enterprise that includes various livestock.

Our approach to livestock farming goes beyond commercial objectives. It is rooted in environmental stewardship, biodiversity conservation, and sustainable land management. Livestock farming supports our broader ESG goals by promoting regenerative agriculture, ecosystem balance, and community livelihood opportunities.

This focus aligns with our long-term strategy to operate responsibly in our environment while responding to evolving consumer preferences for diversified, safe, traceable meat products.

During the year, our total sales revenue from livestock amounted to KSh65,836,281, derived from both livestock and livestock product sales. The total livestock sales stood at KSh17,742,000, generated mainly from live cattle sold for breeding and genetics, slaughter, and casualty sales. On the other hand, the total sales from livestock products reached KSh48,094,281, with the majority of income

from value-added products such as butchery sales, milk, offals, hides, manure, and biltong.

Livestock Production Journey & Diversification

Kakuzi's livestock enterprise is built on a foundation of diversification and sustainability, with each livestock category playing a strategic role in both commercial output and environmental stewardship. Established in 1982, our cattle operation remains the core of our livestock activities, contributing to food production while promoting soil health through sustainable grazing practices.

In 2001, we introduced goat farming to support natural bush control. By allowing goats to clear undergrowth and invasive vegetation, we reduced reliance on chemical herbicides and enhanced biodiversity.

Most recently, in 2024, we expanded into sheep farming by acquiring 32 sheep from local suppliers. This addition aligns with our commitment to environmental management while meeting growing market demand for diversified meat products. Our approach to livestock is deliberate and integrated, ensuring that economic viability goes hand in hand with ecological responsibility.

Metrics & Performance — 2024 Livestock Production Overview

Livestock Type	Output in 2023	Output in 2024	Key Insights
Cattle	3,955	3,915	Slight production decline due to herd management strategies and environmental considerations.
Goat	551	343	Decline due to supply chain challenges and disease management interventions.
Sheep	N/A	32	Introduced in 2024 as part of diversification and environmental strategy.

Regenerative Grazing & Environmental Conservation

At Kakuzi, livestock farming is a key pillar of our regenerative agriculture practices. Our cattle, goats, and sheep are 100% grass-fed, contributing to natural land management and the restoration of soil health.

We gain multiple ecological benefits through regenerative grazing, including organic fertilisation via livestock manure, improved water infiltration and reduced runoff, and natural soil aeration from hooves. Additionally, we achieve effective bush control through targeted grazing by goats and sheep. This approach minimises the need for chemical inputs while promoting a resilient and biodiverse ecosystem.

Mobile Bomas: Enhancing Soil Fertility and Ecosystem Management

As part of our commitment to environmental conservation, we have adopted Mobile Bomas, portable livestock enclosures that facilitate rotational grazing across our land. These mobile units allow for the strategic movement of livestock, delivering key ecological benefits such as even manure distribution to enhance soil fertility, prevention of overgrazing and land degradation, improved pasture regeneration, and natural soil aeration through livestock movement. This practice is integral to our regenerative agriculture model, promoting sustainable land use while restoring ecosystem health and biodiversity.

Animal Health & Quality Control

We operate a structured animal health programme, underpinned by a computerised livestock management system that tracks treatment schedules, health monitoring data, and vaccination and disease management records. This system supports traceability and accountability, reinforcing our 'farm-to-fork' philosophy and helping provide consumers with safe, high-quality meat products.

Sustainable Meat Processing & Traceability

Kakuzi operates its own butchery, promoting a closed-loop, sustainable value chain — we produce what we sell.

Our products are sold through our Kakuzi Butchery and Boran Ban food outlets, which are Halal certified and regularly inspected by public health authorities.

In line with product innovation and diversification, we introduced *biltong* (dried meat snacks) in 2023 and expanded meat product offerings in 2024 by introducing sheep.

Social Impact & Employment

The livestock division employs approximately 190 staff members, including 12 women, reflecting our commitment to local employment and gender inclusion.

Looking Ahead

Our future livestock strategy is centred on scaling impact and sustainability. Key priorities include increasing sheep numbers to meet rising market demand, expanding the Mobile Bomas programme to cover broader grazing zones, and strengthening our animal health monitoring systems. We also aim to grow our range of sustainable meat products under the farm-to-fork model while leveraging livestock as a catalyst for environmental conservation, regenerative agriculture, and biodiversity enhancement.

By allowing goats to clear undergrowth and invasive vegetation, we reduced reliance on chemical herbicides and enhanced biodiversity.

Commercial Forestry: Sustainable Forest Management

Kakuzi's forestry division oversees 1,900 hectares of land, comprising 1,600 hectares of commercial forests and 300 hectares of indigenous forests. The commercial plantations are managed on a 10 to 12-year rotation cycle to support sustainable harvesting. These forests are a primary source of treated poles, timber, and pallets. In contrast, the indigenous forests are preserved with minimal human intervention to support biodiversity, natural regeneration, and long-term ecosystem stability.

We track the number of trees planted and their survival rates annually, with data captured by the compliance department. For instance, in 2024, Kakuzi planted over 20,000 indigenous trees, with a survival rate of 85% by the end of the year. This initiative is vital for biodiversity and helps restore ecosystems, particularly around the Thika River, which we have adopted for environmental management.

Production Output and Commercial Success

In 2024, the forestry division recorded notable commercial achievements in product output. Converting older plantations and adopting improved hybrid seeds led to higher yields and enhanced product quality. The division also secured a major order for transmission poles, which significantly boosted production volumes.

During the year, we achieved a total harvest volume of 25,112 m³ of timber. Out of this, 7,201 m³ were processed into treated posts and poles, and 13,631 m³ were used for firewood production. In addition, we produced 1,584 bags of charcoal, 956 m³ of sawn timber, and 14,489 pallets. Overall, our forestry operations focused on sustainable resource use and value addition through processing and diversification of forest products.



Quality Assurance and Regulatory Compliance

To uphold product quality and client confidence, the division offers a 12-year warranty on all treated poles and posts. A structured customer complaint resolution system is in place, capturing order numbers, supply dates, the nature of complaints, resolution steps, and client satisfaction.

In 2024, the division received two complaints. The first involved the drill bit size used on a batch of poles, which was resolved by dispatching a team to expand the holes. The second complaint concerned post-splitting and was addressed by educating the customer on proper handling techniques. These cases demonstrate Kakuzi's responsive client service and emphasis on post-sale support.

All forestry products meet the standards set by the Kenya Bureau of Standards (KEBS). Specifically, the division complies with KS 516:2020 for transmission posts and KS 1608:2020 for fencing posts, maintaining consistency and safety in all outputs.

Sustainable Timber and Charcoal Production

Our forestry operations also follow circular economy principles. After timber and poles are processed from eucalyptus trees, any unusable wood remnants are repurposed into sustainable charcoal. This charcoal is sold to staff and customers, sustainably supporting local energy needs. Additionally, the remaining wood is provided to the community for free, reducing their energy costs and supporting local livelihoods.

Area under Commercial forests

1,600ha

Area under Indigenous forests

300ha



20,000

indigenous
trees planted

