



Food and Agriculture
Organization of the
United Nations



Hand-in-Hand
Initiative

Investment Opportunities in Kenya's Coffee Sector

HIH Investment Forum 2026



Kenya Coffee Sector in 2026 HIH Initiative – Progress Since 2024 & 2025 Side Events

Public Investments in Coffee Seedlings – US\$3.9M (Distribution of 1.3M seedlings to farmers)

Establishment of Coffee Revitalization Programme

US\$1.28M FAO & UNIDO Joint Project on Sustainable Coffee Value Chain (Production, productivity, digitization, Market Access & circularity)

€91.35 million Climate Resilience Coffee–Kenya Project under approval by the Italian Climate Fund, with implementation by UNIDO

Enactment of Coffee Act 2026 (Revival Board of Kenya under the Act, Coffee Research Institute & Coffee Research Fund)

Completion of Mapping of Farmers for EUDR Compliance

US\$39.8M Master Card Foundation CASHA Livestock Project

US\$ 23M Deus Animal Feed Plant

US\$1.03M government investment in ANITRAC infrastructure, traceability, connectivity, and institutional readiness.



Kenya' Macro Economic Environment



Key Macro Indicators

- GDP - US\$130+billion (Largest in East African, 6th in Africa)
- Reals GDP Growth - 5.0% (2025) 5.4% Projected for 2026
- Inflation: 4.1% average 2025 | 4.4% Qtr 1 March 2026 – within CBK 5% +/-2.5% target
- Central Bank Rate: Held at 8.75% (April 2026) – eased from 13% in late 2024
- Forex Reserves: US\$13.7 billion (approx.5.8 months import cover)

Strategic Strengths

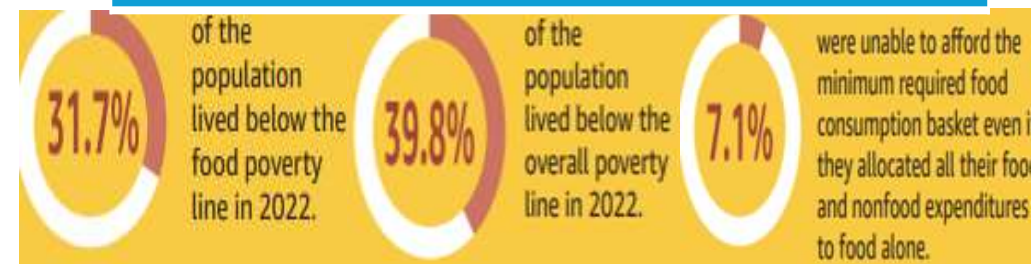
- ✓ One of Sub-Saharan Africa's most diversified & resilient economies
- ✓ Regional hub for finance, logistics, transport, transport & trade (gateway to EAC, COMESA & AfCFTA)
- ✓ Liberal, free-enterprise democratic governance
- ✓ Agriculture contributes – 32% GDP directly & indirectly, 40% jobs nationally, 70% rural Jobs

World Bank Outlook on other Economic Indicators

- ❖ **GDP Per Capita** – US\$2,132 (2024)
- ❖ **Unemployment** – 5.4% (2025 Estimate)
- ❖ **Private Sector Lending** – Rebound from 2.0% in May 2025 to 5.0% in September 2025; Total lending projected to reach US\$31.7billion in 2026
- ❖ **Public Debt** – Approx. 65% of GDP (2024)
- ❖ **Fiscal Deficit** – 5.1% of GDP (2024)
- ❖ **Remittances** – 4.2% of GDP

Kenya's Poverty Indicators

Source: KNBS Poverty Report 2022





Why Invest in Kenya? – Competitive Incentives for value addition & Agro-processing



Export Processing Zones (EPZ) Incentives (Ideal for export-oriented projects)



10 – year 0% corporate income tax holiday (then 25% for next 10 years, then standard 30%)



10-year withholding tax holiday on dividends, royalties, interest & management fees for non-residents



100% Investment deductions on new buildings, machinery & equipment



Perpetual exemption for 16% VAT, customs/import duties on raw materials, inputs & machinery, stamp duties on legal instruments

Special Economic Zones Incentives (more flexible & broadly attractive)

1. Reduced Corporate Tax – 10% for the first 10 years, 15% for the next 10 years and then standard 30%
2. Zero-rated VAT (no VAT Registration required for SEZ enterprises)
3. Exemptions from import duties, stamp duties, capital gain tax & certain county/sub-national fees
4. Exemptions from capital gain tax on transfer of property
5. 100 – 150% Investment deduction allowances on plant, machinery, industrial buildings etc.
6. Additional benefits via Nairobi International Financial Centre (NIFC)

Kenya offers some of the most competitive tax incentives in the region through EPZs and ZEZs, significantly improving project returns in coffee-related agro-processing

Kenya's Coffee Sector – Premium Quality with Growth Potential



Key reforms – New Coffee Act 2026, Direct Settlement System & Government seedling supply programme

Supports 800,000 – 1.2 million smallholder farmers directly, >5million value chain actors directly & indirectly

Coffee production 50,000MT clean coffee per year | Area under coffee – 113,000HA| New production in Western Region Counties

Area under Coffee 113,000 HA. Accelerated Growth in Western Kenya

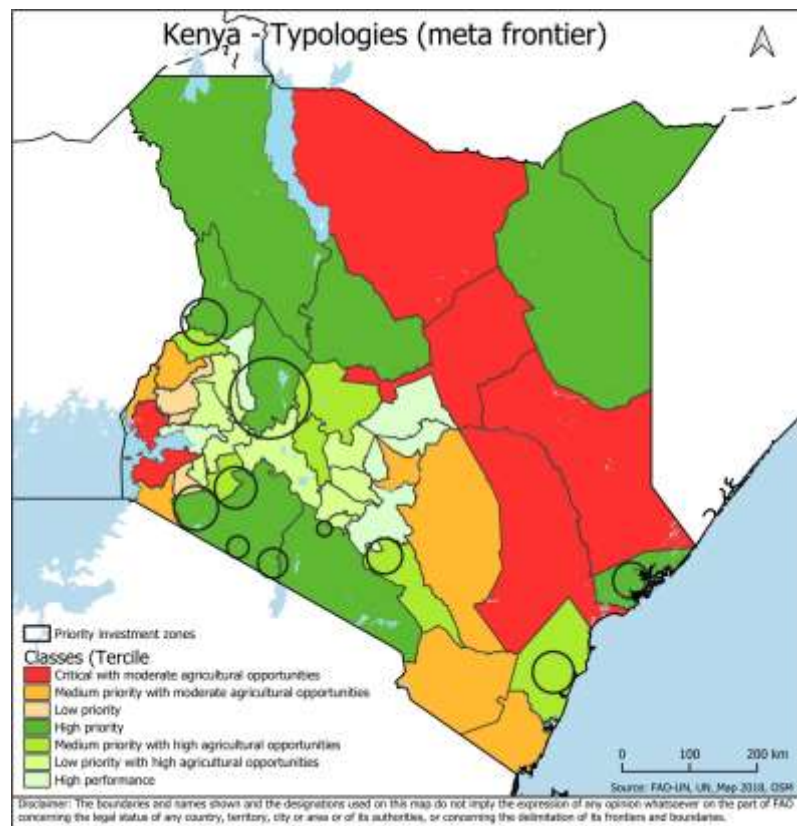
Export Earnings: US\$336 million (2025) with projected improvement in 2026

Nation coffee production target: 150,000MT clean coffee by 2030

Certified coffee seeds production & distribution: 10 million per year currently, projected to 50 million seeds per year

World-renowned Arabica varieties: SL 28, SL 34, Batian & Ruiru 11

Targeted territories for coffee: Typology and Suitability Maps



1. % Constituency Level Suitability Area

- Share of each constituency suitable for coffee
- Significance of coffee suitable area
- High % - strong spatial concentration of coffee related potential
- Interpret together with coffee suitability index & coffee opportunity index

2. Constituency Level Opportunity Index

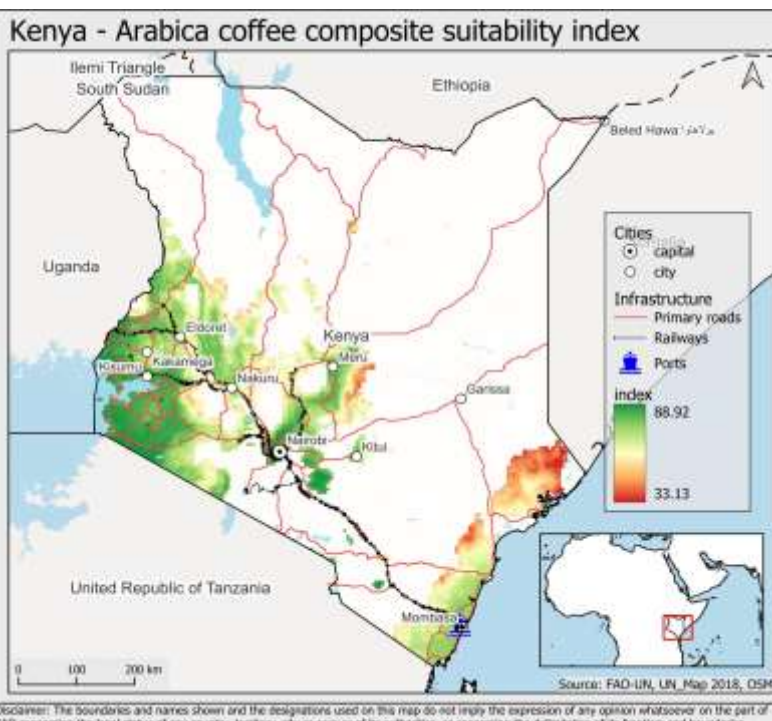
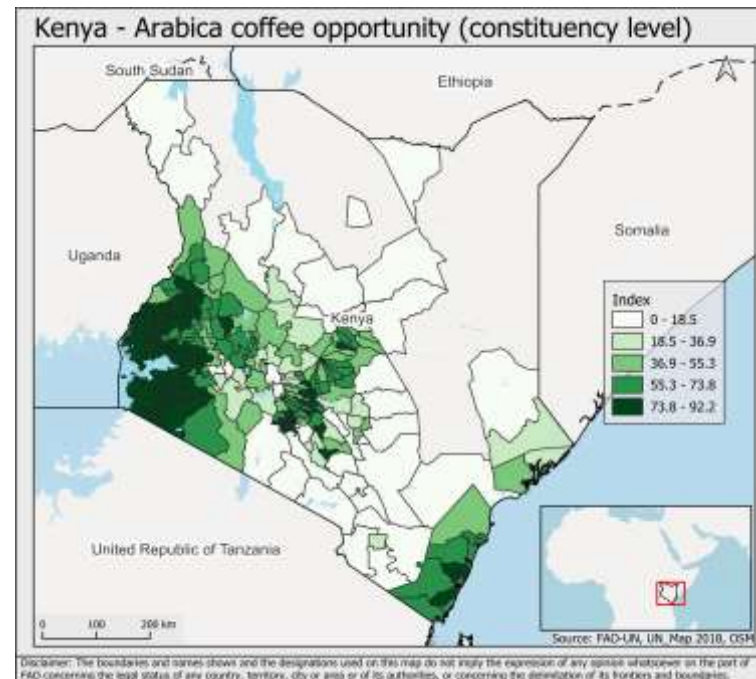
- Constituency level coffee opportunity
- High value – constituency where coffee related investments are strongest in combinations
- More promising areas for further assessment, value chain development, aggregation, processing, logistics, market access, digital market services or investment profiling

3. Composite Suitability Index

- Index Combines coffee Suitability with socio-economics, access & demand related factors
- Areas with greatest

4. Investment Opportunities:

- Modernization of Primary/Wet Mills
- Establish of Western Kenya Secondary/Dry Mill
- Waste-to-value Cascara Tea/Infusion Production
- Digital Coffee Trading System





Kenya Coffee Sector – Priority Investment Opportunities: A combined Investment Portfolio of USD 50.00 million



Sector Challenge	The Opportunity	Indicative Investment	Expected Impact
Ageing processing infrastructure leading to quality losses, inefficient processing (wet mill) and inadequate capacity in emerging coffee regions (Dry mill).	Modernize 1,200 wet mills and establish a regional dry mill in Western Kenya to improve processing efficiency, coffee quality and export competitiveness.	USD 13.66M (wet mills) + USD 3.71M (dry mill)	- Higher AA/AB/PB recoveries - Reduced water and energy use - Increased farmer earnings - Improved export competitiveness
Declining bee populations and limited income diversification for coffee farmers, particularly women and youth.	Develop integrated coffee and honey enterprises through modular processing, refining and bottling facilities targeting women and youth-led MSMEs/Cooperatives.	USD 4.64M	- Additional household income - Improved pollination and yields - Biodiversity conservation - Women and youth employment
Limited digital trading infrastructure constraining market transparency, traceability and value realization.	Develop a fully digital coffee trading ecosystem with traceability, warehouse receipting and direct market access for cooperatives.	USD 2.18M	- Greater market transparency - Better price discovery - Reduced transaction costs - Improved traceability and compliance
Over 200,000 tonnes of coffee pulp is discarded annually as waste, creating environmental pollution and lost economic value.	Establish commercial cascara processing facilities to convert coffee pulp into premium export products for global specialty markets.	USD 25.80M	- Circular economy - Reduced waste and emissions - New export products - Additional farmer revenues

Driving value addition, climate resilience, export competitiveness, rural industrialization and inclusive economic growth.



Investment Case 1: Market demand and plans



A. Export Market

- B. Mainly Arabica Coffee Production
- C. 270,000MT of Coffee Cherry/Year
- D. Exports 50,000 MT/Year
- E. Premium Grades – AA, AB, PB, C
- F. **Export Destination** – Western Europe, North America, Asia, Middle East
- G. **New Markets frontiers** – Africa, China, Eastern Europe etc

B. Market Potential & Growth

- Rising Coffee Consumption & Prices
- Export projection from 50,000MT/yr to 150,000 MT/Yr by 2030
- Growth Driven by demand & Prices for **Specialty, Single Origin Coffees**
- **Technology Integration** to drive future market profiles - Traceability for Market Visibility – EUDR

C. Production Expansion & Innovations

- New Coffee Act -**Institutional Reforms** on Coffee Research & Funding, Coffee Regulator
- **Public Investments in Seed** Production & Distribution
- **Expanding production** - new areas of Western & Rift Valley Counties
- Coffee Value addition – roasting, grinding & contract packaging
- **Valorization of coffee by-products** – Cascara tea, bio-fertilizers, biochar etc

D. Beneficiaries & Impact

Direct: ~1M Farmers; Indirect 5M + 1,200 cooperatives factories

- Approx. 10 -20% Quality Grade Improvements
- Approx. 10 – 20% price/earning increases
- Productivity linked Jobs - 350 direct & indirect jobs – mills, Brokers, Auction Organizers & other enterprises
- Approx. 30% Eco-pulper water-use saving
- Environmental benefit:
 - ✓ 50kW Solar Drier
 - ✓ 70tCO₂e/year (displacement of grid system) – 7,000tCO₂e/year for 100 Mills)
 - ✓ 30% Eco-pulper water savings



Investment Case 1: Upgrading and Modernizing of milling infrastructure to Meet Evolving Global Market Standards.

1a) Upgrading/Modernizing of existing dilapidated Wet Mills



A. Bottlenecks

High capital investment requirements

Aging infrastructure and operational inefficiencies

Fragmented aggregation and inconsistent quality

Market access and compliance challenges

B. Key investments

Proposed Private Investment

- **Modular Case Capex** – US\$136,625
- **100 Hubs** –US\$13.66M
- **Components:** Eco-pulper capacity of 5 tonnes/h , Machine House, Fermentation Tanks, Storage, solar drying infrastructure.

Financing Structure

- Financing (Debt/blended) to Cooperatives Societies to support Capital investment in eco-pulpers, renewable energy systems, solar drying infrastructure, digitization (operations, full traceability and marketing), security systems and factory refurbishment.

Government Contribution

- **100 Investment-Ready Cooperatives:** Assessment of **1,200 coffee factories** to identify the most bankable.
- **USD 20M Productivity Support:** Seedlings, inputs, extension, and farmer capacity building.
- **€91.38M Climate Financing:** Investment in coffee climate resilience.
- **DSS Capital Recovery:** Government-backed repayment mechanism to de-risk investments.
- **1,600 Extension Officers:** Supporting productivity, quality, and cooperative performance.

C. Risks

Smallholder financing risk

Climate variability and coffee diseases

Export market compliance (EUDR, food safety, traceability)

Underfunded research, seed systems, and extension

D. Mitigation measures

Cooperative aggregation and Direct Settlement Scheme (DSS)-backed capital recovery

Cooperative aggregation /modular investment in agroforestry and climate-smart coffee production

Cooperative-led traceability, certification, and compliance

Establishment of the Coffee Research Fund by the government



Investment Case 1:Upgrading and Modernizing of milling infrastructure to Meet Evolving Global Market Standards.1a)

Upgrading/Modernizing of existing dilapidated Wet Mills



Profitability Indicators

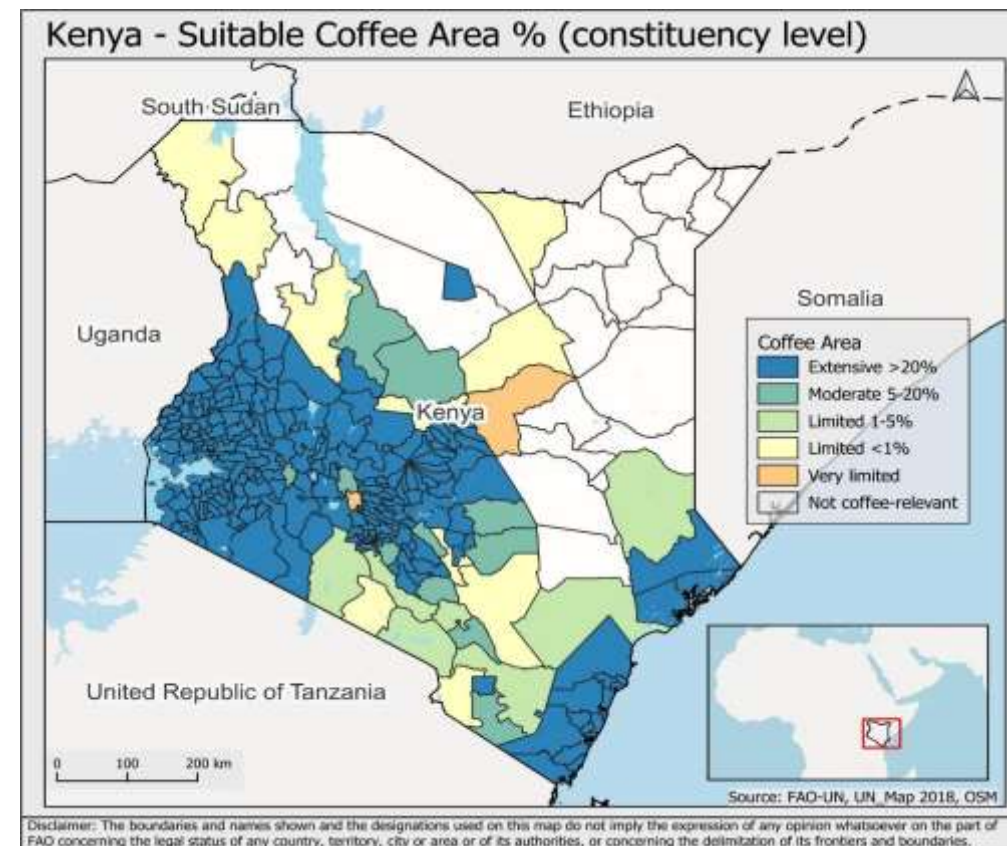
Total Investments	US\$ 13.66M	
Net Present Value	US\$ 17.45M	
Internal Rate of Return	29.47%	

Environment & Social Economic Benefits

Inclusion	50% jobs for women and youth
Beneficiaries	• 100 Cooperative Coffee Factories Modernized • 30,000 direct beneficiaries (300 farmers per mill) • 300 permanent jobs (3 per factory) • 121,200 indirect beneficiaries (4 per household)
Climate Benefit	• 70tCO₂e/year from 50kW solar drier • Total for 100 wet Mills -7,000tCO₂e/year • Approx. 30% Eco-pulper water savings
Resilience	Efficient processing and recovery, Approx. 5 – 10% Quality Grade Improvements & Revenues
Per Capita Income Growth (Average 300 farmers/mill, Average 0.405HA each, total 122HA, 1,000 coffee bushes/0.405HA, Average 2kgs cherry recovery per bush, US\$ 0.55/Kg Average cherry payout rate & 5% growth in quality-based price	Per Capita household Income increase - US\$54

Government Contribution

- 100 Investment-Ready Cooperatives
- USD 20M Productivity Package
- €91.38M Climate Finance
- Government-Backed DSS
- 1,600 Extension Officers



targeted investment in wet mills strategically located in high-production coffee zones (blue) to maximize throughput and commercial viability..



Investment Case 1: Market demand and future plans

Export Market

- Global coffee demand exceeds **10.6** million MT annually and continues to grow at approximately **2%** per year in volume.
- **Current production: 50,000 MT**
- **Exports: 50,000 MT** (almost the entire crop)
- **Export earnings: US\$ 242 million** (2023/24)
- Expand beyond established markets (EU 55%, USA 16%, Asia 15%, Others 14%) into high-growth premium and value-added markets through modernization, traceability and sustainability.

Market Potential & Growth

- **US\$263B** global coffee market growing at **5.4% CAGR** in value.
- **10.6 million MT** annual global coffee demand, with demand continuing to exceed supply.
- **US\$123B** specialty coffee market growing at **10.8% CAGR**.
- Less than 0.5% of global coffee supply. Access to a US\$123 billion specialty coffee market growing at 10.8% annually. Modernization is the catalyst for scaling Kenya's premium coffee exports.
- Rising demand at coffee auction and Direct sales
- Specialty markets
- Opportunities in value-added ready to drink coffee eg private labels
- Expansion to new coffee consumer markets in Africa, Asia & Middle East

Production Expansion & Innovations

Current gap:

- Additional dry milling capacity; parchment 9,000MT; Clean Coffee 7,200MT
- Improved recovery quality grades rates (+5–10%) and reduced defects through precise hulling & grading

Beneficiaries & Impact

Farmers:

- **5 – 10%** Improvement in Quality Grades recovery, reduced defects through precise hulling & grading
- Increase in export prices from higher grades (AA, AB, PB & specialty) from the current **USD 8–10/kg** to approximately **USD 10–12.5/kg**
- Increase in volume exported from current **50 to 150 Mt** p.a by 2029
- Approx. 500 direct jobs & 800 indirect jobs across milling, sorting, packaging & logistics;
- 50% women & youth
- Environmental benefits– 50kW solar drying system, 35K kWh/year
- 70 tCO₂e/year (pollution avoidance from the interconnected system)
- Approx. 70,000 farmers reached and 100 Coffee Factories Served



Investment Case 1: Upgrading and Modernizing of milling infrastructure to Meet Evolving Global Market Standards

1b) Establish a dry milling facility in Kakamega



A. Bottlenecks

High capital costs and seasonal utilization challenges

Limited access to dry milling services in emerging coffee regions

Coffee theft and quality losses during transit and processing

B. Proposed Private Investment US\$3.71M (joint venture)

- Capex: USD 3.71M - Establish an Integrated coffee processing and commodity logistics hub; Milling Plant – Milling, colour sorting, grading, ware housing & Marketing
- Integrated Solar Drying System
- **Dry Mill Plant Capacity** – 10MT/Hour
- Joint Venture investment model with New KPCU (Union of coffee cooperatives)
- Joint venture with New Kenya Planters Cooperative Union (NKPCU) to establish regional processing and commodity hubs that provide shared services to multiple coffee factories while improving efficiency, reducing costs, and increasing farmer returns.

Government contribution

- Provision of land for the construction of the facility
- Co-finance enabling infrastructure with an initial budget **commitment** of **US\$ 1.38M** (access roads, electricity connection)
- Mobilization of Cooperatives in the region
- Drive commercialization, market access, and export growth through NKPCU

C. Risks

Volume risk

Revenue and throughput risk

Asset utilization risk

Counterpart risk sharing

D. Mitigation measures

Aggregate coffee from traditional and emerging coffee-growing regions through the New KPCU network

Leverage New KPCU's established supplier network, DSS aggregation, and long-term supply agreements with cooperatives.

Adopt a shared-use milling model and diversify services to maximize year-round utilization-Dual use facilities eg warehouses for other value chains (grains, pulses and oilseeds)

-New KPCU to develop a clear transparent JV partnership agreement



Investment Case 1: Upgrading and Modernizing of milling infrastructure to Meet Evolving Global Market Standards **1b)** Establish a dry milling facility in Kakamega



Profitability Indicators

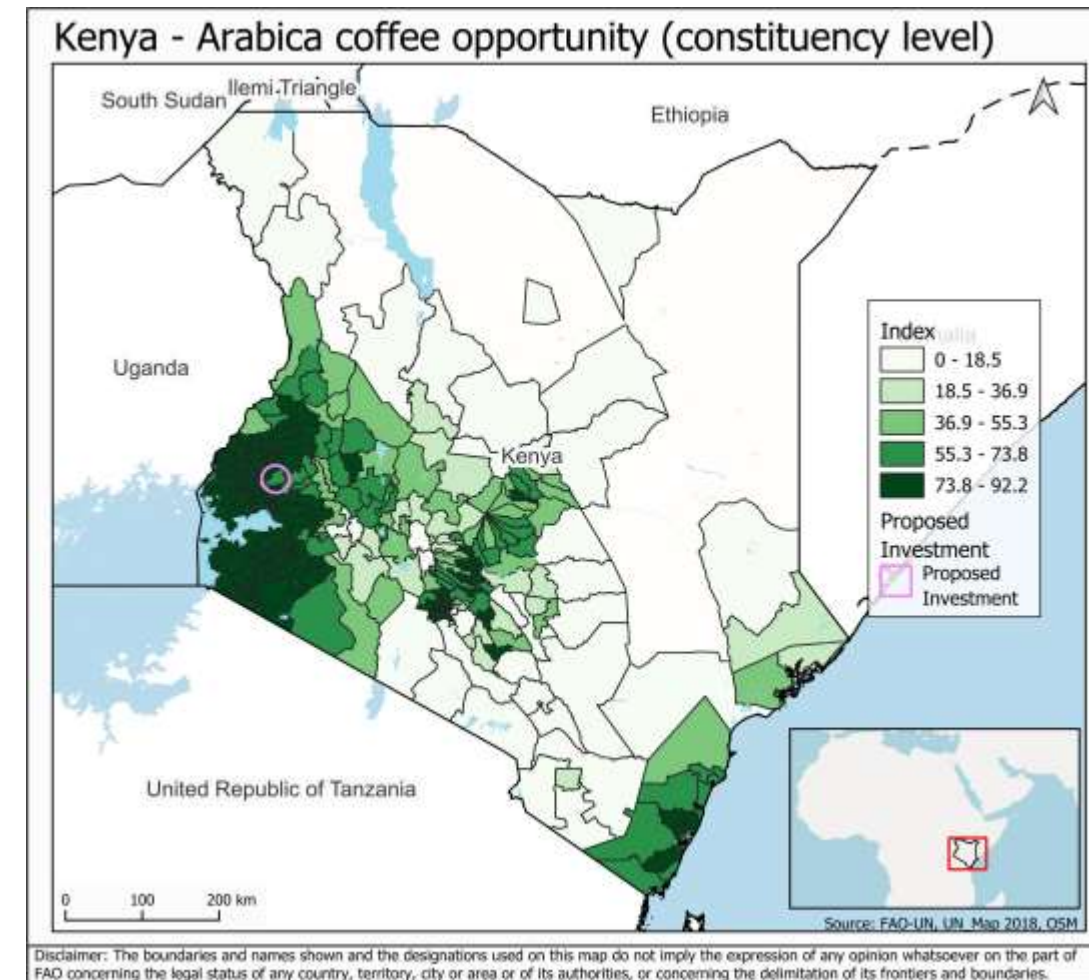
Total Investments	US\$ 3.71M	
Net Present Value	US\$ 464,000	
Internal Rate of Return	16.55%	

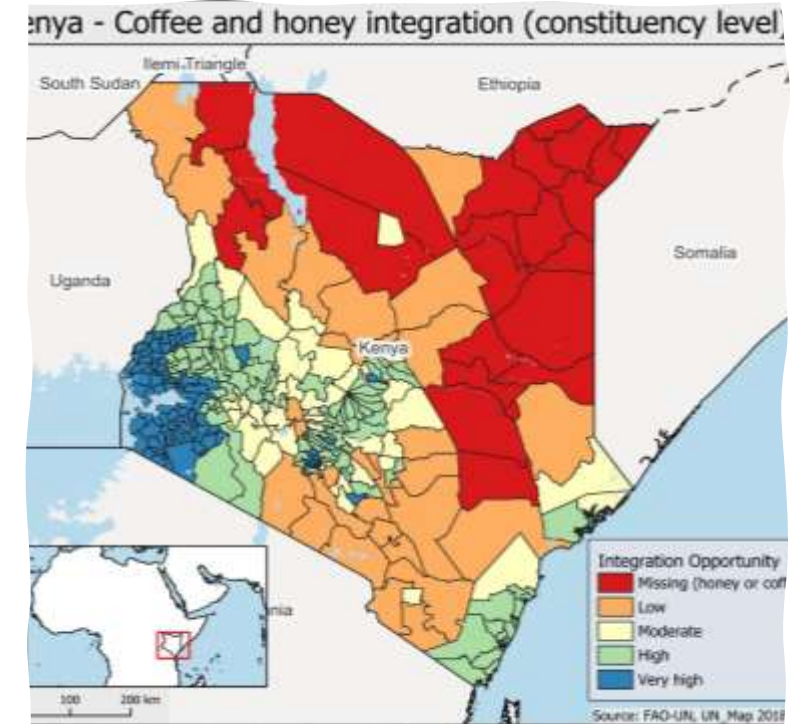
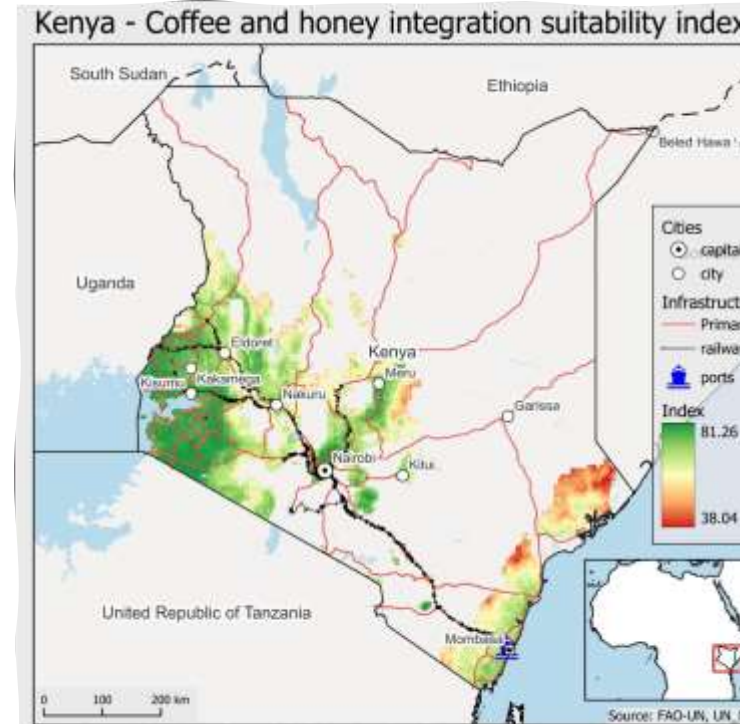
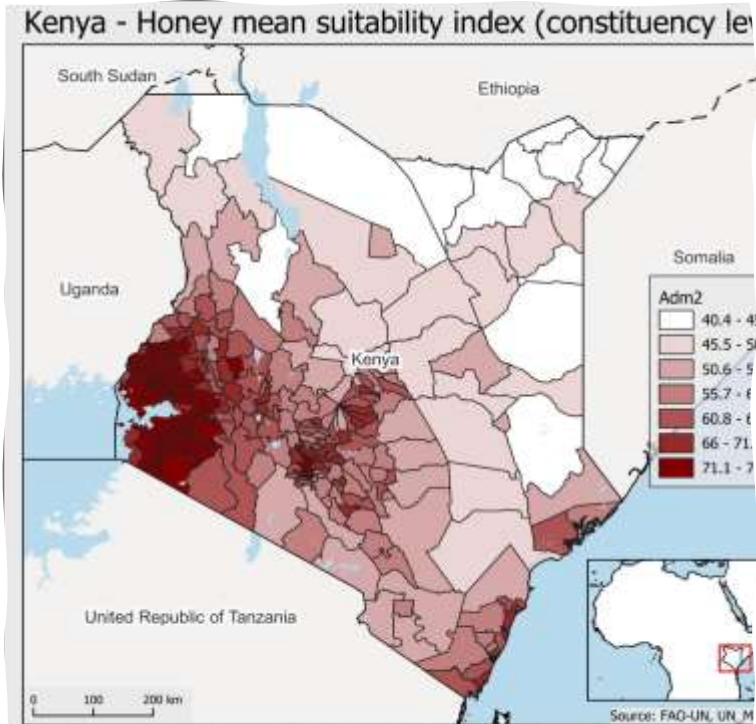
Environment & Social Economic Benefits

Inclusion	50% jobs women & youth
Beneficiaries	• Approx. 300,000 direct farmers reached • Approx. 150 direct jobs & 300 indirect jobs across milling, sorting, packaging & logistics; • 1.2M indirect beneficiaries
Climate	50kW Solar Drying System; 35K kWh per year in Energy • 70tCO₂e/year
Resilience	Efficient processing and recovery, +5 – 10% Quality Grade Improvements & Revenues
Per capita Income Growth – Approx 9M kgs of parchment processing/year = 63Mkgs of coffee cherry. @US\$0.54/kg cherry payment Rate yields US\$34M & US\$ 35.9M with a 5% quality-based price increase	Per Capital Household Income Increase – US\$162 per year

Government Contribution

- Land provision for the facility
- US\$1.38M co-financing of enabling infrastructure
- Cooperative mobilization to guarantee feedstock
- Commercialization and export market support through NKPCU





Coffee & Apiculture Suitability Maps

Coffee & Honey Integration Maps:

1. Supports early-stages Investment planning for integrated coffee and honey value-chain investment opportunities
2. Support identification of areas where coffee & honey related investment conditions align
3. Supports early-stage interventions – organizations of women & youth groups, training, distribution of modern hives and harvesting gear, aggregation facilities, refining & bottling investment planning, transport & logistics etc

Interpretation

1. **Honey Mean Suitability Index Map** – Where honey related conditions are strongest at constituency level
2. **Coffee & Honey Integration Suitability Index map** – where coffee opportunity and honey potential are both present in combination
3. **Constituency level Coffee & Honey integration map** – Summarizes this combined potential into practical investment cases



Investment Case 2: Climate Smart Coffee- Honey Production & Refining



Export Market

- Honey production was **19.5 million kg** in 2024, valued at **US\$ 131 million** Represents only **19.5%** of an estimated national production potential of **100,000 tonnes**. (KNBS)
- EU imports more than **350,000 tonnes of honey annually** and remains only **63% self-sufficient**, while demand for certified organic and traceable honey continues to grow.
- Premium export demand exists in the Middle East, EU and East Africa

Market Potential & Growth

- **45,000–50,000 tonnes** annual domestic demand
- **25,000–30,000 tonnes** unmet market opportunity
- **US\$ 300m** domestic market
- Premium pricing for **organic, traceable & single-origin honey**
- Existing coffee cooperatives enable **rapid scale-up and market access**

• Government contribution

Development of national honey quality, traceability and certification standards
Market access facilitation
Anchor Demand & Cooperative Supply Agreements:

Production Expansion & Innovations

- Replication of production hubs in scale & Productivity:
- Scale a proven cooperative coffee–apiculture enterprise model by investing in modern beekeeping, cooperative aggregation, honey refining and bottling hubs that supply premium domestic and export markets while increasing coffee productivity through pollination services.

Beneficiaries & Impact

- **≈3,000 coffee farming households** directly integrated into commercial apiculture.
- **500 skilled and semi-skilled jobs** in extension, aggregation, processing, quality assurance, packaging, logistics, marketing and export operations.
- **2,500 additional jobs** across commercial beekeeping, hive manufacturing, input supply, transport and ancillary services.
- Strong participation of **women and youth-owned MSMEs** in production, aggregation and value addition.



Investment Case 2: Coffee Honey Production & Refining



A. Bottlenecks

Bottleneck
Informal honey aggregation and processing
Weak quality, traceability, and market compliance
Limited investment in the honey value chain

B. Proposed Private Investment US\$4.64M

- Set up 10 Modular honey production and aggregation Centre – US\$464,000
- 10 Hubs – US\$4.64M

Investment in Honey Production & Aggregation Centres through cooperative model (10 modern bee-hives per farmer/ 300 farmers per hub, storage facilities and working capital for logistics) at **US\$20,000/hub**

Establishment (construction and equipment) of a central honey refining & bottling Hubs-with **Annual Honey Refinery Processing capacity** 45MT/year per unit/hub at **US\$ 260,000**

Branding, Marketing & Distribution

Government contribution

- Cooperative mobilization and sensitization
- DSS backed check off for bee-hives and apiary set up for farmers
- Mobilization of resources for blended finance and de-risking, research and innovation

Risk	Mitigation Measure
Climate change effects on water availability and flowering patterns	Government to provide extension services and advisory through the cooperative model to promote Agroforestry integration and climate-smart production systems
Weak farmer agency and fragmented production	Cooperative-led aggregation and market participation through supply agreements
Declining bee colonies and pollination services	Government to support research and innovation on bee colony strengthening
Adverse effects of agrochemicals on bees and coffee ecosystems	Government to provide farmer extension services through cooperatives on use of bio-inputs and environmentally sustainable pest management
Competition from imported and adulterated honey	Government to Introduce quality testing, standards, certification, and product differentiation



Investment Case 2 –Coffee Honey Production & Refining

Profitability Indicators

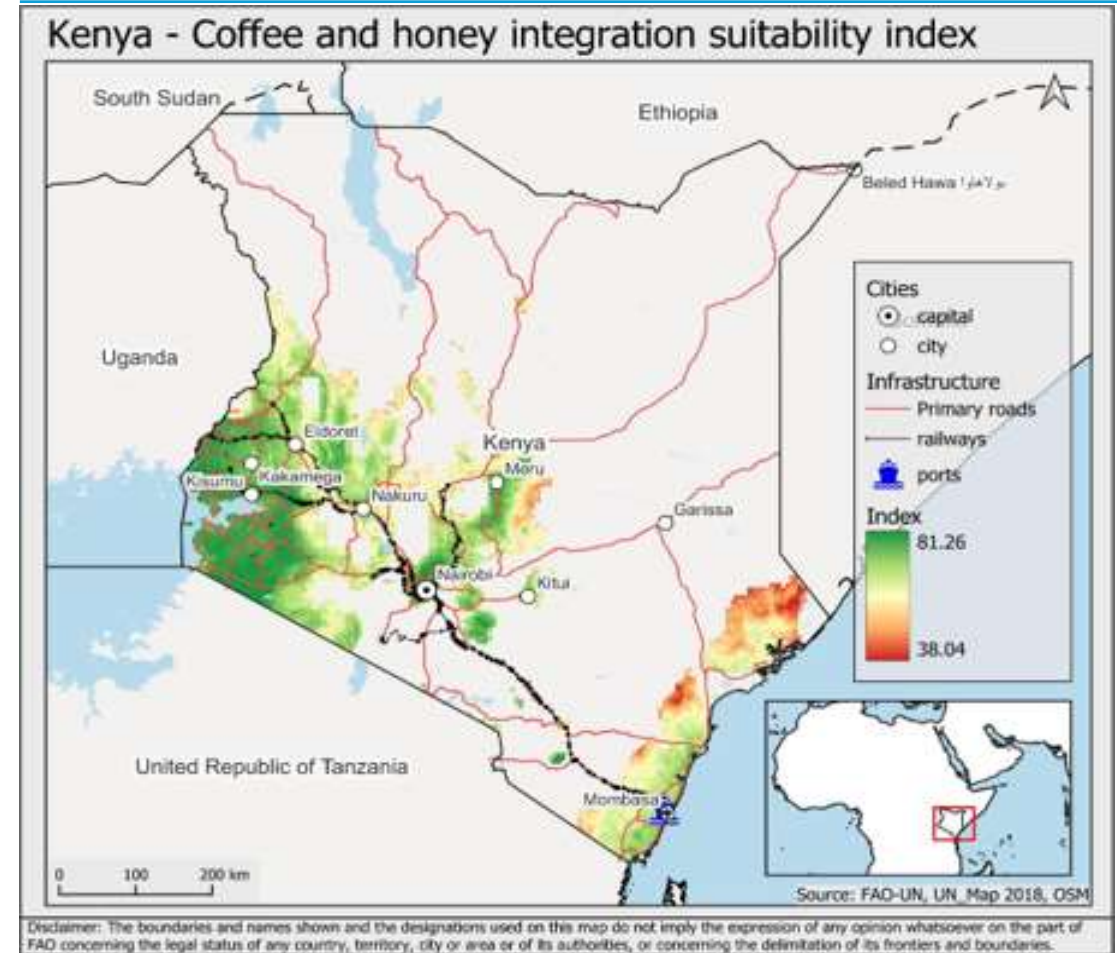
Total Investments	US\$ 4.64M
Net Present Value	US\$ 0.45M
Internal Rate of Return	17.07%

Environment & Social Economic Benefits

Inclusion	500 Jobs Women & Youth owned Micro, small & medium enterprises in honey aggregation 50% women & youth	
Beneficiaries	3,000 coffee farming households 500 skilled and semi-skilled jobs 2,500 additional jobs across commercial beekeeping, hive manufacturing, input supply, transport and ancillary services. 14,000 indirect beneficiaries	
Climate	- Bees as Vector bio-control agents, Biodiversity restoration & carbon co-benefits - Bee pollination Services	
Resilience	Additional Revenue Stream for Farmers	
Per Capita Income Growth: 300 farms/farmers/Households, 10 bee hives per farm, 15kgs per hive honey production/year - 45MT of Honey per year, US\$211,202 enterprise Revenue, US\$106,750 O&M Costs – US\$104,352 Gross Margin & US\$57,952 Net after tax revenues		Per Capita Income Increase per farmer/HH - US\$193/Year

Government Contribution

- Honey quality standards, traceability and certification, market access, and cooperative-led offtake agreements to strengthen commercialization and investor confidence.
- Establishment of testing labs



Proposed Honey Aggregation Hubs in High-Potential (Green) Zones



Investment Case 3 – Digital Coffee Trading System-market demand



Export Market

- Approx. **80%** of Kenya's clean coffee exports are traded through the Nairobi Coffee Exchange.
- **Open Marketplace:** Global B2B/B2C access with direct farmer/cooperative storefronts and reduced intermediaries
- **Small-Lot & Specialty Trade:** From 1 bag upwards with micro-lot listings, quality grading, origin storytelling, and certifications
- **Price Discovery:** Real-time bidding and fixed pricing with full market transparency
- **Traceability & Compliance** Farm-to-cup tracking with ESG compliance and export readiness
- **Embedded Finance:** Invoice financing, cherry advances, and working capital for cooperatives

Market Potential & Growth

- Current 50,000 MT → \$300M export value
Implies roughly \$5,000–\$6,000 per ton
- Target Export Value (2030):~\$750M–\$900M, assuming stable prices and no premium uplift
- Could exceed \$1B with specialty premiums, direct trade, and digital market access.

Revenue Streams

- Transaction Fees: % commission per trade
- Subscription Fees.
- Value-Added Services: Revenue from logistics and fulfillment margins, warehousing fees, and quality certification services
- Financial Services Revenue: Income from interest spreads on supply chain financing and credit facilitation fees
- Data & Analytics Monetization: Revenue from selling market data and insights to buyers, roasters, and policymakers

Production Potential & Expansion

- An ubiquitous, open access digital marketplace enabling direct, transparent, and global trading system
- Market activation & onboarding Working capital / ecosystem financing
- Opportunity to monetize over the top services

Current Beneficiaries & Impact

- 2,000 Jobs – 50% Women & Youth
- +10–20% farmer income uplift (price transparency + direct access)
- Increased export volumes
- Reduced intermediation costs
- Strengthened Kenya's position in specialty coffee markets
- Clean Energy Technology – 20kW Solar Plant, 35K kWh/year & 8-9tCO₂e/year



Investment Case 3 – Digital Coffee Trading System



A. Bottlenecks

Restricted and inefficient market access

Weak price discovery and limited value capture

Low traceability and fragmented supply chains

Limited access to embedded finance and market services

C. Proposed Private Investment US\$2.18M

100% equity investment of **US\$ 2.18M** through a long-term BOT concession with the Nairobi Coffee Exchange to finance, develop, and operate Kenya's national digital coffee trading platform, generating returns through transaction fees, warehouse receipt services, and embedded financial products.

- Platform development & integration
- Traceability
- infrastructure (cloud, cybersecurity)

Operational (Opex)

- Platform management
- Customer onboarding & training
- Compliance & verification
- Marketing & ecosystem development

Government contribution

- Exclusive NCE mandate for digital coffee trading.
- Subsidized Konza Technopolis hosting and cybersecurity.
- Regulatory support for digital trading and warehouse receipts.
- Government systems integration and cooperative onboarding.
- Mandatory onboarding of licensed coffee cooperatives and market participants.
- Capacity building and digital literacy for cooperatives and market participants.

D. Risk

E. Mitigation

Resistance to change by market players

Government to support stakeholder engagement and phased adoption

Low platform liquidity

Government support for cooperative aggregation and DPI interoperability to create a monetizable data ecosystem that enhances platform viability

Potential overlap with National Multi Commodities Exchange (KOMEX)

Government to issue exclusive rights for coffee trading to NCE

Technology and cybersecurity risks

Scalable architecture and strong cybersecurity

Governance and trust risks

Government to enforce Coffee Act reforms and transparent governance

JV partner alignment risk

Clear governance and shareholder agreements

Revenue sustainability risk

Diversified digital revenue streams



Investment Case 3 – Digital Coffee Trading System



Profitability Indicators

- Exclusive NCE trading mandate.
- Enabling policy and digital infrastructure.
- Government integration and cooperative onboarding.
- Capacity building for platform adoption.

Total Investments US\$ US\$ 2.18M

Net Present Value US\$ US\$ 1.12M

Internal Rate of Return 21.92%

Environment & Social Economic Benefits

Inclusion

- 2,000 Jobs - 50% women & 70% Young people
- Transparency in trading system – information to producers

Beneficiaries

- 1,200 factories onboarded
- 1.2M farmers reached
- 500 direct jobs (500 cooperative societies)
- Approx. 1,200 indirect jobs (1 per factory)
- 4.8M indirect beneficiaries (1.2M farming households)

Climate (Methane CH₄, CO₂ and N₂O)

- 20kW Solar System (Approx.35K kWh/year in energy CO₂ avoidance from KPLC system)
- Total Carbon Benefit: 8-9tCO₂e/year

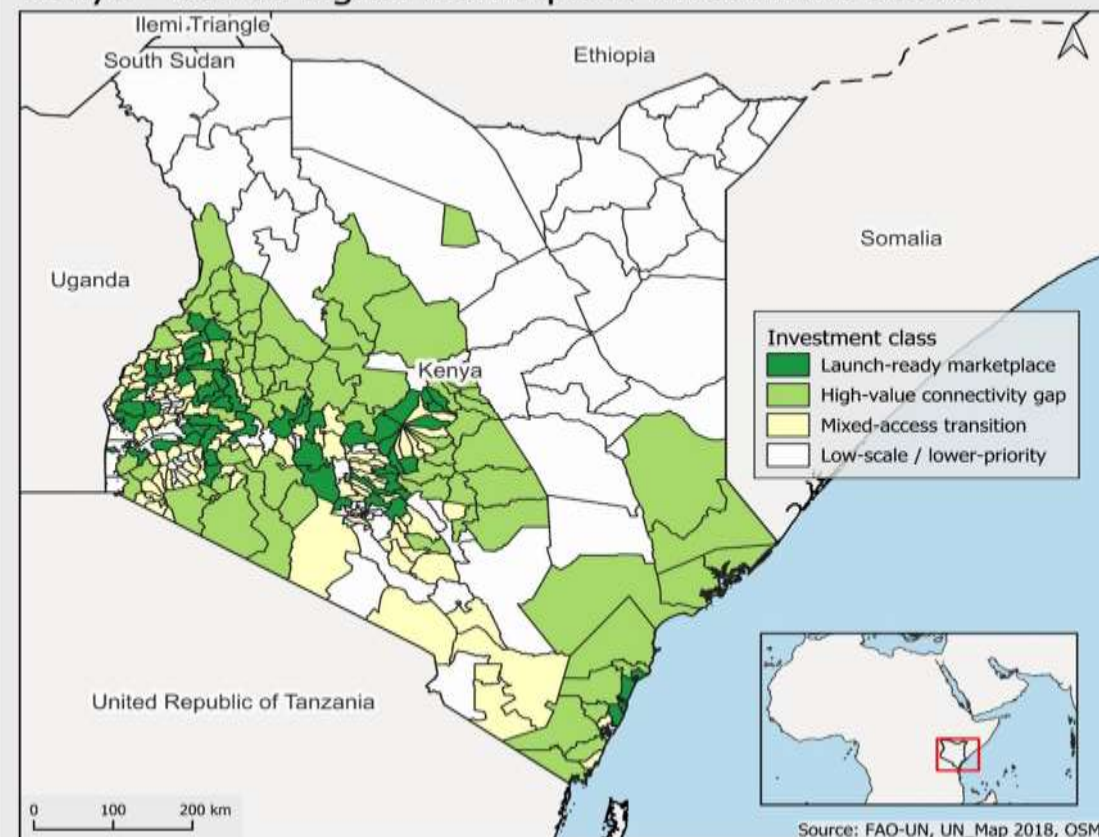
Resilience

Integration of coffee traceability system

Per Capita Income Growth: Approx. 5% increase in auction prices and payments to farmers from a more competitive trading platform

Per Capita Income Increase –
US\$8 (US\$0.027/kg of cherry farm gate
Price increase from a base of US\$0.54/kg
for an average of 300kgs per farmer
(0.27*300kgs =Us\$8)

Kenya - Coffee digital marketplace investment classes



Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries.

Robust digital connectivity across Kenya's coffee-growing regions de-risks nationwide platform rollout and accelerates adoption.



Investment Case 4: Coffee Pulp to Cascara Tea (Circularity)



Export Market

- 2025 Global Cascara product market – US\$1.8 billion (online resources)
- Cascara tea – lightly caffeinated (25 – 50mg/cup), fruity, hibiscus-like herbal tea
- Superfood beverage with high polyphenols, antioxidants, dietary fibre & low acidity
- Products – loose flakes (core), teabags, instant powders
- Export Markets– Europe 20 - 30%, North America 30 – 40%, Asia pacific 18 -20%

Market Potential & Growth

- 10% CAGR to US\$4.1 billion by 2034
- Bulk wholesale price Range – US\$5 – 12/kgs for Arabica lots
- Superior taste & flavor profiles - high altitude SL 28 & 34 deliver superior flavors (bright cherry, rosehip, cranberry notes)

Production Potential & Expansion

- Produce cascara from pulp using food grade handling & solar drying
- 50,000MT clean coffee production
- Projected to 150,000MT by 2030
- Over 20,000MT dried cascara potential currently
- Projection to 60,000MT dry cascara by 2030
- Scale Dedan Kimathi University of Technology (DeKUT's) cascara innovations to transform coffee waste into high-value products, generate incomes and promote a circularity in coffee

Current Beneficiaries & Impact

- Utilizes 100% of coffee cherry → reduces waste and improves overall value recovery
- +10 – 20% additional incomes cooperatives & Farmers
- 200 jobs in aggregation, drying, processing, packaging & distribution
- **Climate Benefits:** 20 KWh solar system (35K kWh/Year Energy @20%Load Factor)
- ✓ Kenya's grid emission factor – 0.20 – 0.27 kg CO₂e per kWh – Average 0.20 kg CO₂e per kWh
- ✓ Environmental benefit (displacing grid system for drying: 8-9tCO₂e/year
- ✓ Methane avoidance from aerobic decomposition of pulp: 6 -12g CH₄/Kg of coffee pulp



Investment Case 4: Coffee pulp to Cascara Tea (Circularity)



A. Bottlenecks

Underutilized coffee processing waste

Low awareness and market development

Limited cascara innovation and commercialization

C. Proposed Private Investment US\$25.80M

- Set up ten Cascara production units, each with a Processing Capacity of **3.375MT/Year** including solar PV utilities and storage, targeting 300 farmers per hub

- Total investment: US\$ 25.80M

Government contribution

- Cooperative mobilization and sensitization
- HACCP/Organic training, certification, pilot, testing
- Based on research from Dedan Kimathi University of Technology, government to pilot cascara support resources for innovation and marketing campaigns

D. Risk

Competition from conventional beverages

Competition for alternative pulp uses eg composite manure, briquettes

Competition from other producing countries in export market

Raw material supply risk from organically produced coffee

E. Mitigation

Government to support promotional marketing of cascara at a large-scale including Branding

Competitive purchasing prices

Quality differentiation and origin branding

Promote organic farming to increase pulp production from emerging coffee regions



Investment Case 4: Coffee pulp to Cascara Tea (Circularity)



Profitability Indicators

Total Investments	US\$ 25.80M
Net Present Value	US\$ 12.29M
Internal Rate of Return	19.88%

Environment & Social Economic Benefits

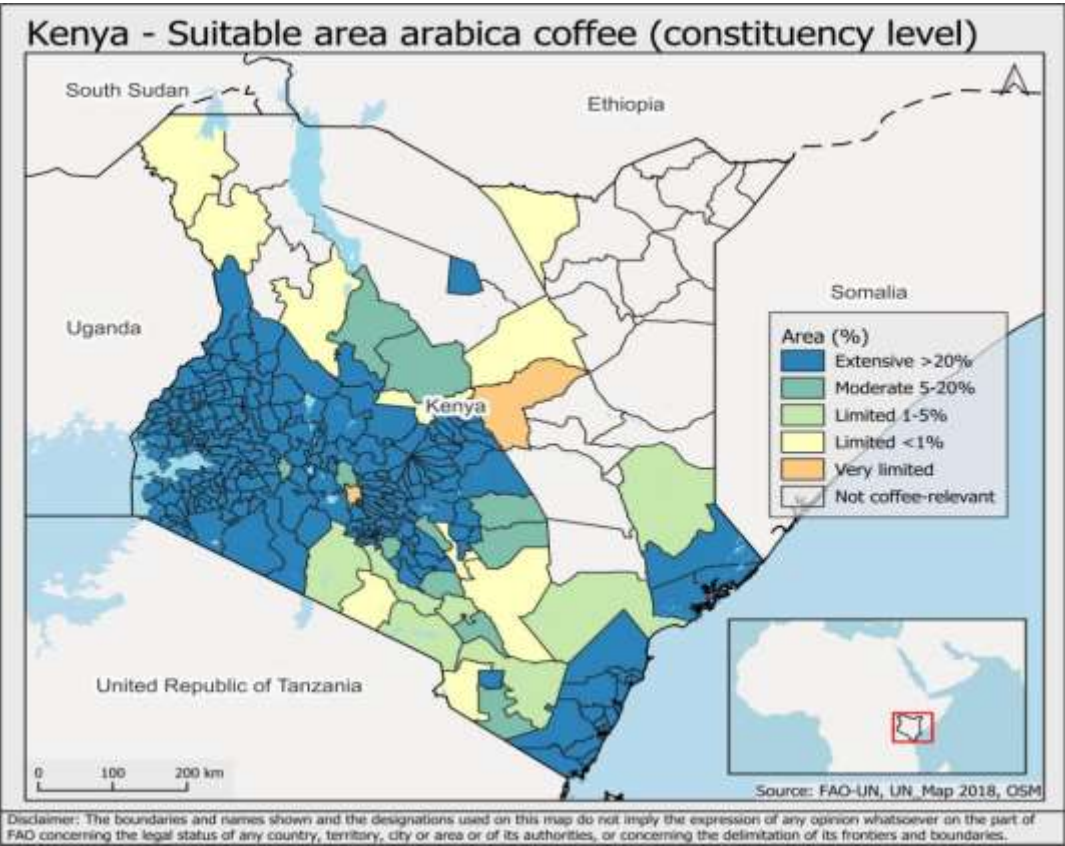
Inclusion	200 Jobs - Strong participation of women & Youth in cascara processing and micro enterprises	
Beneficiaries	• 100 farmer reached • 15 direct jobs in aggregation, drying, processing, packaging & distribution • 460 indirect beneficiaries	
Climate (Methane CH ₄ , CO ₂ and N ₂ O)	• 20kW Solar System (Approx.35K kWh/year in energy C02 avoidance from KPLC system • Total Climate Benefits: 8-9tCO₂e/year	
Resilience	Diversified income beyond coffee → reduced dependence on a single coffee revenue stream	
Per Capita Income Growth – 3.375MT cascara processing per year, Account for 15% national annual Cascra throughput, processing hub serving 120,000 farmer/HH (15% of total – US\$0.3/Kg pulp off-take incentive to farmers = US\$1.012,500		Per Capita Income Increase – US\$8 per season for 120,000 farmers/HH

Government Contribution

Enforcement of Coffee Act – Better Regulation

Investments in Public Goods – Research & Extension, Roads, Utilities, Standards

Stable Macro Economic Climate, Standards, Certification protocols



Proposed Cascara Processing Facilities to be established in High-Volume Supply Zones (Blue)



Summary Investment Plan



Total Investment: US\$50.00M	Av. Per Capita Income US\$2,132	Average IRR 22.49%	Total Beneficiaries 7.67M (Direct 1.53M people Indirect 6.14 Million people)	Income Capita US\$ 85	Increase Per	Emission Reductions/Year 7,089tCO₂e/year
Total NPV: US\$ 31.78M						

Modernization of Coffee Milling a) Modernization of Wet Mills Cost US\$13.66M	Modernization of Coffee Milling b) Development of Dry Mills - Western Cost US\$ 3.71M	Honey Coffee Refining Cost US\$ 4.64M	Production& Nairobi Coffee Ubiquitous Trading, Exchange Management & Collateral Receiving System Warehouse Cost US\$ 2.18M	Cascara tea production Cost US\$ 25.80M
NPV: US\$ 17.45M IRR: 29.47%	NPV: US\$ 0.46M IRR: 16.55%	NPV: US\$ 0.45M IRR: 17.07%	NPV: US\$ 1.12M IRR: 21.92%	NPV: US\$ 12.29M IRR: 19.88%
Income Increase Per Capita: US\$54	Income Increase Per Capita: US\$162	Income Increase Per Capita US\$: 193	Income Increase Per Capita: US\$8	Income Increase Per Capita: US\$8
Emission Reduction 7,000tCO ₂ e/year for 100 factories upgraded – approx.87,600kWh @20Load Factor	Emission Reduction 70tCO ₂ e/year from a 50kW solar drying system that generates 87,600kWh @20% Load Factor)	Emission Reduction • Vector bio-control benefits)	Emission Reduction 8 - 10tCO ₂ e/year from 20kW solar system (approx. +35,000kWh per year @20%Load Factor)	Emission Reduction 8 - 9tCO ₂ e/year from 20kW solar system (approx.35,000kWh per year @20%Load Factor)