



Ministry of Agriculture and
Livestock Development

COFFEE DEVELOPMENT AND MARKETING STRATEGY 2024-2029



January 2024

FOREWORD

The Constitution of Kenya 2010 Schedule IV provides for the development of agricultural policy as a function of the national government while devolving all other aspects along the value chain to county governments. Vision 2030 provides for *improving the value gained in production and supply chain through the branding of Kenyan farm products*. The Agriculture Policy 2021 provides the framework for the agricultural sector with the twin objectives of: (a) *improving, intensifying and diversifying agricultural production and productivity to meet national food security and market requirements while promoting conservation, development and sustainable utilization of crop, livestock and fisheries resources*, and, (b) *improving soil fertility for increased production and productivity based on good agricultural practices*.

The sector further developed the Agriculture Sector Transformation and growth Strategy (ASTGS) which is a 10-year sector strategy focused on the participation of counties in the transformation of the sector initiatives.

Agriculture remains the key driver of Kenya's economic development contributing over 50% of the GDP both directly and indirectly. Among the key crops driving this sector is coffee, which is cultivated in 33 counties. The coffee value chain includes growers, millers, brokers, traders and consumers.

Coffee has been Kenya's key foreign exchange earner since its introduction into the country over a century ago. However, over the last few decades, this important industry has suffered several challenges thereby reducing its contribution to the country's GDP as well as lowering farmers earnings from the crop. It is in recognition of this that the government has developed the Coffee Development and Marketing Strategy to resuscitate the growth and transformation of the sector with the key goal of making the sector *Kenya's top foreign exchange earner and increase income for farmers and other value chain players*.

The strategy identifies eight pillars that will underpin the sector's growth and transformation over the next five years. These are: (i) production (ii) processing and value addition, (iii) marketing, (iv) domestic consumption (v) research and extension (vi) climate change, environment, and inclusivity (vii) financing and payment management. (viii) governance and institutional development

The strategy has been developed through an extensive consultative process with various sector stakeholders including, but not limited to, coffee growers, regulators, millers, brokers, MDAs, county governments and the Council of Governors.

I wish to take this opportunity to sincerely thank all the stakeholders who have contributed in one way or the other to the successful development of this comprehensive document that will go a long way in guiding the sub-sector. I invite all of you to support the implementation of the strategy and to actively effect your various roles.

Thank you

Hon. Mithika Linturi
Cabinet Secretary
Ministry of Agriculture and Livestock Development

PREFACE

The Coffee Development and Marketing Strategy has been developed by the Ministry of Agriculture and Livestock Development in order to streamline the framework for the cultivation, value addition, marketing and promotion of Kenyan Coffee as well as address other incidental issues. The Strategy puts in place a framework for the coordination of all relevant industry matters through the creation of the Coffee Strategy Coordination Committee domiciled at the Ministry of Agriculture and Livestock Development. The key mandate of the coordination committee being to closely monitor the implementation of the strategic initiatives proposed herein.

At the county level, the Intergovernmental County Coffee Working Group will be in charge of the implementation of the various initiatives at the county level. The committee will create a coordination framework that will be in charge of bringing together the various value chain players on a single platform to ensure timely and accurate flow of information and to ensure that growers are adequately represented at the decision-making table.

This strategy also identifies and assigns key responsibilities to various SAGAs. These responsibilities, though already within the legal mandates of these SAGAs, will be enhanced through the initiatives proposed under the Ministry's coordination role. The specific SAGAs expected to play key roles include AFA, KEBS, KIRDI, KIPI, NEMA, WRA among others. The role of the private sector in the implementation of the strategy cannot be over-emphasized. Kenya's private sector has been instrumental in sustaining the sub-sector over the last several decades and is expected to play a pivotal role under this transformative strategy. Key among these roles are; branding, quality enhancement, market expansion and prompt payment to farmers among other mandates.

On behalf of the Ministry, I invite all the stakeholders in the coffee value chain to take advantage of the streamlined and well-coordinated strategy proposed herein to increase Kenya coffee's market share both locally and globally and ensure that Kenyan Coffee gets the recognition and revenues it deserves.

Our Coffee, Our Wealth.

Dr Paul K. Rono
Principal Secretary
State Department of Agriculture
Ministry of Agriculture and Livestock Development

ACKNOWLEDGMENT

I wish to acknowledge the efforts of the technical committee appointed by the Principal Secretary, State Department of Agriculture, MoA&LD, and the technical experts from both public and private sectors, Non-Governmental Organizations and KALRO- CRI, SWAG, council of governors, county governments representative who positively participated and contributed to the development of this National Coffee Development and Marketing Strategy. Special thanks go AFA-Coffee Directorate and State Department for Agriculture.

I wish to recognize the contribution from farmers, farmers ‘cooperatives, millers and roasters, Nairobi Coffee Exchange in enriching this strategy.

The Ministry of Agriculture and Livestock Development expresses its gratitude to development partners through the National Agricultural and Rural Inclusive Growth Project (NARIGP) for funding the development of this important Strategy that aims in revitalising coffee subsector in Kenya.

For those who have not been mentioned, your contribution was of great value in developing the CDMS. The ministry takes this opportunity to say a big thank you.

Josphat Muhunyu
Agriculture Secretary
State Department of Agriculture
Ministry of Agriculture and Livestock Development

EXECUTIVE SUMMARY

The agricultural sector is Kenya's key economic driver with a current GDP contribution of 22.4% directly and 27% indirectly through linkages with other sectors. Coffee is one of the major crops driving this sector. Coffee is grown in 33 counties by over 800,000 smallholder farmers and 3,000 estates. Arabica coffee constitutes over 99% of Kenya's coffee with less than 1% being Robusta.

The coffee industry in Kenya continues to perform sub-optimally in terms of area, total production, productivity and revenue generation. For instance, in 1987/88, total area under coffee was 153,030Ha yielding 128,687MT as compared to an area of 108,199 Ha in 2021/22 which recorded a total yield of 51,852 MT. As a result, the sub-sector has lost its place as one of the leading foreign exchange earners for the country. It was the leading foreign exchange earner, contributing to about 40% of the national foreign exchange earnings in the 1970s. Currently, coffee stands as the 5th in the foreign exchange earnings list. Meanwhile, in the global scene, most coffee-producing countries that have maintained dominance have put in place national coffee development and marketing strategies which have seen them register progressive growth in terms of production and productivity. This current strategy has been developed as a response to the above challenges.

This strategy has adopted the value chain approach from production, value addition, marketing and associated linkages. Coffee production in Kenya is carried out at both the smallholder and estate levels. Most estate farms have relatively good economies of scale and can control their production systems. Smallholder farmers operate under varied production and management conditions and rely on consolidation of their produce under cooperative societies.

On value addition and processing, there exists three levels of coffee processing, namely primary, secondary and tertiary. Primary coffee processing involves the transformation of red cherry into parchment coffee. Secondary processing involves hulling parchment coffee and buni to clean coffee while tertiary processing involves value addition activities that begin from roasting, grinding and finally, packaging. The existing wet mills processing capacity is only at 30% utilisation. The licensed dry milling capacity operates at 13% utilisation. About 95% of Kenya's coffee is exported in green bean form. There is therefore a huge potential for increasing the country's value addition in the subsector.

There are two coffee marketing systems namely the auction at Nairobi Coffee Exchange and direct sale. Under the auction system, coffee is bought by licensed coffee buyers through competitive bidding. Coffee brokers contracted by coffee growers offer coffee for sale to coffee buyers (exporters) competitively to the highest bidders. Capital Markets Authority annually licences the brokers who participate at the auction floor. Market prices are subject to quality of coffee and international market demand and supply. Thus, coffee prices in Kenya are influenced, to a larger extent, by global coffee prices at both Intercontinental Exchange (ICE) and London (LIFFEE). On the other hand, direct sale involves coffee growers negotiating directly with overseas buyers and entering into a direct purchase agreement.

The coffee market is structured into five key segments namely: traditional, emerging, regional, specialty and domestic markets. The volume of domestically consumed coffee has recently increased from 509.9 MT in 2009/10 to 1,655.85 MT in 2020/21, representing an increase of 3.6 % from 1.21 % to 4.81% of local coffee consumption to total annual coffee production. The consumption per capita in the country is still low and stands at 0.036kg per capita compared to other leading countries that range between 4kg and 12kg per capita.

On the research front, coffee research and development is conducted by the Coffee Research Institute (KALRO- CRI). The institution has over the last few decades experienced reduction in staff numbers due to natural attrition. The number of researchers has reduced significantly from a few hundred in the 1990s to less than 20 currently. Meanwhile, the effects of climate change have negatively impacted coffee production through changes in; the suitability of coffee growing areas, rainfall patterns, disease

and pests occurrences, coffee physiological patterns, coffee yields and quality, supply chain and labour demand profiles. These impacts call for the intensification of research to identify mitigation and adaptation strategies for the industry.

Credit for coffee production is offered by several players including; Commodities Fund, Agricultural Finance Cooperation (AFC), commercial banks and SACCOs. In the past, coffee subsector received support from tailor-made programs funded by both the government and development partners. Some of these funding agencies, especially commercial banks, do not find agriculture an attractive area to venture into, and when they do, the interest rates charged are prohibitive to the farmers.

The Vision of this strategy is to make coffee Kenya's top foreign exchange earner that generates adequate income for farmers and other value chain players.

This Strategy is premised on the following eight Strategic Pillars, (i) Production, Productivity and Quality enhancement, (ii) Processing and Value Addition, (iii) Marketing and (iv) Domestic Consumption, (v) Research, Extension and Data dissemination, (vi) Climate Change, Environmental and Inclusivity, (vii) Financing and Payment Management, (viii) Governance and Institutional development

The aim of the strategy is focused on increasing the national revenue earning from KES 35 billion in 2021/2022 to about KES 100 billion and farmers earning from the national average of KES 86 in 2020/2021 to a national average of KES 130/kg of clean coffee cherry by the end of 2028/29.

This shall be achieved through the following strategic objectives proposed under this strategy:

- (i) Increasing the coffee production from 51,852 MT to 150,000 MT and productivity from current 2kg/tree to 6kg/tree by the year 2028/29
- (ii) Promoting the adoption of modern technologies for coffee processing and value addition for quality coffee
- (iii) Improving market access for growers and farmer cooperatives
- (iv) Increasing domestic consumption of Kenyan coffee for price stabilization and revenue enhancement for growers
- (v) Enhancing research, extension services and generate and dissemination timely data in the subsector.
- (vi) Increasing resilience and adaptability of the subsector to climate change
- (vii) Enhancing sustainable participation of women, youth and PWD in the subsector.
- (viii) Enhancing a sustainable financing and payment system in the subsector that generates revenue for farmers and other players in the value chain
- (ix) Developing and strengthening an effective institutional governance framework for efficient service delivery

A detailed implementation action plan outlining the timeline, assigned responsibilities for various agencies and actors is provided in annex 6-1. The Coffee Strategy Coordination Committee is proposed at national level to coordinate the implementation of the strategy among other mechanism for monitoring and evaluation, reporting schedule and communication strategy. The various strategic risks and the corresponding risk mitigation framework are also provided, as well as proposals for revenue sources for implementation of the strategy.

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ACRONYMS AND ABBREVIATIONS

AFA	Agriculture and Food Authority
AFFA	Agriculture, Food and Fisheries Authority
AGRA	Alliance for a Green Revolution in Africa
ASDS	Agriculture Sector Development Strategy
ASTGS	Agricultural Sector Transformation and Growth Strategy
BEPs	Best Environmental Practices
CBK	Coffee Board of Kenya
CD	Coffee Directorate
CDA	Coffee Development Authority
CDMS	Coffee Development and Marketing Strategy
CoG	Council of Governors
COTEPA	Coffee and Tea Parliamentary Association
CRI	Coffee Research Institute
CSCU	The Coffee Strategy Coordination Unit
EAC	East African Community
EMCA	Environmental Management and Coordination Act
ERP	Enterprise Resource Planning
FAO	Food and Agriculture Organization
FCS	Farmers Corporative Societies
GAPs	Good Agricultural Practices
GDP	Gross Domestic Product
Ha	Hectares
IACO	Inter-African Coffee Organisation
ICO	International Coffee Organization
KALRO	Kenya Agricultural and Livestock Research Organization
KCPTA	Kenya Coffee Producers and Traders Association
KEBS	Kenya Bureau of Standards
KEPROBA	Kenya Export Promotion and Branding Agency
kgs	Kilograms

KIAMIS	Kenya Management Information System
KIRDI	Kenya Industrial Research and Development Institute
KPCU	Kenyan Planters Cooperative Union
M&E	Monitoring and Evaluation
M&E	Monitoring and Evaluation
MCSME	Ministry of Co-Operatives and Micro, Small And Medium Enterprises (MSME) Development
MITII	Ministry of Trade, Investment and Industry
MoA & LD	Ministry of Agriculture and Livestock Development
MTs	Metric Tonnes
NCE	Nairobi Coffee Exchange
NGOs	Non-Governmental Organizations
PCPB	Pesticide Control Products Board
PESTEL	Political, Economic, Social, Technology, Environmental and Legal
PPP	Public Private Partnerships
PWDs	Persons Living with Disabilities
SACCO	Saving and Credit Cooperative.
SAGA	Semi-Autonomous Government Agencies
SWOT	Strength, Weakness, Opportunities and Threats analysis
SYK	Sauti ya Kahawa
WCPF	World Coffee Producers Forum

1 CHAPTER ONE: INTRODUCTION

This section gives brief overview of the agriculture sector, coffee sub sector and its contribution to GDP. It also gives the rationale for Coffee Development and Marketing Strategy (CDMS), the anchoring strategies and policies and the strategy development process.

1.1 Overview of Agriculture Sector

Agriculture is key to Kenya's economy contributing 22.4% directly and 27% indirectly through linkages with other sectors of Kenya's Gross Domestic Product (GDP) (Economic Survey 2022). It accounts for over 65% of exports and employs more than 40% of the total population and over 80% of the Kenya's rural population (ASTGS, 2019). The sector provides the livelihood (employment, income and food security needs) for more than 80 per cent of the Kenyan population and contributes to improving nutrition through production of safe, diverse and nutrient dense foods. The sector also contributes to the non-agricultural economy including manufacturing, providing inputs and markets for operations such as building/construction, transportation, tourism, education and other social services. (FAO STAT. 2022).

According to World Bank (2015), the Kenya's agriculture sector is dominated by smallholder rain-fed production farming systems of between 0.2Ha and 3Ha, which account for 78% of total agricultural production and 70% of commercial production. Despite the contribution of agriculture to the local and national economies, it is yet to realize its full potential due to various non-climatic and climatic factors. The key factors that hinder Kenya's agricultural sector from realising its full potential include: poor land use practices; low levels of investments; limited access to factors of production (inputs, credit, technologies) and markets that are fundamental for inclusive growth; limited value addition and weak institutional coordination (Economic Survey, 2019; AGRA, 2018).

Kenya's Vision 2030 strategy identifies agriculture as one of six priority sectors critical to delivering on the Government of Kenya's economic growth target of 10 % per annum. The agricultural sector comprises of six subsectors that include industrial crops, food crops, horticulture, livestock, fisheries and forestry and employs such factors of production as land, water and farmer institutions (cooperatives, associations)

Agriculture sector policies consist of government decisions that influence the level and stability of input and output prices, public investments affecting agricultural production, costs and revenues and allocation of resources. These policies affect agriculture either directly or indirectly. Improved agricultural production has been seen as one of the overall objectives for poverty reduction in the country. Some of the key policy issues and concerns with respect to the sector's development are highlighted:

- i. Challenges in sector financing and related activities.
- ii. Lack of a comprehensive land use policy.
- iii. Limited diversification of agricultural production.
- iv. Limited high potential agricultural land and
- v. Over-reliance on rain fed agriculture.
- vi. Declining sector performance.

1.2 Overview of the Coffee Subsector

Global coffee production has increased by more than 60% since the 1990s, with the ratio of Arabica to Robusta being 57/43 (ICO, 2022). The major coffee producers remain; Brazil, Vietnam, Colombia, India, Ethiopia, Uganda, Guatemala, and Costa Rica. The global coffee production by exporting countries was 168.5 million (60kg) bags in the coffee year 2021/2022, an increase from a low of 93,230 million bags (60kg) in 1990/91. About 38% of this production is consumed in the producing countries, making coffee an export commodity. The domestic coffee consumption by all exporting countries was 54.492 million (60kg) bags, while the total exports by all exporting countries were 140.93 million (60kg) bags in the same period.

In Africa, the main coffee producers are; Ethiopia, Uganda, Cote d'Ivoire, Madagascar, Tanzania and Kenya. Kenya's coffee production has been less than one million (60kg) bags over the past decade. Since 2010, Ethiopia and Uganda have registered the highest contribution to African coffee production, while Kenya's production has stagnated (ICO, 2022). Other less significant African coffee producers include Ghana and Equatorial Guinea. The regional contribution to global coffee production is about 11.3% in 2022 from highs of 16% in the past years. Trade within the African Region has remained low, with countries such as Egypt and Tunisia importing coffee from Europe and other Asian countries such as Indonesia.

Coffee was first planted in Kenya in 1893 in Taita Hills and was reserved for white settlers until 1930s when the privilege was extended to Africans in Kisii and Meru on experimental basis. The 1932 Coffee Industry Ordinance established a restrictive regulatory framework, which viewed coffee as public property, mainly for foreign exchange earnings. It prohibited coffee planters from exporting their coffee or selling it except with the consent of the Coffee Board, among other prohibitions.

After independence, the Coffee Ordinance became Coffee Act and retained the licensing regime to control the value chain. The independence government also created the Coffee Development Authority (CDA) to provide extension services and funding of wet mills for small-holder farmers under the ambit of cooperatives. The unions also offered banking services to their member societies, and received sales proceeds from the Coffee Board of Kenya (CBK) through Kenyan Planters Cooperative Union (KPCU). The unions were affiliated to KPCU since it was the sole miller.

The collapse of International Coffee Agreement (ICA) in 1989 precipitated major decline in coffee prices globally and locally and ignited the call for reforms in the coffee sub-sector in Kenya. These initiatives for reforms gained momentum in 1993, and were partly pushed by the Coffee and Tea Parliamentary Association (COTEPA). Consequently, the government licensed three millers to compete with KPCU. As part of the reforms, the threshold for estate licenses was reduced to five acres.

In line with the Agriculture Sector Development Strategy (ASDS), Parliament enacted Agriculture, Food and Fisheries Authority (AFFA) and later Agriculture and Food Authority (AFA) Act 2013 and Crops Act, 2013, which repealed the Coffee Act, 2001. Among others, Coffee directorate under AFA, operates by these provisions, Coffee General Regulation 2019 and other relevant laws and regulations as well as partnerships with other public and private institutions.

Currently, In Kenya, coffee is grown in 33 counties spread within the Western, Nyanza, Rift Valley, Mt Kenya, Central, and Eastern regions. The type of coffee grown in Kenya is predominantly Arabica with less than 1% of Robusta. Robusta is slowly coming up and it's grown in low altitude areas mainly Homabay, Kisumu, Busia, Siaya and Bungoma counties. The main grown Arabica varieties are SL28, SL34, K7, Ruiru 11, Batian and Blue Mountain. Kenya coffee is produced under two farming systems namely smallholder farmers estimated at 800,000 in 2022 an increase from 11,000 in 1963 and registered estates 3,000 with 2694 estates being active (AFA, 2021/2022). The smallholders are clustered into co-operative societies for primary processing and marketing coffee. The subsector has different value chain players which play important roles in coffee production and marketing of Kenyan coffee as illustrated in Figure 1.1 below.

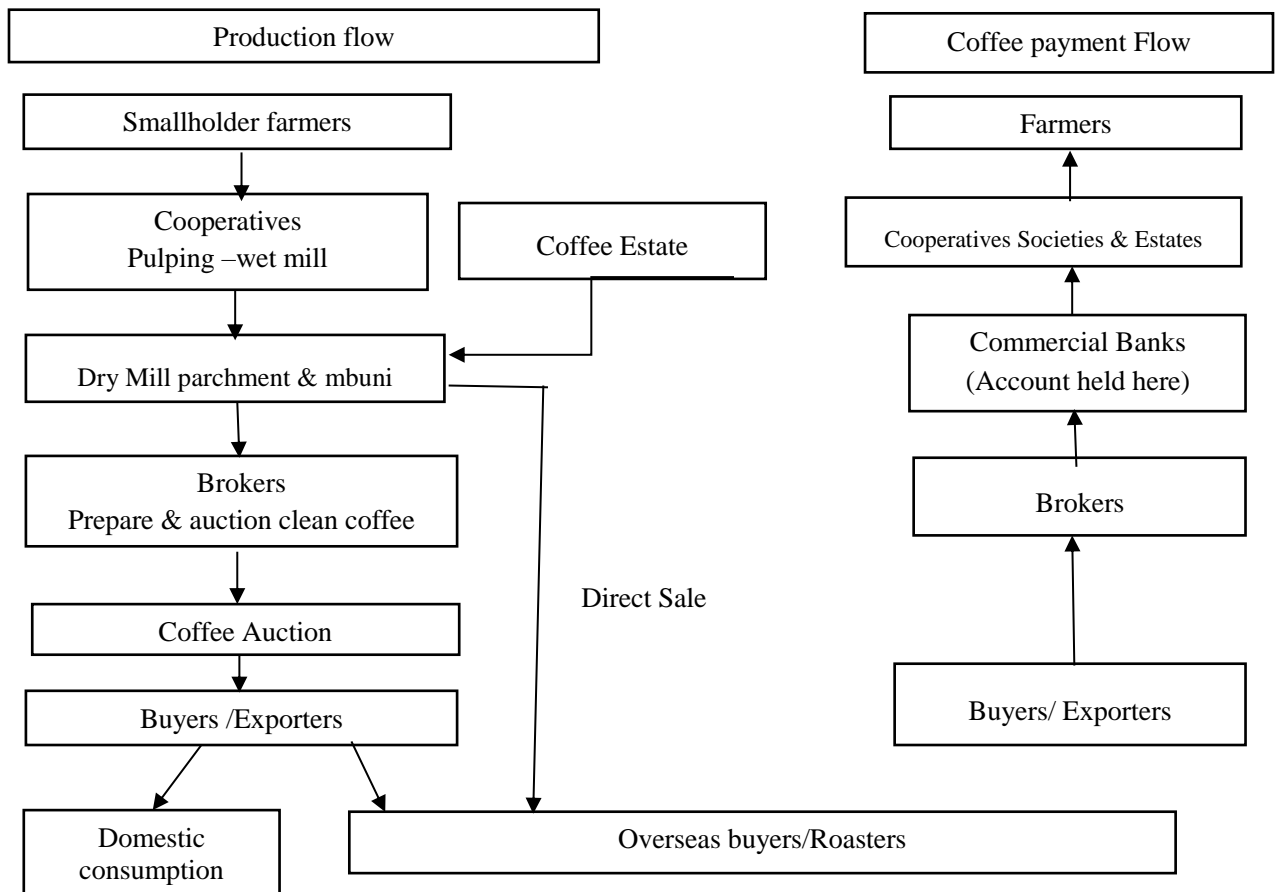


Figure 1-1: Coffee subsector Value Chain Players

The total area under coffee is estimated at 109,384.45 Ha in 2021/2022 with two-thirds of the acreage under smallholders' farmers (AFA,2021/2022).

There are three levels of coffee processing, namely primary, secondary and tertiary. Wet processing is the most preferred primary processing in Kenya. Current wet processing capacity stands at 30% utilization.

The coffee market structure is dynamic and involves several value chain players with specific interest in the coffee returns. There are two coffee marketing systems in Kenya, namely; the auction at Nairobi Coffee Exchange and direct sale. The coffee market is structured in to five key segments namely: Traditional, specialty, emerging, regional, and domestic markets. The domestic

consumption of Kenyan coffee is still at 0.036 kg per capita compared to Finland at 12.57kg per capita. There is need to return coffee subsector into one of the leading exchange earners and generating sustainable income to farmers and other value chain players.

Increasing area under production, enhancing governance in subsector, strengthening marketing infrastructure and increasing the domestic consumption are key to cushioning farmers against the volatile global coffee prices.

1.3 Rationale for the Coffee Development and Marketing Strategy

Coffee industry in Kenya continues to perform sub-optimally from an area of 45,000 Ha with average yield of 972.8kg/Ha in 1963, to area of 153,030 Ha with an average yield of 842 kg/Ha in 1987/88 to a low of 109,384.45 Ha with average yield of 474kg/Ha in 2021/2022 (AFA, 2021/2022).

The domestic consumption of Kenyan coffee is still at 0.036 kg per capita compared to Finland at 12.57kg, Ethiopia at 2.6kg and Uganda at 1.4 kg per capita respectively. The traceability of Kenyan coffee ends at the point of sale at auction. There is growing consumer demand for traceability and transparency in the value chain and digital marketing. The coffee market structure is dependent on traditional market accounting for 55% of total clean coffee production in Kenya.

Coffee was for a long time, one of Kenya's top foreign exchange earners, contributing about 40% of foreign exchange in the 1970s and providing livelihoods and income to millions of Kenyan farmers and rural communities. However, over the last two decades, coffee has lost its contribution to a distant 5th foreign exchange earner at 0.3% share of GDP.

Currently the coffee subsector is served by 4 ministries (Ministry Agriculture and Livestock Development, Ministry of Investment Trade and Industry, The National Treasury and Economic Planning and Ministry of Co-operatives and Micro, Small and Medium Enterprises (MSME) Development and County Governments. The duplicity of roles, approaches and strategies require to be harmonized into a single point of reference to facilitate implementation, coordination and monitoring.

The Government has formulated the Agricultural Sector Transformation and Growth Strategy (ASTGS). AFA also formulated AFA strategic plan 2017-2022. The ASTGS was launched to guide the overall development of the agriculture sector. There were, however, no specific guidelines or strategy for the coffee subsector. The subsector has over the years been guided by legislations and general crops strategies without a specific strategy. The sub optimal performance of the coffee subsector, has brought up the need to formulate turnaround strategies.

A review of approaches elsewhere has revealed that other coffee producing countries with significant market shares (e.g., Brazil, Colombia, Vietnam, Ethiopia and Uganda) have developed national coffee strategies which have seen progressive growth of their coffee in terms of increase in production and expansion of areas under coffee. For instance, Uganda, achieved 101% increase in production from 4.0 million 60kg bags in to 8.06 million 60kg bags, Coffee exports had increased by 71% from 3.6 million 60 kg bags to 6.1 million 60 kg bags; Value of exports increased by 59%

from USD 352 million in to USD 559 million between 2015/16 to 2020/21 respectively (IACO, 2022).

This coffee development and marketing strategy therefore lays out strategies to guide the coffee sub-sector to achieve sustainable growth while increasing Kenya’s foreign exchange earnings and generating income for value chain players.

1.4 Coffee Development and Marketing Strategy Development Process

The general approach adopted for the development of this CDMS was in-depth literature review, inclusive participatory based consultations among coffee value chain players through a variety of approaches including key informant meetings, focused group discussions, field inspections, working retreat, workshops, public participations through memoranda, county and national consultative meetings and expert opinions. Selection of stakeholders for engagement was based on a criterion of relevant experience, exposure and knowledge in matters related to the coffee value chain.

1.5 Coffee Development and Marketing Strategy Anchoring Strategy & Related Policy Framework

The Coffee Development and Marketing Strategy is aligned to the national development agenda as contained in the Constitution of Kenya, 2010, Kenya Vision 2030, Agricultural Sector Transformation and Growth Strategy (ASTGS) 2019 -2029, Agricultural Policy 2021 which guides the overall development of the agriculture sector, AFA Strategic Plan 2017-2022, Sustainable Development Goals (SDGs), and the specific coffee guidelines strategy based on the Task Force Report on Coffee Reforms, 2016. Table 1.1 summarizes the relevance of the CDMS in aligning to the national policies and strategies.

Table 1-1: Relevance of CDMS to the National Policies and Strategies

S/No.	Policy and Strategy	Relevance
1.	<p><i>Constitution of Kenya, 2010</i></p> <p>The CoK 2010 includes a comprehensive Bill of Rights; “<i>right to food of adequate quality and quantity at all times for all</i>” under Article 43,</p> <p>Article 36 and 40 provides for protection of producers and consumers right</p>	<p>(i) CDMS intends to enhance the right to be free from hunger by proposing strategies that increases farmers’ incomes through coffee subsector and hence empowering the small holder farmers to be able to cater for their needs.</p> <p>(ii) Articles 36 and 40 of the CoK 2010 provides for the protection of producers and consumer rights and right to property respectively. The CDMS seeks to enhance these rights of coffee growers as the produce owners up to the point of sale while at the same time protecting the right of coffee consumers by proposing strategies to streamline data dissemination, improve the</p>

S/No.	Policy and Strategy	Relevance
		<p>returns to growers and increased revenue for government.</p> <p>(iii) Constitution 2010 devolves specific functions in the agriculture sector, the National Government has the mandate in policy formulation, legislation, regulation, standardization and quality assurance; thus, the need for policy guidelines on the two levels of government. The CDMS has aligned itself to this by adhering to this requirement and outlined the responsibilities of the two level of government in improving the subsector.</p>
2.	<p><i>Kenya Vision 2030</i></p> <p>In Vision 2030, agriculture is identified as a key sector in achieving the envisaged annual economic growth rate of 10%.</p>	<p>The Vision 2030 takes cognizance of the central role of agriculture in driving the economic development of the country to a middle-income economy by 2030. In particular, the Vision 2030 focuses on the need for appropriate land use, increased yield output, fertilizer/ input cost reduction, enhancing investments and post-harvest losses, value addition and job creation and poverty eradication to meet the sector growth targets. This CDMS seeks to mainstream these aspects in the coffee subsector</p>
3	<p><i>Agricultural Policy 2021:</i></p> <p>The policy guides the overall development of the agriculture sector</p>	<p>CDMS recognizes that coffee is a unique crop in international trade with unique challenges of standardization, quality and pricing which require specific coffee focused policy interventions and guidelines that offer long term direction in promotion of commodity trade, achieving growth in coffee subsector contributes to overall goal of the Agricultural Policy 2021</p>
4.	<p><i>ASTGS 2019-2029;</i></p> <p>is based on three anchors:</p> <ul style="list-style-type: none"> i. increasing small-scale farmer incomes, ii. increasing agricultural output and value-add, and iii. boosting household food resilience 	<p>CDMS objective is to:</p> <ul style="list-style-type: none"> i. Increase coffee production from 51,852 MT to 150,000 MT and productivity from current 2kg/tree to 6kg/tree by end of 2028/29 ii. Increase national revenue earning from coffee subsector is from KES 35 billion in 2021/2022 to about KES 100 billion by end of 2028/29. iii. Increase the farmer earning from the national average of KES 86/kg of clean cherry in 2020/2021 to a national average of KES 130/kg of clean coffee cherry by the end of 2028/29

S/No.	Policy and Strategy	Relevance
		<p>iv. Enhance value addition in the sector from current 5% to 20% by the year 2028/29.</p> <p>This is in line with the ASTGS object of increasing small-scale farmer incomes, increasing agricultural output and value-add, and boosting household food resilience</p>
5	<p><i>Agricultural Marketing Strategy 2023-2032</i></p> <p>This Strategy aims to improve competitiveness and market access for Kenyan agricultural produce and products in both domestic and export markets</p>	<p>The AMS is general for all agricultural produce, coffee being one of the produce. This CDMS hence furthers the object of improving the competitiveness and access to marketing for Kenyan coffee as an agricultural produce.</p>
6	<p><i>AFA Strategic Plan 2017-2022</i></p> <p>AFA Strategic plan, was to enhance the AFA mandate to sustainably develop and promote scheduled crops value chains through effective regulation for economic growth and transformation.</p> <p>The key goals:</p> <ol style="list-style-type: none"> i. Boost agricultural growth and productivity; ii. Upgrading Kenya’s agricultural value chains for job and income creation; iii. Market access and integration into global value chains; 	<p>Coffee being one of the scheduled crops and with no specific interventions from the strategic plan, the CDMS has aligned itself to the AFA strategic plan and proposes strategies specific to improving coffee subsector and hence spurring economic growth and transformation for the small-scale farmers and nation.</p> <p>The strategies enhance the AFA strategic goals of boasting agricultural growth and productivity, upgrading Kenya’s agricultural value chains and, market access by proposing strategies focusing on coffee subsector</p>
7	<p><i>Sustainable Development Goals (SDG)</i></p> <p><i>Goal 1: No Poverty</i></p> <p><i>Goal 2: Zero Hunger</i></p> <p><i>Goal 5: Gender Equality</i></p> <p><i>Goal 10: reduced inequality</i></p>	<p>CDMS strategies aligns and tries to enhance SDG1,2,5 10 and 13 by proposing strategies that improves small scale earnings and enhances gender equality and reduces inequality in coffee subsector. It also proposes strategies to produce coffee sustainability while promoting BEPs</p>

S/No.	Policy and Strategy	Relevance
	<i>Goal 13: Climate Action</i>	
8	<p>Coffee Task Force Report 2016</p> <p>The report recommended for the development of coffee specific national strategy.</p>	<p>The Coffee taskforce report recommended for the development of coffee specific national strategy. The CDMS is in conformity with the recommendation of proposes strategies the improve coffee production and productivity, processing and value addition, widening and the coffee marketing and improving the funding and payment in the subsector.</p>

1.6 Organization of the Coffee Development and Marketing Strategy

The Coffee Development and Marketing Strategy is organized in Nine Chapters as follows:

Table 1-2: Organization of the Coffee Development and Marketing Strategy Report

No.	Chapter Section	Description
1	Introduction	This section gives brief overview of the agriculture sector, coffee sub sector and its contribution to GDP. It also gives the rationale for CDMS, the anchoring strategies and policies, the development process and the overall structure of the CDMS.
2	Situational Analysis	This section covers a situational analysis and identifies the challenges facing the subsector. In addition, the Strength, Weakness, Opportunities and Threats analysis (SWOT), Political, Economic, Social, Technology, Environmental and Legal (PESTEL) of the subsector is presented. Furthermore, a stakeholder analysis of the coffee subsector has been outlined with the proposed role in implementation of the strategy, finally a summary strategic issue that informs the strategic initiatives have been identified from the situation analysis.
3	The Strategic Model	This section outlines the coffee sector Vision and Mission Statements, the policy priorities for CDMS, the Slogan, the core values, thematic pillar under this CDMS. The section further sets out the goals, strategic objectives, and proposed strategic initiatives and activities for the identified CDMS pillars.
4	Strategy Implementation	This section outlines the implementation mechanism, coordination, resource mobilization, funding strategy and summary budget estimate for the implementation of CDMS. The section also outlines risk analysis and mitigation of possible risks and their potential impacts on the implementation of Coffee development and marketing strategy for the subsector
5	Monitoring and	This section gives the monitoring and evaluation overview, the

No.	Chapter Section	Description
	Evaluation	M& E system, reporting mechanism, and finally sets out the communication and review mechanism for CDMS.
6	Annexes	This section contains the relevant annexures

2 CHAPTER TWO: SITUATIONAL ANALYSIS

This section gives situational analysis and identifies the challenges in coffee subsector value chain. It further highlights the strength, weakness, opportunities and threats in the subsector.

2.1 Introduction

Kenyan coffee occupies an enviable position in global market due to its quality and uniqueness. However, despite the rising demand for her coffee, the country's production has been on decline due to several factors. These include; high cost of production, declining soil fertility, aging coffee processing machinery, fluctuating global coffee prices, aging coffee community, systematic delayed payments, poor corporate governance and impact of the climate change. Additionally, the existing farming practices continue to exert pressure on the environment necessitating initiatives that are environmentally friendly for sustainable coffee production and productivity.

2.2 Coffee Production

2.2.1 Current Status

a. National Acreage

Area under coffee within co-operatives experienced an increasing trend in the period 1963/64 to 1986/87. After this period, there was a period of slow increment (almost stagnation) until 2008/09 when the area experienced a sudden dip and another period of stagnation. In the estates, the area under coffee remained fairly stable over the years, except for the sudden dip in 2008/09. In recent years, the area under production has increased from 108,200 Ha in 2020/2021 to 109,384.45 Ha in 2021/2022 (AFA, 2021/2022) and this can be attributed to introduction of coffee in new areas which resulted in the increase of coffee cultivation from 31 to 33 counties.

The declining trends in area over the years has affected coffee production. Efforts for improving production in the country should target recovery and increments of coffee area beyond the levels obtained prior 2008/09. The trend of area under coffee production is illustrated in Figure 2.1.

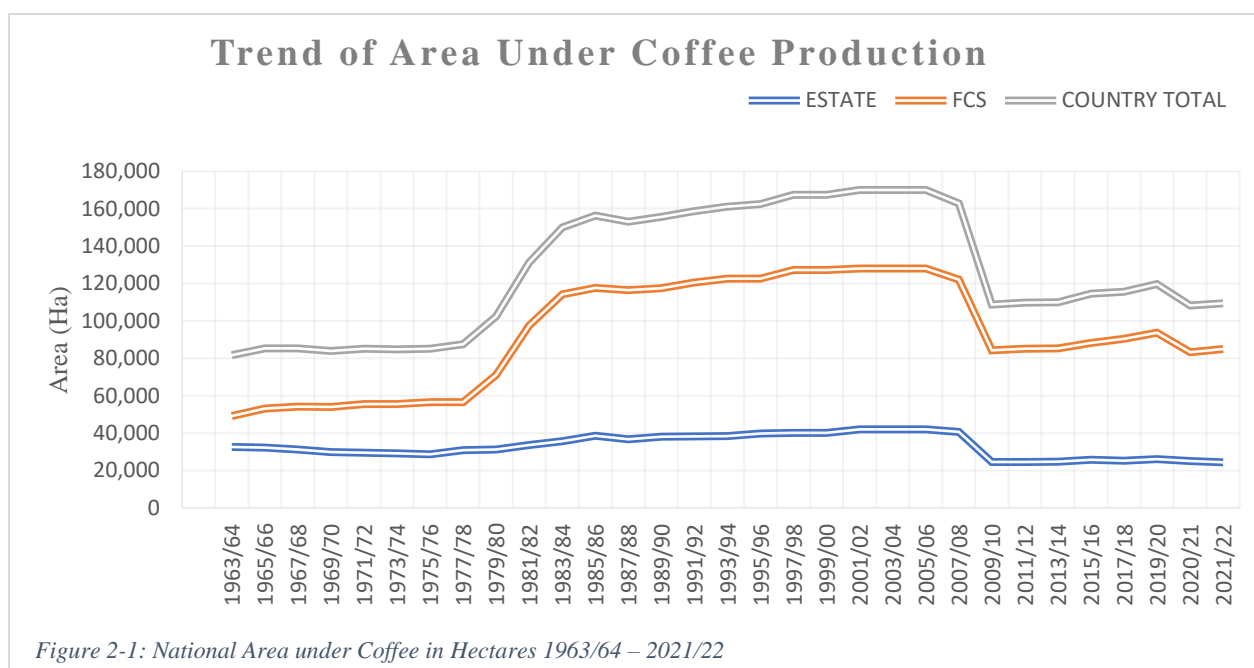


Figure 2-1: National Area under Coffee in Hectares 1963/64 – 2021/22

b. National Production

In the period 1963/64 to 1987/88, coffee production in the country showed an upward but stochastic trend. This trend continued in both estates and co-operatives, though downwards in subsequent years. The production trend recorded a low of about 33,000 MT in 1967/68, a peak of 1987/88 of 128,637 MT in 1987/88, and another low of 36,000 MT in 2019/20. In the year, 2021/22, the sub-sector recorded a production of 51,852 MT. This was an increase of about 50% from a low of 34,500 MT reported in 2020/2021 (AFA, 2020/21). The trend of coffee production is best illustrated in Figure 2.2.

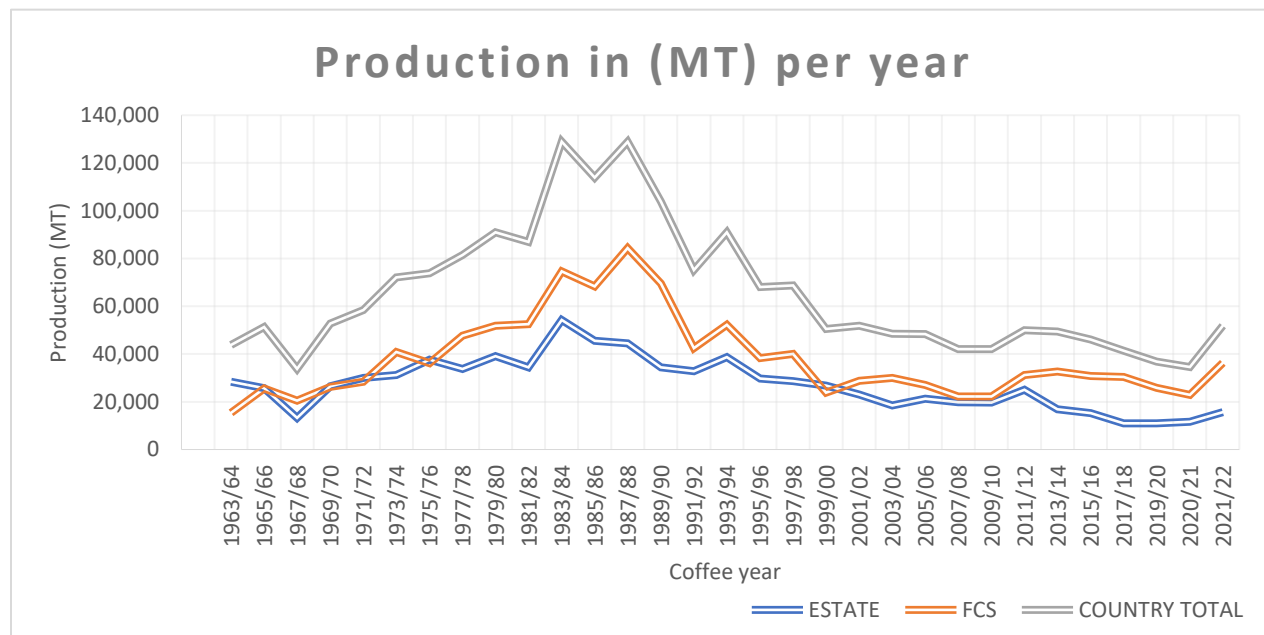


Figure 2-2: National Coffee Production in Metric Tonnes, 1963-2022

The increase follows a raft of measures by the government to revive the sector, such as the revolving fund established in 2021 and the 40 per cent fertilizer subsidy programmes, free coffee seedlings distributed by the coffee directorate and improvement in coffee prices realized in in year 2021/22. (AFA, 2023).

The low production in 2020/2021 was attributed to inadequate rainfall among other factors. The negative impact was particularly felt among smallholder farmers aggregated in societies where production declined by 11.8% from 25,901 MTs in 2019/2020 compared to 22,841 MTs in 2020/21. However, a positive production growth of 6.4% was recorded among the estate farmers from 10,972 MTs in the 2019/20 to 11,672 MTs in 2020/21, (AFA, 2020/22).

Multiple production factors such as poor weather conditions in the coffee growing areas, inadequate application of farm inputs by smallholder farmers and the change of land use from coffee farming to other competing enterprises are among the factors that affected overall coffee production.

c. Distribution of clean coffee Production per County

The distribution of clean coffee by county is provided in the Table 2.1. The four counties from the Mount Kenya region which are the traditional coffee growers namely Kiambu, Kirinyaga, Nyeri and Murang'a contributed 31795 MTs (61.32%) of the total national production in 2021/22. Among the top counties, estates are dominant in Kiambu compared to Kirinyaga where smallholders are dominating.

Table 2-1: Distribution of Coffee Production Per County in 2021/2022

No	County	Estate (Kg)	Co-op (Kg)	Total (Kg)	%
1	Kiambu	8,669,417.51	1,967,631.32	10,637,048.82	20.51%
2	Kirinyaga	485,043.14	8,291,961.89	8,777,005.03	16.93%
3	Nyeri	857,250.69	5,965,680.15	6,822,930.84	13.16%
4	Murang'a	942,865.68	4,615,508.21	5,558,373.89	10.72%
5	Kericho	802,328.14	3,523,998.21	4,326,326.35	8.34%
6	Bungoma	81,265.43	2,886,873.55	2,968,138.98	5.72%
7	Meru	205,136.59	2,301,084.24	2,506,220.84	4.83%
8	Embu	219,641.06	2,124,185.02	2,343,826.08	4.52%
9	Nandi	231,330.57	1,215,223.00	1,446,553.57	2.79%
10	Machakos	479,989.61	818,417.88	1,298,407.49	2.50%
11	Kisii	704,051.88	512,699.10	1,216,750.98	2.35%
12	Tharaka Nithi	88,395.39	785,183.42	873,578.81	1.69%
13	Nyamira	335,788.00	465,189.86	800,977.86	1.55%
14	Trans Nzoia	685,950.15	97,609.00	783,559.15	1.51%
15	Nakuru	415,056.19	261,708.83	676,765.02	1.31%
16	Baringo	26,473.94	150,985.16	177,459.10	0.34%
17	Uasin Gishu	80,705.00	25,820.00	106,525.00	0.21%
18	E/Marakwet	35,501.42	59,467.00	94,968.42	0.18%
19	Narok	77,788.00	6,065.41	83,853.41	0.16%
20	Makueni	5,438.00	76,224.00	81,662.00	0.16%
21	Migori	7,413.68	58,218.16	65,631.84	0.13%
22	Kisumu	54,572.43	1,941.00	56,513.43	0.11%
23	Bomet	24,486.50	18,538.49	43,024.99	0.08%
24	West Pokot	320.00	33,587.00	33,907.00	0.07%
25	Kakamega	11,448.00	16,708.00	28,156.00	0.05%
26	Nairobi	17,680.00	0.00	17,680.00	0.03%
27	Homa Bay	903.00	10,838.00	11,741.00	0.02%
28	Laikipia	0.00	7,358.00	7,358.00	0.01%
29	Kajiado	7,194.80	0.00	7,194.80	0.01%

30	Busia	0.00	318.00	318.00	0.00%
31	Vihiga	0.00	177.00	177.00	0.00%
32	Siaya	0.00	0.00	0.00	0.00%
33	Taita Taveta	0.00	1.00	0.00	0.00%
	Total	15,553,434.80	36,299,198.87	51,852,633.67	100.00%

Source: AFA, 2021/2022

d. Coffee Productivity

The coffee production average yield in Kenya in 1963/64 and 1987/88 was 972.8kg/Ha and 762.6kg/Ha respectively. The average yield has had a varied decline over the years to 474kg/Ha in 2021/22 (AFA,2021/2022). Figure 2.3 illustrates the average coffee yield over the years.

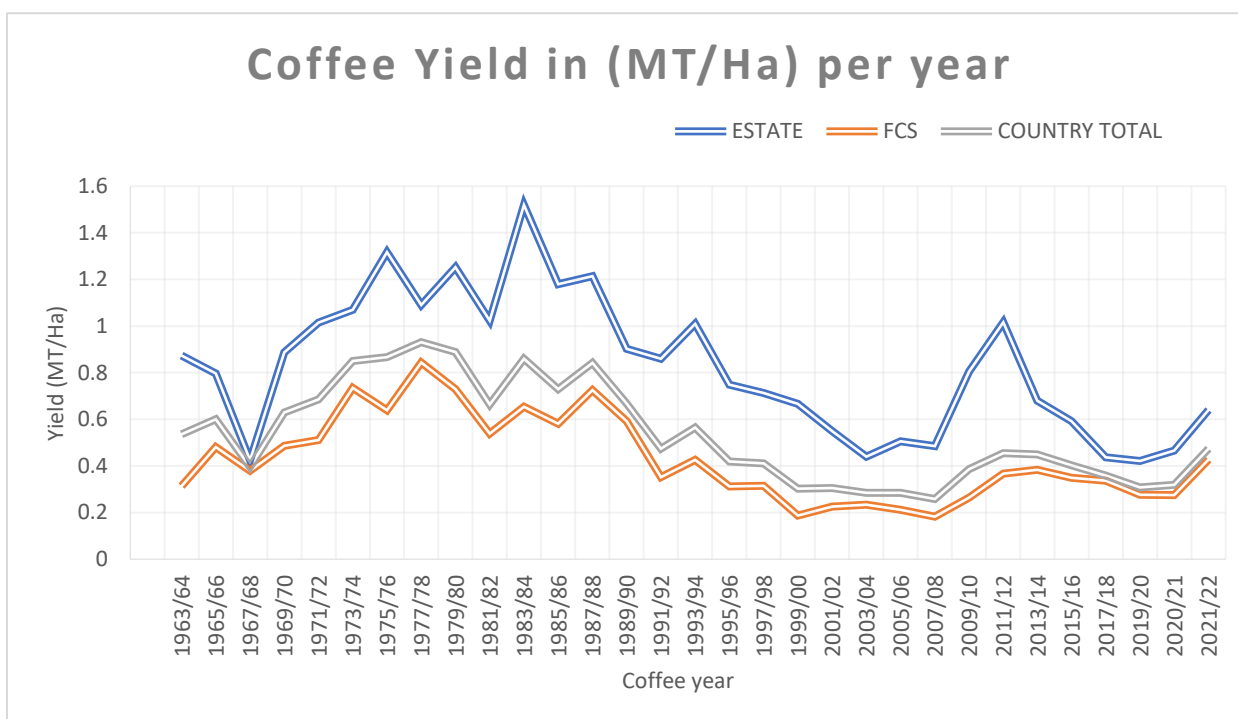


Figure 2-3: National Coffee yield in MT/Ha, 1963-2022

It can also be deduced from Figure 2.3 that, the estates are doing better than the small holders and this is mainly because they have the economic resources to do the right management from husbandry, to fertilizer application to pest and disease control and investing in disease tolerant varieties. There is need therefore to improve coffee production per hectare to realize better returns for small holders' farmers.

Yield Per Tree

Productivity was at 2kgs/tree/year in the coffee year 2019/2020 which is a decline from 4kg/tree/year in 1987/88, (CRI 2008; AFA, 2019).

Coffee productivity in the coffee estates is 4kg/tree/year on average, they are doing better than the smallholder farmers who are getting 2kg/tree/ year but still producing below the potential and this

is an opportunity for improvement. Farmers have registered productivities of up to 10kg/tree/year.

The decrease in yield can be attributed to the following:

- (i) Declining soil fertility
- (ii) Low use of agricultural inputs such as fertilizer and chemicals for pest and disease control
- (iii) Poor canopy management
- (iv) Inadequate and unevenly distributed rainfall due to climate change
- (v) Pest and diseases incidences
- (vi) Poor quality planting materials

e. Coffee Quality

Green coffee beans are generally used in medicinal and dietary preparations, while roasted coffee beans are mainly used in beverage preparation. Quality is an important aspect for the current coffee industry to satisfy the demands of the coffee consumer market. The quality of coffee beans has a direct impact on the valorisation of the beverage, being a decisive factor in the definition of its price.

The quality of coffee is influenced by the several intrinsic and extrinsic factors. These factors include: altitude and soil composition of coffee plantation, botanical species, variety, cultivation system, irrigation, geographical origin, seasonal conditions, post-harvest processing methods (washed, pulped natural, natural, fermentation conditions) and chemical changes that occur during this stage, appearance and shape of the bean, presence of defective beans and foreign matters, the chemical composition of green coffee beans, cup quality profile and preparation method (Belchior et al. 2019)

The unique quality of the Kenyan coffee is attributed to the volcanic soils, ideal climatic conditions, use of certified coffee varieties and good farming practices. The clean coffee is segregated into seven standard grades and ten classes based on raw roast and liquor attributes. In Kenya, 30% of the coffee is specialty coffee with the rest falling into the commercial and low-quality niches. This percentage can be increased by adoption of good agricultural practices and good processing practices, particularly in cooperative societies.

f. Coffee Varieties

Coffee Research Institute has developed improved coffee varieties Ruiru 11 and Batian which are high yielding and disease tolerant. Adoption of the improved coffee varieties saves the farmers about 30% of the production cost. Current coffee varieties grown in Kenya can be grouped into two:

- a) Traditional varieties (SL 34, SL28 and K7) which are susceptible to major coffee diseases such as Coffee Berry Disease, and Coffee Leaf Rust
- b) Improved varieties Ruiru 11 and Batian are high yielding and tolerant to Coffee Berry Disease and Leaf Rust.

The current country's supply of planting materials does not meet the national demand. This supply gap has been attributed to inadequate funding of CRI for seed production. The CRI is currently underfunded and has not been able to meet the demand of seeds and seedlings particularly the Ruiru 11 in addition to other services required by the farmers.

Subsequently due to inadequate funding, CRI sells seeds at KES 7500.00 per kg and seedlings at KES 40.00 per kg unlike in the past when farmers subsidized seed production through a 2% ad valorem levy that allowed CRI to sell one seedling at a cost of KES 20.00. Coffee varieties grown in Kenya are presented in Table 2.2.

Table 2-2: Coffee Varieties and Specifications in Kenya

Variety	Areas grown	Spacing and population density	Attributes
Batian	All coffee growing areas	2.1x 2.5m 1905 trees/ha	Tolerant to Coffee Berry disease and Coffee Leaf Rust Early maturing 18 months Reduces cost of production by 30%
Ruiru 11	All coffee growing areas	2x2 M 2500treesd/Ha	Hybrid variety, Tolerant to Coffee Berry Disease and Coffee Leaf Rust, Early maturing, 2 years Reduces cost of production by 30% Compact growth amenable to high density planting
SL 34	High altitude with good rainfall	2.74 x2.74M 1330 trees/Ha	Susceptible to Coffee Leaf rust and Coffee Berry Disease High cup quality
SL28	Medium to high altitude coffee zones		Susceptible to Coffee Leaf Rust and Coffee Berry Disease High cup quality
K7	Low altitude		Tolerant to Coffee Leaf Rust Tolerant to drought Medium cup quality

Adoption of the different varieties varies from region to region, the original coffee growing areas such as central Kenya region grow the traditional varieties but farmers are slowly adopting the new varieties, while in the new coffee growing areas in the Rift and the West of the Rift Valley are planting the improved varieties.

The advantages of using the disease tolerant varieties saves up to 30% of production cost and addresses consumer demand for organic coffee. With the increased concern of pesticide residues levels (MRLs) among coffee consumers, growing disease tolerant varieties tends to address these concerns through reduced use of fungicides.

g. Support Services

i. Farm Input

The main inputs used in coffee production are seeds and seedlings, fertilizer (organic and inorganic) and pesticides. Continuous cultivation of coffee has depleted most soils of the main soil nutrients hence the need for a higher usage recommendation of fertilizers. Currently, the base recommendation is at 6-50kg bags of Calcium Ammonium Nitrate (CAN), 5- 50kg bags of lime and 4- 50kg bags of Nitrogen Phosphorous Potassium (NPK) per acre per year.

An acre of Ruiru 11 coffee requires 5- 50kg bags of NPK, 10- 50kg bags of CAN and 5-50kg bags of lime per year, at an estimated total cost of KES 85,000, traditional varieties the cost is KES 41, 000 and for Batian the cost is KES 53,000 (CRI 2022). This may not be affordable to most coffee farmers which has led to the current low usage of fertilizers.

This notwithstanding, there has also been reports of use of sub-standard inputs in coffee farms. In addition, accessing the fertilizers and pesticides by farmers is a challenge because of procurement, supply logistics and untimely delivery coupled with poor distribution. Besides, in most cases, coffee growers have no ready cash to buy the inputs timely. There is therefore need to ensure inputs used by growers are analyzed and their suitability determined by the relevant government institutions prior to their application in the farms.

In order to address the high cost of production, the Government has introduced input subsidy Programme in all the coffee growing counties, which covers; fertilizers, pesticides, planting materials and factories rehabilitation. Other support production support services include: coffee research, extension and credit.

2.2.2 Coffee Production Challenges

The challenges facing coffee production are:

- i. Diminishing sizes of suitable land for coffee production
- ii. Shift in land use by farmers (estate development and other competing enterprises)
- iii. Inadequate coffee planting materials from KALRO-CRI and County Nurseries.
- iv. Pests and diseases
- v. Declining soil fertility and poor soil management
- vi. Low use of agricultural inputs
- vii. Unfavourable weather patterns
- viii. Increased cost of production
- ix. Inadequate technical support to farmers
- x. High cost of labour.
- xi. Aging workforce in the subsector

2.3 Coffee Processing and Value Addition

The postharvest processing of coffee aims to separate the seed from the remaining parts of the coffee fruit and guarantee a good preservation of the final product. Coffee processing and value addition involves adding value to coffee products by changing its current set of characteristics to other characteristics that are more preferred and valuable in the marketplace while retaining its intrinsic value.

The coffee fruit has five layers of protective material that need to be removed in order to reveal the bean inside, (Charis, 2018). They include:

- (i) the skin which is a monocellular layer covered with a waxy substance; when ripe it can be red, yellow, or pink, according to the coffee variety;
- (ii) the pulp which is composed by a fleshy pulp and, in ripe fruits, a slim layer of mucilage;
- (iii) the parchment which is a thin polysaccharide covering;

- (iv) the silver skin (or chaff)- is a fine film of the external layer of green coffee bean that is obtained as by-product or residue in the roasting process; and
- (v) two seeds with elliptical form

To increase value addition in the subsector, several strategies can be undertaken. Key among them are; enhancing research and skills in value addition, zero rating of materials for coffee packing, provision of affordable credit, inter- cropping product diversification (IACO, 2022).

2.3.1 Current Status

There are three levels of coffee processing, namely; primary, secondary and tertiary.

I. Primary Processing.

Primary coffee processing involves the transformation of red cherry into parchment coffee by sorting, pulping, fermentation, washing, parchment drying, and storage; or sun drying of cherry into buni coffee (AFA-CD, 2022a). There are other emerging primary processes such as honey coffee processes, among others. In 2021/22, there were 1,190 primary coffee pulping stations (wet mills) operated by 590 cooperatives societies and a further 2,694 pulping units of various sizes and models operated by estate growers. The existing processing capacity for these pulping stations in Kenya is estimated at 950 million kg against the average annual cherry production of 300 million kg which is 30% of installed capacity utilization, (AFA, 2022 b).

Most of the wet mills use obsolete technologies, have inadequate infrastructure, are labour intensive, and consume high energy and water, resulting in high processing costs averaging at KES 14.29 per kg of cherry as illustrated by Table 2.3, (SYK, 2020). However, in recent years some growers and cooperatives have started adopting eco-pulpers which remove both the pulp and mucilage mechanically without the need for the fermentation stage thereby saving on water and labour and reduces the cost of processing to KES.4.00 per kg of cherry processed, (Mwangi, 2021).

The primary coffee processors can also be categorized into low-cost processors (Tier 1), medium cost processors (Tier 2) and high -cost processors (Tier 3) as shown in Table 2.3. The main components of primary processing costs are staff related expenses accounting for about 49.7%, repairs and maintenance at 12.1%, depreciation of plant and equipment 4.9%, transport 4.9%, processing materials 4.0%, borrowing expenses at 3.8%, and electricity and fuel 3.2%. All other expenses combined accounted for less than 20%.

The costs of processing a kilogram of cherry varies from KES. 7.6 per kg for low-cost processors to 26.96 per kg for high -cost processors, with an average cost of KES. 14.29 per kg. One of the main determinants of average cost of processing in societies is the volume of cherry intake. On average, societies with high volume of cherry intake have lower average costs of processing than those with low intake. This justifies the need for merger of small pulping stations into larger ones, and a deterrence of further splitting of farmer cooperative societies. Moving into the future, interventions are needed to reduce the labour costs which constitute half of the processing costs, but also other costs, (SYK, 2020).

Table 2-3: Actual costs involved in primary processing of coffee, 2020

Category	Tier 1	Tier 2	Tier 3	Average
Average Cherry Intake in kgs	515,698	244,007	112,238	294,219
Average cost of processing (KES/kg of cherry)	7.6	14.7	26.96	14.29
Percentage costs				
Permanent staff	23	21	21	20.5
Casuals	21	24	20	22.9
Other staff costs	6	7	5	6.3
Repairs & maintenance	11	13	10	12.1
Processing materials	8	3	2	4
Depreciation	5	5	7	4.9
Transport	7	4	3	4.9
Borrowing costs	1	4	8	3.8
Electricity, Fuel & Water	3	3	4	3.2
Committee allowances	2	4	3	3.5
Member education	6	3	1	3.2
Travel & allowances	1	1	2	1.4
Security	2	2	2	1.7
Insurance	4	2	3	2.5
All other expenses	2	5	8	5.1

Source: Sauti ya Kahawa, 2020

II. Secondary Processing.

At the secondary processing stage, parchment coffee and buni are hulled at the dry mills, polished and graded as clean coffee. Parchment coffee is delivered to the mills with moisture content not exceeding 12%. When the delivered coffee exceeds the maximum moisture content some of the millers offer drying services at a fee while others return the coffee to the growers for further drying.

Before milling, pre-milling samples are obtained from each outturn for purposes of quality assessment to assist in providing milling instructions and monitoring of coffee classifications. Coffee is bulked to obtain millable lots and after hulling and polishing, clean coffee is mechanically graded in terms of size, shape and density into main grades, namely; AA, AB, PB, E, C, TT, T or Miscellaneous grades; HE, SB, UG, UG1, UG2, UG3 or mbuni (unwashed) grades; MH and ML. Table 2.4 shows the description of each grade.

Table 2-4:Standard Coffee Grades

Grade	General description	Screen number (size as per KSOS-174 0r 150415-1980)
E	Elephant- two beans joined together a genetic effect and includes very large AA	Retained in 21(size diameter 8.3mm)
PB	Pea berries-one ovule develops in coffee of the usual two	Through retained on 12 (4.76mm)
AA	Flat beans	Through 21 retained on 18 (7.2mm)
AB	Flat beans	Through 18 retained on 16 (6.35mm)
C	Small flat beans	Through 16 retained on 10 (3.96mm)
TT	Light density beans from AA, AB and E grades by air extraction	Separated through density by blowing
T	Smallest consists of broken and small C	Through screen No. (2.9mm)
Other miscellaneous /Kenyan Grades		
Grade	Description	
MH	Heavy buni from the natural washing process	
ML	Light buni from the natural washing process	
SB	Sorted beans	
HE	Hulled beans	
UG	Clean coffee not graded occasionally referred to as estate cured coffee or sweepings	
RH	Robusta heavy	
RL	Robusta light	

After milling clean coffee is packed and labelled into 60kg export bags whose cost is charged to the grower. The millers also undertake the transport of the packed clean coffee to a designated warehouse ready for sale. The cost of transporting the clean coffee is also borne by the grower

Since the liberalization of coffee milling in 1994, the regulatory authorities have continued to license more mills. The liberalization of coffee milling ushered tremendous growth in installed milling capacity from the initial 142,000MT in 1993 to about 400,000MT in 2019. There are Fifteen (15) licensed coffee mills in the period 2023/24. There is also an emerging trend of County governments supporting the establishment of mills for use by growers.

In 2021/2022, it was estimated that the existing installed milling capacity in the country was about 400,000MT against an average national production of 51,852MT translating to about a 13% capacity utilization, (AFA-CD, 2021/22). The unutilized capacity has resulted to unhealthy competition amongst the commercial millers leading to coffee theft. The costs attributed to the idle milling capacity are transferred to the coffee growers. In addition, there is inadequate technical

skills at the growers' mills that leads to inefficiencies that result into poor grading. It is therefore necessary to enhance compliance and review of police direction on licensing of coffee mills that incorporates feasible business plans, existing installed capacity, capital and technical capacity requirements.

III. Tertiary Processing / Value Addition

Industrial coffee processing for value addition begins with roasting, grinding and packaging. A study done by AFA- Coffee Directorate in 2019, identified fourteen different types of roasted ground coffee of which eleven were locally produced brands and remaining three were Ethiopian, Rwandese and Ugandan Java brands. Majority of small roasters in Kenya were identified with Kahawa No.1 packaging.

In 2020/2021, about 95% of the Kenya coffee was exported in green bean form, (AFA, 2022b). Globally, a larger portion of revenue from coffee is derived from value addition as opposed to the selling of green beans. Coffee value addition can positively impact the Kenyan economy through better and predictable returns, stabilization of fluctuating global prices, creation of employment and promotion of agro processing. This is in line with Kenya Vision 2030 of transforming the country into a middle-income economy through manufacturing sector.

Value addition is undertaken by the private sector players comprising of; thirty-eight (38) coffee roasters and packers. which includes seven (7) grower's cooperatives and unions in 2021/2022. Coffee roasting and packaging and consumption business is subject to food standards, regulations and licensing by various government agencies. The value addition industry includes both the roasted and ground coffee, roasted beans and other coffee by-products (AFA, 2022b)

Coffee value addition technology must promote consumers tastes and cup profile. Availability of coffee roasting and brewing machines for both domestic and commercial coffee enhances the domestic market. There is need to promote and support the acquisition of these equipment at an affordable price through various government initiatives including but not limited to tax waivers.

The training of baristas should also be enhanced to provide a pool of skilled labour which is key to building a positive image of the coffee product and hence improving the country's value addition capacity. There is also need for provision and manufacture of quality customized packaging material. This increases the competitiveness of the roasted and packaged coffee. Currently, various packaging bags are available in the local market ranging from side gusset bag recommended for large capacity packaging (200g to 500g); flat bottom pouch suitable for 100g-150g and stand-up pouch suitable for small and medium usually in small quantities.

2.3.2 Coffee Processing and Value Addition Challenges

The challenges facing processing and value addition include:

- i. Primary processing techniques that are heavy on labour, cost of operation and water consumption
- ii. Underutilization of the existing coffee mills

- iii. Inadequate technical skills at the growers' mills that leads to inefficiencies that result into poor grading and inconsistencies.
- iv. Inadequacy of appropriate skills for value addition
- v. Inadequate investments in the processing technologies
- vi. High cost of value addition equipment and infrastructure
- vii. Tariff fluctuations for value added coffee in key destination markets.

2.4 Coffee Marketing

2.4.1 Introduction

Coffee was among the most traded commodities in the world in 2022. World Coffee Producers Forum (WCPF) held in Medellin, 2017, Colombia noted that coffee profitability along the value chain is heavily skewed in the favour of the roasters and retailers in coffee consuming countries.

The coffee market structure is dynamic involving several value chain players with specific interest in the coffee returns. An efficient marketing system, created a good platform for value-added coffee and increases coffee consumption culture both domestic, regional and international which contribute to maximization of coffee returns for farmers and all sector players. Before 1989, the coffee market pricing was dependant on the allocation of quotas by the International Coffee Agreement (ICA) which stabilized prices through regulation of supplies. However, with the collapse of the quota system under ICA in 1989 coffee growing countries and producers were no longer protected. Since then, coffee is freely traded in the world market where price discovery was left to the market forces of supply and demand. (GoK, 2022)

a) Liberalization of the coffee subsector in various parts of the world

The collapse of the International Coffee Agreement (ICA) in 1989, paved way for coffee producing countries to flood the market with coffee, leading to dampening of prices. The ICA used to allocate marketing quotas to coffee-producing countries.

In most countries, liberalization of the coffee subsector was part of broader macroeconomic reforms. In addition to ending direct government control, these reforms devalued exchange rates and substantially reduced government interventions in the marketing and pricing of traded products. Controlling foreign exchange was particularly important factor in countries with overvalued currencies, where there was a high risk of foreign exchange revenues leaking to the black market. Governments also used controls to prevent coffee growers from being cheated by middlemen and to maintain fixed producer prices that shielded farmers from price fluctuations or assured them a minimum price, (Akiyama et al.,2003).

b) Coffee Market Liberalization in Kenya

Before liberalization of the coffee industry, the then Coffee Board of Kenya (CBK) served both as a regulator and the sole marketing agent for all coffee in Kenya. At that particular time the Nairobi Coffee Exchange (NCE), the institution established under the Coffee Rules to market coffee was run by Kenya Coffee Auctions Limited (KCA)

Upon liberalization of the industry and subsequent enactment of the Coffee Act in 2001, CBK core mandate was regulation function. Consequently, commercial marketing agents and traders organized themselves and managed the operations of NCE until sometime in the year 2004. The Coffee (General) Rules were subsequently amended in the year 2002 to give an association the mandate to manage NCE. In 2006, Section 62 of the rules was further amended to allow Kenya Coffee Producers and Traders Association (KCPTA) to be the manager of NCE until July 2013. Later Section 44 of the Coffee Act, was further amended to provide that the NCE to be managed by an Exchange Committee.

In addition, the government liberalized the coffee subsector with the aim of promoting increase in production, increased foreign investment, enhanced competitiveness in industrial production, and technological advancements. Furthermore, it was aimed that changes would bring about modernization and change the financial status of the economy.

Some of the changes associated with coffee market liberalization included but not limited to:

- a) Coffee Board of Kenya was mandated to carry out coffee trade at Nairobi Coffee Auction in US dollars
- b) Permission was given for coffee farmers to be paid in US dollars to help them engage in foreign exchange and benefit from currency gains.
- c) Introduction of alternative farmer payment systems (Direct Payment System) to consolidate price risks and to maintain steady flow of funds
- d) In 1996, the government reduced the total acreage required for a farmer to be registered as a coffee grower from a minimum of 10 acres to 5 acres.
- e) The smallholder farmers were not allowed to sell cherry at farm gate level but to take the produce to the cooperatives in order to consolidate economies of scale during processing.
- f) Establishment of Coffee Development Fund to fund farm development, purchase of farm inputs and operations
- g) There was debt relief for farmers owing loans to the cooperative bank on outstanding growers' arrears.
- h) The Coffee Board of Kenya retained the regulatory role while the marketing function was to be taken over by commercial marketing agencies
- i) Capital Market Authority under the capital market (coffee exchange) regulations 2020 licences the coffee broker who were initially referred as marketing agents

2.4.2 Current Status

The penetration of coffee market economy into formerly isolated and remote areas opens up opportunities for raising coffee productivity and generating coffee value-addition options for the farmer. Strong linkages to coffee markets for coffee rural producers are essential to increasing coffee production, enhancing economic growth in rural areas and reducing hunger and poverty.

Better access by small coffee farmers and estates to domestic and international markets means that they can reliably sell more produce at higher prices. This in turn encourages farmers to invest and increase the quantity and quality of the coffee produce. Seizing emerging market opportunities for

promoting specialty coffee in the new global context is, therefore, imperative for prosperity and coffee development.

Trade liberalization and regional integration, Inter-African Coffee Organization, G25 push has widened the markets available for coffee products. To fully exploit these markets, there is need to ensure compliance to product requirements especially from the developed markets.

Trading of coffee is currently guided by Capital Market (coffee exchange) regulation 2020 in line with Section 12(1) of the Capital Markets Act, 2019. The following functions are undertaken by Capital Market Authority.

- a. provide for the establishment and regulation of coffee exchanges.
- b. provide for the licensing of coffee brokers; formerly marketing agents.
- c. provide for the establishment and operationalization of direct settlement system (DSS) for expedited and transparent payment of coffee sales proceeds.
The proceeds of the sale of coffee at the auction shall be remitted by a coffee buyer or roaster through a direct settlement system for onward settlement to the service providers and net payment to the grower.
- d. provide for the promotion and maintenance of an efficient coffee exchange.
- e. give directives, principles and conditions for trading of clean coffee at an exchange.
- f. ensure the trading is conducted in a secure, stable, and transparent manner in an environment of fair competition; and
- g. provide for the protection of the interests of the grower, the buyer and other stakeholders at an exchange.

2.4.3 Marketing Systems

There are two marketing systems in Kenya through which coffee is sold, namely; the Central Auction and Direct Sales

a. Auction System

This is managed by the Nairobi Coffee Exchange Management Committee drawn from the industry stakeholders. This is the time-tested central auction system with a total of 11 brokers and 51 dealers (now known as buyers) in 2021 (AFA,2020/2021). Coffee is bought by the licensed coffee buyer (previously known as coffee traders) through competitive bidding. Coffee auctions are conducted weekly. Coffee brokers (previously known as marketing agents) contracted by coffee growers offer coffee for sale to coffee buyers (exporters) competitively to highest bidders. Currently, Capital Market Authority annually licences the coffee brokers and buyers who participates at the auction floor.

The market prices are subject to quality of coffee and international market demand and supply. Coffee prices in Kenya are therefore influenced to a larger extent by global coffee prices at both Intercontinental Exchange (ICE) and London (LIFFE).

The Exchange has an automated auction system established back in 1998, being the only coffee system of its kind then globally. The auction system was upgraded to allow online platform.

However, bidders still do individual cup quality testing. There is hence an opportunity to establish a cupping laboratory at NCE to integrate the quality analysis on the online platform to widen and allow many market players to participate in the auction.

The quantities of coffee sold in the auction floor ranged from a minimum of 24.5 million kgs to a maximum of 40.9 million kgs in the period 2012/13 to 2021/22. The value of this coffee ranged from a minimum of USD 92.76 million and a maximum of USD 227.3 million over the same period as shown in Figure 2.4 below. These quantities are offered to the NCE auction floor by marketing agents, appointed by the growers. Once the coffee is offered at the NCE, the buyers buy the coffee mainly for export. The quantities of coffee sold at the auction represents about 74% of the total average national production of 51MT. This market structure is largely oligopolistic, and competition is critical for improved market performance.

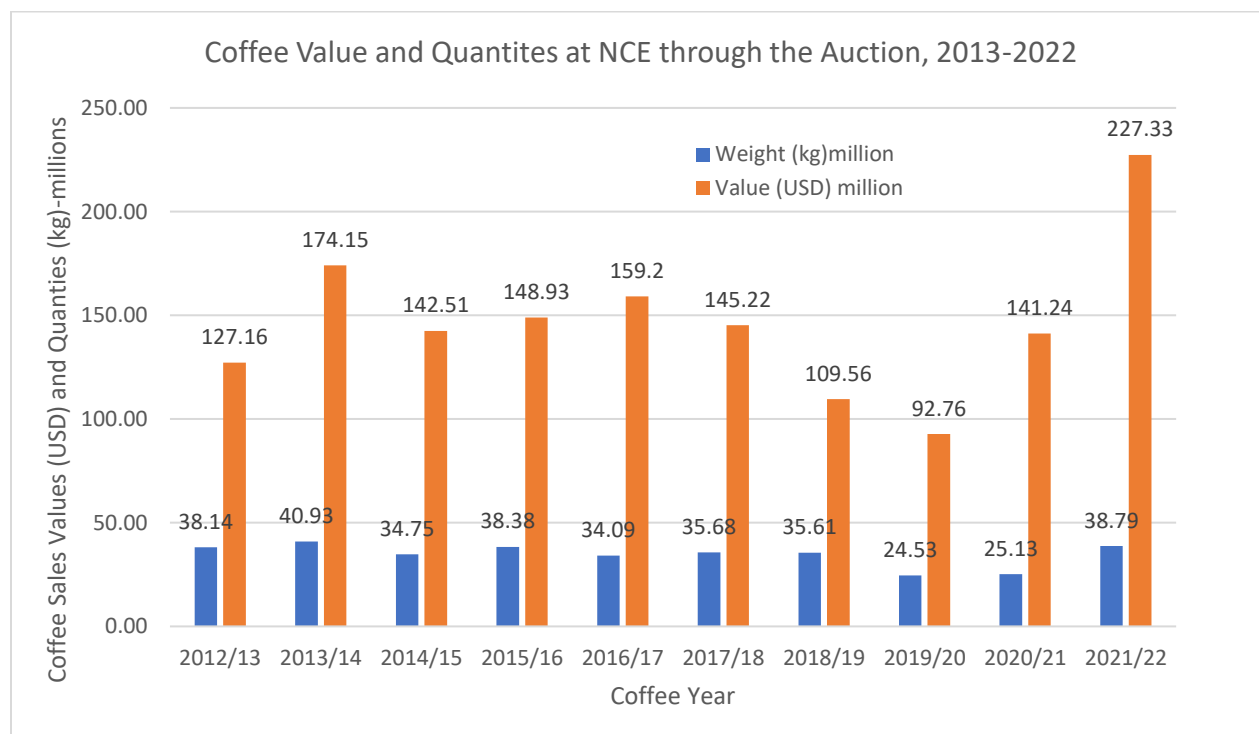


Figure 2-4: Total Coffee Sales Values (USD) and Quantities in kg between 2012/13 to 2021/22

Once coffee is purchased at the NCE floor, the proceeds are paid to the farmers less statutory deductions and fees charged by the service providers along the value chain.

Direct Sales System

The Finance Act of 2005 amended the Coffee Act 2001 to introduce the direct market sales after marketing liberalization programs failed to address the perennial problem of low producer prices in the country. Following introduction of direct sales sometimes referred to as the second window of selling coffee in 2007, some growers are able to access the foreign buyers outside the auction system.

This is an alternative marketing system to the Central Auction at the NCA floor and entails

engagement between the grower marketer and the overseas buyers. The grower brokers are coffee growers who are licenced to market own coffee directly to overseas buyers. However, in cases where the growers do not have the capacity to market directly, the process is facilitated by commercial coffee brokers by way of drawing sale agreements between producers and the buyers. Growers are paid after deduction of agency fee, management fee, storage charges, transport charges, milling and export bags costs.

The quantities of coffee sold in the direct sales ranged from a minimum of 3.7 million kilograms to a maximum of 13.5 million kilograms in the period 2012/13 to 2021/22. The value of this coffee ranged from a minimum of USD 17.99 million and a maximum of USD 84.55 million over the same period as shown in Figure 2.5. The quantities sold in direct sales represents about 22% of the total national production of 51MT.

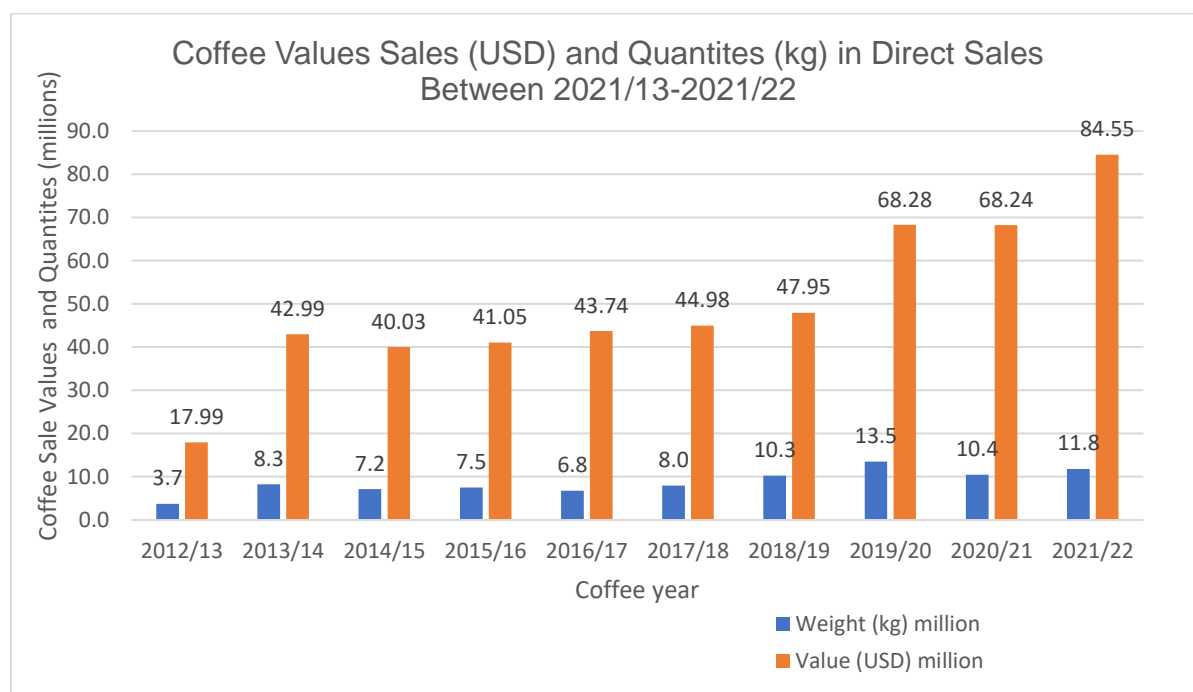


Figure 2-5: Total Values and Quantities Sold through Direct Sales between 2012/13 to 2021/22

2.4.4 Coffee Kenya and the Mark of Origin

The national brand called Coffee Kenya is a generic logo for Kenyan coffee produced under guidelines and conditions that meet market and quality requirements, as prescribed by the Kenya Bureau of Standards (KEBS) and regional and international standards. The logo represents Kenyan coffee's bold, distinctive, full-bodied flavour. It is a perfect representative of the good attributes of coffee produced in Kenya as captured by the majestic Mt. Kenya in the background, the boldness of the roasted coffee beans, and the rich tapestry of Kenya, hence the tagline of the Brand: “*So Rich, So Kenyan*”. Improved marketing of Kenyan coffee internationally can be realized by mandatory adoption of the Mark of Origin by all buyers.

2.4.5 Market Structure and Trends.

The international coffee market is established, but it keeps on evolving. Specialty coffees, single-serve methods and ready-to-drink coffees are growing in popularity. Sustainability remains a top priority for coffee industry stakeholders. Buyers and retailers often use certification to promote their sustainability efforts. The growing consumer demand for traceability and transparency in the value chain, as well as the growth in digital marketing have intensified direct trade between producers and roasters. At the same time, increasing involvement of multinational companies in mainstream coffee trading and roasting further consolidates the market, putting pressure on prices along the entire chain.

The potential markets for Kenya's coffee include countries in Africa such as Djibouti, Eritrea, Rwanda, South Sudan, Sudan, Egypt, DRC and Zambia. Countries such as Saudi Arabia, Israel, Jordan and Syria have shown immense interest in Kenya's coffee over the last few years.

The Kenyan coffee market is structured in to five key target market segments namely the traditional, specialty, regional, domestic and emerging markets.

i. Traditional Markets

These have been the major market destinations for exporting coffee over the years. Most Kenyan coffee is exported to the traditional market as raw products.

The major traditional market countries are; Belgium, Germany, Sweden, Finland, Denmark, Norway, United Kingdom, Netherlands, Switzerland and Italy. This represents a market share size of 55% of total clean coffee production in Kenya.

ii. Specialty Markets

This is a niche market which attracts better prices because of the quality that entices the buyer to pay a premium price. The specialty coffee standards are hinged on emphasis on human health, high quality beans, beans of bigger grade (14mm and above) and of significant intrinsic value. It also involves the methods actors use in the production and considers the aspects of growing and storage to ensure high quality is achieved, environmental management organic coffee are also key areas upon which concern is put for specialty coffee. Specialty coffee entails traceability mechanism from farm to cup and buyers are willing to pay premium coffee prices. Top four (4) countries involved in the specialty market are USA, Japan, Canada and Norway.

These markets are subject to close scrutiny and supervision by actors who keep tabs on all aspects of the value chain through organizations like the Specialty Coffee Association (SCA), Specialty Coffee Association of Japan (SCAJ) and Coffee Quality Institute (CQI). The specialty market represents a market share size of about 25 % of total clean coffee production in Kenya.

iii. Emerging markets

These are markets with high potential to buy coffee because of their associated high GDPs. These markets include Korea, Gulf Countries like Dubai, Oman and Kuwait, Israel, Iraq, Iran, Malaysia and China.

The Korean market has grown to the top 5 in the Kenyan markets overtaking some traditional market and it is becoming a very promising coffee market destination. There is also emerging trend

among the Arab nations for importing low quality coffee in high volumes.

iv. Regional markets.

These are markets in African countries which are vastly unexplored. The market is characterized by fewer barriers and has high potential. Uganda for instance, is a major trading partner of Kenya but coffee is vastly ignored as a trade object. The expansion of East African Community block to 7 partner states with an estimated population of over 300 million offer an opportunity to explore the market. Currently, Tunisia is a major consumer in the regional market followed by Egypt and South Africa as regional market. Others include; Sudan, South Sudan, Somalia, Morocco and Algeria.

v. The domestic market

Consumption of coffee in producing countries accounts for an estimated 38 % of world demand for coffee (ICO, 2022). A total of 28 million bags is consumed locally in Brazil alone which translates to 50 % of total consumption, Indonesia (8 %), Colombia (5 %), Ethiopia (5 %), Mexico (5 %), and India (3.5 %). Many of the coffee producing countries are now actively engaging in domestic promotion campaigns in order to increase consumption. For example, Brazil has for a while now been actively promoting local consumption. These efforts appear to be bearing fruit since the country is currently ranked first in domestic coffee consumption among the producing countries and the second largest consumer overall after the United States of America. With the exception of Brazil and Costa Rica, local consumption in most of the other coffee producing countries in Latin America is relatively low on per capita basis. Within this region the only countries that continue to register more than one million bags in local consumption per year include; Brazil, Mexico (1.3 million), and Colombia (1.5 million).

According to the International Coffee Organization, Africa contributes about 10% of global coffee exports but, except for Ethiopia, has limited domestic consumption. By comparison, in Africa, with the exception of Ethiopia, consumption of coffee has largely remained negligible.

Domestic coffee consumption trend is taking root in Kenya mostly in urban areas and cities with a sizeable population of middle-class most of whom prefer the beverage. Two factors appear to be boosting growth in the local coffee market in Kenya i.e., increase in disposable incomes of the middle class and expansion investments in coffee retail outlets.

The world's largest consumers of coffee per capita are; Finland with close to 12.57 kg per capita, followed by Norway at 10.37 kg per capita, Iceland at 9.43 kg per capita, and Denmark at 9.11kg per capita. The United States of America closes this list of high per capita consumers with slightly over 4.50 kg per capita. Regionally, Ethiopia has 2.6 kg per capita and Uganda with 1.40kg per capita. Kenya ranks at position 25 with a 0.036 kg per capita as illustrated in Figure 2.6 below (AFA-CD, 2022).

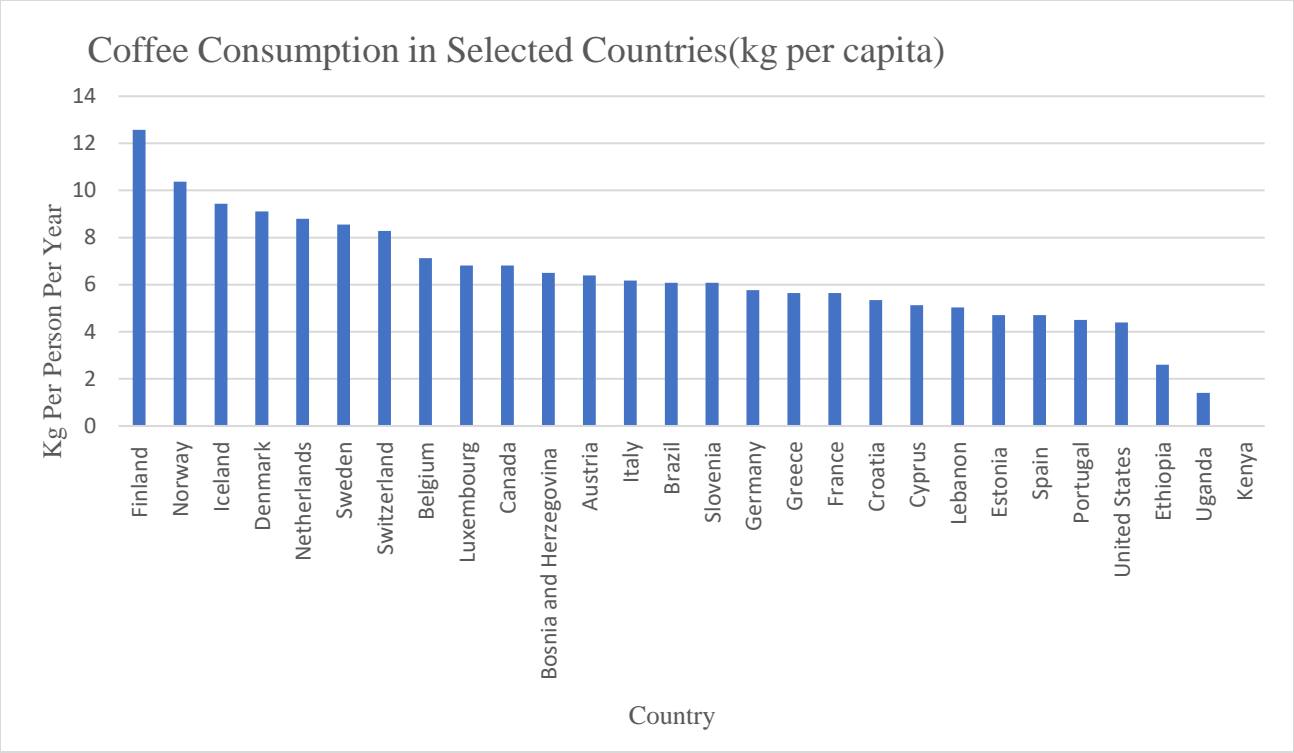


Figure 2-6: Coffee Consumption in kg per capita in various Countries

Source: AFA- CD, 2022: Domestic Coffee Consumption and Census of Coffee Houses in Kenya

The total number of roasters and packers as of 2020/21 was 544 out of which 506 are coffee houses. The number of coffee houses and shops grew from 6 in 1998 to 506 in 2020/21 as shown in Figure 2.7.

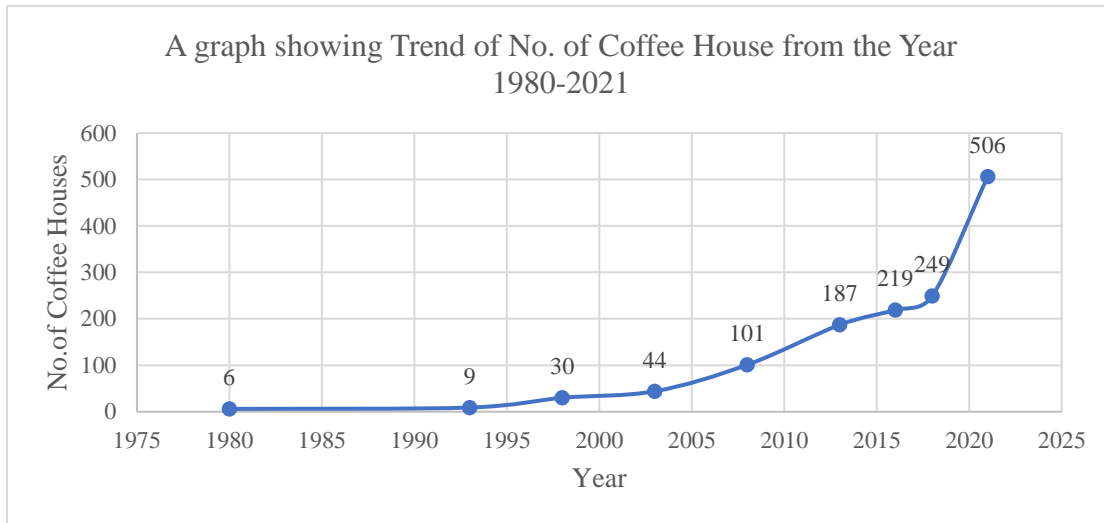


Figure 2-7: A graph Showing Trends of coffee houses in Kenya over the years. Data Source Coffee Year Book 2020/2021

Currently, there are 24 buyers engaged in roasting, grinding and packaging for coffee either locally or for international markets (AFA-Coffee Directorate, 2022). This development is attributable to consumption by the growing middle class. On the other hand, in its efforts to promote domestic coffee consumption, the Coffee Directorate has entered into partnerships with several institutions of higher learning and colleges. The domestic consumption market still needs to be grown in order for Kenya not to over rely on the export market.

Domestic annual coffee consumption has grown from 510 MTs in 2009/10 to 1659 MTs in 2020/21 in volume. Similarly, the proportion of Kenya's national production consumed locally increased from 1.2% in 2009/10 to 4.81% in 2020/21 representing a growth of 3.6% over the 12-year period. as illustrated in Figure 2.8 and Figure 2.9 respectively.

This is an indication that Kenyan's are slowly appreciating locally produced and brewed coffee and the government efforts and drive in marketing domestic coffee consumption is encouraging. The Kenyan coffee industry has contributed to job exportation through package designers, barristers, cuppers and brewers. To avoid exporting these jobs, there has been strategies employed to increase local consumption. These strategies include encouraging the youth to participate and consume locally produced coffee through career weeks at the universities, development of coffee houses and coffee bars along beaches and hotels.

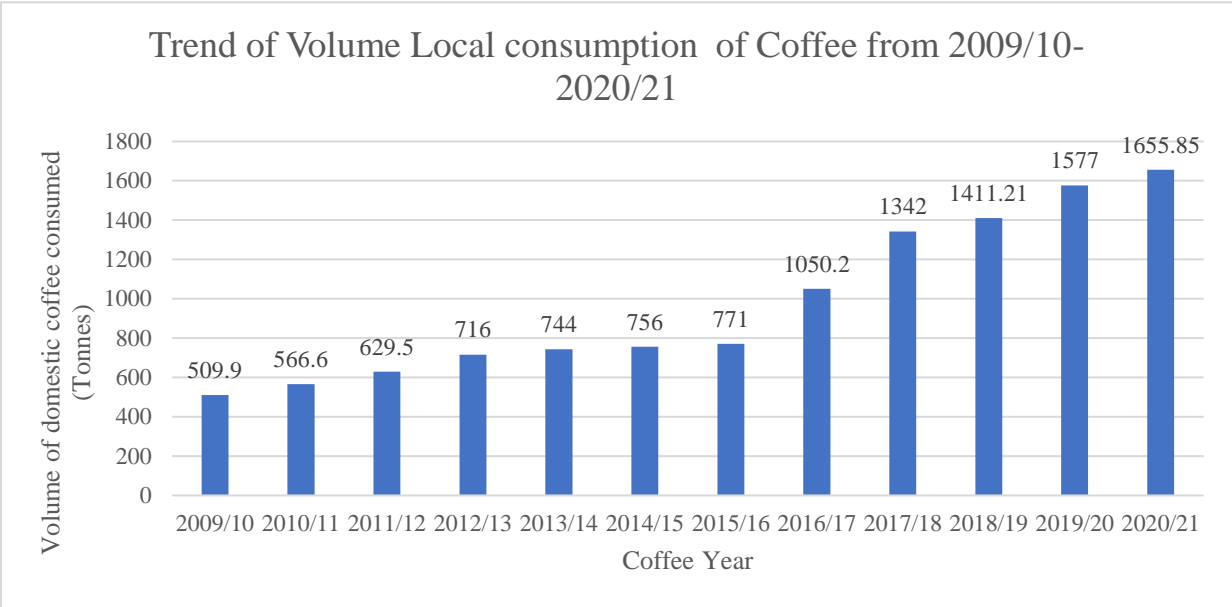


Figure 2-9: Trend of domestic Coffee Consumption in volume over the selected Years

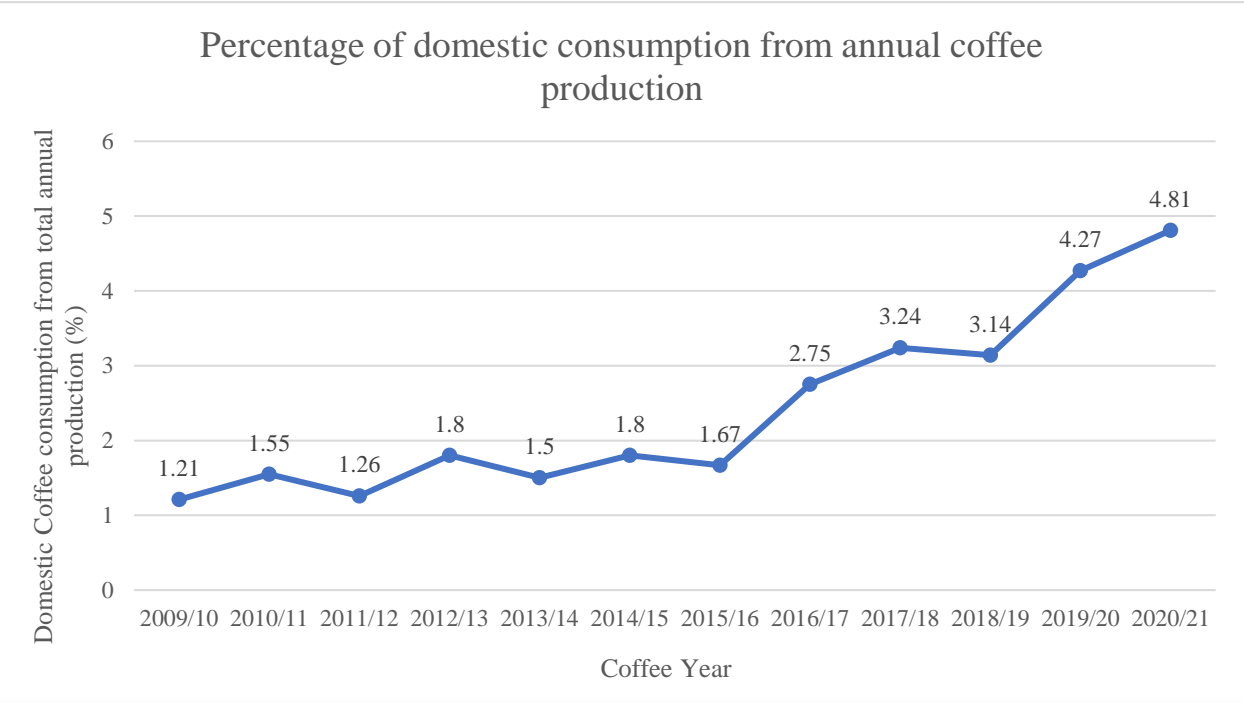


Figure 2-8: Trend of local coffee consumption as a percent of total coffee production in Kenya over the selected years

2.4.6 Coffee Marketing Challenges

Challenges facing coffee marketing include:

- i. Inadequate coffee marketing systems and arrangements
- ii. Unstructured and untargeted targeted activity schedules to market Kenyan coffee
- iii. Prevalence of coffee marketing malpractices
- iv. Underdeveloped domestic market
- v. Lack of targeted advertising drives
- vi. Changing market demands
- vii. Lack of awareness on coffee products emanating from coffee value added processes
- viii. Over-reliance on traditional export markets
- ix. Absence of specialty guidelines on specialty coffee production and marketing
- x. Myths on health risks of coffee consumptions
- xi. Unpredictability of global coffee market prices
- xii. Inadequate market information dissemination among key stakeholders in the value chain
- xiii. Lack of coffee vending guidelines

2.5 Coffee Research and Extension

2.5.1 Current Situation

a. Coffee Research

Coffee research in Kenya is done by Kenya Agricultural and Livestock Research Organization (KALRO)- Coffee Research Institute (CRI). The mandate of CRI under the KALRO Act 2013 is to promote research into and investigate all issues relating to coffee and other agricultural and commercial systems as are associated with coffee and on matters ancillary thereto.

Work is on-going on developing more varieties which have drought and heat tolerance. CRI is also undertaking research on Arobusta coffee variety. There is also research work on best agronomic practices for coffee, other pest and disease control methods among other production aspects.

The funding of research up to 2016, was mainly through an Ad-valorem levy of 2% deducted from the coffee growers' sale proceeds to support the research and transfer of technology to the stakeholders. However, following the abolishment of the levy in 2016, CRI has experienced operational challenges due to low funding from the ex-chequer checker for research and development activities. For instance, when the levy was abolished, the price per kg of seed of Ruiru 11 and Batian increased from KES 5,000.0 to KES. 7,500.0 while the price per seedling increased from KES 20.0 to KES 40.0 over the same period. In order for a farmer to establish one acre of the improved varieties, this requires 1,000 seedlings, hence a cost of KES 40,000 at source.



In order to realize a 10% increment in area under, coffee, the CRI will need to develop

approximately 27million seedlings in five years to cater for the expanded area.

The institution (KARLO-CRI) has over the last few decades experienced reduction in staff numbers due to natural attrition. The number of researchers has reduced significantly from a few hundred in the 1990s to less than 20 currently. The current staffs are retiring with more than 60% aged between 51years and 65 years with no clear succession strategies in place.

It is therefore necessary for CRI to be supported in research of climate change adaptive varieties, production and supply of certified coffee planting materials required by the coffee farmers.

Consequently, this has affected the development and production of quality coffee planting materials and limited research to support expansion of the coffee into new areas particularly in western Kenya. As research is a critical activity in any development nationally and internationally, sustainable coffee research funding is necessary. In addition, the current human resource capacity for research is dwindling due to inadequate capacity building and weak succession management systems.

b. Coffee Extension Services

Extension services communicate the research findings and recommendations to farmers and stakeholders in the coffee value chain/

In the period when production was at its peak, specialized coffee extension services were provided by the government which deployed coffee extension officers in coffee growing regions. All the coffee development initiatives were coordinated by a Coffee Working Group which are no longer in place. The Coffee Research Foundation backed the extension by production of farmer focused publications, staff training, farm demonstrations and exhibitions. The National Agricultural Extension Policy, 2012 recommended a demand driven extension approach for the agricultural sector. This approach has however not worked well for coffee growers.

There are currently several actors offering extension services, namely; the county governments, private service providers and Non-Governmental Organizations (NGOs). Agriculture, cooperatives and extension services are devolved services under the CoK 2010. It is, however, noted that funding extension services by the county governments is minimal. In addition, there are no regulations to guide public and private sector specific coffee extension services. There are no clear guidelines for ensuring quality of the extension services and use of appropriate technology to enhance extension hence the confusion and ineffective service delivery. Consequently, there is increased competition and dissemination of conflicting extension messages to clients, duplication of efforts and wastage of resources.

2.5.2 Challenges in Coffee Research and Extension Development

Challenges in coffee research and extension services include:

- i. Inadequate funding for research and extension services
- ii. Inadequate human capacity and weak succession management system at the CRI
- iii. Inadequate investment in accessing the state-of-the-art equipment for research.
- iv. Available research data do not cover the whole spectrum of the coffee value chain.
- v. Inadequate support for research staff to participate in scientific forums.
- vi. Weak dissemination of research information across the coffee value chain

2.6 Coffee Sector Data Dissemination

2.6.1 Current Situation

The 2001 liberalization of the coffee subsector to an extent disrupted the coordination and collaborative synergies and complementarity among various institutions along the value chain and consequently hindered the sharing of information amongst all stakeholders. The coffee specific extension service reduced and, in some quotas, collapsed and the primary stakeholder (growers/farmers) were literally cut off the chain on accessing timely information on matters coffee.

Most data for the coffee industry is currently on estimates. These include; total area under coffee, number of farmers growing traditional coffee varieties vis-à-vis those hybrids improved varieties (Ruiru-11) by age and gender, those growing Arabica and Robusta coffee and the coffee area under irrigation, number of coffee trees, among other relevant details.

Different value chain players produce data based on their interests. The Semi-Autonomous Government Agencies (SAGAs) generate their own data and there is no- clear central systems for sharing all this data.

The industry is hampered with too many duplications of data and information and hence increasing the cost which is transferred to the farmers. There is need therefore for a collaborative approach and creation of a central knowledge management system, return of coffee specific extension services that were in touch with farmers to communicate the data, information and advice to farmers in a timely and effective manner.

2.6.2 Challenges facing Data Dissemination

Challenges facing coffee subsector data dissemination include:

- i. Lack of critical data to aid planning (actual area under coffee production, coffee houses, area under irrigation, number of farmers growing traditional varieties and those on hybrid varieties by age and gender, among others)
- ii. Weak data creation and dissemination techniques
- iii. Insufficient human resources to help in data collation and dissemination
- iv. Duplication of data generation by various value chain players
- v. Lack of a central coffee information knowledge management system

2.7 Climate Change and Environment

2.7.1 Current Situation

a. Climate Change

Climate change has negatively impacted on coffee production through; change on suitability of coffee growing areas, changes in rainfall patterns, changes in disease and pests' occurrence, change of coffee physiological patterns, change in coffee yields and quality, supply chain and changing labour demand profiles. The effects of climate change in Kenya are more pronounced given that

coffee plantations are pure stands while in the neighboring countries coffee is either inter-cropped or grown under shade or in forests. Climate change is also negatively impacting on coffee productivity and resilience of value chain actors, including households. An increase in the severity and frequency of climate change-related disasters such as droughts, pests and diseases on other crops and floods pose threats to overall returns to farmers.

Given the current and predicted climate change trends, climate adaptation and mitigation strategies are needed to strengthen the sustainability and resilience of the coffee farming system. Research is thus needed to synthesize in-depth evidence-based impacts of climate change as well as management conditions related to climate adaptation on coffee quality toward informing climate mitigation and adaptation in the coffee industry.

b. Environmental Management

Kenya recognizes the value of her natural resources. She also recognizes that the degradation of natural resources can adversely affect agricultural productivity. The Environmental Management and Coordination Act, 2015 provides that all in Kenya are entitled to a healthy environment that they are required to safeguard and enhance. Besides, environmental concerns are global and there is a growing trend among consumers to prefer coffee produced under environmentally sound practices with the preference being on organically produced coffee.

Coffee bushes contributes to increased forest cover through intercropping with recommended shade trees. It further acts as a cover crop itself to the micro-environment that it is planted on, this increases carbon sequestration, temperature regulation and provision of nectar for bees.

Coffee processing wastes and by-products include immature/defective beans, husks, skin and pulp, parchment, silverskin, and spent coffee which, when mishandled, can cause contamination and serious environmental problems. Coffee husks are composed of the dried skin, the pulp, the mucilage, and the parchment. On a dry-weight basis, husks represent about 12% of the cherry, and for each tonne of harvested coffee fruit, about 0.18 tonnes of coffee husks are produced. 1 tonne of coffee pulp is produced from every 2 tonnes of produced coffee.

The disposal of coffee husks/pulp presents an environmental burden due to their chemical composition, namely their content in caffeine and tannins. Nevertheless, approaches have been suggested to use coffee husks/pulp namely as manure, for composting or vermicomposting, as biosorbents, for bioethanol production or caffeine extraction. Defective and immature beans during harvesting and pre-processing operations can be further processed through extraction of the oil. Coffee silverskin from coffee-roasting industries can be used as direct fuel, composting and for soil fertilization. Spent coffee grounds can be used for: fuel in boilers, animal feed, substrate for fungus growth, raw material to produce fuel ethanol, as adsorbent for the removal of heavy metals or for preparation of a distilled beverage with coffee aroma. (Charis, 2017).

Kenya is a water scarcity country. There is growing concern over the volumes of water used for wet processing. The process of producing and brewing coffee is water intensive. It takes 140 litres

of water to produce just one cup of coffee. (Project Water Fall, 2016). Coffee wet processing is thus extremely water intense and puts pressure on the country's water resources and the environment.

2.7.2 Challenges in Climate Change and Environment

Climate change and environment challenges include:

- i. Changing coffee production cycles due to climate change
- ii. Slow pace in the development of drought and heat tolerant coffee varieties
- iii. Lack of risk transfer instruments in the subsector, e.g. coffee insurance
- iv. Coffee processing wastes that pose environmental risks
- v. Unpredictable rainfall patterns
- vi. High water usage in coffee processing
- vii. Low adoption of BEPs
- viii. Over-reliance on rain-fed production systems

2.8 Women, Youth and Persons with Disabilities (PWDs Involvement in Coffee Sector

2.8.1 Current Status

According to 2019, census, about 75% of Kenya's population are below the age of 35 years. Young people often view agriculture as inefficient, socially immobile, and technically uninteresting, which leads to a situation where the average age of farmers is 60 years. The coffee sub-sector is composed of aging industry actors in the various segments of the value chain, including production, distribution and value addition. The inclusion of youth in the value chain of the coffee sub-sector is mooted as a viable remedy to sustainable production and addressing unemployment issues in Kenya.

Traditionally, farming and land ownership in Kenya is considered the preserve of a 'man's activities. Approximately 62% of Kenya women are in the frontline of the coffee industry and do the bulk of the work in plant care, harvesting as well as processing. On the other hand, their male counterparts are mostly engaged in logistics and marketing and thus have access to more resources and information.

The participation of PWDs in the coffee sub-sector is still low and coupled with significant challenges. They also face other logistical challenges such as access to buildings, offices and factories as well as buying centres. There is therefore need for enhanced affirmative action targeted towards PWDs in the subsector.

2.8.2 Challenges facing the inclusion of youth, women and PWD in the subsector.

Challenges facing inclusivity in the coffee subsector include:

- i. It is difficult for the youth and women to register as independent members at FCSs.
- ii. There is no term limit for leadership at FCSs.
- iii. Low level of digitisation along the value chain to attract tech-savvy youth.
- iv. Long systematic waiting periods after delivery of cherry at FCS discouraging youths from coffee production.
- v. Lack of inter-generational knowledge transfer on coffee production

- vi. Limited access to land as a factor of production,
- vii. Limited representation in coffee cooperative and societies and coffee farmer associations, leading to exclusion in decision making processes at farm and cooperative levels;
- viii. Limited access to credit due to security requirement
- ix. Drudgery in production systems

2.9 Coffee Financing and Payment

2.9.1 Current Situation

i. Coffee Financing

In the past, coffee subsector received support from tailor-made programs funded by the government and by development partners such as the World Bank funded Smallholder Coffee Improvement Projects (SCIP I & II) that provided funds for extension support, factory rehabilitation, farm inputs and cherry advance and the STABEX program that funded cherry advance, working capital and farm inputs. Coffee Directorate; Coffee Research Institute (CRI) and Coffee growing Counties were fund through an ad valorem levy.

Currently, credit for coffee production is offered by Commodities Fund, Agricultural Finance Cooperation (AFC), commercial banks, SACCOs. Few farmers are able to access the bank loans as they lack collateral for securing the loans for farm operations. Farmers are pushed to obtain expensive get credit from other sources who then recover their cost once coffee is sold. The cost of these credit facilities to farmers have not been ascertained and may not be well regulated.

The transformation of the coffee subsector into a commercially viable and sustainable undertaking requires access to affordable and sustainable financial credit and services. Improving the regulatory framework will enhance sustainable financing from the public and private players.

There is need to support the implementation of innovative financing mechanisms such as warehouse receipt system, guaranteed minimal returns, crop insurance, enhanced corporate governance structures and application of financial management best practices in the coffee cooperatives sector.

ii. Coffee Payment

Coffee revenues are realized when coffee buyers bid and pay for coffee at an auction or through direct sales to the buyers. Coffee payments were remitted through commercial marketing agents by the coffee buyers in the case of auction purchases or direct sales. A marketing agent was expected to pay the grower directly after the sale of coffee and on making statutory deductions within seven days of receipt of the coffee sales proceeds from the dealer as specified in the sales catalogue and there shall be no coffee pool in the custody of any marketing agent (

Currently, the Crops (Coffee) (General) Regulations 2019 has introduced the Direct Settlement Scheme which is envisaged to receive all the coffee sales proceeds and distributes them according to the coffee value chain players, thereby eliminating the need for a Bank Guarantee.

Direct settlement system means a receipts and disbursements facility provided by a commercial bank regulated as such under the Central Bank Act for the receipt from buyers of all proceeds from the purchase of coffee and from which all claims on the coffee so purchased, including payments to growers, grower millers, grower brokers, miller-brokers, warehousemen, warehouses, Nairobi Coffee Auction and financial obligations will be directly settled.

2.9.2 Challenges in Coffee subsector Financing and Payment

Challenges facing financing and payment in the subsector include:

- i. Inadequate funding of the key institutions in coffee value chain
- ii. Limited access to credit facilities due to a variety of risks and poor loan recoveries by lending institutions
- iii. High bank guarantee requirements by the Authority as a precondition for brokers hinders the participation of growers and private players in the market.
- iv. High cost of commercial loans from financial institutions
- v. Unpredictable production patterns as a result of long drought and wet seasons have made it difficult for farmers to service their loans in a timely manner
- vi. Competing interests for Commodities Fund
- vii. Low level of PPP in investments
- viii. Lack of collateral for most farmers to access loans
- ix. The systemic wait period owing to the long period from primary processing to marketing of coffee which takes between 6-8 months. This affects farmers' cash flow.

2.10 Coffee Sector Institutional Development and Legal Framework

2.10.1 Current Situation

Coffee subsector necessitates collaboration of different agencies which includes; public, private, NGO/CBOs and cooperatives, to develop and regulate the whole value chain and market products effectively. On the other hand, legal and institutional framework, as well as good corporate governance, are key enablers for effective implementation of the Coffee Development and Marketing Strategy.

1) Public Institutions

The public institutions involved in the development and growth of the coffee subsector include; National Government Ministries of; Agriculture and Livestock Development-, Cooperatives and Micro, Small and Medium Enterprises (MSME) Development, Trade, Investment & Industry, Foreign & Diaspora Affairs, National Treasury & Planning, Ministry of Water, Sanitation and irrigation (State department of irrigation), Ministry of Youth Affairs and Sports (State department of Youth Affairs), Ministry of Gender, Culture, the Arts and Heritage (State department of gender), Ministry of East Africa Community, the ASALS and Regional Development and County Governments.

The Semi-Autonomous Government Agencies (SAGAs) involved in the development and growth of the coffee subsector are Kenya Agricultural and Livestock Research Organization (KALRO) Coffee Research Institute (CRI), Agriculture and Food Authority (AFA), New KPCU, Export processing Zones (EPZ), Kenya Bureau of Standards (KEBS), Kenya Export Promotion and Branding Agency (KEPROBA), Kenya Plant Health Inspectorate Service (KEPHIS), National Irrigation Authority (NIA), Universities, Capital Markets Authority (CMA), and Warehouse Receipts Systems Council among others.

The collaboration and consultations between the National government and County governments in development and promotion of coffee sub sector as provided for in the Constitution needs to be enhanced. Further it is noted that individual County governments growing coffee apply different

approaches with different focus in terms of the interventions in the promotion and development of the subsector.

2) Private Sector Institutions and Non-Governmental Organizations

The private sector players in the coffee subsector includes smallholder coffee growers, estate growers, cooperative societies, commercial millers, roasters, traders, retail chains, coffee houses, certification agents, financial institutions and Non-Governmental Organizations. The challenge is each of them operates independently leading to duplication of roles and conflicts of interest among others.

3) Co-operatives and Corporate Governance in the Coffee Subsector

The smallholder coffee farmers are organized into cooperative societies for economies of scale. Co-operative societies are member-based private entities but have public interest. Their role in produce aggregation, primary processing, secondary milling, marketing and facilitating finance and farm input access make the model a viable vehicle in the development of the subsector.

Over the recent periods, some coffee cooperatives societies have shown institutional and governance weakness leading to poor financial management resulting in to high levels of operational costs and indebtedness.

To enhance the institutional framework and governance development in the coffee subsector there is need to enhance compliance to regulations, guidelines and standards in the operation of this cooperative societies.

4) Other farmer Associations

The coffee industry is organized in organizations that vary in size, area of coverage, and mandate. However, each association plays a critical role in the coffee value chain. They include:

Small associations of small estate farmers: These are small organizations found in nearly every coffee-producing county, some of which are legally registered. They consist of small estate coffee farmers and are used as channels for information sharing for better bargaining power and pooling resources for purposes of accessing inputs at affordable prices.

National Coffee Cooperative Union – (NACCU): This is an outfit of some cooperative coffee unions, formed in 2018 from the coffee task force of 2016 recommendations. Its membership includes some cooperative unions (cooperative farmers only). The sole mandate of this union is to ensure and enhance the social and economic welfare of cooperative coffee farmers.

Coffee Estate Planters Association (CEPA): This is an association of some coffee estate farmers established in 2018 based on the recommendations of the coffee task force of 2016. The task of this association is to enhance the social and economic welfare of coffee estate farmers. It should however be noted that two associations in one industry with similar mandates could divide farmers instead of uniting them.

Association of Women in Coffee Industry (AWICI): This is a membership organization in Kenya registered in 2020 whose main aim is to take action to bring women into full participation in the

mainstream of the coffee value chain. The members include coffee farmers, buyers, brokers, barristers, liquorers etc. Members of the association are subscribers to the association's constitution and include any woman in the coffee value chain over the age of eighteen years. This means all women from production, value addition, processing and coffee dealership, and financing among others are eligible to membership. Key Strategic objectives or areas of focus for AWICI are: a) information and Knowledge dissemination; b) market Access and Logistics support; c) connections and Networks Creation; d) access to finance facilitation; and, e) advocacy

Kenya Coffee Producers Association (KCPA): This association has existed since 1960s as Kenya Coffee Growers Association but was later rebranded to the current status for better service delivery to its members. Its members include the association of estates (both directly and through their small associations) and smallholder farmers cooperatives (directly and through their unions' farmers). KCPA has since November 2019 started devolving the organization representation structure in line with the devolved government structure for improved service delivery to the farmers. The devolved representation structure has considered the following: delegate system of member representation; County chapters, Estates, and smallholder farmers' representation; and both the individual smallholder and estate farmers and corporate/associate membership.

The association performs the following functions: to advocate for the economic and social interests of coffee producers in Kenya through active participation in policy issues impacting the coffee sub-sector in Kenya and enhance the capacity of farmers to address issues related to coffee production, processing, and marketing coffee for improved livelihoods of coffee producers. They are involved in the facilitation of policy dialogue and information gathering and sharing with the farmers.

5) Legal and Regulatory Framework

The Coffee sub sector is regulated through the Crops Act 2013, AFA Act, 2013 and KALRO Act, 2013. Other relevant statutes include the Seed and Plant Varieties Act; the Cooperatives Societies Act 2012, Cooperative Societies Bill (Amendment), 2021; the Biosafety Act 2009 the Plant Protection Act; and the Pesticide Control Products Board (PCPB) Act and Warehousing Receipt System Act, 2019.

Subsidiary regulatory instruments include; Crops (Coffee) General Regulations, 2019 and Capital Markets (Coffee Exchange) regulations, 2020 to operationalize Crops Act, 2013.

The National Government is mandated to develop policies, regulations, guidelines, standards, capacity building of County Governments and undertake international trade relations. The County Governments are mandated to implement the national policies and regulatory framework in the subsector. The county government functions include; crop husbandry, coffee extension services, pest and disease control, primary processing, trade development and regulation (GoK, 2010)

The National Agriculture Policy 2021 (GoK, 2021) provides guidelines to the National and County Governments. More importantly, the policy touches on roles in ensuring; increase of agricultural production and productivity through the use of appropriate, good quality and affordable inputs; facilitating access to domestic, regional and international markets and reducing post-harvest losses while promoting agribusiness, value addition and product development.

The National Cooperatives Policy 2019 provides for institutional and regulatory reforms aimed at improving governance in cooperative institutions in Kenya (GoK, 2019)

The National Trade Policy 2017 (GoK, 2017) seeks to facilitate Kenya's transformation into a competitive export led economy, enhance regional integration, and widen participation in both domestic and international trade.

However, there exist some gap in implementation of some regulatory frameworks that supports the subsector.

2.10.2 International and National Standards on coffee Certifications

Coffee is one of the most globally traded commodities. About 70% of total coffee produced is consumed in non-producing countries (ICO, 2023). Apart from the national regulations and standards, coffee is also heavily regulated with various regional and international certifications standards. Some of the certifications, standards and regulations include but not limited to:

- 1) **EUDR -The EU Deforestation-free Regulation (EUDR).** The EUDR regulation is designed to ensure that products entering the EU market are free from links to deforestation and forest degradation. For coffee producers, it means demonstrating the source of their beans and adhering to deforestation-free practices.
- 2) **International Fair-Trade Certification:** Fair Trade ensures that coffee producers receive fair prices for their products, promoting social and environmental sustainability.
- 3) **Organic Certification (USDA Organic, EU Organic):** These certifications ensure that coffee is produced without the use of synthetic pesticides or fertilizers.
- 4) **Rainforest Alliance Certification:** This certification focuses on promoting environmental sustainability, social responsibility, and economic viability in the production of coffee.
- 5) **UTZ Certified (Now Rainforest Alliance):** Formerly known as UTZ Certified Good Inside, this program focuses on sustainable farming and better opportunities for farmers.
- 6) **4C Association (Common Code for the Coffee Community):** A baseline standard for sustainable coffee production, covering social, economic, and environmental aspects.
- 7) **Bird Friendly Certification:** Ensures that coffee is grown under conditions that support bird habitat conservation.
- 8) **ISO/TC 34/SC 15-** Involves Standardization in the field of coffee and coffee products, covering the coffee chain from green coffee to consumption, in particular. Standardization includes terminology, sampling, test methods and analysis, product specifications and requirements for packaging, storage and transportation
- 9) **Global Coffee Monitoring Program (GCMP):** An initiative by the International Coffee Organization (ICO) to monitor the coffee sector and promote sustainability.
- 10) **East African Standard** – The East African Standard specifies the requirements and methods of sampling and test for roasted coffee beans and roasted ground coffee. This standard applies to decaffeinated roasted ground coffee

2.10.3 Challenges in Governance, Institutional Development and Legal Framework

The challenges facing coffee subsector institutions and governance include:

- i. Inadequate capacity in key coffee value chain institutions
- ii. Low level of engagement among stakeholders
- iii. Weak governance structures in the cooperatives leading to high operational costs and indebtedness.
- iv. Weak succession management systems at various value chain institutions
- v. Low compliance levels among value chain players with relevant laws and regulations governing the subsector.
- vi. Weak communication system between various institutions along the coffee value chain
- vii. Duplication of roles among various subsector players
- viii. Low level of awareness among farmers on key roles and responsibilities in cooperatives societies
- ix. Subdivision of cooperative societies into small uneconomical units
- x. Weak supportive legal and regulatory frameworks in the subsector

2.11 SWOT Analysis of the Coffee Value Chain

The following is a SWOT analysis of the coffee value chain in Kenya

A. STRENGTHS

- (i) Availability of suitable land for coffee farming expansion
- (ii) A pool of experts in coffee production in the country
- (iii) Elaborate legal and institutional framework in the two levels of government.
- (iv) Availability of coffee varieties that can be improved (Arabica, Robusta, Arobusta)
- (v) Existence coffee institutions (AFA-CD, CRI) among other.
- (vi) Availability of processing infrastructure and Presence of private millers to augment the growers' millers.
- (vii) Existence of training facilities at CRI Kenya Coffee College and private and public universities on coffee production, processing, and value addition
- (viii) Automated price discovery auction system
- (ix) Reliable traditional export markets for coffee
- (x) Market exhibitions and trade delegation in the wider EAC market
- (xi) Availability of established farmers organizations and financial institutions
- (xii) Introduction of Cherry Revolving Fund to improve liquidity to farmers.
- (xiii) Digital airwaves that make it possible to communicate information on local languages to farmers and social media platforms that allow easy flow of information.

B. WEAKNESSES

- (i) Inadequate funding for the subsector
- (ii) Declining soil fertility, inadequate farm inputs and poor farming practices
- (iii) Low returns deterring new farmers from venturing into coffee farming while others uprooting their trees.
- (iv) Poor corporate governance in FCSs
- (v) High production costs
- (vi) Insufficient research funding and extension services
- (vii) Inadequate technical skills at the growers' mills and Old processing equipment
- (viii) Low levels of domestic value addition
- (ix) Lack of formal marketing arrangements between Kenya and other consumer countries
- (x) Land tenure system that promotes male ownership
- (xi) Inadequate staff development and low participation in scientific forums
- (xii) Lack of central coffee information knowledge management systems

C. OPPORTUNITIES


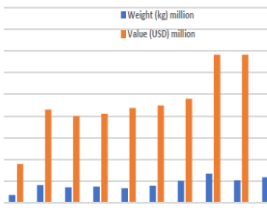


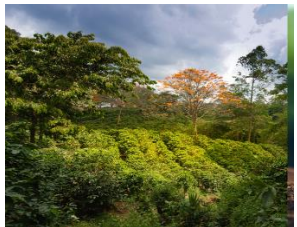

- (i) Government prioritization of coffee enterprise
- (ii) Availability of potential in non coffee growing counties

- (iii) Increased coffee consumption globally and locally.
- (iv) Growing interest in specialty coffee
- (v) Expansion of the EAC regional block and Pan African Free Trade Area
- (vi) An established coffee auction system with capacity to serve regional market.
- (vii) Untapped domestic and global market
- (viii) Potential for commercialization of coffee by-products
- (ix) Availability of a huge, underutilised milling capacity
- (x) Availability of certification systems
- (xi) Established and emerging alternative marketing windows/channels such as Warehouse Receipt System
- (xii) Existence of high yielding, drought resistant and heat tolerant coffee varieties
- (xiii) Increased knowledge in research and development in coffee value chain
- (xiv) A high number of innovative youth population ready to participate in the subsector
- (xv) A strong legal environment for environmental protection
- (xvi) Increase in financial support systems in coffee subsector
- (xvii) Validation of climate insurance and credit
- (xviii) Increased demand for specialty coffee

D. THREATS

- (i) Aging coffee farming community
- (ii) Low use of agricultural inputs
- (iii) Low investments in the value chain
- (iv) Low funding for the sub sector
- (v) Climatic change
- (vi) Weakening Kenya Shillings affecting cost of inputs
- (vii) Competition from other beverages
- (viii) New strains of pests and diseases
- (ix) Competing enterprises for land resources
- (x) Loss of soil fertility
- (xi) Subdivision of land to uneconomical sizes
- (xii) Changing coffee consumer demands
- (xiii) Volatile global coffee market prices
- (xiv) Inadequate market research, intelligence, and dissemination of market information
- (xv) Importation of value-added coffee
- (xvi) Growing concerns on maximum residue levels (MRLs)
- (xvii) Indebtedness of coffee societies
- (xviii) Disinterest from youth engaging coffee farming.
- (xix) Lack of stability in the sub-sector's regulatory environment

2.12 Political, Economic, Social, Technology, Environmental and Legal (PESTEL) Analysis of the Coffee Value Chain

					
POLITICAL	ECONOMIC	SOCIAL	TECHNOLOGY	ENVIRONMENTAL	LEGAL
<ul style="list-style-type: none"> • Political stability – there has been political stability since 2007 which is positive for the coffee industry • Government Policies: BETA programmes on fertilizers subsidy, guarantee schemed on minimal payments for coffee farmers, • Existence of agricultural policy 2021- that guides the overall development of agriculture • Political interferences on governance of the cooperatives and key coffee 	<ul style="list-style-type: none"> • Exchange Rates: Fluctuations in exchange rates can influence the cost of production and international sales. • Economic Growth: This affects the consumer purchasing power and demand for Kenyan premium coffee. • Availability of credit: Farmers rely on credit to finance their operations • Investment in technology including agricultural innovations and 	<ul style="list-style-type: none"> • Health myths and consciousness among coffee consumption • Cultural and religious beliefs in coffee consumption, coffee tree inheritance, land and property inheritance • Preferential roasting and brewing techniques in key market destinations • Changing demands and increasing preferences for organically produced coffee • Increasing awareness of health and wellness especially for specialty and 	<ul style="list-style-type: none"> • Emerging processing techniques- eco-pulping • E-trading at NCE • ERP systems at NCE for buyers • Absence of ERP system along the rest of the value chain • Extension: Adoption of e-extension • Continual research on technological improvement of coffee varieties and processing techniques at CRI • Rising digital trading by the international markets • Increased mechanization: Modern processing equipment and machinery are used for sorting, pulping, and drying coffee 	<ul style="list-style-type: none"> • Climate change • Changing consumer demands and preference on organically and environmentally sustainable practices coffee produced • Degradation of soil fertility • Changing climatic patterns • Existence of sustainable waste management along the value chains- (National Sustainable Waste Management Policy 2021) 	<ul style="list-style-type: none"> • Supportive legal framework for operation of coffee subsector including marketing and brokerage of Kenyan Coffee (Crop Act, 2013, Crop (coffee general) regulations 2019, Capital Markets (Coffee Exchange) regulations, 2020, among others • Intergovernmental agriculture sector working groups • Existence of labour laws governing labour use in coffee value chains • Absence of specialty coffee

<p>regulatory and marketing institutions</p> <ul style="list-style-type: none"> • Export market agreements/MoUs with key markets would require strengthening • Taxation: Multiple taxations, cess and levies 	<p>processing improvements</p> <ul style="list-style-type: none"> • Market access and trade agreements • Low private sector investment • Intercounty trading • Establishment of Special Economic Zones by county governments should aid market access and investments 	<p>organic coffees in emerging and specialty markets</p> <ul style="list-style-type: none"> • Increased demand for value added coffee products such as yoghurt, beer, beauty products, etc) • Demographic patterns- For instance youth coffee consumption based on coffee waves, coffee preferences by middle class citizens • The growing consumer demand for traceability and transparency in the value chain • Branding of coffee as the new lifestyle drink 			<p>intellectual property rights</p>
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2.13 Stakeholder Analysis

The coffee subsector is served by various stakeholders along the value chain. Their roles in the implementation of the coffee development and marketing strategy are outlined in Table 2-5.

Table 2-5: Stakeholder Analysis

#	Name of the Stakeholder	Role of Stakeholder to assist in Implementation of CDMS
1	Ministry of Agriculture and Livestock Development (MoA &L)	<ul style="list-style-type: none"> ● Formulation of policies and regulations ● Supervision of sector's performance ● Development of linkages with development partners ● Provision of financial support ● Disease and pest control ● Technical support ● Promotion and marketing of Kenya Coffee
2	Ministry of Co-operatives and Micro, Small and Medium Enterprises Development (MSME)	<ul style="list-style-type: none"> ● Policy formulation for registration of cooperative societies ● Registration of corporative societies ● Provision of governance guideline of farmer cooperative societies ● Promotion of agro- processing ● Provision of relevant favourable policies for coffee corporative societies ● Provision of regulations and guidelines for efficient governance of corporative societies ● Provision of technical support to governance of cooperative societies
3	County Governments	<ul style="list-style-type: none"> ● Formulation of county laws and regulations ● Implementation of devolved agricultural related functions ● Development of favourable laws and regulations for coffee sector growth ● Promotion of coffee production ● Implementation of National government policies and regulations in the counties ● Provision of enabling environment for the development of coffee and inter and intra County trade ● Availing of farm inputs such as, fertilizer and other planting materials ● Provision of infrastructure to promote agricultural production and marketing as well as agro-processing and value chains;
4	Ministry of National Treasury and Economic Planning	<ul style="list-style-type: none"> ● Formulation of financial policies ● Facilitation of budgetary allocations in coffee industry ● Provision of financial policies and regulatory framework

#	Name of the Stakeholder	Role of Stakeholder to assist in Implementation of CDMS
5	Ministry of Trade, Investment and Industry (MITII)	<ul style="list-style-type: none"> ● Formulation of trade policies ● Facilitation of Trade in Coffee Industry ● Provision of necessary support for coffee trading
6	AFA- Coffee Directorate	<ul style="list-style-type: none"> ● Development of governance regulations for the promotion of coffee industry
7	KALRO Coffee Research Institute and other Research Institutions	<ul style="list-style-type: none"> ● Undertake coffee research that meets industry demands ● Provision of technical support to the private sector in mass multiplication of improved coffee varieties
8	Cooperative societies, unions	<ul style="list-style-type: none"> ● Representation of farmers' issues ● Marketing of farmer produce ● Compliance with set rules ● Provision of good corporate governance
9	New KPCU	<ul style="list-style-type: none"> ● Provision of milling, warehousing and marketing coffee services ● Offer sustainable milling, warehousing and marketing ● Provision of information on challenges in milling, warehousing and marketing
10	Farm input suppliers	<ul style="list-style-type: none"> ● Supply of farm inputs ● Provision of extension services ● Promptly and efficiently deliver farm inputs and collaborate with coffee cooperatives
11	Coffee Farmers	<ul style="list-style-type: none"> ● Production of coffee ● Compliance with set guidelines and standards ● Provision of feedback on coffee development programmes
12	Nairobi Coffee Exchange (NCE)	<ul style="list-style-type: none"> ● Provision of a central platform where buyers and sellers trade coffee in a transparent and efficient manner ● Provision of auction coffee marketing data/information on markets
13	Domestic consumers	<ul style="list-style-type: none"> ● Provision of domestic market for coffee ● Maintain loyalty to local coffee products ● Provision of feedback on coffee products
14	Coffee Producers and Processing Associations	<ul style="list-style-type: none"> ● Agro- processing and value addition ● Product diversification ● Increase product diversification ● Adoption of appropriate technologies
15	Ministry of East African Community (EAC)	<ul style="list-style-type: none"> ● Dissemination of information on EAC investments in the coffee sector ● Lobbying for EAC coffee market
16	Ministry of Environment and Forestry	<ul style="list-style-type: none"> ● Environmental management/protection ● Main-streaming Climate Change, and ● Coordinating climate change policy implementation
17	Ministry of Sports and Youth Affairs	<ul style="list-style-type: none"> ● Gender and youth mainstreaming in coffee sector

#	Name of the Stakeholder	Role of Stakeholder to assist in Implementation of CDMS
18	Ministry of Water and Irrigation	<ul style="list-style-type: none"> ● Regulation of abstraction of water for subsector production ● Development of infrastructure for coffee irrigation
19	Ministry of Roads and Transport	<ul style="list-style-type: none"> ● Provision of access to coffee producing areas ● Regulating transport ● Support the development of the infrastructure that reduces the cost of doing business
20	Council of Governors	<ul style="list-style-type: none"> ● Promotion of coffee in counties ● Provision of markets and linkages both locally and internationally ● Lobby for increased production of coffee in growing counties ● Offer linkage and guidance on implementation of National government policies and regulations in the counties targeting coffee sector ● Lobby for provision of an enabling environment for the development of coffee and inter and intra county trade
21	Kenya Industrial Research and Development Institute (KIRDI)	<ul style="list-style-type: none"> ● Development of industrial and allied technologies for use within the coffee value chain ● Collaboration with other research institutions to promote industrial research in coffee subsector ● Provision of research support to Coffee Research Institute and others,
22	Pest Control Products Board (PCPB)	<ul style="list-style-type: none"> ● Regulation of Pest Control Products; importation, exportation, manufacture, distribution in the subsector to ensure consumer preferences are addressed
23	Kenya Bureau of Standards (KEBS)	<ul style="list-style-type: none"> ● Standardization ● Certification ● Quality Control ● Enforcement of standards
24	Kenya Plant Health Inspectorate Services (KEPHIS)	<ul style="list-style-type: none"> ● Inspection of coffee exports and Imports ● Issuance of phytosanitary certificates ● Registration of new varieties
25	Certification Bodies (Africert ltd, SGS Kenya ltd, Bureau Veritas Kenya ltd)	<ul style="list-style-type: none"> ● Certification ● Third party audit checks/ Check for conformity ● Participate in technical committees for standards
26	Kenya Accreditation Services (KENAS)	<ul style="list-style-type: none"> ● Accreditation of inspection bodies
27	Development partners	<ul style="list-style-type: none"> ● Offer technical and financial support
28	National Irrigation Authority	<ul style="list-style-type: none"> ● Provision of irrigation infrastructure ● Promotion of irrigation initiatives
29	Kenya National Farmer's Federation (KENAFF)	<ul style="list-style-type: none"> ● Advocacy on behalf of coffee farmers ● Registration of commodity associations

#	Name of the Stakeholder	Role of Stakeholder to assist in Implementation of CDMS
30	Kenya Export Promotion and Branding Agency (KEPROBA)	<ul style="list-style-type: none"> • Provision of export market information • Marketing of coffee products • Promotion of export of value-added coffee products
31	Kenya Metrological Department	<ul style="list-style-type: none"> • Provision of weather and climatic information to support informed decision making among coffee farmers • Advise value chain players on climatic patterns
32	Universities and learning institutions	<ul style="list-style-type: none"> • Research on climate resilient and high yielding coffee varieties • Technical advice on new farming technologies and methods
33	National Environment Management Authority (NEMA)	<ul style="list-style-type: none"> • Approval of ESIA reports for new coffee milling factories • Enforcement of legal framework for environmental management • Provision of guidelines for Environmental Impact Assessment (EIA)
34	Commodities Fund	<ul style="list-style-type: none"> • Provide sustainable and affordable credit and advances to subsector for: Farm improvement; inputs; operations; Infrastructure development • Support coffee value addition initiatives • Support price stabilization; • Facilitation of capacity building related to credit absorption in the subsector
35	Agrochemicals Association of Kenya (AAK)	<ul style="list-style-type: none"> • Manufacture, formulates, repackages, imports and distribute pest control products (pesticides) used in the subsector
36	Agricultural Finance Corporation (AFC)	<ul style="list-style-type: none"> • Assist in the development of agriculture and agricultural industries by making loans and providing managerial and technical assistance to the loan beneficiaries. • Provision of credit for the purpose of developing agriculture sector which includes coffee subsector
37	Ministry of Public Services, Gender and Affirmative Action	<ul style="list-style-type: none"> • Provision of policies direction and management of the human resources function in the public services • Promotion of gender equity and equality and the empowerment of women

2.14 Summary of Strategic Issues

Table 2.6 summarizes the key strategic issues.

Table 2-6: Summary Strategic Issues

Node	Strategic Issues
1. Coffee Production	<ul style="list-style-type: none"> i. Declining national coffee production ii. Declining national coffee productivity and quality iii. Low use and inadequate access to quality farm inputs
2. Coffee Processing and value addition	<ul style="list-style-type: none"> i. High operational costs of the existing mills ii. Low value addition of Kenyan coffee
3. Coffee Marketing	<ul style="list-style-type: none"> i. Inadequate coffee marketing systems and arrangements ii. Declining market share in the traditional markets iii. Low access and penetration in alternatives markets (specialty, emerging and regional markets)
4. Domestic Coffee Marketing	<ul style="list-style-type: none"> i. Low level of domestic coffee consumption
5. Coffee Research and Extension	<ul style="list-style-type: none"> i. Declining coffee research and development activities ii. Inadequate and unsustainable research capacity and KALRO-CRI iii. Inadequate coffee-tailored extension services along the value chain
6. Coffee Sector Data Generation and Dissemination	<ul style="list-style-type: none"> i. Inadequate data for coffee subsector
7. Climate Change and Environment	<ul style="list-style-type: none"> i. Increasing impacts of climate change and environmental risk to the coffee subsector
8. Inclusivity in the coffee subsector	<ul style="list-style-type: none"> i. Inadequate involvement of women, youth and PWDs along the coffee value chain
9. Coffee Financing and Payment	<ul style="list-style-type: none"> i. Inadequate access to sustainable financing and payment systems for the subsector
10. Governance, Institutional Development and Legal Framework	<ul style="list-style-type: none"> i. Inadequate capacities in key coffee subsector institutions ii. Low level of engagement and use of existing intergovernmental structures iii. Weak governance structures in the farmers cooperatives iv. Inadequate supportive legal and regulatory framework the coffee subsector

3 CHAPTER THREE: STRATEGIC MODEL

This section outlines the coffee subsector Vision and Mission Statements, the policy priorities for CDMS, slogan, core values and identified thematic pillars. The section further sets out the goals, objectives, strategic issues, initiatives and the activities for the identified Coffee Development and Marketing Strategy pillars.

This section outlines the coffee sector Vision and Mission Statements, the policy priorities for CDMS, slogan, core values and identified thematic pillars.

3.1 Vision and Mission

3.1.1 Vision Statement

To stimulate Kenya's economic growth through increased foreign exchange earnings and improved livelihoods in the coffee subsector

3.1.2 Mission Statement

To achieve a sustainable coffee production and marketing system that ensures increased incomes to farmers and other value chain players.

3.1.3 Policy Priorities

- a. Guiding the coffee sub-sector to achieve sustainable growth in the next 5 years.
- b. Promoting coffee production, processing, value-addition, and delivery of services along the value chain.
- c. Creating an efficient and predictable national coffee marketing system focused on local and regional marketing, specialty, traditional and emerging market segments.

3.1.4 Slogan

“Our Coffee, Our Wealth”

3.1.5 Core Values

Core Values define how coffee sector value chain players relate with each other and will form the standard of conduct in engagement with all stakeholders. These values are:

- a. Professionalism
- b. Integrity
- c. Customer focus
- d. Teamwork
- e. Innovativeness

3.1.6 Strategic Pillars

The following are the 8 thematic strategic pillars of focus for the CDMS.

PILLAR 1: Production, Productivity and Quality Enhancement

PILLAR 2: Processing and value addition

PILLAR 3: Marketing

PILLAR 4: Domestic Coffee Consumption

PILLAR 5: Research, Extension and Data dissemination

PILLAR 6: Climate Change, Environment and Inclusivity

PILLAR 7: Financing and Payment Management

PILLAR 8: Governance and institutional development

.

3.2 Strategic Objectives, Issues and Initiatives

3.2.1 Coffee Production

PILLAR 1: Production, Productivity and Quality enhancement.

Goal 1.1: Increased coffee production and productivity

Strategic Objective 1.1: To increase coffee production from 51, 852 MT to 150,000 MT and productivity from current 2kg/tree to 6kg/tree by the year 2028/2029.

Strategic Issue 1.1: Declining national coffee production

Strategic Initiative 1.1: Improve coffee production by expanding the area under production by 10% from the 109,384.45 Ha by 2028/2029.

The following activities shall be undertaken:

- i. Intensify coffee development and production within existing coffee growing counties.
- ii. Expand coffee production to new and emerging coffee growing counties.
- iii. Collaborate with local universities, colleges, and schools for use of their available land as demonstration plots for coffee development.
- iv. Provide certified seeds and seedlings to coffee farmers.
- v. Promote water harvesting and conservation technologies to support the expansion of coffee area.
- vi. Implement a framework for management of non-productive coffee bushes
- vii. Promote coffee production among alternative groups (CBO, SHG, associations, youth groups etc.)

To national and county government will undertake the following activities:

National Government to:

- i. Support the production and distribution of certified seedlings to coffee farmers in coffee growing counties for intensification purposes
- ii. Support production and distribution of certified seedlings to new coffee growing regions
- iii. Provide incentives for private sector investment in coffee production
- iv. Develop a framework for management of non-productive coffee bushes

County Government to:

- i. Support the expansion area under coffee in the traditional and non-traditional coffee growing areas
- ii. Promote appropriate and cost-effective coffee production technologies to encourage new farmers to venture into the business.
- iii. Promote coffee production among alternative groups (CBO, SHG, associations, youth groups etc.)
- iv. Provide certified seeds and seedlings to coffee farmers
- v. Support and facilitate renting of abandoned and non-productive coffee bushes

Strategic Issue 1.2: Declining national coffee productivity and quality

Initiative 1.2: Rejuvenating existing coffee trees and optimizing tree density

The following activities shall be undertaken:

- i. Upscale the implementation of guidelines to support existing tree rejuvenation in coffee growing areas
- ii. Through public and private partnership carry out demonstrations to farmer households on the benefits of reaching the optimum tree density with existing varieties and rejuvenating older trees through stumping and canopy management.
- iii. Promote management of non-productive coffee bushes for rejuvenation.
- iv. Upscale implementation of soil fertility management guidelines in the traditional coffee growing counties to support tree optimization.

The national and county governments will support the directorate by effecting the following activities:

National Government to:

- i. Provide incentives for private sector investment in coffee production,
- ii. Implement the guidelines to support coffee production in coffee growing areas,
- iii. Support carrying out of demonstrations to farmer households on the benefits of reaching the optimum tree density with existing varieties and rejuvenating older trees through stumping and canopy management
- iv. Develop and implement appropriate and cost-effective coffee production technologies,
- v. Implement guidelines for designating suitable coffee growing regions,
- vi. Implement soil fertility management guidelines,
- vii. Promote management of non-productive coffee bushes

County Government to:

- i. Support the intensification and expansion of coffee production in the traditional and non-traditional coffee growing areas,
- ii. In collaboration with stakeholders, implement appropriate and cost-effective coffee production technologies
- iii. Support carrying out of demonstrations to farmer households on the benefits of reaching the optimum tree density with existing varieties and rejuvenating older trees through stumping and canopy management
- iv. Support Implementation of soil fertility management guidelines.
- v. Support and facilitate and the management of non-productive coffee bushes,
- vi. Identify and promote investments opportunities for coffee production,
- vii. Offer adequate budgetary support for coffee production (nursery establishments,

extension services, agricultural mechanization, etc)

Strategic Issue 1.3: Low use and inadequate access to quality farm inputs

Initiative 1.3: Improving access to quality and affordable agro-inputs for coffee production.

The following activities shall be undertaken:

- i. Support bulk purchase and importation of certified quality farm inputs
- ii. Promote government efforts to subsidise farm inputs for coffee farmers
- iii. Develop and implement a framework that enables cooperatives as entities to procure and access subsidized inputs e.g., fertilizers from NCPB on behalf of farmers
- iv. Collaborate with relevant government entities to provide tax incentives for farm inputs
- v. Support programmes to provide guarantee scheme for farmers to access affordable quality farm inputs
- vi. Train farmers on the Best Agronomic Practices through field days and demonstration farms
- vii. Upscale the monitoring of the quality of agro-inputs used by coffee farmers
- viii. Establish coffee nurseries in each coffee growing counties for access to certified planting material for farmers
- ix. Promote regular inspection of coffee nurseries and other farm input for quality assurance.
- x. Scale up soil testing and leaf analysis for farmers

The national and county government shall undertake the following activities:

National Government to:

- i. Create an enabling environment for private sector investment in the provision and supply of certified quality farm inputs,
- ii. Establish efficient and effective mechanisms for procurement and distribution of certified inputs.
- iii. Develop a framework that enables cooperatives as entities to procure and access subsidized fertilizers from NCPB on behalf of farmers
- iv. Establish a quality assurance framework for coffee farm inputs.
- v. Undertake joint surveillance and monitoring of uncertified coffee planting materials at entry points

County Government to:

- i. Create an enabling environment and promote private sector investment in provision and access of quality certified coffee seed and planting materials,
- ii. Implement efficient and effective mechanisms for procurement and distribution of quality certified inputs,
- iii. Support the provision of certified coffee farm inputs.
- iv. Establishment coffee nurseries to enhance access to certified coffee planting material for farmers
- v. Promote regular inspection of coffee nurseries and other farm input for quality assurance

3.2.2 Coffee Processing and Value Addition

PILLAR 2: Processing and Value Addition

Goal 2.1: Upgraded Processing and Value Addition

Strategic Objective 2.1: To promote the adoption of modern technologies for processing and value addition for quality coffee

Strategic Issue: High operational cost of the existing mills and low value addition of Kenyan coffee

Initiative 2.1: Enhancing coffee processing and increase value addition from current 5 % to 10%

Activities

To achieve the above strategic objective, the activities will be carried out:

- i. Promote adoption of modern coffee processing and value addition technologies
- ii. Conduct trainings to impart skills on use of modern technologies for coffee processing and value addition
- iii. Strengthen the monitoring system for emerging processing technologies to ensure quality of Kenyan coffee.
- iv. Support the establishment of value addition Centres of Excellence
- v. Promote commercialisation of homebased value added coffee
- vi. Promote coffee product diversification
- vii. Upscale affordable credit for acquisition of value addition equipment
- viii. Upscale training on production of coffee-based products in learning institutions
- ix. Train value chain actors on quality control and packaging.
- x. Support farmers and farmers organisation in purchase of value addition machinery
- xi. Through a public private partnership, support the development of a national roasting and soluble product industry

The national and county government shall undertake the following activities:

National Government to:

- i. Develop a manual on modern technologies on coffee processing and value addition
- ii. Develop a framework that supports commercialisation of home based value added coffee along the value chain
- iii. Create an enabling environment for private sector investment in the modern processing and value addition technologies
- iv. Promote a monitoring systems for emerging coffee processing technologies to ensure quality
- v. Upscale training on production of coffee-based products in learning institutions.
- vi. Enhance awareness of and enforce of relevant laws and regulations on quality, packaging and value addition materials
- vii. Create conducive environment for private sector investment in the modern processing and value addition technologies
- viii. Support farmers and farmers organisation on purchase of value-added machinery through tax

relief

County Government to:

- i. Promote adoption of modern coffee processing and value addition technologies
- ii. Support the national government efforts in upscaling coffee training on production of coffee-based products in learning institutions.
- iii. Support commercialisation of home-based value added coffee
- iv. Undertake and promote coffee product diversification initiative.
- v. Create an enabling environment for private sector investment in the modern processing and value addition technologies
- vi. Design and implement licensing framework that involve keys stakeholders of coffee mills

3.2.3 Coffee Marketing

PILLAR 3: Marketing

Goal 3.1: A Strong Reliable Marketing System for Kenyan Coffee

Strategic Objective 3.1: To improve market access for farmers and farmers cooperatives.

Strategic Issue 3.1: Inadequate coffee marketing systems and arrangements

Strategic Initiative 3.1: To promote a sustainable marketing of Kenyan coffee to enhance competitiveness and pricing for maximum returns to growers and other value chain players.

Activities

To achieve the above strategic objective, the following activities shall be carried out:

- i. Strengthen the ERP system at NCE to cover the entire coffee value chain
- ii. Establish warehouses in target markets
- iii. Promote competitive branding and packaging of Kenyan coffee.
- iv. Promote compliance to coffee marketing standards and practices among value chain players
- v. Capacity build growers in accessing export market and trading in direct sales
- vi. Increase funding to NCE to support coffee auction system modernisation
- vii. Develop a NCE cupping laboratory to facilitate online trade.
- viii. Strengthen the marketing structures in line with capital market (coffee exchange) regulation 2020

Strategic Issue 3.2: Declining market share in the traditional markets.

Initiative 3.2: Rebuild competitiveness and market share in traditional markets

Activities

To achieve the above strategic objective, the following activities shall be carried out:

- i. Profile Kenya Arabica by region, geographic indications, variety, altitude and sustainable or other certification.
- ii. Promote access to all market segments through Taste of Harvest competitions and ‘know your cup’ coffee tasting.
- iii. Promote marketing coffee safaris and agro-tourism for international coffee roasters
- iv. Collaborate with the diplomatic missions to promote sustainability of Kenyan coffees in the traditional markets.
- v. Implement certification guidelines and promote the production of organic coffee for maximum profits from this niche

Strategic Issue 3.3: Low access and penetration in alternative markets (specialty, emerging and regional markets)

Kenya coffee marketing is heavily skewed towards traditional markets that controls over 55% of total Kenya coffee exports.

Initiative 3.3: Promote and enhance accessibility of emerging, regional and specialty markets

Activities

To achieve the above strategic initiative, the following activities need to be carried out:

- i. Develop partnerships in emerging, regional and specialty markets to promote and negotiate access for Kenyan coffee
- ii. Enter into bilateral agreements for the marketing of Kenyan Coffee
- iii. Develop and disseminate guidelines on specialty coffee production
- iv. Develop and implement guidelines for production and sales of organic coffee
- v. Organise and participate in targeted exhibition and trade fairs to promote Kenyan coffee intrinsic value
- vi. Promote marketing coffee safaris and agro-tourism for international coffee roasters
- vii. Expand market opportunities in the African continental free trade agreement and other regional trade agreements (EAC, COMESA)
- viii. Collaborate with the diplomatic and foreign missions to promote, acquire and sustain emerging and regional markets

The national and county government to undertake the following activities:

National governments shall:

- a) Promote fair trade practices in the coffee subsector in line with the national trade policy and other relevant trade legislation.
- b) Develop and disseminate specialty coffee production guidelines
- c) Explain market opportunities in the African continental free trade agreement
- d) Enter into bilateral agreements for the marketing of Kenyan Coffee
- e) Develop and enhance guidelines for production of organic coffee
- f) Promote the production of organic coffee
- g) Strengthen the marketing structures in line with Capital Market (coffee exchange) regulation 2020
- h) Promote fair trade practices in the coffee subsector in line with the national trade policy and other relevant trade legislation.

County governments shall:

- a) Promote fair trade practices in the coffee subsector in line with the national trade policy and other relevant trade legislation.
- b) Domesticate specialty coffee production guidelines
- c) Promote enforcement of Competition Act and Consumer Protection Act.
- d) Support the development and enhancement of guidelines for production of organic coffee
- e) Promote the production of organic coffee
- f) Support coffee marketing initiatives and drives in their respective counties

3.2.4 Domestic Coffee Consumption

PILLAR 4: Increased Domestic Coffee Consumption

Goal 4.1: Increase domestic consumption of Kenyan coffee

Strategic Objective 4.1: To increase domestic consumption of Kenyan coffee for price stabilization and revenue enhancement for growers.

Strategic Issue 4.1: Low level of domestic coffee consumption

To achieve the stated strategic objectives, the following strategic initiatives are necessary.

Strategic Initiatives:

Initiative 4.1: Enhancing a coffee drinking culture in Kenya

To achieve the above strategic objective, the following activities will be carried out:

- i. Engage health professionals in the promotion of coffee drinking as a healthy activity
- ii. Promote and support setting up of barista training centres on coffee brewing skills

- iii. Conduct national and regional barista championships.
- iv. Support roasters in developing brands and blends
- v. Implement consistent media campaigns using traditional and emerging media platforms to promote Kenyan coffee as a refreshing drink.
- vi. Use of social media influencers to promote Kenyan coffee.

Initiative 4.2: Increasing demand for Kenyan Coffee in the local market

To comprehensively achieve the above interventions, the following activities will be undertaken:

Activities

To achieve the above strategic objective, the following activities will be carried out:

- (i) Design and implement an integrated market activation campaign targeting new consumer segments e.g., youth in campus and the middle class
- (ii) Encourage brewers to come up with new coffee flavours and blends to attract starters
- (iii) Advocate for design of user-environmentally friendly packaging by coffee roasters and brewers
- (iv) Promote coffee consumption in government institutions and public schools
- (v) Design and implement a prize contest targeting general public through radio and social media platforms
- (vi) Undertake wet sampling drives in shopping malls and major bus parks across county headquarters
- (vii) Develop and implement guidelines for coffee vending
- (viii) Promote coffee mills and home-based value addition of Kenyan coffee
- (ix) Promote recognition of coffee Kenya brand identity by retouching brand attributes of the mark of origin.

The national and county government to undertake the following activities:

National governments shall:

- a) Set up of barista training centres on coffee brewing skills
- b) Promote fair trade practices in the coffee subsector in line with the national trade policy and other relevant trade legislation.
- c) Design coffee vending guidelines
- d) Support roasters in developing brands and blends
- e) Upscale training on coffee brewing skills.
- f) Support domestic coffee consumption initiatives include promoting coffee consumption in government institutions and schools.
- g) Enter into bilateral agreements for the marketing of Kenyan Coffee

County governments shall:

- a) Promote fair trade practices in the coffee subsector in line with the national trade policy and other relevant trade legislation.
- b) Support upscaling of training on coffee brewing skills in their respective counties.
- c) Support domestic coffee consumption initiatives.
- d) Domesticate guidelines on coffee vending.
- e) Promote recognition of coffee Kenya brand identity
- f) Promote user-environmentally friendly packaging by coffee roasters and brewers.

3.2.5 Coffee Research, Extension Services and Data Dissemination

PILLAR 5: Research, Extension and Data Generation and Dissemination

Goal 5.1: Strengthened research, extension and data dissemination services in the subsector

Objective 5.1: To enhance research extension services and generate timely and accurate data for dissemination among industry stakeholders

Strategic Issue 5.1: (a) Inadequate and unsustainable research capacity at KALRO-CRI
(b). Declining coffee research and development activities

Initiative 5.1: Strengthen Coffee Research Capacity at KALRO-CRI and Promote Technology and Innovation of the subsector

Activities.

To achieve the above strategic objective, the following activities will be carried out:

- i. Scale up research capacity at CRI through increased staffing, equipment improvement and relevant facilitation.
- ii. Promote skills and knowledge succession mechanism at the KALRO Coffee Research Institute
- iii. Provide mechanism for monitoring and tracking impacts of new technologies in the subsector
- iv. Development of post-harvest handling and storage technologies and practices;
- v. Development of new varieties which are resistant to the main diseases coffee berry and leaf rust.
- vi. Develop drought tolerant and pest resistant coffee varieties to support the expansion counties.
- vii. Develop suitable production technologies that support coffee to be planted more densely in intercropping systems
- viii. Establish technology incubation Centre at KALRO Coffee Research Institute on value addition emerging technologies
- ix. Scale up and sustain collaborative linkages with other research institutions at regional and international levels

- x. Introduce a traceability system for planting materials
- xi. Enhance farmer participatory research including adaptive trials on farmer fields
- xii. Provide adequate and sustainable financing for coffee research by identifying and promoting internal revenue generation and additional sources of public and private sector funding.
- xiii. Establish a mechanism for rewarding innovation in the subsector

Strategic Issue 5.2: Inadequate coffee tailored extension services

Initiative 5.2: Strengthen coffee specific extension services along the value chain

To achieve the above strategic objective, the following activities shall be carried out:

- i. Scale up coffee extension capacity for coffee inspectors and extension officers
- ii. Scale up collaboration with other research institutions e.g to maximize the use of existing Agriculture Training Centres (ATCs) for innovation and technology transfer
- iii. Promote and facilitate private extension service providers
- iv. Facilitate self-regulation and supervision of coffee extension service providers
- v. Strengthen e- extension service.
- vi. Scale up training programmes for extensionists targeting farming households, and farmers' cooperatives that are tailored to each agro-ecological zone and farming system
- vii. Train farmers' organisations, farmer group leaders, and input suppliers, in extension technologies

Strategic Issue 5.3: Inadequate Data for Industry Planning

Strategic Initiative 5.3: Generate, collate, and disseminate updated data to assist industry players in planning.

To achieve the above strategic issue, the following activities shall be carried out:

- i. Carry out coffee census incorporating KIAMIS data to ascertain actual acreages under coffee production.
- ii. Undertake feasibility and needs assessments in new counties identified for expansion.
- iii. Undertake feasibility and needs assessments in traditional coffee growing counties to determine the potential for and means of expansion.
- iv. Undertake regular market surveys on target markets and avail relevant information to the coffee subsector players.
- v. Establish centralized coffee information and knowledge management centre.
- vi. Promote compliance of guidelines on data and information management in coffee institutions
- vii. Promote coffee data and information dissemination methods through:
 - a. Publication and dissemination of Kenya coffee publications.
 - b. Collaboration and strengthening of the relationship with media (print, broadcast, and online versions) to run packaged module on coffee sector.

- c. A national coffee journals.
- d. Hold/attend national coffee conferences for coffee professional and stakeholders
- e. Hosting of scheduled coffee promotion fairs in various learning institutions to disseminate information
- f. Develop and publish training manuals on various coffee value chain for stakeholders.
- g. Establish and maintain an active social media and organization websites for sharing coffee information
- h. Issuance of regular press releases on coffee matters
- i. Use of vernacular language

The national and county government shall undertake the following activities:

National Government to:

- a) Establish sustainable research funding mechanisms for the coffee subsector,
- b) Improve information sharing amongst institutions involved in coffee research,
- c) Recruit adequate researcher and other support staffs at various coffee institutions.
- d) Provide mechanisms for skills and knowledge successions at CRI and other sub sector institutions.
- e) Establish centralized information and knowledge management centre
- f) Promote and facilitate private extension service providers.
- g) Develop guidelines and standards to enhance e-coffee extension services,
- h) Provide technology incubation hubs,
- i) Support capacity building of county governments to provide coffee extension service.
- j) Together with other stakeholder, carry out coffee census

County Government to:

- a) Recruit adequate coffee specific extension officer
- b) Support adaptive research and technology transfer,
- c) Support sustainable coffee research funding mechanisms,
- d) Implement knowledge management system for the coffee subsector
- e) Adopt and implement appropriate and sustainable coffee extension models,
- f) Ensure compliance with the guidelines and standards for coffee extension services,
- g) Provide a mechanism for monitoring and tracking impacts of technologies.
- h) Adopt hybrid data dissemination methods including USSD, mobile apps, vernacular radio etc
- i) In collaboration with national government support carrying out of coffee census

3.2.6 Climate Change, Environment and Inclusivity

PILLAR 6: Climate Change, Environment and Inclusivity

Goal: Enhanced resilience to climate change, sustainable environmental practices and inclusivity in the subsector.

Strategic Objective 6.1: To increase resilience and adaptability of coffee subsector to climate change.

Strategic Issue 6.1: Increasing impacts of climate change and environmental risk along the coffee value chain

Initiative 6.1: Promote and support climate change adaptation and mitigation and environmentally responsible practices in coffee value chain

To achieve the above strategic objective, the following activities shall be carried out:

- i. Promote and adopt climate adaptative, mitigation and climate SMART agriculture (use of shade trees, mulching, terracing, insitu water harvesting, rehabilitation of catchment areas, water management,)
- ii. Promote the regenerative coffee farming including production of organic coffee.
- iii. Promote irrigation of at least 10,000 Ha of coffee crops by the end of five years
- iv. Incentivise coffee farmers by lobbying for carbon credit by recognizing coffee bushes as part of forest cover.
- v. Promote circularity approach in management of coffee wastes from along the value in line with national and international regulations (EMCA 1999, Sustainable Waste Management Act, 2022)
- vi. Develop drought and heat tolerant coffee varieties to improve adaption to climate change.
- vii. Develop and implement incentive systems for farmers who practice BEPs
- viii. Promote use of renewable energy in factories
- ix. Assess the viability of coffee insurance to cushion the farmers from adverse effect of climate change and variability.

The national and county government shall undertake the following activities:

National Government to:

- i. Promote integration of mitigation measures for adaptation of climate smart agricultural practices in the coffee subsector,
- ii. Develop and implement incentive systems for farmers who practice BEPs.
- iii. Lobby for carbon credit for coffee farmers by recognizing coffee bushes as part of forest cover.

- iv. Promote and support irrigation of coffee crops.
- v. Promote the integration of circularity approach in coffee wastes management.
- vi. Support the use of technologies that promote environmental sustainability.

County Government to:

- i. Promote and implement climate smart technologies along coffee the value chain,
- ii. Domesticate and implement incentive systems for farmers who practice BEPs.
- iii. Promote irrigation of coffee crops
- iv. Lobbying for coffee farmers to benefit from carbon credits.
- v. Implement the use of circularity approach in coffee waste management.
- vi. Encourage adoption of environmentally friendly technologies for the primary coffee factories in the respective counties

Strategic Objective 6.2: To enhance the sustainable participation of women, youth and PWD in the subsector.

Strategic Issue 6.2: Inadequate involvement of women, youth and PWDs along the coffee value chain

Initiative 6.2: Enhanced participation of women, youth and PWDs in the subsector.

To achieve the above strategic objective, the following activities shall be carried out:

- i. Promote the implementation of affirmative action in the coffee value chain.
- ii. Promote the ‘Household Approach’ and community-based approach to ensure extension services address gender and youth issues in coffee farming.
- iii. Develop training programs on coffee entrepreneurship targeting youth, women and PWDs.
- iv. Support initiatives that involve youth, women and PWDs in the coffee value chain e.g., setting up coffee nurseries
- v. Scale up and support access to funds for youth, women and PWDs either in groups or individually in the coffee value chain.
- vi. Promote digitisation & new technologies in the coffee value chain to attract youth.
- vii. Encourage ownership of coffee trees by women, youth and PWDS

The national and county government shall undertake the following activities:

National Government to:

- a) Create an enabling environment for private sector investment in the women and youth to support coffee farming,
- b) Establish efficient and effective mechanisms for ensuring women and youth are encouraged to participate in along the coffee value chain.
- c) Promote initiatives that gives equal land ownership rights to both genders.
- d) Develop and promote training programs on coffee entrepreneurship targeting youth, women and PWD

County Government to:

- a) Create an enabling environment for private sector investment in the women and youth to support coffee farming,
- b) Support and promote mechanisms for ensuring women and youth are encouraged to participate along the coffee value chain, e.g training and licensing of coffee nursery by various groups, value addition.
- c) Promote and implement initiatives that gives equal land ownership rights to both genders.
- d) Promote training programs on coffee entrepreneurship targeting youth, women and PWD

3.2.7 Coffee sub sector Financing and Payment

PILLAR 7: Financing and Payment Management**Goal: Sustainable Funding and Payment in Coffee subsector**

Strategic Objective 7.1: To enhance a sustainable financing and payment system in the subsector that generates revenue for farmers and other players in the value chain.

Strategic Issue 7.1: Inadequate access to sustainable financing and payment systems for the subsector

Initiative 7.1: Provision of adequate and sustainable financing and payment for coffee subsector

To achieve the above strategic objective, the following activities shall be carried out:

- i. Scale up the capacity of Commodities Fund
- ii. Promote internal revenue generation for the subsector
- iii. Lobby for the re-introduction of coffee levy
- iv. Negotiate and secure revenue from the catering levy trustee fund for development and promotion of domestic market
- v. Promote and support public and private partnership in investment and funding for the subsector.

- vi. Promote savings by growers and other stakeholder and lobby development partners' support the initiatives.
- vii. Support establishment of minimal guaranteed scheme for advance payment up coffee delivery for farmers
- viii. Support the establishment of coffee bonus system.
- ix. Strengthen and support the implementation of the direct settlement system (DSS)
- x. Support the innovative financial mechanism for the subsector like matching grants.

The national and county government shall undertake the following activities:

National Government to:

- a) Create guaranteed scheme that enables minimal payment to farmers upon coffee delivery.
- b) Create an enabling environment for private sector funding in the coffee subsector.
- c) Strengthen and support the implementation of DSS.
- d) Develop a mechanism for growers and other stakeholder to mobilize savings and lobby development partners' support.
- e) Support and strengthen coffee bonus system.
- f) Support and lobby for the re-introduction of coffee levy
- g) Promote innovative financial mechanism for the subsector like matching grants.

County Government to:

- a) Create an enabling environment for private sector funding in the coffee subsector.
- b) Promote the adoption of best practices in financial management in coffee institutions e.g cooperative societies.
- c) Support sustainable financing and loans access by cooperatives societies.
- d) Adopt innovative financial mechanism for the subsector like matching grants.
- e) Promote savings by growers and other stakeholder.
- f) Mobilize and lobby development partners' investment support in the subsector.
- g) Support the implementation of DSS
- h) Support coffee bonus system

3.2.8 Institutional Development and Legal Framework

PILLAR 8: Coffee Subsector Governance and Institutional Development

Goal: Enhanced Governance and Institutional Development

Strategic Objective 8.1: To develop and strengthen an effective institutional framework for efficient service delivery.

Strategic Issue 8.1: Inadequate capacities in key coffee subsector institutions

Strategic Initiatives:

Initiative 8.1: Strengthen the Capacity of public institutions in the subsector.

The following activities shall be undertaken:

- i. Recruitment of adequate and competent staffs
- ii. Lobby the re-introduction of ad-valorem levy to strengthen the financial position.
- iii. Establishment of mechanism for internal revenue generation
- iv. Scale up the institutional capacity to monitor the quality of agro-inputs.

Strategic Issue 8.2: Low level of engagement and use of existing intergovernmental structures

Initiative 8.2: Enhance framework for intergovernmental engagements (national and county governments) for the coffee subsector

The objective is to enhance the framework for engagement between national and county governments.

Activities

To achieve the above strategic objective, the following activities shall be carried out:

- i. National and county governments to optimise the use of existing intergovernmental engagements framework in the coffee subsector
- ii. Establishment of intergovernmental county *coffee working group*.

The proposed intergovernmental county coffee working group shall be constituted based on the Intergovernmental Relations Act No.2 of 2012. It will comprise of:

- a. National government that will include a representative from; county commissioner office, NEMA county office, Ministry of Lands, KALRO-CRI, CD-field offices
- b. County government representative appointed by governor from departments of; agriculture, cooperatives, trade, gender and youth affairs
- c. Farmers' cooperative societies representative
- d. Other selected private players including representative from farmers organisation, millers, civil societies, NGOs, SHG, among others

Strategic Issue 8.3: Weak governance structures in the farmers cooperatives and other institutions

Initiative 8.3: Enhancing governance and accountability of cooperatives societies and other institutions including Coffee Estate Planters Association in the coffee subsector.

This will be achieved through the following activities:

Activities

- i. Support sensitisation on proper management of resources in the cooperatives and Estate Planters Associations.

- ii. Upscale the collaboration with stakeholders in enforcement and compliance with relevant laws and regulations in subsector.
- iii. Promote one third gender rule in election of the Cooperatives management committees and Coffee Estate Planters Associations.
- iv. Develop and implementation of operational business indicators for coffee co-operative societies.
- v. Sensitise farmers on roles and responsibilities of members, management, and leadership in the cooperatives.
- vi. Promote digitalisation and automation of cooperative societies operations.

Strategic Issue 8.4: Inadequate supportive legal and regulatory framework in coffee subsector cooperatives

Initiative 8.4: Develop, implement, and strengthen legal and regulatory framework the coffee subsector.

This will be achieved through the following activities:

Activities

- i. Strengthening of the framework that allows monitoring of agro inputs used by coffee farmers.
- ii. Enforcement of relevant laws and regulations on quality, packaging, and value addition material
- iii. Develop a framework for collaboration with local universities, colleges, and schools to support area under coffee expansion.
- iv. Develop a framework to support management of non-productive coffee bushes.
- v. Develop a framework that enables cooperatives as entities to procure and access subsidized inputs e.g., fertilizers from NCPB on behalf of farmers.
- vi. Develop a framework for monitoring the impacts emerging coffee processing technologies to ensure coffee bean quality.
- vii. Develop a framework that supports commercialisation of homebased value-added coffee.
- viii. Strengthen the compliance of coffee marketing standards and practices among value chain players.

To national and county government will undertake the following activities:

National Government to:

- i. Enforce best Corporate Governance practices in the coffee subsector, and
- ii. Establish intergovernmental county coffee working group.
- iii. Lobby for re-introduction of ad-valorem levy to strengthen the financial position of the subsector.

- iv. Recruitment of adequate and competent staffs to enhance capacity.
- v. Optimise the use of existing intergovernmental engagements framework in the coffee subsector.
- vi. Strengthen the enforcement and compliance with relevant laws and regulations in subsector.
- vii. Develop a framework for collaboration with local universities, colleges, and schools to support area under coffee expansion.
- viii. Develop a framework for monitoring the impacts emerging coffee processing technologies to ensure coffee bean quality.

County Government to:

- i. Promote good corporate governance practices in the coffee subsector, and
- ii. Establish intergovernmental county coffee working group
- iii. Optimize the use of existing intergovernmental engagements framework in the coffee subsector
- iv. Recruitment of adequate and competent staffs to enhance capacity
- v. Promote the integration of women and youth in the management of cooperatives societies.
- vi. Enforcement and compliance with relevant laws and regulations in subsector at count level
- vii. Promote proper management of resources in the cooperatives including approving sustainable loans only.
- viii. Support the initiative to monitor the impacts of emerging coffee processing technologies to ensure quality

4 CHAPTER FOUR: IMPLEMENTATION AND COORDINATION FRAMEWORK

This section outlines the implementation mechanism, coordination, resource mobilization, funding strategy. The section also outlines risk analysis and mitigation of possible risks and their potential impacts on the implementation of Coffee development and marketing strategy for the subsector. The proposed mitigation measures for the identified risks are outlined in Table 4.2

4.1 Implementation Overview

The implementation of the coffee development and marketing strategy will be undertaken by various stakeholders identified under stakeholder analysis in Table 2.5 both the National government and County government levels. The success of the implementation will require an effective coordination of key subsector stakeholders; adequate resource mobilization, implementation of risk mitigation measures, development of an effective information and knowledge management system and proper monitoring and evaluation of implementation measures.

Implementation of this strategy will be based on a number of assumptions. They include but not limited to: sustainable political good will; adequate financial and human resources; adherence to core values; effective sub- sector coordination and collaboration; between various stakeholders and agencies within national and county government using the existing intergovernmental structures and between public and private sector actors.

4.2 Implementation Mechanism

The National Coffee Development and Marketing Strategy will be implemented by the following entities/institutions:

4.2.1 National Government

The implementation of the strategy at national government will be undertaken by:

- 1) MoALD- State Department of Agriculture
- 2) AFA-Coffee Directorate
- 3) KALRO- CRI
- 4) Other line ministry; MCMSME, MITI, National Treasury
- 5) SAGAs as indicated in Table 2.5

4.2.2 County Governments

County implementation committee whose chairperson shall be appointed by the Governor. Members of the committee shall be drawn from departments of agriculture, cooperatives, trade, finance, gender, and youth affairs.

4.2.3 Other Implementing entities shall include:

- Private sector
- Farmers and farmers' organizations (Growers Association, Cooperative Societies)
- Academia

- Development partners
- Civil Society
- Media

For public institutions, this will involve incorporating the plans into the Medium-Term Expenditure Framework and annual work plans and budgets to indicate what they are intending to do and as a tool for securing funds.

The private sector will be encouraged to invest along the area lines enlisted under this Strategy by identifying new business opportunities and supporting stakeholder initiatives. The private sector is responsible for the production, processing and marketing of coffee and provision of marketing services along the value chain.

In the case of Public private partnership-type implementation arrangements, the relevant public and private parties will agree on the modalities and steps necessary to undertake a partnership including; feasibility studies, detailed investment planning, financing arrangements and implementation.

4.3 Coordination

In order to achieve the objectives, set out in this Coffee Development and Marketing Strategy, it will be important to have an effective coordination framework.

A Coffee Strategy Coordination Committee (CSCC) is hereby proposed to oversee the coordination and the implementation of the CDMS. The CSCC will be constituted by the Department of Agriculture, (SDA). The unit will be headed by a chair appointed by the PS SDA and members to be drawn from state departments and agencies, Council of Governors, county governments representatives, farmers organizations, smallholder and estate farmers representatives and selected key service providers.

4.3.1 The Proposed Roles of Coffee Strategy Coordination Committee (CSCC)

The mandate of the CSCC will be to create linkages and collaboration among the coffee subsector players as well as provide an enabling environment for sector wide consultations along the various levels of implementation. It shall not be involved in the actual implementation of the strategy. The unit is proposed to review various sub-sector players /agencies strategic and annual work plans to ensure they conform to National CDMS.

4.4 Resource Mobilisation

Without adequate financial resources to enable implementation of the CDMS and other related operational expenditures, the CDMS will not deliver its intended objective of transforming the coffee subsector into a vibrant competitive, top foreign exchange earner, providing livelihood and income to value chain actors.

Each relevant MDA will need to undertake a financing needs assessment of their responsibility

under the coffee sub-sector and to develop a comprehensive resource mobilization strategy.

Resources for implementation of proposed activities assigned to the various actors has been outlined in the CDMS Implementation Matrix in annex 1. the national government from its normal budgetary allocations and national programmes and budgets funded by development partners

Some of the sources of revenue for coffee subsector during the period of implementation will include:

- 1) **National Government-** The Line Ministries and SAGAs involved in coffee value chain to incorporate in their annual budgets the financial obligations under the CDMS It is also proposed that Parliament, through legislation, return the ad valorem levy to support implementation of CDMS and operations of CRI and CD. Other sources will include, national programmes and budgets funded by development partners. The key public institutions involved in the implementation are also encouraged to generate internal revenues through various fees and commissions charged and export levies.
- 2) **County Governments:** Agriculture is a devolved function and hence the devolution of extension services. The County governments will mobilise resources through incorporating of the strategy in the County Integrated Development Plans (CIDPs) and budgetary allocations in their annual workplans as well as sourcing for funding from donors for investments falling under the county governments. The priority intervention of ensuring coffee-targeted extension services at ward level need to be supported by the counties through adequate resource allocation and recruitment of relevant staff.
- 3) **Development Partners** –SAGAs involved in coffee value chain will continue to engage development partners for support in financing research development and capacity building.
- 4) **Public Private Partnership** - The private sector plays a key role in the development and sustainability of the coffee subsector. The SAGA involved in coffee value chain will therefore develop strategic financing proposals for support in implementing such projects through Public Private Partnership.
- 5) **Foreign Governments:** National and County Governments will continue to foster and establish sustainable partnership through MoUs with foreign governments for financial and technical support for the growth of coffee subsector.
- 6) **Diaspora Investments** - Kenyans in the diaspora are a potential source of investments in the coffee subsector. The National and County Governments will explore ways of attracting this group to invest in the coffee subsector by financing implementation of the CDMS at appropriate.
- 7) **Foreign Direct Investment** – FDI is another source of revenue for the subsector. Promotion of foreign entrepreneurs and investors from foreign countries to fund and invest the subsector infrastructure is key.
- 8) **Farmers Own Investment-** Own source investment from farmers to the subsector

4.4.1 Funding for Coordination of Coffee Development and Marketing Strategy

Resources for coordination of coffee development and marketing strategy implementation shall be mobilised by both the National government and County government as per the proposed coordination national coordination committee and county coordination committee under section 4.2. It is expected that development partners and other non-governmental organizations will support both the National and County Governments in facilitating coordination and Monitoring & Evaluation activities under the Coffee Development and Marketing Strategy.

4.4.2 Funding for Strategy Implementation

The proposed budget for implementing the CDMS is estimated at KES 2.394 billion over the five (5) year strategy implementation period. This cost will be shared amongst the national government, county governments, development partners, foreign governments, private sector, diaspora investment, foreign direct investment and farmers own investment. The estimated budget requirement for implementation of CDMS is as summarized in Table 4.1

Table 4-1: Summary CDMS Implementation Budget Estimates

S/N	Pillar	Strategic Objective	Strategic Initiative	Amount (Million KES/Year)					Total (Million KES)
				1	2	3	4	5	
1	PILLAR 1: Production, Productivity and Quality Enhancement.	Strategic Objective 1.1: To increase coffee production from 51, 852 MT to 150,000 MT and productivity from current 2kg/tree to 6kg/tree by the year 2028/29	1.1 Improve coffee production by expanding the area under production by 10% from the 109,384.45 Ha by 2028/29	75.5	60.5	55.5	47.5	45	284
			1.2 Rejuvenating existing coffee trees and optimizing tree density	32	32	20	20	20	124
			1.3 Improving access to quality and affordable agro-inputs for coffee production.	86	81	41	41	41	290
Pillar 1 Subtotal									698
2	PILLAR 2: Processing and Value Addition	Strategic Objective 2.1: To promote the adoption of modern technologies for processing and value addition for quality coffee	Initiative 2.1 Enhancing coffee processing and Value Addition from current 5 % to 10%	76	66	66	61	51	320
Pillar 2 Subtotal									320

S/N	Pillar	Strategic Objective	Strategic Initiative	Amount (Million KES/Year)					Total (Million KES)
				1	2	3	4	5	
3	PILLAR 3: Marketing	Strategic Objective 3.1: To improve market access for farmers and farmers cooperatives.	3.1: To promote a sustainable marketing of Kenyan coffee to enhance competitiveness and pricing for maximum returns to growers and other value chain players.	47.43	47.43	47.43	27.5	25	194.79
			3.2 Rebuild competitiveness and market share in traditional markets	12	12	12	11.99	11.99	59.98
			3.3: Promote and enhance accessibility of emerging, regional and specialty markets	24.8	24.8	24.8	15.5	15.5	105.4
Pillar 3 Subtotal									360.17
4	PILLAR 4: Increased Domestic Coffee Consumption	Strategic Objective 4.1: To increase domestic consumption of Kenyan coffee for price stabilization and revenue enhancement for growers.	4.1: Enhancing a coffee drinking culture in Kenya	50	50	50	50	50	250
			4.2 Increasing demand for Kenyan Coffee in the local market	33.66	33.66	33.66	16	16	132.98

S/N	Pillar	Strategic Objective	Strategic Initiative	Amount (Million KES/Year)					Total (Million KES)
				1	2	3	4	5	
Pillar 4 Subtotal								382.98	
5	PILLAR 5: Research, Extension Services and Data Dissemination	Strategic Objective 5.1 To enhance research, extension services and timely data dissemination that is responsive to dynamic industry requirements and demands.	5.1 Strengthen Coffee Research, Technology and Innovation of the subsector	78	78	78	78	78	390
			5.2 Strengthen coffee specific extension services along the value chain	66.8	27.3	27.3	14	14	149.4
			5.3 Generate, collate, and disseminate updated data to assist industry players in planning.	65	5	5	5	5	85
Pillar 5 Subtotal								624.4	
6	PILLAR 6: Climate Change, Environment and Inclusivity	Strategic Objective 6.1: To increase resilience and adaptability of coffee subsector to climate change.	6.1 Promote and support climate change adaptation and environmentally responsible practices in coffee value chain	39	39	34	34	29	175
		Strategic Objective 6.2: To enhance the sustainable participation of	6.2 Enhanced participation of women, youth and PWDs in the subsector for Inclusivity.	19.5	19.5	17	17	17	90

S/N	Pillar	Strategic Objective	Strategic Initiative	Amount (Million KES/Year)					Total (Million KES)
				1	2	3	4	5	
		women, youth and PWD in the subsector							
Pillar 6 Subtotal									265
7	PILLAR 7: Financing and Payment Management	Strategic Objective 7.1: To enhance a sustainable financing and payment system in the coffee subsector that generates revenue for farmers and other players in the value chain	7.1 Provision of adequate and sustainable financing and payment for coffee subsector	161.6	37.6	37.6	36	36	308.8
Pillar 7 Subtotal									308.8
8	PILLAR 8: Coffee Subsector Governance and Institutional Development	Strategic Objective 8.1: To develop and strengthen an effective institutional framework for efficient service delivery	8.1 Enhance the Capacity of public institutions in the subsector	21	21	16	16	16	90
			8.2 Enhance framework for intergovernmental engagements (national and county	50	-	-	-	-	50

S/N	Pillar	Strategic Objective	Strategic Initiative	Amount (Million KES/Year)					Total (Million KES)
				1	2	3	4	5	
			governments) for the coffee subsector						
			8.3: Enhancing governance and accountability of cooperatives societies in the coffee subsector	25	20	15	15	15	90
Pillar 8 Subtotal									230
GRAND TOTAL									3189.35

4.5 Risk Analysis and Mitigation Measures

4.5.1 Implementation Risks

The major risks affecting the coffee value chain can be categorized into; the production risk, the enabling environment risk and the market risk. All these risks have different impacts on actors along the coffee value chain. Production risks in coffee mostly affect farmers. However, this impact is also transmitted to other actors along the coffee value chain. All these three risks can arise from two main sources, external risk factors and internal risk factors.

1) Production Risks

Weather related events like droughts, increase in temperature, frost, pest and disease outbreaks among others are major risks that lead to production volatility.

2) Market Risks

These include commodity and input price volatility, fluctuation in exchange rate and associated default risk.

3) Credit Risk

The risk arising from a borrower's probability to default on any contract with the financier or failure to perform as agreed.

4) Strategic Risk

These are risk arising from adverse strategic boardroom decisions, improper implementation or lack of decisions.

5) Liquidity Risk

The risk arising from inability to meet liabilities when they fall due without incurring unacceptable losses

6) Interest Rate Risk

The risk arising from adverse movements in interest rates

7) Foreign Exchange Risk

The risk arising from adverse movements in currency exchange rates

8) Environmental and Climate Change Risk

The risk arising from uncertainty about environmental liabilities or the negative impact of climate changes

9) Regulatory Risk

The risk arising from violations of, or non-conformance with, laws, rules, regulations

10) Reputational Risk

The risk that causes negative publicity regarding an institution's business practices, whether true or not, will cause a decline in the customer base, costly litigation, or revenue reduction

11) Operational Risk

The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events

These risks can be as result of external and internal factors.

a) External risk factors

External risk factors are those factors that the implementing Coffee Strategy Coordination Unit has no control over, and slows down or prevent the realization of the strategic goals determined in the strategy. Such factors include; changes in the legal frameworks, political factors, economic factors and technological changes.

b) Internal risk factors

Internal risk factors are those factors that the implementing Coffee Strategy Coordination Unit has control over, may slow down or prevent the realization of the strategics goals determined in the Strategy. Such factors include; coordination among various departments, roles and responsibilities of various personnel, organizational structure, work processes and procedures, lack of resources (financial, human), poor communication and, information sharing flow, and resistance to change.

4.5.2 Risk Mitigation Framework

The strategic interventions in this CDMS will take into account these risks to ensure that risk mitigation measures are inbuilt in the strategic actions, work plans and activities. Table 4.2 provides the risk mitigation matrix framework to aid in identifying, quantifying and mitigating the risks.

Table 4-2: Risk Mitigation Matrix Framework

Risk Category	Risks occurrences along the value chain	Risk Probability	Risk Impact	Risk Mitigation	Risk Mitigation Agent
<p>Production Risk:</p> <p>Risk arising from uncertain natural growth processes affecting quality and quantity of coffee produce</p>	<ul style="list-style-type: none"> • Prevalence or outbreaks of coffee diseases and pests • Uncertain weather occurrences e.g. flooding, drought increase in temperature, frost • Declining soil fertility 	High	High	<ul style="list-style-type: none"> • Continued research on coffee disease resistant and drought, heat tolerant coffee varieties • Climate adaptation and mitigation programmes in coffee growing counties • Apply integrated soil fertility technologies 	CRI, MoA&LD, CG, KMD
<p>Market Risk:</p> <p>The risk that a business may experience loss due to commodity and input market price volatility and fluctuation</p>	<ul style="list-style-type: none"> • Low coffee returns due to the many deductions along value chain • Concentration risk of relying on a traditional market to sell over 60 % of the coffee 	Medium	High	<ul style="list-style-type: none"> • Setting up an indicative price mechanism for cherry that is variable and responsive to market dynamics and closed to manipulation • Expanding the international and domestic coffee market destinations for Kenya’s coffee through concerted marketing effort • Future market and forward sales at the Coffee Auction to improve price predictability and mitigate against price volatility 	MOAL&LD CD NCE New KPCU KEPROBA
	<ul style="list-style-type: none"> • Competition through price wars in our Kenyan coffee traditional markets 	High	High	<ul style="list-style-type: none"> • Expand emerging and regional markets diversification to broaden our market base • Diversify to specialty coffee and naturals • Embrace value addition to fetch better market prices • Allocate additional funding for 	MoA&LD, Cooperative societies CD, New KPCU

Risk Category	Risks occurrences along the value chain	Risk Probability	Risk Impact	Risk Mitigation	Risk Mitigation Agent
				marketing of Kenya coffee in the domestic and international markets <ul style="list-style-type: none"> • Kenya Embassies abroad to be engaged more to push Kenya coffee in their respective jurisdictions 	
Strategic Risk: The risk arising from adverse strategic boardroom, improper implementation or lack of decisions, lack of responsiveness to subsector industry changes or the impact that the decisions of a management team have on a subsector, and lack of capital to implement the CDMS.	<ul style="list-style-type: none"> • Inadequate financial resources to implement the CDMS • Inadequate human & skill capacity a) the many activities to be undertaken within certain strict timelines and budget will require adequate technical b) many initiatives require doing things in a new way, which may challenge the ability of some of the existing staff to deliver the initiatives as proposed • Learning curve – most Initiatives may involve re-orienting some of the stakeholders to achieve full commitment, retraining some staff and even hiring new employees. Given some of these may require mobilizing the stakeholders and resources, this may delay delivery of some Initiatives 	Medium	High	<ul style="list-style-type: none"> • Lobby the exchequer at National and County government levels to provide adequate resources for the CDMS. • Encourage robust governance structure both at the Coffee Directorate, at the Nairobi Coffee Exchange (NCE) and any other relate value chain node institution • Adoption of implementation unit within the directorate and representative from the subsector value that eases decisions making 	CD, CRI, NCE, Commodities Fund/ Crop Commodities Fund New KPCU, Cooperatives Societies
Credit Risk: The risk arising from a borrower’s likelihood	<ul style="list-style-type: none"> • Cooperatives societies defaulting on their debts to banks, millers, SACCOs, Commodities fund, Coffee cherry advance revolving fund 	Low	High	<ul style="list-style-type: none"> • Cooperatives to conduct full credit appraisal to determine serviceability before requesting for additional loans 	Commodities Fund/ Crop Commodities Fund,

Risk Category	Risks occurrences along the value chain	Risk Probability	Risk Impact	Risk Mitigation	Risk Mitigation Agent
to default on any contractual obligation with the financial institutions/agents	<ul style="list-style-type: none"> Growers defaulting on their loans to SACCOs, banks and Commodities fund 			<ul style="list-style-type: none"> Ensure all lending institutions registered with or linked to the Credit Reference Bureau 	New KPCU, SACCOs
<p>Liquidity Risk:</p> <p>The risk arising from inability to meet liabilities when they fall due without incurring unacceptable losses.</p>	<ul style="list-style-type: none"> Cooperatives societies running into liquidity problems due to poor treasury management. Growers over-committing themselves in debt to the extent of being unable to meet day to day liquidity needs 	Medium	Medium	<ul style="list-style-type: none"> Enhance treasury management at the Cooperatives by establishing an Asset and Liabilities Committee to manage the risk at each Cooperatives and Union Carry out financial management training for all growers Adopt Direct Settlement System (DSS) solutions that release funds promptly to value chain actors 	NCE, Commodities Fund/ Crop Commodities Fund New KPCU
<p>Interest Rate Risk:</p> <p>The risk arising from adverse fluctuation in interest rates</p>	<ul style="list-style-type: none"> Cooperatives societies' debt obligations may become more expensive and reduce their profitability and liquidity margins Growers' debts from financial institutions may become unserviceable or at least reduce their disposable income 	Medium	High	<ul style="list-style-type: none"> Commodities fund /Crops commodities fund / Coffee cherry advance revolving fund to leverage on their strong financial position to negotiate fixed interest rate debts 	Commodities fund /Crops commodities fund, New KPCU
<p>Foreign Exchange Risk:</p> <p>The risk arising from adverse movements in currency exchange rates</p>	<ul style="list-style-type: none"> Loss of value to the growers due to forex losses on conversion to Kenya shillings 	High	High	<ul style="list-style-type: none"> Make it optional and allow cooperative societies and growers to operate forex denominated bank accounts so that they can receive their payments in dollars and only convert to Kenya Shillings when the need arises Enter into forward forex 	Cooperative Societies, Contracted Banks for proposed DSS

Risk Category	Risks occurrences along the value chain	Risk Probability	Risk Impact	Risk Mitigation	Risk Mitigation Agent
				contracts to hedge on known future forex obligations	
<p>Operational Risk:</p> <p>The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events</p>	<ul style="list-style-type: none"> Cooperative societies making losses due to operational inefficiencies and fraudulent activities. 	High	High	<ul style="list-style-type: none"> Enhance the sustainability of the business processes and models at the Cooperative societies and factories to optimize efficiency by minimizing cost and maximizing returns 	Cooperative societies Management committees
<p>Reputational Risk:</p> <p>These are risks that creates negative publicity regarding an institution's business practices, whether true or not, will cause a decline in the customer base, costly litigation, or revenue reduction</p>	<ul style="list-style-type: none"> The negative image of particularly Cooperatives societies, other coffee value chain node institutions due to their history whether perceived or not may alienated them from their subsector in the industry consumers. 	Medium	High	<ul style="list-style-type: none"> Embark on a deliberate PR campaign to improve on the perception of Cooperative societies as facilitators of production, processing, and marketing of Kenya coffee. 	Cooperative societies CD, CRI, New KPCU, NCE,

Risk Category	Risks occurrences along the value chain	Risk Probability	Risk Impact	Risk Mitigation	Risk Mitigation Agent
<p>Regulatory Risk</p> <p>The risk arising from violations of, or non-conformance with, laws, rules, regulations, prescribed practice, or ethical standards issued by the various industry regulators from time to time.</p>	<ul style="list-style-type: none"> • There have been certain levels of regulatory failure at the farm level, factory level and auction level. • Due to continued breaches, certain practices have taken root and have become the norm. for example, cherry hawking, advances to growers from millers/marketing agents, 	Medium	Medium	<ul style="list-style-type: none"> • CD to ensure that all laws, rules and regulations pertaining to the industry are followed to the letter • Cooperative Societies and growers to outlaw illegal practices like cherry hawking or borrowing from millers/marketing agents 	<p>CD, Cooperative societies, NCE, New KPCU</p>
<p>Environmental and Climate Change Risk:</p> <p>The risk arising from uncertainty about environmental liabilities or the negative impact of climate changes</p>	<ul style="list-style-type: none"> • There is a threat to coffee production due to climate change effects • The dependency of water in coffee cherry processing is unsustainable. 	Medium	High	<ul style="list-style-type: none"> • Introduce improved coffee varieties that are resilient to climate changes. • Explore modern technologies to facilitate coffee pulping at lower water volumes. • Practice GAPs • Promote climate insurance concept 	<p>CRI, MOA &LD, CD, Cooperative societies</p>

5 CHAPTER FIVE: MONITORING AND EVALUATION

This section provides an overview of monitoring and evaluation, reporting, and communication framework for the CDMS.

5.1 M&E Overview

The success of achieving the objective of any strategy lies in a SMART monitoring and evaluation framework. Monitoring is the process of continuously gathering collecting data and information during the implementation of the Strategy to ensure all activities are on track. Evaluation measures the extent to which planned outputs, objectives and goals are being achieved. Through an effective M&E, the value chain players will be able to identify where the coffee subsector intends to be and how to get there and evaluate achievement of desired targets within the proposed planned five (5) year period.

The monitoring and evaluation system will aid in:

- a) Evaluating the proposed strategies initiatives, policies interventions and identifying the areas that need adjustment to successfully achieve the intended strategic objectives
- b) Provide framework for reporting implementation progress
- c) Identification and reporting of key lessons learnt along the chain
- d) Providing avenue for incorporating new interventions and strategic initiatives

5.2 Monitoring and Evaluation System

Measuring whether progress is being made towards attaining long-term results, strategic objectives and outputs of the national CDMS and assessing the relevance of the methods used will be crucial tool. This will help with learning and adapting the Strategy in order to improve its implementation and accountability of the responsible entities. For this to take place, an effective monitoring and evaluation system will be put in place.

A wide monitoring and evaluation as well as periodic progress reviews and reporting will be undertaken by the implementing entities under the coffee strategy coordinating committee established for coordinating the implementation of the CDMS. Corrective actions will be instituted along the programme's implementation stages.

M&E will provide reliable and timely data to inform key stakeholder along the value chain on progress, results and shortcomings of strategic initiatives interventions under implementation in the coffee subsector. This is to enable policy marker to recommend fine tuning policies and programmes and also to create transparency as a basis for accountability to the public.

To provide regular information on subsector performance, the information originating from the different implementing institutions and sector players will be compiled into a coffee subsector M&E report. This calls for harmonizing the existing M&E instruments to reduce duplication, overlap and fill information gaps in a coordinated way.

5.3 Reporting

To build a credible reporting system, the first step will involve establishing baselines against which

to monitor and evaluate progress, including farm and farmers characteristics, economic and social variables.

Reporting on the progress will comprise the following:

Implementers will self-report on progress toward strategic objectives and targets as measured by the indicators and with problems encountered, and solutions formulated.

Reporting frequency will depend on the timing of information gathering and will include:

- Quarterly reports from implementing agencies
- Semi-annual reports
- Annual Reports
- End Term Short-Term Reports (Less than 2 years)
- Mid-Term Medium Report (3 years)
- Mid-term Long Period Report (4 years)
- End Term Long Period Report (5 years)

Once reports have been shared, it will be vital that feedback and reviews be carried out. Towards this end, the following feedback events will be held:

- Annual review by coffee stakeholders convened by PS, State Department of Agriculture
- Seasonal feedback from farmers/farmers organizations
- Review every time a sample survey is carried out.
- Comprehensive review every Mid-Term and End-Term Report

5.4 Communication Strategy for the Review Findings

The implementation of the National Coffee Development and Marketing Strategy will involve various stakeholders and as such a communication strategy that elaborates how the coffee subsector will network, participate, interact and implement the finding with all its stakeholders is vital.

The communication strategy will facilitate directorate to create a roadmap of how information on the coffee subsector and results of the CDMS will be shared, communicated, who is supposed to communicate what, when, and will define internal and external information flow mechanism.

The information and messages to be disseminated will include, among others: laws and regulations, performance reviews, announcements, publications, operating guidelines, market reports, services, quick important messages and clarifications on misconceptions. The following channels of communication will be used during dissemination: -

- Meetings, workshops, conferences, trade fairs and press conferences
- Telephones
- Radio and Television
- Internet
- Newspapers and brochures
- Events
- Reports

The proposed coffee subsector knowledge management platform will play a critical role in enhancing communication and information sharing among value chain players in the subsector

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6 ANNEXES

6.1 Annex 6-1: Detailed Implementation Matrix

This section provides a detailed implementation action plan giving the timeline and responsibilities for various agencies and actors. The section also gives the target and output performance measure.

PILLAR 1: Production, Productivity and Quality Enhancement.

Goal 1.1: Increased coffee production and productivity

Objective 1.1: To increase coffee production from 51, 852 MT to 150,000 MT and productivity from current 2kg/tree to 6kg/tree by the year 2028/29.
Strategic Issue 1.1: Declining national coffee production

Strategic Initiative 1.1		Improve coffee production by expanding the area under production by 10% from the 109,384.45 Ha by 2028/29									
Strategic Activities	Performance Indicator	Target	Implementation Period					Budget (KES Millions)	Responsibility		
			(Yearly)						Lead	Support	
			2024/2023	-2028/2029	Y1	Y2	Y3	Y4			Y5
i. Intensify coffee development and production within existing coffee growing counties.	Area under production within existing coffee growing counties.	100% implementation	20	20	20	20	20	100	National Government	MoALD, CD, County governments	

ii. Expand coffee production to new and emerging coffee growing counties.	Area under production within existing coffee growing counties.	100% implementation	20	20	20	20	20	100	National Government	MoALD, CD, County governments
iii. collaborate with local universities, colleges and schools for use of their available land as demonstration plots for coffee development.	Framework for collaboration	100% implementation	5	5				10	MoALD, CD, County governments	Ministry of Education
iv. Provide seeds and seedlings to coffee farmers	No. of farmers supported with seeds and seedlings	100% implementation	5	5	5	5	5	20	CRI	National & County government
v. Enhance water harvesting and conservation technologies	Area under production using the technologies	100% implementation	8	8	8			24	County governments, CD, KALRO-CRI	Smallholder farmer, Coffee estates

vi. Enhance research on development of drought and pest tolerant coffee varieties to support the expansion of coffee production in drought-prone counties and mitigate anticipated effects of climate change in general.	CRI Research status report	100% Implementation	2.5	2.5	2.5	2.5	2.5	12.5	CRI	National, County government, universities and private researchers
vii. Carry out trials of coffee in new areas so as to improve on knowledge and dissemination of relevant technologies.	Trials Report	100% implementation	5					5	CD, CRI, County governments	National government
viii. Develop a framework to support renting of abandoned and non-productive coffee bushes	Coffee bushes and trees renting framework	100% implementation	10					10	MoALD, County governments	County government
ix. Promote coffee production among alternative groupings (CBOs, SHGs, youth groups, etc)	No. of new groups participating in coffee production	100% implementation	5					5	MoALD, County government, CD	CBO, SHG, youth groups

Strategic Issue 1.2: Declining national coffee productivity

Strategic Initiative 1.2										
Rejuvenating existing coffee trees and optimizing tree density										
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. Upscale the implementation of guidelines to support existing tree rejuvenation in coffee growing areas	No. of coffee trees rejuvenated	100% implementation	8	8	10	10	10	25	MoALD	CD, County governments
ii. Through public and private partnership carry out demonstrations to farmer households on the benefits of reaching the optimum tree density with existing varieties and rejuvenating older trees through stumping and canopy management.	No of extension activities, Acreage of rejuvenated older trees.	100% implementation all the coffee growing counties	8	8	5	5	5	10	MoALD, county government	CRI, CD, private sector actors

iii. Promote management of non-productive coffee bushes for rejuvenation.	Number of Coffee bushes rejuvenated through proper management	100% implementation	8	8	5	5	5	15	County Governments, CoG	Ministry of Lands, Ministry of Interior
iv. Upscale implementation of soil fertility management guidelines in the traditional coffee growing counties to support tree optimization.	Soil management guidelines	100% implementation	8	8				10	KALRO-CRI	National government County governments

Strategic Issue 1.3: Low use and inadequate access to quality farm inputs

Strategic Initiative 1.3		Improving access to quality and affordable agro-inputs for coffee production.									
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility		
			Y1	Y2	Y3	Y4	Y5		Lead	Support	
i. Support bulk of farm inputs importation	Quantities of farm inputs imported	TBD	10	10	10	10	10	50	MoALD, County governments,	Commodities Fund	
ii. Promote government efforts to subsidise farm inputs	Quantity of subsidized farm inputs	TBD	10	10	10	10	10	50	MoALD & County governments	Commodities Fund, KRA, KEBS	
iii. Develop a framework that enables cooperatives as entities to procure and access subsidized inputs e.g., fertilizers from NCPB on behalf of farmers	Framework For Subsidies	100% Implementation	5					5	MoALD, MSME,	Treasury, County Governments	

iv. Collaborate with relevant government entities to provide tax incentives for farm inputs	Tax incentives in place	TBD	10	10	10	10	10	50	MoALD, county governments	Commodities Fund, KRA, KEBS
v. Support programmes to provide guarantee scheme for farmers to access affordable quality farm inputs	No. of Guarantee Scheme Programmes	TBD	5	5	5	5	5	20	MoALD, County government	CD Commodities Fund, NKPCU
vi. Train farmers on the Best Agronomic Practices through field days and demonstration farms	No. of field days and demonstration farms	100% implementation	6	6	6	6	6	30	MoALD, CRI, county governments, CD,	Commodities Fund Private sector
vii. Establish coffee nurseries in each coffee growing counties to enhance access to certified planting material for farmers	No of coffee nurseries	100 % implementation	12.5	12.5				25	MoALD, CRI, County governments	Private sector, KEPHIS

viii. Promote regular inspection of coffee nurseries and other farm inputs for quality assurance	Number of inspections carried out	100 % implementation	10	10				20	County Government, CD,	MoALD, MITI
ix. Scale up soil testing and leaf analysis for farmers	National soil testing map	100% implementation	17.5	17.5				35	MoALD, CRI	County government CD



PILLAR 2: Processing and Value Addition

Goal 2.1: Upgraded Processing and Value Addition

Strategic Objective 2.1: To promote the adoption of modern technologies for processing and value addition for quality coffee

Strategic Issue 2.1: High operational cost of the existing mills and Low value addition of Kenyan coffee

Initiative 2.1	Enhancing coffee processing and Value Addition from current 5 % to 10%									
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. Promote adoption of modern coffee processing and value addition technologies	No. of factories adopting new technologies, No. of technologies adopted	TBD	2	2	2	2	2	10	County government, MoALD, CRI, CD,	Private sectors, Universities, KIRDI, Commodities Fund, MCSME
ii. Conduct trainings to impart skills on use of modern technologies for coffee processing and value addition	No. of training activities	100% Implementation	5	5	5			15	County government, MoALD, CRI, CD,	Private sectors, Universities, KIRDI, Commodities

											Fund, MCSME
iii. Strengthen the monitoring system for emerging processing technologies to ensure quality of Kenyan coffee.	Level of implementation of the monitoring system for emerging processing technologies	100% Implementation	10						10	MoALD, CRI, CD	CD
iv. Support the establishment of value addition Centres of Excellence	10 Centres of Excellence	100% Implementation	10	10	10	10			40	County governments, CD, CRI,	Private sectors, Universities, KIRDI, Commodities Fund, MCSME
v. Promote commercialisation of homebased value-added coffee	Number of value chain players participating in homebased value addition	100% Implementation	2	2	2	2	2		10	County governments, CD, CRI	CRI
vi. Promote coffee product diversification	No. of products	100% Implementation	3	3	3	3	3		15	MoALD, county	Private sectors,

										government s, CD, CRI,	Universities, KIRDI, Commodities Fund, MCSME
vii.Upscale affordable credit for acquisition of value addition equipment	No. of new credit products	100% Implementation	10	10	10	10	10	50		MoALD, county government s, Private sector	, Commodities Fund, CD
viii.Upscale training on production of coffee-based products in learning institutions	No. of training programmes introduced	100% Implementation	3	3	3	3	3	15		MoALD, CRI, Learning institutions,	County governments
ix.Train value chain actors on quality control and packaging	No. of value chain actors trained on quality control and packaging	100% Implementation	1	1	1	1	1	5		MoALD, Ministry of Interior and National Administrati on, County government s	CD
x.Support farmers and farmers organisation in purchase of value addition machinery	Number of machinery purchased	100%	20	20	20	20	20	100		MoALD, Ministry of Interior and National	MoALD

									Administrati on, County government s	
xi.Through a public private partnership, support the development of a national roasting and soluble product industry	Degree of development of the industry	75 % growth in the national roasting and soluble product industry	10	10	10	10	10	50	MoALD, CRI, CD,	Public and private Sector

PILLAR 3: Marketing

Goal 3.1: Strengthened and Predictable Marketing of Kenyan Coffee

Objective 3.1: To improve market access for farmers and farmers cooperatives.

Strategic Issue 3.1: Inadequate coffee marketing systems and arrangements

Initiative 3.1:		To promote a sustainable marketing of Kenyan coffee to enhance competitiveness and pricing for maximum returns to growers and other value chain players.								
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. Strengthen the ERP system at NCE to cover the entire coffee value chain	Traceability incorporated into ERP system, No. of stakeholder embracing the ERP system	100% Implementation	2.5	2.5	2.5	2.5		10	CD, NCE	National and county Governments, Growers, marketing agencies
ii. Establish warehouses in target markets	No. of warehouses established,	100% Implementation	3	3	3	3	3	15	MoALD, MFA, CD	county Governments, private sector, millers

	Quantities of coffee bags held at warehouses										
iii.	Promote competitive packaging and branding of Kenyan coffee.	Increased sales, Improved shelve life	100% Implementation	3.33	3.33	3.33			10	CD, KEPROBA	county Government, private sector
iv.	Promote compliance to coffee marketing standards and practices among value chain players.	No. of non-compliance cases reported	100% Implementation	1	1	1	1	1	5	CD, KEBS	National Government, millers and marketing
v.	Capacity build growers in accessing export market and trading in direct sales	No of growers trading in direct sales	100% Implementation	1	1	1	1	1	5	MoALD	County Government, MITI
vi.	Increase funding to NCE to support coffee auction system modernisation	Funding level received, Level of modernisation	100% Implementation	10	10	10	10	10	50	MoALD	County Governments, Millers
vii.	Develop a NCE cupping laboratory to facilitate online trade.	Cupping laboratory developed	100% Implementation	16.6	16.6	16.6			50	NCE	National Government, millers, brokers

iii. Strengthen the marketing structures in line with capital market (coffee exchange) regulation 2020	Effectiveness of the marketing structures	100% Implementation	10	10	10	10	10	50	NCE	MITI ,National Government, millers, brokers
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Strategic Issue 3.2: Declining market share in the traditional markets.

Initiative 3.2		Rebuild competitiveness and market share in traditional markets								
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly)					Budget (KES Millions)	Responsibility	
			2024/2025 -2028/2029						Lead	Support
			Y1	Y2	Y3	Y4	Y5			
i. Profile Kenya Arabica by region, geographic indications, variety, altitude and sustainable or other certification.	A profile Report	100% Implementation	2.5	2.5	2.5			3	MoALD	
ii. Promote access to all market segments through Taste of Harvest competitions and 'know your cup' coffee tasting	No. of competitions	100% Implementation	2.5	2.5	2.5	3.33	3.33	5	CD	NCE, National and county Government

iii. Promote marketing coffee safaris and agro-tourism for international coffee roasters	No. of marketing safaris and agro-tourism activities	100% Implementation	2.5	2.5	2.5	3.33	3.33	5	CD	National and county Government
iv. Collaborate with the diplomatic missions to promote sustainability of Kenyan coffees in the traditional markets.	No. of collaborations with diplomatic missions	100% Implementation	2.5	2.5	2.5	3.33	3.33	5	MFAs, MoALD, CD	National Government and traditional markets
v. Implement certification guidelines and promote the production of organic coffee for maximum profits from this niche	Degree of compliance to guidelines	100% Implementation	2	2	2	2	2	10	CD	National Government and traditional markets, MFAs, MoALD,

Strategic Issue 3.3: Low access and penetration in alternatives markets (specialty, emerging and regional markets)

Initiative 3.3:	Promote and enhance accessibility of emerging, regional and specialty markets									
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. Develop partnerships in emerging, regional and specialty markets to promote and negotiate access for Kenyan coffee	No. of partnerships, MoUs, Volume of coffee sold through negotiated agreements	100% Implementation	1	1	1	1	1	5	MFAs, MoALD, CD	County Government, private sector
ii. Explore into bilateral agreements for the marketing of Kenya Coffee	No. of bilateral agreements	100% Implementation	4	4	4	4	4	20	MFAs, MoALD,CD	Private sector
iii. Develop and disseminate guidelines on specialty coffee production	Guidelines developed and disseminated	100% Implementation	5	5	5			15	MoALD, county Government CD	

iv. Develop and implement guidelines for production of organic coffee	Guidelines developed and disseminated	100% Implementation	5	5	5	5	5	25	MoALD, County Governments CD	
v. Organise and participate in targeted exhibition and trade fairs to promote Kenyan coffee intrinsic value	No. of exhibitions	100% Implementation	2.5	2.5	2.5	2.5	2.5	10	MoALD, CD	County governments
vi. Promote marketing coffee safaris and agro-tourism for international coffee roasters	No. of coffee safaris and agro-tourism activities	100% Implementation	2	2	2	2	2	10	MoALD, CD	County Government, Private sector
vii. Expand market opportunities in the African continental free trade agreement and other regional trade agreements (EAC, COMESA)	No. of trade agreements signed	100% Implementation	4.3	4.3	4.3			13	MoALD, MFAs, Ministry of EAC, MITI, CD	County Government
iii. Collaborate with the diplomatic and foreign missions to promote, acquire and sustain emerging and regional markets	No. of collaborations with diplomatic missions	80% Implementation	1	1	1	1	1	5	MoALD, MFAs, CD	Diplomatic And Foreign Missions

PILLAR 4: Increased Domestic Coffee Consumption

Goal 4.1: Increase domestic consumption of Kenyan coffee

Objective 4.1: To increase domestic consumption of Kenyan coffee for price stabilization and revenue enhancement for growers.

Strategic Issue 4.1: Low level of domestic coffee consumption

Initiative 4.1:	Enhancing a coffee drinking culture in Kenya										
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility		
			Y1	Y2	Y3	Y4	Y5		Lead	Support	
i. Engage health professionals in the promotion of coffee drinking as a healthy activity	i. No. of health professionals engaged in promotion, ii. No. of health benefits packaged	100% Implementation	4	4	4	4	4	10	MoALD, CD	National Government, health professionals	
ii. Promote and support setting up of barista training centres on coffee brewing skills	No of barista training centres	100% Implementation	10	10	10	10	10	50	CD	National Government, Universities	
iii. Conduct national and regional barista championships.	No of barista championships.	100% Implementation	4	4	4	4	4	10	MoALD, CD	County Governments	

iv. Support roasters in developing brands and blends	<p>i. No. of developed brands and blends,</p> <p>ii. No. of different sizes of packages in the markets</p>	100% Implementation	2	2	2	2	2	10	MoALD,CD	County Government
v. Implement consistent media campaigns using traditional and emerging media platforms to promote Kenyan coffee as a refreshing drink	Number of media campaigns	100% Implementation	20	20	20	20	20	100	MoALD,	CD
vi. Use of social media influencers to promote Kenyan coffee.	No. of social media influencers engaged in promotion	100% Implementation	10	10	10	10	10	50	MoALD,	CD

Initiative 4.2		Increasing demand for Kenyan Coffee in the local market								
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support

i. Design and implement an integrated market activation campaigns targeting new consumer segments e.g., youth in campus & the middle class	No of integrated market activation campaigns	100% Implementation	2	2	2	2	2	10	MoALD, CD	National and county Governments
ii. Encourage brewers to come up with new coffee flavours and blends to attract starters	No of new coffee flavours and blends	100% Implementation	3	3	3	3	3	15	MoALD, CD	National Government, coffee roasters and brewers
iii. Advocate for design of user-environmentally friendly packaging by coffee roasters and brewers	environmentally friendly packaging	100% Implementation	6.66	6.66	6.66			20	MoALD, CD	NEMA, KEBS, National Government, coffee roasters and brewers
iv. Promote coffee consumption in government institutions and public school	Amount of coffee consumed in government institutions and public school	100% Implementation	5	5	5	5	5	25	MoALD, CD, county Government	MoALD,
v. Design and implement a prize contest targeting general public through radio and	No of contest	100% Implementation	5	5	5			15	MoALD, CD	Radio and social media platforms, National and

social media platforms											county Governments
vi. Undertake wet sampling drives in shopping malls and major bus parks across county headquarters	No of wet sampling drives	100% Implementation	1	1	1	1	1	5	MoALD, CD	County Governments	
vii. Develop and implement guidelines for coffee vending	coffee vending guidelines developed	100% Implementation	2	2	2			6	MoALD, CD	County Governments	
iii. Promote coffee mills and home-based value addition of Kenyan coffee	Amount of coffee undergoing home-based value addition of Kenyan coffee	50	5	5	5	5	5	25	MoALD, CD	MoALD	
ix. Promote recognition of coffee Kenya brand identity by retouching brand attributes of the mark of origin	Brand attributes retouched	100% implementation	4	4	4			12	MoALD, CD	MFAs, County governments, roasters and coffee houses,	

PILLAR 5: Research, Extension Services and Data Dissemination

Goal 5.1: Strengthened research, extension services and data dissemination in the subsector

Strategic Objective 5.1 To enhance research, extension services and timely data dissemination that is responsive to dynamic industry requirements and demands.

**Strategic Issue 5.1: (a) Inadequate and sustainable research capacity in KALRO-CRI
(b). Declining sustainable coffee research and development activities**

Strategic Initiative 5.1	Strengthen Coffee Research, Technology and Innovation of the subsector									
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. Scale up research capacity at CRI through increased staffing, equipment improvement and relevant facilitation	No. of new researchers recruited, No. of new equipment installed	TBD	10	10	10	10	10	50	CRI	MoALD, CD, County Governments

ii. Promote skills and knowledge succession mechanism at the KALRO Coffee Research Institute	No of personnel trained	100% Increase in no of personnel trained	5	5	5	5	5	25	CRI	MoALD, CD
iii. Provide mechanism for monitoring and tracking impacts of new technologies in the subsector	A Monitoring mechanism	100% Implementation	2	2	2	2	2	10	CD	CRI, MoALD
iv. Development of post-harvest handling and storage technologies and practices	Technologies adopted	50% increase in the amount of equipment in the industry	2	2	2	2	2	10	CD	CRI, MoALD and county Governments,
v. Develop drought and pest tolerant coffee varieties to support the expansion counties.	Number of draught and pest tolerant varieties	100% Implementation	10	10	10	10	10	50	CRI,	CD, MoALD and County Governments
vi. Develop suitable production technologies that can support coffee to be to planted more densely in intercropping systems	No of suitable production technologies developed	100% Implementation	10	10	10	10	10	50	CRI,	CD, MoALD and County Governments

vii. Establish technology incubation Centre at KALRO Coffee Research Institute on value addition emerging technologies	Technology incubation Centre	100% Implementation	20	20	20	20	20	100	CRI,	CD, MoALD
iii. Scale up and sustain collaborative linkages with other research institutions at regional and international levels.	No. of MoUs	10 MoUs	1	1	1	1	1	5	CRI, MoALD	County Government
ix. Introduce a traceability system for planting materials	ERP system for planting materials in place, Framework for collaboration between CRI and counties on licensing	100% Implementation	2	2	2	2	2	10	MoALD, CRI, CD, CoG	County Government
x. Enhance farmer participatory research including adaptive trials on farmer fields	No. of demo farms	TBD	7	7	7	7	7	35	MoALD, County Governments CRI	CD

xi. Provide adequate and sustainable financing for coffee research by identifying and promoting internal revenue generation and additional sources of public and private sector funding	Amount of funding provided	100% Implementation	8	8	8	8	8	40	MoALD, and County Governments	CD, CRI
xii. Establish a mechanism for rewarding innovation in the subsector	Reward framework in place, No. of awards issued	100% Implementation	1	1	1	1	1	5	CRI, MoALD,	KIRDI, KIPI, County Governments

Strategic Issue 5.2: Inadequate coffee tailored extension services and data collation and dissemination techniques

Strategic Initiative 5.2	Strengthen coffee specific extension services along the value chain									
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support

i. Scale up coffee extension capacity for coffee inspectors and extension officers	i. Number of Extension workers employed ii. Staff-farmer ratio	100% increase	14	14	14	14	14	70	County Government, MoALD	CRI, CD
ii. Scale up collaboration with other research institutions to maximize the use of existing Agriculture Training Centres (ATCs) for innovation and technology transfer	Collaboration framework, Joint Strategies	TBD	1.5					1.5	CRI, MoALD	County governments ATCs
iii. Promote and facilitate of private extension service providers	No. of Framework agreements for extension	TBD	3.3	3.3	3.3			10	MoALD County governments, CRI	CD,
iv. Facilitate self-regulation and supervision of coffee extension service providers	No. of self-regulation instruments in place	100% implementation	7	7	7			21	County governments	CD, CRI
v. Strengthen e- extension service.	ICT framework system	100% implementation	3	3	3			9	CRI/ Counties	CD, National

vi. Scale up training programmes for extensionists targeting farming households and farmers' cooperatives that are tailored to each agro-ecological zone and farming system	No. of Training activities	TBD	5					5	CRI, CD	National and County governments
vii. Train farmers' organisations, farmer group leaders, and input suppliers in extension technologies	No. of Trainees	TBD	33					33	MoALD, County governments, CRI	CD,

Strategic Issue 5.3: Inadequate Data for Industry Planning

Strategic Initiative 5.3		Generate, collate, and disseminate updated data to assist industry players in planning.								
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. Carry out coffee census incorporating KIAMIS data to ascertain actual	Feasibility study report	100%implementation	20					20	MoALD, County governments	CD and farmer, coffee estates

acres under coffee production. ii. Undertake feasibility and needs assessments in new counties identified for expansion.										
iii. Undertake feasibility and needs assessments in traditional coffee growing counties to determine the potential for and means of expansion.	Assessment reports	100% Implementation	10					10	MoALD and county governments	CD
iv. Undertake regular market surveys on target markets and avail relevant information to the coffee subsector players.	Survey reports	100% Implementation	1	1	1	1	1	5	MoALD, CD	County Governments
v. Establish centralized coffee information and knowledge management centre	A coffee knowledge management system in place	1 centre	30					30	MoALD, CD	CRI, County government, Private sector

vi. Promote compliance of guidelines on data and information management in coffee institutions	No. of non-compliance cases reported	50% Reduction in No of reported breaches	2	2	2	2	2	10	MoALD, County Governments, CD	CRI
vii. Promote coffee data and information dissemination methods through: a. Publication and dissemination of Kenya coffee publications. b. Collaboration and strengthening of the relationship with media (print, broadcast, and online versions) to run packaged module on coffee sector. c. A national coffee journals. d. Hold/attend national coffee conferences for coffee professional	Data Dissemination methods in place	100% implementation	2	2	2	2	2	10	MoALD, CD, CRI, County Governments	Millers, NCE, Roasters, private sectors

<p>and stakeholders</p> <p>e. Hosting of scheduled coffee promotion fairs in various learning institutions to disseminate information</p> <p>f. Develop and publish training manuals on various coffee value chain for stakeholders.</p> <p>g. Establish and maintain an active social media and organization websites for sharing coffee information</p> <p>h. Issuance of regular press releases on coffee matters</p> <p>i. Use of vernacular language</p>										
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PILLAR 6: Climate Change, Environment and Inclusivity

Goal 6.1: Enhanced Resilience to Climate Change, Sustainable Environmental Practices and Inclusivity in The Subsector.

Strategic Objective 6.1: To increase resilience and adaptability of coffee subsector to climate change.

Strategic Issue 6.1: Increasing impacts of climate change and environmental risk of waste along the coffee value chain

Strategic Initiative 6.1		Promote and support climate change adaptation and environmentally responsible practices in coffee value chain									
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility		
			Y1	Y2	Y3	Y4	Y5		Lead	Support	
i. Promote and adopt climate adaptative. mitigation and climate SMART agriculture (use of shade trees, mulching, terracing, in-situ water harvesting, rehabilitation of catchment areas, water management)	i. No. of farmers adopting climate SMART practices, ii. No. of technologies	100%	1	1	1	1	1	5	County governments, CRI	MoALD, Ministry of Environment and Forestry, WRA	

ii. Promote the regenerative coffee farming including production of organic coffee.	Acreage of coffee under regenerative farming	100% implementation	10	10	10	10	10	50	MoALD	CD, County Governments Commodities fund
iii. Promote irrigation of at least 10,000 Ha of coffee crops by the end of five years	Acreage of coffee irrigated	100%	10	10	10	10	10	50	MoALD and county Governments	CD, Commodities fund
iv. Incentivise coffee farmers by lobbying for carbon credit by recognizing coffee bushes as part of forest cover	Carbon Credits Granted	TBD	2	2	2	2	2	10	Minnistry of Environment, CD	Minnistry of Environment
v. Promote circularity approach in management of coffee wastes from along the value in line with national and international regulations (EMCA 1999, Sustainable Waste Management Act, 2022)	Level of adoption of circularity approach	TBD	5	5	5	5	5	25	Minnistry of Environment, CD	Minnistry of Environment

vi. Develop drought and heat tolerant coffee varieties to improve adaptation to climate change	No. of resilient varieties	TBD	1	1	1	1	1	5	CRI	County Government, CD and farmers
vii. Develop and implement incentive systems for farmers who practice BEPs	No. of Incentive systems in place	TBD	5	5				10	MoALD and county Government	CD, Commodities fund, NEMA
iii. Promote use of renewable energy in factories	No. of factories reporting utilization of renewable energy resources	All factories	2.5	2.5	2.5	2.5		10	County governments, CD, EPRA	NEMA
ix. Assess the viability of coffee insurance to cushion the farmers from adverse effect of climate change and variability	No. of farmers insured	TBD	2.5	2.5	2.5	2.5		10	County Governments, CRI	CD, financial institutions Commodities fund

Strategic Objective 6.2: To enhance the sustainable participation of women, youth and PWD along the coffee value chain

Strategic Issue 6.2: Inadequate involvement of women, youth and PWDs along the coffee value chain

Strategic Initiative 6.2										
Enhanced participation of women, youth and PWDs in the subsector										
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. Promote the implementation of affirmative action in the coffee value chain	No. of women, youth and PWDs participating in coffee value chain	80% implementation	2	2	2	2	2	10	MoALD, County governments	Ministry of Public Service, Farmers
ii. Promote the Household Approach' to ensure extension services address gender and youth issues in coffee farming.	i. No. of households visited; ii. No. of technologies dispensed	100% implementation	1	1	1	1	1	5	County government, CRI	CD,

iii. Develop training programs on coffee entrepreneurship targeting youth, women and PWDs	No of Training programs	TBD	1	1	1	1	1	5	MoALD, County government	MCSME, learning institutions
iv. Support initiatives that involve youth, women and PWDs in the coffee value chain e.g., setting up coffee nurseries	No of Initiatives	100%	10	10	10	10	10	50	MSME, MoALD, County government	MSME
v. Scale up and support access to funds for youth, women and PWDs either in groups or individually in the coffee value chain	No. of youth/women/PWDs accessing funds	TBD	2.5	2.5				5	MSME, MoALD, County governments	Private sector
vi. Promote digitisation & new technologies in the Coffee Value Chain to attract youth	No. of promotion campaigns, No. of new technologies adopted	50% Implementation	1	1	1	1	1	5	MoALD, County Governments	CRI, CD, private sector

vii. Encourage ownership of coffee trees by women, youth and PWDS	No of coffee trees owned by women, youth and PWDS	100% implementation	2	2	2	2	2	10	MoALD, County Governments	CRI, CD
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PILLAR 7: Financing and Payment Management

Goal: Sustainable Funding and Payment in Coffee subsector

Strategic Objective 7.1: To enhance a sustainable financing and payment system in the coffee subsector that generates revenue for farmers and other players in the value chain.

Strategic Issue 7.1: Inadequate access to sustainable financing and payment systems for the subsector

Strategic Initiative 7.1	Provision of adequate and sustainable financing and payment for coffee subsector									
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. Scale up the capacity of Commodities Fund	i. No. of farmers accessing commodities fund, ii. Percentage increase in the fund	50% implementation	20	20	20	20	20	100	Commodities Fund	MoALD, CD CRI
ii. Promote internal revenue generation for the subsector	Number of internal resources generated by the sector	100% Increase	3	3	3	3	3	15	MoALD and County Governments	CD, CRI Commodities Fund

iii. Lobby for the re-introduction of ad-valorem levy to strengthen the financial position	Establishment of ad-valorem levy	100% Implementation	4					4	MoALD	CD, Commodities Fund CRI
iv. Negotiate and secure revenue from the catering levy trustee fund for development and promotion of domestic market	Negotiation meetings, Amount of Revenue remitted	100% Implementation	20					20	MoALD, CD	Coffee houses, Coffee Producers and Processing Associations
v. Promote and support public and private partnership in investment and funding of the subsector	No of public and private partnerships	100% Implementation	2	2	2	2	2	10	MoALD, Ministry of National Treasury, CD	private sector
vi. Support establishment of minimal guarantee scheme for advance payment up coffee delivery for farmers	Establishment of scheme	100% Implementation	100					100	MoALD, Ministry of National Treasury, CD	MoALD

vii. Support the establishment of coffee bonus system.	A bonus system in place	100% Implementation	10	10	10	10	10	50	MoALD, National Treasury, NCE	Marketing agencies, Banks
viii. Strengthen and support the implementation of the direct settlement system (DSS)	DSS implemented	100% Implementation	1	1	1	1	1	5	MoALD, National Treasury, NCE	Marketing agencies, Banks
ix. Support the innovative financial mechanism for the subsector like matching grants	Establishment of innovative financial mechanisms	100% Implementation	1.6	1.6	1.6			5	MoALD, National Treasury	Marketing agencies, Banks

PILLAR 8: Coffee Subsector Governance and Institutional Development

Goal: Enhanced Governance and Institutional Development

Strategic Objective 8.1: To develop and strengthen an effective institutional framework for efficient service delivery

Strategic Issue 8.1: Inadequate human and financial capacity in key coffee subsector institutions

Initiative 8.1	Strengthen the Capacity of public institutions in the subsector										
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility		
			Y1	Y2	Y3	Y4	Y5		Lead	Support	
			i. Recruitment of adequate and competent staff	No of competent staff employed	80% Implementation	4	4		4	4	4
ii. Lobby the re-introduction of ad-valorem levy to strengthen the financial position	Introduction of ad-valorem levy	100% Implementation	5	5				10	MoALD, National Treasury	Marketing agencies, Banks	
iii. Establishment mechanism for internal revenue generation	Amount of internal revenue generated	TBD	2	2	2	2	2	10	MoALD, National Treasury	Marketing agencies, Banks	

iv. Scale up the institutional capacity to monitor the quality of agro-inputs.	No of agro inputs inspected for quality	TBD	10	10	10	10	10	50	CD, National Governmet	MoALD,
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Strategic Issue 8.2: Low level of engagement and use of existing intergovernmental structures

Initiative 8.2		Enhance framework for intergovernmental engagements (national and county governments) for the coffee subsector								
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. National and county government to optimize the use of existing intergovernmental engagements framework in the coffee subsector	No. of intergovernmental engagements reported	100% Implementation	10					5	National government,	County governments and CoG

ii. Establishment of intergovernmental county coffee working group.	33 County <i>coffee working groups</i> .	100% Implementation	40					33	National government,	County governments
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Strategic Issue 8.3: Weak governance structures in the farmers cooperatives

Initiative 8.3:		Enhancing governance and accountability of cooperatives societies in the coffee subsector								
Strategic Activities	Performance Indicator	Target	Implementation Period (Yearly) 2024/2025 -2028/2029					Budget (KES Millions)	Responsibility	
			Y1	Y2	Y3	Y4	Y5		Lead	Support
i. Support sensitization on proper management of resources in the cooperatives and Estate Planters Associations.	No. of cooperative societies effecting timely payment to members	100% Implementation	4	4	4	4	4	20	MoALD, MCSMEs	National and County Governments
ii. Upscale collaboration with stakeholders in enforcement and compliance of relevant laws and regulations in the subsector	No. of non-compliance reports resolved	100% Implementation	1	1	1	1	1	5	MoALD, MCSME	National and County Governments

										cooperative societies
iii. Promote of one third gender rule in election of the Cooperatives management committees and Coffee Estate Planters Associations.	No. of societies complying with One third gender rule	100% Implementation	5					5	MCSME, Ministry of Public Service, Youth and Gender Affairs	National and County Governments
iv. Development and implement of operational business indicators for coffee co-operative societies	Operational business indicator manuals in place	100% Implementation	2.5	2.5				5	CD, MCSMEs	National Government
v. Sensitise farmers on roles and responsibilities of members, management and leadership in the cooperatives.	No. of sensitization engagements	100% Implementation	2.5	2.5				5	County governments,	National Government
vi. Promote digitalisation and automation of cooperative societies operations	No. of digitalised and automated operations	100% Implementation	10	10	10	10	10	50	MoALD, MCSME	National and County Governments cooperative societies

6.2 Annex 6-2: Projected area under coffee production by 2028/29

S/No	County	Area under coffee production (Ha) in 2021/22	Projected area under coffee production by 2028/29 (Ha)
1	Kiambu	20,369.00	20,400
2	Kirinyaga	10,089.10	10,133
3	Nyeri	9,841.00	9,900.00
4	Murang'a	9,413.00	9,450.00
5	Meru	8,708.40	8,758.40
6	Machakos	8,013.00	8,063.00
7	Bungoma	7,725.00	7,775.00
8	Embu	6,881.90	6,930.00
9	Kericho	4,842.00	4,892.00
10	Kisii	4,579.00	4,609.00
11	Tharaka Nithi	3,680.90	3720.00
12	Nyamira	2,710.50	2740
13	Trans Nzoia	2,198.00	2,260.00
14	Nakuru	1,999.20	2050
15	Nandi	1,915.00	1,990.00
16	Makueni	1,695.00	1,750.00
17	Baringo	1,215.40	1,295.40
18	Migori	835	900
19	Homa Bay	429	444
20	Kakamega	351	400
21	Uasin Gishu	341	610
22	Narok	337.2	420
23	Bomet	273	310
24	Busia	200	240
25	Nairobi	181	183
26	West Pokot	178	230
27	Elgeyo Marakwet	154	190
28	Kisumu	106	190
29	Laikipia	56	100
30	Siaya	37	60
31	Vihiga	15	50
32	Taita Taveta	10	100
33	Kajiado	5.40	50
	Total	109,384.40	111,193.00

Note: The remaining 9,130.04 Ha is expected to be achieved from new counties