



# Green finance assessment of Embu County



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# Green finance assessment of Embu county



**April 2024**

Financial Sector Deepening Kenya (FSD Kenya) is an independent trust dedicated to the achievement of a financial system that delivers value for a green and inclusive digital economy while improving financial health and capability for women and micro and small enterprises (MSEs).

FSD Kenya works closely with the public sector, the financial services industry, and other partners to develop financial solutions that better address the real-world challenges that low-income households, micro and small enterprises, and underserved groups such as women and youth face.

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# Table of contents

<b>1. Project background</b>	<b>1</b>
<b>2. Project objectives</b>	<b>2</b>
<b>3. Macroeconomic and fiscal assessment of Embu County</b>	<b>3</b>
3.1 Macroeconomic analysis	3
3.1.1 Population size and structure	4
3.1.2 Level of employment and economic diversification	4
3.1.3 Macroeconomic variables	5
3.1.4 Level of infrastructure	6
3.2 Fiscal assessment	7
3.2.1 Governance structure	7
3.2.2 Finances of Embu County Government	8
3.2.3 Revenue collection mechanism	10
3.2.4 Embu County debt profile	10
3.2.5 Compliance with the Public Finance Management Act	10
<b>4. Credit risk assessment of Embu County</b>	<b>11</b>
4.1 Rating rationale	11
4.2 Financial condition review	13
4.3 Rating outlook	15
4.4 Counties financing framework	15
<b>5. Green asset and activity assessment</b>	<b>19</b>
5.1 Preliminary green priority areas	23
5.2 Green assets identified	25
5.3 Suggested green projects	27
<b>6. Risk analysis on suggested green projects</b>	<b>31</b>
<b>7. Green finance capability assessment</b>	<b>34</b>
<b>8. Recommendations</b>	<b>37</b>
<b>9. Appendices</b>	<b>39</b>
9.1 Embu County profile summary	39
9.2 Three-year financial summary Embu County government	40
9.3 Rating definitions	42
9.4 List of stakeholders engaged during the workshops	43
9.5 List of key documents accessed	44

# List of figures

<b>Figure 1:</b> Map of Kenya – Embu County	3
<b>Figure 2:</b> Total Population in Embu	4
<b>Figure 3:</b> Embu Gross County Product (GCP) in Current Prices	5
<b>Figure 4:</b> Gross County Product Contribution by Economic Activity	5
<b>Figure 5:</b> Government Revenue vs. Spending of Embu County (2017/18 -2022/23)	9
<b>Figure 6:</b> Breakdown of Embu County Government Spending (2017/18-2022/23)	9
<b>Figure 7:</b> Strengths, Weaknesses, Opportunities and Challenges	12
<b>Figure 8:</b> Breakdown of Embu County’s Revenue - FY 2022/23	13
<b>Figure 9:</b> Own Source Revenue Ksh’millions (FY2020/21 - FY2023/24 Budget)	14
<b>Figure 10:</b> Recurrent & Development to Total Expenditure	14
<b>Figure 11:</b> Pre-requisites for Counties Financing	17
<b>Figure 12:</b> Critical Stakeholders to support County’s Financing Framework	18
<b>Figure 13:</b> Embu County Schedule of Activities	19
<b>Figure 14:</b> Briefing session with Embu County Governor (day 1)	20
<b>Figure 15:</b> Debrief session with Embu County Governor (day 1)	20
<b>Figure 16:</b> Workshop with county government officials (day 1)	20
<b>Figure 17:</b> Workshop with county government officials (day 1)	20
<b>Figure 18:</b> Workshop with Civil Society Organisations (CSOs) and private sector representatives (day 2)	20
<b>Figure 19:</b> Workshop with Civil Society Organisations (CSOs) and private sector representatives (day 2)	20
<b>Figure 20:</b> Embu Level 5 Hospital - Meeting with the CEO (day 3)	20
<b>Figure 21:</b> Cross section of participants at workshop for CSOs, CBOs and private sector (day 2)	20
<b>Figure 22:</b> Embu Level 5 Hospital - asbestos waste from replaced roofing (day 3)	21
<b>Figure 23:</b> Embu Level 5 Hospital - incinerator for burning medical waste (day 3)	21
<b>Figure 24:</b> Embu Level 5 Hospital - truck preparing to carry shredded medical waste (day 3)	21
<b>Figure 25:</b> Embu Level 5 Hospital - private wing not operational (day 3)	21
<b>Figure 26:</b> Nthenge Njeru Waterfall - Proposed location of a hydropower plant (day 3)	21

<b>Figure 27:</b> Thambana Dam’s proposed intake location (day 3)	21
<b>Figure 28:</b> Thambana River - Thambana dam’s proposed intake location (day 3)	21
<b>Figure 29:</b> Thambana Dam proposed intake location - sandbags used to raise water levels (day 3)	21
<b>Figure 30:</b> Thambana Dam proposed intake location - existing infrastructure (day 3)	22
<b>Figure 31:</b> Runyenjes Milk Cooling Plant- milk being received from a dairy farmer (day 3)	22
<b>Figure 32:</b> Runyenjes Milk Cooling Plant - milk cooling tanks (day 3)	22
<b>Figure 33:</b> Runyenjes Milk Cooling Plant - laboratory (day 3)	22
<b>Figure 34:</b> Runyenjes Milk Cooling Plant – with plant manager (day 3)	22
<b>Figure 35:</b> Kamwimbi Dumpsite - Location of the material recovery and waste to energy facility (day 3)	22
<b>Figure 36:</b> Kamwimbi Dumpsite - with staff from the environment department (day 3)	22
<b>Figure 37:</b> Debrief session with the Embu County Governor (day 4)	22
<b>Figure 38:</b> Embu County Key Priority Areas	23
<b>Figure 39:</b> Map of the Distribution of Green Assets and Agro-ecological zones in Embu County	25
<b>Figure 40:</b> Mount Kenya Peaks	26
<b>Figure 41:</b> Embu County Suggested Green Projects	27
<b>Figure 42:</b> Proposed Location of Thambana Dam - Thambana River	27
<b>Figure 43:</b> Embu Level 5 Hospital - Asbestos Roofing at the General Wing	28
<b>Figure 44:</b> Embu Level 5 Hospital – Private Hospital Wing	28
<b>Figure 45:</b> Kamwimbi Landfill – Perimeter Fencing	28
<b>Figure 46:</b> Nthenge Njeru Waterfall	29
<b>Figure 47:</b> Runyenjes Milk Cooling Plant - Cooling Tanks	29
<b>Figure 48:</b> Runyenjes Milk Cooling Plant - with the Plant Manager	29
<b>Figure 49:</b> Recommendations to the National Government	38

# List of tables

<b>Table 1:</b> Sub-County and Electoral Wards of Embu County	4
<b>Table 2:</b> Key County Executives in Embu County	8
<b>Table 3:</b> Embu County Elected Members of the County Assembly 2022	8
<b>Table 4:</b> Centrally distributed funds by National Treasury - FY2020/21 - FY2023/24 budget (Ksh'millions)	13
<b>Table 5:</b> Green Assets Located in Embu County	26
<b>Table 6:</b> Embu County Capability Assessment	35
<b>Table 7:</b> Recommendations to the Embu County Government	37

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# 1 Project background

The Financial Sector Deepening Kenya (FSD Kenya) is an independent trust dedicated to the achievement of a financial system that delivers value for a green and inclusive digital economy, while improving the financial health and capabilities of women and micro and small enterprises. FSD Kenya has a green finance programme dedicated to supporting the development of a green finance ecosystem and a greener real economy that is resilient to climatic and other environmental shocks, resource efficient and generates green investment, employment, and income generation opportunities for low-income Kenyans.

This **county green finance assessment** is related to FSD Kenya's mission to support the development of an inclusive green finance ecosystem in Kenya. The 2010 Kenyan Constitution devolved important natural resource and environment-related sectors such as agriculture, water provision and transport to the counties. Thus, counties have a pertinent role to play in Kenya's sustainable development agenda which can only be realised if counties have the requisite capacities and capabilities including financial resources. Yet, counties face a funding gap, with most, if not all, of them fully reliant on transfers from the National Treasury as their own-source revenue remains very low.

Green finance is defined as structured financial activity created to ensure a better environmental outcome. Green finance includes climate finance but is not limited to it as it encompasses a wider range of other environmental objectives, such as industrial pollution control, water sanitation, biodiversity protection and environmental benefits.

Green finance instruments such as green county bonds, present an opportunity for counties to generate resources for the much-needed development of county infrastructure such as water piping, county roads and the development of agriculture, in a green and climate-resilient manner. While not yet tested locally, their widespread application in other markets as well as the recent approval by the National Treasury for the Laikipia County Infrastructure Bond illustrate their potential.

## Project Partners

This project was initiated by FSD Kenya with the approval

and partnership of The National Treasury, Climate Finance and Green Economy Unit. The Unit provides technical support to The National Treasury on all matters relating to green and climate financing, and green growth.

The Capital Markets Authority was the regulatory partner on this project, providing insight and leadership on green finance instruments, processes, and structures in the capital markets applicable to county governments, including related policy and legislation requirements. The Capital Markets Authority is an independent public agency, under the National Treasury and Planning and has a twin mandate of regulating and facilitating the development of capital markets in Kenya.

The County Government of Embu provided valuable insight on the dynamics and opportunities in their county on green finance. The vision of the County Government of Embu is a prosperous, wealthy, and secure county, with a mission to improve livelihoods through the provision of suitable infrastructure, investment opportunities, legislation, and security, while maintaining sustainable environmental management practices.

FSD Kenya commissioned Agosto & Co. Limited as the lead consultant for this project. Agosto & Co. is registered as a credit rating agency by the Kenyan and Rwandan Capital Markets Authorities and the Securities Exchange Commission in Nigeria. Agosto & Co. is also Certified as an Approved Verifier by the Climate Bond Standards Board as the first company of African origin to have the capabilities to perform verification of green bonds, projects, and assets in Africa.

The Adaptation (ADA) Consortium engaged county government and stakeholders to provide on-site coordination, site visit and meeting arrangements for the project. ADA consortium is a non-profit that supports county governments to mainstream climate change into development and planning.

The Nairobi Securities Exchange (NSE) was the private sector partner in the project. The NSE operates under the jurisdiction of the Capital Markets Authority of Kenya and is a full member of the World Federation of Exchange, a founder member of the African Securities Exchanges Association (ASEA) and the East African Securities Exchanges Association (EASEA), and member of the Association of Futures Market and is a partner exchange in the United Nations-led SSE initiative.



2

## Project objectives

This project assessed the potential for counties to access and apply to the green finance market for the development of green activities and consisted of the following assessments:

- **Economic and fiscal assessment:** County fiscal performance (historical and projected), strengths, challenges, and ability to take on (additional) debt including the consideration of potential revenue generation sources.
- **Credit risk assessment:** Estimate the county government's relative likelihood of defaulting on its obligations from capital raising initiatives- includes a shadow credit rating.
- **Green asset and activity assessment:** Availability of green investment opportunities in the selected counties.
- **Green finance capability assessment:** County government skills and ability to manage green financial instruments and related projects.

The green finance market is defined as the pool of funding constituting a range of green financial instruments that meet the objectives of green finance such as government grants; development grants; guarantee funds; subsidies; concessionary loans; commercial loans; results-based finance; blended finance; green bonds etc.

3

# Macroeconomic and fiscal assessment of Embu County

## 3.1 Macroeconomic analysis

Embu County (“the County” or “Embu”) is one of the counties located in the Eastern Region of Kenya which was created as a result of the 2010 Kenya Constitution which devolved powers to sub-national governments. The capital city of Embu Town was the provincial

headquarters of the former eastern province. The county is bordered by Kirinyaga County to the West, Kitui County to the East, Machakos County to the South, Murang’a County to the South West, Tharaka Nithi County to the North and Meru to the North West. The land area of the County is 2,821 square kilometres and has a population of over 608,599 people<sup>1</sup>.



Figure 1: Map of Kenya – Embu County

Source: e-limu.org

<sup>1</sup> 2019 Kenya Population and Housing Census

Embu County is composed of highlands and lowlands, as well as slopes from the north-west to the east and south-east, with a few isolated hills like Kiambere and Kiang’ombe. The County rises from approximately 515 metres above sea level in the River Tana Basin in the east to 5,199 metres at the summit of Mt. Kenya in the north west. Mwea plains cover the southern part of the County and rise northwards, culminating in hills and valleys in the northern and eastern parts of the County.

The County has a typical agro-ecological profile on Mt. Kenya’s windward side, with cold and wet upper zones and hot and dry lower zones in the Tana River Basin. Embu County’s rainfall pattern is bimodal, with two distinct rain seasons. Long rain falls from March to June, while short rain from October to December. Rainfall quantity varies with altitude, averaging about 1,067.5 mm per year and ranging from 640 mm in some areas to 1,495 mm in others. Temperatures range from 12oC in July to 30oC in March, with a mean average temperature of 21oC. Some parts of the County, particularly the southern region, have a localised climate with higher humidity and moderate climate conditions due to their proximity to the Kiambere, Masinga, Kamburu, and Kindaruma dams.

The County is divided into four sub-counties, which are further subdivided into 20 electoral wards, as shown in table 1 below.

Table 1: Sub-County and Electoral Wards of Embu County

S/N	Constituencies	Wards
1	Manyatta	Ruguru/Ngandori, Kithimu, Nginda, Mbeti North, Kirimari, Gatari South
2	Runyenjes	Gatari North, Kagaari South, Kagaari North, Central Ward, Kyeni Nort, Kyeni South
3	Mbeere South	Mwea, Amakim, Mbeti South, Mavuria, Kiambere
4	Mbeere North	Nthawa, Muminji, Evurore

Source: Embu County Website

### 3.1.1 Population size and structure

According to the last census conducted in 2019, 608,599 people were living in Embu County representing a 36% growth from the 2009 census results. The County’s gender diversity was 50% male and 50% female. According to the 2019 Census, Embu County had 182,743 households with an average household size of 3.3 people. Based on the County Integrated Development Plan (CIPD) 2023 – 2027, the population of Embu County is estimated at 661,667 persons and 673,843 persons by 2025 and 2027<sup>2</sup> respectively.

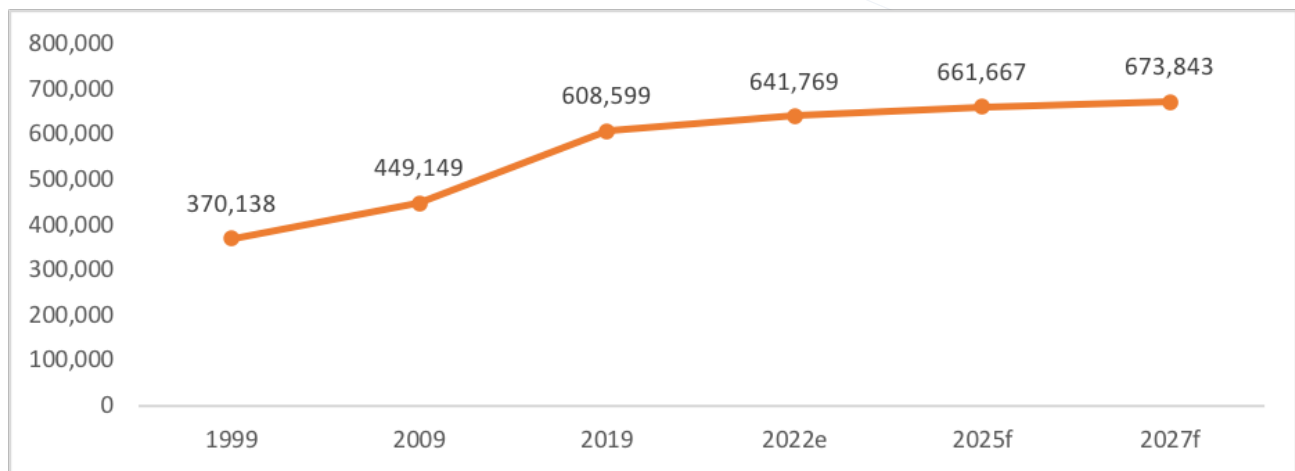


Figure 2: Total population in Embu

Source: Kenya National Bureau of Statistics

About 87.5% of the County’s population lives in rural areas, with the remainder living in urban areas such as Embu Town, Runyenjes, Manyatta, Kiritiri and Siakago. With the adoption of devolution, county-level urbanization has increased. This has resulted in the growth and spread of small urban and market centres throughout the County. In addition to Embu town, other major urban centres such as Siakago, Kiritiri, Runyenjes, Manyatta, Kianjokoma and Ishiara are rapidly expanding. The growing population is expected to put a strain on existing social services and necessitate collaborative efforts from all key players to improve physical infrastructure as well as expand existing social amenities to accommodate the growing population.

### 3.1.2 Level of employment and economic diversification

Crop farming and livestock keeping provide a means of livelihood for the majority of the people in Embu County, accounting for approximately 87.9% of the total households. Embu County’s main crops are divided into three categories: food crops, industrial crops and horticultural crops. The main food crops grown in the County are maize, green grams and cow peas, while horticultural crops include mangoes and bananas, and industrial crops include coffee, tea and macadamia nuts.

<sup>2</sup> Embu County Integrated Development Plan 2023-2027

The unemployment rate in the County is about 5%<sup>3</sup>, with unemployment being highest in Mbeere South and lowest in Mbeere North Sub-Counties. The majority of the labour force is employed in the picking of tea, coffee and miraa, the transport sector (Matatu and Bodaboda), sand harvesting, and stone quarrying, among others. Self-employment is very common in the County, with more than 55% of the population working for themselves. Small-scale retailing, wholesaling and the jua kali<sup>4</sup> sector contribute significantly to self-employment in urban areas and market centres, whereas cash crop farming,

including tea, coffee, miraa and dairy farming, dominates in rural areas.

### 3.1.3 Macroeconomic variables

Based on the Gross County Product (GCP) 2023 report by the Kenya National Bureau of Statistics (KNBS), Embu County contributed 1.5% of Kenya's national Gross Domestic Product (GDP). The County economy expanded in 2022 with Kshs 187.93 billion as GCP, up from Kshs 166.29 billion in 2021.

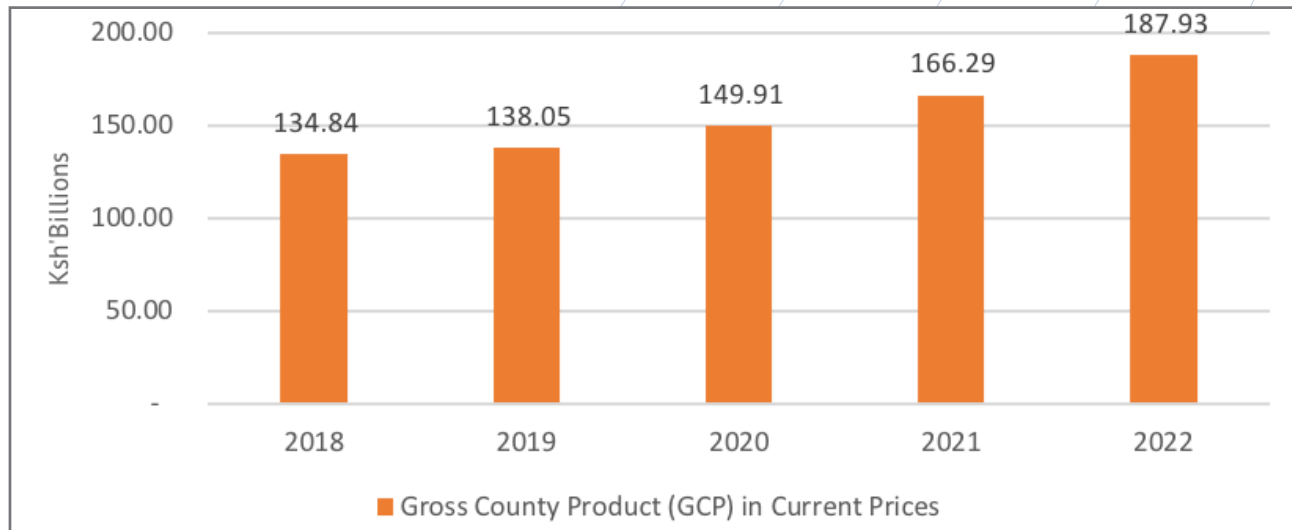


Figure 3: Embu Gross County Product (GCP) in current prices

Source: Gross County Product 2023 Report, KNBS

The key sectors of Embu County's economy that contributed at least 5% of the GCP are agriculture, forestry and fishing (27.1%), transport and storage (21%), electricity supply (10.2%), construction (9.1%), wholesale and retail trade (6.2%), public administration and defence (5.6%) while the remaining 13 sectors contributed 20.8%

to the GCP. In the near term, the County's overall GCP is expected to increase on account of the improved performance of the agricultural sector as a result of various initiatives implemented at the county and national levels, such as providing farmers with subsidized agricultural inputs.

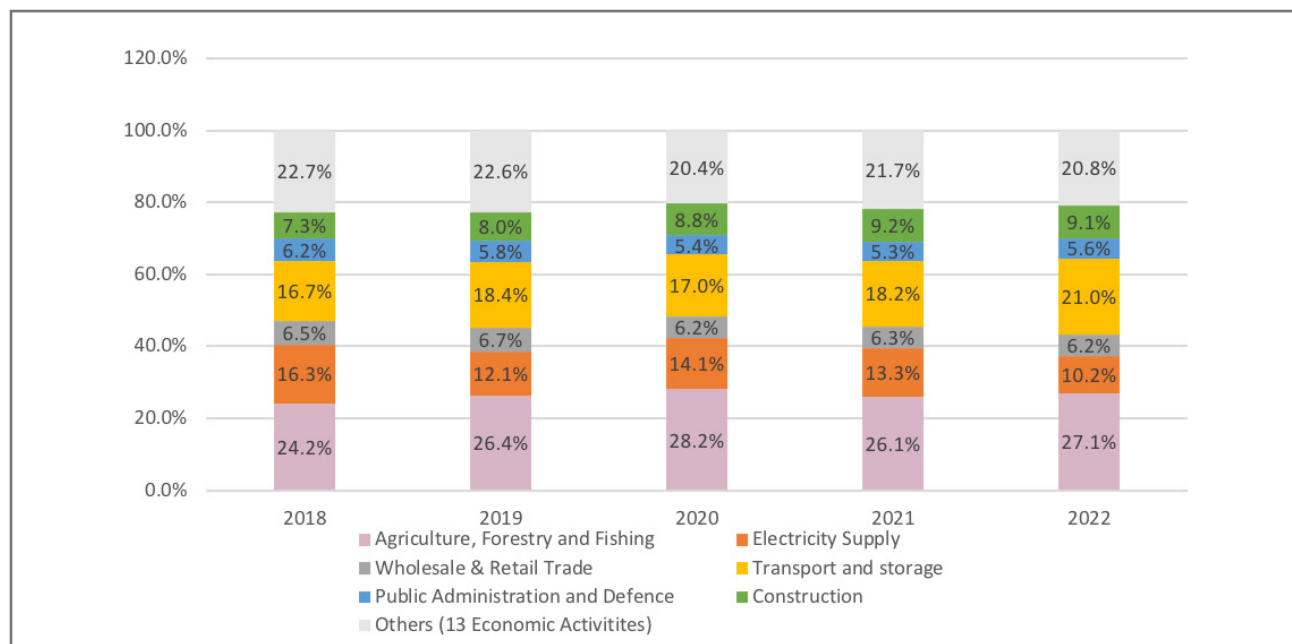


Figure 4: Gross County Product contribution by economic activity

Source: Gross County Product 2023 Report, KNBS

<sup>3</sup> Embu County Integrated Development Plan 2018-2022

<sup>4</sup> Jua Kali is a collection of traders and artisans with a wide range of skills, including carpentry, metal work and welding, shoe repair, tailoring, automobile repair and plumbing among others

## Key Sectoral Analysis

### Agriculture, livestock and fisheries

Agriculture is the mainstay of Embu contributing 27.1% to the County's GCP and employing approximately 70.1% of the population<sup>5</sup>. The County grows industrial, food and horticultural crops. Coffee, tea, macadamia nuts and miraa are the leading industrial/cash crops, while maize, green grams, and cowpeas are the key food crops, and mangoes and bananas are high-value horticultural crops in the County.

Irrigation is practised only in some parts of the County due to water supply challenges. In Embu County, there are two types of irrigated farming: small-scale irrigation and large-scale irrigation. Based on the 2018-2022 CIDP, the County irrigated an average of 800 acres and has the potential to irrigate an additional 60,000 hectares if all water sources, including ground water, rivers, springs, shallow wells, boreholes and runoff harvesting are utilized. To realize Embu County's full irrigation potential, Mbeere North and Mbeere South sub-counties, which are part of the County's dry areas, should be considered as priority irrigation sites due to their ample arable land.

### Transport and storage

The transport and storage sector contributed 21% to the County's GCP making it the second largest contributor. The County's Road network includes 914.3 km of earthen surface, 154 km of tarmac (including the Meru-Embu highway and the Embu-Kiritiri Road), and 948 km of gravel surface<sup>6</sup>. The County also has two airstrips, one at Don Bosco in Embu town which is primarily used for security purposes, and the other in Kiambere which is mainly used by Kenya Electricity Generating Company PLC (KenGen). Infrastructure development is one of the top strategic priorities and the County Government intends to invest in infrastructure development in the short term to improve road efficiency and lower production costs, thereby improving connectivity, trade, and security.

### Electricity supply

Embu County is a major player in national electricity generation, with the sector contributing 10.2% to the County's GCP. This is due to the presence of five out of the regional famous seven-forks<sup>7</sup> project, which has an installed capacity of 543.2 megawatts and contributes 80.2% of the national installed hydro-electric power (HEP) capacity. Masinga (40MW), Kamburu (94.2MW), Gitaru (225MW), Kindaruma (44MW) and Kiambere (144MW) are among the Seven Forks Hydro Stations located in Embu County.

In the short term, the County intends to focus on renewable energy and increase energy efficiency across government offices, healthcare centres and schools, amongst others. The sector's top priorities include the installation of new streetlights and floodlights, as well as the improvement of existing ones to make them more

energy efficient.

### Construction

Based on the Gross County Product Report 2023, the construction sector contributed 9.1% to the County's GCP. The sector's contribution has grown over time with the ultimate goal of ensuring high quality construction works and proper maintenance of government buildings and other public works for long-term socio-economic development. To assist in the construction of more housing units, the County plans to engage real estate development investors through a public-private partnership (PPP) arrangement, where regulations to guide counties on PPPs are provided for by the Public Private Partnerships Act, 2021. The use of appropriate building technologies will also be emphasized in the County's efforts to ensure residents' access to affordable housing that aligns with relevant green building codes.

### Wholesale and retail trade

The wholesale and retail trade sector in Embu accounted for 6.2% of the County's GCP according to the Gross County Product Report 2023. Fresh produce markets have been improved to provide farmers with a market for their produce as well as spur economic growth and development. The ongoing construction and improvement of markets throughout the County will help improve trade in the region.

### Public administration and defence

The sector, which is divided into three sub-sectors: public service and administration, human resources, and information, communication, and technology (ICT), contributed 5.6% of the County's GCP. The County intends to establish decentralized public administration mechanisms that are accountable and responsive to people's needs to improve service delivery efficiency. In addition, ICT systems will be established to support accountability, data storage, transparency, and information gathering for better decision making.

#### 3.1.4 Level of infrastructure

Embu County has 154 kilometres of tarmac road, 914.3 kilometres of earthen surface and 948 kilometres of gravel surface<sup>8</sup>. The County also has two airstrips, one in Embu town and one in Kiambere, which are primarily used for security purposes and KenGen respectively. There are two major post offices in Embu town and one in Runyenjes town, as well as three sub-post offices in major trading centres across the County. Embu is served by three mobile network operators: Safaricom, Airtel and Telkom and also covered by a fixed national digital network with local connectivity, as well as a fiber optic cable running through Embu and Runyenjes to Meru and also through Kiritiri to Masinga. The County is at the end of its efforts to connect all sub-county offices with fiber optic connectivity and to establish digital communities and hot spots.

<sup>3</sup> Embu County Integrated Development Plan 2018-2022

<sup>4</sup> Jua Kali is a collection of traders and artisans with a wide range of skills, including carpentry, metal work and welding, shoe repair, tailoring, automobile repair and plumbing among others

<sup>5</sup> Embu County Integrated Development Plan 2018-2022

<sup>6</sup> Embu County Integrated Development Plan 2018-2022

<sup>7</sup> A series of dams located in the upper Tana River basin

<sup>8</sup> Embu County Integrated Development Plan 2018-2022

The County has seven commercial bank branches and several microfinance institutions (MFIs). Most banks have ATM networks and agents spread throughout the County. Kenya Women Microfinance Bank, Business Initiatives and Management Assistance Services (BIMAS) and SACCOs like Nawiri, Daima and Winas are among the major microfinance institutions in the County with most having branches in market centres.

The county is characterised by a primarily rural settlement pattern as most residents are concentrated along major permanent water sources such as rivers and dams, where irrigation, farming and fishing are practised. Mbeere North and Mbeere South receive less rainfall and have a more dispersed settlement pattern compared to the sub-counties of Manyatta and Runyenjes. The County has three major urban centres: Embu, Siakago and Runyenjes. The developing towns of Ishiara, Karaba, Kiritiri, Gachoka and Kianjokoma have better infrastructure than the rural areas and as such have a higher potential for business enterprises.

## 3.2 Fiscal assessment

### 3.2.1 Governance structure

Embu County Government comprises two arms, namely the County Assembly and the County Executive. The County Governor, the Deputy Governor, the members of the County Executive Committee and the County Public Service Board make up the executive arm of the County Government. The County Public Service Board is primarily responsible for the management of the County's human resources. County Executive Committee (CECM) members are appointed by the Governor with the approval of the County Assembly. Under Section 5 of the County Government Act 2012, the devolved functions of the county government are county legislation in accordance with article 185 of the 2010 Kenya Constitution which confers the county's legislative authority to the County Assembly. Another devolved task is exercising executive functions per Article 183 of the Constitution which provides for the following roles:

- a) Implementation of county legislation;
- b) implementation of national legislation within the county if the legislation so requires;
- c) management and coordination of the functions of the county administration and its departments;
- d) performance of any other functions conferred by the Constitution or national legislation.

A county executive committee can also prepare proposed legislation for consideration by the county assembly. The committee provides the assembly with full and regular reports on matters relating to the county. Under the Fourth Schedule of the 2010 Constitution of Kenya, the devolved sectors and activities performed by county governments are:

1. Agriculture, including crop and animal husbandry, livestock sale yards, county abattoirs (slaughterhouses), plant and animal disease control and fisheries.
2. County health services, including, in particular – county health facilities and pharmacies, ambulance services, promotion of primary health care, licensing and control of undertakings that sell food to the public, veterinary services (excluding regulation of the profession which is a national government function), cemeteries, funeral parlours and crematoria, and refuse removal, refuse dumps and solid waste disposal.
3. Control of air pollution, noise pollution, other public nuisances and outdoor advertising.
4. Cultural activities, public entertainment and public amenities, including – betting, casinos and other forms of gambling, racing, liquor licensing, cinemas, video shows and hiring, libraries, museums, sports and cultural activities and facilities, and county parks, beaches and recreation facilities.
5. County transport, including – County roads (Class D, E and Unclassified Roads), street lighting, traffic and parking, public road transport, and ferries and harbours (excluding the regulation of international and national shipping and matters related thereto).
6. Animal control and welfare, including – licensing of dogs, and facilities for the accommodation, care and burial of animals.
7. Trade development and regulation, including – markets, trade licences (excluding regulation of professions), fair trading practices, local tourism and cooperative societies.
8. County planning and development, including – statistics, land survey and mapping, boundaries and fencing, housing, and electricity and gas reticulation and energy regulation.
9. Education – only pre-primary education (ECD), village polytechnics, home craft centres and childcare facilities.
10. Implementation of specific national government policies on natural resources and environmental conservation, including soil and water conservation and forestry.
11. County public works and services, including – stormwater management systems in built-up areas, and water and sanitation services.
12. Firefighting services and disaster management.
13. Control of drugs and pornography.
14. Ensuring and coordinating the participation of communities and locations in governance at the local level and assisting communities and locations to develop the administrative capacity for the effective exercise of the functions and powers and participation in governance at the local level.

The key personnel in Embu County's executive arm are listed in Table 2 below:

**Table 2: Key county executives in Embu County**

	Name	Designation
1	H.E. Hon. Cecily Mbarire	Governor
2	H.E. Kinyua Mugo	Deputy Governor
3	Amb Jamal Runyenje	CECM Trade, Tourism and Industry Development
4	Mr. Daniel Ngeranwa	CECM Education
5	Mr. Elijah Njeru Mugo	CECM Roads, Transport and Public Works
6	Ms. Florence Ndinda Musyoka	CECM Water, Irrigation, Environment, Climate Change and Natural Resources
7	Mr. Francis Ndwiga	CECM Health
8	Mr. Emilio Kathuri	CECM Public Service Administration and ICT
9	Ms. Jane Waroga	CECM Youth, Gender, Sports, Culture and Social Services
10	Prof. Joe Kamaria	CECM Finance and Economic Planning
11	Mr. John Ndwiga Nyaga	CECM Agriculture, Livestock and Cooperative Development
12	Mr. Raymond Njagi Kinyua	CECM Lands, Housing and Urban Planning

Source: Embu County Website

The county assembly is in charge of enacting county laws, overseeing the County Executive and representing the people. It is made up of Members of County Assembly (MCAs) elected from the various Assembly Wards, nominated MCAs representing special interests such as persons with disabilities and youth as prescribed by an Act of Parliament, and the Speaker, who serves as an ex-officio member. The county assembly is led by the speaker, who also serves as Chairman of the County Assembly Service Board. The Embu County Assembly is made up of one Speaker, 20 elected MCAs and 13 nominated MCAs bringing the total to 34 members.

Table 3 below outlines the names of the elected County Assembly members and the wards they represent:

**Table 3: Embu County Elected Members of the County Assembly 2022**

	Elected Member of County Assembly (MCA)	Ward
1	Hon. Josiah Murithi Thiriku	Speaker (Ex-Officio Member)
2	Hon. Michael Njeru Kariuki	Kithumu Ward
3	Hon. Masters Leonard Mwaniki	Kiambere Ward
4	Hon. Steve Munene Mugendi	Runyenjes Central Ward
5	Hon. John Harrison Mwaluko Kisigu	Mwea Ward
6	Hon. Newton Kariuki Ndwiga	Muminji Ward
7	Hon. Salesio Njeru Kimaru	Kyeni South Ward
8	Hon. Frederick Mugendi Gatumu	Gaturi South Ward
9	Hon. Morris Muchiri Nyaga	Kirimari Ward
10	Hon. Duncan Ileri Mbui	Evurore Ward
11	Hon. Peter Murithi Nyaga	Mbeti North Ward
12	Hon. Harrison Sammy Muturi	Ruguru Ngandori Ward
13	Hon. John Ngari Mbaka	Mavuria Ward
14	Hon. Nathan Kariuki Mwari	Nthawa Ward
15	Hon. Patrick Njeru Mukavi	Kyeni North Ward
16	Hon. Murithi Njagi Kiura	Mbeti South Ward
17	Hon. Robert Njiru Ileri	Kagaari South Ward
18	Hon. Patrick Rugendo Ileri	Kagaari North Ward
19	Hon. Paul Muchangi Njiru	Gaturi North Ward
20	Hon. John Gichovi Gatumu	Nginda Ward
21	Hon. Philip Kinyutu Nzangi	Makima Ward

Source: Embu County Assembly Website

### 3.2.2 Finances of Embu County Government

Based on the Office of the Controller of Budget Report FY 2022/23, Embu County reported total revenue of Kshs 6.86 billion at the end of the fiscal year ending 30 June 2023, representing a 21.1% increase from Kshs 5.67 billion in the previous year<sup>9</sup>. The increase was largely driven by a growth in own source revenue (OSR) in the review period which amounted to Kshs 678 million (2021/22: Kshs 394 million). In 2022/23, the County received Kshs 5.54 billion (80.7%) as an equitable share of national revenue, Kshs 344 million (5%) as Appropriations in Aid (AIA), generated Kshs 678 million (9.9%) as own-source revenue and had a cash balance of Kshs 305 million (4.4%).

<sup>9</sup> County Governments Budget Implementation Review Report for the FY 2022/23

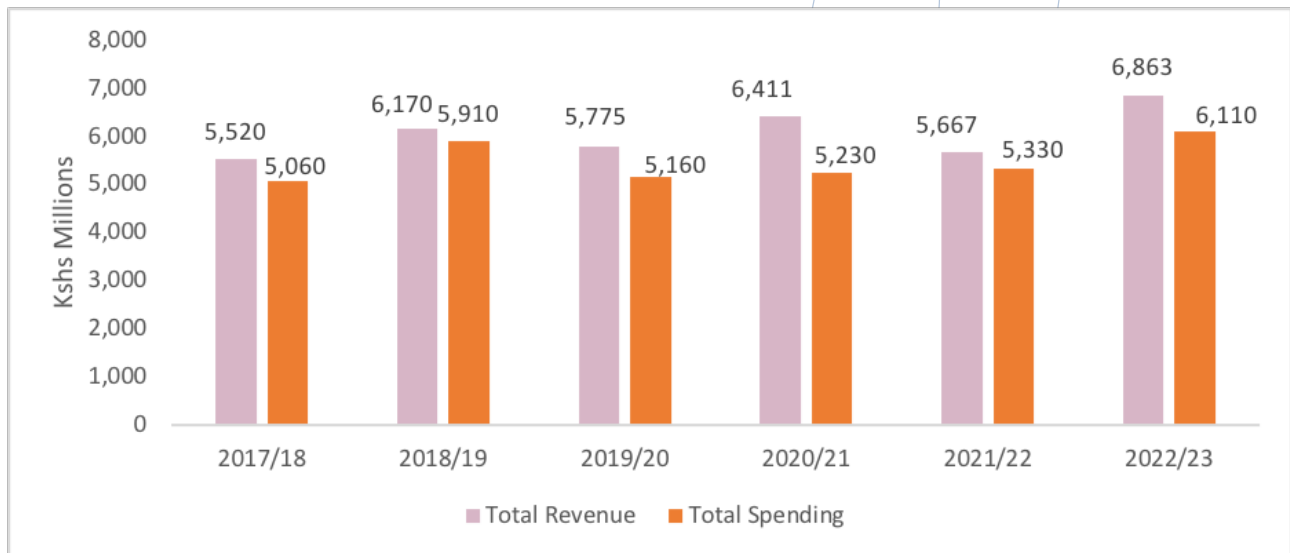


Figure 5: Government revenue vs. spending of Embu County (2017/18 -2022/23)

Source: Office of the Controller of Budget

In FY2022/23, the Embu County Government had spent a total of Kshs 6.11 billion, with development programs

accounting for 20% (Kshs 1.22 billion), and recurring programs accounting for 80% (4.89 billion).

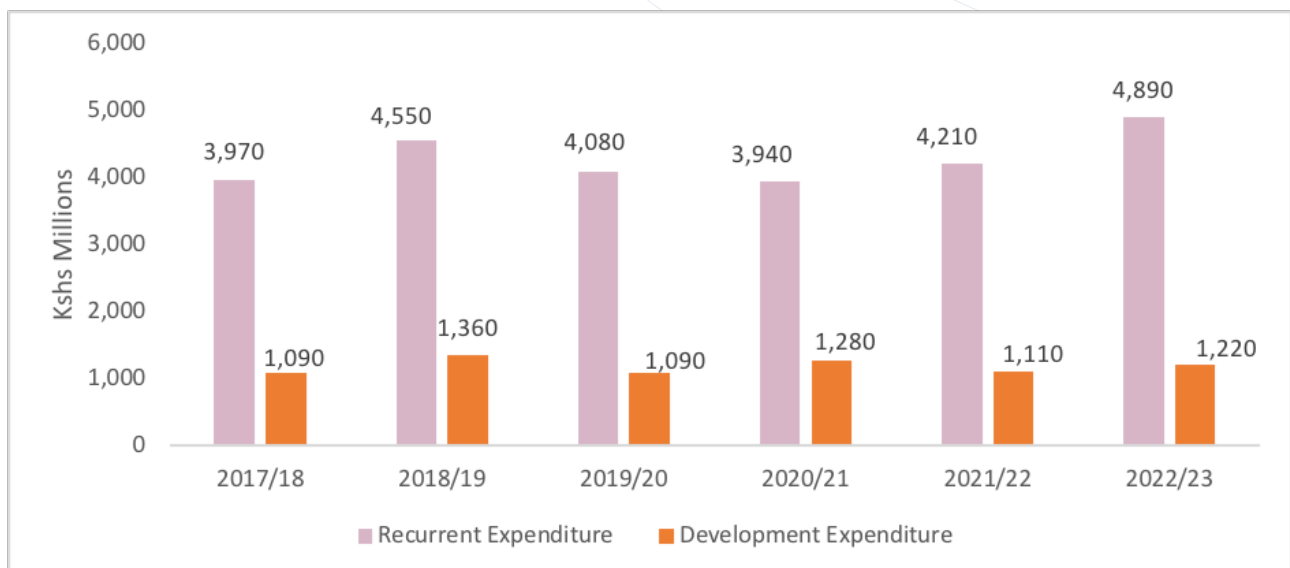


Figure 6: Breakdown of Embu County Government spending (2017/18-2022/23)

Source: Office of the Controller of Budget

Typically, the Embu County Government spends more on recurring expenses such as employee salaries, operating costs, and other maintenance costs. Under Regulation 25 (1) (b) of the Public Finance Management (County Governments) Regulations, 2015, the County Government’s wage and benefit expenditure is expected to be within 35% of the total revenue limit. However, in the fiscal year 2022/23, Embu County spent 50.3% of its annual realised revenue on employee compensation, exceeding the set limit which has been the trend over the last five years. The Integrated Personnel and Payroll Database (IPPD) system processed Kshs 3.27 billion in personnel emoluments, while manual payrolls totalled

Kshs 122.23 million<sup>10</sup>. The manual payroll accounted for 3.6% of total personnel costs, with the County faulting a lack of Unified Personal Numbers for not processing all salaries in the IPPD system. Nonetheless, with all counties expected to migrate to the new unified human resource (UHR) platform, as per the guidelines provided by the Head of Public Service, manual payments are expected to end because the new system provides reliable information on public service numbers, wages, and allowances. As part of reforms to increase transparency, the National Treasury has committed to keeping all national and county government employees on the unified system.

<sup>10</sup> County Governments Budget Implementation Review Report for the Financial Year 2022/23



### 3.2.3 Revenue collection mechanism

In FY 2022/23, the county generated a total of Ksh 678.64 million as own-source revenue. This amount represented an increase of 72.1% compared to Ksh 394 million realised in FY 2021/22. The County intends to implement an automatic revenue collection system that will close all revenue pilferage loopholes. The revenue collection system, which will be developed in collaboration with the Ministry of ICT and Safaricom, will allow for real-time monitoring of collected revenue and is expected to increase the County's OSR to Kshs 1 billion in the medium term. The key revenue streams for the County include single business permits, Cess<sup>11</sup>, land rates, plans and inspections (building permits), advert fees and parking fees.

### 3.2.4 Embu County debt profile

The county has not taken on debt before, so there were no commercial debt balances on its financial statement for the fiscal year ending 30 June 2023. Nonetheless, the County had pending bills totalling Ksh 2.24 billion at the beginning of FY 2022/23, which comprised of Ksh 1.16 billion for recurrent expenditure and Ksh 1.08 billion for development activities. By the end of FY 2022/23, pending bills amounting to Ksh 895.46 million were settled and consisted of Ksh 620.76 million for recurrent expenditure and Ksh 274.71 million for development programmes. Therefore, the outstanding pending bills as of 30 June 2023 was Ksh 1.37 billion<sup>12</sup>.

### 3.2.5 Compliance with the Public Finance Management Act

Part 4 of the Public Finance Management (PFM) Act of 2012 outlines the County Government's duties regarding the management and supervision of public finances. It establishes the guidelines for good financial management that County Treasuries must adhere to. As outlined in Chapter 12 of the Constitution, the pillar is responsible for upholding the essential values of prudent financial management, accountability and responsibility.

While overseeing and reporting on the implementation of Embu County FY 2022/23 budget, the Office of the Controller of Budget (OCOB) identified the following challenges to effective budget implementation:

1. A high wage bill, accounting for 50.3% of annual realised revenue in FY 2022/23. The COB advised the County Public Service Board to establish an optimal staffing structure to ensure compliance with Regulation 25 (1) (b) of the Public Finance Management (County Governments) Regulations, 2015.
2. There was an unexplained variance between the IFMIS-generated expenditure reports and the reports prepared by the County Treasury,

3. which points to the failure to regularly reconcile expenditure payments in the system. The COB advised the County Treasury to regularly reconcile the expenditure Cashbook with the IFMIS-generated expenditure to enhance the credibility of its financial reports.
3. Low expenditure on development at Ksh 1.22 billion, accounting for 20% of total expenditure in the FY 2022/23. The COB recommended that the County Government should address the low utilisation of funds allocated towards development expenditure to improve the living standards of its residents.
4. A high level of pending bills which stood at Kshs 1.37 billion at the end of fiscal year 2022/23, despite the availability of Kshs 363.49 million in the CRF at the end of the financial year. The COB recommends that County leadership takes charge of the deteriorating pending bills situation to ensure that genuine bills are paid promptly in the remaining financial year.
5. The late submission of financial reports to the Controller of Budget by the County Treasury hampered the timely preparation of the budget implementation report. To address this issue, the COB recommended that the County treasury should ensure that financial reports are prepared and submitted to the Office of the Controller of Budget timely, as required by Section 166 of the PFM Act, 2012.
6. Own-source revenue was Ksh 678.64 million, falling short of the annual target of Ksh 950 million and accounting for 71.4% of the target. To fully fund the approved budget, the COB recommended that the County improves its revenue performance.
7. Failure by Fund Administrators to submit quarterly financial and non-financial reports to the COB is against the requirement of Section 168 of the PFM Act, 2012. Furthermore, the reports for all the established County Funds were not submitted to the Controller of Budget. The COB advised that the CECMF should follow up to ensure Fund Administrators prepare and submit statutory reports in line with the PFM Act, 2012.
8. Personnel emoluments totalling Ksh 122.23 million were processed manually, accounting for 3.6% of total payroll costs. Manual payroll is prone to abuse and may result in the loss of public funds in the absence of proper controls. Therefore, the COB recommends that Embu County fast-tracks the acquisition of Unified Personnel Numbers for all employees. Furthermore, the County Public Service Board should regulate staff engagement on contract and casual workers as provided under Section 74 of the County Governments Act 2012.

<sup>11</sup> Cess fees is a form of tax charged by county governments on goods when they move across county borders

<sup>12</sup> County Governments Budget Implementation Review Report for the Financial Year 2022/23

## 4

# Credit risk assessment of Embu County

## 4.1 Rating rationale

- Augusto & Co. hereby assigns a “Bb- ken” shadow credit rating to the County Government of Embu (“Embu County”, “Embu” or “the County”). The assigned rating reflects the County’s stable political environment, improving governance framework and modest financial flexibility owing to minimal leverage. However, the rating is constrained by the County’s low own source revenue (also known as internally generated revenue) accounting for 10% of total revenue in FYE 2022/2023 which requires improvement, high personnel expenses at 50.3% of revenue, above the 35% limit set by Regulation 25 (1b) of the Public Finance Management (PFM) Act of 2012, over-reliance on equitable share of income distributed by the Exchequer as well as the qualified audit opinions over the last five years by the Auditor General of Kenya.
- Embu is one of the counties located in the Eastern Region of Kenya which was created as a result of the 2010 Kenya Constitution which devolved powers to sub-national governments. The County is a major player in national electricity generation as it plays host to five out of the seven-folk regional project, which contributes about 80.2% of the national installed hydro-electric power (HEP) capacity. Based on the 2023 Gross County Product (GCP) report by the Kenya National Bureau of Statistics (KNBS), Embu County’s GCP was estimated at Ksh187.9 billion, representing about 1.5% of the Country’s Gross Domestic Product (GDP). Agriculture is the mainstay of Embu employing about 70% of the population. The County’s favourable climatic conditions as well as increasing commercial activities in the capital city of Embu Town (formerly the Eastern Province Headquarters) portend huge opportunities for growth in the near to medium term.
- In the financial year ended 30 June 2023 (FY 2022/23), Embu County reported a total revenue of Ksh6.86 billion which was 18% higher than the prior year due to increased equitable receipts from the Exchequer as well as a rise in own source revenue. Augusto & Co. notes

positively that the ongoing implementation of the automated collection system known as Embu Pay boosted the County’s own-source revenue (OSR) which grew markedly by 72% year-on-year to Ksh678.6 million representing 10% of total revenue. We recognize the positive strategic leadership by the County Governor as well as the ongoing initiatives in terms of automating collections. However, we believe that automating all the OSR income lines would help drive higher receipts from business permits, licenses, building approval fees, land rates, hotel fees and parking fees amongst others as well as minimize leakages as OSR is considered to be the most stable source of financing for a county. Embu, like most counties, will continue to be reliant on the equitable share disbursements from the National Government through the Exchequer which accounted for over 86% of total revenue in FY2022/23 as we do not anticipate a material change in the revenue model in the near to medium term.

- In the financial year ended 30 June 2023, Embu County reported a total expenditure of Ksh6.1 billion (FY 2021/22: Ksh5.52 billion), comprising recurrent (81%) and development expenditure (19%). Similar to most counties, Embu County’s personnel cost (including payroll costs of the County Assembly) is the largest recurrent cost component and accounted for 50.3% of total revenue in FY 2022/23, which is higher than the 35% limit set by Regulation 25 (1b) of the Public Finance Management Act (County Regulations), 2015. Notwithstanding, this compares better than Laikipia County (56%) but higher than Kirinyaga County (43%), Makueni County (42.1%) and Nairobi City County (38%). Furthermore, the County’s overhead cost which has been negatively impacted by inflationary pressures averaged 11% of revenue over the last three years (FY 2020/21 – 2022/23) and we consider this to be satisfactory. Going forward, we expect the County’s personnel expenses-to-revenue ratio to remain above the 35% threshold, while the overhead cost-to-revenue ratio is projected to moderately increase on the back of inflationary pressures.

- In the fiscal year ended 30 June 2023 (FY 2022/23), Embu County spent Kshs1.18 billion on capital development activities which represented 19% of total expenditure - lower than the 30% minimum requirement as per Section 107 (2b) of the PFM Act. We note that the County plans to significantly increase capital spending in the short term in line with the projected development expenditure of circa Kshs2.5 billion (accounting for 33% of the budget) in FY2023/24. However, Embu's reliance on the Exchequer distributions which are susceptible to delays as well as the paucity of funds at the National Government level are some of the constraints in achieving this target expenditure. In our view, the County will need to explore alternative financing options to fund capital development projects across water, healthcare, public infrastructure, agro-processing, waste management and agricultural sectors which are expected to stimulate the growth of the economy in the short to medium term.
- As at the end of the 2022/23 financial year, Embu County did not have any third-party borrowings either directly or through contingent liabilities. Based on the Controller of Budgets FY2022/23 report, the County's accumulated outstanding payables (pending bills) arising from contracted goods and services stood at Ksh1.37 billion as at 30 June 2023. Going forward, Embu County intends to increase its own-source revenue on the back of ongoing revenue mobilization initiatives, enhance revenue management processes to improve resilience and diversify the economy beyond primary agriculture to harness the commercialization and industrialization opportunities. In our view, the County has huge potential to generate higher local incomes on the back of fully automating revenue collection streams from licenses, land rates, business permits and market fees buoyed by the increased commercial activities in the growing capital city of Embu Town.
- Therefore, we hereby attach a stable outlook to the County Government of Embu.

### Strengths

- Stable political environment
- Improving governance framework
- Modest financial flexibility on account of low leverage profile

### Weaknesses

- Significant dependence on centrally distributed revenue by the Exchequer which are not timely
- Qualified audit opinions over the last five years
- High personnel expenses significantly above regulatory threshold
- Large pending bills year-on-year
- Low own source revenue which requires improvement

### Opportunities

- Youthful population accounting for majority of the active labour workforce
- Favourable climatic condition suitable for agricultural activities
- Deepening of own source revenue using fully automated collection systems

### Challenges

- Susceptibility of centrally distributed revenue by Exchequer due to global and macroeconomic headwinds
- Adverse climate impacts
- Weakened agricultural productivity on account of low rainfall during the long rains season and a delay in the short rains

Figure 7: Strengths, Weaknesses, Opportunities and Challenges

## 4.2 Financial condition review

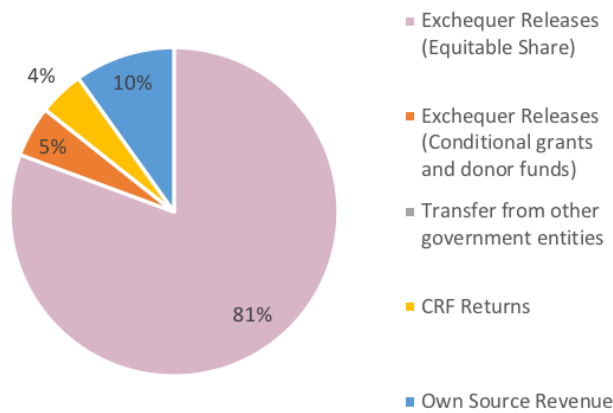
### Analysts' comments

- Embu County prepares its financial statements in line with the International Public Sector Accounting Standards (IPSAS) cash basis.
- We have analysed the financial statements of Embu County over the three years FY 2020/21 to 2022/23

### Revenue profile

Embu County, like other counties in Kenya, generates its own source revenue (also known as internally generated revenue) from fines, licenses, levies and user fees as stipulated in Article 209 of the 2010 Kenya Constitution. Also, the County receives income from the National Government as an equitable share of revenue collected and distributed nationally. Article 202 of the Kenya Constitution provides that revenue raised nationally shall be shared equitably among the National and county governments, with the sharing structure determined yearly through the County Allocation of Revenue Act (CARA). The sharing formula is developed by the Commission on Revenue Allocation and approved by the Parliament per Article 217 of the Kenya Constitution.

To finance the County's approved FY 2022/23 budget of Ksh7.3 billion, Embu was expected to receive Ksh5.54 billion as the equitable share of revenue raised nationally, Ksh510.6 million as conditional grants and allocation and also to generate Ksh950 million from own source revenue.



**Figure 8: Breakdown of Embu County's Revenue - FY 2022/23**

In the financial year ended 30 June 2023 (FY 2022/23), Embu County's total revenue rose by 18% to Ksh6.86 billion from the prior year due to higher receipts distributed by the Exchequer as well as an increase in own source revenue. Even though the County received

Ksh5.54 billion as the equitable share of the revenue raised nationally (representing 100% of the budget), conditional grants and OSR receipts were below the budget projections, leaving the County's revenue performance at 94%.

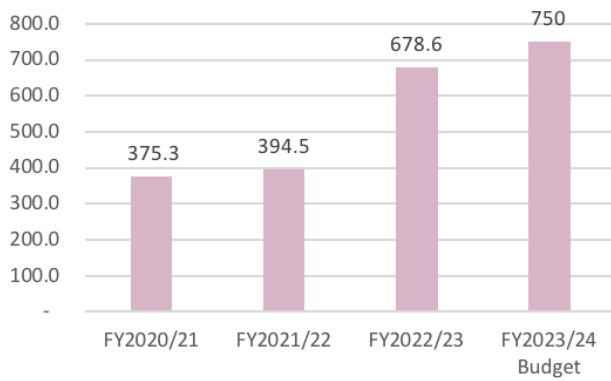
A breakdown of FY 2022/23 total revenue shows that Embu's equitable share of income distributed by the Exchequer grew by 17% year-on-year to Ksh5.54 billion (accounting for 81%), while conditional grants of Ksh344.2 million was significantly lower than the budget (representing 5%) and returns to the County Revenue Fund (CRF) from prior year unutilized balances stood at Ksh305.2 million accounting for 4% of total revenue. Table 2 shows the details of centrally distributed funds received by Embu County over the last three years.

**Table 4: Centrally distributed funds by National Treasury - FY2020/21 - FY2023/24 budget (Ksh'millions)**

Centrally Generated Revenue	FY2020 /21	FY2021 /22	FY2022 /23	FY2023 /24 Budget
Exchequer releases (equitable share & donor)	4,674.6	4,715.2	5,535.3	5,341.8
Exchequer releases (Conditional grants and donor funds)	383.4	291.7	344.2	940.3
Transfer from other government entities	481.9	-	-	117.6
CRF Returns	496.6	392.2	305.2	553.1
Total Centrally Generated Revenue	6,036.4	5,399.1	6,184.7	6,952.0

Source: Controller of Budget's County Governments Budget Implementation Review Report & Embu County Financial Statements FY 2020/21 - 2022/23 and Embu County Fiscal Strategy Paper 2023/2024

In the 12-month fiscal year ended 30 June 2023, Embu County's own-source revenue (OSR) grew significantly by 72% year-on-year (YoY) to Ksh678.6 million representing 10% of total revenue. This growth is linked to the improved revenue collection strategies following the implementation of an automated collection system known as Embu Pay. Nonetheless, we believe that fully automating all the OSR income lines would help drive higher receipts in the form of business permits, licenses, building approvals fees, land rates, hotel fees and parking fees amongst others. As a result, Embu County projects an OSR of Kshs750 million and Ksh860 million by the end of FY 2023/24 and FY 2024/25 respectively. Notwithstanding, Embu County, similar to most counties in the country, will remain reliant on the disbursements from the National Government through the Exchequer in the near to medium term.



**Figure 9: Own Source Revenue Ksh'millions (FY2020/21 - FY2023/24 Budget)**

Based on the FY2023/24 Fiscal Strategy Paper, Embu County intends to generate a total revenue of Ksh7.71 billion with equitable share from the National Government accounting for 69.2% of the total revenue, while conditional grants and allocation from Exchequer (12.2%), transfer from government entities (1.5%) and County Own Source Revenue (9.7%). The County's revenue projection is underpinned by a stable equitable share of revenue as well as a marked increase in OSR collections in the period.

Going forward, the County intends to enhance OSR collections which will help improve fiscal autonomy and thus provide greater ownership and control of the county development agenda. To achieve these objectives, Embu plans to increase OSR in the short to medium term through the following initiatives: strengthen the Embu County Revenue Authority; enhance Embu Pay revenue management system, operationalize the real estate valuation roll to increase land-based revenue; fully exploit existing revenue generation streams and innovative revenue raising strategies; train revenue personnel; amongst others. In our view, fully automating revenue collection by making EMBU Pay an online one-stop collection portal for all fees, levies, licences and permits would help minimise income leakages and translate into higher OSR in the near to medium term.

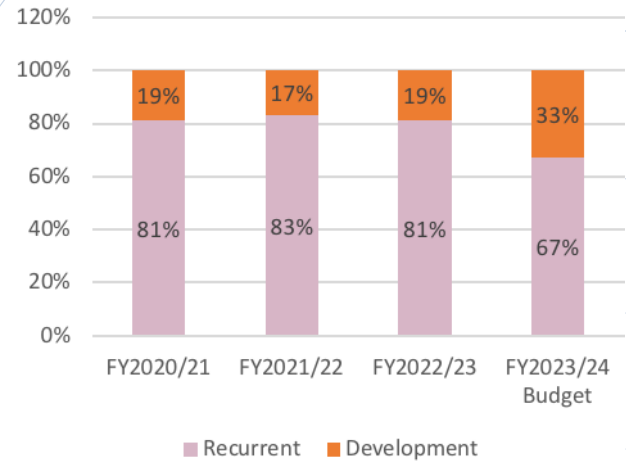
In our opinion, Embu County's overall revenue profile is weak and requires improvement.

### Expenditure profile

The Public Finance Management Act 2012 (PFM) classifies counties' expenditures into two main broad categories – recurrent and development expenditure. Recurrent expenditure comprises expenses incurred in the services provided by the county government such as compensation of government employees, purchase of goods and services and interest payments on borrowings, amongst others. Development expenditure covers the payment for the acquisition or renewal of assets (property, plant and equipment) and Section 107 (2b) of the PFM provides that a minimum of 30% of a county's budget be allocated to this expense category.

In the financial year ended 30 June 2023, Embu County reported a total expenditure of Ksh6.1 billion (FY 2021/22: Ksh5.52 billion), comprising recurrent (81%)

and development expenditure (19%). A breakdown of the County's recurrent expenditure revealed that Kshs3.2 billion was spent on employee compensation (representing 52% of total expenditure), Kshs893.3 million on operations and maintenance (accounting for 15%) and Ksh878.7 million as transfers to the County Assembly and other agencies (covering compensation, operations and maintenance and development activities).



**Figure 10: Recurrent and development to total expenditure**

Based on the Controller of Budget Report FY 2022/23, Embu County's total personnel cost (processed through the Integrated Personnel and Payroll Database (IPPD) system and manual payroll) including the payroll costs of the County Assembly represented 50.3% of total revenue in FY 2022/23 which is higher than the 35% limit set by Regulation 25 (1) (b) of the Public Finance Management (County Regulations), 2015. Furthermore, we note that the County's personnel wages and benefits as a percentage of revenue has trended higher than the statutory threshold over the last three years and we consider this a concern due to the impact on the County's financial flexibility. Despite higher inflationary pressures on operations and maintenance costs over the last three years, the County's overhead cost-to-revenue ratio of 13% in FY2022/23 and the three-year (FY 2020/21 – 2022/23) average of 11%, are both in line with our expectations.

Based on section 116 of the PFM Act, 2012, county governments are allowed to establish and allocate monies from the budget to public funds with approval from the County Executive Committee and the County Assembly. In FY 2022/23, Embu County allocated Ksh202 million) on county-established funds (Embu County Education Support Fund, Embu County Emergency Fund, Embu County Assembly Mortgage Members Scheme Fund and County Assembly of Embu (Staff) Car Loan and Mortgage Scheme Fund), constituting 2.8% of the County's overall budget for the year.

In FY 2022/23, Embu County spent Ksh1.18 billion on development activities, representing circa 19% of total expenditure, and this was lower than the 30% minimum requirement as stipulated in Section 107 (2b) of the PFM Act of 2012. Over the last three years, the County's development expenditure as a proportion of total expenditure has fallen short of the statutory minimum requirement and as such requires improvement.

Based on the FY 2023/24 Fiscal Strategy Paper, the County's recurrent expenditure is estimated at Kshs 5.17 billion representing 67% of the overall budget. This consists mainly of personnel emoluments of Kshs 3.92 billion and operation and maintenance costs of Kshs 1.25 billion. Furthermore, the Fiscal Strategy Paper provides for a total development expenditure of Kshs 2.5 billion accounting for 33% of the overall Budget. This is expected to be deployed to facilitate the completion of existing projects across the different sectors in the county.

Going forward, Agosto & Co. estimates that the County's personnel expenses to revenue ratio will continue to trend higher than the 35% threshold in the near term, while the overhead cost to revenue ratio is projected to rise on account of inflationary pressures on administrative and office expenses as well as the associated cost of planned investment in capital projects across various sectors in the County. Furthermore, we expect capital development expenditure to increase markedly compared to the prior year as the County intends to complete ongoing projects and commence new flagship initiatives earmarked in the County Integrated Development Plan (CIDP) 2023 – 2027.

In our view, Embu County's overall expenditure profile requires improvement, particularly in reducing payroll expenses below the 35% statutory threshold.

### Debt profile

County governments in Kenya can borrow funds for short-term to long-term purposes in line with the Public Finance Management Act 2012. The County Treasury is expected to include in the County Fiscal Strategy Paper, the financial outlook for the county government revenues, expenditures and borrowing for the coming financial year and over the medium term. According to the PFM, short-term borrowing by a county government of not more than 5% of the most recent audited county government revenue per Section 107 (3) can only be used for cash management purposes which is repayable within twelve months. In line with Section 107 (2d) of the PFM, county governments can borrow over the medium term only for financing development expenditure and the total county public debt is not expected to exceed 20% of total revenue at any time in line with Regulation 25 (1) (d) of the Public Finance Management (County Regulations), 2015.

As at the end of the FY2022/23 fiscal year, Embu County did not have any third-party borrowings on its book either directly or through contingent liabilities. However, as at 30 June 2023, the County had outstanding pending bills of Ksh1.37 billion, reflecting a marked reduction from outstanding pending bills of Ksh2.24 billion in FY2021/22.

We note positively that the County government is keen to access third-party medium to long-term financing to execute capital projects such as the construction of the 250 cubic metres Thambana Dam, expansion of water infrastructure to support irrigation projects, construction of an integrated waste management and recycling plant in Kamwimbi, development of the Nthenge Njeru waterfall hydropower plant, upgrade of the Runyenjes Milk Cooling plant to a fully-fledged milk processing plant, and development of eco-lodges in Mt. Kenya and Mwea Game Reserve in collaboration with private investors, amongst others.

In our opinion, Embu County has a low-leverage position. However, the county's financial flexibility to meet future debt obligations requires improvement given its low own source revenue.

### 4.3 Rating outlook

The County Government of Embu under the leadership of Her Excellency, Hon. Cecily Mbarire intends to explore innovative ways to scale local revenues through the digitization of services by enhancing the online payment system (EMBU Pay) as a one-stop solution for government services and minimize leakages by strengthening the Embu County Revenue Authority. In addition, the government plans to transform Embu County beyond primary agriculture to harness the gains of industrialization opportunities given the growing physical infrastructure and human resources available within the County. Furthermore, Embu is keen on leveraging private sector partnerships for the development of capital projects across waste management, affordable housing, water distribution and irrigation, electricity generation and growth of tourism potentials. The policy thrust of the FY2023/24 Budget and the County Fiscal Strategy Policy 2023/24 are both aligned with these overarching objectives.

We note positively the County's political goodwill and intent to improve the welfare of its citizens through the provision of relevant services and incentives for the predominant agrarian communities while supporting industrialization initiatives to generate local employment for the citizens. However, we believe that own source revenue can be improved upon to boost Embu's financial flexibility in the near to medium term to attract capital for infrastructure development.

We hereby assign a "Bb- Ken" shadow credit rating and attach a stable outlook to the Embu County Government of Kenya.

### 4.4 Counties financing framework

#### Background

The Government of Kenya has been under considerable financial pressure due to macroeconomic headwinds and the impact of Covid-19, which will ultimately limit the near-term funds available for developing infrastructure projects across the 47 Counties. As such, counties in Kenya have been urged to embrace the Debt Capital Markets for Infrastructure Development Financing.

#### Excerpts of Statutory requirements for County borrowing under the PFM Act 2012

- 58.** (1) Subject to subsection (2), the Cabinet Secretary may guarantee a loan of a county government or any other borrower on behalf of the national government and that loan shall be approved by Parliament.
- (2) The Cabinet Secretary shall not guarantee a loan under subsection (1) unless—
- the loan is for a capital project;
  - the borrower is capable of repaying the loan, and paying any interest or other amount payable in respect of it;

- (c) in the case of a private borrower, there is sufficient security for the loan;
  - (d) the financial position of the borrower over the medium term is likely to be satisfactory;
  - (e) the terms of the guarantee comply with the fiscal responsibility principles and financial objectives of the national government;
  - (f) where Parliament has passed a resolution setting a limit for the purposes of this section—
  - (i) the amount guaranteed does not exceed that limit; or
  - (ii) if it exceeds that limit, the draft guarantee document has been approved by resolution of both Houses of Parliament;
  - (g) the Cabinet Secretary takes into account the equity between the national government's interests and the county government's interests so as to ensure fairness;
  - (h) the borrower complies with any conditions imposed by the Cabinet Secretary in accordance with the regulations;
  - (i) the Cabinet Secretary has taken into account the recommendation of the Intergovernmental Budget and Economic Council in respect of any guarantee to a county government; and
  - (j) the loan is made in accordance with provisions of this Act and any regulations made thereunder.
- (3) Parliament may approve a draft loan guarantee document as provided by subsection (2)(f)(ii) only if satisfied that—
- a) the guarantee is in the public interest;
  - b) the borrower's financial position is strong enough to enable the borrower to repay the loan proposed to be guaranteed and to pay interest or other amounts payable in respect of the loan; and
  - c) the loan is geared towards stimulating economic growth in a county government.
- (4) To enable Parliament to decide whether or not to approve a draft loan guarantee document as provided by subsection (3), the Cabinet Secretary shall prepare and submit to each of the House of Parliament a paper that—
- a) gives details of the loan that is proposed to be guaranteed, including the amount of the loan, the terms of repayment, and the details of the interest or any other amount payable under the loan;
  - b) specifies the national government's total contingent liability under guarantees given under this section; and
  - c) specifies any other information that the Cabinet Secretary considers relevant.
- 59.** Not later than fourteen days after the guarantee is entered into, the Cabinet Secretary shall submit to Parliament and publish a statement:
- a) stating that a guarantee is entered into; and
- b) containing details of:
    - i) the guarantee, including the name and other particulars of the borrower whose loan is guaranteed;
    - ii) the duration and nature of the guarantee;
    - iii) a risk assessment in respect of the guarantee; and
    - iv) any other information prescribed by regulations for the purposes of this subsection.
- 140.** (1) A County Executive Committee member for finance may, on behalf of the county government, raise a loan for that Government's purposes, only if the loan and the terms and conditions for the loan are set out in writing and are in accordance with:
- (a) Article 212 of the Constitution;
  - (b) sections 58 and 142 of this PFM Act;
  - (c) the fiscal responsibility principles and the financial objectives of the county government set out in its most recent County Fiscal Strategy Paper; and
  - (d) the debt management strategy of the county government over the medium term.
- (2) A loan may be raised either within Kenya or outside Kenya.
- 141.** (1) In borrowing money, a county government shall ensure that its financing needs and payment obligations are met at the lowest possible cost in the market that is consistent with a prudent degree of risk while ensuring that the overall level of public debt is sustainable.
- (4) A public debt incurred by a county government is a charge on the County Revenue Fund unless the County Executive Committee member for finance determines that all or part of the public debt that would otherwise be a charge on that Fund shall be a charge on another public fund established by that county government or any of its entities.
- (5) The County Executive Committee member for finance shall pay the proceeds of any loan raised under this Act into the County Revenue Fund or any other public fund established by the county government or as the County Executive Committee member for finance may determine.
- (6) A County Executive Committee member for finance may establish a sinking fund or funds for the redemption of loans raised under this Act for the county government or any of its entities as the County Executive Committee member for finance considers necessary.
- 142.** (1) The County Assembly may authorise short-term borrowing by county government entities for cash management purposes only.
- (2) Any borrowing under subsection (1) may not exceed five percent of the most recent audited revenues of the entity.

(3) A county government entity that has any such borrowing shall ensure that the money borrowed is repaid within a year from the date on which it was borrowed.

**144.** (1) The county government may issue securities, whether for money that it has borrowed or for any other purpose, only in one or more series and only in accordance with this Act and regulations.

(2) The County Executive Committee member for finance may issue securities on behalf of the county government, for money borrowed by the county government in accordance with the criteria prescribed by regulations made for this subsection.

(3) Subject to the provisions of section 141 of this Act, the authority of the County Executive Committee member for finance to borrow money includes the authority to borrow money by issuing county government securities in accordance with the regulations.

(4) Any county government securities issued by the County Executive Member for finance under this

section shall be within the borrowing limits set out by the County Assembly under subsection 141(2) of this Act.

(5) A county government securities:

(a) may be issued in one or more series; and

(b) may be issued in accordance with loan agreements entered into in accordance with regulations developed by the County Executive Committee member for finance and approved by the County Assembly.

(6) An agreement to obtain a loan by a county government entity made under subsection (5), may be amended from time to time and where the amendment results in further indebtedness or prejudice to the entity that borrowed, the amendment shall be approved by the County Assembly.

(7) The County Executive Committee member for finance shall ensure that every county government security issued under this section is given in the name of that County.



Figure 11: Pre-requisites for counties financing

Source: Agosto & Co. Research





Figure 12: Critical stakeholders to support counties' financing framework

Source: Agosto & Co. Research

5

# Green asset and activity assessment

To understand the availability of green assets and investment opportunities, Embu County was subjected to a green asset identification and risk analysis. The approach employed involved field visits to Embu County, where general sessions were held with members of specific stakeholder groups (county officials, civil society organizations, private actors and community representatives) who were invited to a workshop to discuss issues on the identification of green assets, projects and capabilities of the various stakeholder groups in the County. Furthermore, the workshop served as a medium for gathering information relevant to the County's macroeconomic, fiscal and credit assessments.

To guide the assessment process, information-gathering questionnaires/assessment tools targeting various actors in the counties were prepared and shared in advance of the visit. During the visit, Augusto & Co. engaged three types of stakeholders using the conference/workshop model, namely;

1. County officials which included directors and county representatives of the seven priority areas related to climate change (Disaster risk management; food and nutrition security; water and the blue economy; forestry, wildlife and tourism; health, sanitation and human settlements; manufacturing; and energy and transport) and finance and budget department (Day 1)
2. Civil Society Organisations (CSOs), Community Based Organisations (CBOs) and private actors in the climate-finance space in Embu (Day 2)
3. Community representatives (Day 3)

Figure 13 below outlines the activities for the visit to the County:

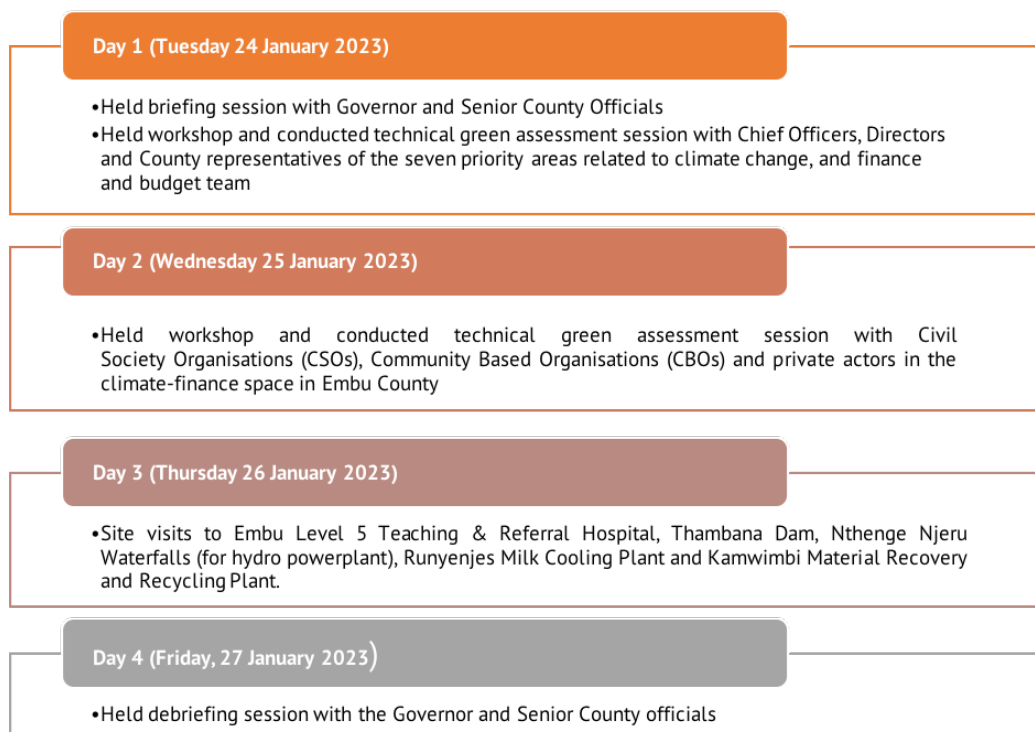


Figure 13: Embu County schedule of activities



Figure 14: Briefing session with Embu County Governor (day 1)



Figure 15: Debrief session with Embu County Governor (day 1)



Figure 16: Workshop with county government officials (day 1)



Figure 17: Workshop with county government officials (day 1)



Figure 18: Workshop with Civil Society Organisations (CSOs) and private sector representatives (day 2)



Figure 19: Workshop with Civil Society Organisations (CSOs) and private sector representatives (day 2)



Figure 20: Embu Level 5 Hospital - Meeting with the CEO (day 3)



Figure 21: Cross section of participants at workshop for CSOs, CBOs and private sector (day 2)



Figure 22: Embu Level 5 Hospital - asbestos waste from replaced roofing (day 3)



Figure 23: Embu Level 5 Hospital - incinerator for burning medical waste (day 3)



Figure 24: Embu Level 5 Hospital - truck preparing to carry shredded medical waste (day 3)



Figure 25: Embu Level 5 Hospital - private wing not operational (day 3)

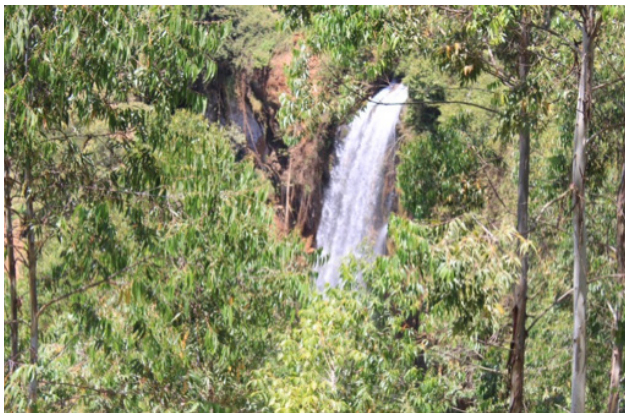


Figure 26: Nthenge Njeru Waterfall - Proposed location of a hydropower plant (day 3)



Figure 27: Thambana Dam's proposed intake location (day 3)



Figure 28: Thambana River - Thambana dam's proposed intake location (day 3)



Figure 29: Thambana Dam proposed intake location - sandbags used to raise water levels (day 3)



Figure 30: Thambana Dam proposed intake location - existing infrastructure (day 3)



Figure 31: Runyenjes Milk Cooling Plant- milk being received from a dairy farmer (day 3)



Figure 32: Runyenjes Milk Cooling Plant - milk cooling tanks (day 3)



Figure 33: Runyenjes Milk Cooling Plant - laboratory (day 3)



Figure 34: Runyenjes Milk Cooling Plant - with plant manager (day 3)



Figure 35: Kamwimbi Dumpsite - Location of the material recovery and waste to energy facility (day 3)



Figure 36: Kamwimbi Dumpsite - with staff from the environment department (day 3)



Figure 37: Debrief session with the Embu County Governor (day 4)

## 5.1 Preliminary green priority areas

The following thematic areas emerged as key priority sectors for Embu County as a result of discussions

and interactions with various stakeholders, as well as assessments conducted during workshops and site visits.

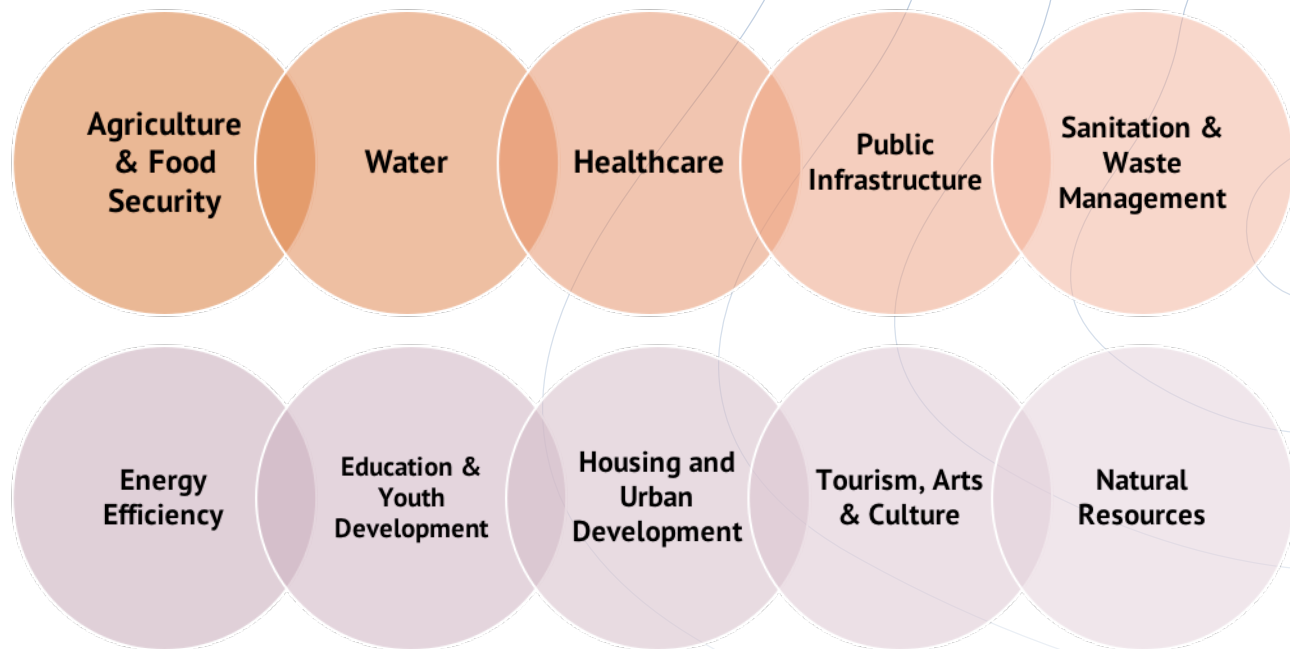


Figure 38: Embu County key priority areas

These sectors are also identified as priority areas in the Embu County Integrated Development Plan (CIDP), which the County Government is keen to implement projects in the short to medium term.

### Agriculture and food security

Agriculture is Embu County's backbone, employing circa 70% of the population and over 87.9% of the County's households are into agricultural activities. The upper parts of Embu rely heavily on cash crops like tea and coffee, while the lower parts rely on Miraa (Khat) and food crops like maize, beans, cowpeas, tomatoes and fruits. Livestock farming is also gaining popularity in the County, due to the revival of milk cooperatives and private sector investment in milk processing plants. Nonetheless, the sector faces high input costs, and a lack of value addition, among others. To address these challenges and improve sustainable agricultural production and value addition (which aligns with United Nations Sustainable Development Goals (SDGs) 2 – End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture), Embu County Government intends to implement several initiatives highlighted in the Embu County Government 2023-2027 CIDP, such as increasing the number of milk coolers, providing agricultural training centres and veterinary clinics per sub-county, establishing a macadamia processing plant, reviewing the existing tea sector frameworks, establishing a state of the art fruit processing plant, promoting cotton farming and eventually establishing a state of the art ginnery among others. Through the implementation of these initiatives, we expect an increase in the incomes for the farmers and concurrently for the County.

### Water

The main sources of drinking water in the County include rivers, dams, piped water, boreholes, springs, shallow wells and pans. Embu County is served by five major rivers namely Thuci, Tana, Rupingazi, Thiba and Ena. About 30.1% of the population in Manyatta and Runyenjes sub-counties get their water from rivers, 35% from piped water and 21% from dug wells<sup>13</sup>. In the Mbeere North and Mbeere South constituencies, 40.4% of residents get their water from rivers, 8.2% from piped water, 23.7% from dug wells, and 10.9% from boreholes. The Embu Water and Sanitation Company Ltd (EWASCO) is the main water service provider in Embu County, as it has the mandate to provide cost-effective and affordable quality water and sanitation services to the residents of Embu County. EWASCO intends to expand its distribution network and improve the existing water infrastructure to serve more County residents. In addition, funding for expanding water distribution networks remains a key priority for the County Government to provide clean water to more households in the County. Construction, rehabilitation, and expansion of urban and rural water supply through bore hole drilling, rehabilitation, and equipping, as well as the development of dams and water pan de-silting, will remain critical in the provision of domestic water, which aligns with SDG 6 – Clean Water and Sanitation.

### Healthcare

The county has a health infrastructure consisting of both public and private facilities. The facilities include 1 level five hospital, 4 level four hospitals, 11 level three hospitals, 77 level two hospitals, and a host of other smaller health facilities<sup>14</sup>. Embu County had 21 health

<sup>13</sup> Embu County Integrated Development Plan 2018-2022

<sup>14</sup> Embu County Integrated Development Plan 2018-2022

workers per 10,000 population, which was higher than the country's ratio of 13.8 health workers per 10,000 population based on the human resources for health policy brief by the Ministry of Health<sup>15</sup>. Nonetheless, Embu's health workers to population ratio falls below the recommended healthcare professionals per population by the World Health Organization (WHO) which is estimated at 44.5 health workers per 10,000 population to be able to achieve universal health coverage and SDG 3 – good health and well-being by 2030. To provide comprehensive health care, the County has made significant investments in upgrading, expanding, and renovating existing facilities. The County's health sector agenda focuses on improving hospital services by raising the standard of care and treatment for patients, as well as providing better working conditions and a pleasant working environment for healthcare professionals. Continued modernization of health facilities and drug supply will allow the people of Embu County to access more services from fully functional health centres.

### Public infrastructure

Appropriate infrastructure is important for the growth and development of the County as it provides services that enable the society to function and thrive. The department of Roads, Transport and Public Works which is in charge of the construction and maintenance of infrastructure has previously faced challenges relating to slow procurement and funds disbursement leading to late commencement and progress of projects. Going into the future, the County government plans to sustain investment in infrastructure development and exploit opportunities with private-sector partnerships. According to the Embu County Government Plan for 2022-2027, the key projects that the County plans to implement include allocating 20% of the budget per year towards upgrading road networks. Embu County also plans to install energy-efficient street lights and conversion of the existing flood lights to solar-powered ones. It is expected that continued road improvement will ease transport and access to markets for locally available raw materials and produce thus creating more business and employment opportunities for the citizens of Embu County.

### Sanitation and waste management

The majority of the population in Embu County uses pit latrines for human waste disposal. Of all urban centres in the County, only Embu town has a sewage treatment plant which does not have adequate capacity to serve the whole town. In addition, only about 5% of the entire Embu County is connected to the municipal sewer<sup>16</sup>. Manyatta sub-county has the highest number of residents using improved sanitation, while in Mbeere North and Mbeere South, most residents use poor sanitation methods and this is due to inadequate water supply. According to the 2022 Kenya Demographic and Health Survey Fact Sheet, 90.4% of the households in the county had access to improved sanitation. Nonetheless, the county government is keen to establish a new sewerage treatment plant in Embu Town to increase the provision of improved sanitation services in the county.

Embu County lacks a solid waste segregation from the source recovery structure as well as an effective and

efficient disposal system. In the County, about 37% of households discarded their solid waste in open places, 32% burnt it, 24% recycled it and about 8% of households reused the solid waste<sup>17</sup>. Going forward, the County intends to work with the private sector to establish a solid waste management company as per the 2022-2027 Embu County Government Plan to enhance a proper solid waste management system which aligns with SDG 11 – sustainable cities and communities.

### Energy efficiency

Households accessing electricity from the national grid in the County stood at 47.3%<sup>18</sup>. Embu County is home to the well-known seven-forks Project, which contributes 80.2% of the nation's installed hydroelectric power capacity; however, a large number of households in the County especially in the villages are still not connected to the grid, which focuses on supplying power throughout the country. The County heavily relies on hydro-generated energy which results in frequent power outages and blackouts during the dry weather conditions. As a result, diversification through the use of alternative energy sources such as solar and wind would help in addressing this challenge. The County government plans to build a solar park in Mbeere North and Mbeere South sub-counties to reduce dependence on the national grid and provide affordable energy to more homesteads. Furthermore, the County government intends to develop policies that will encourage the use of renewable energy thus aligning with SDG 7 – Affordable and Clean Energy.

### Education and youth development

The County has 619 early childhood development education (ECDE) centres, 552 primary schools, 186 secondary schools, 26 vocational training centres (VTCs), and 1 university<sup>19</sup>. The education sector is critical in developing skilled and competent labour to drive long-term socioeconomic growth and development. The sector's priority is to increase access to ECDE by building and equipping prototype units, providing adequate staffing, establishing a feeding program, and providing funds for ECDE children's capitation to ensure that preschool education is free. Other key initiatives include refurbishing and equipping existing VTCs with modern training equipment, establishing Model VTCs in wards where they currently do not exist as well as initiating income-generating activities in VTCs to equip the youth with relevant entrepreneurial skills.

### Urban development and housing

The sector facilitates efficient land administration and management, access to adequate and affordable housing, and social and physical infrastructure for sustainable County development. To meet the set objectives, the County intends to prioritize the preparation of the County Spatial Plan and Part Development Plan, as well as the installation and operationalization of the geographic information system (GIS). In addition, the County is committed to reducing the proportion of the urban population living in informal settlements or inadequate housing. To achieve the County's affordable green housing initiatives, the Embu County government plans to construct circa 5,000 units of civil servant houses

<sup>15</sup> Kenya County Fact Sheets Report 2022

<sup>16</sup> Embu County Integrated Development Plan 2018-2022

<sup>17</sup> University of Embu Study conducted in 2020

<sup>18</sup> 2022 Embu County Fact Sheet

<sup>19</sup> County Integrated Development Plan 2018-2022

through public-private partnerships (PPPs) with investors who are inclined to develop rental houses to achieve SDG 11 which seeks to ensure access to adequate, safe and affordable housing and basic services and upgrade of slums by 2030.

**Tourism, arts and culture**

Embu County has great potential for tourism given that it is one of the gateways to Mt. Kenya and hosts five of the seven forks dams which, if intentionally promoted can result in huge incomes to the nation and eventually to the County in the form of rates and fees giving that tourism is not a fully devolved function. The County also boasts of two National reserves namely: Mwea National Reserve and Mt. Kenya National Reserve. According to the 2022- 2027 County Plan, the County aims to pursue public-private partnerships (PPP) in the investment in key tourism sites such as establishing state-of-the-art resorts and conference facilities at Mwea National Reserve and lodges for mountain climbers along the County's Mt. Kenya route. Other initiatives include promoting water sports such as kayaking and skiing along the Seven Forks' Dams and implementing policies that promote sustainable tourism and local culture which aligns with

SDG 8 and SDG 12 - devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

**Natural resources**

Embu County hosts several major natural resources such as Tana River, Mt. Kenya National Park and Mwea National Reserve among others. The County government aims to empower communities to sustainably manage natural resources by building capacity to develop resource management plans while also improving their livelihoods through initiatives such as agroforestry practices and re-afforestation activities. For the national parks and reserves, the County seeks to enhance the law against poaching and educate the residents on the importance of wildlife in partnership with the Kenya Wildlife Service and Kenya Forest Service which manage the key natural resources. In addition, the County plans to implement strategies for afforestation and conservation of natural forests in hilltops, as well as promote the use of alternative energy sources, which reduces the carbon footprint and has the potential of generating carbon credits for the County.

**5.2 Green assets identified**

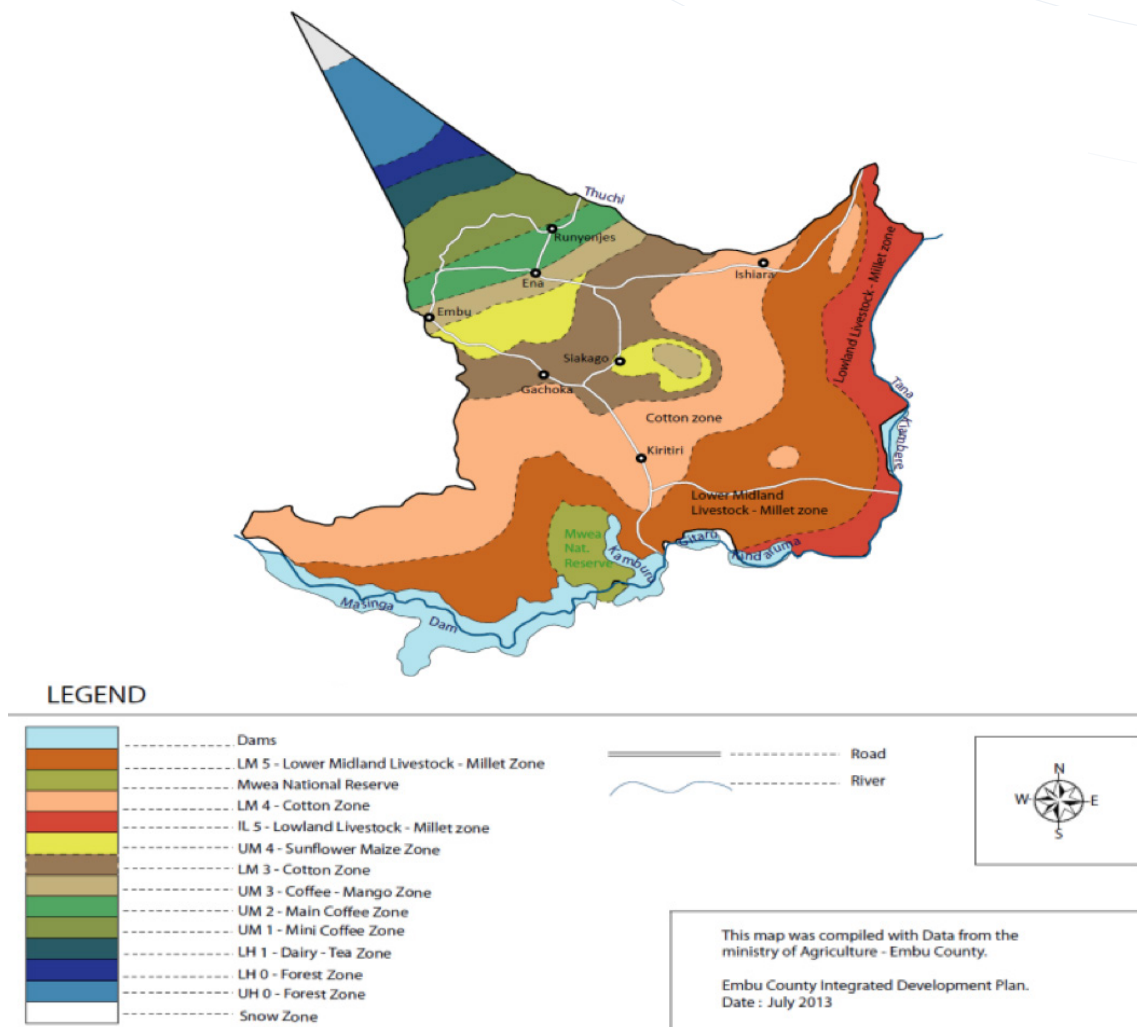


Figure 39: Map of the distribution of green assets and agro-ecological zones in Embu County

Source: Farm Management Handbook



### Overview of green assets in Embu County

The most prominent physical features of Embu County are Mt. Kenya, Kiang’ombe Hills, Kiambere Hills, Mwea Game Reserve, River Tana, Masinga Dam, Kamburu Dam, Kindaruma Dam, Kiambere Dam and Gitaru Dam. The County is characterized by highlands and lowlands, as well as slopes from the northwest to the east and southeast, with a few isolated hills like Kiambere and Kiang’ombe. It rises from approximately 515m above sea level in the River Tana Basin in the east to 5,199m at the summit of Mt. Kenya in the northwest. Mwea plains cover

the southern part of the County and rise northwards, culminating in hills and valleys in the northern and eastern parts of the County. As a result, the County has a typical agro-ecological profile of Mt. Kenya’s windward side, with cold and wet upper zones giving way to hot and dry lower zones in the Tana River Basin. The County can leverage some of these green assets to develop projects that provide a financial return and thus be included in the potential green bond issuance as an alternative way of financing key projects in Embu.

The county’s distinct landscape profile includes the following key green assets:

Table 5: Green assets located in Embu County

Rivers	Dams	Forests and hills	Parks and reserves
Tana River	Masinga Dam	Kiang’ombe	Mt. Kenya National Park
Rupingazi River	Kindaruma Dam	Kirimiri	Mwea National Reserve
Kii River	Kamburu Dam	Kianjiru	
Ena River	Gitaru Dam	Kiambere	
Thiba River	Kiambere Dam	Karue	
Thuci River			
Tributaries:			
Thambana			
Nyanjara			
Gichangai			
Kapingazi			
Kirurumwe			

Source: Embu County Integrated Development Plan and Augusto & Co. Research

### Green assets shared with other counties

Tana River and Mount Kenya are the primary natural resources that Embu County shares with neighbouring counties. The 1,000-kilometer-long Tana River is the longest in Kenya and flows through seven counties. The river originates west of Nyeri in the Aberdare Mountains and flows through Embu County supplying water to the Seven Forks Dams. The river then flows through Bisanadi, Kora and Rabole National Reserve before getting to Garissa, Hola and Garsen where it later drains into the Indian Ocean through the Ungwana Bay in Kipini.

Mt. Kenya is located about 90 kilometres north of the equator in Kenya’s former Eastern and Central provinces, which are now Meru, Embu, Laikipia, Kirinyaga, Nyeri, and Tharaka Nithi Counties. The mountain has a summit elevation of 5,200 meters, making it the highest in Kenya and the second highest in Africa after Kilimanjaro. There is a need for harmonization and a unified approach to the conservation and management of shared/transboundary resources, such as the Tana River and Mount Kenya, to prevent conflicts over their control and management.



Figure 40: Mount Kenya Peaks

### Green assets owned by the national government

The Kenya Wildlife Service (KWS), a state corporation, manages Mt. Kenya National Park and Mwea National Reserve. Mwea National Reserve has a savannah ecosystem with small hills covered in bushy vegetation and scattered large trees. Other areas are open grasslands, while large trees with dense undergrowth can be found along the main rivers. The main trees found in the ecosystem are acacia species and baobab trees. The main features of the ecosystem are the confluence of the rivers Tana and Thiba, as well as the Kamburu and Masinga hydroelectric dams, which support a diverse range of biodiversity. The Mount Kenya National Park was established in 1949 to protect Mount Kenya, the wildlife, and the surrounding environment, which serves

as a habitat for wild animals and a water catchment area. The national park covers 715 square kilometres, the majority of which is above the 3,000-metre contour line. In the near term, Embu County will need to develop appropriate partnership approaches with the state-owned corporations that manage Mt. Kenya National Park and Mwea National Reserve, as some of the identified green projects, such as the construction of eco-lodges, will require their consent and approval.

### 5.3 Suggested green projects

The following green projects were proposed for development and implementation based on the identified thematic areas and Agosto & Co.'s evaluation of the green assets:

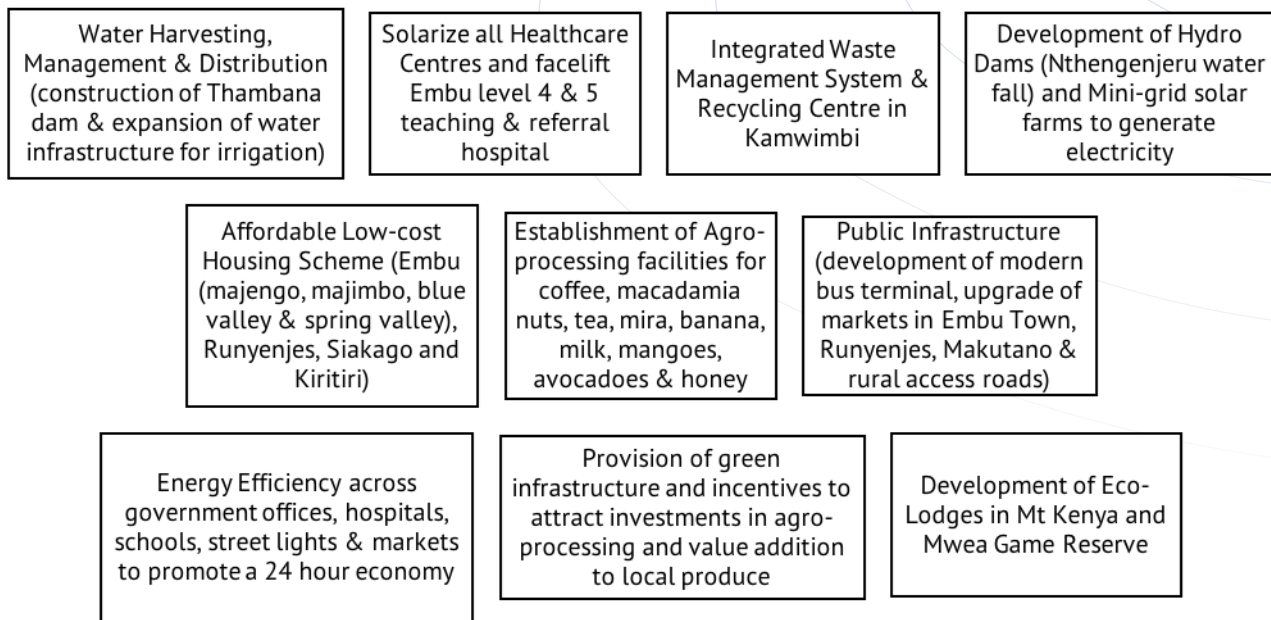


Figure 41: Embu County suggested green projects

### Water harvesting, management and distribution

Embu has five water companies owned by the County Government, with the Embu Water and Sanitation Company Ltd (EWASCO) serving as the primary water service provider. The County's water supply remains inadequate, particularly in the Mbeere North and Mbeere South sub-counties, where only 34.4% and 18.5% of the population<sup>20</sup> respectively, have access to clean and safe water. As a result, the County government intends to build a proposed 12 million cubic meters Thambana Dam on the upstream side of Embu to provide the residents with access to clean and safe water (which aligns with United Nations Sustainable Development Goals (SDGs) 6 - Clean Water and Sanitation). The dam when completed will get its water from two permanent rivers, the Rupingazi and Thambana.



Figure 42: Proposed location of Thambana Dam - Thambana River

Source: Agosto & Co. Research

<sup>20</sup> Embu County (Kenya County Fact Sheets 3rd-Edition) by The Commission on Revenue Allocation (CRA), 2022

The project is expected to supply water to 16 irrigation projects as well as provide water to Embu County residents through three water service providers. Given its capacity of 12 million cubic meters of water, the dam will serve over 100,000 people and provide water to an irrigation infrastructure of 6,000 hectares. Other initiatives that the County government plans to implement include improving the existing water infrastructure in Embu to reduce the level of non-revenue water.

**Solarise all healthcare centres and facelift existing hospitals**

Embu County has 218 public and private health centres that offer health care to its residents. To enhance service provision, the County plans to build a level 6 hospital while also renovating the existing level 4 and 5 hospitals. Furthermore, to reduce the overall cost of power, the County Government intends to promote solarization of all healthcare facilities. Some health facilities already have solar panels in place, however, proper storage infrastructure will be required to facilitate an efficient and reliable supply of solar power. The Embu Level 5 hospital, the largest in Embu County, intends to implement the

use of alternative energy sources to reduce the cost of power, which is estimated to be Kshs 15 million per month. The hospital, which opened in 1924, serves over 15,000 outpatients per month and has a capacity of 730 beds.

The hospital was a loss-making entity as of the end of 2022 due to high operating costs; however, the private wing being developed by the hospital management is expected to make it profitable in the medium to long term. Other projects that would improve the hospital's efficiency and service provision, aligning with SDG 3 which promotes good health and well-being, include the construction of modern facilities for the mother and child section, a modern emergency department, and a cancer centre, provision of access to clean water, and improvements in medical waste disposal measures. To support the County's health centres, there is a need to improve medical waste management by installing additional incinerators throughout the County, establishing biodigesters to promote the use of biogas, and improving water harvesting measures at the health care centres.



Figure 44: Embu Level 5 Hospital – private hospital wing



Figure 43: Embu Level 5 Hospital - Asbestos roofing at the general wing

**Integrated waste management system and recycling centre**

Embu County has an existing dumpsite that is not approved by the National Environment Management Authority (NEMA) near Embu Town. However, the County government intends to relocate the dumpsite to the Kamwimbi landfill, which spans 33 acres of land. The landfill, which was expected to be functioning in 2022, is not yet operational and only perimeter fencing has been completed. Furthermore, the County plans to establish a material recovery facility and a waste-to-energy plant at the Kamwimbi site anchored on the improved municipal waste collection mechanism in the County. Previously, Embu County had unsuccessfully engaged private investors for the establishment of a 10-megawatt plant at the Kamwimbi landfill. Going forward, the County is keen to develop an appropriate waste collection and management ecosystem to cater for the end-to-end management of waste. Furthermore, the size of the waste currently generated in Embu County (estimated at 0.57kg/person/day) is insufficient for the proposed

waste-to-energy facility and as such the County would have to rely on waste from neighbouring counties such as Kirinyaga and Tharaka Nithi counties for the plant to operate optimally. Proper management of waste is critical in every society as it helps promote good health and general well-being (SDG 3) and also aligns with SDG 6 on proper sanitation and hygiene.



Figure 45: Kamwimbi Landfill – Perimeter fencing

**Development of hydro dams and solar farms to generate electricity**

Embu County hosts the famous Seven Forks dams, namely Masinga, Kamburu, Gitaru, Kindaruma, and Kiambere dams, which have an installed capacity of 543.2 megawatts and contribute 80.2% of the national installed hydro-electric power capacity. Nonetheless, the County experiences frequent power outages and blackouts during the long dry spells, therefore, diversifying energy sources to include solar farms and wind energy will help to address these challenges. Furthermore, access to electricity in the rural settlements remains low in Embu, thus, the County Government is planning to build several hydro and solar mini-grids in the County to improve residents’ access to electricity. According to the energy department, the County has 310 days of sunlight in a year and has identified four waterfalls that it plans to leverage to implement these projects.

Nthenge Njeru is one of the waterfalls that the County government intends to harness by setting up a hydropower plant at the location. The Nthenge Njeru project is scheduled to begin in the fiscal year 2023/24,

and a pre-feasibility and feasibility study are to be conducted to ensure successful implementation. In addition, the County intends to establish mini-grid solar farms in various sub-counties to provide electricity to households that are not connected to the grid, to meet the Sustainable Development Goal (SDG) 7 goal of access to affordable and renewable energy by 2030.



Figure 46: Nthenge Njeru Waterfall

Source: Agosto & Co. Research

**Establishment of agro-processing facilities**

Given that agriculture is the mainstay of Embu County, the government is keen on increasing production and value addition of farm produce to improve residents’ livelihoods. Some of the initiatives that the County government plans to implement include expanding existing irrigation schemes, particularly through rainfall water harvesting, establishing (and supporting the setting up of) agro-processing facilities for coffee, macadamia nuts, tea, miraa, banana, mangoes, avocados and honey, which are the key commodities produced in the County. Furthermore, the County Government plans to boost the capacity of milk collection plants in the County, such as the Runyenjes Milk Cooling plant, for which the County was able to secure Kshs 700 million in financing in 2023 from the national government to upgrade it into a fully-fledged processing facility.

The Runyenjes Cooling Plant which has a capacity of 41,500 litres of milk, receives 20,000 litres of milk daily from seven dairy cooperatives in Embu, Tharaka

Nithi and Kirinyaga counties, which is then stored and transported through milk tankers to the New Kenya Cooperative Creameries (KCC) Dandora Milk processing plant, in Nairobi daily. On the back of the plans to scale the cooling plant to a processing plant, the dairy farmers will be able to receive more income from the milk sold through cooperatives.

The County government also intends to develop County Industrial Parks which will contain warehouses to support value addition of other agricultural products such as tea and avocados. The process of warehouse construction has commenced in Machanga, in Mbeere South Constituency. Furthermore, to support business incubation, the County established the Embu County Investment Corporation, whose board is to be formed in March 2024. In addition, the County government is well-positioned to provide green infrastructure and incentives to potential investors to attract investments in agro-processing and value addition for local produce, which will eventually lead to economic growth.



Figure 48: Runyenjes Milk Cooling Plant - with the plant manager



Figure 47: Runyenjes Milk Cooling Plant - cooling tanks

### **Affordable low-cost housing schemes**

The county seeks to engage real estate development investors under public-private partnership (PPP) arrangement to help construct over 5,000 housing units across the County. The use of appropriate green building technologies will be emphasized in the County's efforts to ensure residents access to affordable housing, which aligns with SDG 11 - Sustainable Cities and Communities. The County government has identified and set aside land in Majimbo (5 acres), Majengo (1 acre), Blue Valley (1 acre), and Spring Valley (1/2 acre), all in Embu, on which it plans to build these affordable housing units. Other identified areas outside Embu town include Runyenjes, Siakago and Kiritiri, which the County intends to construct additional housing units under the PPP model.

To align with affordable green housing standards, these developments will have to adhere to energy-efficient building design codes, water management systems and waste efficiency in line with green buildings certification standards. This may include the introduction of higher-performance building materials and services such as lighting, appliances and solar hot water heating. The provision of green affordable housing developments avoids the need for major future renovations and cuts costs associated with energy, water use and maintenance. Therefore, it is beneficial that the housing development is considered an end-to-end process with as many green features as possible.

### **Public infrastructure**

Public infrastructure development is one of the key strategic priorities for Embu. In the near term, the County Government plans to build a modern bus terminal and upgrade rural access roads, which will improve road efficiency and lower the transportation cost of taking farm produce to the markets. Other initiatives by the County include the improvement of modern markets in Embu, Runyenjes and Makutano towns to promote trade and security. Furthermore, the increasing population in the County is expected to exert pressure on existing social and physical amenities, therefore to achieve SDG 11 (sustainable cities and communities), the County government will need to implement a strategic green

infrastructure renewal and development plan to upgrade existing physical infrastructure such as roads, bridges, walkways as well as develop urban renewal plans for upcoming towns.

### **Energy efficiency across government offices, hospitals, schools, street lights and markets to promote a 24-hour economy**

Energy efficiency is pivotal to the attainment of most of the SDGs by 2030 and the County is keen on promoting the use of renewable energy and increasing energy efficiency, particularly in government offices, hospitals, schools, street lights, and markets, which fits into the core of SDG7 on affordable and clean energy. In line with the County Government's vision, installing solar streetlights and floodlights on roads and markets, as well as converting existing streetlights and floodlights to be more energy efficient are part of the key priorities in the near term to promote a 24-hour economy. The successful completion of these projects is expected to promote a 24-hour economy, which will attract investments and create new opportunities for cottage industry and value addition, resulting in more jobs and citizen participation in the County economy.

### **Development of eco-lodges to promote tourism**

Tourism in Embu County remains an underutilized resource that has the potential to generate significant revenue for the County if properly harnessed. Part of the County's strategic initiative is to create a tourism circuit that connects the Mwea National Reserve and the Mt. Kenya region and as such develop eco-lodges in these locations in collaboration with private investors to maximize the County's tourism potential. Furthermore, Embu County is in the process of acquiring the Mwea Game Reserve from the national government. As of the end of 2022, the Mwea Game Reserve received an average of 100 visitors per month according to the Department of Tourism, however, with the establishment of eco-lodges and other tourist-related attractions, the number of tourist arrivals and earnings from tourism could potentially grow in the medium term.

## 6 Risk analysis on suggested green projects

	Climate risks	Environmental risks	Legal risks	Reputational risks	Financial risks
<b>Water Harvesting, Management &amp; Distribution (construction of Thambana dam and expansion of water infrastructure for irrigation)</b>	Prolonged drought may lead to drying up or reduction in the water levels of the water sources including that of the dam.	Pollution of the water sources due to distribution activities which include pumping water to the tanks among others.	Unpaid bills for metered water to residents, thus leading to high non-revenue water proportion.	Diversion of funds allegations. Potential of water quantity and quality disruptions. Poor quality construction of the water infrastructure.	Inadequate funding. Diversion of project funds. The inability of the water company to run the project's profitability to repay their financial obligations.
<b>Solarise all healthcare centres and facelift Embu level 4 and 5 teaching and referral hospitals</b>	The process of installing solar systems may result in the release of greenhouse gases into the environment.	Some of the products used in the manufacturing of photovoltaic systems contain toxic materials and hazardous products which can indirectly affect the environment.  Pollution from e-waste linked to solar panels during disposal.	Potential conflict between the Kenya Power and Lighting Company (KPLC) and the County government, especially since the big level 5 and 4 hospitals rely heavily on the national power provider for the energy, thus reducing the revenues received by KPLC.	Greenwashing, if the minimum criteria required for the renewable energy sectors is not met. Lack of proper and timely reporting as required.	Inadequate funding due to the initial high cost. Diversion of funds. Rapid obsolescence of solar technology given innovations in the field which would require the solar panels to be replaced after a while irrespective of the high installation costs.

	Climate risks	Environmental risks	Legal risks	Reputational risks	Financial risks
<b>Integrated waste management system and recycling Centre in Kamwimbi</b>	Improper management of the collected waste may lead to flooding on account of drainage blockages and health hazards.	Air pollution at the Kamwimbi Landfill. Land pollution at the dumpsite. Water pollution at the waste management facility.	The existing dumpsite in Embu County is due for relocation to the Kamwimbi Landfill. However, due to issues of proximity to Embu town, residents still use the former dumpsite which conflicts with the National Environment Management Authority (NEMA) requirements.	The pollution caused by the existing dumpsite poses a health risk to the community living in the area.	Lack of funding to set up the material recovery facilities.  Lack of appropriate private sector partners who can set up a waste-to-energy facility at the identified dump site.  Diversion of funds
<b>Development of hydro dams (Nthenge Njeru waterfall) to generate electricity</b>	Long-term drought may cause the water velocity required to power the turbines to decrease.	Water pollution during installation and setup of the hydropower plant.	Counterparty risk given that the project will be implemented in collaboration with other interested partners.	Lack of proper implementation or either of the parties not executing part of their responsibilities. Lack of public participation and involvement in the project.	The inability of the project to cover operational costs once completed.
<b>Establishment of agro-processing facilities for coffee, macadamia nuts, tea, miraa, banana, milk, mangoes, avocados and honey. (The facilities are expected to use alternative energy sources such as solar energy)</b>	Potential of environmental pollution from the agro-processing facilities which may lead to climate change and environmental risks.	Water pollution from the manufacturing processes. Air pollution from the gases released during the manufacturing processes. Land pollution from the waste generated by the facilities.	Probability of a poorly executed environmental impact assessment which may conflict with the National Environment Management Authority (NEMA) requirements.	Greenwashing. Allegations of corruption when engaging potential investors in the agro-processing facilities	Inadequate funding. Diversion of funds.
<b>Public Infrastructure (development of modern bus terminal, upgrade of markets to use solar power for lighting and storage facilities in Embu Town, Runyenjes, Makutano and rural access roads)</b>	The materials and equipment used in road construction lead to environmental pollution which may lead to climate change risks. Deforestation of existing land use could result in changes in rainfall patterns and the long run lead to drought.	Land pollution during the development of the infrastructure. Air pollution during construction. Water pollution during construction of the facilities. Sound Pollution during construction.	Probability of engaging contractors who may not fully deliver on the projects as per the stipulated standards.	Public participation in the upgrading of existing markets, particularly among traders operating in these markets, will be critical to ensuring that the projects are beneficial and meet the needs of the traders.	Availability of resources for road infrastructure construction. Diversion of funds.

	Climate risks	Environmental risks	Legal risks	Reputational risks	Financial risks
<b>Affordable low-cost housing Scheme (Embu Runyenjes, Siakago and Kiritiri) that adheres to energy-efficient building design codes, water management systems and waste efficiency in line with green buildings certification standards.</b>	Clearing of land and trees may negatively impact existing natural resources and the ecosystem.	Land pollution during construction of the housing units. Air pollution from the construction processes. Water pollution. Sound Pollution during construction.	Lack of obtaining the required licenses from the relevant authorities to construct the houses. The responsibilities of the parties to be involved in the development will need to be clearly defined to avoid future litigations.	Greenwashing due to failure to meet the requirements of the certification scheme for green buildings. Lack of public-participation especially in the Urban Renewal Project which will require relocating the existing residents of the estates to allow for redevelopment.	Inadequate funding and lack of a suitable partner to support the development. Diversion and mismanagement of funds. The inability of the project to cover the operating costs.
<b>Energy Efficiency across government offices, hospitals, schools, street lights &amp; markets to promote a 24-hour economy</b>	The process of installing solar systems may result in the release of greenhouse gases into the environment.	Some of the products used in the manufacturing of photovoltaic systems contain toxic materials and hazardous products which can indirectly affect the environment. Pollution from e-waste linked to solar panels during disposal.	Potential conflict between the Kenya Power and Lighting Company (KPLC) and the County government, especially due to public institutions that heavily rely on the national power provider for energy, thus reducing the revenues received by KPLC.	Greenwashing, if the minimum criteria required for the renewable energy sectors is not met. Lack of proper and timely reporting as required.	Inadequate funding due to the initial high cost. Diversion of funds. Rapid obsolescence of solar technology given innovations in the field which would require the solar panels to be replaced after a while irrespective of the high installation costs.
<b>Development of Eco-Lodges in Mt Kenya and Mwea Game Reserve</b>	The construction process of eco-lodges may harm the forests and wildlife.	Environmental pollution from the activities of developing the facilities.	Inappropriate channels to obtain approvals for the development as the facilitates are managed by KWS which is a state corporation due to conflict of interests.	Lack of public participation in project execution.	The inability of the established eco-lodges and tourism activities to break even, thus becoming a loss-making venture.



7

# Green finance capability assessment

Agusto & Co. conducted a green finance capability assessment for Embu County to evaluate the County government's skills and ability to manage green financial instruments, with a focus on green bonds and related projects. Based on the assessment, there is a considerable knowledge gap among the County government staff and residents. As the County prepares to participate in the green bond market, the Embu County government should put measures in place to provide capacity building for staff, and stakeholders (CBOs, CSOs and private sector players) on climate-related issues. It is noted that the County has climate-related laws and plans in place that could aid in the management of the projects and assets identified. Some of Embu County's climate-related laws, policies and plans are reviewed below.

## a) The Embu County Climate Change Fund (CCCF) Act, 2020

– The regulations which are formulated under the Public Finance Management Act of 2012, provide a mechanism that enables vulnerable communities through their climate change structures, to access and use climate finance to build their resilience to the changing climate in a more coordinated way. The mechanism consists of four interrelated components namely: establishing a county-level climate change fund, putting in place climate change planning committees at ward and county levels, integrating climate information into planning and implementation and monitoring and evaluation of progress with resilience building at both community and institution levels as a result of the adaptation investments made. The approach enables the implementation of public good investments that address communities' priorities while supporting the County government in delivering its mandate in realizing sustainable development in the face of climate change.

## b) The Embu County Environment Management Act 2015:

The Act provides for the management of the environment including; control of air pollution, noise pollution, waste management, and general nuisances to promote a clean and healthy environment and to provide for matters incidental thereto. The purpose of the Act includes:

- i) To create the necessary institutional framework required to have an efficient waste management system within the County;

- ii) To create the necessary institutional framework to provide for the prevention, control and abatement of;
  - a. air pollution to ensure clean and healthy ambient air;
  - b. noise pollution; and
  - c. Waste and disease-causing pests, and ensure a clean healthy environment.
- iii) Promote an environmentally friendly county that will reduce health risks associated with a polluted environment; and
- iv) Encourage residents to take responsibility for the environment.

## c) The Embu County Water Act, 2015:

- The Act provides a legal framework that guides the:
- i) Provision of equitable and continuous access to safe, clean water in adequate quantities;
  - ii) Promotion of soil water conservation;
  - iii) Promotion of conservation and protection of water catchment;
  - iv) Provision for the development and management of County water and sanitation services public works;
  - v) Provision for effective and efficient provision of water and sanitation services;
  - vi) Promotion of effective and efficient management of stormwater in built-up areas;
  - vii) Enhancement of sustainable management of water resources, and
  - viii) Promotion of inter-agency collaboration and public participation in water resource development and management.

## d) The Embu County Tourism Act, 2018:

- The Act provides for the promotion and development of tourism in the County and connected purposes. The key objectives of the Act are:
- i) Promotion and facilitation of growth and development of the tourism sector and tourism-related businesses;
  - ii) Promotion of the County as a sustainable tourism destination;
  - iii) Promotion of sustainable local tourism;
  - iv) Promotion and facilitation of the development of a conducive investment and business operating climate in the sustainable tourism sector;

- v) Promotion of sustainable local tourism led economic development; and
- vi) To safeguard against negative impacts

associated with tourism in Embu County as identified in relevant tourism laws and policies in Kenya.

Table 6: Embu County Capability Assessment

S/n	County capabilities assessment	Status	Justification
<b>CCCF governance, stability, and performance</b>			
1	Presence of a legal and regulatory framework for green/climate finance	Yes	There exists the Embu County Climate Change Fund Regulations, 2020 which will guide the County on green/climate finance.
2	Political commitment to green growth and support for use of green finance	Yes	Existence of a County Department that has the mandate covering Water, Irrigation, Environment, Climate Change and Natural Resources. In addition, the County has the CCCF Regulations in place, which guide the County in matters of green finance.
3	County government familiarity with the Green Bond Framework and requirements	No	Capacity building in the areas of the Green Bond Framework is still required.
4	County capability in managing green funds (preferably for financial return)	No	The County has not received green funds before to fund projects with a financial return.
5	County's ability to apply county-level financial tools	Yes	The County has Finance Bills and policies in place which have been applied previously.
6	County's understanding of frameworks for green finance instruments	No	There is still a need for capacity building in this area
7	County's understanding of stakeholder engagements in the origination, design, implementation, and monitoring and evaluation (M&E) of projects.	Yes	The County has previously implemented projects where various stakeholders were involved. Public Participation is very critical for the County before the implementation of any projects.
<b>Green project and finance experience</b>			
1	County staff dedicated to green finance issues	Yes	Staff in the Water, Irrigation, Environment, Climate Change and Natural Resources Department are knowledgeable on green finance issues.
2	County staff trained in environmental management, climate/ green finance, or related areas	Yes	County staff in the Water, Irrigation, Environment, Climate Change and Natural Resources Department following enactment of the CCCF Regulations.
3	County staff with project management experience particularly with bonds and green projects	Yes	County staff in the Water, Irrigation, Environment, Climate Change and Natural Resources Department have experience with green projects especially due to the implementation of the CCCF mechanism in the County.
4	County staff with experience with accessing and prudentially utilising other green financial resources (e.g., donor funds)	Yes	The County has previously received funding to facilitate green projects through the CCCF mechanism.
<b>Access to appropriate green finance and project experts</b>			
1	Ability of County government to identify and procure experts to support green finance projects	Yes	The County government has previously implemented projects successfully and hence can procure the support services of experts.
2	Ability of County government to mobilise financing to secure and pay for services rendered	Yes	Previously the County has mobilized financing to acquire the Kamwimbi Dumpsite where it intends to construct a material recovery facility and a waste-to-energy facility.
3	Existence of coordination mechanisms and experience working with national government ministries and agencies such as the National Treasury that can provide the necessary support.	Yes	Embu County has various policies in place which guide the process of coordinating with the national government or agencies. Such as the Embu County Climate Change Fund Act, 2020.

S/n	County capabilities assessment	Status	Justification
4	County's qualification for Financing Locally Led Climate Action (FLLoCA) funds	Yes	The County qualifies for FLLoCA funds because it has climate finance legislation in place through the Embu County Climate Change Fund Regulations, 2020 which guides the County on green/climate finance.
5	Has the County successfully received and dispersed FLLoCA funds	Yes	So far, the County has received funds for institutional strengthening including for the participatory climate risk assessment (PCRA) process. The PCRA process will enable counties to identify investment areas/ projects after which counties can receive investment grants to apply to these areas/projects



# Recommendations

Based on the sessions and workshops with the various stakeholders as well as assessments of existing green assets, Augusto & Co. hereby posits that Embu County consider the following recommendations in the near term:

**Table 7: Recommendations to the Embu County Government**

Section	Recommendations
<b>County credit risk assessment</b>	<ul style="list-style-type: none"> <li>Embu County's overall revenue profile requires improvement mainly in fully automating its own source revenue collection by providing an online one-stop collection portal for licenses, land rates, business permits and market fees, among other levies. This will also help to address challenges associated with revenue leakages.</li> <li>Embu County's overall expenditure profile requires improvement, particularly in reducing payroll expenses, which have consistently exceeded the 35% statutory threshold.</li> <li>Embu County can explore alternative financing options such as the debt capital markets to fund capital development projects as macroeconomic headwinds have placed significant pressure on the Government of Kenya's finances, which would ultimately limit near-term funds available for developing infrastructure projects.</li> <li>Embu County should explore the option of soliciting an independent external auditor to audit its financial statement</li> </ul>
<b>Green asset and activity assessment</b>	<ul style="list-style-type: none"> <li>The Embu County Government needs to increase public sensitization on reforestation and afforestation, especially in the lower side of Embu which is Mbeere North and Mbeere South.</li> <li>Provision of green infrastructure (street lighting, water and waste management) and incentives to attract investments in manufacturing and value addition to products.</li> <li>Increase investment in County infrastructure to promote tourism activities, which will enhance related revenue.</li> <li>Awareness of climate change impact and policies to ensure the protection of the natural ecosystem</li> <li>Implement a deliberate policy of energy efficiency at government offices, schools, hospitals, markets and street lighting.</li> </ul>
<b>County green assets and climate related legislations</b>	<ul style="list-style-type: none"> <li>There is a need to create awareness in the communities on climate change plans and impacts by leveraging various stakeholders.</li> <li>Enforce compliance with established county laws and policies relating to climate change.</li> </ul>
<b>Green finance capability assessment</b>	<ul style="list-style-type: none"> <li>Capacity building of County Staff in all departments on climate change and green finance</li> <li>Capacity building and awareness for key stakeholders such as Members of County Assembly (MCAs), civil society organisations (CSOs), community-based organisations (CBOs) and private actors in the County.</li> <li>General County-wide awareness and sensitization on the impact of climate change and how the citizens can support government efforts in restoring the natural ecosystem.</li> </ul>

In our opinion, the County will be properly positioned to implement the suggested green projects if the following steps are pursued in the near to medium term;

- Development of Concept Notes for the various suggested projects by relevant County Stakeholders
- Undertake feasibility and viability studies on proposed projects as well as cost-benefit analysis
- Obtain requisite approvals (County Executive and Assembly) for the selected projects
- Design and develop approved projects in tandem with sustainability standards
- Obtain relevant County and National Government approval to raise finance to fund projects
- Subject proposed projects to green verification standards such as the Climate Bonds Standards
- Issue green County instruments to raise funds to

execute projects

- Monitor utilization of proceeds and report on use and impact on the environment and the welfare of the citizens.
- Alternatively, Embu County can utilize a special purpose vehicle (SPV) to ring-fence the green assets to raise funds from the green finance market to execute priority infrastructure projects or partner/support private enterprises in the County (with the provision of land, infrastructure and incentives) to access the green finance market to finance identified green projects, especially in the agro-processing and value additions to agricultural produce.

To support the growth of the green finance market, we believe that the national government has a key role to play through:

Provide green finance legislation that are relevant to counties and are applicable to the green finance market

Provide fiscal incentives for entities that issue green bonds to encourage sustainable investments in the country, especially at the county level.

Build capacity around the green economy particularly for key internal stakeholders in the national government.

Figure 49: Recommendations to the national government



# Appendices

## 9.1 Embu County profile summary

No	Indicator	County 2022	National 2022
1.	Estimated County Population	608,599 (KNBS, 2019)	1.3% of the total country's population
	Males	304,208	50.0%
	Females	304,367	50.0%
	Intersex	24	0.0%
2.	Estimated Population Density (persons/km <sup>2</sup> )	216	82
3.	Persons with disability (%)	3.0	2.2
4.	Population living in rural areas (%)	87.5	68.8
5.	Children (0-14 years) (%)	31.3	41.1
6.	Youth 15-35 years (%)	36.0	25.6
7.	Labour force (15-64 years) (%)	62.3	51.2
8.	Elderly population (over 65-year-old)	6.4	3.5
9.	Poverty (%)	28.2 (2015/2016)	36.1
10.	Food Poverty (%)	28.3 (2015/2016)	31.9
11.	Stunted children %	26.8	19
12.	Gross County Product (Kshs Million)	153,927 (2020)	1.6% Share of total GDP (2022)
13.	Average growth of Nominal GCP/GDP (%)	9.5 (2013-2020)	15.30%
14.	GCP per capita (Kshs)	252,920.23	179,021.60
15.	Percentage of children under 1 year of age fully immunized	93.3%	84%
	Child Mortality Rate (CMR)	26.3/1000	31.7/1000
	Under Five Mortality Rate (U5MR)	42.4/1000	52/1000
16.	Maternal Mortality Rate	244/100,000	355/100,000
	Percentage of deliveries conducted by skilled attendants in health facilities	94.7%	60%
	Percentage of pregnant women attending at least 4 ANC visits	-	42%
17.	Latrine coverage	-	85%
	Open Defecation Free (ODF) rate	-	10%
18.	Doctor Population Ratio	-	1:16000
	Nurse Population Ratio	-	1:1034
19.	Health workers per 10,000 population	21	13.8
20.	Health Insurance Coverage	32.7%	6%

No	Indicator	County 2022	National 2022
21.	The proportion of HHs accessing safe drinking water (%)	67.9	56.0
22.	The proportion of HHs accessing improved sanitation services (%)	90.4	82.5
23.	Tree cover	29.28%	12.13%
24.	Average farm size (Small scale) (ha)	0.8	0.04
25.	Average farm size (Large scale) (ha)	2.7	8.9

Source: KNBS and County Integrated Development Plan (2018 - 2022 and 2023-2027)

## 9.2 Three year financial summary Embu County Government

REVENUE & EXPENDITURE	2020/2021		2021/2022		2022/2023	
	KES'mns	%	KES'mns	%	KES'mns	%
<b>REVENUE</b>						
Centrally Distributed Revenue						
Share of Exchequer releases (Equitable Share)	4,674.6	73%	4,715.2	81%	5,535.3	81%
Share of Exchequer releases (Donor & Grant Funds)	383.4	6%	291.7	5%	344.2	5%
Other Capital Receipts (other government entities)	481.9	8%				
CRF Returns/Reallocation budget	496.6	8%	392.2	7%	305.2	4%
Centrally Generated Revenue (CGR)	6,036.4	94%	5,399.1	93%	6,184.7	90%
County-Owned Source Revenue						
Asset sales	-		-		-	
Investment Income	-		-		-	
Others - licenses, permits, fines & fees	375.3	6%	394.5	7%	678.6	10%
County Own Source Revenue (OSR)	375.3	6%	394.5	7%	678.6	10%
<b>TOTAL REVENUE</b>	6,411.8	100%	5,793.7	100%	6,863.3	100%
Direct Donations and Grants Receipts	-		-		-	
<b>TOTAL REVENUE &amp; GRANTS</b>	6,411.8		5,793.7		6,863.3	
<b>EXPENDITURE</b>						
Transfers (County Assembly, others)	1,287.7	21%	889.7	16%	878.7	14%
Interest Payments	-		-		-	
Departments Expenditure	4,788.9	79%	4,625.4	84%	5,235.3	86%
<b>TOTAL EXPENDITURE</b>	6,076.5	100%	5,515.2	100%	6,114.0	100%
<b>Department's expenditure comprises</b>						
<b>Personnel costs</b>	2,712.8	45%	2,887.7	52%	3,160.0	52%
<b>Purchase of goods &amp; services</b>	681.2	11%	535.0	10%	893.3	15%
<b>Capital expenditure</b>	1,172.6	19%	942.7	17%	1,182.0	19%
<b>Other Payments (contingency, scholarship, subsidies, etc)</b>	222.3	4%	260.1	5%	-	
<b>Total Departments Expenditure</b>	4,788.9	79%	4,625.4	84%	5,235.3	86%
<b>Foreign loan balance</b>	-		-		-	
<b>Domestic loan balance</b>	-		-		-	
<b>Total Pending Bills</b>	1,816		2,240		1,370	
<b>AUDITORS OPINION</b>	Qualified		Qualified		Unaudited	

KEY RATIOS	2020/2021	2021/2022	2022/2023
Revenue			
OSR as % of GCP	0%	0%	0%
Centrally Generated Revenue as % of GCP	4%	3%	3%
Total revenue as % of GCP	4%	3%	4%
OSR as % of total revenue & grants	6%	7%	10%
Centrally Generated Revenue as % of total revenue & grants	94%	93%	90%
Growth in Centrally generated revenue	15%	-11%	15%
Spending			
Total Expenditure as % of GCP	4%	3%	3%
Non-discretionary expenditure* as % of Centrally generated revenue	66%	70%	65%
Capital expenditure as % of total expenditure	19%	17%	19%
Payroll as % of revenue	42%	50%	46%
Overheads as a % of revenue	11%	9%	13%
Budget balance/revenue	5%	5%	11%
Leverage			
Budget balance (Ksh'mns)	335.22	278.53	749.33
Debt as % of nominal GCP			
Interest payments as % of total revenue			
Principal due as % of Revenue			
Financial flexibility			
Discretionary revenue** as % of total revenue	38%	35%	41%
Net Debt as % of Free Cash Flow ***	-21%	-16%	-2%
Non-discretionary expenditure as % of total expenditure	66%	68%	66%
Outstanding Debt/Revenue			
* Non-discretionary spending is made up of statutory transfers, interest payments and personnel costs			
** Discretionary revenue is total revenue minus non-discretionary spending			
*** Free cash flow is defined as revenue minus non-discretionary spending			



### 9.3 Rating definitions

<b>Aaa</b>	A county with the best financial condition and the strongest capacity to meet obligations as and when they fall due relative to all other issuers in the same country.
<b>Aa</b>	A county with a very strong financial condition and a very strong capacity to meet obligations as and when they fall due relative to all other issuers in the same country.
<b>A</b>	A county with a good financial condition and a strong capacity to meet obligations as and when they fall due relative to all other issuers in the same country.
<b>Bbb</b>	A county with a satisfactory financial condition and adequate capacity to meet obligations as and when they fall due relative to all other issuers in the same country.
<b>Bb</b>	A county with a satisfactory financial condition but limited capacity to meet obligations as and when they fall due relative to all other issuers in the same country.
<b>B</b>	A county with a weak financial condition and weak capacity to meet obligations as and when they fall due relative to all other issuers in the same country.
<b>C</b>	A county with a very weak financial condition and very weak capacity to meet obligations as and when they fall due relative to all other issuers in the same country.
<b>D</b>	County in default.

#### Rating Category Modifiers

A "+" (plus) or "-" (minus) sign may be assigned to ratings from 'Aa' to 'C' to reflect a comparative position within the rating category. Therefore, a rating with a + (plus) attached to it is a notch higher than a rating without the + (plus) sign and two notches higher than a rating with the - (minus) sign.

## 9.4 List of stakeholders engaged during the workshops

### Day 1

Institution Name	Designation of Attendees
Embu County Government	Chief Officer, Environment
Embu County Government	Chief Officer, Finance
Embu County Government	Chief Officer, Resource Mobilization
Embu County Government	Chief Officer, Medicals
Embu County Government	Chief Officer, Trade and Tourism
Embu County Government	Chief Officer, Education
Embu County Government	Chief Officer, Lands
Embu County Government	Chief Officer, Cooperatives
Embu County Government	Chief Officer, Livestock
Embu County Government	Chief Officer, Agriculture
Embu County Government	Director, Climate Change
Embu County Government	Director, Energy
Embu County Government	Director, Tourism
Embu County Government	Director, Trade
Embu County Government	Environment Officers
Embu County Government	Forest Officers
Embu County Government	Livestock Officer

### Day 2

Institution Name	Designation of Attendees
Embu County Government	Director, Climate Change
Embu County Government	Director, Environment and Natural Resources
Embu County Government	Director, Planning
Kiang'ombe Community Forest Association	Representative
Climate Pal	Representative
Embu County Environment Committee	Members
Green Initiative (GEIN)	Member
Mwietheri Sacco Society Ltd	Secretary
Kamabunda Community Based Organization	Chairperson
Transitec Eco Solutions Community Based Organization	Chairperson and Member
The Duty of Care	Founder
Kirie/ Rwonjoga Community Based Organization	Chairperson
Nature Kenya	Project Officer
Hindu Community Kiriwam Etotical Ltd	Director
Ambassador of Nature Kenya	President

### Day 3

Institution Name	Designation of Attendees
Embu County Government	CECM Water, Irrigation, Environment, Climate Change and Natural Resources Department
Embu County Government	Chief Officer, Water, Irrigation, Environment, Climate Change and Natural Resources Department
Embu County Government	Representatives from the Water, Irrigation, Environment, Climate Change and Natural Resources Department
Embu Level 5 Hospital	Chief Executive Officer (CEO)
Runyenjes Milk Cooling Plant	Plant Manager

## 9.5 List of key documents accessed

### List of Documents Accessed

Embu County Integrated Development Plan (CIDP) 2018-2022 and 2023-2027
Controller of Budget Performance Report over five years 2017/18 to 2022/23
County Government's Budget Implementation Review Report from 2017/18 to 2022/23 by the Office of the Controller of Budget
2019, Kenya Population and Housing Census
Embu County Governor's Manifesto
Kenya Integrated Household Budget Survey 2015/2016
Gross County Product 2023 Report
Embu County Bills, Plans and Policies
Public Finance Management Act 2012
Financial Statements of Embu County from 2017/18 to 2022/23
Extract of the Auditor General of Kenya's Audit Opinion on Embu County for the year ended FY 2020/21 -22
The Public Finance Management (County Governments) Regulations, 2015
Embu County Government 2022-2027 Plan
Embu County Quarterly Reports and Financial Statement for 1ST Quarter Ended 30 September 2020
County Fiscal Strategy Paper FY 2020/21 – 2023/24











📍 Riverside Green Suites  
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