Green finance assessment of Vihiga County

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Creating value through inclusive finance

Green finance **assessment of** Vihiga 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.

Current FSD Kenya funders are UK International Development, the Swedish International Development Cooperation Agency (Sida), The International Fund for Agricultural Development (IFAD), and the Bill & Melinda Gates Foundation.

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Acknowledgement

This report is the result of the partnership, expertise, and work of numerous specialists from FSD Kenya, Agusto & Co., ADA Consortium, The National Treasury and Economic Planning, The Capital Markets Authority, the Nairobi Securities Exchange, and the County Governments of Embu, Kirinyaga, Kisumu, Laikipia, Nairobi City, Makueni, Nandi, Taita-Taveta, Vihiga, and Wajir.

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 Vihiga provided valuable insight on the dynamics and opportunities in their county on green finance. The vision of the County Government of Vihiga is to be a Prosperous and Model County in Kenya, with a mission to transform Vihiga County to a prosperous County through implementation of impactful development programmes and projects and fostering good governance practices. This assessment is well aligned with the theme of the County Government of Vihiga which is 'accelerating socio-economic transformation for a more competitive, inclusive and resilient economy'.

FSD Kenya commissioned Agusto & Co. Limited as the lead consultant for this project. Agusto & Co. is registered as a credit rating agency by the Kenyan and Rwandan Capital Markets Authorities and the Securities Exchange Commission in Nigeria. Agusto & 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 Vihiga County

3.1 Macroeconomic analysis

Vihiga County ("the County" or "Vihiga") is situated in the Western region of the country and borders the following counties: Nandi to the East, Kisumu to the South, Siaya to the West and Kakamega to the North. Vihiga County covers an area of 563.7 square kilometres and is located in the Lake Victoria Basin in the Western Kenya Region. The geographical formation of the County is composed of Kavirondian and Nyanzian rocks notable being the Bunyore and Maragoli Hills. The main rivers and streams are Yala, Esalwa, Erjordan and Egalagoli all draining into Lake Victoria.

Vihiga County is also a member of the Lake Region Economic Bloc (LREB) comprising thirteen (13) other counties namely; Kisumu, Migori, Homabay, Nyamira, Kisii, Siaya, Bungoma, Siaya, Kakamega, Vihiga, Busia, Bomet, Trans-Zoia and Kericho.

The activities of LREB through policy harmonization and resource mobilisation is aimed at spurring economic development amongst member counties.

Figure 1: Map of Kenya - Vihiga County

Source: e-limu

The County consists of five sub-counties which are further subdivided into 25 assembly wards as noted in table 1 below.

Table 1: Sub-County and Assembly Wards of Vihiga County

S/N	Sub-County	Assembly Wards
1	Hamisi	Tambua, Banja, Jepkoyai, Shiru, Muhudu, Shamakhokho, Gisambai
2	Sabatia	Chavakali, Busal, Wodanga, Sabatia West, North Maragoli, Lyaduywa/Izava
3	Vihiga	Lugaga/Wamuluma, Central Maragoli, South Maragoli, Mungoma
4	Emuhaya	North East Bunyore, Central Bunyore, West Bunyore
5	Luanda	Luanda Township, Luanda South, Emabungo, Mwibona, Wemilabi

Source: County Website

3.1.1 Population size and structure

According to the last census conducted in 2019, the population of Vihiga was 590,013, which represents a 6% growth from the last census conducted in 2009.

Based on the County Integrated Development Plan (CIDP) 2023–2027, the population of Vihiga which was estimated at 606,044 is expected to reach 634,074 persons by 2027[1]. The gender structure of Vihiga is split between 52% female and 48% male.

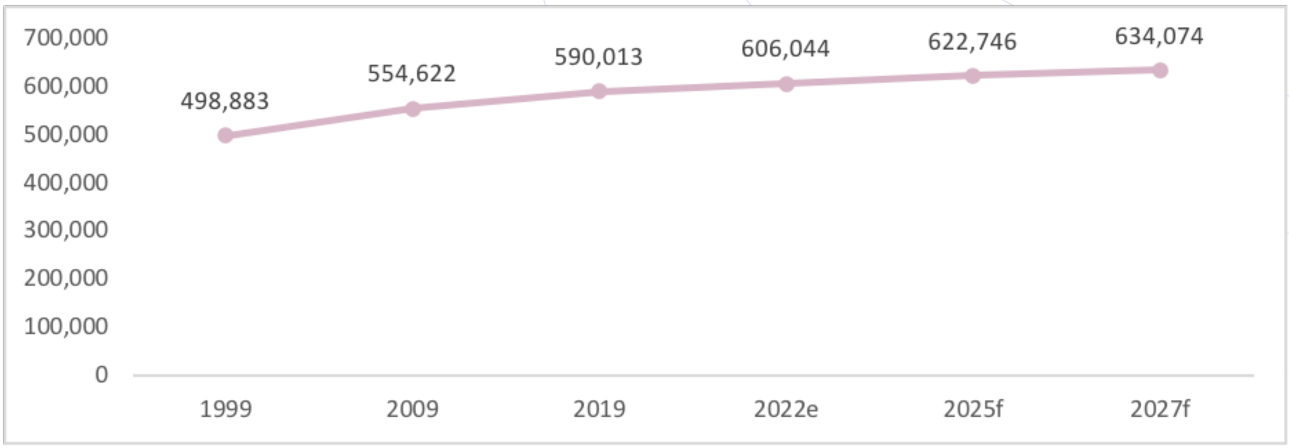


Figure 2: Total population in Vihiga

Source: Kenya National Bureau of Statistics & Agusto & Co. Research

The population density in Vihiga County is 1,047 persons/Km2 and it is estimated that by 2027 the density of the County will be at 1,125 persons/Km^2 [2]. Furthermore, our analysis reveals that over 90% of the population is in rural settlements, however, there is a gradual increase in rural-urban migration, especially in the urban centres such as Majengo, Mbale and Luanda due to the prospects of employment and access to better social service amenities.

3.1.2 Level of employment and economic diversification

The major activities that drive the Vihiga County economy are; cottage industries, small-scale subsistence farming which includes crop and livestock farming, tea farming, wholesale and retail trade, quarrying and mining. Agriculture remains the mainstay of the economy of the County with approximately 80% of the inhabitants directly or indirectly depending on the sector.

Vihiga County has a poverty index of 38.6%, compared to a national index of 33.4%[3] as at 2022. The County's food poverty index is estimated to be 30.2%, while extreme poverty is estimated to be 7.6% according to the 2022 County statistics. The County government has made significant efforts to reduce poverty though measures such as the promotion of agribusiness, infrastructure development, enhancing trade and enterprise as well as social support programmes amongst others.

The economically active population (15-64 years) in Vihiga County constitutes the labour force and accounts for more than 53% of the County's population. The unemployment rate in the County is estimated to be around 19%[4]. This necessitates the development of a strategy to address the issue of unemployment through effective employment and job creation policies, which must be accompanied by increased investment in productive sectors to grow aggregate demand and thus stimulate the economy. Since Vihiga County is a member of the Lake Region Economic Bloc (LREB), the regional bloc seeks to stimulate economic growth through policy alignment and resource mobilization.

[1] Vihiga County Integrated Development Plan 2023 -2027
[2] Vihiga County Integrated Development Plan 2023 -2027
[3] Kenya Integrated Household Budget Survey 2015/2016
[4] Kenya Population and Housing Census Volume I: Population by County and Sub-County

3.1.3 Macroeconomic variables

Vihiga County contributed 0.8% of Kenya's National gross domestic product (GDP) according to the Gross County Product (GCP) 2023 report. The County economy expanded in 2022 with Kshs 101.1 billion as GCP, up from Kshs 90.6 billion in 2021. It is expected that the economy will expand by about 11.1% in 2023 and 2024 based on the growth trajectory recorded in the previous five years as well as the strategies being implemented to expand various sectors according to the 2023-2027 County Integrated Development Plan.

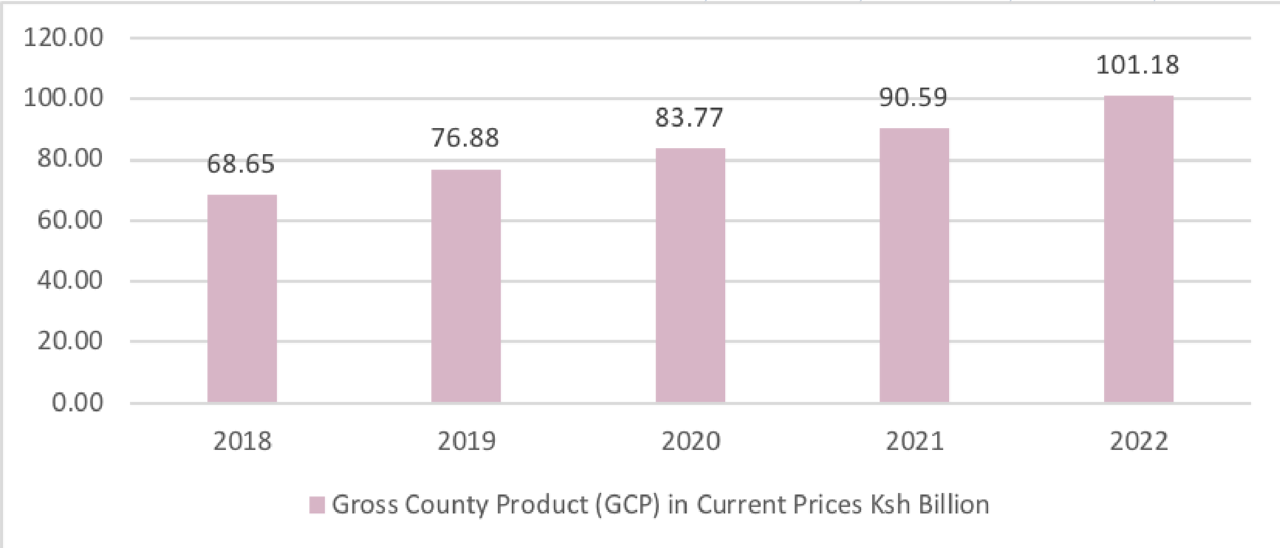


Figure 3: Vihiga Gross County Product (GCP) in current prices

Source: Gross County Product 2023 Report, KNBS

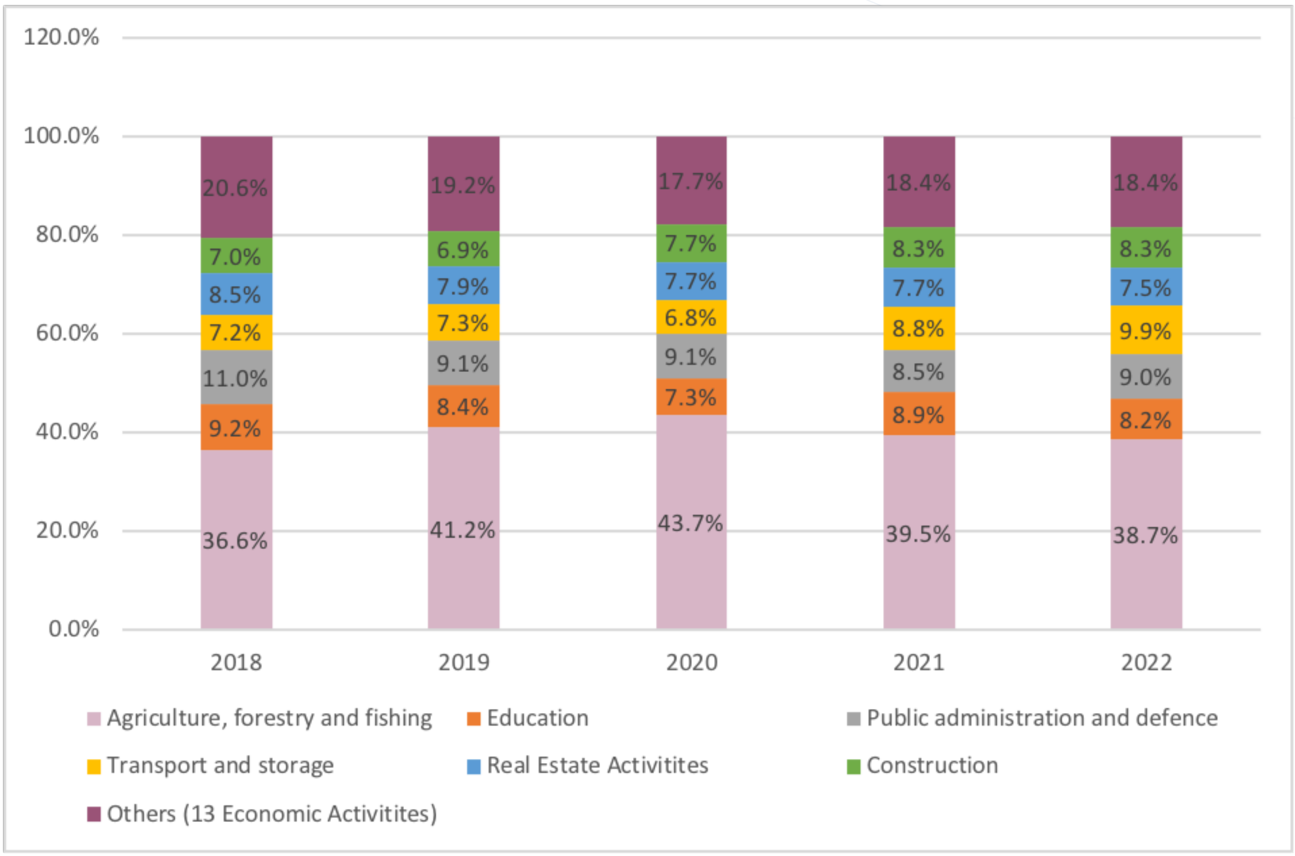


Figure 4: Gross County Product contribution by economic activity

Source: Gross County Product 2023 Report, KNBS

In 2022, Vihiga County's economy recorded better performance mainly in the transport and storage sector, public administration and defence sector, construction sector and the agriculture, forestry and fishing sector supported by the rebound in most economic activities that had contracted significantly previously due to measures instituted to curb the spread of COVID-19.

Key sectoral analysis

Agriculture, livestock and fisheries

Agriculture is the backbone of the county's economy, accounting for more than 38% of the gross county product (GCP) and 80% of both direct and indirect employment. Despite its central role, the agricultural sector continues to face challenges in terms of productivity due to the effects of climate change such as prolonged periods of low rainfall, land use, markets and value addition. The sector's growth slowed significantly in the first half of FY2021/22 due to erratic rainfall patterns, the use of low-quality seeds and inadequate farm inputs.

The County Integrated Development Plan (CIDP) 2023-27 proposes the following key strategic initiatives to achieve the overall goal of an innovative commercially-originated and modern farm and livestock sector, as well as food and nutrition security: provision of subsidized farm inputs; increased market access and value addition; transforming land use and enhanced soil testing; promotion of agribusiness with a focus on youth and women; promotion of agroforestry and fruit tree farming; and promotion of agriculture. Other high-priority investments in the sector will go towards supporting the growing of avocadoes and African leafy vegetables, dairy, goat, poultry, apiculture and fish production. These initiatives will stimulate the agricultural sector's growth by addressing issues such as insufficient farm inputs, which contributed to slow growth in the previous year.

Transport and infrastructure

The transportation sector, which accounts for 9.9% of the county's GCP, plays an important role as a driver and enabler of economic growth by providing the infrastructure on which the economy relies to move goods and sustain development. The County has committed to routine maintenance of 200 kilometres of roads, completion of 8 footbridges, opening of 50 kilometres of new access roads and street lighting of 10 markets to ensure a 24-hour economy on the back of Vihiga County Medium Term 2024 Fiscal Strategy Paper implementation plan, which if executed successfully will result in significant improvement in the welfare of the citizens. To improve the institutional capacity of infrastructure, the County will need to develop roads and transport regulations to operationalize the legislation in place.

Public administration and defence

The sector contributed 9% of the County's GCP as of the end of 2022. The Vihiga County Integrated Development Plan envisioned a County public service that is focused, efficient, results-oriented, and responsive to people's needs and aspirations. In the implementation of CIDP 2018 -2022, reforms in public sector management were put in place, including the restructuring of county governments, the implementation of a performance management framework, service re-engineering, and service charters. Going into the future improvement in service delivery is expected as a result of implementing the strategies outlined in the 2023-2027 CIDP, which includes promoting interdepartmental coordination mechanisms through coordination committees and promoting good governance and decentralization of administrative services among other factors.

Construction

The level of construction activities in the County has been on the rise evidenced by the increase in the sector GCP contribution to 8.3% in 2022 from 7% in 2018. There has also been an emphasis on the application of appropriate building technologies in addressing acute shortages and high cost of housing through training, community sensitization and collaborating with training institutions and development partners. Given the County's goal of increasing the number of decent houses for its citizens, the construction sector will continue to grow in the future.

Education and training

The provision of quality education, training, science, technology, research and skills development is imperative to build a just and cohesive community that contributes to socio-economic development. The education and training sector accounted for 8.2% of the County's GCP with the literacy rate standing at 88.5%[5] as of 2022. Vihiga County plays host to several educational institutions including primary schools (455), early childhood development centres (930), secondary schools (164), adult learning centres (107) and technical and vocational training centres (34) as at the end of 2022. The County also hosts the Kaimosi Friends University College (KAFUCO) which is a fully-fledged university after being awarded a charter in August 2022. With the introduction of the Competence Based Curriculum (CBC) by the national government in 2017, investments in the sector by the County will be directed toward the provision of appropriate learning materials, facilities and human resources to effectively implement the curriculum at all levels. Vihiga County is on course to improve its literacy rate position on the back of the effective geo-spatial mapping that has been done of all the educational centres to understand the gaps and seek viable solutions to rehabilitate education infrastructure in the County.

Real estate

The real estate sector contributed 7.5% to the Vihiga County GCP[6]. Over the years, there has been a rising demand for housing in various locations in Vihiga County including Majengo, Mbale and Luanda. Further growth in the sector is expected due to the County government's efforts to develop new affordable housing schemes, especially in Central Maragoli and renovate dilapidated civil servants and institutional houses across the County in the near term.

[5] Vihiga County Integrated Development Plan 2023 - 2027
[6] Gross County Product 2023

3.1.4 Level of infrastructure

At the start of the implementation of the CIDP 2018-2022, Vihiga County's total road network was 1,058.2 Km with a bitumen surface covering 201.5 Km, a gravel surface of 373.7 Km and an earth surface of 483 Km[7]. Pursuant to the implementation of the CIDP, the road network coverage improved from 70% to 85% through the opening up of 543 Km of new roads while maintaining and rehabilitating 320 Km of road. The transport sector improved road connectivity by increasing the number of bridges and river crossings constructed from 15 in 2017 to 46 in 2022 and installation of 46 high mast flood lights across the County[8].

The county has a 20-kilometre railway line with one station in Luanda that is not in use. Vihiga County lacks an operational airstrip as the erstwhile Kaimosi airstrip is closed and its residents rely on neighbouring counties (Kakamega and Kisumu) for flight services. There are 16 post offices and four private couriers across the County as per the 2023-2027 CIDP, with the coverage of the mobile phone network standing at 80%. However, some areas of the County have poor network coverage due to the terrain.

There are five commercial bank branches in the County, namely Kenya Commercial Bank, Equity Bank, Cooperative Bank, Post Bank and Absa Bank. In addition, Rafiki Microfinance Bank and Kenya Women Microfinance Bank Plc have branches in Vihiga County alongside 46 registered SACCO branches. According to the FinAccess Household Survey County Perspective, November 2022 report, at least 15% of micro, small & medium enterprises (MSMEs) in Vihiga County used formal financial services and products as the main source of finance. Despite the presence of financial institutions in the County, credit remains a major issue for MSMEs that require financing to scale their business operations.

The major towns in the Vihiga (Mbale, Luanda, Chavakali, Hamisi and Majengo) are being redeveloped by designating parking spaces, installing streetlights, availing firefighting services and constructing various social amenities towards upgrading them to urban centres.

3.2 Fiscal assessment

3.2.1 Governance structure

Vihiga County Government comprises two arms, namely the County Assembly and the County Executive. The executive arm of the County Government is made up of the Governor, the Deputy Governor, County Executive Committee Members and the County Public Service Board (which primarily handles the County's human resource management). The Governor appoints County Executive Committee members (CECM) 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.

[7] Vihiga County Integrated Development Plan 2018 - 2022
[8] Vihiga County Integrated Development Plan 2023 - 2027

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.

Table 2 below shows the key personnel in Vihiga County's executive arm;

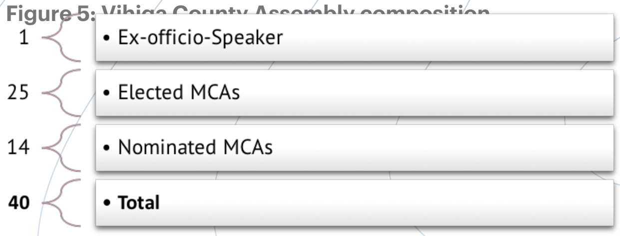
Table 2: Key county executives in Vihiga

	Name	Designation
1	H.E Dr. Wilber K. Ottichilo	Governor
2	H.E. Wilberforce Kitiezo	Deputy Governor
3	Mr. Ayiego Ezekiel Maleya	County Secretary
4	Dr. Jairus Boston Amayi	CECM – Finance and Economic Planning
5	Prof. Mike Amuhaya Iravo	CECM - Public Service Administration and Coordination of County Affairs, ICT and E-governance
6	Mr. Julius Maruja Kiboen	CECM – Physical Planning, Land, Housing and Urban Development
7	Ms. Grace Kanguha	CECM - Trade, Industry, Tourism and Entrepreneurship
8	Mr. Nicholas Kitungulu Ligayo	CECM - Agriculture, Livestock, Fisheries & Cooperatives
9	Ms. Anne Desma Chilande	CECM – Environment, Water, Energy and Natural Resources
10	Dr. Nicholas Kadaga Mwandihi	CECM – Health Services
11	Mr. Meshack Onzere Mulongo	CECM – Youth, Gender, Sports, Culture and Social Services
12	Dr. Ruth M'mbwaya Agesa	CECM - Education, Science and Technical Vocational Training
13	Mr. Joseph Lunani Karungani	CECM – Transport & Infrastructure

Source: Vihiga 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 county's 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 Speaker, who also serves as Chairman of the County Assembly Service Board, leads the County Assembly. The Vihiga County Assembly is made up of the following members:

Figure 5: Vihiga County Assembly composition



Source: Vihiga County Statistical Abstract

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

Table 3: Vihiga County Elected Members of the County Assembly 2022

	Elected Member of County Assembly (MCA)	Ward
1	Hon. Vincent Atsiaya Mwatia	Wodanga Ward
2	Hon. Yalwala Gladys Inyanje	Chavakali Ward
3	Hon. Esipirah Aineah Hellam	North East Bunyore Ward
4	Hon. Abudiku Duncan Nkrumah	Izava – Lyaduywa Ward
5	Hon. Amunyanyi Boniface Shanga	Muhudu Ward
6	Hon. Anguche Zakayo Manyasa	Mwibona Ward
7	Hon. Collins Anyanje Ayugu	Banja Ward
8	Hon. CPA Gaduve Caleb Ndolo	Jepkoyayi Ward
9	Hon. David Onjiri Nabakwe	Luanda Township Ward
10	Hon. Dominic Evusa Baraka	North Maragoli Ward
11	Hon. Dr. Fredrick Mavisi Muhindi	Lugaga Wamuluma Ward
12	Hon. Franklin Muhindi Gidali	West Sabatia Ward
13	Hon. Karega Mboku Manoah	Majority Leader Tambua Ward
14	Hon. Kegode Florence Anganoi	Busali Ward
15	Hon. Mwangu Kelvin Elegwa Njiro	Luanda South Ward
16	Hon. Mugata Albert Ala	Mungoma Ward
17	Hon. Muhiga Richard Shugh	Shamakhokho Ward
18	Hon. Mwashi David Lusava	Shiru Ward

	Elected Member of County Assembly (MCA)	Ward
19	Hon. Obamo Erick Odei	Deputy Speaker Gisambai Ward
20	Hon. Okoba Michael Katai	Emabungo Ward
21	Hon. Osore Wimsey Manoah	West Bunyore Ward
22	Hon. Patrick J.O. Akhwale	Wemilabi Ward
23	Hon. Patrick Kigumba Mahagwa	South Maragoli Ward
24	Hon. Paul Tirra Ananda	Central Bunyore Ward
25	Hon. Pauline Engesha Amwata	Central Maragoli Ward

Source: County Assembly Website

3.2.2 Finances of the Vihiga County Government

According to the Office of the Controller of Budget FY2022/23 Report, the total revenue generated by Vihiga County at the end of the fiscal year 2022/23 was Kshs 6.68 billion, representing a growth of 21.8% from the previous period. In the review period, the County received Kshs 5.47 billion (82%) as an equitable share of national revenue, Kshs 241.34 million (3.6%) in own-source revenue, Kshs 146.93 million (2.2%) in conditional grants, and had a cash balance of Kshs 816.83 million (12.2%) from the previous year. In the fiscal year 2022/23, the County's own source revenue represented a marginal increase of 0.2% from the prior year and represented 84.9% of the annual budget allocation. The County intends to fully automate its revenue collection system in the fiscal year 2023/24.

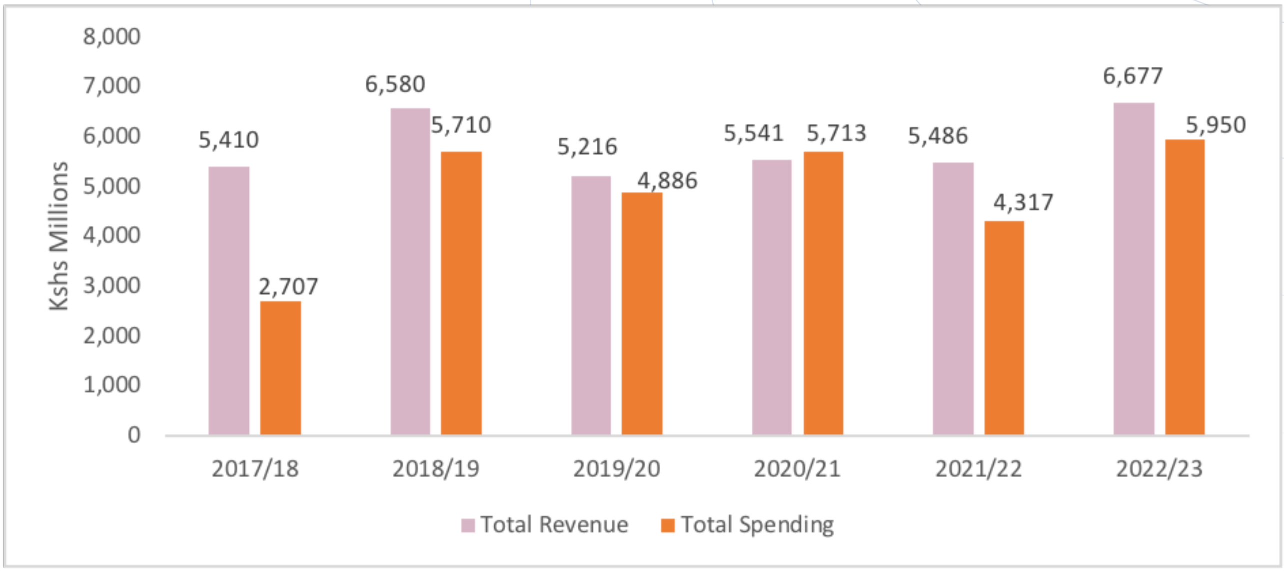


Figure 6: Government revenue vs spending of Vihiga County (2017/18 -2022/23) – Ksh'millions

Source: Office of the Controller of Budget

The county government spent Ksh 5.95 billion during the review period, which was 37.8% higher than FY 2021/22. This was elicited by a significant increase in the county's capital spending by 125.7%. In the fiscal year 2022/23, expenditure on development programs was Ksh 1.46 billion (24.5%), while expenditure on recurring programs was Ksh 4.49 billion (75.5%).

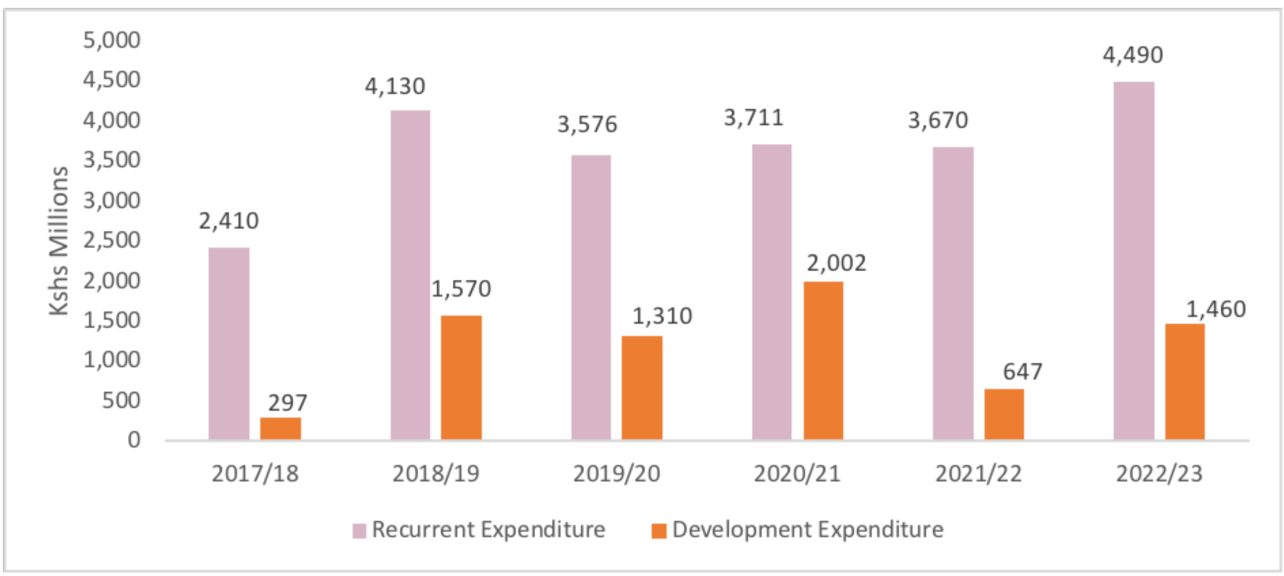


Figure 7: Breakdown of Vihiga's Government spending (2017/18-2022/23)

Source: Office of the Controller of Budget

Vihiga County Government typically spends more on recurring expenses such as employee salaries, operating costs, and other maintenance costs. Regulation 25 (1) (b) of the Public Finance Management (County Governments) Regulations, 2015 caps the County Government's wage and benefit expenditure at 35% of total revenue. In the fiscal year 2022/23, Vihiga County spent 37.8% of its annual realised revenue on employee compensation, exceeding the set limit. Personnel emoluments totalling Ksh 2.29 billion were processed through the Integrated Personnel and Payroll Database (IPPD) system, while manual payrolls totalled Ksh 235.3 million[9]. The manual payroll accounted for 9.3% of total personnel costs, with the County citing a lack of unified personal numbers as the reason for not processing all salaries in the IPPD system.

Revenue collection mechanism

Vihiga County has 22 own source revenue streams across various sectors. The key streams that contributed to the County's own source revenue in FY 2022/2023 include; Bus Park (37%), Single Business Permits (24%), Market (19%), wall & vehicle branding (12%) and house rent (8%). The County has mainly used a manual collection system which has negatively affected the effectiveness and efficiency of local revenue collection. To streamline revenue management processes, Vihiga County automated revenue collection streams for market and parking fees in 2018. Furthermore, the County has continued to automate its revenue collection system, and by the end of 2023, the majority of income streams had been automated. Other measures being implemented by the County to increase own-source revenue collection include hiring more revenue clerks and training revenue collection officers. Following the implementation of these measures, the County Government anticipates an increase in own source revenue collection to Kshs 500 million in FY 2023/24.

3.2.3 Vihiga County's debt profile

Vihiga County has not taken on debt before, so there were no commercial debt balances in its financial statement for the fiscal year ending 30 June 2023. Nonetheless, the county had pending bills totalling Ksh 1.25 billion at the beginning of FY 2022/23, which consisted of Ksh 386.1 million for recurrent expenditure and Ksh 868.8 million for development activities. By the end of FY 2022/23, pending bills totalling Ksh 740.6 million had been settled, with Ksh 289.9 million for recurrent expenditure and Ksh 450.7 million for development programs. Furthermore, the County had accumulated pending bills amounting to Ksh 836.5 million in the FY 2022/23, leaving a total outstanding balance of Ksh 1.35 million as of 30 June 2023[10].

3.2.4 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 the Vihiga 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 37.8% of annual realised revenue FY 2022/23. The COB advised the County Public Service Board to develop an optimal staffing structure to ensure compliance with Regulation 25 (1) (b) of the Public Finance Management (County Governments) Regulations, 2015. Furthermore, the County should devise strategies to address the escalating wage bill.
2. A high level of outstanding bills which stood at Ksh 1.35 billion at the end of the fiscal year 2022/23. In this case, the COB recommends that County leadership takes charge of the deteriorating pending bills situation to ensure that genuine bills are paid on time in the remaining financial year period.
3. Personnel emoluments totalling Kshs.235.3 million were processed manually, accounting for 9.3% 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 Vihiga County should expedite the acquisition of Unified Personnel Numbers for all employees.
4. Diversion of funds by the County Treasury and weak budgeting practice where the County incurred expenditure over approved exchequer issues in several departments. The COB advised that the County Treasury should improve the Vote Book and budgetary control to ensure expenditure is within the approved budget.

[9] County Governments Budget Implementation Review Report for the Financial Year FY2022/23
[10] County Governments Budget Implementation Review Report for the Financial Year FY2022/23

4 Credit risk assessment of Vihiga County

4.1 Rating rationale

- Agusto & Co. hereby assigns a "Bb-ken" shadow credit rating to the County Government of Vihiga ("Vihiga County", "Vihiga" or "the County"). The assigned rating reflects the County's stable political environment, improving governance framework driven by the deployment of a real-time Geographic Information System (GIS) 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) which accounted for 4% of total revenue in FYE 2022/23, high personnel expenses at 37.8% of revenue slightly 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.
- Vihiga is one of the counties located in the Lake Victoria Basin in the Western Region of Kenya which was created as a result of the 2010 Kenya Constitution which devolved powers to counties. The County has the second smallest land area (563.7 km2) in the country and a growing population with an estimated high density of 1,047 people per Km2 as at the end of 2022. Based on the 2023 Gross County Product (GCP) report by the Kenya National Bureau of Statistics (KNBS), Vihiga County's GCP was estimated at Ksh101.2 billion, representing about 0.8% of the Country's Gross Domestic Product (GDP). Although agriculture is the mainstay with approximately 80% of the inhabitants directly or indirectly depending on the sector, Vihiga County is currently implementing several initiatives to strengthen agricultural output despite the variability in rainfall patterns occasioned by adverse climate change impact.
- In the financial year ended 30 June 2023 (FY 2022/23), Vihiga County recorded a total revenue of Ksh5.72 billion which was 10% higher than the prior year due to an increase in equitable receipts distributed by the Exchequer in the period. The County's own-source revenue (OSR) in FY 2022/23 remained flat at Ksh241.4 million representing a low 4% of total revenue. Furthermore, we note that Vihiga County is yet to fully automate OSR collection, which we believe would help drive higher local incomes as well as minimize leakages as this is considered to be the most stable source of financing for a county. Notwithstanding, Vihiga like most counties, will continue to be reliant on the equitable share disbursements from the National Government through the Exchequer (which accounted for 93% of total revenue in FY2022/23) and we do not expect a material change in the revenue model in the near to medium term.
- In the financial year ended 30 June 2023, Vihiga County reported a total expenditure of Ksh5.63 billion (FY 2021/22: Ksh5.36 billion), comprising recurrent (78%) and development expenditure (22%). The County's personnel cost (including payroll costs of the County Assembly) is the largest expense component representing 37.8% of total revenue in FY 2021/22, 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%), Embu County (50.3%), 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 over the last three years is satisfactory in our view, representing a three-year (FY 2020/21 – 2022/23) average of 17%. Going forward, we expect the County's personnel expenses to revenue ratio to remain above the 35% threshold due to its large workforce, while the overhead cost to revenue ratio is projected to rise moderately on account of higher inflationary cost pressures.
- In FY 2022/23, Vihiga County spent Ksh1.23 billion on development activities which represented 22% of total expenditure - lower than the 30% minimum requirement as enshrined in Section 107 (2b) of the PFM Act. Going forward, we expect the County

to significantly increase capital spending in the short term in line with the FY 2023/24 development expenditure budget of circa Kshs2.41 billion (accounting for 35% of the Budget). However, Vihiga's significant 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. Therefore, the County will need to explore alternative financing options to complete existing projects as well as commence new flagship initiatives enshrined in the County Integrated Development Plan (CIDP) 2023 – 2027 which are expected to stimulate the growth of the economy in the short to medium term.

- As at the end of the 2022/23 fiscal year (30 June 2023), Vihiga County did not have any third-party borrowings either directly or through contingent liabilities. Based on the Controller of Budget FY 2022/23 report, Vihiga County's accumulated outstanding payables (pending bills) arising from contracted goods and services stood at Ksh1.35 billion as at 30 June 2023. Going forward, the County intends to grow its own source revenue to about Ksh300.5 million in FY 2023/24 on the back of continuing revenue mobilization initiatives and enhancing revenue management processes to improve sustainability and resilience. In our view, the OSR target can be improved upon as we believe that Vihiga County has huge potential to generate higher local incomes as well as diversify the economy beyond agriculture.
- Based on the above, we hereby attach a **stable** outlook to the County Government of Vihiga.

Strengths

- Stable political environment
- Improving governance framework driven by the deployment of a realtime Geographic Information System
- 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
- Huge accumulated pending bills year-on-year
- Low own source revenue which requires improvement

Opportunities

- Youthful population accounting for almost 50% of active labour workforce
- Scaling governance and adminstration on the back of a fully functional Geographic Information System
- Deepening of own source revenue using automated collection systems

Challenges

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

Figure 8: Strengths, Weaknesses, Opportunities and Challenges

4.2 Financial condition review

Analysts' comments

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

Revenue profile

Vihiga 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 quarterly 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.

In the financial year ended 30 June 2023 (FY 2022/23), Vihiga County's total revenue grew by 10% to Ksh5.72 billion (FY 2021/22: Ksh 5.21 billion) mainly due to higher equitable receipts distributed by the Exchequer in the period. To finance Vihiga's FY 2022/23 budget of Ksh 6.49 billion, the County expected to receive Ksh 5.1 billion as the equitable share of revenue raised nationally, Ksh319.8 million as conditional grants and to generate Ksh 284.1 million from own sources of revenue. However, the County received Ksh 5.33 billion as the equitable share of the revenue raised nationally (representing 108% of the budget), while conditional grants and own source revenue receipts were below the budget projections.

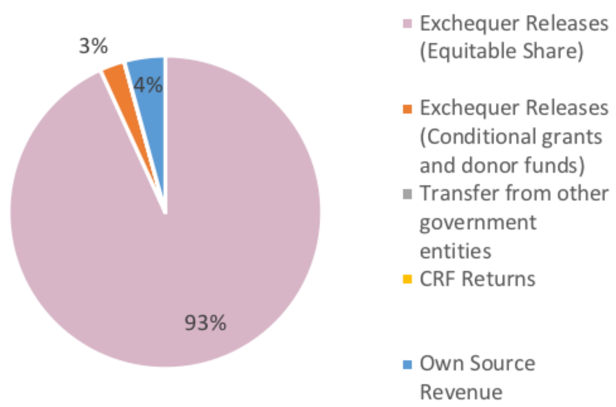


Figure 9: Breakdown of Vihiga County's revenue - FY 2022/23

A breakdown of FY 2022/23 total revenue shows that Vihiga's equitable share of income distributed by the Exchequer grew by 14% year-on-year to Ksh5.33 billion (accounting for 93% of total revenue), while conditional grants of Ksh146.9 million was significantly lower than the previous year (representing 3%) and returns to the County Revenue Fund from prior year unutilised balances and miscellaneous receipts stood at Ksh1.5 million accounting for less than 1% of total revenue. Table 2 below shows the details of centrally distributed funds received by Vihiga County over the last three years.

Figure 10: 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)	4,652.6	4,661.9	5,325.8	5,267.0
Exchequer releases (Conditional grants and donor funds)	719.6	240.5	146.9	969.1
Transfer from other government entities	-	15.0	-	-
CRF Returns	-	49.0	1.5	270.4
Total Centrally Generated Revenue	5,372.1	4,966.5	5,474.3	6,506.5

Source: Controller of Budget's County Governments Budget Implementation Review Report FY2022/23 & Vihiga County Fiscal Strategy Paper 2024

In the fiscal year ended 30 June 2023, Vihiga County's own-source revenue (OSR) remained at par with the prior year at Ksh241.4 million representing a low 4% of total revenue. Although Vihiga's OSR has grown at a tepid compound annual growth rate (CAGR) of 6% over the last five years, we note that the County is yet to fully automate own source revenue collection, which we believe would help drive higher OSR receipts in the form of business permits, licenses, building approvals fees, land rates, hotel fees and parking fees amongst others. Akin to most counties in Kenya, Vihiga County, is overly dependent on the disbursements from the National Government through the Exchequer to operate sustainably and we do not see this changing in the near to medium term.

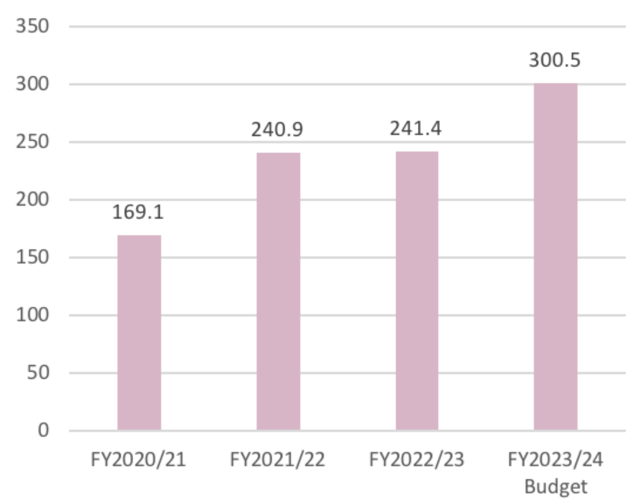


Figure 11: Own Source Revenue Ksh'millions (FY2020/21 - FY2023/24 Budget)

Based on the FY 2023/24 budget, Vihiga County intends to receive Ksh5.27 billion as an equitable share from the National Government (accounting for 77.4% of the total revenue), Ksh969.1 million as conditional grants and allocation from Exchequer (14.2%), Ksh270.4 million as CRF returns (3.9%) and Ksh300.5 million from own source revenue (4.4%). Agusto & Co. notes that the County's FY 2023/24 projected income source is skewed in favour of an estimated rise in the exchequer distributions as well as improved OSR collections. Nonetheless, we note that unlikely macroeconomic headwinds, heightened inflationary pressures, fiscal shocks occasioned by revenue underperformance at the national level and attendant disruptions to centrally distributed funds by the Kenya government will have dire consequences on the County's ability to function optimally due to the significant reliance on the Exchequer receipts, which are susceptible to delays.

Going forward, the County intends to automate the revenue collection process to address the challenges associated with revenue leakages. Furthermore, Vihiga intends to increase OSR in the short to medium term through the following initiatives: a review of the Vihiga County Trade Licensing Act, 2017 to charge single business permit fees for all businesses; implement the stipulated house rent rates for county houses; operationalize the real estate valuation roll to increase land-based revenue; engage third parties to partner in the collection of land rates; hire more technical personnel to support enforcement of collections in plans approval, inspections and physical planning; and issuance of farm inputs at a fee. We believe that fully automating revenue collection by establishing a one-stop collection portal as well as successfully implementing these initiatives would translate into higher OSR in the near to medium term.

In our opinion, Vihiga County's overall revenue profile is weak and requires improvement, especially in terms of fully automating its own source revenue collection.

Expenditure Profile

The Public Finance Management Act 2012 (PFM) guides the county's expenditure 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, Vihiga County reported a total expenditure of Ksh5.63 billion (FY 2021/22: Ksh5.36 billion), comprising recurrent (78%) and development expenditure (22%). Based on our analysis, the County spent Ksh2.45 billion on employee compensation (representing 43% of total expenditure), while Ksh862 million on operations and maintenance (accounting for 15%) and Ksh971.7 million as transfers to the County Assembly (covering compensation, operations and maintenance and development activities) and other agencies with only Ksh1.23 billion allocated for capital development expenditure.

Based on the Controller of Budget Report FY 2022/23, Vihiga'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 37.8% of total revenue in FY 2022/23[11] which is slightly higher than the 35% limit set by Regulation 25 (1) (b) of the Public Finance Management (County Regulations), 2015. We note that the County's personnel cost as a percentage of revenue has trended above the statutory threshold over the last three years and we consider this a concern due to the impact on Vihiga's financial flexibility. Notwithstanding the high inflationary pressures on operations and maintenance cost (i.e overheads cost) over the last three years, the County has managed to curtail operations cost, leading to an overhead cost-to-revenue ratio of 15% in FY2022/23 and three-year (FY 2020/21 – 2022/23) average of 17%, both of which are considered to be satisfactory in our view. This compares better to Nairobi City County (26%), Laikipia County (25%), Kirinyaga County (23%) and Makueni County (23%) but higher than Embu County (13%).

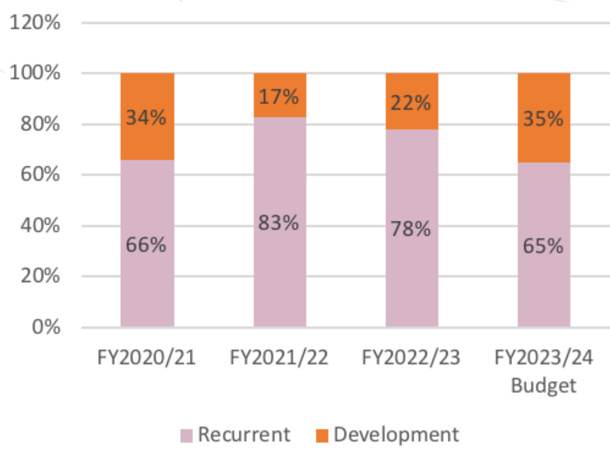


Figure 12: Recurrent and development to total expenditure

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, Vihiga County spent Ksh217.7 million (out of an allocation of Ksh320 million) on the following county-established funds (Bursary Fund, Sports Fund, Trade and Enterprise Fund, Climate Change Fund and Facility Improvement Fund), representing 5% of the County's budget for the fiscal year.

In FY 2022/23, Vihiga County spent Kshs1.23 billion on development activities which represented 22% of total expenditure, which was lower than the 30% minimum requirement as enshrined in Section 107 (2b) of the PFM Act of 2012. Over the last three years, the County's average development expenditure as a proportion of total expenditure has fallen short of the statutory minimum and as such requires improvement.

Based on the FY2023/24 Budget, the County's recurrent expenditure is estimated at Kshs 4.39 billion representing 65% of the overall budget while the development expenditure of Kshs2.41 billion (accounting for circa 35%

[11] Based on our estimates, Vihiga County's payroll cost to total revenue for FY 2022/23 is higher at 43%.

of the budget) is expected to facilitate the completion of existing projects across the different sectors in the sub-national.

Going forward, we expect the County's personnel expenses to revenue ratio to remain above the 35% threshold due to its large workforce, 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 the County. Also, we expect capital development expenditure to increase markedly compared to the prior year as the County intends to complete ongoing projects in the FY2023/24 Budget and commence new flagship initiatives which are earmarked in the County Integrated Development Plan (CIDP) 2023 – 2027.

In our opinion, Vihiga County's overall expenditure profile requires improvement, particularly in reducing payroll expenses which has consistently breached the 35% statutory threshold.

Debt Profile

In line with the Public Finance Management Act 2012, counties can borrow funds for short-term or medium to long-term purposes. The County Treasury is expected to include in its 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 FY 2022/23 fiscal year, Vihiga County did not have any third-party borrowings on its book either directly or through contingent liabilities. However, the accumulated outstanding payables (pending bills) arising from contracted goods and services stood at Ksh1.35 billion as at 30 June 2023.

Going forward, Vihiga County intends to access medium to long-term financing to execute flagship development projects such as the completion of the Vihiga Cluster Water project in Maseno, Lunyerere and Kaimosi, construction of an integrated waste-to-energy plant in Luanda South, restoration of Maragoli Hills and development of the Kaimosi Hydropower Plant in collaboration with KENGEN, amongst others.

In our view, Vihiga 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

Vihiga County under the leadership of His Excellency, Hon. Dr. Wilber K. Ottichilo has encapsulated the strategic priorities in the County Integrated Development Plan (CIDP) 2023 – 2027 which it intends to pursue to achieve sustainable economic and social impact over the medium term. The policy thrust of the CIDP and the County Fiscal Strategy Paper 2024 are both aligned reflecting the underlying key priorities which include:

- Good Governance and Accountability
- Inclusivity, Job and Wealth Creation with a Special Focus on Youth and Women
- Agribusiness
- Health Services
- Transport & Infrastructure Development
- Technology and Innovation
- Water, Environmental Conservation, Climate Change and Green Growth.
- Micro-Small and Medium Enterprises (MSMEs)
- Education and Training

In line with the Fiscal Strategy Paper 2024, Vihiga County intends to grow its OSR modestly to about Ksh300.5 million on the back of automating the revenue collection process to address the challenges associated with revenue leakages. Nonetheless, we believe that the County has a greater potential to generate higher local incomes from licenses, land rates, business permits and market fees as well as tourism-related fees due to its increasing commercial activities.

Based on the aforementioned, we hereby assign a **"Bb-Ken"** shadow credit rating and attach a **stable** outlook to the Vihiga 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—

(a) the loan is for a capital project;

(b) 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 13: Pre-requisites for Counties Financing

Source: Agusto & Co. Research

Ministry of Devolution and Arid and Semi-Arid Lands

Commission on Revenue Allocation (CRA)

National Treasury

Retirement Benefits Authority (RBA)

Nairobi Securities Exchange (NSE)

Capital Markets Authority (CMA)

Capital Market Operators

County Executive

County Assembly

Figure 14: Critical stakeholders to support county's financing framework

Source: Agusto & Co. Research

5 **Green asset** and activity assessment

To understand the availability of green assets and investment opportunities, Vihiga County was subjected to a green asset identification and risk analysis. The approach employed involved field visits to Vihiga 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, Agusto & 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) and private actors in the climate-finance space in Vihiga (Day 2)
3. Community representatives (Day 3)

Figure 15 below outlines the activities for the visit to Vihiga County:

Day 1 (Thursday 1 December 2022)

- Held briefing session with County Government Secretary and Senior County Officials
- Held workshop and conducted technical green assessment session with Directors and County representatives of the seven priority areas related to climate change and finance department
- Visited the Geographical Information Services (GIS) Lab at the Directorate of Geospatial Technologies Services (GTS)

Day 2 (Friday 2 December 2022)

- Held workshop and conducted technical green assessment session with Civil Society Organisations (CSOs) and private actors in the climate-finance space in Vihiga County.
- Site visits to Vihiga Dairy Farmers Co-operative Cooling Plant in Majengo, Mwitoko Fish Hatchery and Aquaculture Training Centre in Luanda and Mwibona Ward Water Project in Luanda.

Day 3 (Saturday 3 December 2022)

- Held Debrief session with the Governor and Senior County Officials
- Site visits to Kaimosi Hydropower Plant in Kaimosi and Lunyerere Water Scheme in Mbale

Figure 15: Vihiga county schedule of activities

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

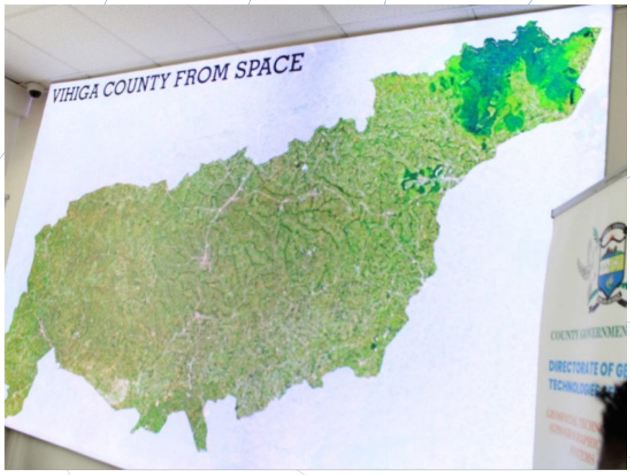


Figure 17: Directorate of Geospatial Technologies Services (GTS) Laboratory, governor's office (day 1)

Figure 18: Briefing Session at the governor's office with the Vihiga County Government Secretary (day 1)

Figure 19: Directorate of Geospatial Technologies Services (GTS) Laboratory, governor's office (day 1)

Figure 20: Vihiga Dairy Farmers Co-operative cooling plant - milk ATM (day 2)

Figure 21: Workshop with Civil Society Organizations (CSOs) and private sector (day 2)

Figure 22: Mwibona Ward water project – with community representatives (day 2)

Figure 23: Mwibona Ward water project – borehole location (day 2)

Figure 24: Vihiga Dairy Farmers Co-operative cooling plant - 10,000 litres milk cooling tank (day 2)

Figure 25: Vihiga Dairy Farmers Co-operative Cooling Plant (Day 2)

Figure 26: Mwitoko Fish Hatchery and Aquaculture Training Centre – fingerlings sorting area (day 2)

Figure 27: Mwitoko Fish Hatchery and Aquaculture Training Centre – catfish water ponds (day 2)

Figure 28: Lunyerere Water Scheme – existing water scheme and treatment facility (day 3)

Figure 29: Kaimosi Hydropower Plant – proposed turbine site (day 3)

Figure 30: Lunyerere Water Scheme – solar panels (day 3)

Figure 31: Kaimosi Hydropower Plant – water storage tanks (day 3)

Figure 32: Debrief Session with Vihiga County Governor (Day 3)

Figure 33: Lunyerere Water Scheme - representatives from vihiga cluster water supply project (day 3)

5.1 Preliminary green priority areas

Following the discussions and interactions with various stakeholders and assessments conducted during workshops and site visits, the following thematic areas emerged as key priority sectors for Vihiga County.

Industrialization	Waste Management	Energy Efficiency
Healthcare	Water Resources Management	Agriculture and Food Security
Affordable Housing	ICT & Innovation	Public Infrastructure
Sanitation	Tourism	Natural Resources Management

Figure 34: Vihiga County key priority sectors

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

Industrialisation: The sector facilitates the growth of micro, small & medium enterprises (MSMEs) through the creation of an enabling environment for business, industrial development and investments, promotion of sustainable tourism as well as the development of commercially viable cooperative enterprises. To promote manufacturing and value addition, Vihiga County plans to establish an industrial and export processing zone in Kaimosi and Luanda. Other planned projects under the industrialization sector include: promoting the development of cottage industries and establishing a granite factory in West Bunyore. It is expected that the industries to be established will utilise renewable sources of energy, especially solar energy and a circular economy model will be adopted in the use of resources.

Waste management: The county seeks to develop functional waste management systems, especially in the urban centres. Over the last five years, there has been a steady rise in population and increased urbanization which has continued to pose challenges to waste management. Vihiga County does not have an approved and adequate waste disposal site and as such the County government has procured a 7-acre piece of land in Luanda South to facilitate the establishment of an integrated solid waste management and recycling centre. There is also an ongoing project in Mbale town involving the conversion of human waste to fertilizer through a Sanitation Decentralized Treatment Facility (DTF). The facility receives waste from schools and residentials within the area which is transported using waste collection vehicles.

Energy efficiency: Based on the governor's Manifesto, the County government is keen to promote and support the uptake of solar power systems in public primary and secondary schools, technical and vocational training institutes and dispensaries, health centres and hospitals as well as at households' levels. Other initiatives to promote energy efficiency being championed by the County government include promoting the use of energy-saving cooking stoves in rural households, establishing a model solar-powered village and completing and operationalising the Kaimosi Hydropower plant in collaboration with Kenya Electricity Generating Company PLC (KENGEN).

Healthcare: The county's health strategic thrust is to provide equitable and affordable health care at the best standard to all its citizens. Vihiga County government intends to improve healthcare and supporting infrastructure, as well as ensure a consistent supply of health commodities and equipment to healthcare centres. The County also intends to invest in solar power systems for all healthcare facilities (4 sub-county hospitals, 18 health centres and 23 dispensaries) to ensure that all health services continue uninterrupted and high electricity bills are reduced significantly.

Water and sanitation: Some of the initiatives that the County would like to facilitate to promote access to clean and safe water in the urban and rural settlements (which aligns with United Nations Sustainable Development Goals (SDGs) 6 – Clean Water and Sanitation) include expanding and rehabilitating the existing piped water supply schemes. Vihiga County plans to expand the three existing water schemes (Maseno, Lunyerere and Kaimosi) which serve circa 30,000 households under the Vihiga Cluster Water Supply Project. However, the existing water schemes' harvesting, treatment and distribution capacities can be improved in the interim by utilising solar power storage systems (including batteries), which would allow clean water to be distributed to more households. There are also plans to invest in a study and mapping of urban centres and markets to kickstart the development of a modern sewerage disposal system in the County.

Agriculture and food security: Agriculture is the mainstay of the Vihiga County economy and a source of employment, food and nutrition security. The County government's mission is to attain food and nutrition security and increase incomes for the people of Vihiga through value addition and the adoption of innovative technology in the sector. Some of the projects that the government seeks to implement include the establishment of a dairy animal multiplication centre in Wodonga Ward and a milk processing plant which would process the milk collected at the three milk cooling plants in Vihiga County while utilizing solar energy in the cooling and processing of the milk. As at the end of 2022, the annual milk production in Vihiga County stood at 32 million litres. To increase milk production in the County, the government is keen to grow the number of dairy farmers by giving cows to farmers every financial year.

Affordable housing: The sector promotes efficient, effective and sustainable land use while providing decent and adequate housing for all in a clean and secure environment. The County government is keen to develop a smart urban infrastructure and affordable quality housing in the County in partnership with developers, which aligns with SDG 11 – Sustainable Cities and Communities. As a result, the County Government has purchased two acres of land in Central Maragoli to develop affordable houses in partnership with the private sector. The affordable houses project is expected to incorporate green building elements as part of the smart urban infrastructure components.

Information Communication and Technology (ICT) and innovation: The County's previous CIDP (2018-2022) sought to position Vihiga as a regional hub for technologies and integration of ICT in public service delivery, and this was achieved through the strengthening of ICT capacities and capabilities through training, purchase of ICT equipment and enhanced internet connectivity through the laying of fibre optic cables in the five sub-counties. Vihiga is one of the counties with a functional geographical information system (GIS) Lab which it utilizes to improve land use planning and management. Furthermore, the County is training and exporting the GIS lab model to other counties in Kenya which a view to supporting governance decisions.

Public infrastructure: The county's mission is to provide an efficient, affordable and reliable infrastructure for sustainable economic growth and development through construction, modernization, rehabilitation and effective management of all infrastructure facilities. The County government is keen to develop a zoned and well-regulated transport system for buses, matatu and boda-boda services, and ensure the availability of well-serviced transport parks. Vihiga County also intends to enhance the installation and maintenance of solar-powered high mast lighting programs across the County. All of the projects on the development of public infrastructure have been captured in the CIDP.

Tourism: Vihiga County aims to position itself among the top tourist destinations in the Western Kenya circuit. As such, the County is promoting the development of Eco-Lodges at Kaimosi and Maragoli Hills for outdoor activities among other initiatives in partnership with private sector operators.

Natural resources management: The county is keen to promote sustainable utilization and management of water, environment, natural resources and energy that enhances social-economic development and climate change adaptation and mitigation. The County government plans to continue investing in and promoting ground and rainwater harvesting and conservation of water sources, basins and towers. The County intends to collaborate with national agencies such as the Water Resources Management Authority (WaRMA), Kenya Wildlife Services, Kenya Forest Services and Regional Water Services Boards to conserve the County's water resources, forests and wildlife.

5.2 Green assets identified

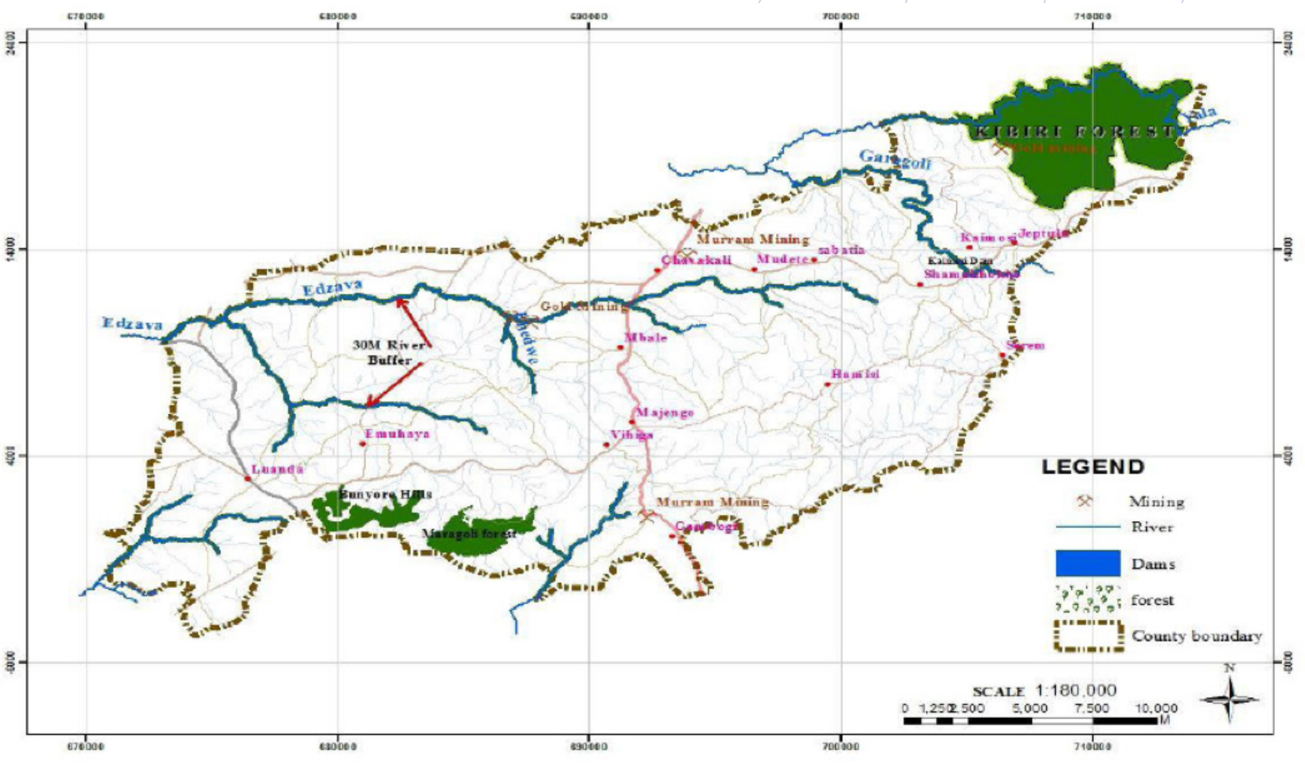


Figure 35: Map of the distribution of green assets in Vihiga County

Source: County Integrated Development Plan (CIDP 2023-2027)

Overview of green assets in Vihiga County

Vihiga County's altitude ranges between 1300m and 1800m above sea level. The County is categorized into two main agro-ecological zones, the upper and lower midlands. These zones dictate land use and population settlement in the County. The upper midland zone, which includes the sub-counties of Hamisi, Sabatia and parts of Vihiga, is well-drained and has fertile soils. The red loamy sand soils derived from sedimentary and basalt rocks are found in the lower midland zone, which includes the sub-counties of Emuhaya and Luanda. The County's unique landscape profile comprises the following key green assets which are owned by the County:

Table 4: Green assets in Vihiga County

Water Bodies	Hills	Forests
River Izava	Maragoli Hills	Kaimosi Forest
River Esalwa	Bunyore Hills	Over 40 Community Forests
River Erjordan	Munzatsi Hills	
River Igalagoli	Ibuyangu Hills	

Source: Vihiga County Integrated Development Plan 2023- 2027

The streams in Vihiga County drain into Lake Victoria from northeast to southwest. River Yala is the County's only major river, with three major tributaries: Edzava, Zaaba, and Garagoli. The County's geological formation is made up of Kavirondian and Nyanzian rocks, the most notable of which can be found in the Tambua, Jepkoyai, Emabungo and Maragoli Hills. The County's soils are mostly sedimentary and support a variety of farming activities. Kaimosi forest is one of the forests in the County that is threatened by human activity. There are also other communal and private non-gazetted forests which cover an area of 48 hectares. About 70% of the tree species grown on farms are Eucalyptus[12].

Green assets shared with other counties

River Yala was identified as one of the major green assets shared with other counties. The Nandi Escarpments in the Rift Valley are the source of the River Yala. The river runs for 219 kilometers and covers an area of 3,351 square kilometers. The Middle Yala block includes Vihiga and Kakamega counties, while the Lower Yala block includes Siaya and a part of Busia County. Lake Victoria in Kisumu County is the mouth of River Yala. Conflicts over control and management of shared/transboundary resources are common among counties. As such, there must be a harmonised and common approach to the conservation and management of shared/transboundary resources.

[12] Vihiga County CIDP 2018 -2022

Figure 36: River Yala

Source: British Broadcasting Corporation

Green assets owned by the national government

The Maragoli Forest and Kibiri Forest are gazetted by the Kenya Forest Service (KFS) as National forests. The Kibiri forest has indigenous and exotic tree species on 3,691.3 hectares of land while the Maragoli forest has 469.3 hectares of exotic tree species. The County government of Vihiga has a Memorandum of Understanding (MOU) with KFS that stipulates the responsibilities and scope of the parties in the two forests.

5.3 Suggested green projects

Based on the identified thematic areas and Agusto & Co.'s evaluation of the green assets, the following green projects were proposed for development and implementation:

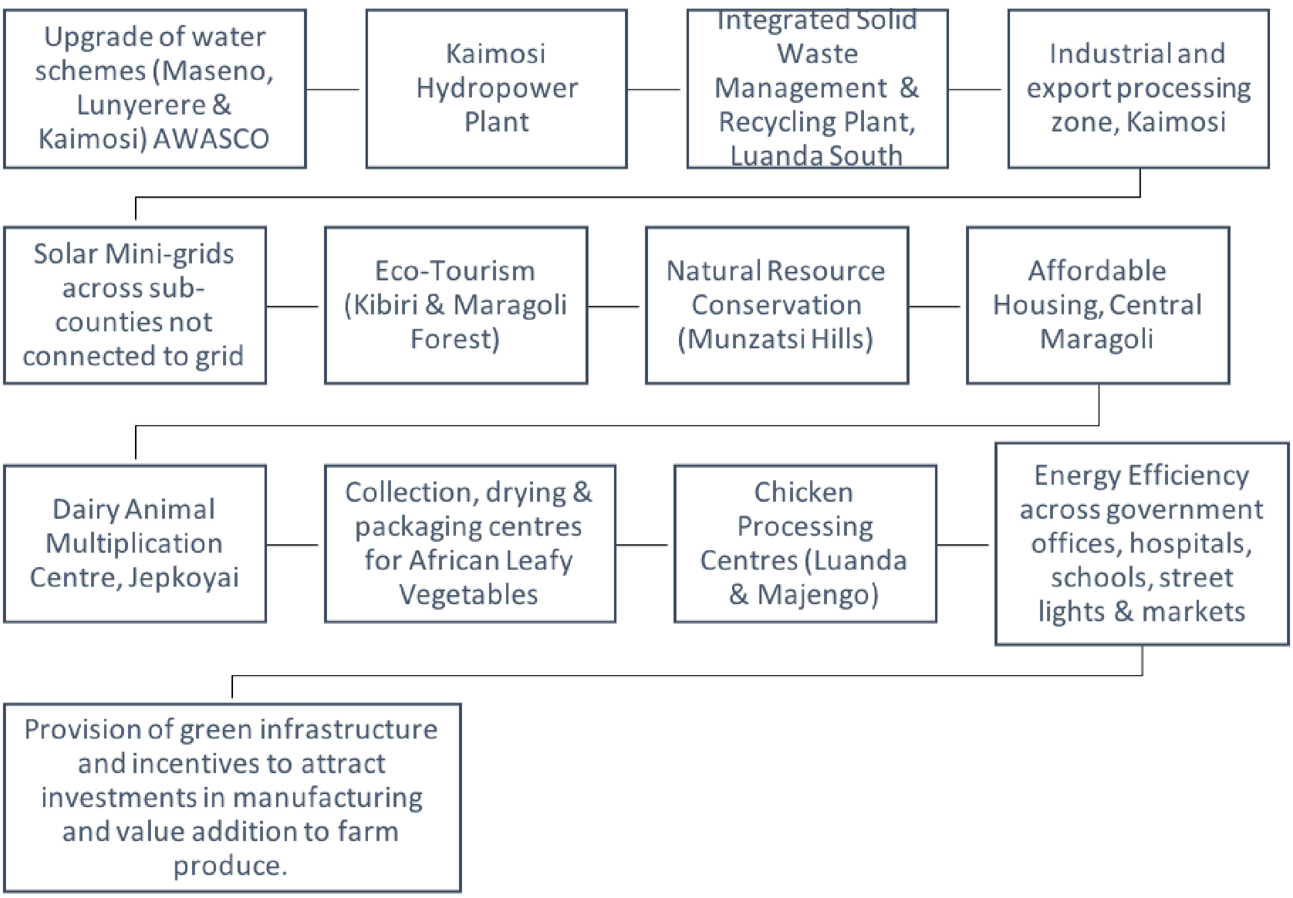


Figure 37: Vihiga County Suggested Green Projects

Upgrade of water schemes (Maseno, Lunyerere and Kaimosi)

The proportion of households with access to clean and potable water stood at 20% and 64%[13] for households in the urban areas and rural areas respectively, after the implementation of the 2018-2022 CIDP. The average time taken to a water point was also less than 20 minutes compared to the previous 30 minutes in 2017. This was a result of the development and expansion of water infrastructure that included the completion of the Vihiga Cluster Water Project (Maseno, Lunyerere, Kaimosi) among other projects. These three water projects which are managed by Amatsi Water Services Company Ltd (AWASCO), cumulatively led to an increase in water supply capacity in Vihiga County from 6.3 million to 12.5 million litres per day, serving over 300,000 residents with piped water at the end of 2022. AWASCO is an agent of the Vihiga County Government providing water services as a devolved function and subject to the provisions of the Vihiga County Water Act 2016.

Figure 38: Lunyerere water project (Partly powered by Solar) energy)

Source: Agusto & Co. Research

There is still potential to improve the water projects through the use of solar energy to pump water (and for treatment facilities) in the schemes thus reducing the overall cost of power. Based on the projects' assessment, the solarized schemes such as the Lunyerere Water Scheme would require storage capacities for solar energy. Furthermore, the use of solar energy can be scaled and replicated across various water schemes to improve the sustainability of water supply services in the County. According to the County Government, 23 water schemes in Vihiga have been solarized, with plans to improve the remaining projects to fully utilize solar energy.

Kaimosi hydropower plant

The county government is keen to complete and operationalize the 0.25megawatts Kaimosi Hydropower plant in collaboration with Kenya Electricity Generating Company PLC (KENGEN) to meet the increasing demand for electricity in Vihiga and surrounding counties. Based on the assessment, the county government noted that feasibility studies have been done on the site and financing is required to commence the development of the project as well as the purchase of required turbines and equipment for the power plant. In addition, the county has also prepared a report on the power plant's operationalization which has been reviewed by KENGEN.

Figure 39: Kaimosi Hydropower Plant (Proposed Locations for Turbines)

Source: Agusto & Co. Research

[13] County Integrated Development Plan 2023 - 2027

Integrated Solid Waste Management and Recycling Plant, Luanda South

The County's population growth and urbanization have posed new challenges to waste management over the years. According to the Vihiga County Annual Development Plan 2023/24, the average volume of solid waste generated annually is 30,000 tonnes. As a result, the County is eager to establish a solid waste management and recycling plant to facilitate functional and effective waste management. Thus, the County government has purchased a 7-acre plot of land in Luanda South to facilitate the proposed establishment. Riding on the back of this plan, the County has developed a waste management policy to guide the waste ecosystem in the County.

Industrial and Export Processing Zone, Kaimosi

One of the objectives of the County Government as enshrined in the CIDP is to increase the level of value addition to farm produce. Consequently, the County has entered into a strategic partnership with the National Government Special Economic Zone Authority to develop a special export processing zone in Kaimosi. Vihiga has secured 30 hectares of land in Kaimosi for the Export Processing Zone (EPZ). To attract investments in manufacturing as well as agro-processing companies provision of green infrastructure and incentives will be important at the EPZ. Other value-addition projects considered during the assessment which will uplift the industrial activities in the County include Chicken Processing Centres in Luanda and Majengo as well as drying and packaging centres for African leafy vegetables across sub-counties, with the centres utilizing solar energy for their processes.

Affordable housing, Central Maragoli

The Vihiga housing sector is characterized by inadequate decent housing including emerging slums and squatter settlements in Majengo, Mbale, Chavakali and Luanda. Housing in the County is categorised by the type of walling, floor and roof materials. As at the end of 2022, mud-walled houses accounted for 74.8% of all households, earth floors accounted for 17.1% and corrugated iron sheet roofs accounted for 94.2% of all houses in Vihiga[14]. Going forward, the County government aims to implement a variety of strategies to improve housing and urbanization. One of the housing initiatives is the proposed development of 2,000 affordable housing units in Central Maragoli on 2 acres of land purchased by the County to reduce the housing demand. Other initiatives include: improving access to adequate finance for both developers and buyers; decentralizing urban development through the establishment of Kaimosi/Cheptulu and Luanda municipalities; and building capacities for urban planning and the construction industry to develop smart urban infrastructure.

Energy efficiency across government offices, hospitals, schools, street lights and markets

To minimize the destruction of forests and environmental degradation, the County government is keen to promote and support the uptake of solar power systems in government offices, schools, healthcare centres, markets, water schemes, and streetlights as well as at household levels. Furthermore, the County aims to set up solar mini-grids across different sub-counties to provide electricity to the households that are not connected to the grid (estimated at 44.2% as at the end of 2022) to ensure that the Sustainable Development Goal (SDG) 7 goal of access to affordable and renewable energy is achieved by 2030.

Natural resource conservation and eco-tourism

The civil societies and community-based organisations in Vihiga County have been at the forefront of advocating for the planting of bamboo and fruit trees in forests, particularly along rivers, to promote natural resource conservation. This would serve as a water tower and help conserve the environment and improve the overall tree cover in the County. Furthermore, the County plans to establish eco-tourism activities in the Kibiri and Maragoli forests, to boost tourism. Other proposed tourist destinations include the Munzatsi Hills, Izava Hill, and community forests in various sub-counties, which when developed will help attract tourists to the County and ultimately result in improvement in economic activities.

[13] County Integrated Development Plan 2023 - 2027

[14] Vihiga County Integrated Development Plan (CIDP 2023 - 2027)

6 Risk analysis on suggested green projects

	Climate risks	Environmental risks	Legal risks	Reputational risks	Financial risks
Upgrade of water schemes (Maseno, Lunyerere and Kaimosi)	Prolonged drought may lead to drying up or reduction in the water levels of the water sources.	Pollution of the water sources due to distribution activities which include pumping water to the water tanks among others.	Unpaid bills for metered water to residents, thus leading to high non-revenue water proportion.	Diversion allegations. Potential of water quantity and quality disruptions.	Inadequate funding. Diversion of project funds. The inability of the water company to run the project's profitability to repay their financial obligations.
Kaimosi hydropower plant	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 KENGEN who will be the purchaser of the power generated from the project.	Lack of proper im-plementation or either of the parties not executing part of their responsibilities. Lack of public participation and involvement in the project.	The cost of implementing the project may exceed the amount that was previously quoted due to inflationary pressures. The inability of the project to cover operational costs once completed.
Industrial and export processing zone, Kaimosi	Sustained environmental pollution from the industries in the EPZ may lead to climate change and environmental risks.	Water pollution. Air pollution. Land pollution.	Probability of a poorly executed environmental impact assessment.	Greenwashing. Allegations of corruption when engaging potential investors in the Industrial Zone.	Inadequate funding. Diversion of funds.

	Climate risks	Environmental risks	Legal risks	Reputational risks	Financial risks
Integrated Solid Waste Management and Recycling Plant, Luanda South	Improper management of the waste may lead to flooding on account of drainage blockages and health hazards.	Air pollution. Land pollution. Water pollution.	Inability to obtain relevant licenses from NEMA and other institutions in setting up a solid waste management facility.	Lack of adequate public participation in the location of the facility. Insufficient involvement of all the stakeholders especially CBOs and Private Sector institutions involved in the waste management ecosystem.	Lack of a suitable private sector partner for the proposed PPP financing arrangements.
Green affordable housing in Central Maragoli	Clearing of land and trees in the area may negatively impact existing natural resources and the ecosystem.	Land pollution. Air pollution. Water pollution. Sound Pollution.	Lack of obtaining the required licenses from the relevant authorities to construct the houses.	Greenwashing due to failure to meet the requirements of the certification scheme for green buildings. Lack of public participation in the project.	Inadequate funding and lack of a suitable partner to support the development. Diversion and mis-management of funds. The inability of the project to cover the operating costs.
Energy efficiency across government offices, hospitals, schools, street lights and markets	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.	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.
Natural resource conservation and eco-tourism	The construction process of eco-lodges may harm the forests and wildlife.	Water pollution from the activities of planting trees along the rivers.	Use of inappropriate or unauthorized channels to obtain approval to facilitate the projects as some of the forests are managed by KFS.	Lack of public participation in project execution especially in the community forests.	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 Vihiga County to evaluate the county government's skills and ability to manage green financial instruments, with a focus on green bonds and related projects. Despite the county's Climate Change Department's efforts to create awareness of climate change issues through various channels such as the community radio station, there still exists a considerable knowledge gap among Vihiga County Government staff and residents. As the county prepares to participate in the green bond market, the Vihiga 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. Furthermore, we recognise that Vihiga County has climate-related laws in place that could aid in the management of the projects and assets identified:

a) **The Vihiga County Climate Change Fund Act 2019** – Vihiga County was among the first counties to draft and enact the County Climate Change Fund (CCCF) legislation in Kenya. 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 deliver its mandate in realizing sustainable development in the face of climate change. The Mwibona Ward Water project, which was launched in July 2022, is one of the projects implemented through the Climate Change Fund mechanism. The project provides water to 85 households as well as a school in the Ward. The Kshs 5 million water project is powered by solar energy and provides at least 8 cubic meters of water to the residents every day. The County government has implemented five similar projects in other wards using the CCCF mechanism.

b) **The Vihiga County Water and Sewerage Services Bill, 2015**: The objectives of the bill is to ensure equitable and continuous access to clean water, promote soil and water conservation, promote water catchment conservation and protection, provide for the development, management and regulation of County water services public works, ensure effective and efficient management of stormwater in built-up areas, promote the effective and efficient provision of water and sanitation services and promote inter-agency collaboration and public participation in water resource development and management.

c) **Proposed Vihiga County Solid Waste Management Policy, Kenya 2019**: The proposed Vihiga County Solid Waste Management, 2019 is designed to conform to the framework outlined in the Constitution of Kenya (2010), the National Water Policy 2019, the Environmental Management and Co-Ordination Act (EMCA) 1999, and the Sustainable Development Goals (SDGs). The overall primary goals of this policy include:

Figure 40: Mwibona Ward Water Project - Solar Energy Converter

Figure 41: Mwibona Ward Water Project - Borehole

1. Reclamation of wastewater for recycling and improved sanitation. The County has a sanitation coverage target of 50% of the population connected to a sewer system and another 30% served by localized Decentralized Treatment Facilities (DTFs) within the next ten years to 2029
2. Develop agile green technology-based applications, services and enterprises supporting the development of the water sector leading to below 10% failure time in service delivery and 15% non-revenue water (NRW) within the next ten years
3. Implement strategies aimed at contributing to the realization of the forty (40) litres per capita per day water delivery within the next ten years.
4. Effective and efficient management of solid waste for a safe and healthy environment towards sustainable economic development of the County.

Table 5: Vihiga County Capability Assessment

S/n	County capabilities assessment	Status	Justification
	CCCF governance, stability, and performance		
1	Presence of a legal and regulatory framework for green/climate finance	Yes	There exists the Vihiga County Climate Change Fund Regulations, 2019 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 Environment & Climate Change. Vihiga County also has a County Environment Action Plan (CEAP 2021 -2025) which provides a framework for an integrated approach to planning and sustainable development for Vihiga County by ensuring the conservation of the environment.
3	County government familiarity with the Green Bond Framework and requirements	No	Capacity building in the areas of Green Bond Framework is still required.
4	County capability in managing green funds (preferably for financial return)	Yes	The County has received funds previously to fund projects, such as the water schemes (Lunyerere, Maseno and Kaimosi) which were funded through a grant from the Belgian Government. The schemes supply water to the citizens of Vihiga who then pay for the water usage. The County has also received funds through the CCCF mechanism which have been used to implement community water projects.
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.
	Green project and finance experience		
1	County staff dedicated to green finance issues	Yes	Staff in the Environment, Water, Energy and Natural Resources Department are knowledgeable on green finance issues. (At least 9 members of staff as per the responses received from the Directorate of Energy)
2	County staff trained in environmental management, climate/ green finance, or related areas	Yes	County staff in the Environment, Water, Energy and Natural Resources Department. (At least 40 members of staff as per the responses received from the Directorate of Energy)
3	County staff with project management experience particularly with bonds and green projects	Yes	County staff in the Environment, Water, Energy and Natural Resources Department have experience with projects as evidenced by the water projects implemented in the County. (At least 6 members of staff as per the responses received from the Directorate of Energy)

S/n	County capabilities assessment	Status	Justification
4	County staff with experience with accessing and prudentially utilising other green financial resources (e.g., donor funds)	Yes	Vihiga County has previously received funding from donors to facilitate the set up of the three major water schemes which are managed by Amatsi Water Services Company Limited. (At least 6 members of staff as per the responses received from the Directorate of Energy)
	Access to appropriate green finance and project experts		
1	Ability of County government to identify and procure experts to support green finance projects	Yes	The County government has previously implemented projects successfully, hence can procure the support services of experts
2	Ability of County government to mobilise financing to secure and pay for services rendered	Yes	The County has been able to receive funding to support various programs such as the restoration of degraded land which was a partnership between the County Government and banks as well as funding received from the Belgium Government to implement the water projects.
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	Vihiga County has various policies in place which guide the process of coordinating with the national government or agencies. Such as the Vihiga County Climate Change Fund Act, 2019.
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 Vihiga County Climate Change Fund Regulations, 2019 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.

8 Recommendations

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

Table 6: Recommendations to the Vihiga County Government

Section	Recommendations
County credit risk assessment	• Vihiga County's overall revenue profile requires improvement mainly in fully automating revenue collection by establishing a one-stop collection portal for own source revenue. This will also help to address challenges associated with revenue leakages. • Vihiga County's overall expenditure profile requires improvement, particularly in moderating payroll expenses, which have consistently exceeded the 35% statutory threshold. • Vihiga County to improve its financial flexibility by increasing its low own source revenue, which will enhance its ability to meet future obligations. • Vihiga should embrace the Debt Capital Markets for Infrastructure Development financing as macroeconomic headwinds have placed significant pressure on the Government of Kenya's finances, which would ultimately limit near-term funds available for developing infra-structure projects. • Vihiga County should explore the option of soliciting an independent external auditor to audit its financial statement.
Green asset and activity assessment	• The County Government of Vihiga needs to increase public sensitiza-tion on reafforestation and afforestation. • Provision of green infrastructure and incentives to attract investments in manufacturing and value addition to products. • Continued investment in County infrastructure to promote tourism in the forestry sector. • Awareness of climate change impact and policies to ensure the protection of the natural ecosystem • A deliberate policy of energy efficiency at government offices, schools, hospitals, markets and street lighting.
County green assets and climate related legislations	• There is a need to create awareness in the communities on climate change policies and impacts by leveraging various stakeholders. • Enforce compliance with established county laws and policies such as climate change policies.
Green finance capability assessment	• Capacity building of County Staff in all departments on climate change and green finance • 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. • 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.

In our opinion, Vihiga 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 for compliance with the Climate Bonds Standards
- Issue green financial instruments such as County Bonds 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, Vihiga County can utilise 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 Vihiga (with the provision or 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, 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 42: Recommendations to the national government

9 Appendices

9.1 Vihiga county profile summary

No	Indicator	County 2022	National 2022
1.	Estimated County Population	590,013 (KNBS, 2019)	1.0% of the total country's population
	Males	283,678	48.1%
	Females	306,323	51.9%
	Intersex	12	0.0%
2.	Estimated Population Density (persons/km2)	1,047	82
3.	Persons with disability (%)	5.0	2.2
4.	Population living in rural areas (%)	90.1	68.8
5.	Children (0-14 years) (%)	39.1	41.1
6.	School going age (4-18 years) (%)	43.1	35.7
7.	Youth 15-29 years (%)	25.3	25.6
8.	Labour force (15-64 years) (%)	53.4	51.2
9.	Elderly population (over 65-year-old)	7.5	3.5
10.	Poverty (%)	38.6 (2015/2016)	36.1
11.	Food Poverty (%)	30.2 (2015/2016)	31.9
12.	Multi-dimensional Poverty (%)	62% (2015/2016)	56.1
13.	Stunted children %	14.6	19
14.	Gross County Product (Kshs Million)	85,407 (2020)	0.9% share of total GDP (2022)
15.	Average growth of Nominal GCP/GDP (%)	12 (2013-2020)	15.30%
16.	GCP per capita (Kshs)	144,754.44	179,021.60
17.	Percentage of children under 1 year of age fully immunized	83%	84%
	Child Mortality Rate (CMR)	32.2/1000	31.7/1000
	Under Five Mortality Rate (U5MR)	73.4/1000	52/1000
18.	Maternal Mortality Rate	393/100,000	355/100,000
	Percentage of deliveries conducted by skilled attendants in health facilities	53.6%	60%
	Percentage of pregnant women attending at least 4 ANC visits	46.2%	42%
19.	Latrine coverage	93.7%	85%
	Open Defecation Free (ODF) rate	0.F8%	10%
20.	Doctor Population Ratio	1:20689	1:16000
	Nurse Population Ratio	1/1,500	1:1034
21.	Health Insurance Coverage	35%	6%

22.	The proportion of HHs accessing piped water (%)	11.8	24.0
23.	The proportion of HHs accessing improved sanitation services (%)	86	82.5
24.	Tree cover	14%	12.13%
25.	Forest Cover	35%	8.83%
26.	Average farm size (Small scale) (ha)	0.4	0.04
27.	Average farm size (Large scale) (ha)	3	8.9
28.	Share of Agriculture sector contribution to GCP (Gross County Product)	43.7% (2020)	22.4%
29.	Amount of milk produced annually in litres	32,000,000	4,000,000,000

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

9.2 Three year financial summary – Vihiga County Government

REVENUE & EXPENDITURE					**UNAUDITED**	
	2020/2021		**2021/2022**		**2022/2023**	
REVENUE	**KES'mns**	**%**	**KES'mns**	**%**	**KES'mns**	**%**
Centrally Distributed Revenue						
Share of Exchequer releases (Equitable Share)	4,652.6	84%	4,662.0	90%	5,325.8	93%
Share of Exchequer releases (Donor & Grant Funds)	719.6	13%	240.5	5%	146.9	3%
Other Capital Receipts (other government entities)			15.0	0%	-	
CRF Returns/Reallocation budget	-		49.0	1%	1.5	0%
Centrally Generated Revenue (CGR)	**5,372.1**	**97%**	**4,966.5**	**95%**	**5,474.3**	**96%**
County-Own Source Revenue						
Asset sales	-		-		-	
Investment Income	-		-		-	
Others - licenses, permits, fines & fees	169.1	3%	240.9	5%	241.4	4%
County Own Source Revenue (OSR)	**169.1**	**3%**	**240.9**	**5%**	**241.4**	**4%**
TOTAL REVENUE	**5,541.2**	**100%**	**5,207.4**	**100%**	**5,715.6**	**100%**
Direct Donations and Grants Receipts	-		-		-	
TOTAL REVENUE & GRANTS	**5,541.2**		**5,207.4**		**5,715.6**	
EXPENDITURE						
Transfers (County Assembly, others)	597.5	10%	922.0	17%	971.7	17%
Interest Payments	-		-		-	
Departments Expenditure	**5,116.0**	**90%**	**4,437.0**	**83%**	**4,663.2**	**83%**
TOTAL EXPENDITURE	**5,713.5**	**100%**	**5,359.1**	**100%**	**5,634.9**	**100%**
Department's expenditure comprises						
Personnel costs	*2,010.9*	*35%*	*2,668.2*	*50%*	*2,449.5*	*43%*
Purchase of goods & services	*1,135.0*	*20%*	*771.5*	*14%*	*862.0*	*15%*
Capital expenditure	*1,970.1*	*34%*	*889.5*	*17%*	*1,233.0*	*22%*
Other Payments (contingency, scholarship, subsidies, etc)	-		*107.9*	*2%*	*118.8*	*2%*
Total Departments Expenditure	***5,116.0***	***90%***	***4,437.0***	***83%***	***4,663.2***	***83%***
Foreign loan balance	**-**		**-**		**-**	
Domestic loan balance	**-**		**-**		**-**	
Total Pending Bills	**589.9**		**1,250.0**		**1,350.0**	
AUDITORS OPINION	**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	6%	5%	5%
Total revenue as % of GCP	6%	5%	5%
OSR as % of total revenue & grants	3%	5%	4%
Centrally Generated Revenue as % of total revenue & grants	97%	95%	96%
Growth in Centrally generated revenue	6%	-8%	10%
Spending			
Total Expenditure as % of GCP	6%	5%	5%
Non-discretionary expenditure* as % of Centrally generated revenue	49%	72%	62%
Capital expenditure as % of total expenditure	34%	17%	22%
Payroll as % of revenue	36%	51%	43%
Overheads as a % of revenue	20%	15%	15%
Budget balance/revenue	-3%	-3%	1%
Leverage			
Budget balance (Ksh'mns)	(172.27)	(151.63)	80.66
Debt as % of nominal GCP			
Interest payments as % of total revenue			
Principal due as % of Revenue			
Financial flexibility			
Discretionary revenue** as % of total revenue	53%	31%	40%
Net Debt as % of Free Cash Flow ***	-15%	-18%	-23%
Non-discretionary expenditure as % of total expenditure	46%	67%	61%
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

Aaa	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.
Aa	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.
A	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.
Bbb	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.
Bb	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	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.
C	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
D	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 Other potential green projects identified during the assessment

Water	Natural Resources Management	Solid & Waste Management	Industrialization	Energy Efficiency	Public Infrastructure
•Upgrade of Water Schemes - Maseno, Lunyerere & Kamosi •River Izava Irrigation scheme •Water Harvesting, storage, management and distribution	•Wind Mill/Power in Bunyorere Hills, Maragori Hills and Munzadsi Hills •Natural Conservancy in Munzadsi Hills •Rehabilitation and Restoration of degraded land (granite site, etc) •Eco-Tourism (Kibiri & Maragori Forest)	•Integrated Solid Waste Management & Recycling Plant, Luanda South •Biodigester Waste Facility Mbale •Decentralized Treatment Facilities for liquid waste in Mbale and in the upcoming markets	•Industrial and export processing zone (Kaimosi & Luanda) •Diary Animal Multiplication Centre, Jupkoyai •Granite Factory, West Bunoyere •Collection, drying & packaging centres for African Leafy Vegetables •Chicken Processing Centres (Luanda & Majengo)	•Solar Mini-grids across sub-counties not connected to grid •Integrate energy efficiency in government offices, hospitals, sporting facilities, schools, street lights & markets •Provision of green infrastructure and incentives to attract investments in manufacturing and value addition to farm produce.	•Municipal and sub-county Roads •Affordable Housing, Central Maragori •Air Strip Kaimosi •Kaimosi Hydropower Plant •Spatial Development Plan

9.5 List of stakeholders engaged during the workshops

Day 1

Institution Name	Designation of Attendees
Vihiga County Government	Chief officers from the Environment, Water, Energy and Natural Resources Department
Vihiga County Government	Director and representatives from the Environment, Water, Energy and Natural Resources Department
Vihiga County Government	Deputy Director, Medical Services
Vihiga County Government	Director, Geographical Information Systems (GIS)
Vihiga County Government	Accountant
Vihiga County Government	Director, Surveys
Vihiga County Government	Director, Budget
Christian Aid	Representatives from the monitoring and evaluation team

Day 2

Institution Name	Designation of Attendees
SusiWatch	Environment Planner
Avene Community Development Organization	Program Officer
Anglican Development Services - Western	Climate Change Experts
Vihiga Young Agripreneurs Network (VIYAN)	Financial Analyst
Radaboda	Association Member
Amulavu Ecosystem	Program Coordinator
Owasis Community Based Organization	Chairman
Solison	Director
Izava North Community Empowerment Network	Director
Sustainable Organic Farming and D.I.	Program Coordinator
Vihiga County Government	Representatives from the Environment, Water, Energy and Natural Resources Department

Day 3

Institution Name	Designation of Attendees
Vihiga County Government – Kaimosi Hydropower Plant	Representatives from the Environment, Water, Energy and Natural Resources Department
Lunyerere Water Project - Amatsi Water and Services Company (AWASCO)	Plant Manager
Vihiga County Government - Debrief	The Governor, County Secretary, CECM Environment and other senior County government officials

9.6 List of key documents accessed

List of Documents Accessed
Vihiga County Integrated Development Plan (CIDP) 2018-2022
Vihiga County Integrated Development Plan (CIDP) 2023-2027
Vihiga County Annual Development Plan 2023/2024
Controller of Budget Performance Report over five years 2017/18 to 2022/23
County Government's Budget Implementation Review Report from 2016/17 to 2022/23 by the Office of the Controller of Budget
Vihiga County Statistical Abstract
Vihiga County Fiscal Strategy Paper 2022 -2024
2019, Kenya Population and Housing Census
Vihiga County Governor's Manifesto
Kenya Integrated Household Budget Survey 2015/2016
Gross County Product 2023 Report
Vihiga County Climate Change Fund Regulations, 2019
Vihiga County Bills, Plans and Policies
Public Finance Management Act 2012
Audited financial statements of Vihiga County from 2016/17 to 2021/22 by the Auditor General of Kenya
Vihiga County Consolidated Unaudited Financial Statements 2022/23
The Public Finance Management (County Governments) Regulations, 2015
KNBS ECONOMIC SURVEY 2022 & 2023
Vihiga County Programme Based Budget (PBB) 2021/22 – 2023/24
Vihiga County Finance Bill 2022

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