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HEIGHTS-FS: HIGHER EDUCATION INSTITUTIONS GENERATING HOLISTIC AND TRANSFERABLE SOLUTIONS – FINANCIAL SUSTAINABILITY, KENYA

FINAL REPORT

NOVEMBER 2024

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RECOMMENDED CITATION

Magutu, P., Iraya, C., Nyamute, W., Okeo Inyega, J., Kipchumba Chogii, R., Nyaboke Onsomu, Z., Elly, D., Arodi, J., Kinuthia, I., Anyuki, B., Mutegi, D., Ssentongo, J., Mayanja Lwanga, M., & Jang, H. (2024). *SHARE HEIGHTS-FS (Higher Education Institutions Generating Holistic & Transferable Solutions - Financial Sustainability) Kenya, Final Report*. Pulte Institute for Global Development, University of Notre Dame. https://doi.org/10.7274/rb68x924279

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ABBREVIATIONS

CSO	Civil Society Organization
CUE	Commission for University Education
DUC	Differentiated Unit Cost
HE	Higher Education
HEIGHTS	Higher Education Institutions Generating Holistic and Transformable Solutions
HEI	Higher Education Institution
HELB	Higher Education Loans Board
IT	Information Technology
KII	Key Informant Interview
KUCCPS	Kenya Universities and Colleges Placement Service
LMIC	Low- and Middle-Income Countries
MIT	Means Testing Instrument
MoU	Memorandum of Understanding
NACOSTI	National Commission for Science, Technology and Innovation
NESSP	National Education Sector Strategic Plan
NG-CDF	National Government Constituency Development Fund
NGO	Non-Government Organization
PPP	Public Private Partnership
STEM	Science Technology Mathematics and Engineering
TTI	Technical Training Institute
TVET	Technical and Vocational Education and Training
TVETA	Technical and Vocational Education and Training Authority
UF	University Fund
UND	University of Notre Dame
UoN	University of Nairobi
VSLF	Variable Scholarship and Loan Fund
VTC	Vocational Training Centre
USAID	United States Agency for International Development

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PREPARED UNDER COOPERATIVE AGREEMENT NO. 7200AA20CA00025

The University of Notre Dame's Pulte Institute for Global Development is implementing the SHARE activity in partnership with local higher education and research institutions. Through SHARE and its partners, UND will advance USAID's Learning Priorities as a global good to improve education and learning outcomes. This publication was produced at the request of the United States Agency for International Development Center for Education. It was prepared independently by the Pulte Institute for Global Development at the University of Notre Dame and its partners, the ResilientAfrica Network and the University of Nairobi. The views of the authors expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the U.S. Government.

EXECUTIVE SUMMARY

HEIGHTS-FS (Higher Education Institutions Generating Holistic & Transferable Solutions - Financial Sustainability) is a multicountry comparative study involving Kenya, Indonesia and the Philippines. The purpose of this study is to produce evidence for improving sustainable financing of Higher Education Institutions (HEIs) by analyzing approaches and risk management strategies that HEIs are pursuing to strengthen their financial sustainability. The study informs the United States Agency for International Development's (USAID) "strategic planning, activity design, and professional development" in the area of sustainable financing for HEIs as noted within USAID's Higher Education Learning Agenda. Evidence from this study will be used by key stakeholders including USAID, the Government of Kenya (especially the Ministry of Education), and multilateral organizations funding higher education activities in low- and middle- income countries (LMICs).

HEIGHTS-FS within Kenya answers the following questions related to how the government, HEIs, and other stakeholders in Kenya understand financial sustainability and the approaches to risk management strategies that HEIs employ to strengthen their financial sustainability.

- **RQ1:** How do Higher Education Institution leaders and government actors in Kenya understand Higher Education Institutions financial sustainability?
- **RQ2:** How are sampled Higher Education Institutions financed to operate and what are their various revenue streams?
- **RQ3:** What are the factors that sampled Higher Education Institutions leaders and government actors perceive to determine or shape Higher Education Institutions financial sustainability?
- **RQ4:** What strategies do sampled Higher Education Institutions undertake to promote their financial sustainability?
- **RQ5:** What risk management strategies, if any, do Higher Education Institutions stakeholders undertake for navigating unexpected shocks (e.g., COVID-19)?

The study uses mixed methods to collect the relevant data and information, including qualitative and quantitative techniques. Qualitative data was collected through key informant interviews with respondents drawn from public and private HEIs, the government, civil society organizations, and the private sector. Quantitative data was collected using a survey administered to HEIs and was complemented by collecting and reviewing official documents from HEIs (including annual reports, financial statements), and secondary data from the Kenya National Bureau of Statistics.

KEY FINDINGS

RQ1: HOW DO HEI LEADERS AND GOVERNMENT ACTORS IN KENYA UNDERSTAND HEI FINANCIAL SUSTAINABILITY?

This research question interrogated key stakeholders' (including representatives from the public and private HEIs, the government and researchers) understanding of financial sustainability of HEIs. The definition of financial sustainability revolved around three key parameters, namely: (1) the ability to finance HEI operations and invest in continued growth; (2) reduced reliance on government funding; and (3) availability of quality infrastructure, equipment, and trainers.

1. **Ability to finance HEI operations and invest in continued growth:** Stakeholders defined financial sustainability of an HEI as having the ability to finance operations including operational costs, research, cover students' co-curricular expenses, and meet required obligations such as taxes, pension schemes, and insurance. In addition, this element of financial sustainability was characterized as having diversified and sustained streams of revenue, financial reserves, and the ability to fund future developments.

2. **Reduced reliance on government funding:** Financially sustainable HEIs were further characterized by stakeholders as having the ability to meet both present and future obligations with limited reliance on government funding. Respondents highlighted that for HEIs to reduce dependence on government funding and therefore achieve financial sustainability, they need to have internally generated revenue and financial reserves.

3. **Availability of quality infrastructure, equipment, and trainers:** Stakeholders also defined financial sustainability as having adequate, modern, and well-maintained infrastructure and equipment, and skilled trainers to support the delivery of quality education and research. Such infrastructure includes adequate and modern classrooms, libraries, workshops/laboratories, and ICT facilities.

RQ2: HOW ARE SAMPLED HEIs FINANCED TO OPERATE AND WHAT ARE THEIR VARIOUS REVENUE STREAMS?

Findings revealed that HEIs have diverse sources of revenue, including government allocations, student tuition, non-tuition fees, grants from development partners, and other income-generating activities (such as research and consultancies, revenue from programs and education activities, rental income, interest income, and revenue from sales of goods and services). We observed differences in financing models of public and private HEIs. Public HEIs mainly depend on government funds in the form of capitation grants (based on the number of students enrolled), student loans and bursaries (need-based grants), while private HEIs mainly rely on student tuition fees. Government allocations to HEIs include capitation grants, loans and bursaries (through the Higher Education Loans Board (HELB)), and the bursaries through the National Government Constituency Development Fund (NG-CDF). The major challenges with government allocations cited by the respondents include inadequate government allocations and delays in disbursements. They emphasized that government allocations have been progressively declining in recent years and that disbursement of the funds is often delayed.

RQ3: WHAT ARE THE FACTORS THAT SAMPLED HEI LEADERS AND GOVERNMENT ACTORS PERCEIVE TO DETERMINE OR SHAPE HEI'S FINANCIAL SUSTAINABILITY?

This research question sought stakeholders' views on the factors that influence financial sustainability of HEIs. Findings from the study highlight six key determinants of HEI financial sustainability: (1) government policies and regulations; (2) human resource structure; (3) leadership; (4) limited autonomy to make financial decisions; (5) infrastructure; and (6) geographical location.

1. **Government policies and regulations:** Views from representatives revealed that three government policies and regulations affect the financial sustainability of HEIs, especially public HEIs: (1) the allocation and disbursement of capitation grants; (2) the government directive on

the promotion of STEM courses in TVETs; and (3) the establishment of at least one TVET institution per constituency.

- **Allocation and disbursement of capitation grants:** Declining allocations and delays in disbursements create funding gaps, cripple the operations of HEIs, and undermine their financial sustainability.

- **Government directive on the promotion of STEM courses in TVETs:** In December 2022, the Government of Kenya issued a directive to TVETs to phase out business courses and increase enrollment in STEM courses over a period of three years starting January 2023. For TVETs to effectively implement this directive, they would have to undertake substantial investments in infrastructure, equipment, as well as align their human resources to STEM courses. In addition, institutions that predominantly offer non-STEM courses face a risk of reduced enrollment and therefore reduced revenue.

- **Establishment of at least one TVET institution per constituency[1]:** The TVET policy (2014) calls for the establishment of at least one Vocational Training Centre (VTC) at constituency level, at least one Technical College (TC) at the county level, Technical Teachers' Training College (TTTC), National Polytechnics (NPs), and Technical Universities (TUs). Respondents representing TVETs were of the view that this regulation was largely politically motivated and it has resulted in too many TVETs competing for the same students within a catchment area in addition to stretching the limited government resources to fund TVETs.

2. **Human resource structures:** Views from respondents indicate that the human resource structure for public HEIs (especially TVETs) is skewed towards non-teaching staff and this has created inefficiencies, duplication of tasks, and a high wage bill, all of which affect financial sustainability. In addition, a number of HEIs reported inadequate numbers of teaching staff on government payroll, forcing them to use internally generated funds to pay salaries for the additional teaching staff.

3. **Leadership:** Respondents emphasized the importance of good governance in contributing to the financial sustainability of HEIs. The views expressed show that public HEIs have skill gaps in

[1] Based on Article 89 of the 2010 Constitution of Kenya, there are 290 constituencies, based on a formula where these constituencies are delineated based on population numbers. As such, the constituencies are clustered more densely in urban areas than rural areas, resulting in an increase in competition for students by the many TVETs in those areas.

governance unlike their private counterparts. This was partly attributed to political interference during the process of appointing leaders in public HEI where some respondents indicated that selections are based on political loyalty rather than merit.

4. **Limited autonomy to make financial decisions:** The views expressed by the respondents indicate that public HEIs have limited autonomy in making decisions related to setting student tuition fees as this is done by the Commission of University Education (CUE). Respondents indicated that the current tuition fees are too low compared to the market rate and therefore insufficient to meet the costs of delivering the academic programs.

5. **Infrastructure:** While good teaching and learning infrastructure (e.g., classrooms, workshop spaces, laboratories, ICT, equipment, and machinery) is a key determinant of HEI financial sustainability, especially in determining the enrollment levels, the quality of the training, and graduate marketability, respondents indicated that the expansion of infrastructure in public HEIs has not kept pace with increasing student enrollment numbers. Lack of finances was mentioned as the main barrier hindering the development of infrastructure within public HEIs.

6. **Geographical location:** Representatives' views indicate that the geographical location of an HEI, especially TVETs, affects their financial sustainability. They noted that TVETs located within the urban areas attract higher student enrollments and benefit from better infrastructure and access to essential amenities compared to their rural counterparts.

RQ4: WHAT STRATEGIES DO SAMPLED HEIS UNDERTAKE TO PROMOTE THEIR FINANCIAL SUSTAINABILITY?

This research question captured respondents' views on strategies to promote financial sustainability of Kenyan HEIs. The study identified three major strategies: (1) alternative income-generating activities; (2) partnerships and collaborations; and (3) research grants, consultancies, and research commercialization.

1. **Alternative Income Generating Activities:** Respondents mentioned that having alternative income-generating activities is a good strategy that promotes the financial sustainability of HEIs. They emphasized that engaging in alternative income-generating activities diversifies HEI revenue sources and reduces their reliance on government allocations. Examples of the various income-generating activities include agriculture, processing of agricultural products, trade and

services, and manufacturing. Respondents, however, indicated that alternative income-generating activities undertaken by HEIs are not managed efficiently, and that there is a lack of accountability and transparency in financial reporting. In addition, respondents mentioned that some alternative income-generating activities are not competitive due to government regulations on procurement of goods and services that require all public institutions to source items from prequalified suppliers whose prices are often higher than the market rates.

2. **Partnerships and collaborations:** Partnerships with the government, the private sector, development partners, and other HEIs (both local and international) were reported as key to promoting the financial sustainability of HEIs. Such partnerships enable HEIs to meet infrastructural, skills development, equipment, and funding needs.

3. **Research grants, consultancies, and research commercialization:**[2] This was another viable strategy for financial sustainability of HEIs mentioned by the respondents. While HEIs have attempted to commercialize research, respondents indicated that the lack of guidelines and institutional support as well as inadequate government funding for innovative research impede commercialization efforts. For example, in some HEIs, there is an absence of staff dedicated to mobilizing funds and applying for intellectual property rights, including royalties, patents, and trademarks.

RQ5: WHAT RISK MANAGEMENT STRATEGIES, IF ANY, DO HEI STAKEHOLDERS UNDERTAKE FOR NAVIGATING UNEXPECTED SHOCKS (E.G., COVID-19)?

This research question explored available risk management strategies employed by HEIs in case of unexpected shocks, such as the COVID-19 pandemic. Risk management approaches employed before and during the pandemic were discussed. Respondents indicated that the COVID-19 pandemic greatly disrupted HEI operations and threatened their financial sustainability. This was largely due to COVID-19 mitigation measures instituted by the government, including nationwide lockdowns, social distancing, and

[2] Research grants, consultancies, and research commercialization is explored in more detail in the HEIGHTS Innovation Ecosystems, Kenya study.

closure of education institutions, among others. To navigate the effects of the pandemic, HEIs employed the following strategies: (1) adoption of online classes; (2) increased use of technology for communication and institutional meetings; and (3) building financial reserves.

However, respondents mentioned that many of the public HEIs lacked the required infrastructure to successfully deliver classes online. Risk management measures to mitigate anticipated shocks undertaken by HEIs include having good financial management practices such as: (1) planning and budgeting for short-, medium-, and long-term; (2) adopting digital technology in financial management at all levels; (3) having procurement and tender committees to review the procurement process to ensure compliance with relevant laws and regulations; (4) having internal audit and risk management committees to monitor overall HEI risk management framework, financial reporting and compliance processes; (5) carrying out external audits, financial monitoring, and reporting; and training personnel in financial management.

RECOMMENDATIONS

RECOMMENDATIONS FOR THE KENYAN GOVERNMENT

1. **Review and develop a fit-for-purpose legislative financing model for HEIs in Kenya:** Between 2017 and 2023, HEI financing was based on the Differentiated Unit Cost (DUC) model, which allocated funds based on the number of students per academic program. A new model started in May 2023, the Variable Scholarship and Loan Funding (VSLF) model, which is student-centered, has done one disbursement with several challenges prompting its revision. The inefficiencies of DUC and VSLF call for the government and all the education stakeholders to develop a performance based funding model which should hinge on (1) institutional and national enrollment planning in line with demand forecasting and (2) rationalization of program costing, since different HEIs charge different fees for similar programs within the ecosystems.

2. **Periodically update the funding formula for public HEIs**: The government should periodically review the funding formula for public HEIs and increase government investment as needed to ensure that the amounts provided match the financial needs of public HEIs to maintain their quality and competitiveness.

3. **Improve disbursements of government allocations to public HEIs:** The government should improve budgetary procedures to prioritize allocations to HEIs and ensure timely disbursements.

4. **Review and reform the TVET policy of 2014:** Revise the policy on establishment of at least one TVET per constituency to ensure that TVETs are created based on demand and student population rather than basing on constituency.

5. **Review and update the Public Procurement and Asset Disposal Act of 2015:** Amend policies and regulations on procurement for public institutions to provide waivers for HEIs for sourcing certain goods and services that relate to alternative income-generating activities.

6. **Streamline HEI human resource structure for increased efficiency and financial sustainability of HEIs:** Hire more teaching staff to fill the vacant positions and streamline the human resource structure to match the number of staff with the available roles and duties.

RECOMMENDATIONS FOR HEIs IN KENYA

7. **Review and update the appointment process of HEI leadership:** Streamline procedures of appointing, promoting, and retaining HEI leaders to ensure that they are based on merit, performance and are free of political influence.

8. **Build capacity of HEI leaders in financial management:** Carry out capacity assessments to identify skill gaps in financial management and offer necessary capacity strengthening trainings to HEI leaders.

9. **Improve the management of alternative income-generating activities:** Hire professional managers to run alternative income-generating activities and adhere to good practice in financial management and reporting to ensure accountability and transparency.

10. **Strengthen research commercialization and provide incentives:** Formulate and institutionalize guidelines on research commercialization and create specialized units dedicated to marketing research products, technologies, processes and services.

11. **Deepen partnerships and collaborations with HEI stakeholders:** Seek partnerships and collaborations with key HEI stakeholders including the private sector, government agencies, development partners, and other HEIs (both domestic and international), in areas that support fundraising, research, infrastructural and skills development.

12. **Build financial reserves to strengthen HEI preparedness for financial risks:** HEIs should gradually build financial reserves to prepare for risk management and navigate unexpected shocks, like the COVID-19 pandemic.

INTRODUCTION AND BACKGROUND

STUDY PURPOSE AND AUDIENCE

The goal of this study on higher education is to inform the United States Agency for International Development's "strategic planning, activity design, and professional development" in the area of sustainable financing for higher education institutions (HEIs) as outlined in the USAID Higher Education Learning Agenda (USAID, 2020). To achieve this goal, the study produces evidence-based strategies for improving sustainable financing of HEIs by analyzing approaches and risk management strategies that HEIs are pursuing to strengthen their financial sustainability. Specifically, this study analyzes HEI financial operations and strategies taking into account their HEI financing models within the larger higher education policy, regulatory, and funding environment. This research is part of a multicountry comparative study involving Kenya, Indonesia and the Philippines. The audience for the output of the study includes the following stakeholders: USAID Washington's Center for Education, USAID/Kenya Mission, as well as other USAID Missions worldwide engaged in Higher Education activities, multilateral organizations funding higher education activities in low- and middle- income countries (LMICs), and the Government of Kenya, especially the Ministry of Education.

AN OVERVIEW OF HEI FINANCIAL SUSTAINABILITY IN KENYA

Kenya Vision 2030, launched in 2008, aims to transform Kenya into a newly industrializing, middle-income country by 2030 (Government of the Republic of Kenya, 2007). Higher education is a key pillar of this vision, emphasizing the need for a skilled workforce. The Vision advocates for expanding higher education infrastructure and accommodating the growing student population. In addition, the government of Kenya formulates five-year National Education Sector Strategic Plans (NESSP) that spell out policy priorities, programs and strategies for the education sector, and education financing frameworks (Ministry of Education, 2019). Higher Education Institutions (HEIs) in Kenya comprise of public and private: (1) universities, and (2) Technical and Vocational Education and Training (TVET) institutions, see **Table 1**.

Table 1. HEIs by Category, 2019 – 2023

Category	2019	2020	2021	2022	2023
Universities					
Public	31	31	32	36	37
Private	32	33	33	33	33
Total	*63*	*64*	*65*	*69*	*70*
TVET Institutions					
Public Vocational Training Centres (VTC)	1,149	1,156	1,031	1,051	1,120
Private Vocational Training Centres (VTC)	47	83	88	88	88
Public Technical and Vocational Colleges (TVC)*	191	230	255	277	309
Private Technical and Vocational Colleges (TVC)*	742	820	885	973	1,048
National Polytechnics	11	12	12	12	12
Total	*2,140*	*2,301*	*2,271*	*2,401*	*2,577*

*Notes/Source: Kenya National Bureau of Statistics, 2024 (*Formerly Technical Training Institutes)*

The NESSP 2023-2027 highlights that HEIs face a number of challenges including inadequate physical infrastructure and equipment to support teaching requirements, inadequate funding, and others. The funding landscape for HEIs in Kenya is multifaceted, involving various sources of funding, such as government allocations, student tuition fees, private donations, and grants from local and international organizations (Oanda & Jowi, 2012). There are robust legal and regulatory frameworks encompassing various laws and policies designed to ensure sustainable and equitable financing of HEIs. The Universities Act, 2012 (Government of the Republic of Kenya, 2012) and TVET Act, 2013 (Government of the Republic of Kenya, 2013) provide the legal basis for the establishment, accreditation, and governance of universities and technical institutes. The two laws establish the Commission for University Education (CUE) and the Technical and Vocational Education and Training Authority (TVETA) respectively, as key regulatory bodies overseeing quality assurance and standards in higher education and technical vocational training.

HEI FUNDING SOURCES

The Kenyan government provides substantial funding to public universities through capitation grants, student loans, and bursaries (Ministry of Education, 2019, Wanjala et al., 2024). The Higher Education

Loans Board (HELB)[3] Act, 1995 established HELB to provide loans, bursaries, and scholarships to students, thereby facilitating access to higher education for those who might otherwise be unable to afford it (Government of the Republic of Kenya, 1995). In addition, the Universities Act, 2012 established the Universities Fund (UF)[4] for financing universities.

Differentiated Unit Cost Financial Model (2017-2023)

Between 2017 and 2023, government funding to HEIs was based on the Differentiated Unit Cost (DUC) model, which allocated funds based on the number of students per academic program. The DUC model calculated funding based on the average cost of delivering various academic programs and allocated a block amount directly to HEIs. These funds were shared amongst the enrolled students which led to a lower grant amount per student. As such, this model often led to disparities and inconsistencies in funding allocations, as it did not always reflect the true cost of individual academic programs. Since its inception, the amount of DUC funds allocated to the universities have been declining. On the other hand, there has been a growth in the number of students qualifying for and enrolling in various higher education programs. This high growth in student enrollment and reduction in DUC funds caused financial strain on HEIs. Due to the DUC funding gap, all private universities opted out of the DUC model and admission of government sponsored students in the financial year 2022/2023 (See **Table 2**).

Table 2. Differentiated Unit Cost (DUC) model for Public and Private Universities

Public Universities DUC Funding				Private Universities DUC Funding			
Financial Year	Number of Students	Approved Budget (Billions Ksh)	% of DUC Allocation	Financial Year	Number of Students	Approved Budget (Billions Ksh)	% of DUC Allocation
2018/2019	233,218	38.1	66.40%	2018/2019	18,587	1.6	44.86%
2019/2020	241,015	41.2	60.70%	2019/2020	29,729	2	34.16%
2020/2021	271,446	41.9	53.77%	2020/2021	43,676	2.5	28.79%
2021/2022	324,182	43.8	49.51%	2021/2022	61,541	2.7	22.55%
2022/2023	356,188	44.0	48.11%	2022/2023	-	-	-

Notes/Source: Universities Fund, 2024

[3] HELB primarily offers loans and bursaries.

[4] The Universities Fund primarily provides student scholarships.

Variable Scholarship and Loan Funding

Effective 2023/2024 financial year, HEI financing is based on a new model, the Variable Scholarship and Loan Funding (VSLF) model, which is student-centered and it allocates government funds based on the level of student need and academic program cost (HEIs charge tuition fees based on the market). Under this new model, public HEIs no longer receive block funding in the form of capitation, but funding for students is provided through a combination of scholarships, loans, student household contributions, and upkeep. Further, students seeking to pursue their studies in private universities are eligible to apply for loans only (Universities Fund, 2023).

Under the new model, financial support is targeted directly to students based on their level of need, as determined by the Means Testing Instrument (MTI). MTI considers a range of socioeconomic indicators, including household income, geographical location, poverty probability index, special circumstances such as orphans and students with disability, number of dependents, program costs, expenditure on education and gender. These indicators are scientifically weighted to ensure a fair, and transparent allocation of funds. In addition, the program cost is determined through a cost analysis of expenses (such as salaries, laboratory and equipment costs, materials, and other) incurred in delivering each program. Therefore, the model provides a transparent fees structure to all stakeholders, fairer distribution of financial resources across different programs and institutions, and targeted financial support to programs that require higher investments, such as those in science, technology, engineering, and mathematics (STEM). Based on the MTI, government funding to students in public universities and TVETs is categorized into five bands indicated in **Table 3** below.

Table 3. Variable Scholarship and Loan Funding (VSLF) Model

Band	Public University	TVET
Band 1 *Students from households earning below KSh 5,995 per month*	• 95% Government of Kenya Financing ○ Scholarships - 70% ○ Loans - 25% • Households - 5% • Upkeep - KES 60,000	• 92.5% Government of Kenya Financing ○ Scholarships - 70% ○ Loans - 22.5% • Households - 7.5% • Upkeep - KES 18,600
Band 2 *Students from*	• 90% Government of Kenya Financing ○ Scholarships - 60%	• 88% Government of Kenya financing ○ Scholarships - 60%

Band	Public University	TVET
households earning between KShs.5,995 to KShs.23,670 per month	○ Loans - 30% • Households - 10% • Upkeep - KES 55,000	○ Loans - 28% • Households - 12% • Upkeep - KES 17,600
Band 3 *Students from households earning between KShs.23,671 and KShs.70,000 per month*	• 80% Government of Kenya Financing ○ Scholarships - 50% ○ Loans - 30% • Households - 20% • Upkeep - KES 50,000	• 82% Government of Kenya Financing ○ Scholarships - 50% ○ Loans - 32% • Households - 18% • Upkeep - KES 15,600
Band 4 *Students from households earning between KShs.70,001 and KShs.119,999 per month*	• 70% Government of Kenya Financing ○ Scholarships - 40% ○ Loans - 30% • Households - 30% • Upkeep - KES 45,000	• 78% Government of Kenya Financing ○ Scholarships - 40% ○ Loans - 38% • Households - 22% • Upkeep - KES 14,600
Band 5 *Students from households earning above KShs.120,000 per month*	• 60% Government of Kenya Financing ○ Scholarships - 30% ○ Loans - 30% • Households - 40% • Upkeep - KES 40,000	• 73% Government of Kenya Financing ○ Scholarships - 30% ○ Loans - 43% • Households - 27% • Upkeep - KES 13,600

Notes/Source: Ministry of Education, State Department for Higher Education & Research, 2024

Tuition fees are also a major income source for HEIs in Kenya and contribute to their financial sustainability (Mukhwana et al., 2016). In addition to government funding and tuition fees, other funding sources such as philanthropic organizations, international agencies, alumni contributions, and income from alternative income generating activities (IGAs) (such as short courses, business ventures, consultancy services, and hiring out university facilities to external users) play a crucial role in financing sustainability of HEIs in Kenya (Oanda & Jowi, 2012, Tsuma & Mugambi, 2014, Murage & Onyuma, 2015).

While HEIs have some autonomy over the revenue generated through IGAs, studies have reported that inadequate operational capital, unskilled management, adherence to internal financial controls and reporting affect the performance of IGAs (Tsuma & Mugambi, 2014, Murage & Onyuma, 2015).

HEI FUNDING CHALLENGES

HEIs in Kenya face several financial challenges that impact their financial sustainability and ability to provide quality education and services (Oanda & Jowi, 2012). One of the key challenges faced by HEIs is their financial vulnerability to fluctuations in government disbursements due to their heavy reliance on government funding. Before the introduction of the funding model was revised, government allocations such as capitation grants, have been insufficient to cover all the expenses of HEIs, including personnel salaries, infrastructure development, research initiatives, and academic programs (Maobe & Peng, 2020). Indeed, while the government budgetary and public resources allocation to higher education has grown in recent years from 15.5% in 2013/14 to 22.7% in 2018/19, it has not kept up with the increase in the number of public universities (World Bank, 2019). In addition, disbursements of government funds to HEIs are often delayed, disrupting HEIs' planning and operations, which can lead to challenges in maintaining quality standards, expanding services, and meeting financial obligations (Maobe & Peng, 2020). On the other hand, HELB is affected by low loan recovery from students, limiting its ability to continue to provide loans, scholarships, and bursaries (HELB, 2020).

Solutions and Strategies for Addressing the HEI Funding Challenges

To reduce reliance on government funding, HEIs have started to diversify their revenue streams to ensure financial sustainability. For example, collaborations and partnerships with private sector organizations and philanthropic donors provide financial support for infrastructure development and research projects (Maobe & Peng, 2020). In addition, partnerships with industry stakeholders, research collaborations, and technology transfer agreements can present opportunities for generating revenue while advancing academic and research agendas (Kombo & Mwangi, 2018). HEIs also engage in alternative income-generating activities, such as offering consultancy services, renting out facilities, and venturing into commercial enterprises, such as agriculture and real estate development, to diversify their revenue streams (Tsuma & Mugambi, 2014, Murage & Onyuma, 2015). Through leveraging their expertise and resources, HEIs generate additional income that can be used to support their operations and invest in research funding, infrastructure development, and student scholarships (Maobe & Peng, 2020). By diversifying their funding sources, HEIs can reduce their vulnerability to fluctuations in government disbursements and ensure a more sustainable financial model.

RESEARCH QUESTIONS

This study addresses the following overarching research question: How do the government and Higher Education Institutions in Kenya understand financial sustainability, and what approaches and risk management strategies are sampled Higher Education Institutions pursuing to strengthen their financial sustainability? Specifically, the study focused on the following questions.

- **RQ1:** How do Higher Education institutions leaders and government actors in Kenya understand Higher Education Institutions financial sustainability?
- **RQ2:** How are sampled Higher Education Institutions financed to operate and what are their various revenue streams?
- **RQ3:** What are the factors that sampled Higher Education Institutions leaders and government actors perceive to determine or shape Higher Education Institutions financial sustainability?
- **RQ4:** What strategies do sampled Higher Education Institutions undertake to promote their financial sustainability?
- **RQ5:** What risk management strategies, if any, do Higher Education Institutions stakeholders undertake for navigating unexpected shocks (e.g., COVID-19)?

METHODOLOGY

The study used mixed methods to collect the relevant data and information, including qualitative and quantitative techniques. The qualitative data was collected using key informant interview (KII) guides (see **Annex 2**, **3**, **4**, and **5**). with stakeholders relevant to the higher education system and the financial sustainability of HEIs in Kenya. These included leaders from public and private HEIs, government officials, civil society organizations, development organizations and other non-governmental organizations (NGOs), private donors, and other actors relevant to financial sustainability, such as accrediting associations. The quantitative data was collected using a survey tool which was complemented by collecting and reviewing official documents (including annual reports and financial statements), and statistics from higher education authorities and sampled HEIs in Kenya.

SAMPLE DESCRIPTION

To ensure representation of the various voices, the study employed the maximum variation sampling technique to select a sample of HEIs to include in the study. Using this sampling technique, we purposefully stratified HEIs based on various dimensions of interest: geographical location, year of establishment, status of accreditation, and HEI size (based on student enrollment). Forty-one HEIs were sampled for the quantitative survey. A total of 71 stakeholders were purposely selected for key informant interviews, which included 41 HEI faculty and staff, 10 government officials, 5 HEI researchers, 5 representatives of the civil society organizations, 5 non-state HEI funders, and 5 private sector representatives, see **Table 4**.

Table 4. Number of sampled HEIs and other stakeholders

Stakeholder Category	Key Informant Interviews (KIIs)	Financial Survey/Financial Statements
Public universities	10	10
Private universities	10	10
Public TVC	11	11
Polytechnics	10	10
Government officials	10	–
Civil society	5	–

Stakeholder Category	Key Informant Interviews (KIIs)	Financial Survey/Financial Statements
Private sector	5	–
Researchers	5	–
Non-state funders	5	–
Total	*71*	*41*

DATA COLLECTION

The data collection took place between February to July 2023. Of the sampled 71 key informants, a total of 41 interviews were conducted, of which 31 were with HEI faculty and staff representatives (eight public universities, three private universities, 10 TTIs, 10 national polytechnics, four government officials, three HEI researchers, two representatives of the civil society organizations, and one private sector representative). Interviews were conducted either face to face or virtually and lasted between 60 to 90 minutes. Face-to-face interviews were conducted in a private location chosen by the interviewee and were audio recorded after seeking informed consent and permission from the interviewees. Virtual interviews were conducted over Zoom or other virtual platforms and were audio recorded on a password-protected server. All key informant interviews were carried out by two people, a senior researcher who was the lead interviewer and an associate who took notes.

In an effort to gain a better understanding of the financial sustainability of HEIs, data was collected using a survey tool and complemented with secondary data from HEI official documents (audited annual reports and financial statements) and the Kenya National Bureau of Statistics (KNBS). The research team surveyed relevant higher education personnel from sampled institutions on key metrics related to financial sustainability. Of the HEIs sampled, quantitative data was collected from five public universities, two private universities, three polytechnics, and four TTIs.

DATA ANALYSIS

QUALITATIVE DATA ANALYSIS

Key informant interviews were transcribed verbatim and checked for accuracy prior to coding. The final set of interviews were entered into the Dedoose data analysis software. We used both deductive and inductive coding. Data analysis followed thematic analysis techniques where the key themes and sub-themes were examined and refined in relation to the research questions.

QUANTITATIVE DATA ANALYSIS

The information collected from the fieldwork and secondary sources was collated, cleaned and analyzed using Microsoft Excel. Due to the low response rate and incompleteness of the data, the analysis selected one HEI from each category (i.e public universities, private universities, public TVCs and polytechnics) to complement the qualitative data findings. The analysis responded to the issues raised by the research questions and key variables analyzed include revenue sources, expenditure and student enrollment across the different HEI categories.

RESEARCH ETHICS

We obtained informed consent from all respondents and observed confidentiality of the data and respondents throughout the research process (see consent from in **Annex I**). All respondents were informed of their right to withdraw their participation from the study at any time, and a right to refuse to answer any question that they felt that they had no obligation to. Ethical approval was obtained at the University of Notre Dame and at the University of Nairobi. In addition, we obtained a research permit from the National Commission for Science, Technology & Innovation (NACOSTI). For more details on research ethics, data management, and quality assurance, please review **Annex I**.

LIMITATIONS

The study has a few notable limitations:

- **Low response rate:** For the financial survey, data was only collected from five public universities, two private universities, three polytechnics, and four TTIs; although the survey data was not representative due to incompleteness and critical errors or omissions.

- **Incomplete information:** In addition to the low response rate, some questionnaires from HEIs were returned with incomplete information and therefore our analysis is not representative of the population of HEIs in Kenya. Based on this, we chose to provide cases instead of aggregate analysis
- **Relatively short review period:** Data from HEI financial statement covers only five years (from 2018 to 2022) which limits our examination of the trends in the HEIs' revenue sources, expenditure and student enrollment before 2018. Additionally, it is worth noting that the government funding model changed from the DUC to the VSLF in 2023, which means that some of the factors noted may change going forward.

Due to these limitations, study findings cannot be generalized for all HEIs in Kenya. As noted above, for the quantitative findings, we chose instead to use four illustrative examples/cases (one per each HEI subtype), given the limited number of HEIs for which we obtained financial data.

STUDY FINDINGS

UNDERSTANDING OF HEI FINANCIAL SUSTAINABILITY

RQ1: HOW DO HEI LEADERS AND GOVERNMENT ACTORS IN KENYA UNDERSTAND HEI FINANCIAL SUSTAINABILITY?

Representatives from the public and private HEIs, the Government of Kenya, and Higher Education (HE) researchers defined FS for HEIs as the ability of an institution to meet its financial obligations consistently and on time, without accumulating pending bills or debts, and build reserves to finance future expansion. This definition takes into account both short-term and long-term financial positions and it revolves around three key parameters namely: (1) the ability to finance HEI operations and to invest in continued growth: (2) reduced reliance on government funding; and (3) availability of quality infrastructure, equipment and trainers. Below we discuss how these parameters help HEIs meet their core mandate and achieve financial resilience over time.

Ability to Finance HEI Operations and Invest in Continued Growth

Representatives from the public and private HEIs, the Government, and Higher Education (HE) researchers defined a financially sustainable HEI as one that can finance its operations including operational costs (payroll, utility bills, repairs and maintenance, teaching materials, and administration expenses), finance research, and cover students' co-curricular expenses. In addition, a financially sustainable HEI should be able to meet its statutory obligations such as taxes, pension schemes, and insurance. A representative of a public university stated that:

> "As a university, it is sustainable if it is able to address the wages of its workers, salaries and being able to at least give some research funds to its researchers to conduct research because the university is both teaching and research. If the university is able to do all that, then we say that the university is financially stable and self-sustaining."

– HEI Representative, Public University

Further, some representatives from both public and private HEIs and the Government included in their definition the ability to have financial reserves and fund future development, such as expansion and purchase of new equipment. An HEI representative stated that:

> "You must have some reserves to enable you to expand and therefore meet future challenges. If you cannot do that, you may guarantee survival but not future sustainability because things are changing all the time…for me that is the character of sustainability in university. Start by meeting your immediate needs and then get some little reserves that you can now use for gradual expansion and growth"
>
> – HEI Representative, Public University

Representatives from both public and private HEIs also included, having diversified and sustained streams of revenue, to the definition of a financially sustainable HEI. Diversification of income sources reduces reliance on a single revenue source and helps HEIs to withstand shocks while increasing their financial resilience. Mentioned revenue sources for public HEIs include capitation grants, research grants and consultancies, and earnings from other income-generating activities such as farming, adding value to agricultural produce (agricultural processing), rent, and catering services. However, private HEIs rely mainly on tuition fees. A representative from a TVET provided some of the other sources of revenue as shown in the quote below:

> "We do conferences…we provide conference facilities by working with our students who are doing food and beverage courses. We also hire out equipment."
>
> – HEI Representative, TVET Institute

Reduced Reliance on Government Funding

Representatives from the public HEIs, the Government, and HE (higher education) researchers see a financially sustainable HEI as one that can meet both its present and future obligations without depending on Government funding and therefore is self-supporting in its operation, however there is nosingle example of an HEI where this self reliance from government funding is occurring to date. A national government

representative explained that achieving financial independence from the government can be achieved by HEIs having internally generated income and building financial reserves from such incomes, as illustrated below.

"...of course, reduced dependence on the exchequer. World over, governments will continue to support university education but the characteristic is that globally, the funding from governments seems to be going down and the internally generated resources seem to be moving up"

– National Government Representative

Availability to Provide Quality Infrastructure, Equipment and Trainers

Representatives from both public and private HEIs, and the Government, agreed that a financially sustainable HEI is characterized by adequate, modern, and well-maintained infrastructure and equipment, and skilled trainers to support its core mandate of delivering quality education and research. Infrastructure, equipment, and trainers contribute to credibility, drive enrollment and enhance the ability of HEIs to attract other revenue sources. Indeed HEIs that offer STEM programs require up-to-date infrastructure such as modern classrooms, modern libraries, ICT facilities, workshops/laboratories and equipment to deliver practical programs. A representative from the government stated:

"A financially sustainable university should have a well-equipped infrastructure to perform its mandate. If its core mandate is engineering, then its infrastructure should be suitable for delivering engineering courses. That's why you see the Commission for University Education will not approve a medical course in a given university without the facilities and infrastructure needed."

– National Government Representative

For non-STEM programs, adequate facilities are also important, manifested in adequate and modern classrooms, modern libraries and ICT facilities. These are considered a key characteristic of a financially sustainable non-STEM HEI. As one representative from a private HEI put it, a financially sustainable HEI should be able to invest in ICT beyond the physical infrastructure as shown in the quote below:

"...the ability of the university to even invest in infrastructure or facilities such as classrooms or lecture halls, facilities that can enhance student learning and experience. [HEIs should have the]

capacity to invest in ICT infrastructure such as adequate computers and laptops according to the number of the students…apart from the physical infrastructure."

– HEI Representative, Private University

In addition, representatives from TVETs and the Government stated that an HEI that is financially sustainable should have a sufficient number of qualified trainers. Qualified trainers for the technical programs were defined as those with industry best practice expertise and are able to train on modern equipment. Such trainers can provide quality, market-relevant training to trainees. Representatives from TVETs mentioned that they often have fewer trainers in comparison to the number of students which compromises their ability to deliver quality education. In explaining this challenge, a representative from a Technical Training Institution (TTI) stated that:

"The major issue is we have more students coming in for different courses but the institution is not able to sustain the trainers and therefore we are forced to look for resources to hire extra teachers to add on those provided by the Government. So, that one is exerting a huge threat on meeting our mandate."

– HEI Representative, Technical Training Institution

CURRENT STATE OF HEI FINANCING

RQ2: HOW ARE SAMPLED HEIs FINANCED TO OPERATE AND WHAT ARE THEIR VARIOUS REVENUE STREAMS?

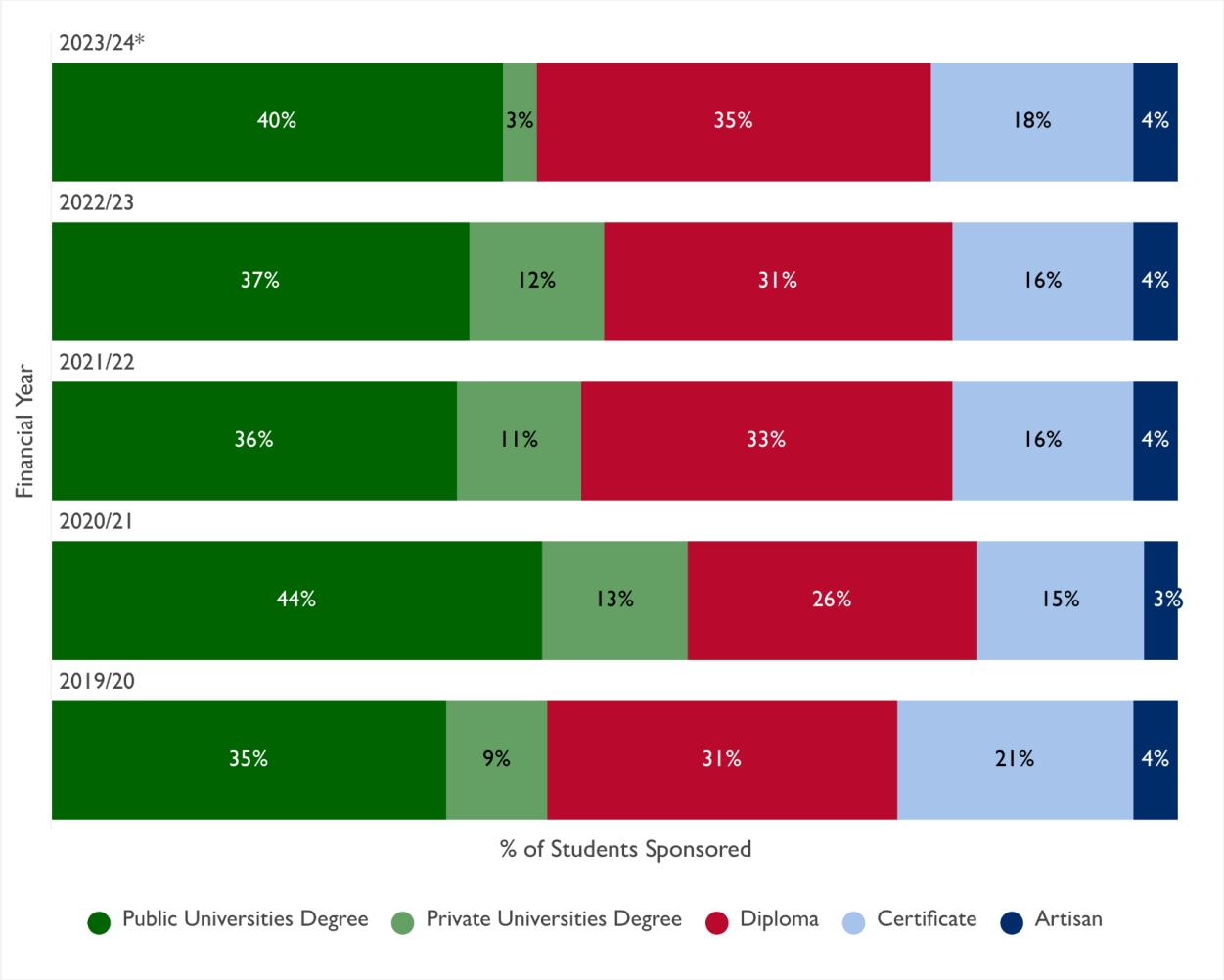
We provide a detailed account of the revenue sources and financing of HEIs based on an analysis of both interview data, secondary data from KNBS, and financial statements obtained from four selected HEIs as illustrative examples – not representative of other HEIs. This section discusses the revenue sources of HEIs across the subtypes: private university and public (university, TVC, and polytechnic). We find that the public HEIs depend mainly on allocations from the national government per the DUC funding model, tuition paid directly by students, scholarships and loans from the government, and fees, while the single largest source

of revenue for the private university is student tuition, as expected. Qualitative data findings corroborate these and highlight a number of challenges that public HEIs face, including reductions and delays in government capitation grants disbursements and uniform allocation of capitation per student despite varying cost requirements for different academic programs, both of which pose threats to financial sustainability of HEIs. It is worth noting that the new VSLF funding model that came into effect in the financial year 2023/2024 addresses the issue of uniform allocation of capitation per student.

Revenue Sources for HEIs

As detailed in the background section, the Government of Kenya provides funding to both public and private HEIs through capitation grants, student loans, and bursaries based on the DUC funding model. Analysis of secondary data obtained from KNBS, shows that the government sponsors more students pursuing degree programs at public universities (ranging 35% - 44%) followed by diploma students at universities and TVET institutions (26% - 35%) and certificate programs (15% - 21%) for the period 2019/20 to 2023/24. Government sponsorship of students pursuing degree programs at private universities and TVET artisan programmes trails with ranges of (3% - 13%) and (3% - 4%) respectively. Note that with the introduction of the new VSLF model – that excludes scholarships to private universities – in the financial year 2023/24, government sponsorship of students in private universities stands at 3% far less than the preceding years, see **Figure 1**.

Figure 1. Proportion of Government Sponsored Students Placed to Universities and TVET Institutions by Programme, 2019/20 – 2023/2024



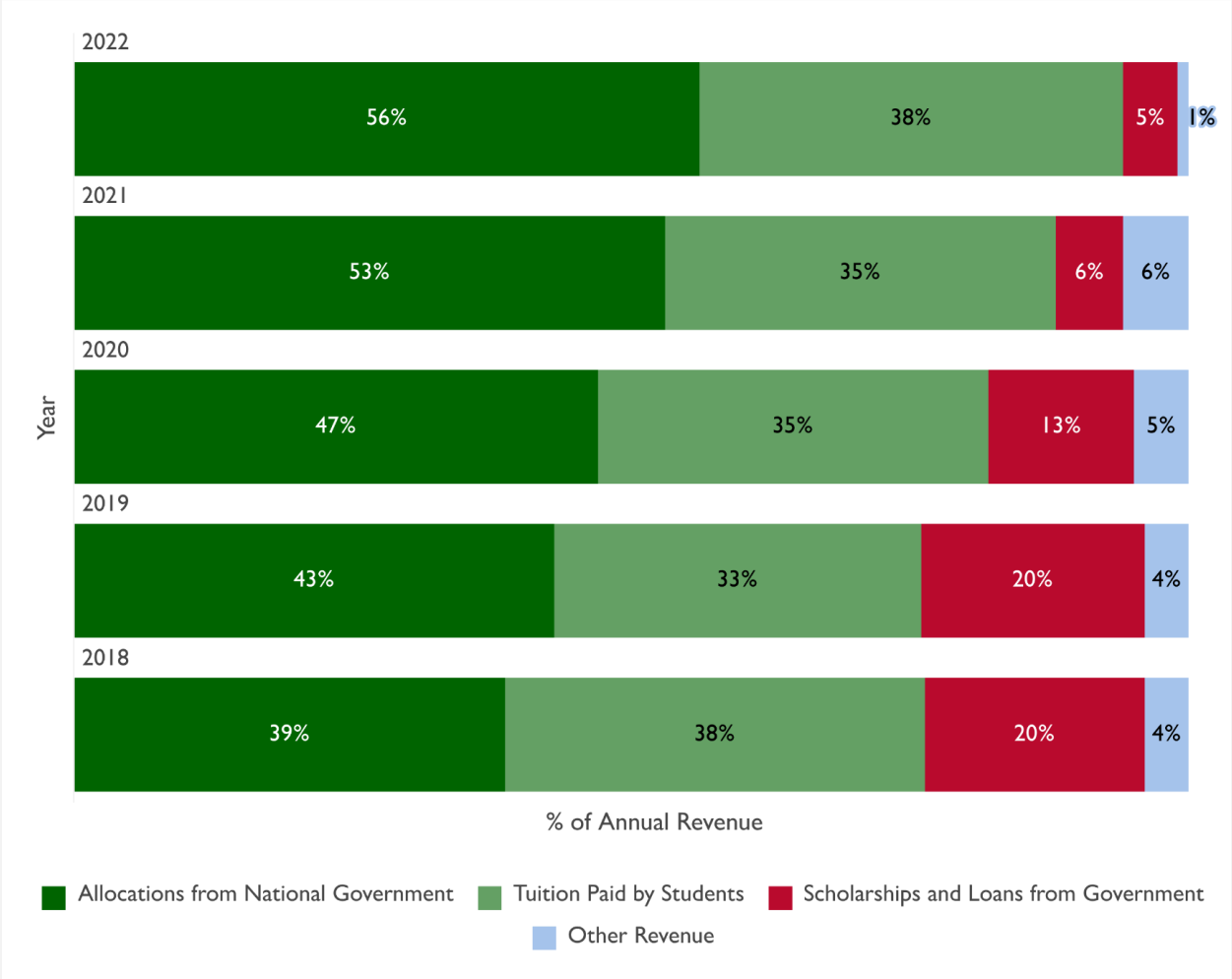
*Notes/Source: Authors' Calculations from Data Provided by KNBS, 2024 (*Provisional)*

Financial data from the selected public HEIs shows that they depend mainly on allocations from the national government, tuition paid directly by students, scholarships and loans from the government, non-tuition fees[5] as their main sources of revenue. We observe differences in the composition and structure of revenue sources across the three subtypes of public HEIs selected as illustrative examples. For instance, for the public university, allocations from the national government make up the largest share of the total revenue, gradually increasing from 40% in 2018 to 56% in 2022, followed by tuition (ranging 33-38%) during the same

[5] Non-tuition fees include registration fees, student identity cards, development levy, activity fees, caution, electricity, water and conservancy, local transport and traveling, repairs and maintenance, industrial attachment, medical and insurance.

period as shown in **Figure 2**. The share of other revenue (which includes income from sale of goods and services, rent, accommodation, catering, special accounts, foreign grants and grants overhead, and interest earnings) has gradually decreased from 18% in 2018 to 5% in 2022. It is worth noting that the share of other revenues for the selected public HEIs is small compared to allocations from national government, fees, tuition, scholarships and loans from government; but representatives from both the government and higher education researchers mentioned the importance of alternative income generating activities in improving revenue mobilization and reduce reliance on government funding. Representatives acknowledged that capitation may not be a sustainable approach to funding public HEIs. Alternative revenue sources for HEIs are discussed in more detail in research question four.

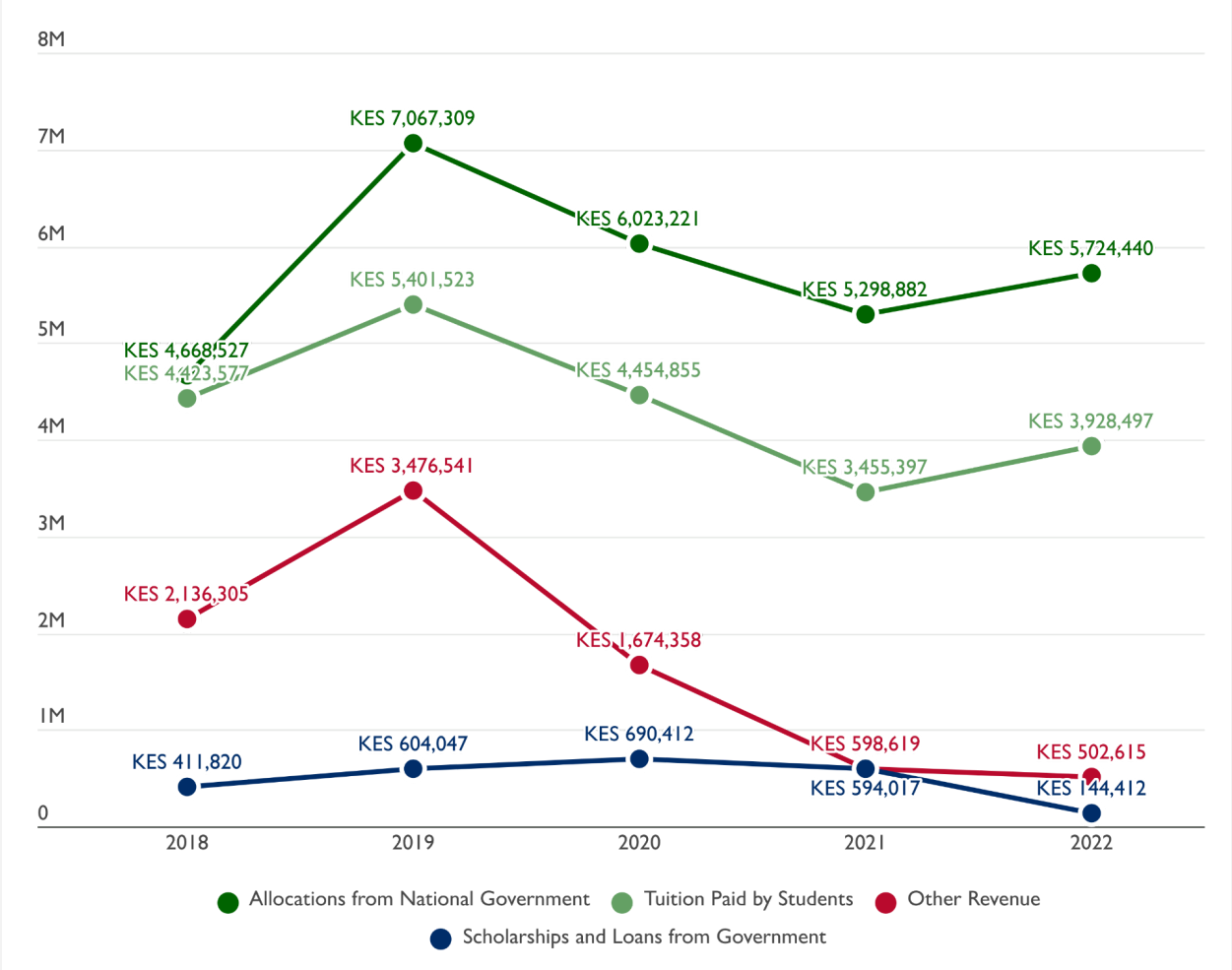
Figure 2. Revenue Sources as % of Total Revenue for a Public University (2018 – 2022)



Notes/Source: Authors' Calculations from Financial Statements from a Public University (2018-2022)

We observe a decreasing trend across three revenue sources between 2019 and 2021 for the public university depicted in **Figure 3**. The decreases in revenues mirror the decreasing student enrollment in this university during the same period. Data from this university shows that enrollment numbers have dropped from 73,582 in 2019 to 44,623 in 2022. The decrease in the number of students and consequently in revenues may be partly due to the government policy of decongesting some public universities (including our illustrative example) in favor of TVETs as well as the government's increased focus on technical colleges in a bid to feed the labor market with craftsmen and technicians. Indeed, according to the 2022 economic survey by the KNBS, in recent years most students opt to join TVETs in order to access government sponsorship and loans from HELB. In addition, while the decrease in student number has been gradual at about 6% per year, we observe a sharp drop of over 30% between 2020 and 2021. This sharp drop in student enrollment could be due to the huge hikes in tuition fees in 2021 at some public universities after a revision of tuition structure to reflect market rates, including our illustrative example.

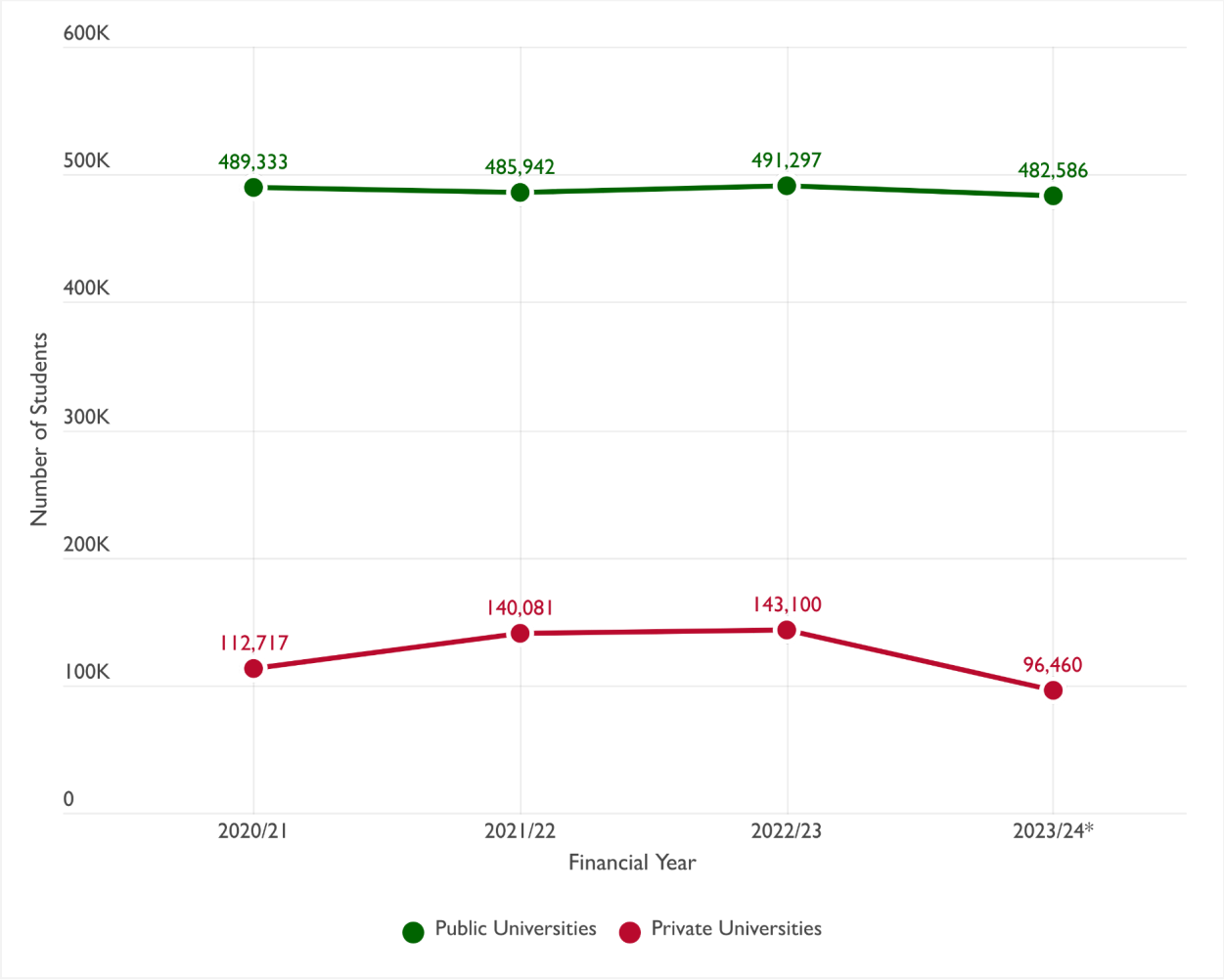
Figure 3. Trends in Revenue Collections by Revenue Source for a Public University between 2018 and 2022



Notes/Source: Authors' Calculations from Financial Statements from a Public University (2018-2022)

However, the decreasing enrollment numbers in the public university illustrated above is not representative nationwide of trends in student enrollment at public universities. Indeed, data from the KNBS shows an increase in student enrollment in public universities and a corresponding decrease at private universities as illustrated in **Figure 4**.

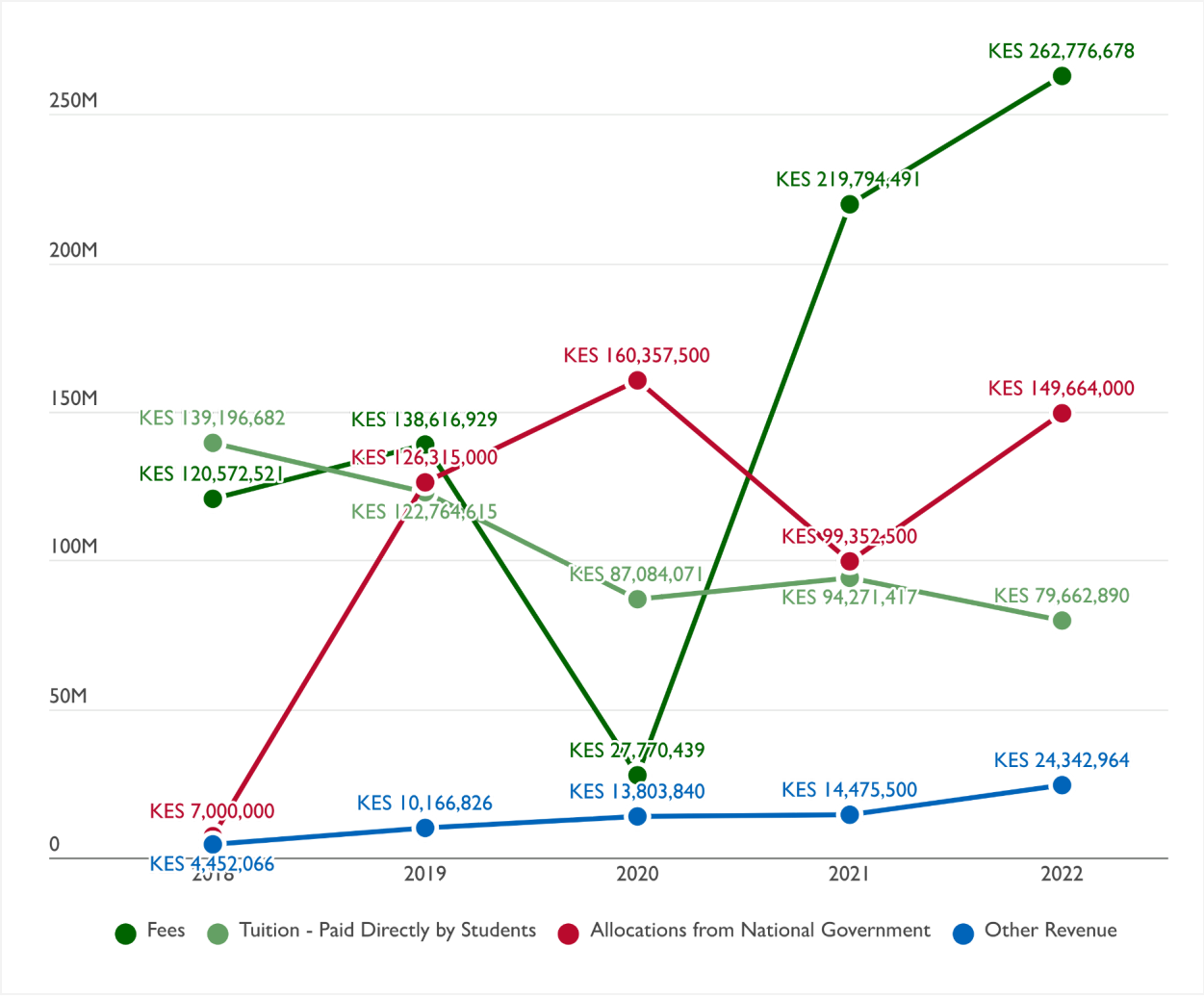
Figure 4. Enrollment in Public and Private University 2020/21 – 2023/24



*Notes/Source: Authors' Calculations from Data Provided by KNBS, 2024 (*Provisional)*

On the other hand, student enrollment numbers in TVET institutions show varying trends with enrollment in public TVCs increasing at a faster rate than in other TVET subtypes. There is a jump in the enrollment in public TVCs between 2022-2023 due to the government's policy of 100% transition from high school to TVETs since the old education system of 8.4.4 KCSE is being phased out due to CBC which is now at grade 8. Variations in the trends for revenue sources can be observed with tuition showing a downward trend while non-tuition fees show a sharp drop in 2020 before rising in 2021 and 2022 (see **Figure 5**). The sharp drop in non-tuition fees observed in 2020 can be attributed to the government lockdown due to the COVID-19 pandemic.

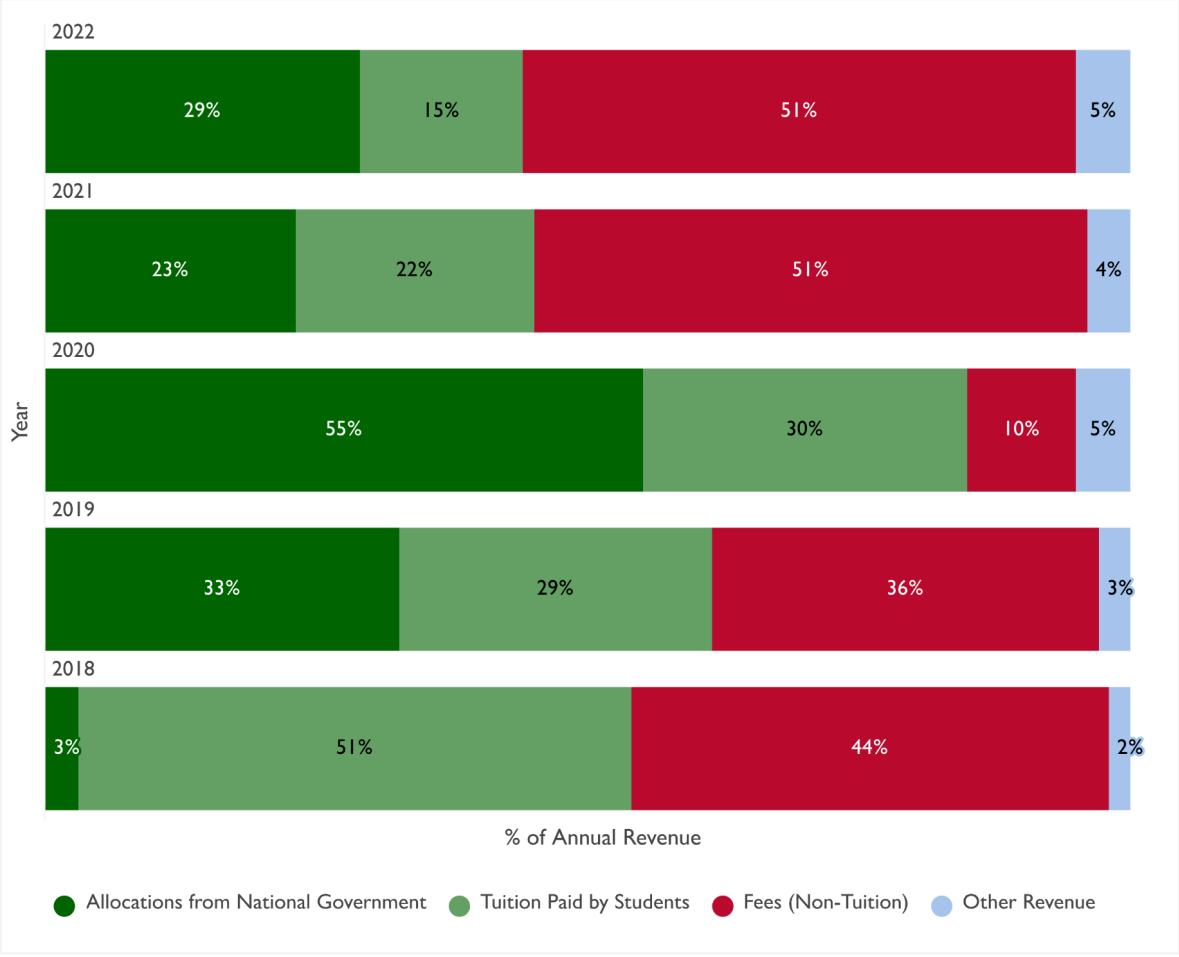
Figure 5. Trends in Revenue Collections by Revenue Source for a Polytechnic between 2018 and 2022 (KES)



Notes/Source: Authors' Calculations from Financial Statements from a Polytechnic (2018-2022)

In addition, while the public university had allocations from the national government consistently as the main source of revenue, data from the polytechnic shows dramatic shifts between tuition, allocations from the national government, and non-tuition fees as the main sources, as shown in **Figure 6**. In 2018, revenues from tuition made up the largest portion of the total revenue (51%), followed by non-tuition fees (44%), and allocations from the national government contributing only 3%. In the following years, allocations from the national government increased significantly, reaching 55% of total revenue in 2020, before declining to 23% in 2021, slightly increasing to 29% in 2022. On the other hand, non-tuition fees dropped to 10% in 2020, after which this revenue source became prominent for this HEI, contributing over half (51%) of the total revenue for the years 2021 and 2022. Other revenue sources for the polytechnic include interest earnings, sale of goods and services, grants and donations from development partners, which constitute 5% or less of the total revenue.

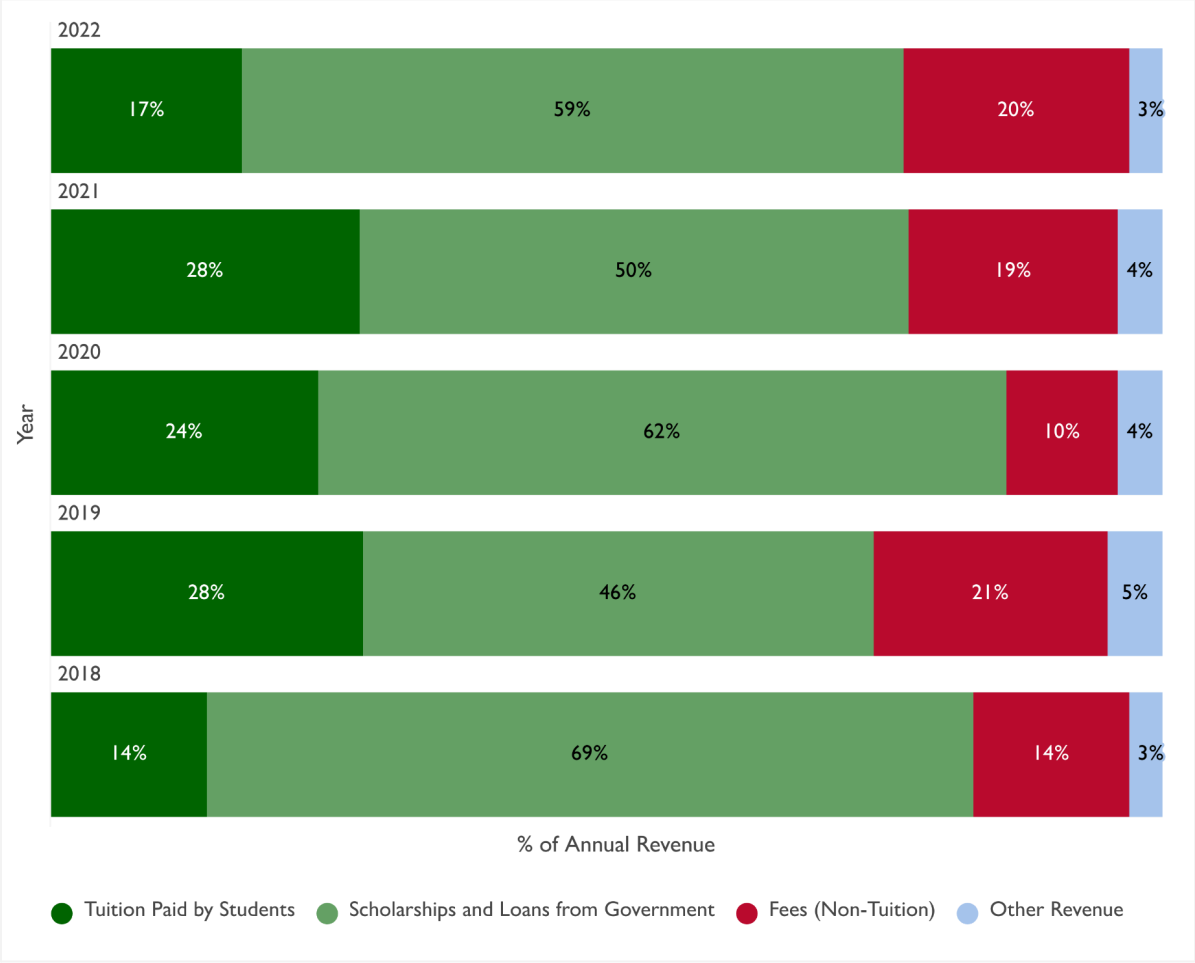
Figure 6. Revenue Streams as % of Total Revenue for a Polytechnic (Public) Between 2018 and 2022



Notes/Source: Authors' Calculations from Financial Statements from a Polytechnic (2018-2022)

Unlike the polytechnic, non-tuition fees have consistently been the largest source of revenue (ranging from 46% to 69%) for the public TVC between 2018 and 2022 as shown in **Figure 7**, followed by tuition (14-28%) and government scholarships and loans (10-21%). However, proportions to the total revenue of these three main sources vary over the years. For example, fees contributed 69% of the total revenue in 2018, followed by tuition and scholarships and loans from the national government, both contributing 14%. In 2022, fees contributed 59% of the total revenue followed by scholarships and loans from the national government at 20% and tuition at 17%. Other revenue sources for this public TVC include income from sale of goods and services, rent from facilities and equipment, and sales from farm/catering/kitchen activities. In contrast to the public universities, public TVETs do not receive capitation grants from the government which cater for salaries, wages, and some operational expenses. Tutors and staff at public TVETs are civil servants and therefore their salaries and wages come directly from the Public Service Commission (PSC).

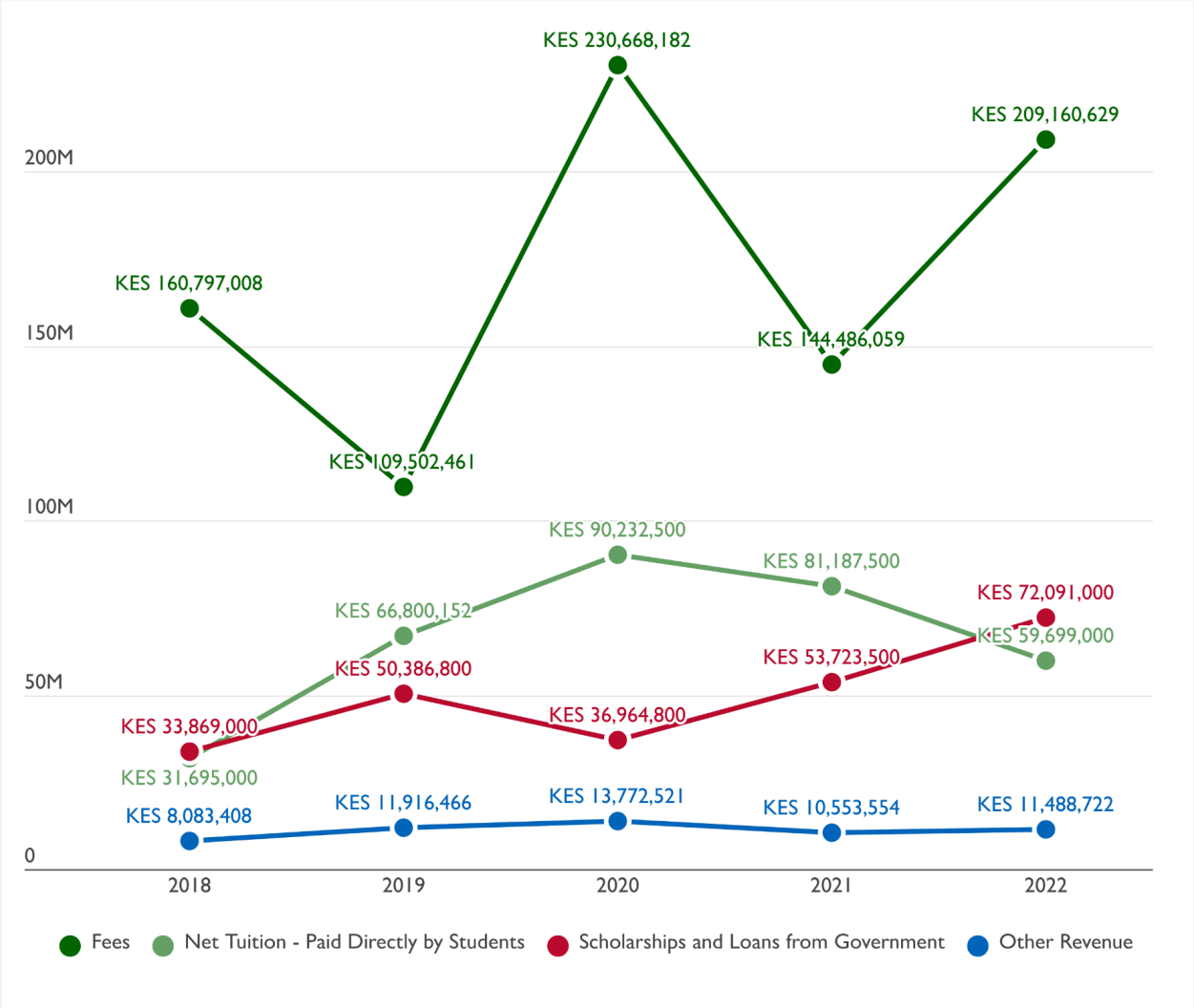
Figure 7. Revenue Streams as % of Total Revenue for a Public TVC Between 2018 and 2022



Notes/Source: Authors' Calculations from Financial Statements from a Public TVC (2018-2022)

Similar to the polytechnic, the number of students in the public TVC have gradually increased for the same period (2018-2022). There are variations in the trends for the revenue sources, with tuition increasing from 2018 to 2020 and gradually decreasing afterwards mirroring movements in scholarships and loans from the government. This could imply that the decrease in tuition over time is compensated by the increments in scholarships and loans. Non-tuition fees drop sharply in both 2019 and 2021 while scholarship and loans from the government fall slightly in 2020 and gradually rise afterward, see **Figure 8**. The drops observed can be partly attributed to lockdowns during the COVID-19 pandemic.

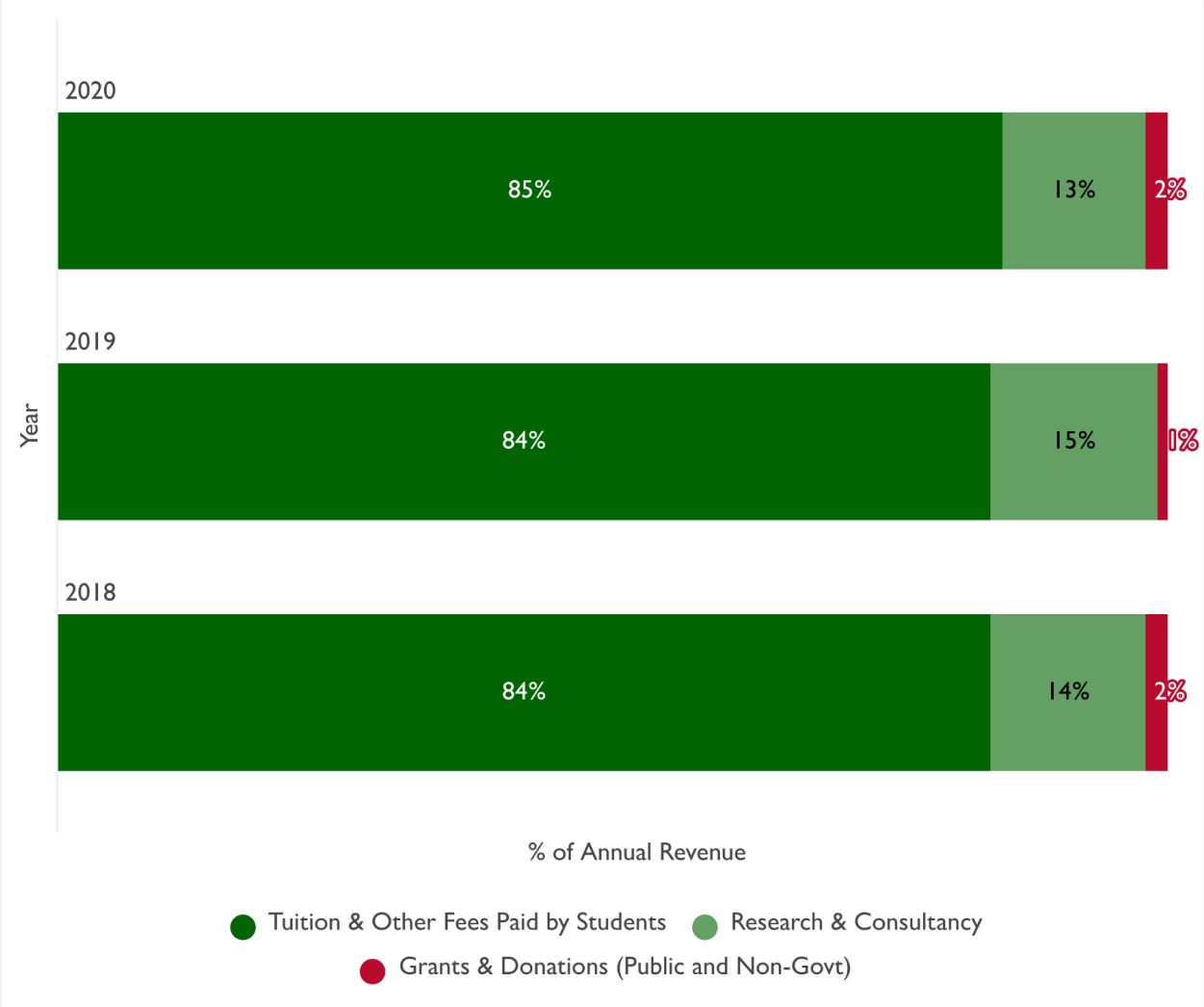
Figure 8. Trends in Revenue Collections by Revenue Source for a Public TVC between 2018 and 2022



Notes/Source: Authors' Calculations from Financial Statements from a Public TVC (2018-2022)

In contrast to the public HEIs, the revenue sources and their proportions making up the total revenue for the selected private university are relatively stable (during the three years for which data is available) from 2018 to 2020, as shown in **Figure 9**. Financial data shows that tuition is the single largest revenue source for this private university, constituting 85% of the total revenue. The revenue from research and consultancy makes up about (13-15%) and only 1-2% of the total revenue comes from grants and donations (public, non-government sources).

Figure 9. Revenue Sources as % of Total Revenue for a Private University Between 2018 and 2020



Notes/Source: Authors' Calculations from Financial Statements from a Private University (2018-2020)

Qualitative findings support these trends depicted in **Figure 9**. A representative from a private university stated that the main revenue source for private HEIs is tuition fees paid by students and that the higher the

number of students a private university can attract in enrollment, the higher the revenue received. In addition, the respondent mentioned that in the financial year 2016/2017, the government started allocating capitation grants by sponsoring students to pursue academic programs in private universities as well as extending HELB loans. However, a representative from the government noted that private universities receive minimal funding from the government in the form of capitation because government-sponsored students in private institutions are few as illustrated in the quote below.

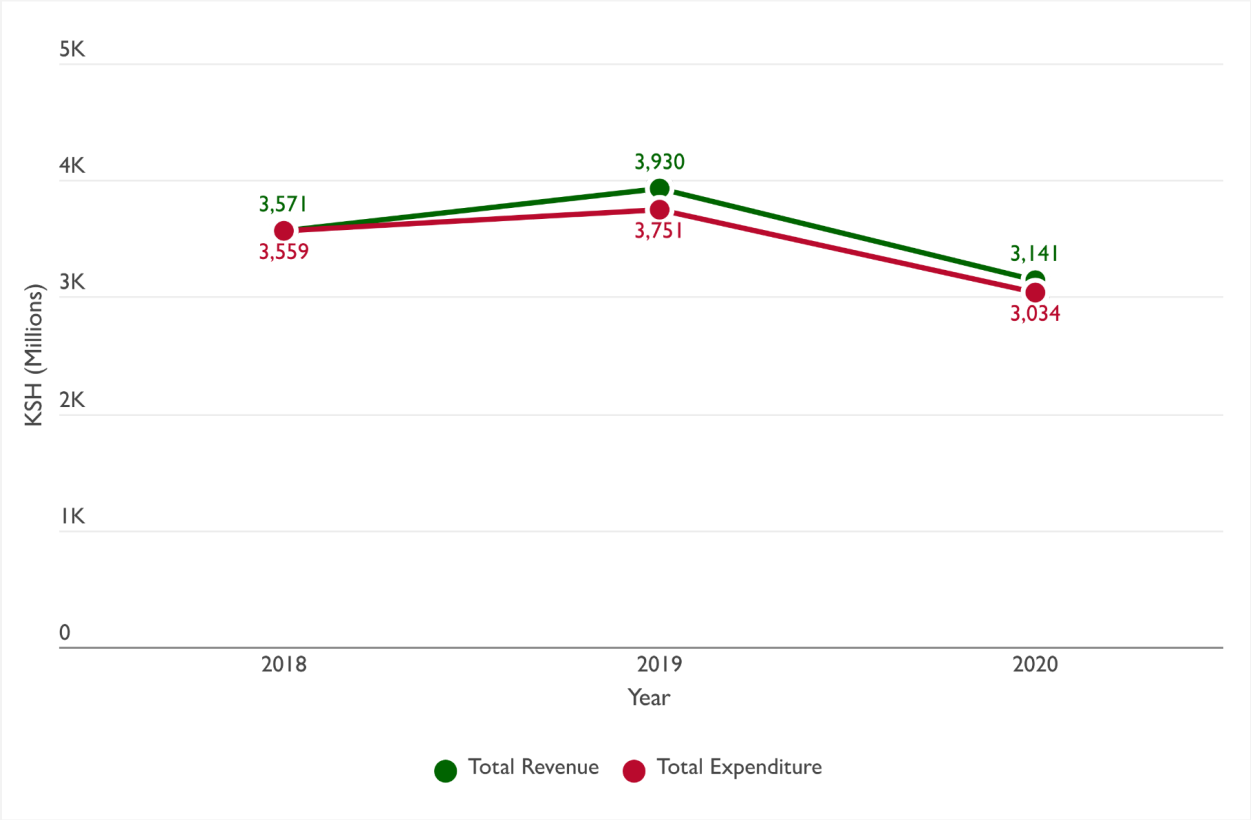
"The amount they [private universities] expect from the government is small since the number of government students who are sponsored in private universities is low. Although private universities have issues related to financial sustainability, they are not as big as in public universities."

– National Government Stakeholder

HEI Total Revenue Versus Total Expenditure

Analysis of revenue and expenditure data from the selected HEIs shows varying levels of financial vulnerability across the different subtypes. The public university is more financially vulnerable compared to the private university, TVET and polytechnic. For example, for the three years for which data is available, total revenue exceeds expenditure for the private university, see **Figure 10**.

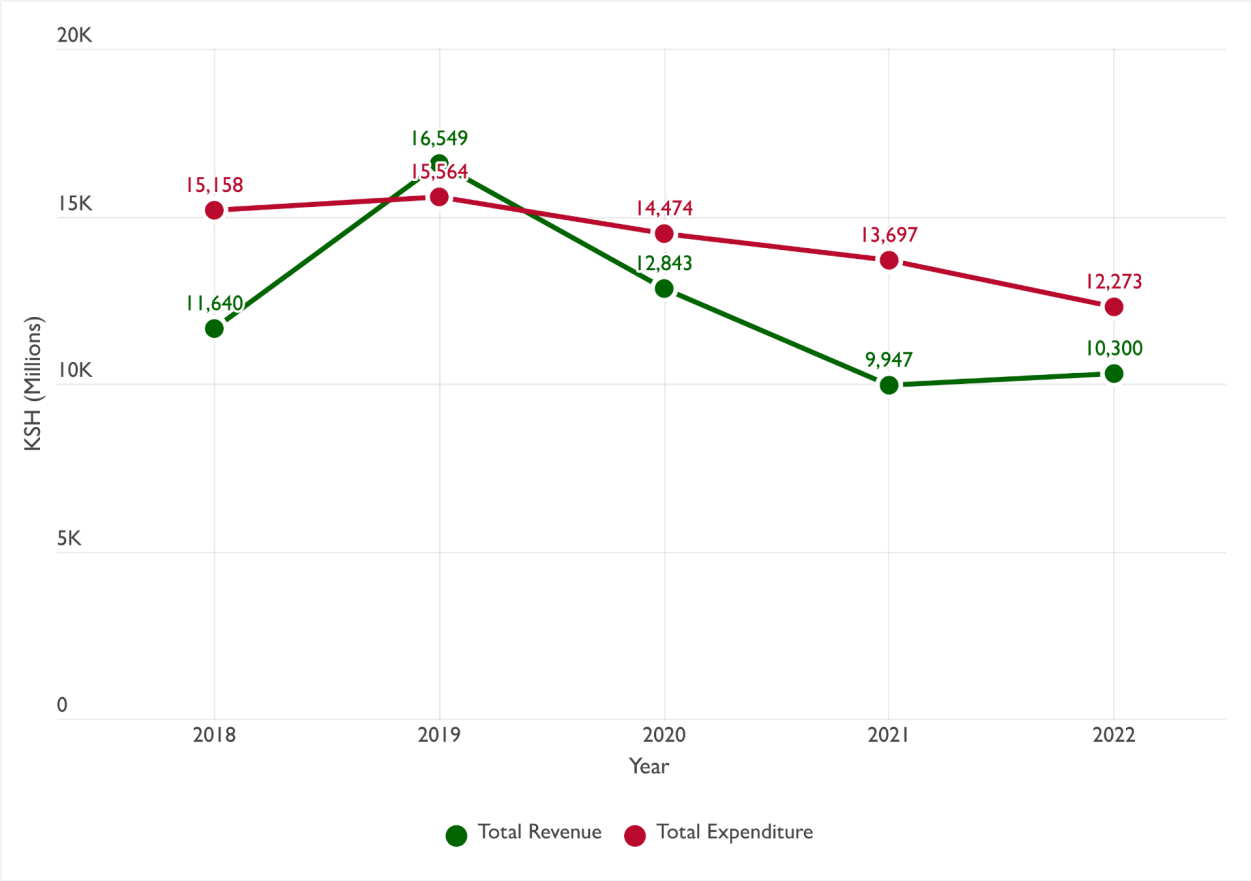
Figure 10. Comparison of Revenue and Expenditure for a Private University (Millions KES) between 2018 to 2020



Notes/Source: Authors' Calculations from Financial Statements from a Private University (2018-2020)

In contrast , for the public university apart from 2019, its expenditure exceeds revenue for the rest of the period under review, as shown in **Figure 11**. This is due to the underfunding from government, delayed capitation, decline in enrollment levels, campus closures, the microeconomic underperformance resulting in low fee collection. This implies that the public university selected for illustrative purposes for this report, struggles to meet its short-term financial obligations and is financially vulnerable. Financial statements and annual reports from this university show that thisHEIs relies on debt to finance their short- and medium-term operations. According to the National Government Budget Implementation Review Report (Financial Year 2021/22), a number of public universities take on both guaranteed and non-guaranteed loans with approval from the national treasury to finance priority projects and operations.

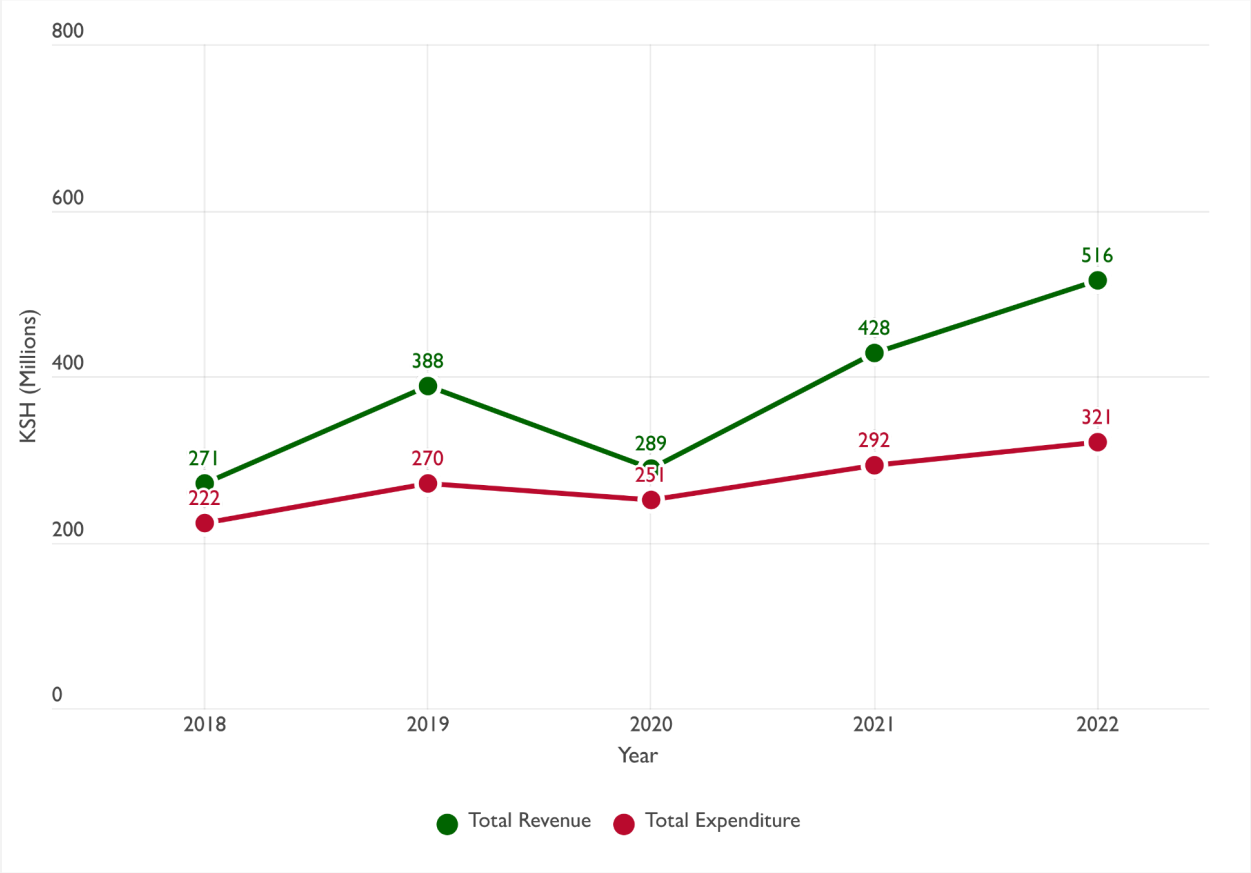
Figure 11. Comparison of Revenue and Expenditure for a Public University (Millions KES) between 2018 to 2022



Notes/Source: Authors' Calculations from Financial Statements from a Public University (2018-2022)

In contrast, data from the selected polytechnic show that revenues exceed expenditures during the entire period under review, as shown in **Figure 12**. We observe a drop in revenue collections between 2019 and 2020, coinciding with the COVID-19 pandemic, after which they start to rise again throughout the entire period under review.

Figure 12. Comparison of Revenue and Expenditure for a Polytechnic (Millions KES) between 2018 to 2022



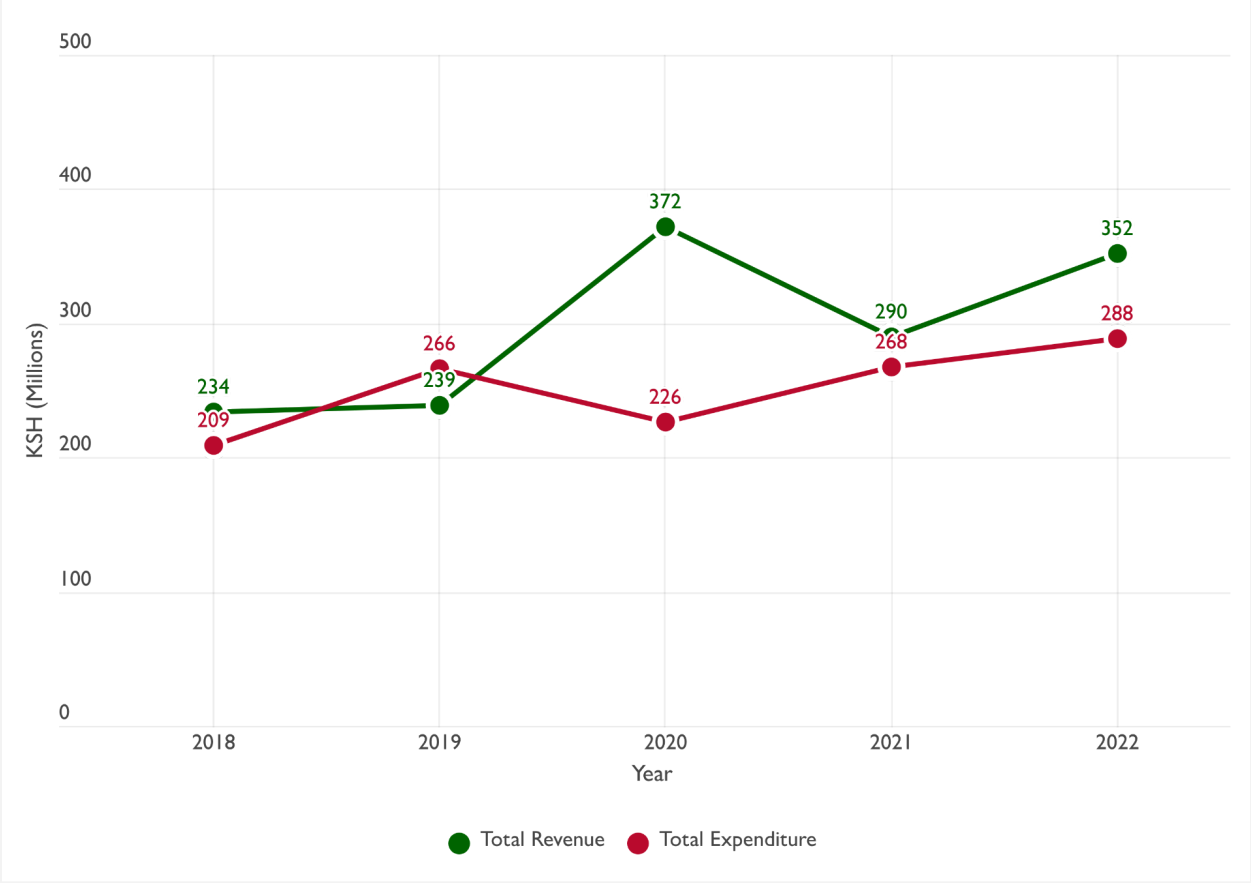
Notes/Source: Authors' Calculations from Financial Statements from a Polytechnic (2018-2022)

For the public TVC, apart from 2019, revenue collection has exceeded expenditure for the rest of the period under review, as shown in **Figure 13**. The observed drops in revenue for the polytechnic and the public TVC coincide with the drop in non-tuition fees as a percentage of total revenue seen in **Figure 3** and **Figure 4**. This underscores the importance of non-tuition fees as a source of revenue to these two institutions.

The comparison of revenue and expenditure for all our illustrative examples show that the private university and TVETs are less financially vulnerable compared to the public university. The difference in the financial vulnerability for the public HEIs could partly be explained by differences in the payroll structure and size of TVETs and public universities. Unlike public universities, salaries and wages of full time staff (teaching and non-teaching) at the public polytechnics and TVCs are paid by the public service commission. These two HEI subtypes are only responsible for the salaries and wages of their part-time academic staff. In addition, operational expenses for public TVCs and polytechnics are relatively lower compared to public

universities since they (public TVCs and polytechnics) are relatively smaller in size and do not have multiple campuses or branches spread across the country.

Figure 13. Comparison of Revenue and Expenditure for a Public TVC (Millions KES) Between 2018 to 2022



Notes/Source: Authors' Calculations from Financial Statements from a Public TVC (2018-2022)

Challenges to HEI Financing

Challenges with allocations from the national government

While allocations from the national government is a key revenue source to public HEIs, results from the qualitative interviews highlight several challenges associated with this revenue source. Representatives from universities and TVETs mentioned reduced and delayed disbursement of capitation grants, allocation of capitation to support government sponsored students placed at private universities[6], and uniform allocation

[6] The new higher education funding model Variable Scholarship and Loan Funding (VSLF), introduced in May, 2023, addresses this challenge as does the current new student-centered funding model (SCFM). These two new models

of capitation grants to TVETs regardless of student economic background as the main challenges. Representatives indicated that the reductions and delays in disbursement are due to the government having insufficient funds, as reflected in the following quote from a public HEI representative:

> "The differentiated unit cost for the student who's doing dentistry is about KES720,000. The student doing a Bachelor of Arts like history or something like that is KES144,000. But what the government does, after placing the students, it tells us that it doesn't have money. So, like last year, we received only 48% of the total fees from the government."
>
> – HEI representative, Public University

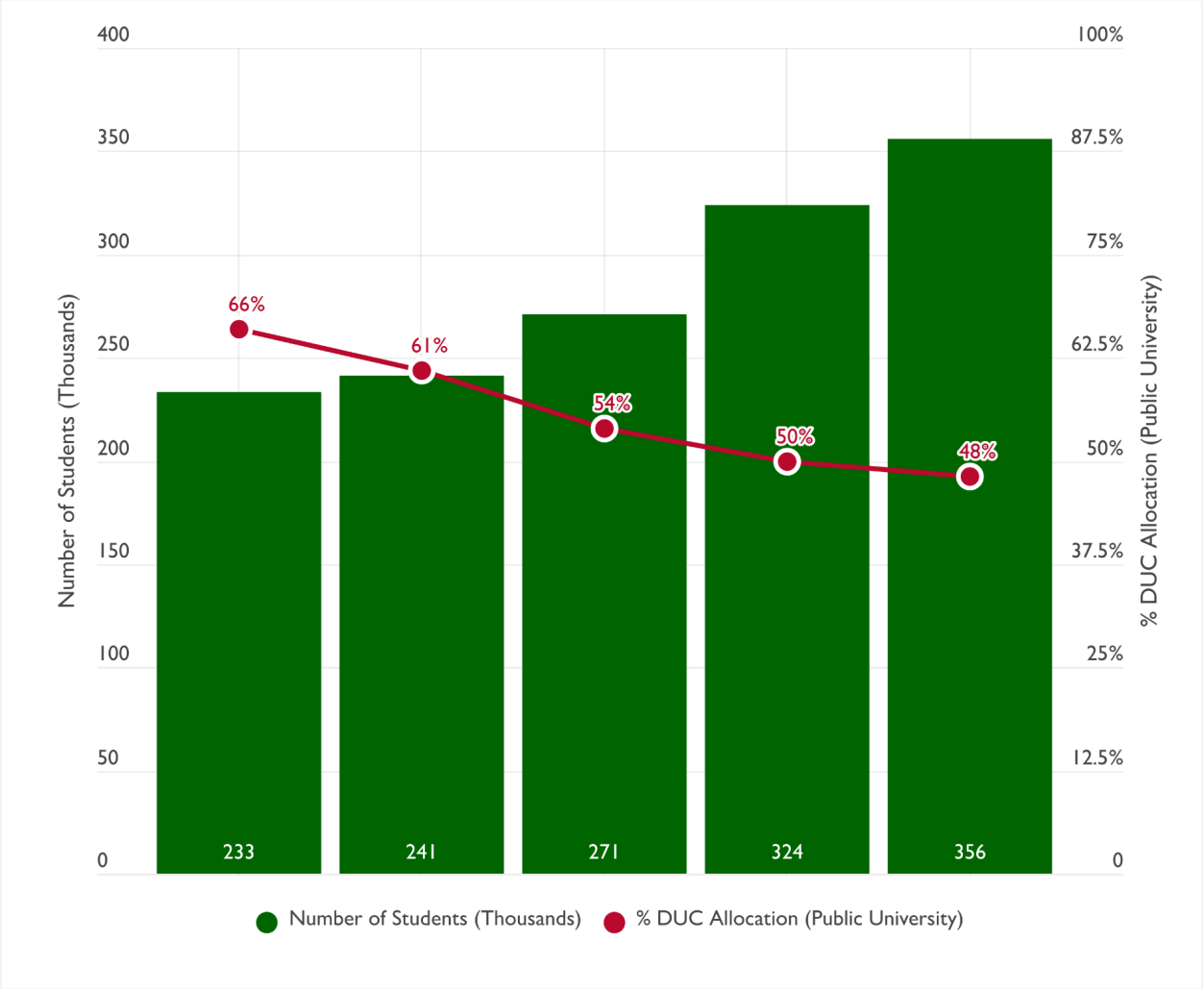
Similarly, representatives from national polytechnics stated that the government is supposed to contribute KES 30,000 per student per year disbursed in quarterly installments amounting to KES7,500. However, representatives of national polytechnics indicated that the installments have consistently reduced to installments of KES3,000 per student per quarter, implying that national polytechnics receive KES12,000 per student per year. This is due to reductions in the government capitation and an increase in the student enrollment.

> "Capitation caters for more than 50%. The annual fee per student is KES56,420 and the Government used to pay KES30,000 per student per year and the student could pay the remaining KES26,420. However, right now capitation has reduced to KES3,000 per quarter per student which comes to around KES12,000 per student per year, yet the Government has not issued an official circular to this effect."
>
> – HEI representative, National Polytechnic

Indeed the declining DUC allocation is also evidenced in the data from the Universities Fund as illustrated in **Figure 14**.

replaced the Differentiated Unit Cost (DUC) model, and private HEIs no longer receive government capitation, see **Table 1**.

Figure 14: Trending in DUC Allocations and Student Enrolment for Public Universities



Notes/Source: Authors' Calculations from data obtained from the Universities Fund, 2024

In addition to the reductions and delays in the disbursement of capitation grants, capitation allocation per student for national polytechnics is fixed at KES 30,000 per student per year and is uniform for all students regardless of the varying cost of the different academic programs. Further, representatives from public HEIs raised concerns over the uniform allocation of capitation to students regardless of their economic background. They advised that there is a need for affirmative action in supporting students from households that are economically marginalized.[7] A representative from a public university had this to say:

[7] The new higher education funding model, introduced in May, 2023, addresses the raised challenges. The new model replaces the Differentiated Unit Cost (DUC) model and allocations to public HEIs are based on a student's financial need thereby taking care of affirmative action.

"The students are admitted through KUCCPS[8] [Kenya Universities and Colleges Central Placement Service] to both public and private universities. Some of these students come from private academies [secondary schools] where their fees for one year is higher than the fees for public universities for a year or for the whole degree program. And because of the facilities they have in those academies, they are better placed to score As and Bs that are required for one to be admitted to a program of their choice. So, they are then given money [government sponsorship] that should have supported poor students. You end up financing the same person who was privileged in secondary to pursue a privileged program in the universities."

— HEI representative, public university

Another concern raised by representatives from public universities and TVETs is the allocation and disbursement of capitation to private universities in support of students placed by the Kenya Universities and Colleges Placement Service (KUCCPS). Public HEI representatives advised that government funds should be channeled to public HEIs for development and not to private-for-profit entities, as reflected in the quote below:

"And what that means is that once a private university is allocated some students, then the funds are allocated to them. Those funds should be building a public institute. Why, because you have a public university.

– HEI Representative, National Polytechnic

On the other hand, representatives from the government and the private university indicated that although the government started placing students in private universities in the financial year 2016/2017, government allocations to these institutions are minimal due to the low number of students sponsored as illustrated in the quote below.

[8] KUCCPS is an Agency established by Universities Act, 2012, to manage student applications for education programmes offered by HEIs. Note that only those who qualify can submit applications.

> "The amount they [private universities] expect from the government is small since the number of government students who are sponsored in private universities is low. Although private universities have issues related to financial sustainability, they are not as big as in public universities."
>
> – National Government Stakeholder

It is worth noting that since we conducted the interviews, the VSLF model has been rolled out by the Government, phasing out the DUC model (see **Table 3**). This new model addresses two of the challenges (i.e uniform allocation of capitation grants to TVETs, allocation of capitation to private universities, reduced amounts of capitation grants, and delays in disbursement of government allocations) mentioned:

- **Uniform allocation of capitation grants to TVETs regardless of student economic background:** Under the new funding model, vulnerable students receive more support through scholarship than student loans while the economically better off students can access more of the student loans than scholarships given their ability to pay tuition.
- **Allocation of capitation to support government sponsored students placed at private universities:** The new model phased out capitation grants to private universities. Students in private universities, however, can apply and receive HELB loans.

However, the operationalization of the VSLF model has faced some challenges including placing students in wrong bands due to information inaccuracies and system errors, prompting its revision after just one disbursement. In addition, the model does not explicitly address the challenges related to reductions in the amounts of capitation grants and delays in disbursement of government allocations.

In conclusion, findings from both qualitative and quantitative analysis show that the government provides funding to all public HEIs through capitation grants, student loans, and bursaries and minimal support to private universities based on the DUC funding model. The private university - selected for illustrative purposes - has one main revenue source, namely, tuition paid by students. Public HEIs depend mainly on allocations from the national government per the DUC funding model, tuition paid directly by students, and non-tuition fees. We observe differences in the composition and structure of revenue sources across the three subtypes of public HEIs selected as illustrative examples. The public university has allocations from the national government as the largest share of the total revenue, while the public TVETs depend on non-tuition fees as the main source of revenue. We also see fluctuations in revenue sources over the years, attributed to COVID-19 lockdowns and declining student numbers (in the selected public university). The analysis further highlights other challenges that public HEIs face, including reductions and delays in

government capitation grants disbursements and uniform allocation of capitation per student despite varying cost requirements for different academic programs. These challenges pose threats to financial sustainability of HEIs. In addition, comparisons between revenues and expenditure of the selected HEIs show budget deficits for the public university highlighting its financial vulnerability.

PERCEIVED DETERMINANTS OF HEI FINANCIAL SUSTAINABILITY

RQ3: WHAT ARE THE FACTORS THAT SAMPLED HEI LEADERS AND GOVERNMENT ACTORS PERCEIVE TO DETERMINE OR SHAPE HEI'S FINANCIAL SUSTAINABILITY?

In the dynamic landscape of HEIs in Kenya, understanding the key factors that determine financial sustainability of HEIs is critical for their continued growth and effectiveness. This research question sought the views of HEI leaders and Government actors regarding factors that influence the financial sustainability of HEIs.

From the discussions with the study participants, the key determinants of HEI financial sustainability were: (1) government policies and regulations; (2) human resource structure; (3) leadership; (4) limited autonomy to make financial decisions; (5) infrastructure; and (6) geographical location. While the majority of respondents indicated HEI infrastructure and leadership as key factors that affect the financial sustainability of both public and private HEIs, government policies and regulations, human resource structure, autonomy to make financial decisions, and location were reported to mainly affect public HEIs.

Government Policies and Regulations

Representatives from the public HEIs, the Government, and civil society identified government policies and regulations as having a great influence on the financial sustainability of public HEIs. The Government policies and regulations mentioned include: (1) allocation and disbursement of capitation grants; (2) Government directive on the promotion of STEM courses in TVETs; and (3) establishment of at least one TVET institution per constituency. While the allocation and disbursement of capitation grants affect both public universities and TVETs, the two other policies/regulations affect TVET institutions alone.

1. **Allocation and disbursement of capitation grants:** Despite the Government being the main source of funding for public HEIs, as discussed in research question two, representatives from both public universities and TVETs noted that allocations of capitation grants have declined over the last five years. In addition, the representatives noted that disbursements of capitation grants are usually delayed. Based on the 2023 report by the presidential working party on education reforms, public universities received about 48% of total tuition fees rather than the expected 80% as stipulated in the DUC model[9]. Similarly, TVETs received KES17,000 ($138) per student per year in the financial year 2022/2023 which is less than half of the KES30,000 ($243) which is stipulated by the DUC model[10]. Declining allocations and delays in disbursements, create funding gaps and cripple the operations of HEIs, and undermine their financial sustainability. To ensure the financial sustainability of HEIs, there is a need for them to reduce their dependence on government funding by adopting or creating other revenue sources. Public HEIs have the autonomy to engage in alternative income generating activities and each institution has a framework on how to utilize its institutional-niche and strength to leverage additional funding. Using activity-based costing, public HEIs pay all costs and taxes while any profits are used to expand, diversify, and maintain the operations of the income-generating units. In explaining the effects of declining allocations and delayed disbursements, a representative from a public university had this to say:

> "The issues of finance are there…we do realistic budgets to implement rationalized spending but we have a funding gap. It is this funding gap which is creating a lot of debt in universities. Because if they were giving us the number of students and the complete DUC, the universities would not have had debts. So, once they reverse that kind of thinking then we shall see the health of universities starting to improve."
>
> – HEI Representative, Public University

2. **Government directive on the promotion of STEM courses in TVETs:** In December 2022, the Government issued a directive to TVETs to phase out business courses and increase enrollment in STEM courses over a period of three years starting January 2023. Representatives from TVETs were of the view that this directive to promote STEM courses is likely to negatively affect the financial sustainability of TVETs. For TVETs to effectively implement the directive, they would have to undertake substantial investments in infrastructure, equipment, as well as align their human resources to STEM courses. Representatives of TVETs further indicated that, whereas the

[9] Report by the presidential working party on education reforms
[10] Report by the presidential working party on education reforms

promotion of STEM courses is a good move, institutions that predominantly offer non-STEM courses face a risk of reduced student enrollment, yet they will have to invest heavily in infrastructure and equipment required to support STEM courses. This will lead to a decrease in revenue which would negatively affect their financial sustainability as illustrated by the quote below.

> "This change of policy from business to technical courses will affect us. The bulk of our students, more than 50%, are business oriented. So, if the Government does away with business courses, that is going to be a major issue and it will reduce our revenue."
>
> – HEI Representative, National Polytechnic

3. **Establishment of at least one TVET institution per constituency:** One of the objectives of the TVET policy[11] (2014) is to improve access, equity and employability in accordance with the Constitution of Kenya 2010. This policy calls for the establishment of at least one Vocational Training Centre (VTC) at constituency level, at least one Technical College (TC) at the county level, Technical Teachers' Training College (TTTC), National Polytechnics (NPs), and Technical Universities (TUs) with provision for each of these setting up campuses in underserved locations according to demand. Representatives from TVETs indicated that this regulation was largely politically motivated and has resulted in high numbers of TVETs competing for students within the same catchment area. Representatives further mentioned that the Government being the main funder of TVETs, establishing one per constituency stretches the available funding for HEIs, as mentioned in the quote below.

> "The other Government policy which is likely to affect us is that all constituencies in the country should have at least one TVET. That creates competition. It is good at a political level but in terms of infrastructural development it spreads the amount of development funds which undermines the development of the existing ones."
>
> – HEI Representative, National Polytechnic

[11] https://www.education.go.ke/sites/default/files/2022-05/first_final_draft_tivet_policy.pdf

Human Resource Structures

Representatives from public HEIs, the Government, and civil society mentioned that there is an imbalance in the number of teaching and non-teaching staff in public HEIs which negatively affects their financial sustainability. Representatives also pointed to a high wage bill for TVETs as another factor that affects their financial sustainability.

Imbalance between the number of teaching and non-teaching staff

Representatives from TVETs, the Government, and the civil society stated that public HEI human resource structures are characterized by larger numbers of non-teaching staff compared to the teaching staff. They explained that overstaffing, related to non-teaching staff, has mainly been as a result of political interference and a lack of transparency and autonomy in the recruitment processes. This imbalance has resulted in inefficiencies, duplication of tasks, and a higher wage bill which negatively affects the financial sustainability of HEIs. A representative from TVETs made the following observation:

> "The wage bill is very high for non-teaching staff for the simple reason that we have employed more than we need. Why have they done that? Political interference. Because a politician comes and says that this is my brother ... and you really have to take them up whether you have room for them or not. So, I would say that we have over recruited, and we have a big wage bill for non-teaching staff to take care of."
>
> – HEI Representative, TVET

Inadequate teaching staff at TVETs

According to representatives from TVETs, the number of teaching staff posted by the Government to these institutions is insufficient for them to deliver their core mandate. Representatives from TVET stated that the Government is responsible for hiring and posting TVET trainers across different institutions. However, those posted are insufficient and institutions have had to hire and pay wages for additional teaching staff (trainers) from internally generated resources. A representative from a TVET institution explained the financial strain caused by hiring and paying trainers from capitation noting that,

> "Previously our teachers were all being paid by the Government but now it is no longer the case. With increasing [enrollment] numbers, the demand for teachers has grown while the Government is not recruiting at the same rate. So, at the moment [at our institution] we have about 50% teachers from the Government, hired by the Public Service Commission, and another 50%, we are

hiring as an institution. We have 160 from the Government and the 152 employed by the board. So, it has now become one of the biggest operational costs for the institution. We pay them from the school fees."

– HEI Representative, TVET

Leadership

Representatives from both the public and private HEIs, the Government, and higher education researchers underscored the importance of good governance in contributing to financial sustainability of HEIs. Public HEIs (universities and TVETs) were perceived to have relatively less skills in governance of HEIs compared to their private counterparts. Respondents indicated that the relatively lower governance skills seen in public HEIs is partly due to political interference during appointments of HEI leadership instead of being based on merit as is the practice in private HEIs.

Governance skills

Representatives from public HEIs and the government indicated that leaders at public HEIs demonstrate capacity gaps in governance. The respondents said that the leaders in public HEIs are selected from the senior teaching staff who may have inadequate skills in leadership and financial management. Similarly, the governing councils (at TVETs) and board of governors (at public universities) sometimes consist of members who might have skill gaps in managing an HEI. In explaining the skills gap, a representative from the Government stated:

"Top notch professors who actually are very qualified to become vice chancellors have not been fully exposed to management. So, you are picked because of your academic excellence, and you find yourself with a lot of difficulties when you get into office. So, what we need to do is to start what we call management training of our people as they rise up. When they become deans, when they become this and that we start a course in management."

– National Government Representative.

Political interference

Representatives from public and private universities, higher education researchers, the Government, and civil society mentioned that the process of appointing members to the governance councils and top

leadership of public HEIs is not transparent and is characterized by political interference. Representatives intimated that the appointment of vice chancellors and their deputies sometimes lacks merit, inclusion, and diversity, and it is rather based on rewarding loyalty, ethnicity, and political leaning. In contrast, leaders in private universities are recruited based on merit and the retention of leaders is based on performance in driving growth of the institution. Leadership that is not based on merit but on political consideration invites those who may not have the proper skills when it comes to administration, management, or vision, which in turn negatively affects the quality of financial management and operations of public HEIs, consequently affecting their overall quality and financial sustainability. A higher education researcher had this to say:

> "The only difference is private universities have better management, they have better managers and better leaders with very little external or rather political influence compared to the public university. And you can actually look at what is happening in [private] universities and the good performance. At the end of the day, the political environment or the political aspect of it, affects how the university performs."
>
> – Society Representative, HE Researcher

Limited Autonomy to Make Financial Decisions

Representatives from the public HEIs noted that their institutions have limited autonomy in making decisions related to setting tuition fees. Representatives from public HEIs stated that the tuition charged by their institutions does not reflect the current market rate and is insufficient to meet the costs of delivering their courses. The budgets and procurement activities in the public HEIs are controlled by the government including performance management through the Controller of Budgets's office, Treasury, Auditor General's Office and other statutory offices. This limits their ability to adapt, innovate, and strategically allocate resources. On the other hand representatives from public HEIs perceive their counterparts to have more autonomy and therefore better positioned to make decisions while seizing opportunities. Specifically, the private universities are free to fundraise, change their budgets and tuition fee structures without government approvals, procure cheaply without public procurement approvals, and undertake their audits without going through the auditor General's Office. A representative from a public university mentioned that:

"You know as I said we have a lot of control by the Government. They give us students and say they can only pay a certain amount of money and we cannot increase it. If increased, it will bring a crisis. Then they give us more students than the money which would be necessary for quality teaching and a good environment. So, we end up reallocating the money from income generating units to support teaching. Some of the money for research ends up supporting teaching and student research."

– HEI representative, Public University

Infrastructure

Representatives from both public and private HEIs identified infrastructure and equipment as key determinants of the financial sustainability of HEIs. The representatives stated that the availability of appropriate infrastructure such as classrooms, workshops, laboratories, ICT, equipment, and machinery influences the ability of the institutions to deliver quality education and attract enrollment. Representatives from public HEIs observed that the expansion of infrastructure in public HEIs has been slower than the rate of increase in enrollment. Representatives from public and private HEIs mentioned that the lack of finances was a key barrier to infrastructural development in their institutions. It was noted that HEIs that have developed infrastructure can deliver quality education and attract higher enrollment numbers. A representative from a public university had this to say:

"Infrastructural capacity is also an issue. The student population growth puts a strain on the available facilities, and the financing of their establishment requires a lot of time. Infrastructure requires Government support in the capital budget which is not often done. You are forced to internally fund it. You find that you are tying your funds to long term ventures that don't have immediate returns. So, you find it can affect your liquidity".

– HEI Representatives, Public University

Geographic Location

Representatives of TVETs mentioned that the location of TVETs significantly influences their financial sustainability, particularly through student enrollments. Notably, TVETs situated in urban areas exhibit distinct advantages over their counterparts in rural settings. Urban-based HEIs tend to attract higher enrollments, benefit from superior infrastructure, and enjoy better access to essential amenities like student

accommodation, and public transportation, thus establishing a notable contrast with their rural counterparts. The TVET policy that calls for the establishment of at least one TVET per constituency, may further exacerbate the enrollment challenges as most constituencies are rural. This divergence in the geographical positioning of TVETs underscores the intricate interplay between location and the financial dynamics of HEIs in Kenya. This is well illustrated in the quote below by a representative from a Technical Training Institute:

> "The catchment area is really wanting, because some places are far and inaccessible. This discourages students from going there and as it is with our institution here. I am sure if we were along the highway, perhaps the catchment area and the attraction would be higher than it is right now".
>
> – HEI Representative, Technical Training Institute

HEI FINANCING STRATEGIES

RQ4: WHAT STRATEGIES DO SAMPLED HEIS UNDERTAKE TO PROMOTE THEIR FINANCIAL SUSTAINABILITY?

The purpose of this research question was to understand financial sustainability strategies and other income-generating efforts implemented by HEIs to promote financial sustainability. Strategies for financial sustainability in HEIs differ between public and private HEIs. Representatives from public and private HEIs, the Government, and higher education researchers mentioned three financial sustainability strategies, namely: (1) alternative income-generating activities; (2) partnerships and collaborations; and (3) research grants, consultancies, and research commercialization. All three financial sustainability strategies were promoted in public HEIs while only research grants and consultancies were mentioned for the private universities. Furthermore, representatives from public HEIs discussed the challenges that their institutions face in the establishment and running of alternative income-generating activities and research commercialization.

Alternative Income Generating Activities

Representatives from public HEIs, the Government, and higher education researchers identified the establishment and operationalization of alternative income generating activities as a key financial

sustainability strategy for public HEIs. Indeed this was the most cited financial sustainability strategy implemented by public HEIs. Unlike the limited autonomy in determining tuition fees discussed in research question three, representatives from public HEIs, the Government, and civil society actors said that there is no restriction on the alternative income generating activities that public HEIs can engage in.

Alternative income generating activities vary from one institution to the other depending on the expertise and other resources available to them. This is a viable initiative that enables HEIs to utilize their institutional-niches to mobilize and leverage additional revenue. Broadly, examples of these income-generating activities mentioned by representatives from public HEIs can be classified as: (1) agriculture and processing agricultural products (e.g. processing of milk to yogurt, butter, and cheese); (2) trade and services; (3) production and manufacturing; and (4) short courses. **Table 5** provides an overview of the income generating activities implemented by various public HEIs.

Table 5. List of alternative income-generating activities undertaken by HEIs

	Category	HEI type	Activities
1	Agriculture (crop and livestock) and agricultural processing	Public universities and TVETs	Agriculture: Dairy farming, poultry, beekeeping, fishpond, horticulture, and other crops such as maize and beans Agricultural processing: fresh milk processing, yogurt, cheese, and butter
2	Trade and services	Public universities and TVETs	Water purification plants, driving schools, hotels and eateries, petrol stations, malls, supermarkets, and healthcare, and hiring out buses, halls, and grounds; water supply from institutional boreholes; and recreation facilities
3	Production and manufacturing	TVETs	Garages, bakeries, conference and catering services, accommodation facilities such as guest houses, fashion design/tailoring, carpentry, and welding shops

	Category	HEI type	Activities
4	Short courses	TVETs	Professional courses such as in ICT and business; and non-business courses that are taught online or in-person during holiday breaks

Representatives from public HEIs indicated that while revenues from alternative income-generating activities help meet some of the operation costs, they are not sufficient enough and therefore cannot be an alternative or substitute to capitation grants from the Government. A public university representative had this to say:

> "From what I am told, [with a] good production, we can earn between KES150 million [$1.2 million] and KES 200 million [$1.6 million]. This is not enough money to support the institution because it cannot even pay a salary for one month. That kind of money can be used for repairs or even starting a project."
>
> – HEI Representative, Public University

Despite the insufficiency of funds from income generating activities to cater for HEI operating costs, representatives from the Government advised that public HEIs should progressively move away from over-reliance on Government funding and/or income from student tuition by promoting alternative incomes. A representative of the Government stated that:

> "There is a need to come up with strategies so that we reduce over-reliance on the exchequer. Universities should come up with a structured resource mobilization mechanism, again, as a way of enhancing their sustainability. A university should be able to make optimal use of all the resources it has."
>
> – National Government Representative

Challenges to Income-Generating Activities

Representatives from the Government and public HEIs mentioned poor management, lack of capital and asset requirements, weather conditions, and government laws and regulations that affect alternative IGAs as the key challenges to HEIs' engagement in alternative income-generating activities.

Management of alternative income-generating activities

Representatives from public HEIs mentioned that alternative income-generating activities are not managed efficiently. For instance, a representative from the government raised a concern that there is lack of full accountability and transparency relating to the revenue generated from alternative income-generating activities.

> "When it comes to alternative income-generating activities, we have issues with accountability and transparency. And so, what the Ministry has done, we have developed a policy guideline on how these activities will operate and their reporting structures.
>
> – National Government Representative

Lack of capital and asset requirement

Representatives of public HEIs stated that they lack funds and assets (e.g., land, water, equipment, and machinery) to invest in alternative income-generating activities. A representative from a National Polytechnic stated that:

> "The other issue is we have not really come up with good income-generating units because we need capital to start them off. For example, if we want to invest in farming or hospitality services or factories, all these need money to start. So at the moment, we have not been able to raise cash to start these income-generating units."
>
> — HEI Representative, National Polytechnic

Weather conditions

Representatives from public HEIs that run agricultural-related income-generating activities stated that poor weather conditions have impacted the level of production and consequently revenue from these activities. A representative from a Technical and Vocational Training Institute explains below:

"We produce bread, milk, and vegetables…although now we have a challenge of the weather and now boreholes are drying up. Otherwise, when it is a [good] rainfall season, we are able to supply vegetables from our kitchen farm fully."

– HEI Representative, Technical and Vocational Training Institute

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Government laws and regulations

Representatives from public HEIs mentioned that some of the alternative income generating activities established are not competitive due to government laws and regulations, specifically, according to the Public Procurement and Asset Disposal Act of 2015, public institutions are required to prequalify suppliers from whom they should source products and services as needed. However, this has proved to be a hindrance to institutions given that the prequalified suppliers often quote higher prices compared to the market rates as stated by representatives of public HEIs. Inevitably, the price of the final products and services from the public HEIs is higher than the prices charged by their competitors. This means that HEIs are not able to compete on market price and their return on investment is compromised. A representative from a national polytechnic said that:

"The Government requires us to follow the Procurement Act which stops us from starting any serious income generating activities. For example, even running a cafeteria here is a big issue. Items like potatoes, we buy them from prequalified suppliers. Such suppliers have to pay taxes and have to be prequalified and all that. At the end of the day, they sell to us at almost double the market price. There is a Cafe outside, so all our students go to eat fries from that Cafe. They cannot buy from us because our fries are always expensive."

– HEI Representative, National Polytechnic

Despite the challenges mentioned above, engaging in alternative income-generating activities is a key strategy for promoting the financial sustainability of HEIs.

Partnerships and Collaborations

Representatives from public HEIs, the Government, and non-state HEI funders identified partnership building with industry stakeholders, the private sector, development partners/donors, Government agencies, and international universities as another key financial sustainability strategy. Partnership can help public HEIs meet infrastructural, equipment, skills development (for both students and trainers), and funding needs. A representative of a TTI stated that:

> "We need training partners. We are now moving out to partner with companies and factories. They are willing to work with us because we are a sustainable institution to partner with in terms of training."
>
> – HEI representative, Technical Training Institute

Research Grants, Consultancies and Research Commercialization

Representatives from public and private HEIs and the Government mentioned research grants, consultancies, and commercialization of research as key viable strategies for financial sustainability of HEIs.

Research Grants and Consultancies

Representatives from both public and private HEIs mentioned that participating in research grants and consultancies is part of their financial sustainability strategy. Some representatives from private HEIs stated that it is a goal for their institutions to grow revenue from research and other sources in order to reduce the proportion of revenue from tuition fees as explained below:

> "We are ensuring that we are going for consultancies and we are writing grants trying to ensure that we reduce the over-reliance on student tuition. We have a 10-year strategic plan and gradually want to come down from maybe 90% to 70% reliance on student fees in five to six years' time."
>
> – HEI representative, private university

Research Commercialization

Representatives from public HEIs mentioned that they have attempted to explore research commercialization[12] as a strategy to ensure financial sustainability. While commercialization of research can be a viable vehicle for financial sustainability, respondents stated that they have faced a number of challenges trying to implement this strategy due to: (1) lack of guidelines and institutional support; and (2) inadequate government funding for innovative research.

- **Lack of guidelines and institutional support:** A representative from public universities stated that while they are able to do research and develop innovative products, such as improved seed varieties, they have not been able to proceed into commercializing the innovation due to unclear guidelines on sharing proceeds. The process of signing partnership frameworks is confounded by HEI and government bureaucracies, which can scare away potential partners. HEIs are currently not permitted to sign any partnership without first involving the government and ministry of education. In addition, staff do not mobilize funds or apply for intellectual property rights such as royalties, patents and trademarks, resulting in inadequate institutional support for commercialization of research and innovation. A representative from a public university mentioned that:

> "Researchers are very poor at business. We want to bring in a department which specifically deals with the commercialization of the products, services, and innovations that come out of our research. Issues of patents, innovations, trademarks and all that. We have come up with what we call a technology transfer to enable us to commercialize our research products, ideas, and services.
>
> – HEI Representative, Public University

- **Inadequate government funding for innovative research:** A representative from a public university stated that universities tend to do more operational research than innovative research. This is because most research funding comes from abroad and mainly addresses topics that are not well aligned with Kenya's innovative needs. There is therefore a need for the government to invest in funding innovative research that can be commercialized as well as addresses Kenya's development priorities. A representative from a public university had this to say:

[12] Research commercialisation is a process of turning an idea through research into marketable products and services

> "We have money coming from outside…and the funding we get is targeting specific concerns which are more global and not really addressing Kenyan issues. Therefore, most of the research we do is more operational than innovative research. Innovative research comes from deliberate government funding and targeted towards specific sectors of the economy. Look at other countries which have grown, what did they do? I think for ten years they focused their resources; they channeled their resources and funded their universities. We also need to do the same…and that is one way of financial stability."
>
> – HEI Representative, Public University

Participation in research grants and consultancies is a viable financial sustainability strategy for both public and private HEIs despite contributing relatively low revenue amounts. Additionally, commercialisation of research was regarded as a potential financial sustainability strategy, although with challenges as described. Besides being a viable financial sustainability strategy, research, and research translation and commercialisation are a key mandate of HEIs, especially universities.

HEI RISK MANAGEMENT STRATEGIES

RQ 5: WHAT RISK MANAGEMENT STRATEGIES, IF ANY, DO HEI STAKEHOLDERS UNDERTAKE FOR NAVIGATING UNEXPECTED SHOCKS (E.G., COVID-19)?

To achieve and maintain financial sustainability, HEIs should have in place risk management strategies to foresee and address both unanticipated and anticipated risks to financial sustainability. Within the context of limited financial resources as discussed in research question two, and HEIs' financial sustainability strategies identified by interviewees in research question four, this research question explored HEIs' ability to plan for unexpected shocks, manage them, and be resilient over time. Interviewees were asked to discuss risk management approaches before and during COVID-19 and what they are doing differently post-pandemic. The key risk management strategies implemented by HEIs to respond to unexpected shocks draw upon lessons from COVID-19. In addition, representatives from both public and private HEIs, the Government,

and the civil society also discussed risk management strategies in response to anticipated risks as an important part of the overall financial risk management.

Risk Management Strategies for Unanticipated Shocks: Lessons from the COVID-19 Pandemic

As discussed in research question two, the main source of revenue for HEIs is government capitation and tuition fees for public and private HEIs, respectively, both driven by student enrollment. The COVID-19 pandemic greatly disrupted HEIs' operations and threatened their FS and viability, especially the newer and smaller HEIs. Many HEIs were unprepared for the challenges that the COVID-19 mitigation measures[13] presented. To adapt to the challenges presented by COVID-19, representatives from public HEIs, higher education researchers, and civil society organizations stated that public HEIs had to: (1) adopt online classes; (2) increase use of technology for communication and institutional meetings; and (3) build financial reserves as discussed by representatives from both public and private HEIs and higher education researchers. These strategies ensured continuity in the delivery of learning, enrollment, and management functions of the HEIs, and therefore ultimately were able to deliver on their core mandate and contributed to the credibility of the institution.

1. **Adoption of online classes:** Representatives from both public and private HEIs, higher education researchers, and civil society organizations, stated that, in responding to the COVID-19 pandemic, their institutions adopted online classes for continuation of student learning. Pre-COVID-19, the primary mode of delivery of learning was through in-person classes. As one representative from a technical and vocational education institute put it, institutions that previously were not offering online classes are now able to do online classes as explained in the quote below:

> "I think COVID-19 itself…we took it more as a challenge. It helped us to open up things…like online classes were things we had never thought of. So, we learned a lot, and then now we are able to do some of the things we were not able to do that time differently."
>
> – HEI Representative, TVET Institute

[13] Mitigation measures in Kenya included lock-downs, social distancing, secession of movement among others. In-person classes and working in offices was not possible for extended periods.

The financial sustainability of HEIs was compromised in the wake of COVID-19 as HEIs could not hold in-person classes anymore. The use of technology during and post-pandemic was geared towards ensuring continued enrollment, learning, and general HEI operations. In explaining the impact of the use of technology, a higher education institution stated that despite the pandemic, their institution was able to graduate students in 2020 as explained in the quote below:

> "...we did a lot of research into areas of technology and education and developed communities of learning across the world. I think we targeted 90 countries in that period of time. The resultant effect was that within two days of our students returning to class, we graduated more students than we had ever graduated in that 2020 period. The trajectory of our strategic graduation was not stopped. We actually graduated students."
>
> – Society, Higher Education Researcher

However, many of the public HEIs were caught off guard and did not have the requisite infrastructure to deliver classes online. Currently, many of these institutions are in the process of improving their technology to continue delivering and scaling online classes as explained by a representative from a national polytechnic who stated:

> "We are looking at strategies where we give the theory first virtually and with time people are able to come in and do practical…. We have the classrooms…as you were coming you saw the media center, the media center has audio rooms and video rooms for recording so that when you teach theory it's going to be easier because you are doing it in the classroom…"
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> – HEI Representative, National Polytechnic

2. **Increased use of technology for communication and institutional meetings:** Representatives from public HEIs reported that the COVID-19 pandemic drove the increase in the use of technology for communication and acceptance of virtual meetings in public HEIs. They stated that post-pandemic, there has been an increased use of emails for information sharing with students, staff members, and external stakeholders. In addition, more meetings are now being held online. This has reduced the costs associated with holding in-person meetings. Representatives of public HEIs stated that there is a need for continued investment in ICT infrastructure to support

both online classes and other institutional virtual activities as explained below by a representative from a public university:

> "We have to invest in ICT to support virtual activities. These have been embraced completely by the ministry…even here there are many things these days which we were not doing before. [For example], the council will circulate E-materials. We bought each one of them a tablet to use. At the senate, we circulate minutes, and we circulate documents in soft copy. If we are giving notice, these days it is sent to your email. So, those are the cost-cutting measures."
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> – HEI Representative, Public University

3. **Building financial reserves**: A representative from public HEIs mentioned building financial reserves to mitigate unexpected shocks as another lesson from the COVID-19 pandemic. A representative from a TVET stated that one of the lessons they learned from the pandemic was a need to progressively build a financial reserve to cushion the institution against a similar pandemic. These not only provide resources for such times but also build the confidence and sense of security of employees as he explained when stated:

> "…as an institution, we learned one thing, you should always have a reserve fund. You know we went to a level where we could not even pay salaries, there were no funds. Now what we ended up doing is [asking ourselves,] …are we able to pay salary for the next 12 years if everything stopped today? So, our financial plan is that we do not spend what we receive 100%. We are able to continuously save to have reserves. We are able to respond faster and it also builds confidence in the staff that anything is possible and we try to keep that by asking trainers to continuously come up with new ideas, innovations, curricula, and all that. We will be faster in responding to things. We have learned a lot."
>
> – HEI Representative, TVET Institute

The key lessons from the COVID-19 pandemic were on the use of technology to deliver online classes, conduct virtual meetings, and build financial reserves. Post-COVID-19, institutions have increased investments in and use of technology.

Risk Management Strategies for Anticipated Shocks

In addition, representatives from both public and private HEIs, the Government, and higher education researchers also discussed risk management strategies in response to anticipated risks as an important part of the overall financial risk management strategies to prepare for shocks, including: (1) planning and budgeting; (2) adoption of digital technology; (3) procurement and tender committees; (4) internal audit and risk management committees; (5) external audit and financial monitoring and reporting; and (6) personnel capacity building.

1. **Planning and budgeting for short-, medium-, and long-term:** Representatives from public universities and TVET stated that their institutions have put in place measures to mitigate risks associated with the allocation of funds and management of payments. They stated that risk is managed by ensuring that the HEIs annual budgets are done against the institutions' strategic plans. However, while institutions adhere to their strategic plans, budgeting has to consider the availability of funds. Representatives also added that to ensure budget ownership, the budgeting process is inclusive and involves all departments in the institution. Further, for transparency and accountability, once budgets have been agreed upon, they are shared with the governing council or board of governors for approval.

> "I can say that we try as much as possible to involve every department during the budgeting cycle so that they are able to express their needs, give their estimates, and then we are able to compile and agree on the overall budget. So, we hardly leave any department of the polytechnic out of budget. We involve every stakeholder as much as possible so I think that is a best practice. We have input across the departments so whatever they envisage to achieve and do in the future is included in the budget as much as possible."
>
> – HEI Representative, National Polytechnic

Further, representatives from public HEIs also stated that there is continuous monitoring of the budget and where necessary reviewed to match available funds. Continuous monitoring has helped HEIs deal with anticipated risks. For example, if there are changes in the number of students who enroll and in the amount of capitation grants received, the budget is revised to reflect these changes as explained by a representative from a technical training institute below:

"We keep monitoring our budget as we implement it. When we are preparing the budget, we assume that all the resources that we have listed will be available in the course of the financial year. However, sometimes we have challenges. For example, like I said, we missed KES33 million in a financial year. When such happens, we have to review our budget and postpone some of the planned projects. But if everything is honored particularly by the Government in terms of capitation, then things would run smoothly.

– HEI Representative, Technical Training Institute

2. **Adoption of digital technology in financial management at all levels:** Representatives from both public and private HEIs and the Government identified digitizing of financial processes as a key risk-mitigating measure associated with revenue collection and improved financial management. Representatives from both public (universities and TVETs) and private HEIs stated that the institutions have moved away from cash-based to electronic revenue collection. They stated that the use of technology such as biometric systems, and online student registration has enhanced the ability of HEIs to collect fees. Further, representatives from public HEIs and the Government reported that the digitization of financial processes has supported prudent financial management and reporting. For example, the Enterprise Resource Planning (ERP) software that is in use in most HEIs has helped in linking various aspects of financial management such as planning, budgeting, expenditure management, requisition, procurement, accounting, audit, and reporting. This has helped in promoting transparency and accountability thereby reducing misappropriation of funds and corruption. A representative from a public university stated that the use of technology has helped institutions delinked revenue collection from human intervention as stated below:

"An example which I know is now the case for many public universities, we have automated the revenue collection fully. We have automated payments fully and I think we also have the ERP that we use in the universities that have really streamlined even financial reporting. Revenue collection has tremendously increased because of the use of technology and limiting human interaction in the revenue collection process."

– HEI Representative, Public University

3. **Procurement and tender committees to review the procurement process to ensure compliance with relevant laws and regulations:** Representatives from public universities and TVETs mentioned that having procurement guidelines and processes as well as procurement and tender committees has helped public HEIs mitigate risks associated with procurement. They stated that procurement is one of the processes where institutions lose a lot of money as the possibility of purchasing overpriced goods and services is high. A representative from a National Polytechnic explained below that institutions need to monitor the procurement process to avoid such occurrences.

"We procure our items through committees. We have a tender committee and an evaluation committee. So, we ensure that whatever we procure is very competitive. There is a committee set aside to see that procurement is done procedurally and we get value for money."

– HEI Representative, National Polytechnic

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4. **Internal audit and risk management to monitor overall HEI risk management framework, financial reporting and compliance processes:** Public HEIs, just like any national Government entity, are required by law to have appropriate arrangements in place for conducting internal audits[14]. Representatives of public HEIs stated that having an independent internal audit office or department and/or risk management committee has been a key risk management strategy for their institutions. These committees are tasked with the responsibility of ensuring the integrity of the financial reporting and audit processes and overseeing the maintenance of sound internal control and risk management systems by conducting risk assessments and developing the overall institution risk policy. This has helped HEIs to comply with government policies and regulations, identify risks and mitigation solutions, as well as reduce financial loss.

"One thing I find very effective is that the Principal is the secretary to the governance board and all its committees except the audit and compliance committee. Only the internal auditor reports to this committee of the board. So that person is fairly independent.

[14] Public Finance Management Act (2012)

Everybody has to be careful, especially the principal because whatever he does is audited by someone who is independent."

– HEI Representative, Technical and Vocational Education Institution

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5. **External audit and government financial monitoring:** According to the Public Audit Act of 2015[15], the Office of the Auditor General (OAG) may audit and report on the accounts of any entity that is funded from public funds. Representatives from public HEIs reported that the OAG audits have been useful in improving internal financial controls and promoting best practices in financial management. Further, representatives from the Government mentioned that besides the external audit conducted by the OAG, the Government monitors HEIS through quarterly reports that are submitted to the Treasury through the Ministry of Education.

"I want to say that auditing by the Auditor General has helped us improve our internal controls as an institution. Recommendations given to us have been implemented. As they say, once you have better internal controls, then it enhances your own financial stability.

– HEI Representative, National Polytechnic

However, despite private universities receiving public funds, representatives from private HEIs reported that they are not audited by the Office of the Audit General but instead submit reports to the government on the number of students that are government-sponsored. As reported by one of the representatives from a private university below, the Government has had no issues with reports regenerated by his institution in accounting for the monies received for the Government sponsored students.

6. **Capacity building of personnel in financial management:** Representatives of public and private HEIs, the Government, and civil society mentioned the capacity building of HEI staff and board members as a key risk management strategy. They emphasized that board members and other HEI administrative staff should be equipped with skills to enable them to manage and monitor financial resources. As explained in the quote below, training of HEI leaders would support the proper management of resources and avoid losses.

[15] Public Audit Act 2015

"Whoever is appointed as a Vice Chancellor, before they assume office, they should undergo mandatory training in management. That is the reason we have been saying that the recruitment of a new vice chancellor should be commenced six months prior to assuming office. You train in financial and human resource management. You can not just appoint a professor, let us say a professor of forestry, and you want them all of a sudden to know financial management and also manage billions. Even council members once appointed should undergo financial management training."

– Society Representative, Civil Society Organization

RECOMMENDATIONS

Ensuring the financial sustainability of HEIs will require concerted efforts from a number of stakeholders including the Government, HEIs, and development partners. Actions needed from the different stakeholders are highlighted in the recommendations below.

RECOMMENDATIONS TO THE KENYAN GOVERNMENT

1. **Review and develop a fit-for-purpose legislative financing model for HEIs in Kenya:** As noted above, between 2017 and 2023, HEI financing was based on the DUC model, which allocated funds based on the number of students per academic program. A new model started in the financial year 2023/2024, but faced several challenges prompting its revision after just one disbursement. The inefficiencies of DUC and VSLF call for the government and all education stakeholders to develop a performance based funding model which should link to: (1) institutional and national enrollment planning in line with demand forecasting; and (2) rationalization of program costs since different HEIs charge different fees for similar programs within the ecosystems.

2. **Periodically update the funding formula for public HEIs**: The amounts allocated by the Government through capitation grants, HELB loans and bursaries, and constituency development funds were reported to be insufficient to adequately meet the needs of public HEIs. In addition, our findings show that allocations to HEIs (especially capitation grants) have gradually reduced over the recent years. This creates funding gaps and cripples the operations of HEIs thereby undermining their financial sustainability. We therefore recommend that the government should periodically review the government allocation formula to public HEIs to ensure that the amounts provided match their financial demands. Increasing the amounts allocated to public HEIs will contribute to improving their financial sustainability as well as ensure the delivery of quality services.

3. **Improve disbursements of government allocations to public HEIs:** Findings from our study show that disbursements of allocations from the Government, especially capitation grants, are often delayed which affects the planning, operations, and quality of services delivered by public HEIs. We therefore recommend that the Government should improve its budgetary procedures and prioritize allocations to public HEIs to ensure timely disbursement of funds.

4. **Review and reform the TVET policy of 2014:** Our findings show that the TVET policy of 2014 advocates for the establishment of at least one TVET per constituency has created competition for students among TVETs within the same catchment area stretching the available public funding for

HEIs. We recommend a review of this policy to establish TVETs based on area needs and student population.

5. **Review and update the Public Procurement and Asset Disposal Act of 2015:** Findings from this study reveal that the policies and regulations related to procurement act as a disincentive for HEIs engagement in alternative income-generating activities. While all public institutions are required to source goods and services from prequalified suppliers, this increases the cost of production making some HEI products and services less competitive compared to those from private enterprises. We recommend that the policies and regulations should be amended to provide waivers to HEIs when it comes to sourcing certain goods and services that relate to alternative income-generating activities.

6. **Streamline HEI human resource structure for increased efficiency and financial sustainability of HEIs:** Our study findings reveal that the human resource structure of public HEIs (especially TVETs) is skewed towards non-teaching staff creating inefficiencies, duplication of tasks, and affecting the wage bill. In addition, the number of HEIs reported having inadequate numbers of teaching staff on government payroll. We therefore recommend hiring more teaching staff to fill the vacant positions as well as streamlining the human resource structure to match the number of staff with the available roles and duties.

RECOMMENDATIONS TO HEIs IN KENYA

To attain financial sustainability, public HEIs need to reduce their reliance on government funding by addressing internal obstacles to revenue diversification. This calls for developing and implementing comprehensive resource mobilization strategies that ensure efficiency in allocation and utilization of resources. The strategy should provide a clear roadmap on the nature of activities, resources (human and capital), and expected returns and should address key challenges identified. In addition, HEIs should strengthen their risk management strategies to foresee and address both unanticipated and anticipated shocks and risks to financial sustainability. See below the detailed recommendations to HEIs.

7. **Review and update the appointment process of HEI leadership:** Our findings indicate that the process of appointing leaders at public HEIs (including members to the governance councils and top leadership) is not transparent and marred with political interference. This undermines the efficient running of the operations of the university and consequently affects their financial sustainability. We recommend that the appointment procedures should be streamlined to ensure that the appointment, promotion and retention of HEI leaders is free of political influence and based on merit and performance.

8. **Build capacity of HEI leaders in financial management:** The study findings show that there are gaps in governance and financial management skills among some of the leaders of public HEIs which affects their financial sustainability. We therefore recommend that HEIs undertake capacity assessments to identify the skill gaps amongst the leaders and offer the necessary capacity strengthening trainings. This can be done in-house by the HEI or offered by external experts in the desired fields.

9. **Improve the management of alternative income-generating activities:** The results from the study reveal that operations of alternative income-generating activities at HEIs are not managed efficiently and lack accountability and transparency. This undermines their financial performance consequently affecting HEIs financial sustainability efforts. We recommend that HEIs should hire professional managers to run alternative income-generating activities and adhere to good practice in financial management and reporting to ensure accountability and transparency.

10. **Strengthen research commercialization and provide incentives:** Commercializing research in HEIs faces challenges such as lack of guidelines and institutional support. For some HEIs, there is absence of staff dedicated to mobilizing funds and applying for intellectual property rights, including royalties, patents and trademarks. We recommend that HEIs should formulate and institutionalize guidelines on research commercialization. In addition, HEIs should create special units that are adequately funded and staffed with qualified personnel dedicated to marketing research products, technologies, processes and services.

11. **Deepen partnerships and collaborations with HEI stakeholders:** The study identifies partnerships and collaborations between HEIs and other stakeholders including the private sector, government agencies, development partners, and other HEIs (both domestic and international) as an important strategy for financial sustainability. We therefore recommend that HEIs should continue to pursue partnerships and collaborations in areas such as fundraising, research, infrastructural and skills development.

12. **Build financial reserves to strengthen HEI preparedness for financial risks:** Unexpected shocks like the COVID-19 pandemic disrupted activities and the flow of revenue to HEIs thereby threatening their financial sustainability. We recommend that HEIs should gradually build financial reserves to prepare for risk management and navigate unexpected shocks.

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ANNEXES

ANNEX 1: CONSENT FORM

Protocol Number: NACOSTI/P/22/16965 (UoN) and 22-08-7365 (UND)
Higher Education Institutions Generating Holistic and Transformative Solutions (HEIGHTS):
Financial Sustainability in Higher Education Institutions - Kenya
Principal Investigators: Peterson Obara Magutu, PhD (University of Nairobi -UoN) and Dr. Fernanda Soares (University of Notre Dame -UND)

ABOUT THIS RESEARCH

You are being asked to participate in this research study. This consent form will give you information about the study to help you decide whether you want to participate. Please read this form carefully and ask any questions you have before agreeing to be in the study.

WHY IS THIS STUDY BEING DONE?

The purpose of this study is to learn more about approaches and risk management strategies that higher education institutions (HEIs) are pursuing to strengthen their financial sustainability.

This is a multicountry study about the financial sustainability of Higher Education Institutions in *Kenya, Indonesia and Philippines*. In Kenya, the study is being conducted by the University of Nairobi (UoN) in collaboration with the University of Notre Dame (UND) and the Makerere University-Resilient Africa Network (RAN), and it is funded by the United States Agency for International Development (USAID).

TAKING PART IN THIS STUDY IS VOLUNTARY

You may choose not to take part in the study or may choose to leave the study at any time. Deciding not to participate, or deciding to leave the study later, will not result in any penalty or loss of benefits to which you are entitled and will not affect your employment or relationship with your organization or institution.

HOW MANY PEOPLE WILL TAKE PART?

If you agree to participate, you will be one of over 70 stakeholders selected from higher education institutions, government, civil society, and the private sector in Kenya taking part in this study.

WHAT WILL HAPPEN DURING THE STUDY?

If you agree to be in the study, you will be asked to participate in a semi-structured interview, which will last approximately 90 minutes. During this interview, we will ask you questions about the strategies and approaches implemented by higher education institutions to strengthen their financial sustainability. If you agree, our team will audio record the activity so we can prepare typewritten notes afterward.

WHAT ARE THE RISKS OF TAKING PART IN THE STUDY?

We do not think that there are any risks to being involved in this study. However, you might be uncomfortable answering some of the questions. At any point during the semi-structured interview, you can tell us that you feel uncomfortable or that you do not want to answer a particular question. You can stop participating in the interview at any time.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THE STUDY?

We don't expect you to receive any benefit from taking part in this study, but we hope to learn more about strategies that work to improve higher education institutions' financial sustainability in your country.

HOW WILL YOUR INFORMATION BE PROTECTED?

The research team will be careful in ensuring your personal information is kept confidential. No information which could identify you will be shared in publications or presentations about this study. The only people who will know what you say are the members of our research team.

If you agree, we will audio record this conversation to review your responses and record them anonymously in our database. The audio recording from the interview and transcription files will be saved on an encrypted cloud-based folder on Google Drive for 3 years after the end of the data collection.

WILL MY INFORMATION BE USED FOR RESEARCH IN THE FUTURE?

Your information will not be used or distributed for future research studies.

WILL I BE PAID FOR PARTICIPATION?

There will be no compensation for participating in this study.

WHO SHOULD YOU CALL WITH QUESTIONS OR PROBLEMS?

For questions about the study, you can contact the Principal Investigators, Dr. Peterson Obara Magutu on email (magutumop@uonbi.ac.ke) or phone (+254 722 109137) OR Fernanda Soares through fassunca@nd.edu

For questions about your rights as a research participant, to discuss problems, complaints, or concerns about this study (Protocol Number NACOSTI/P/22/16965 - UoN and 22-08-7365 UND*)*, please contact Notre Dame Research Compliance at 574-631-1461 or at compliance@nd.edu.

PARTICIPANT'S CONSENT

In consideration of all the above, I give my consent to participate in this research study. I will be given a copy of this informed consent document to keep for my records. I agree to take part in this study.

Participant's Printed Name:____

Participant's Signature:_Date:___

Printed Name of Person Obtaining Consent:___

Signature of Person Obtaining Consent:_____

Date:_____

ANNEX 2: KII GUIDE-GOVERNMENT OFFICIALS / CIVIL SOCIETY / RESEARCHERS

Interview Information:

Date: _____ Time: _____

Interviewer: _____

Respondant's information

Name: _____

Gender: _____

Type of respondent (Govt/CSO/researcher): _____

Name of Org or Govt Unit: _____

Department: _____

Position: _____

Introduction and greeting

Greetings and thank you for agreeing to participate in this interview. My name is ____. I am a researcher with The University of Nairobi collaborating on a multicountry study about the financial sustainability of Higher Education Institutions in Kenya, Indonesia and Philippines. The study is being conducted by the University of Nairobi in collaboration with the University of Notre Dame and the Makerere University-ResilientAfrica Network (RAN), and it is funded by the United States Agency for International Development (USAID).

The purpose of this study is to to understand the opportunities and challenges faced by higher education institutions in Kenya related to financial sustainability. During our interview today we will explore approaches and risk management strategies that Higher Education Institutions in Kenya are pursuing to strengthen its financial sustainability as well as system-level and internal factors that may enable or constrain these strategies. I am recording our conversation so that we can complete our notes for analysis, but the recording will not be shared with members outside of the team assigned to this research. No information which could identify you or your institution will be shared in publications or presentations about this study.

The interview will last approximately 1 to 1.5 hours. Did you read the consent form? Do you have any questions?

[NOTE TO INTERVIEWER: collect signed consent. If any participant refused to grant consent, thank them for their time and advise that they are free to leave].

Ice breaker

a. **[*Govt stakeholders*]**: Could you tell me what is your current role and responsibilities in the government?

b. **[*Researchers*]**: Could you tell me about your previous or current research on the financial sustainability of HEIs in Kenya?

c. **[*Civil Society*]**: Could you tell me about your previous or current work related to the financial sustainability of HEIs in Kenya?

RQ1: Understanding of Financial Sustainability

1.1. CHARACTERISTICS OF FS HEIs: I would like to turn our focus on understanding financial sustainability of higher education institutions. According to our study's definition of financial sustainability: *"a higher education institution is financially sustainable when it is able to fund its operational and maintenance costs to: 1) produce valued results aligned with its mission and 2) achieve resilience over time"*

a) What are the **key characteristics** of higher education institutions in Kenya that accomplish this definition of financial sustainability?

Probes: Encourage respondents to think about an HEI they know of that is financially sustainable or to imagine a hypothetical financially sustainable HEI. Ask participants to describe the key characteristics of this HEI that make it financially sustainable.

b) Do you believe that these characteristics differ by type of HEI? For example, by public and private HEIs and by TVETs and polytechnics?

RQ3: Issues affecting HEI Financial Sustainability (general point of view)

3.1. SHORT TERM: In your view, what are the key issues facing HEIs in the immediate future, for example, in the next year or sooner, that may impact their financial sustainability?

3.2. LONG TERM: What are the key issues facing HEIs over the next ten years that may impact their financial sustainability?

Probes: Do public HEIs have enough funding to accomplish their missions? What about private HEIs? Are the present funding sources stable?

RQ3: System-level and Internal Factors (HEI and Government)

I would like to turn our focus to some of the possible underlying conditions that shape both the current financial situation of HEIs, as well as their future financial viability and prospects.

Let's speak first about those that are specific to HEIs. I recognize that you might have a limited vantage point for speaking about the internal aspects of HEIs, but we would be grateful to hear your point of view nonetheless.

3.3. INTERNAL FACTORS: In your view, how do factors internal to HEIs affect their financial sustainability?

Probes: institutional policies and regulations, leadership capacity, internal governance, capacity for financial management, capacity for resource generation

3.4. SYSTEM-LEVEL FACTORS: In your view, how do existing government policies, regulations and incentives positively or negatively affect the financial sustainability of HEIs?

a) *Probe*. How do they constrain or facilitate the financial strategies that HEIs can pursue? For instance, how do these policies affect the choices made by HEIs regarding their financial strategies? How do they differ for public and private HEIs?

b) *Probe*: mechanism for government allocation of resources, financial regulations, fiscal regulations and incentives, accountability mechanisms

3.5. POLICY IMPLEMENTATION: To what extent h are these regulations and policies implemented as intended?

a) *Probe:* To what extent does the government implement existing policies and regulations as intended?

b) Probe: If not, how does implementation differ from original intent? And how does that impact the financial sustainability of HEIs and does this differ by HEI type?

3.6. TRANSPARENCY AND ACCOUNTABILITY: In your opinion, what role do transparency and accountability policies (particularly on financial information disclosure) play in influencing HEI financial sustainability?

Probes: Does this differ by HEI type (Public, Private, TVET, Polytechnics)?

RQ4: HEI Strategies

4.1. What strategies are HEIs in Kenya currently pursuing to be more financially sustainable?

*Probes:*To what extent are these mentioned strategies different amongst HEI types (Public, Private, TVET, Polytechnics)

Probes: diversification of revenue streams, capacity development, governance, enrollment growth

4.2. In your view, are there any strategies that HEIs in Kenya are not pursuing, but that they should be pursuing to be more financially sustainable?

Probes: What goals, if any, should HEIs have for revenue diversification?

4.3. CAPACITY: From your point of view, to what extent do HEIs have the personnel with the appropriate skills and training to pursue those strategies?

4.4. In your view, what is the role of the government in funding HEIs?

ANNEX 3: KII GUIDE – HE TVET LEADERSHIP/STAFF

Interview Information:

Date: _____ Time: _____Interviewer:_____

Respondent's information

Name: _____Gender: _____

HEI name: _____

HEI Type: _____

HEI Department: _____

Position within HEI: _____

Introduction and greeting

Greetings and thank you for agreeing to participate in this interview. My name is _____. I am a researcher with the University of Nairobi collaborating on a multicountry study about the financial sustainability of Higher Education Institutions in Kenya, Indonesia and Philippines. The study is being conducted by the University of Nairobi in collaboration with the University of Notre Dame and the Makerere University-Resilient Africa Network (RAN), and it is funded by the United States Agency for International Development (USAID).

The purpose of this study is to understand the opportunities and challenges faced by higher education institutions in Kenya related to financial sustainability. During our interview today we will explore approaches and risk management strategies that your institution is pursuing to strengthen its financial sustainability as well as system-level and internal factors that may enable or constrain these strategies. I am recording our conversation so that we can complete our notes for analysis, but the recording will not be shared with members outside of the team assigned to this research. No information which could identify you or your institution will be shared in publications or presentations about this study.

The interview will last approximately 1 to 1.5 hours. Did you read the consent form? Do you have any questions?

[NOTE TO INTERVIEWER: collect signed consent. If any participant refused to grant consent, thank them for their time and advise that they are free to leave].

Ice breaker

Let us start by discussing your role within TVET Institution. Could you tell us what your position is and some of your functions?

RQ1: Understanding of Financial Sustainability

1.1. CHARACTERISTICS OF HIGHER EDUCATION INSTITUTIONS: I would now like us to focus on understanding financial sustainability of higher education institutions. According to our study, "*a higher education institution is financially sustainable when it is able to fund its operational and maintenance costs to: 1) produce valued results aligned with its mission and 2) achieve resilience over time"*

a) What are the **key characteristics** of higher education institutions in Kenya that accomplish this definition of financial sustainability?

Probes: Encourage respondents to think about an HEI they know of that is financially sustainable or to imagine a hypothetical financially sustainable HEI. Ask participants to describe the key characteristics of this HEI that make it financially sustainable.

b) Do you believe that these characteristics differ by type of HEI? For example, by HEI type, such as by Public or Private Universities, TVET, Polytechnics? If yes, how do they differ?

RQ3: Issues affecting Financial Sustainability

Now, taking as a point of departure the characteristics you have just mentioned…

3.1. SHORT TERM: What are the key issues facing your TVET Institution in the immediate future, for example, in the next year or sooner, that may impact its financial sustainability?

3.2. LONG TERM: What are the key issues facing your TVET Institution over the next ten years that may impact its financial sustainability?

RQ3: System-level and Internal Factors

3.3. INTERNAL FACTORS: In your view, how do factors internal to your TVET Institution positively or negatively affect its financial sustainability?

[Note to interviewer: if the respondent is struggling to think of internal factors, use the following probes]

a) *Probe*: How does the financial training and capacity of leaders and managers of this institution in charge of revenue and cost centers affect financial sustainability?

b) Probe: How does your institution's capacity to generate revenue affect its financial sustainability?

c) How does institutionalization of Risk Management help HEIs attain financial sustainability?

3.4. SYSTEM-LEVEL FACTORS: In your view, how do existing government policies, regulation and incentives affect the financial sustainability of your TVET Institution?

a) *Probe:* How do they constrain or facilitate the financial strategies that your institution can pursue? For instance, how do these policies affect the choices made by your institution regarding its financial strategies?

b) Probe: How does the requirements by the sector regulator e.g., CUE for universities affect operations and financial sustainability?

c) *Probe*: Mechanism for government allocation of resources, financial regulations, fiscal regulations and incentives, accountability mechanisms

3.5. POLICY IMPLEMENTATION: In what aspects does the government deviate from its own regulations and policies?

a) *Probes:* Does the government implement existing policies and regulations as intended? If not, how does implementation differ from original intent? And how does that impact the financial sustainability of your institution?

3.6. TRANSPARENCY AND ACCOUNTABILITY: In your opinion, what role do transparency and accountability policies (particularly on financial information disclosure) play in influencing HEI financial sustainability?

Probe: How does this differ by HEI type? (Public, Private, TVET, Polytechnics)

RQ4: HEI Strategies

4.1. What strategies does your TVET Institution currently pursue to be more financially sustainable?

a) Probe: diversification of revenue streams, capacity development, governance, enrollment growth

4.2. What additional strategies, if any, do you feel your TVET Institution could adopt to be more financially sustainable?

4.3. What risk management strategies, if any, does your TVET Institution adopt for navigating unexpected shocks?

a) Probe: shocks before Covid-19, during Covid-19, and post Covid-19 (what are you likely to do differently in the post-pandemic era?)

[Note to interviewer: Question 4.4. should only be asked when interviewing an HEI staff in charge of and-or knowledgeable of financial planning and strategy]

4.4. What practices or strategies does your TVET Institution employ for long-term financial planning, if any?

a) Probe: What do you consider to be an adequate period (timespan) for long-term financial planning?

Mobilization of Funds at the Institutional Level

Now I would like to focus on how your HEI has mobilized funds in the past five years.

4.5. SOURCES OF REVENUE: What are the various revenue streams that your TVET Institution relies on to support operations and development plans? Could you list them for me?

a) *Probes*: Tuition, fees, government contributions, other grants/foundations, fundraising, loans, research and innovation.

4.6. CURRENT FUNDING: How does the current distribution of your TVET Institution's revenue sources negatively or positively influence your TVET Institution's ability to fund operations and meet strategic goals?

a) *Probe:* How reliant is your institution on government capitation?

b) *Probe:* How reliant is your institution on internally generated funds?

4.7. FUTURE REVENUE: What plans, if any, does your TVET Institution have for revenue diversification?

a) *Probes*: Does your institution have any goals or interest to further diversify its revenue stream? If so, how? What are some challenges? If not, why not?

4.8. In your view, what is the role of the government in funding higher education institutions (TVET Institution)?

a) *Probe*: To what extent do you think the government should be funding HEIs?

Now let's consider the cost structure for your HEI.

4.9. COST STRUCTURE: What are some of the main categories of your HEI (TVET Institution) cost structure? Could you list them for me?

4.10 How does your TVET Institution's cost structure affect its financial sustainability?

4.11 What is the current and the expected balance between Revenues and Cost structure?

ANNEX 4: KII GUIDE – HE POLYTECHNIC INSTITUTION LEADERSHIP/STAFF

Interview Information:

Date: _____ Time: _____Interviewer: _____

Respondent's information

Name: _____Gender: _____

HEI name: _____

HEI Type: _____

HEI Department: _____

Position within HEI: _____

Introduction and greeting

Greetings and thank you for agreeing to participate in this interview. My name is _____. I am a researcher with the University of Nairobi collaborating on a multicountry study about the financial sustainability of Higher Education Institutions in Kenya, Indonesia and Philippines. The study is being conducted by the University of Nairobi in collaboration with the University of Notre Dame and the Makerere University-Resilient Africa Network (RAN), and it is funded by the United States Agency for International Development (USAID).

The purpose of this study is to understand the opportunities and challenges faced by higher education institutions in Kenya related to financial sustainability. During our interview today we will explore approaches and risk management strategies that your institution is pursuing to strengthen its financial sustainability as well as system-level and internal factors that may enable or constrain these strategies. I am recording our conversation so that we can complete our notes for analysis, but the recording will not be shared with members outside of the team assigned to this research. No information which could identify you or your institution will be shared in publications or presentations about this study.

The interview will last approximately 1 to 1.5 hours. Did you read the consent form? Do you have any questions?

[NOTE TO INTERVIEWER: collect signed consent. If any participant refused to grant consent, thank them for their time and advise that they are free to leave].

Ice breaker

Let us start by discussing your role within the Polytechnic Institution. Could you tell us what your position is and some of your functions?

RQ1: Understanding of Financial Sustainability

1.1. CHARACTERISTICS OF HIGHER EDUCATION INSTITUTIONS: I would now like us to focus on understanding financial sustainability of higher education institutions. According to our study, "*a higher education institution is financially sustainable when it is able to fund its operational and maintenance costs to: 1) produce valued results aligned with its mission and 2) achieve resilience over time"*

a) What are the **key characteristics** of higher education institutions in Kenya that accomplish this definition of financial sustainability?

Probes: Encourage respondents to think about an HEI they know of that is financially sustainable or to imagine a hypothetical financially sustainable HEI. Ask participants to describe the key characteristics of this HEI that make it financially sustainable.

b) Do you believe that these characteristics differ by type of HEI? For example, by HEI type, such as by Public or Private Universities, TVET, Polytechnics? If yes, how do they differ?

RQ3: Issues affecting Financial Sustainability

Now, taking as a point of departure the characteristics you have just mentioned…

3.1. SHORT TERM: What are the key issues facing your Polytechnic Institution in the immediate future, for example, in the next year or sooner, that may impact its financial sustainability?

3.2. LONG TERM: What are the key issues facing your Polytechnic Institution over the next ten years that may impact its financial sustainability?

RQ3: System-level and Internal Factors

3.3. INTERNAL FACTORS: In your view, how do factors internal to your Polytechnic Institution positively or negatively affect its financial sustainability?

[Note to interviewer: if the respondent is struggling to think of internal factors, use the following probes]

a) *Probe*: How does the financial training and capacity of leaders and managers of this institution in charge of revenue and cost centers affect financial sustainability?

b) Probe: How does your institution's capacity to generate revenue affect its financial sustainability?

How does institutionalization of Risk Management help HEIs attain financial sustainability?

3.4. SYSTEM-LEVEL FACTORS: In your view, how do existing government policies, regulation and incentives affect the financial sustainability of your Polytechnic Institution?

a) *Probe:* How do they constrain or facilitate the financial strategies that your institution can pursue? For instance, how do these policies affect the choices made by your institution regarding its financial strategies?

b) Probe: How does the requirements by the sector regulator e.g CUE for universities affect operations and financial sustainability?

c) *Probe*: Mechanism for government allocation of resources, financial regulations, fiscal regulations and incentives, accountability mechanisms

3.5. POLICY IMPLEMENTATION: In what aspects does the government deviate from its own regulations and policies?

a) *Probes:* Does the government implement existing policies and regulations as intended? If not, how does implementation differ from original intent? And how does that impact the financial sustainability of your institution?

3.6. TRANSPARENCY AND ACCOUNTABILITY: In your opinion, what role do transparency and accountability policies (particularly on financial information disclosure) play in influencing HEI financial sustainability?

Probe: How does this differ by HEI type? (Public, Private, TVET, Polytechnics)

RQ4: HEI Strategies

4.1. What strategies does your Polytechnic Institution currently pursue to be more financially sustainable?

a) Probe: diversification of revenue streams, capacity development, governance, enrollment growth

4.2. What additional strategies, if any, do you feel your Polytechnic Institution could adopt to be more financially sustainable?

4.3. What risk management strategies, if any, does your Polytechnic Institution adopt for navigating unexpected shocks?

a) Probe: shocks before Covid-19, during Covid-19, and post Covid-19 (what are you likely to do differently in the post-pandemic era?)

[Note to interviewer: Question 4.4. should only be asked when interviewing an HEI staff in charge of and-or knowledgeable of financial planning and strategy]

4.4. What practices or strategies does your Polytechnic Institution employ for long-term financial planning, if any?

a) Probe: What do you consider to be an adequate period (timespan) for long-term financial planning?

Mobilization of Funds at the Institutional Level

Now I would like to focus on how your HEI has mobilized funds in the past five years.

4.5. SOURCES OF REVENUE: What are the various revenue streams that your Polytechnic Institution relies on to support operations and development plans? Could you list them for me?

a) *Probes*: Tuition, fees, government contributions, other grants/foundations, fundraising, loans, research and innovation.

4.6. CURRENT FUNDING: How does the current distribution of your Polytechnic Institution's revenue sources negatively or positively influence your Polytechnic Institution's ability to fund operations and meet strategic goals?

a) *Probe:* How reliant is your institution on government capitation?

b) *Probe:* How reliant is your institution on internally generated funds?

4.7. FUTURE REVENUE: What plans, if any, does your Polytechnic Institution have for revenue diversification?

a) *Probes*: Does your institution have any goals or interest to further diversify its revenue stream? If so, how? What are some challenges? If not, why not?

4.8. In your view, what is the role of the government in funding higher education institutions (Polytechnic Institution)?

a) *Probe*: To what extent do you think the government should be funding HEIs?

Now let's consider the cost structure for your HEI.

4.9. COST STRUCTURE: What are some of the main categories of your HEI (Polytechnic Institution) cost structure? Could you list them for me?

4.10 How does your Polytechnic Institution's cost structure affect its financial sustainability?

4.11 What is the current and the expected balance between Revenues and Cost structure?

ANNEX 5: KII GUIDE – HE PUBLIC UNIVERSITIES CONSTITUENT COLLEGE LEADERSHIP/STAFF

Interview Information:

Date: _____ Time: _____Interviewer: _____

Respondent's information

Name: _____Gender: _____

HEI name: _____

HEI Type: _____

HEI Department:_____

Position within HEI: _____

Introduction and greeting

Greetings and thank you for agreeing to participate in this interview. My name is ____. I am a researcher with the University of Nairobi collaborating on a multicountry study about the financial sustainability of Higher Education Institutions in Kenya, Indonesia and Philippines. The study is being conducted by the University of Nairobi in collaboration with the University of Notre Dame and the Makerere University-Resilient Africa Network (RAN), and it is funded by the United States Agency for International Development (USAID).

The purpose of this study is to understand the opportunities and challenges faced by higher education institutions in Kenya related to financial sustainability. During our interview today we will explore approaches and risk management strategies that your institution is pursuing to strengthen its financial sustainability as well as system-level and internal factors that may enable or constrain these strategies. I am recording our conversation so that we can complete our notes for analysis, but the recording will not be shared with members outside of the team assigned to this research. No information which could identify you or your institution will be shared in publications or presentations about this study.

The interview will last approximately 1 to 1.5 hours. Did you read the consent form? Do you have any questions?

[NOTE TO INTERVIEWER: collect signed consent. If any participant refused to grant consent, thank them for their time and advise that they are free to leave].

Ice breaker

Let us start by discussing your role within Public University Constituent College. Could you tell us what your position is and some of your functions?

RQ1: Understanding of Financial Sustainability

1.1. CHARACTERISTICS OF HIGHER EDUCATION INSTITUTIONS: I would now like us to focus on understanding financial sustainability of higher education institutions. According to our study, "*a higher education institution is financially sustainable when it is able to fund its operational and maintenance costs to: 1) produce valued results aligned with its mission and 2) achieve resilience over time"*

a) What are the **key characteristics** of higher education institutions in Kenya that accomplish this definition of financial sustainability?

Probes: Encourage respondents to think about an HEI they know of that is financially sustainable or to imagine a hypothetical financially sustainable HEI. Ask participants to describe the key characteristics of this HEI that make it financially sustainable.

b) Do you believe that these characteristics differ by type of HEI? For example, by HEI type, such as by Public or Private Universities, TVET, Public Universities Constituent College, Polytechnics? If yes, how do they differ?

RQ3: Issues affecting Financial Sustainability

Now, taking as a point of departure the characteristics you have just mentioned…

3.1. SHORT TERM: What are the key issues facing your Public University Constituent College in the immediate future, for example, in the next year or sooner, that may impact its financial sustainability?

3.2. LONG TERM: What are the key issues facing your Public University Constituent College over the next ten years that may impact its financial sustainability?

RQ3: System-level and Internal Factors

3.3. INTERNAL FACTORS: In your view, how do factors internal to your Public University Constituent College positively or negatively affect its financial sustainability?

[Note to interviewer: if the respondent is struggling to think of internal factors, use the following probes]

a) *Probe*: How does the financial training and capacity of leaders and managers of this institution in charge of revenue and cost centers affect financial sustainability?

b) Probe: How does your institution's capacity to generate revenue affect its financial sustainability?

c) How does institutionalization of Risk Management help HEIs attain financial sustainability?

3.4. SYSTEM-LEVEL FACTORS: In your view, how do existing government policies, regulation and incentives affect the financial sustainability of your Public University Constituent College?

a) *Probe:* How do they constrain or facilitate the financial strategies that your institution can pursue? For instance, how do these policies affect the choices made by your institution regarding its financial strategies?

b) Probe: How does the requirements by the sector regulator e.g., CUE for universities affect operations and financial sustainability?

c) *Probe*: Mechanism for government allocation of resources, financial regulations, fiscal regulations and incentives, accountability mechanisms

3.5. POLICY IMPLEMENTATION: In what aspects does the government deviate from its own regulations and policies?

a) *Probes:* Does the government implement existing policies and regulations as intended? If not, how does implementation differ from original intent? And how does that impact the financial sustainability of your institution?

3.6. TRANSPARENCY AND ACCOUNTABILITY: In your opinion, what role do transparency and accountability policies (particularly on financial information disclosure) play in influencing HEI financial sustainability?

Probe: How does this differ by HEI type? (Public, Private, TVET, Polytechnics)

RQ4: HEI Strategies

4.1. What strategies does your Public University Constituent College currently pursue to be more financially sustainable?

a) Probe: diversification of revenue streams, capacity development, governance, enrollment growth

4.2. What additional strategies, if any, do you feel your Public University Constituent College could adopt to be more financially sustainable?

4.3. What risk management strategies, if any, does your Public University Constituent College adopt for navigating unexpected shocks?

a) Probe: shocks before Covid-19, during Covid-19, and post Covid-19 (what are you likely to do differently in the post-pandemic era?)

[Note to interviewer: Question 4.4. should only be asked when interviewing an HEI staff in charge of and-or knowledgeable of financial planning and strategy]

4.4. What practices or strategies does your Public University Constituent College employ for long-term financial planning, if any?

a) Probe: What do you consider to be an adequate period (timespan) for long-term financial planning?

Mobilization of Funds at the Institutional Level

Now I would like to focus on how your HEI has mobilized funds in the past five years.

4.5. SOURCES OF REVENUE: What are the various revenue streams that your Polytechnic Institution relies on to support operations and development plans? Could you list them for me?

a) *Probes*: Tuition, fees, government contributions, other grants/foundations, fundraising, loans, research and innovation.

4.6. CURRENT FUNDING: How does the current distribution of your Polytechnic Institution's revenue sources negatively or positively influence your Polytechnic Institution's ability to fund operations and meet strategic goals?

a) *Probe:* How reliant is your institution on government capitation?

b) *Probe:* How reliant is your institution on internally generated funds?

4.7. FUTURE REVENUE: What plans, if any, does your Public University Constituent College have for revenue diversification?

a) *Probes*: Does your institution have any goals or interest to further diversify its revenue stream? If so, how? What are some challenges? If not, why not?

4.8. In your view, what is the role of the government in funding higher education institutions (Public University Constituent College)?

a) *Probe*: To what extent do you think the government should be funding HEIs?

Now let's consider the cost structure for your HEI.

4.9. COST STRUCTURE: What are some of the main categories of your HEI (Public University Constituent College) cost structure? Could you list them for me?

4.10 How does your Public University Constituent College's cost structure affect its financial sustainability?

4.11 What is the current and the expected balance between Revenues and Cost structure?

ANNEX 6: UNIVERSITIES SURVEY OF FINANCIAL AND EDUCATIONAL CHARACTERISTICS OF HEIS

SHARE-USAID Research on Higher Education

Purpose

The survey of financial and educational characteristics of HEIs aims to collect information derived from financial statements and databases of HEIs in Kenya.Your institution has been selected for participation in the survey based on the need to collect data from a representative sample of HEI institutions.

The information collected with the survey will be used to conduct analyses that improve knowledge on how HEIs mobilize, and allocate financial resources to attain educational goals, and will inform research that will help guide and improve how HEIs navigate challenges to their long-term financial sustainability in Kenya. The resulting findings will also support policymakers and higher education leaders in promoting the financial sustainability of higher education institutions in low- and middle-income countries.

Confidentiality

The data collected with this survey will only be used for statistical purposes, will be anonymized, and will not be released at the institutional level. Only results from analysis, and summary measures will be included in final reports. Indicators derived from the data will not be considered to have *direct* implications for policy.

The survey is part of a research initiative called Supporting Holistic and Actionable Research in Education (SHARE), funded by the USAID Center for Education, and carried out by the University of Notre Dame in collaboration with University of Nairobi.

Which Institutions are Being Studied?

The study focuses on tertiary educational organizations "whose curriculum is designed primarily for students beyond the compulsory age for high school." This definition subsumes any institution offering: 4-year degrees, 2-year degrees, professional degrees, and technical-vocational degrees (TVETS), but excludes avocational studies (i.e: hobbies), and adult basic education studies, such as adult literacy programs and high school equivalency degree programs.

Ideally, the information provided should come from audited General Purpose Financial Statements (GPFS), and from official data on enrollment and graduation, but as long as the data are considered to be reasonably accurate, even if preliminary, the information need not come from audited statements. Please refer to the instructions in each subsection of the survey for details on how to answer questions.

Thank you for your participation.

*****

Sections

1. Preliminary Information (PI). . . . . .
2. Institutional Characteristics (IC). . . . . .
3. Student Enrollment and Completion characteristics (C). . . . . .
4. Student Financial Aid (SFA). [ignore/ PENDING] . . . .
5. Finance (F). . . . . .
6. Human Resources (HR) . . . . . .

1. Preliminary Information

Instructions to Interviewer/Researcher

Date of survey: MM/dd/yyyy

Interviewer Name: _____

Institution's Name: _____

Institution's Division Name: _____

Survey Respondent's name: _____

Survey Respondent's Position Title: _____

****

2. Institutional Characteristics (IC)

Please Indicate your answer with a check mark on the options to the right of the page.

2.1 What is the private-public status of your institution?

2.1.1 A public institution? |__|

2.1.2 A private secular institution? |__|

2.1.3 A denominational institution ? |__|

2.2 Please indicate the type of higher education institution.

2.2.1 University |__|

2.2.2 College |__|

2.2.3 Technical and Vocational Education and Training |__|

2.2.4 Technical Training Institutes |__|

2.2.5 Polytechnic Institutions |__|

2.2.6 Other |__|

2.2.7 If your institution falls under the category "Other", Please indicate which type best describes it.

2.3 Is your institution registered with a government agency? 1 Yes |__| 2 No |__|

2.4 What is the Tax status of your institution?

2.4.1 Not-for-profit organization |__|

2.4.2 For-profit organization |__|

2.4.3 Public institution |__|

3. Enrollment and Completion Characteristics (C)

3.1. Enrollment

Please indicate the number of enrolled students at your institution at the beginning of each academic year.

Table A1. Number of Students by Mode of Enrollment

Table 1: Number of Students by Mode of Enrollment					
	2022	2021	2020	2019	2018
Total undergraduate enrollment					
Undergraduate domestic					
Undergraduate foreign					
Total graduate enrollment					
Graduate domestic					
Graduate foreign					
Total Professional (Medical, engineering, law)					
Professional domestic					
Professional foreign					
Total Other Courses(Diploma, Certificate, Professional course)					
Professional domestic					
Professional foreign					

3.2 Completion

Indicate the number of students who graduate, per degree level. *Please provide as many years of data as are available. If your institution does not offer a degree of the type indicated, please write in: n.a.*

Table A2. Number of graduating students by degree level

Table 2: Number of graduating students by degree level					
Programme type	2022	2021	2020	2019	2018
Associate degree (2-year), and 1-yr certificates (Diploma, Certificate, Professional Courses e.g CPA etc.)					
BA - Undergraduate					
Professional (Medical, engineering, law)					
Graduate Total					

4. Student Financial Aid (SFA).

Please provide data per year for the most recent academic years: 2018-2022. Need-based scholarships refer to funds and financial support given for students who qualify based on economic need. Merit-based scholarships refer to funds, and to financial aid given based on criteria of performance in secondary school and/or in entrance exams to tertiary institutions.

Table A3. Students receiving benefits directly from the HEI that count against student fees and tuition and the total amount of such benefits, discounts, and subsidies per academic year

Table 3: Students receiving benefits directly from the HEI that count against student fees and tuition and the total amount of such benefits, discounts and subsidies per academic year.										
Data for all types of benefits (scholarships, tuition subsidies, loans or grants, and other**)	Number of beneficiary students						Amount received (in …….)*			
	2022	2021	2020	2019	2018		2022	2021	2020	2019	2018
Total											

(*) Indicate the unit used

(**) The amounts correspond to the sums of subsidies allocated to student aid for free or subsidized university accommodation.

Table A4. Students receiving benefits

Table 4: Students receiving benefits											
	Number of Students						Amount received				
Type	2022	2021	2020	2019	2018		2022	2021	2020	2019	2018
Need-based Scholarships and Sponsorships (from private NGOs Churches, Foundations and related)											
Need-based Scholarships (from Govt)											
Merit-based Scholarships (from private NGOs, Churches, Foundations and related)											
Merit-based Scholarships (from Govt. -MOE Capitation and Grants))											
Government Loans (HELB Loans, Bursaries)											
Private Loans											
Government top-up support funds / Fees Sponsorship (NG-CDF, NYS, AfDB)											
Other											

5. Finance (F)

Instructions to interviewer and/or data provider at the institution

Although institutions may be organized in different ways and use different titles for administrative officers, generally a campus office might help you to report data on this survey component might be called: Office of the Chief Financial Officer; Office of Administration and Finance; Office of Finance; Office of Budget; Office of Financial Services; Office of the Comptroller (or Controller); Office of Accounting.

5.1 Availability of Financial Statements

Please indicate if the financial statements are available through your institution, and which entity or subdivision of your institution can provide financial statements.

5.2 Income Statements & Balance Sheet information

Please report gross amounts but exclude interfund transfers. Include the transactions of all funds of your institution. Please provide data per year, for the most recent 5 years.

Table A5. Revenues

Table 4: Revenues										
(provide amounts in nominal values)*	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
Rendering of Services –Tuition, Fees and Services to students										
1.1 Net Tuition (after discounting subsidies provided by the institution)-Paid Directly by students										
1.2 Top-up funds from government for state supported students - Remittances from HELB (Loans and Bursaries)										

1.3 Revenue from fees obtained from programs and educational activities- Fees and other charges other than tuition (ID, activity, caution etc.)										
1.4 Income from Intellectual Property										
1.5 Research and Consultancy income										
1.6 Fees from auxiliary enterprises – Income Generating Units/ Sale of goods and services										
1.7. Fees from rental or leasing of property – Rental Income from Facilities and Equipment										
1.8 Miscellaneous fees/ Other Income:										
2. Public appropriations and grants										
2.1 Direct budget appropriations (from National Gov.)/ Transfer from National government (Grants, Gifts in Kind, Exchequer allocations, Capitation)										
2.2 National Govt. Grants/Contracts										
2.3 Sub-national Govt. (Grants, Appropriations, & contracts)										
2.4 Other revenue: ….....										
3. income from investments, and from private sources										

3.1 Private Gifts and Grants, and Contracts (direct donations but excluding capital grants.) – Donations and Public Contributions (Local)										
3.2 Capital Grants										
3.3 Shareholders current account										
3.4 Foreign grants – Grants from Development Partners (International)										
3.5 Other: ….....										
4. Financial Income and Products										
4.1 Interest earnings – Finance Income										
4.2 Dividend Earnings										
4.4 Realized Capital Gains										
4.4 Other: ….....										
Grand Total										

Please include all funds and operations (incl. endowment funds; but exclude component units)

(*) Indicate the unit used

Table A6. Expenditures

Table 5: Expenditures										
(use amounts in nominal values)*	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
1. Current Expenditures										
1.1 Salaries & wages & compensation** - Employee Costs										
1.1.1 Salaries & wages (Teaching Staff)**										
1.1.2 Salaries & wages (Non-Teaching Staff) ***										

1.1.3. Health-related expenses										
1.2 Transfers, and aid for students – Grants, Discounts and subsidies to students by the Institution										
1.3 Top-funds from government										
1.4. Administrative expenses – Use of goods and services										
1.5 Rent, leasing, and rental charges										
1.6 Repairs and Maintenance.										
1.7 Interest on outstanding debt/Finance Costs										
1.8 Depreciation and amortization										
1.9 Other / Other Expenses:.....										
Total current expenditures										
2. Capital Outlays										
2.1 Expenses to improve assets.										
2.2 Equipment purchases.										
2.3 Land and buildings purchases.										
2.4 Debt principal repayment.										
2.5 Other:.....										
Total Capital Outlays										
Grand total										

(*) Indicate the unit used

(**) If possible, break down salaries between teachers and non-teachers, otherwise fill in line 1.1. Please include any payments to state retirement funds (sub component of all benefits). Include Pension and gratuity, and payments to part-time lecturers

(***) If possible, break down salaries between teachers and non-teachers, otherwise fill in line 1.1. Please include any payments to state retirement funds (sub component of all benefits). Include Pension and gratuity, casual, contract employees and remuneration for directors and council members.

Table A7. Detailed Balance Sheet

Table 6: Detailed Balance Sheet *

(please use amounts in nominal values)	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
1. Capital and Reserves										
1.1 Shareholder's funds										
1.1.1 Capital Fund / Grants										
1.1.2 Accumulated Surplus /Deficit and Revaluation Reserves										
1.1.3 Money received against share warrants										
1.2 Share application money pending										
1.3 Non-current liabilities										
1.3.1 Long-term borrowings										
1.3.2 Deferred tax liabilities (Net)										
1.3.3 Deferred capital contributions/Deferred income from National Government										
1.3.4 Unfunded employee benefits										
1.3.4 Other long-term liabilities										
1.3.5 Long-term provisions										
1.4 Current liabilities										
1.4.1 Short-term borrowings										
1.4.2 Accounts payable **										

1.4.3 Other current liabilities										
1.4.4 Short-term provisions										
Total Equity and liabilities										
2. Assets										
2.2 Current assets										
2.1.1 Cash and cash equivalents										
2.1.2 Current investments										
2.1.3 Inventories										
2.1.4 Account receivables (Exchange and Non-Exchange Transaction)										
2.1.5 Short-term loans and advances										
2.1.6 Other current assets (incl. prepaid expenses)										
2.1 Non-current assets										
2.2.1 Non-Current Assets ***										
2.2.2 Non-current investments										
2.2.3 Deferred tax assets (Net)										
2.2.4 Long-term investments										
2.2.5 Other non-current assets										
Total Assets										

(*) Indicate amounts in nominal values (not adjusted for inflation), and the unit used

(**) Accounts payable to include: Trade and payables (Exchange Transactions); Refundable deposits from customers (Caution money, CDF, HELB remittances etc.); Payables to mentored institutions

(***) Non-Current Assets to include: Property, Plant and Equipment; Biological Assets; Intangible Assets

6. Human Resources and salary expenditures per year (HR)

Table A8. Full time staff and salary expenditures per year

Table 7: Full time Staff and salary expenditures per year															
	2022	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**	**2022**	**2021**	**2020**	**2019**	**2018**
1. Number of Teaching staff															
2. Number of Non-Teaching staff															
4. Wages and salaries: Teaching staff*															
5. Wages and salaries: Non-Teaching staff*															

(*) Please use values that are not adjusted for inflation for the national currency and the units used. Full time staff (Teaching and Non- Teaching to include employees on a term / contractual terms)

Table A9. Part-time staff and salary expenditures per year

Table 8: Part-time Staff and salary expenditures per year										
(Amounts in …….. ….)*	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
1. Number of part-time Teaching staff										
2. Number of part-time Non-Teaching staff										
4. Wages and salaries: part-time faculty and part-time Instructional staff*										
5. Wages and salaries: Non-Teaching staff*										

(*) Please use values that are not adjusted for inflation for the national currency and the units used. Full time staff (Non- Teaching to include casuals and part- time employees employed by the Board of governors / Directors/Council/HEI

END

Thank you for your support and effort in this research endeavor!

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ANNEX 7: VETS SURVEY OF FINANCIAL AND EDUCATIONAL CHARACTERISTICS OF HEIs

SHARE-USAID Research on Higher Education

For Polytechnics, Technical training Institutes and Vocational Training Centers

Purpose

The survey of financial and educational characteristics of HEIs aims to collect information derived from financial statements and databases of HEIs in Kenya. Your institution has been selected for participation in the survey based on the need to collect data from a representative sample of HEI institutions.

The information collected with the survey will be used to conduct analyses that improve knowledge on how HEIs mobilize, and allocate financial resources to attain educational goals, and will inform research that will help guide and improve how HEIs navigate challenges to their long-term financial sustainability in Kenya. The resulting findings will also support policymakers and higher education leaders in promoting the financial sustainability of higher education institutions in low- and middle-income countries.

Confidentiality

The data collected with this survey will only be used for statistical purposes, will be anonymized, and will not be released at the institutional level. Only results from analysis, and summary measures will be included in final reports. Indicators derived from the data will not be considered to have *direct* implications for policy.

The survey is part of a research initiative called Supporting Holistic and Actionable Research in Education (SHARE), funded by the USAID Center for Education, and carried out by the University of Notre Dame in collaboration with University of Nairobi.

Which Institutions are Being Studied?

The study focuses on tertiary educational organizations "whose curriculum is designed primarily for students beyond the compulsory age for high school." This definition subsumes any institution offering: 4-year degrees, 2-year degrees, professional degrees, and technical-vocational degrees (TVETS), but excludes avocational studies (i.e: hobbies), and adult basic education studies, such as adult literacy programs and high school equivalency degree programs.

Ideally, the information provided should come from audited General Purpose Financial Statements (GPFS), and from official data on enrollment and graduation, but as long as the data are considered to be reasonably accurate, even if preliminary, the information need not come from audited statements. Please refer to the instructions in each subsection of the survey for details on how to answer questions.

Thank you for your participation.

*****

Sections

1. Preliminary Information (PI). . . . . .
2. Institutional Characteristics (IC). . . . . .
3. Student Enrollment and Completion characteristics (C). . . . . .
4. Student Financial Aid (SFA). [ignore/ PENDING] . . . .
5. Finance (F). . . . . .
6. Human Resources (HR) . . . . . .

1. Preliminary Information

Instructions to Interviewer/Researcher

Date of survey: MM/dd/yyyy

Interviewer Name: _____

Institution's Name: _____

Institution's Division Name: _____

Survey Respondent's name: _____

Survey Respondent's Position Title: _____

2. Institutional Characteristics (IC)

Please Indicate your answer with a check mark on the options to the right of the page.

2.1 What is the private-public status of your institution?

2.1.1 A public institution? |__|

2.1.2 A private secular institution? |__|

2.1.3 A denominational institution ? |__|

2.2 Please indicate the type of higher education institution.

2.2.1 University |__|

2.2.2 College |__|

2.2.3 Technical and Vocational Education and Training |__|

2.2.4 Technical Training Institutes |__|

2.2.5 Polytechnic Institutions |__|

2.2.6 Other |__|

2.2.7 If your institution falls under the category "Other", Please indicate which type best describes it.

2.3 Is your institution registered with a government agency? 1 Yes |__|

2 No |__|

2.4 What is the Tax status of your institution?

2.4.1 Not-for-profit organization |__|

2.4.2 For-profit organization |__|

2.4.3 Public institution |__|

3. Enrollment and Completion Characteristics (C)

3.1. Enrollment

Please indicate the number of enrolled students at your institution at the beginning of each academic year.

Table A10. Number of Students by Mode of Enrollment

Table 1: Number of Students by Mode of Enrollment					
	2022	**2021**	**2020**	**2019**	**2018**
Total Diploma enrollment					

Diploma *Local*					
Diploma *International*					
Total *Certificate* enrollment					
Certificate Local					
Certificate International					
Total Artisan enrollment					
Artisan *Local*					
Artisan *International*					
Total Professional (KASNEB, KNEC, NIITA)					
Professional Local					
Professional International					

3.2 Completion

Indicate the number of students who graduate, per Programme level. *Please provide as many years of data as are available. If your institution does not offer a degree of the type indicated, please write in: n.a.*

Table A11. Number of graduating students by programme level

Table 2: Number of graduating students by programme level					
Programme type	**2022**	**2021**	**2020**	**2019**	**2018**
Diploma					
Certificate					
Artisan					
Professional Courses Total					

4. Student Financial Aid (SFA).

Please provide data per year for the most recent academic years: 2018-2022. Need-based scholarships refer to funds and financial support given for students who qualify based on economic need. Merit-based

scholarships refer to funds, and to financial aid given based on criteria of performance in secondary school and/or in entrance exams to tertiary institutions.

Table A12. Students receiving benefits directly from the HEI that count against student fees and tuition and the total amount of such benefits, discounts and subsidies per academic year

Table 3: Students receiving benefits directly from the HEI that count against student fees and tuition and the total amount of such benefits, discounts and subsidies per academic year.											
Data for all types of benefits (scholarships, tuition subsidies, loans or grants, and other**)	Number of beneficiary students						Amount received (in ……)*				
	2022	**2021**	**2020**	**2019**	**2018**	**2022**	**2021**	**2020**	**2019**	**2018**	**2022**
Total											

(*) Indicate the unit used

(**) The amounts correspond to the sums of subsidies allocated to student aid for free or subsidized university accommodation.

Table A13. Students receiving benefits

Table 4: Students receiving benefits											
	Number of Students						Amount received				
Type	**2022**	**2021**	**2020**	**2019**	**2018**	**2022**	**2021**	**2020**	**2019**	**2018**	**2022**
Need-based Scholarships and Sponsorships (from private NGOs Churches, Foundations and related)											

Need-based Scholarships (from Govt)											
Merit-based Scholarships (from private NGOs, Churches, Foundations and related)											
Merit-based Scholarships (from Govt. -MOE Capitation and Grants)											
Government Loans (HELB Loans, Bursaries)											
Private Loans											
Government top-up support funds / Fees Sponsorship (NG-CDF, NYS, AfDB)											
Other											

5. Finance (F)

Instructions to interviewer and/or data provider at the institution

Although institutions may be organized in different ways and use different titles for administrative officers, generally a campus office might help you to report data on this survey component might be called: Office of the Chief Financial Officer; Office of Administration and Finance; Office of Finance; Office of Budget; Office of Financial Services; Office of the Comptroller (or Controller); Office of Accounting.

5.1 Availability of Financial Statements

Please indicate if the financial statements are available through your institution, and which entity or subdivision of your institution can provide financial statements.

5.2 Income Statements & Balance Sheet information

Please report gross amounts but exclude interfund transfers. Include the transactions of all funds of your institution. Please provide data per year, for the most recent 5 years.

Table A14. Revenues

Table 4: Revenues										
(provide amounts in nominal values)*	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
1. Tuition and Services - Revenue from Exchange Transactions										
1.1 Net Tuition and fees (after discounting subsidies provided by the institution) Paid Directly by students.										
1.2 Top-up funds from government for state supported students. (Remittances from HELB (Loans and Bursaries)										
1.3 Revenue from fees obtained from programs and educational activities (Revenue from rendering of services other than Tuition and Fees e.g., ID, activity, caution etc.)										
1.4 Income from Intellectual Property										

1.5 Research and Consultancy income										
1.6 Fees from auxiliary enterprises– Income Generating Units/ Sale of goods and services										
1.7. Fees from rental or leasing of property (Rental Income from facilities and securities – Operating lease, contingent rentals …)										
1.8 Miscellaneous fees:/ Other Income										
1.9 Sale of goods and Services (Farm/Catering/Kitchen sales etc.)										
2. Public appropriations and grants -Revenue from Non-Exchange Transactions										
2.1 Direct budget appropriations (from National Gov.)- / Transfer from National government (Grants, Gifts in Kind, Exchequer allocations, Capitation)										
2.2 National Govt. Grants/Contracts										
2.3 Sub-national Govt. (Grants, Appropriations, & contracts)										
2.4 Donations and public Contributions (Local)										
2.5 Grants and Donations from Development Partners (World Bank, …..)										
2.6 Other revenue: ….....										
3. income from investments, and from private sources										

3.1 Private Gifts and Grants, and Contracts (direct donations but excluding capital grants.)										
3.2 Capital Grants										
3.3 Shareholders current account										
3.4 Foreign grants – Grants from Development Partners (International)										
3.5 Other: …….										
4. Financial Income and Products										
4.1 Interest earnings/Finance Income on cash/ External investments and Term Deposits										
4.2 Dividend Earnings										
4.4 Realized Capital Gains										
4.4 Other: Tender sales, graduation , Disposal of Assets etc.										
Grand Total										

Please include all funds and operations (incl. endowment funds; but exclude component units)

(*) Indicate the unit used

Table A15. Expenditures

Table 5: Expenditures										
(use amounts in nominal values)*	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
1. Current Expenditures										
1.1 Salaries & wages & compensation**										
1.1.1 Salaries & wages (faculty)** - Employee Costs (Faculty and staff)										

1.1.2 Salaries & wages (non-faculty) **										
1.1.3. Health-related expenses										
1.1.4. Staff Development/ Training Costs										
1.1.5. Remuneration of Chair and Board of Directors										
1.2 Transfers, and aid for students – Grants, Discounts and subsidies to students by the Institution										
1.3 Top-funds from government										
1.4. Administrative expenses/ Costs Use of goods and services										
1.5 Rent, leasing, and rental charges										
1.6 Repairs, Maintenance and other operating expenses.										
1.7 Finance Costs - Interest on outstanding debt.										
1.8 Depreciation and amortization										
1.9 Use of goods and Services and General Expenses										
1.20 Other: (Discounts, subsidies, grants, contracted services…..)										
Total current expenditures										
2. Capital Outlays										
2.1 Expenses to improve assets.										
2.2 Equipment purchases.										
2.3 Land and buildings purchases.										
2.4 Debt principal repayment.										
2.5 Other:.....										
Total Capital Outlays										
Grand total										

(*) Indicate the unit used

(**) If possible, break down salaries between teachers and non-teachers, otherwise fill in line 1.1. Please include any payments to state retirement funds (sub component of all benefits). Include Pension and gratuity, and payments to part-time lecturers

(***) If possible, break down salaries between teachers and non-teachers, otherwise fill in line 1.1. Please include any payments to state retirement funds (sub component of all benefits). Include Pension and gratuity, casual, contract employees and remuneration for directors and council members.

Table A16. Detailed Balance Sheet

Table 6: Detailed Balance Sheet *										
(please use amounts in nominal values)	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
1. Equity and liabilities										
1.1 Capital and Reserves										
1.1.1 Capital Fund / Grants										
1.1.2 Accumulated Surplus										
1.1.3 Revaluation Reserves										
1.2 Share application money pending										
1.3 Non-current liabilities										
1.3.1 Long-term borrowings										
1.3.2 Deferred tax liabilities (Net)										
1.3.3 Deferred capital contributions / Deferred Income (National Income)										
1.3.4 Unfunded employee benefits										
1.3.4 Other long-term liabilities										

1.3.5 Long-term provisions										
1.4 Current liabilities										
1.4.1 Trade and other accounts payable (Exchange Transactions)										
1.4.2 Refundable deposits from customers (Caution Money, HELB.)										
1.4.3 Short-term provisions										
1.4.4 Short-term borrowings										
1.4.5 Payables to Mentored Institutions										
Total Equity and liabilities										
2. Assets										
2.2 Current assets										
2.1.1 Cash and cash equivalents (Including mentoring Institutions)										
2.1.2 Current investments										
2.1.3 Inventories										
2.1.4 Account receivables (Exchange Transactions – Student fees, Rent …..)										
2.1.4 Account receivables (Non-Exchange Transactions – Grants, Undisbursed donor funds)										
2.1.5 Short-term borrowings and advances (Salary Advances…)										
2.1.6 Short Term Investments										
2.1.7 Inventories										

2.1.8 Other current assets (incl. prepaid expenses)										
2.1 Non-current assets										
2.2.1 Property , Plant and Equipment										
2.2.2 Intangible Assets (Software …)										
2.2.3 Biological Assets										
2.2.4 Non-current investments										
2.2.5 Deferred tax assets (Net)										
2.2.6 Long-term investments										
2.2.7 Other non-current assets										
Total Assets										

(*) Indicate amounts in nominal values (not adjusted for inflation), and the unit used

(**) Accounts payable to include: Trade and payables (Exchange Transactions); Refundable deposits from customers (Caution money, CDF, HELB remittances etc.); Payables to mentored institutions

(***) Non-Current Assets to include: Property, Plant and Equipment; Biological Assets; and Intangible Assets

6. Human Resources and salary expenditures per year (HR)

Table A17. Full time Staff and salary expenditures per year

Table 7: Full time Staff and salary expenditures per year										
	2022	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
1. Number of faculty and instructional staff										
2. Number of Non-instructional staff (Includes BOG/BOD Employees costs)										

4. Wages and salaries: Faculty & instructional staff* (Includes BOG/BOD Employees costs)										
5. Wages and salaries: non-instructional staff*										

(*) Please use values that are not adjusted for inflation for the national currencyand the units used. Full time staff (Teaching and Non- Teaching to include employees on a term / contractual terms)

Table A18. Part-time Staff and salary expenditures per year

Table 8: Part-time Staff and salary expenditures per year										
(Amounts in ……..….) *	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**
1. Number of part-time faculty & instructional staff (BOG/BOD – Trainers)										
2. Number of Non-instructional part-time staff (BOG/BOD – Administrative Staff)										
3. Wages and salaries (Casual Staff)										

(*) Please use values that are not adjusted for inflation for the national currency and the units used. Full time staff (Non- Teaching to include casuals and part- time employees employed by the Board of governors / Directors/Council/HEI

END

Thank you for your support and effort in this research endeavor!

ANNEX 8: RESEARCH ETHICS, DATA MANAGEMENT, AND QUALITY ASSURANCE

DATA MANAGEMENT

All primary and secondary data was de-identified and stored on a secure Google Drive file system hosted by the University of Notre Dame. The Kenya Research Lead and the PI will also store a copy of de-identified data on a password-protected computer for two years following the completion of the study. All secondary data received from higher education institutions, government authorities, and other relevant institutions were scanned to the secure Google drive using a password-protected mobile device, such as a tablet or a mobile phone.

QUALITY CHECKS

Throughout the research process, the Country Research Lead met weekly with the HEIGHTS Program Manager to discuss: (1) progress with the study, (2) any challenges that emerge, and (3) support needed from the broader technical team. During the data collection and analysis process, the research team joined the weekly meetings to oversee and provide support for the data collection and analysis processes.

REPORTING

The reporting phase began in earnest following the completion of the analysis and synthesis of the information collected from both the desk research and fieldwork. This phase progressed in two stages: preparation of the draft report and validation workshop.

ANNEX 9: GOVERNMENT FUNDING MODELS TO HEIs

DIFFERENTIATED UNIT COST (DUC) MODEL (2017)

The Government of Kenya operated a **flat-rate funding model**[16] for several decades and the model allocated resources equally across HEIs, disregarding the varied operational costs of different academic programs. This model potentially disadvantaged disciplines with higher resource needs, such science, technology, engineering, and mathematics (STEM). Recognizing this lack of programme differentiated unit cost in provision of funds from government, and other several challenges in financing public universities (such as inadequate budgetary support, inadequate funds for capital development, inadequate internal

[16] Under the flat-rate model, each academic programme was allocated a flat rate of US$1,200 per year per student, a system favored by older and larger institutions like the University of Nairobi and Kenyatta University.

income generation by the universities, and system inefficiencies), the government enacted a new legislation, the **Universities Act of 2012,** as the main law governing higher education in Kenya. In 2013, the Universities Act established the Universities Fund (UF) and the Universities Fund Board (a Board of Trustee) to govern the University Fund. The Fund first became operational in 2016, and a year later, the University Fund implemented a **Differentiated Unit Cost (DUC) model**. This model represented a significant shift, allocating funding based on a program's specific cost structure. Factors like faculty salaries, student-to-staff ratios, and equipment needs were considered for each program to determine its DUC. Universities were then categorized into 14 clusters based on program similarities, and a Maximum DUC (MDUC) was negotiated for each cluster by the Universities Fund. While this aimed for a fairer distribution of resources, concerns arose. The DUC model allocated 80% of the unit cost per student per year and the 20% was contributed by the university and parents. This might have underfunded crucial but less expensive programs, particularly in humanities and social sciences. Additionally, the 20% cost-sharing requirement for universities and students placed a financial burden on some HEIs.

THE VARIABLE SCHOLARSHIP AND LOAN FUNDING (VSLF) MODEL (2023)

In response to the limitations presented by the DUC model, in July 2023, the Government of Kenya rolled out a new performance-based funding framework, the Variable Scholarship and Loan Funding (VSLF) model. The VSLF model (dubbed the New Funding Model) marks a shift by allocating resources to HEIs based on predetermined Key Performance Indicators (KPIs). Potential KPIs include student success (graduation rates), graduate employability, research output, and overall educational quality (student satisfaction, faculty qualifications). By linking funding to these performance indicators, the government aims to incentivize HEIs to enhance their educational offerings and graduate outcomes.

The VSLF model is student-centered and it is based on the level of student need and academic program cost. In addition, under this model, public HEIs (universities and TVETs) no longer receive block funding in the form of capitation. Instead, funding for students is provided through scholarships, loans, and student household contributions. A student must apply online to the University Fund for a scholarship and to HELB for a loan. The application is assessed using the Means Testing Instrument (MTI). The MTI is a reliable scientific method used to determine the student's level of financial need by using proxy indicators including program type, household income band, affirmative performance, and government priority areas.

Students are eligible for both tuition (in form of scholarships and loans) and upkeep. The scholarship and loan disbursements are processed at the beginning of the semester. The tuition is disbursed directly to the individual public HEIs while the upkeep is paid to the student's personal account Under the VSLF model, students who seek to pursue their studies in private universities and as parallel/module two/self-sponsored students in public universities are eligible for loans only.

The MTI system groups students into five bands, according to their financial needs. Below is a simulation of the implication of categorization in various levels of need using Band 1 and Band 5 as an illustration based on five degree programs at a public university.

Table A19. Funding simulation for a student categorized in Band 1

		Band 1			
Program Name	Program Cost	Scholarship 70%	Tuition Loan 25%	Upkeep	Household 5%
Medicine	612,000	428,400	153,000	60,000	30,600
Bachelor of Education (Science)	244,800	171,360	61,200	60,000	12,240
Bachelor of Education (Arts)	183,600	128,520	45,900	60,000	9,180
Bachelor of Commerce	220,150	154,105	55,037.50	60,000	11,007.50
Bachelor of Arts	122,400	85,680	30,600	60,000	6,120

Table A20. Funding simulation for a student categorized in Band 5

		Band 5			
Program Name	Program Cost	Scholarship 30%	Tuition Loan 30%	Upkeep	Household 40%
Medicine	612,000	183,600	183,600	40,000	244,800
Bachelor of Education Science)	244,800	73,440	73,440	40,000	97,920
Bachelor of Education (Arts)	183,600	55,080	55,080	40,000	73,440
Bachelor of Commerce	220,150	66,045	66,045	40,000	88,060

Bachelor of Arts	122,400	36,720	36,720	40,000	48,960

From the VSLF model, the government does not give any capitation to the universities and TVETs directly but instead funds in form of scholarships and loans are transferred directly to these HEIs depending on the number of students admitted and the degree programmes being offered by the HEIs.

The benefits of the new funding model in relation to placement of students include: (1) emphasizes both equality and equity, ensuring that financial support is available to those in need; (2) a student is eligible to apply for various forms of financial assistance, including government scholarships, loans, and upkeep funds; and (3) funding is based on the actual cost of the academic program, which varies per HEI.

The new funding model addresses three key challenges: (1) cost disparity by allocating funding based on individual course costs (e.g. engineering vs. general studies); (2) student financial need through a needs-based scholarship structure; and (3) private university support by shifting capitation grants solely to public TVETs, with private university students relying on government student loans.

Key Players in the VSLF model

- **Higher Education Loans Board (HELB):** For Provision of Loans and Bursaries to students enrolled in TVET Colleges and Universities [Public and Private];
- **Universities Fund (UF):** Provision of Undergraduate Grants and Scholarships to Government Sponsored Students enrolled in Public Universities;
- **Kenya Universities and Colleges Placement Service (KUCCPS):** For placement of Students in their desired and qualified courses upon application;
- **State Department of Technical Education:** Provision of TVET scholarships;
- **Higher Learning Institutions:** The recipients of loans and scholarships awarded to students inform of fees;
- **Parents:** To support household's contributions; and
- **General Public**

Higher Education Loans Board (HELB) Loans

The Higher Education Loans Board (HELB) plays a critical role in expanding access to higher education in Kenya by offering financial aid specifically for underprivileged students enrolled in universities and TVET institutions. This aid comes in the form of loans requiring repayment with interest, need-based bursaries that don't need repaying, and a limited number of scholarships. HELB utilizes a "Means Testing Instrument" during the online application to assess a student's financial vulnerability based on factors like household income and dependents. This instrument determines whether a student receives a larger bursary or a more favorable loan package. Awarded funds are disbursed differently – bursaries go directly to the university for tuition, while loans are split, with a portion allocated to the university and the remaining amount provided to the student for living expenses The amount of funding an institution receives is directly tied to its student enrollment numbers. This financial incentive serves as a motivator for institutions to expand their student base, thereby promoting broader access to higher education. However, the system is not without its challenges. Loan approval amounts may not fully address all a student's financial requirements, and loan repayment can pose a significant burden for some graduates, particularly those facing difficulties in securing employment.

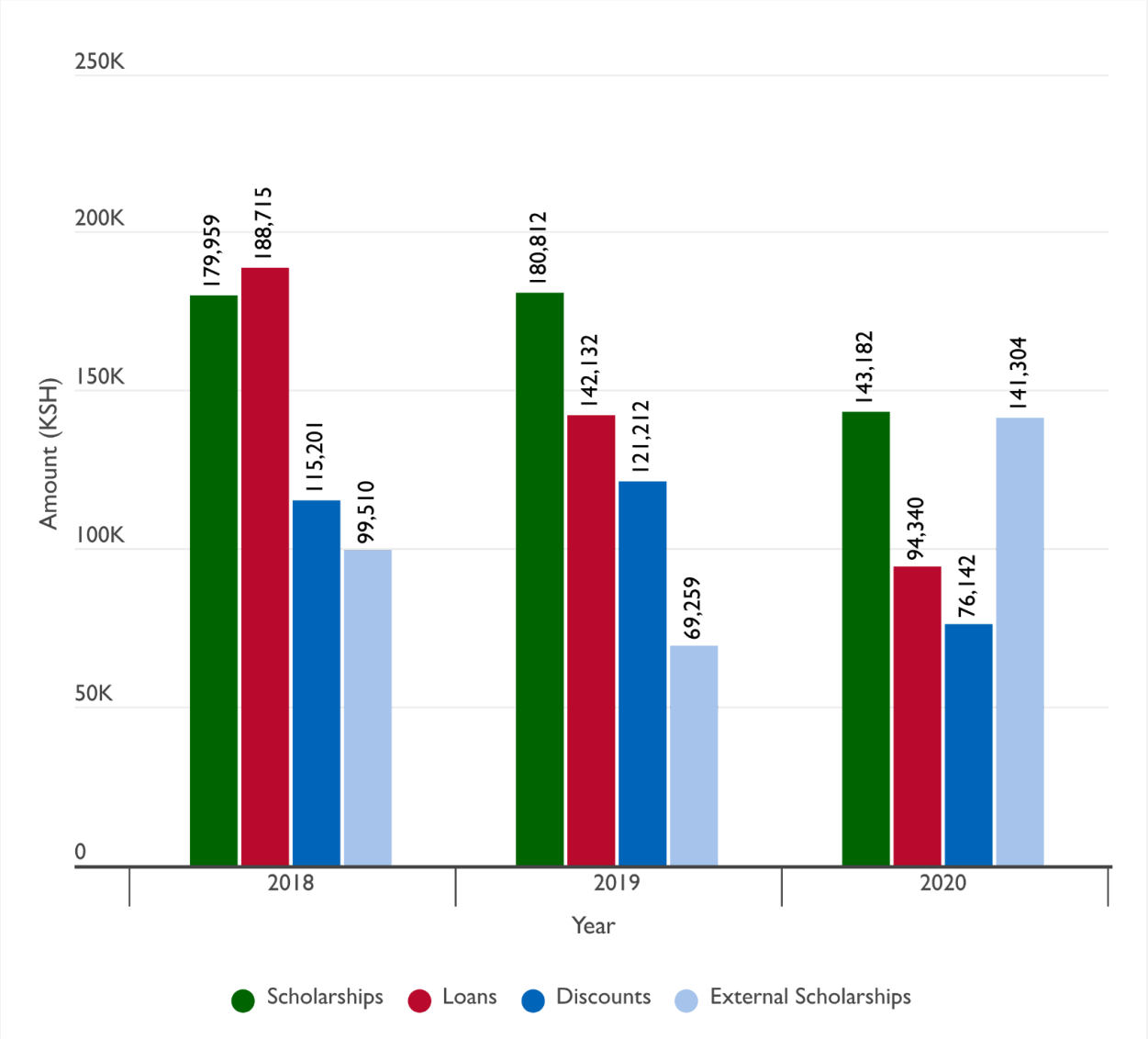
National Government Constituency Development Fund (NG-CDF)

The National Government Constituency Development Fund (NG-CDF) is a government initiative in Kenya that aims to promote development at the constituency level. It was established in 2003 through an Act of Parliament and is managed by a Constituency Development Fund Committee (CDFC) in each constituency. The NG-CDF provides funding for various development projects within constituencies, including education. It supports infrastructure development in schools, colleges, and universities, including the construction and renovation of classrooms, laboratories, libraries, and other educational facilities. The NG-CDF also provides financial support to students through bursaries and scholarships, helping to cover tuition fees, textbooks, uniforms, and other educational expenses. Additionally, the NG-CDF promotes technical and vocational education and training (TVET) by supporting the establishment and improvement of TVET institutions, providing funding for equipment, workshops, and training materials Nganyi and Wafula (2023).

ANNEX 10: FINANCIAL AID TO HEI STUDENTS

Analysis of financial statements obtained from the selected HEIs shows that students in both public and private HEIs receive financial aid in form of scholarships, loans and bursaries. Financial aid to students is one of the major sources of revenue to HEIs and the sources and amounts vary across HEI subtypes. For example, students from the selected private university receive aid mainly from scholarships, followed by loans, discounts and external scholarships respectively. Most of the financial aid to students in this HEI comes from the institution itself, see **Figure A1**.

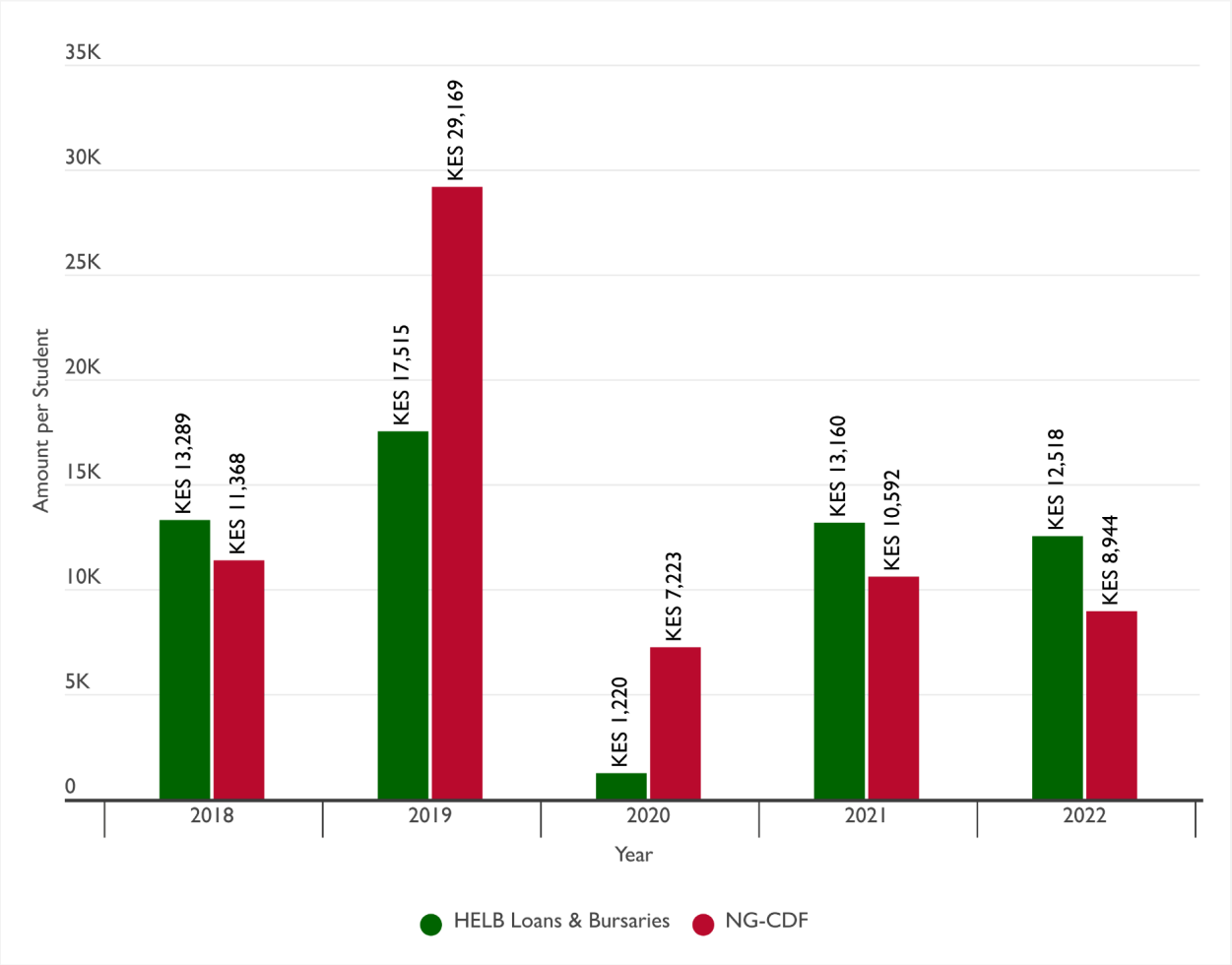
Figure A1. Financial Aid per Student for a Private University between 2018 and 2020



Notes/Source: Authors' Calculations from Financial Statements from a Private University (2018-2020)

On the other hand, for the selected public HEIs, financial aid mainly comes from the national government in the form of capitation grants, HELB loans and bursaries and the National Government Constituency Development Fund (NG-CDF). We observe however, the financial aid types and amounts per student vary across the public HEI subtypes. For example, data from the selected public university shows that students receive only two forms of financial aid namely, HELB loans and bursaries, and NG-CDF, see **Figure A2**.

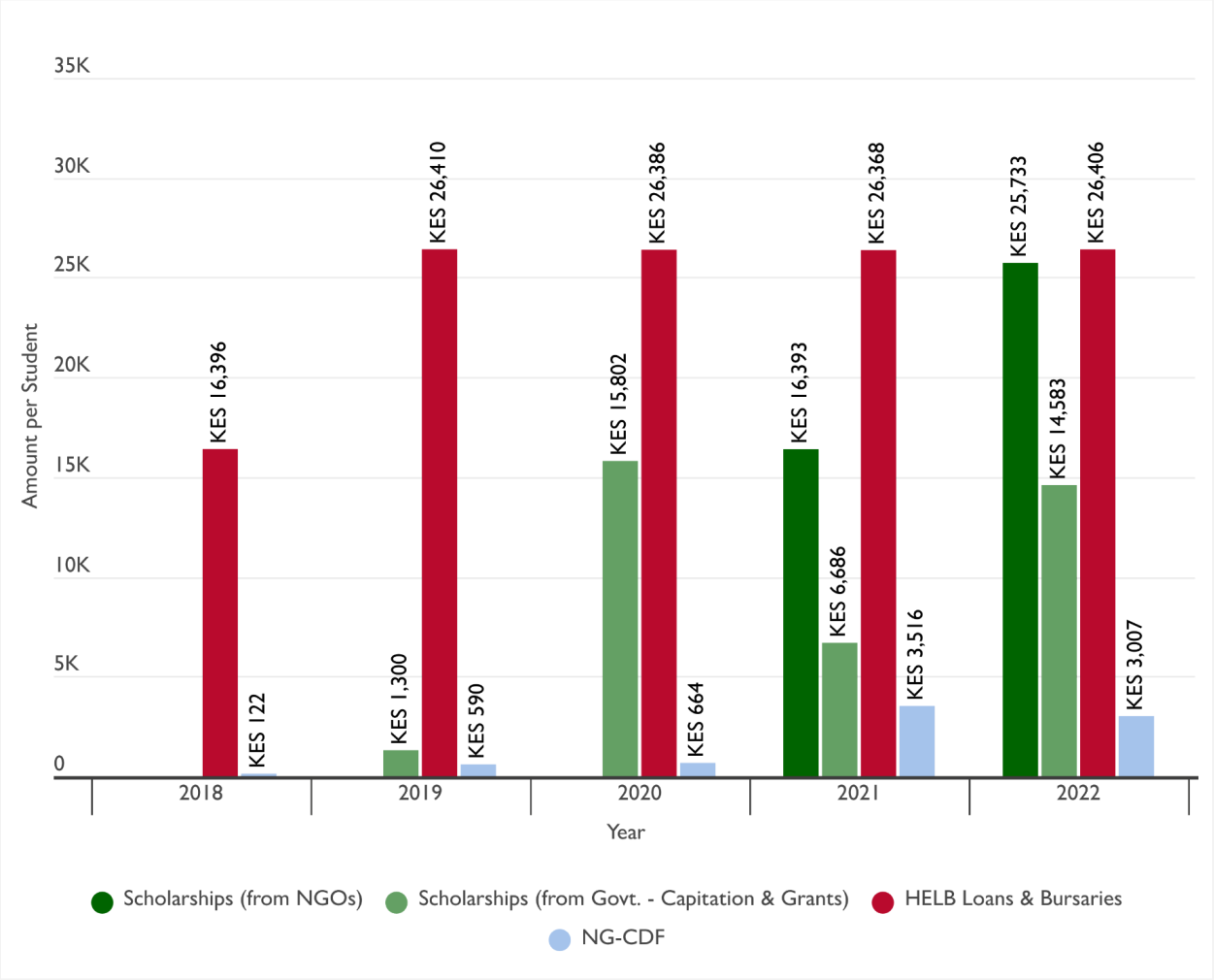
Figure A2. Financial Aid per Student for a Public University between 2018 and 2022



Notes/Source: Authors' Calculations from Financial Statements from a Public University (2018-2022)

For the polytechnic, financial aid to students comes from various sources including HELB loans and bursaries, capitation grants, scholarships from non-government organizations (NGOs), and the NG-CDF, see **Figure A3**.

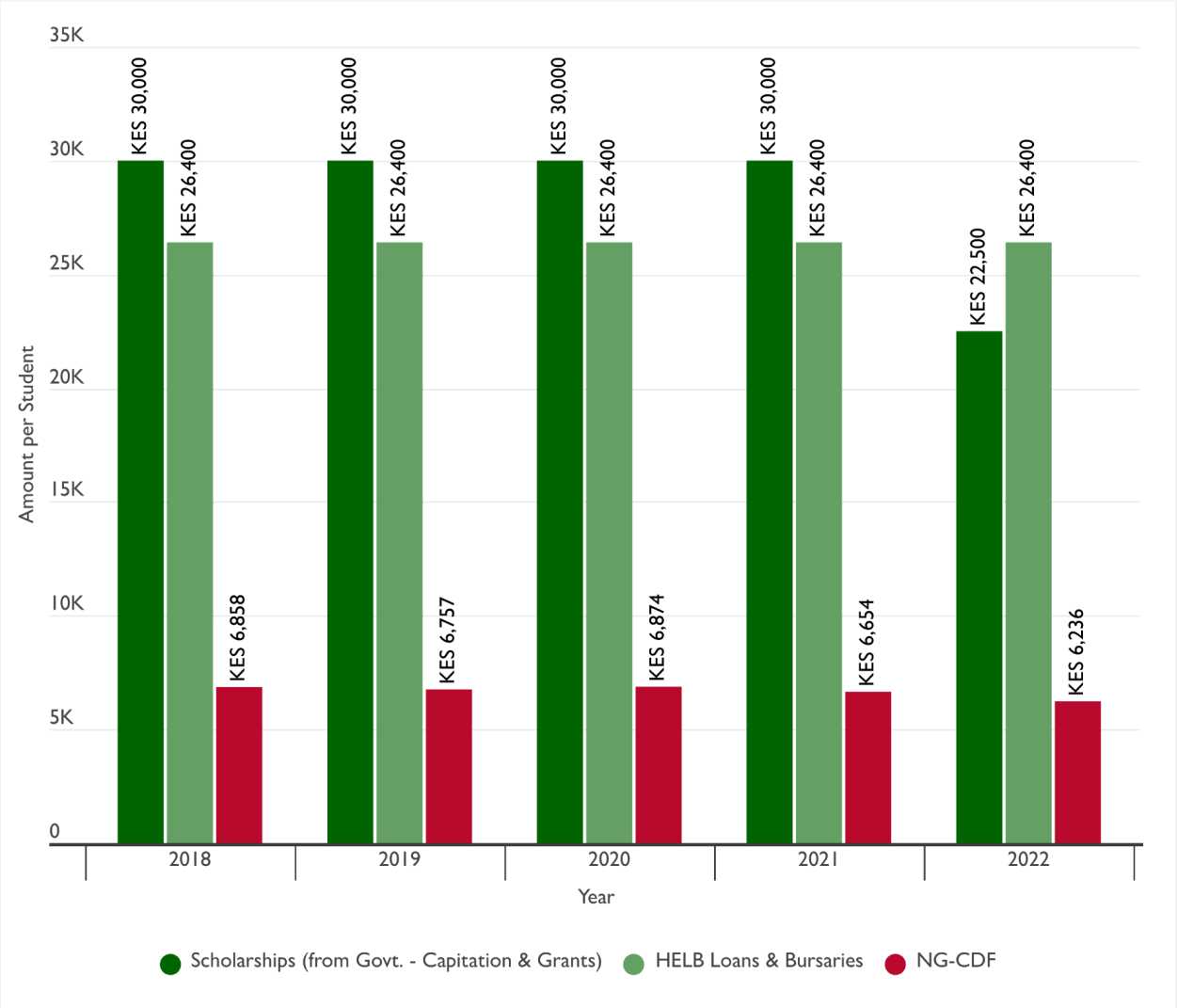
Figure A3. Financial Aid per Student for a Polytechnic between 2018 and 2022



Notes/Source: Authors' Calculations from Financial Statements from a Polytechnic (2018-2022)

For the TVET, capitation grants in form of waived student fees from the national government are the main source of financial aid to students followed by HELB loans and bursaries and NG-CDF (see **Figure A4**).

Figure A4. Financial Aid per Student for a TVET between 2018 and 2022



Notes/Source: Authors' Calculations from Financial Statements from a TVET (2018-2022)

SCHOLARSHIPS AND LOANS FROM THE NATIONAL GOVERNMENT

Results from the qualitative interviews highlight the significance of financial aid to students as a revenue source of HEIs. Representatives from public universities and TVETs reported that HEIs receive HELB loans and bursaries to support their activities. The higher the number of students enrolled, the higher the amounts received from HELB. This is because many of the students who apply for HELB loans and bursaries are approved, although the amount may vary between students. A representative of the

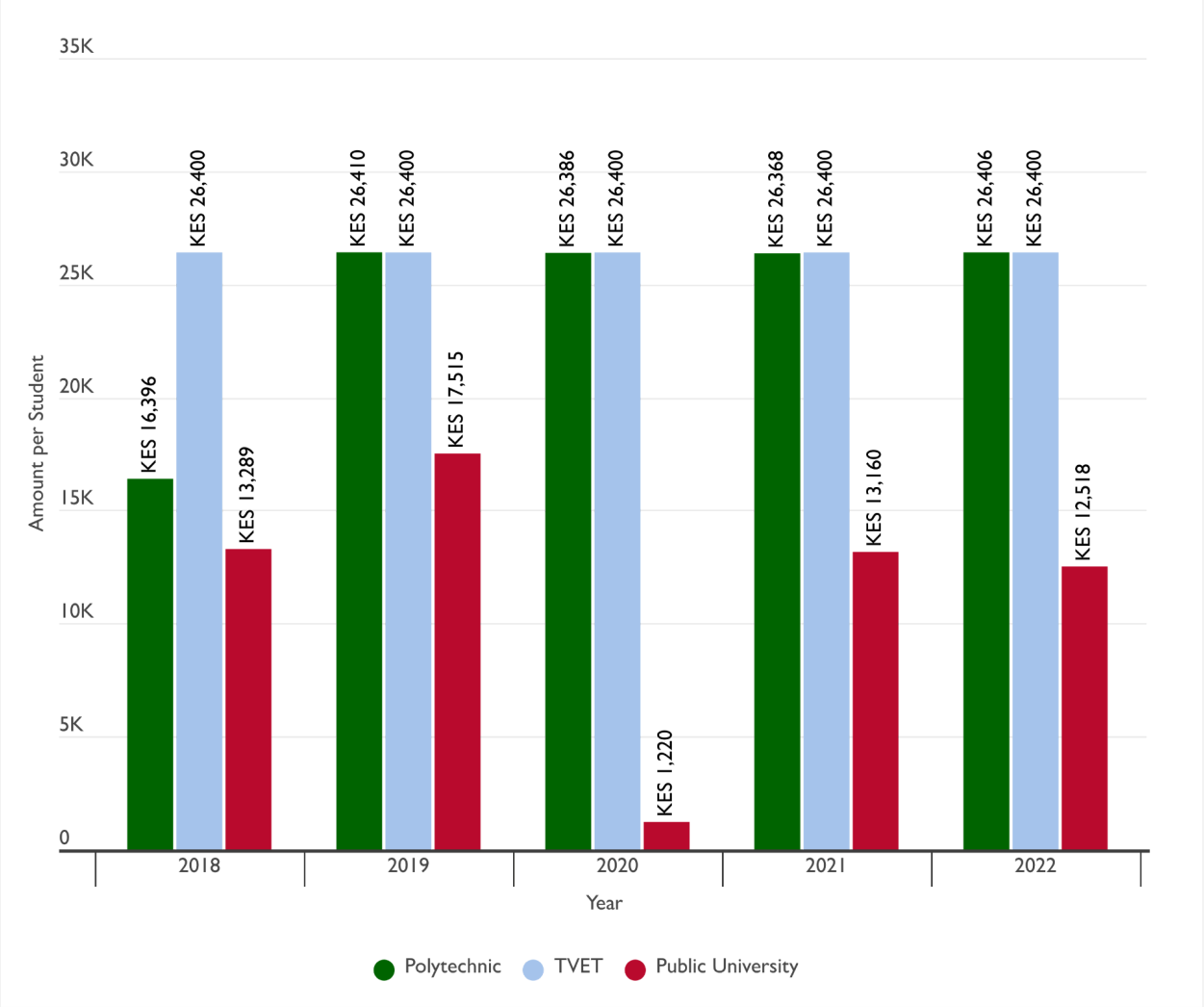
government explained that the difference in the amount approved for each student is based on the level of vulnerability of the students determined through the "Means Testing Instrument[17]" administered by HELB at the point of loan application (see Annex IX for details). As explained by a representative from a national polytechnic, once a student applies and is approved for a loan, HELB disburses a certain proportion of the loan directly to the HEI and the rest to the student for their sustenance.

> "They may give a student KES40,000 from which KES26,000 goes directly to the institution and KES14,000 goes to the student as pocket money. That is how they are doing it."
>
> – HEI Representative, National Polytechnic

Based on our analysis of the financial statements obtained from the three public HEIs selected for illustrative purposes, we see a variation in the amounts of HELB loans and bursaries per student across the public universities, TVETs and polytechnics. Data presented in **Figure A1**, **A2**, **A3**, and **A4** show a public university receiving less loan amounts and bursaries per student compared to a TVET and a polytechnic. The government policy on HELB has been pro-TVETs and Polytechnics which receive the funding upfront. The disbursement of the HELB loans to public universities using the DUC models has been characterized with delays and occasionally non-remittance of capitation to the public universities although the student support component goes directly to the student account. This Underfunding of the public universities is what led to the bankruptcy and insolvency which has consequently been characterized with stalled projects, salary delays and cuts, non-remittance of statutory deductions (PAYE, NSSF, NHIF etc.), staff layoffs, campus closures and pending pills for suppliers and other service providers.

[17] Means Testing Instrument (MTI) calculates a score by using several variables (including parents' background; student's gender; type of academic program; marginalized groups; disability; and family size and composition) to determine a student's level of financial need and places the student under one of the four levels of need: vulnerable, extremely needy, needy, and less needy.

Figure A5. HELB Loans and Bursaries Amounts per student received by selected public HEIs between 2018-2022



Notes/Source: Authors' Calculations from Financial Statements from a Public University, a TVET and a Polytechnic (2018-2022)

National Government Constituency Development Funds (NG-CDF)

Another key source of revenue to public HEIs from the national government is through the NG-CDF. Representatives from TVETs mentioned that they receive funds from the NG-CDF in the form of scholarships and bursaries to students in public universities and TVETs, see **Annex 9** for details. Unlike capitation and HELB loans, funds from the NG-CDF are often disbursed in a timely manner. However,

representatives mentioned that the amounts are relatively smaller compared to revenue from other government allocations for student tuition fees. This is consistent with our analysis of the data from the financial statements as illustrated in **Figure 7** and **Figure 8**, and the quote below. A representative from national polytechnic mentioned that;

"Then we also have those students who are sponsored by the National Government Constituencies Development Fund. It depends on those who have applied and normally it pays between KES 8,000 to KES 10,000."

– HEI representative, National Polytechnic
