Availability and Utilization of University Funds and Implementation of the Core Mandates of Public Universities in Kenya

Wanjala Gidraf Joseph, Asuma Mariita Nchaga and David Ongabi Nyambane

Faculty of Education, Kampala International University, Western Campus, Uganda.
Facility of Business and Management, Kampala International University, Western Campus Uganda.

ABSTRACT

The terms "availability" and "utilization" relate to the sources from which the institution can easily raise money and use it in accordance with established guidelines. It serves as the cornerstone of daily activities at the university. Due to funding shortages resulting from the Differentiated Unit Cost (DUC) funding model's implementation, the researcher was forced to evaluate the availability and use of university funds in order to comprehend the sources of those funds and the limitations imposed on them in order to ensure smooth utilization. Vice Chancellors of Kenya's public universities as well as heads of faculties, schools, and institutes provided information for the study. Three hundred and sixty people were the study's target population. Nine Vice Chancellors and ninety-nine heads of faculties, schools, and institutions made up the sample of one hundred and eight, which was obtained by applying a thirty percent of the target population rule. Using stratified random sampling, nine universities of study were selected. Data were gathered via interviews and questionnaires. Lecturers in Garissa University's Department of Educational Management used their expert judgment to determine validity. Utilizing Cronbach's alpha index, the reliability of the questionnaire items was examined. The results from the questionnaire were analyzed using Pearson r, while the data from the interview schedule were evaluated thematically. The results of this study showed that public universities in Kenya were mostly dependent on government capitation for operations rather than endowment funds, which prevented them from allocating funds for research or paying back money withheld for SACCOS or KRA on time. The findings also demonstrated that budget deficits might be reduced by carefully calculating student fees. Results showed that there was only a slight association ($\rho = .22, p = .072$) between the implementation of public universities' main mandates and the availability and usage of university finances. In order to assure sustainability, this study advised colleges to diversify their revenue streams and adhere to financial sources' regulations and guidelines.

Keywords: Pearson r, correlation, availability, utilization, and differentiated unit cost model

INTRODUCTION

What determines the sustainability of university operations worldwide is the availability of funding sources that the institution may easily access and utilize, adhering to established guidelines and regulations. The funding landscape of higher education institutions globally is based on broad principles and common practices, while the availability and utilization of university money vary by country, institution, funding source, and purpose. Among the sources of funding for the institution are: i) Government financing: A large amount of financing for public universities comes from federal, state, or municipal sources, and is typically determined by factors including enrollment, research output, and other performance measures. ii) Fees and Tuition: Tuition and fee income from students is a significant source of funding, particularly for private colleges. iii) Contracts and grants for research: A sizable amount of funding for research-intensive universities may come from private businesses, foreign agencies, or national research groups. iv) Fundraising and Endowments: Foundation grants, gifts from alumni, and other charitable contributions can add up, especially for more established, esteemed schools. v) Commercial Activities: Some colleges make money through licensing, technology transfer, and even business enterprises. vi) Additional Sources: These could come from real estate, investments, funds from continuing education programs, and more.

Universities spend their funds on the following things: i) wages and benefits; normally, a significant amount of a university's budget is allocated to paying the salaries and benefits of its faculty and staff; ii) research; this includes paying for materials, lab equipment, research assistants, and other related costs. iii) Infrastructure:

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Building, upkeep, utilities, and campus landscaping can take up a large amount of financial resources. iv) Student Services: This covers everything from recreational centers and student groups to health services and libraries. v) Financial Aid: A significant amount of the budget is allocated to scholarships, grants, and other types of financial aid for students. vi) Operational Costs: Daily expenses such as office supplies and IT services also account for a component of the budget.

Statement of the Problem
The availability and use of university money are essential to any university's daily operations, no matter where in the world it is located. They are every university's lifeblood, and when their availability is compromised, so is its utilization. The funding sources differ between nations and academic institutions [1]. Universities with sufficient funding can carry out their mandates rather easily, but those with insufficient funding will find it difficult to meet their daily obligations and are more likely to miss deadlines for implementing their mandates. Kenya's public universities receive practically all of their funding from the government; little is left over for community engagement or research. The promotion of teachers and the graduation of students, particularly postgraduates, have been delayed due to a shortage of funding for research. Furthermore, public institutions are under fire from the communities for not doing enough to address issues with health, the environment, and literacy rates. Students are also complaining that there are too many scripts for professors to mark, which is causing congestion in the lecture halls and delays in the submission of results for semester exams. In light of this, the researcher designed this study with the goal of identifying funding options Kenya's public universities can use to cover the funding gaps left by government capitation. The investigator would investigate the different kinds of money and their limitations.

Objective
Finding out how university finances are used and available, and how they relate to the main missions of Kenya's public universities.

Research Question
How do the availability and use of university funding connect to the main missions of Kenya's public universities?

Research Hypothesis
H₀: Implementing the fundamental goals of Kenya's public universities has no discernible bearing on the availability and use of institutional funding

Significance of the Study
Chief executive officers of universities should benefit from this study's conclusions, particularly with regard to mission-driven, prioritized spending. Furthermore, the results might be helpful in addressing the difficulties public university administrators encounter when locating and managing resources. Finally, but just as importantly, this research would add to our understanding of the availability and use of university funding in connection with the basic missions of Kenya's public institutions.

Theoretical Framework
The Resource Dependence Theory (RDT), which asserts that the availability of outside resources, which institutions depend on for survival, shapes their behaviors, served as the foundation for the study [2]. Resource dependence theory offers an additional explanation for the actions of public higher education institutions, according to [2]. According to [3], resource reliance implies that institutions that lack essential resources will attempt to obtain them, either new or similar, from other sources. When they have control over limited resources that an institution cannot get from another source, outside entities may have some degree of influence over the institution. In this sense, institutions find themselves in tension between their desire to remain independent and their need to lessen the uncertainty that comes with not having a reliable source of funding. The significance of institutional independence was emphasized, along with how higher education institutions might apply the theory to start the process of becoming resource independent [4]. It enables businesses to identify how different their business methods are, how dependent they are on a certain resource, and how well-versed in their competition.

Conceptual Framework
A conceptual framework outlining the primary subjects of study is shown in Figure 1 [4]. It illustrates the connection between the fundamental responsibilities of Kenya's public universities and the availability and use
Access to the use of university funds are connected, both directly and indirectly, to the independent variable through the intervening variable and to the fulfillment of public university core mandates.

Assumption of the Study

The respondents provided sufficient, accurate information without of compulsion or fear. Additionally, the researcher made the assumption that public institutions shared comparable standards for service quality in relation to their primary mandates and that economic, social, and other elements pertaining to them would not change.

Literature Review

Different countries and universities have different funding sources [5]; [1]; [6]. Funding for universities is divided into votes according to its intended use [7]. They go on to say that donors, sponsors, or a board of trustees typically impose the variations in fund categories. According to [8] a fund is an accounting entity that consists of assets, liabilities, and fund balances in a self-balancing system of accounts. Funds in higher education accounting are categorized into five groups: current funds, loan funds, plant funds, endowment and comparable funds, and custodial funds (Thomas, n.d). Fund types are used, in Kagan's opinion, to put together funds that have comparable sources and fall into one of these five fund categories. He goes on to say that distinct monies are kept within each type of fund in order to guarantee adherence to constraints and guidelines imposed on resource utilization. Resources that can be utilized to fulfill the university's purposes are included in current funding [9]. They could be limited or unconstrained [8]. Resources with no restrictions imposed on them by other organizations or contributors are known as unrestricted current funds. Resources having externally imposed restrictions imposed on them by outside organizations or contributors are known as restricted current funds. These resources might only be available for particular initiatives, activities, or academic divisions [10]. The primary kinds of these funding are: i) National appropriations granted by the national government to the institution for operational needs ii) Sponsored Programs: Government and business grants and contracts iii) Private gifts: Money given to the university by contributors iv) Endowment farms: Profits from trusts held by other parties and endowment assets owned by the university vi) Endowment income: Income derived from trusts owned by third parties as well as endowment assets. The institution receives endowment and related funding from sponsors, benefactors, and trustees. The funds could be regulated so that the principal amount remains unaltered and only the profits from the investment can be spent [11]. They contend further that although the money earned from such a principle may be spent, it must be used for a certain objective. [12], notes that this category of funds also includes a number of other endowment-like fund types that are held in different funds to guarantee their intended use. Additional funds comprise, but are not restricted to: i) Loan Funds, which comprise student, faculty, and staff loans. The University creates distinct fund types and funds since these monies originate from a range of sources: ii) Plant Funds, which are used to track the purchase, building, and upkeep of the University's physical plant as well as to manage associated assets. There are four subgroups in this group: Investment in plant (all capitalized assets used by the university for its operations, excluding endowments and comparable funds); iii) Custodial funds used to record resources that the university holds in its capacity as a fiscal agent or custodian for other parties, such as student organizations. Additionally, universities may raise money internally from sponsors, donors, alumni, tuition fees, and other business endeavors. Tuition can be a significant source of revenue for educational institutions, both public and private [13]. They contend further that tuition at private institutions is frequently the only source of income, while state or federal support augments tuition at public universities. Each student has a different source for their tuition costs [14]; [14], go on to say that research assistant earnings are one of the sources of funding for tuition. [15], state that loans from friends and family, both private and public, make up an additional source of tuition income. When a student graduates and begins to receive income, such loans from the extended family are frequently expected to be repaid gradually [16]. For instance, in the United States, student credits serve as the primary means of financial assistance, while grants and other forms of funding are also available [17]. The most popular government grant programs in the United States, according to [18] and [19], are: i) need-based grants, such as Pell Grants, California Cal
Grants, and State Student Incentive Grants (SSIG); ii. Merit-based: National SMART grants; Georgia HOPE (Helping Outstanding Pupils Educationally) grants. Similar funding sources, including as loan programs that let students pay for their tuition and provide grants and subsidies for expensive tuition, are available in both Singapore and Australia [20]. The national treasury and other financing bodies provide public universities in Africa with a large portion of their budget [21]. Government subsidies and tuition are the primary sources of funding for Nigerian institutions [22]; [23]. However, the funding sources for Ghanaian universities are diverse and include grants from the government of Ghana through the Ghana Education Trust Fund (GETF), funds generated internally by the institutions, funds from the private sector, and contributions from students [24]. Kenyan public universities receive a significant portion of their funding from government capitation, same like their counterparts in Ghana and Nigeria [25];[26]. In addition to capitation, [27] state that the Kenyan government also provides tuition fees and bursaries, or grants, to those in need.

**METHODODOLOGY**

The following topics were covered by research methodology: research design; study location; target population; sampling procedure; sample size; research instruments; validity and reliability of instruments; data collection process; data analysis techniques; and the researcher's ethical considerations.

**Research Design**

The concurrent mixed methods design was used in this study. Concurrent mixed method research use empirical methods to examine modern phenomena in their natural habitats, particularly in situations when the lines separating the studied phenomena from their surroundings are seldom discernible [28]. Concurrent mixed techniques enhance the validity of the conclusion by providing contextualization and credibility when the qualitative and quantitative data converge. Triangulation is the term for this procedure [29]. The design made it possible to simultaneously collect quantitative and qualitative data on each of the study variables from the sample. Comparatively speaking, concurrent mixed methods research minimizes this comparative deficit by using a fairly large sample in quantitative research, whereas qualitative research typically has a smaller sample size and is therefore not generalizable.

**Location of the Study**

For purposes of anonymity, this study was conducted at nine public universities in Kenya that were designated with the alphabetic letters A, B, C, D, E, F, G, H, and I.

**Target Population**

[30], states that the complete group of units for which inferences are to be drawn from study data is the target population. In any study, defining the target demographic is just as crucial as figuring out the goals of the investigation. This population aids in establishing the eligibility of sampled cases for the research. The target demographic for this study consisted of 329 heads of faculties, schools, and institutes, as well as 31 vice chancellors.

**The Sampling Procedure**

Nine institutions were selected using stratified random selection so that the thirty-one universities may be split into old and new categories. In this study, universities that were founded by a parliamentary act and were operational by the year 2000 were classified as old, whereas institutions were formed after that year were classified as new. As of 2017, there were 31 universities with charters; 26 were regarded as new, and 5 as old. Six of the twenty-six new institutions and three of the five old universities were carefully chosen. Out of the thirty-one public institutions, nine universities were chosen in total. This meant that since they were important informants, nine vice chancellors, or 29% of all vice chancellors in 31 universities, would be the subjects of qualitative data collection [31]. Using the 90% criterion, quantitative data were gathered from 89 school deans and rounded to the next whole number [32].

**The Sample Size for the Study**

A sample size of 108 respondents was determined by applying the 30% criterion for populations under 1000 [33]. The study's sample size is displayed in Table 5. Old rural and old urban colleges were included in the sample, followed by new institutions. Nine vice chancellors and ninety-nine heads of faculties, schools, and institutes made up the Sample. 108 respondents in all were chosen from nine universities.

**Data Collection Methods**

In this study, the following techniques for gathering data were employed: Interview and Survey. Seven public institutions that were among the nine public universities that were chosen at random participated in the poll. But at the last minute, two of the chosen universities decided not to take part, leaving seven universities involved. The researcher charted the number of heads of faculties, schools, and institutes at each of the participating universities (table 5). The purpose of the survey was to gather perspectives from heads of faculties, schools, and institutes regarding the availability and use of finances by higher education institutions in connection with the execution of the fundamental missions of public universities in Kenya. Ten heads of faculties, schools, or institutions from the two universities declined to participate in the study, leaving 89 heads of faculty, schools, or institutes with questionnaires to complete. In order to get factual data, this was required [34]. Every one of the

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seven Vice Chancellors was interviewed in their offices at a time that was mutually convenient. There were 28 questions on the structured interview agenda. In order to better understand the Vice Chancellor's perspective on the availability and use of university finances, as well as their link to the implementation of Kenya's public universities' core mandates and additional financing sources outside government capitulation, interviews were conducted. Because conducting interviews would produce rich sources of information on vice chancellors' experiences, viewpoints, goals, and emotions, this method was chosen. The approach also permitted mutually beneficial two-way communication, which, in part, allowed the researcher to address the topic of public university funding in considerable detail.

Research Instruments

The questionnaire and interview schedule were the instruments utilized. The researcher created the questionnaire from fresh for this study. A five-step process that included background, questionnaire conception, format and data analysis, establishing validity, and establishing reliability was used to guarantee that the questionnaire generated was both valid and reliable. Stratified random sampling was used to clearly identify the target population, whereas intentional sampling was used to identify the sample. The study's goals, aims, questions, and hypothesis were all carefully considered. It was crucial to understand the audience, particularly with regard to the readability and educational value, accessibility, and selection criteria. By converting content from the literature review and theoretical framework into statements and questionnaire questions, a solid grasp of the issue gained via readings and a literature search facilitated the formulation of the questionnaire. Furthermore, a connection was made between the study's objectives and how they were translated into the questionnaire's content, which determined that the knowledge, attitudes, perceptions, opinions, and fact recall would all be measured. The questionnaire conceptualization process identified and specified the major variables, which are the dependent variable (application of the basic mandates of public universities in Kenya) and the independent variable (availability and utilization of the institution). Writing statements and questions, choosing appropriate measurement scales (a 4-point Likert scale, with options to remain neutral), structuring sections A and B of the questionnaire to gather demographic data and ask questions about research variables, format (Likert type questions), and question ordering (questions were arranged according to variables; for example, questions 1-6 dealt with the fundamental missions of Kenya's public universities, and questions 15–25 dealt with funding availability and utilization). Times New Roman was the font size used, and Pearson r was suggested for all items in the data analysis. The dependent variable (strongly agree to strongly disagree) was measured on an interval/ratio scale, while the independent variables were measured on a nominal scale. A draft questionnaire that had undergone background checks, questionnaire conception and structure, and data analysis was prepared for validity testing. The degree of systematic or inherent error in a measurement is known as its validity. It is the degree to which data analysis findings accurately depict the subject of the investigation. A panel of academics and professionals in the field of educational management from Garissa University's department of education was used to determine validity. In order to ascertain if the items in the instruments sufficiently fulfilled the study's purpose, the focus was on fundamental mandates as well as the availability and utilization of university finances. To determine whether the test seems (at face value) to measure what it promises to, tests of the test's face validity and content were conducted. It's the most basic way to determine validity. High face validity tests are those whose objective is evident to even the most unsuspecting respondents. As a result, assessments with ambiguous purposes have low face validity. By asking academics from Garissa University's Department of Education Management to score the validity of the questionnaire items as they appeared to them, a direct evaluation of face validity was acquired. The face validity was evaluated using the Likert scale. Conversely, construct validity was employed to assess if the questionnaire accurately captured the phenomenon that the investigator was hoping to measure. The following queries were examined in order to determine validity: i) Is the survey legitimate? ii) Is the content accurately represented? iii) Does it make sense for the population or sample? iv) Is the questionnaire sufficiently detailed to gather all the data required to address the study's objectives and purpose? v) Does the tool have a questionnaire-like appearance? Validity of the questionnaire is increased when these items are answered during a readability assessment. Therefore, in order to determine whether the questionnaire was readable, the researcher consulted English language experts. Subsequently, a field test was carried out with participants who were not part of the sample. The questionnaire was then prepared for piloting by the researcher by making all necessary adjustments in light of both a field test and professional advice. The reliability of the questionnaire had to be established after validity. Reliability, according to, is a gauge of how well a research tool produces consistent outcomes. It alludes to measuring mistake that is random. It displays the measuring device's accuracy. The pilot test was conducted by the researcher. To what extent does the questionnaire consistently measure the intended outcomes is the question that needs to be addressed. state that the type of data (nominal, ordinal, interval/ratio) determines the reliability type to use: test-retest, split half, alternate form, and internal consistency. Because the questions in this study were on an interval/ratio scale, reliability was evaluated using internal consistency. Internal consistency comes in three flavors: split-half, dependability, average inter-

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item consistency, and Cronbach's alpha \([47]\). Because Cronbach's Alpha measures test reliability by comparing an item's proximity to a collection of questions, it was employed. Data were gathered from heads of faculties, schools, and institutes at two public universities (University of Eldoret and Multi-Media University) that were not in the sample in order to prove reliability through a pilot test. In total, 17 heads of faculties, schools, and institutes from the two universities were polled. Because this sample was far higher than 10\%, it was considered sufficient. To analyze the data from the pilot test, SPSS (Statistical Package for Social Sciences) was used. The test results were displayed in Table 1. For a test to be considered dependable, it must be valid. The test resulted in a Cronbach's Alpha Coefficient of 0.714, indicating the reliability of the tools \([48]\). They believed that an instrument's dependability could be assessed using a correlation coefficient \((r)\) of roughly 0.7.

### Table 1. Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
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<tbody>
<tr>
<td>0.714</td>
<td>0.714</td>
<td>42</td>
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</table>

The researcher used the questionnaire to gather information on the issue under investigation once it had been piloted \([49]\). The researcher distributed and gathered the completed questionnaires from the respondents, who are the heads of faculties, schools, and institutes. After two other sampled universities declined to participate in the study, eighty-nine questionnaires were given to the heads of faculties, schools, and institutes at seven public universities that were selected for the sample. Seventy (70) of the eighty-nine (89) surveys that were distributed were returned. This indicated a response rate of seventy-eight percent seven percent (78.7\%). As per \([49]\) findings, a minimum response rate of seventy-five percent (75\%) is considered appropriate. In terms of interviews, they are a useful supplement to questionnaires since they provide respondents with more flexibility than other data collection techniques and allow them to acquire more in-depth information on the topics covered in the questionnaires \([50]\). Probing is made possible through interviews because the researcher can observe crucial non-verbal cues from respondents, such as scowls, twitches, and other movements, which enhance and clarify the meaning of hard data \([51]\). In addition, interviews are helpful in situations when participants cannot be watched closely; they enable participants to provide past information and give the researcher control over the direction of inquiry \([50]\). An interview schedule, according to \([50]\), can help address the following issues: it allows for a more thorough examination of interviewees' responses; it corrects the natural limitations of our memories and intuitive glosses that we might place on their statements; it allows for repeated examinations of interviewees' answers; it makes the data available for public scrutiny by other researchers, who can assess the analysis performed by the original researchers of the data; it helps dispel allegations that an analysis may have been influenced by a researcher's values or biases; and it permits the data to be used in ways different from those intended by the original researcher.

### Data Collection Procedure

The researcher sought for a research permit from the National Commission for Science and Technology Innovation (NACOSTI) to conduct the study after the supervisors at the institution approved the research proposal. In order to conduct the Vice Chancellors’ interview and have the deans fill out the questionnaires, the researcher scheduled dates and times with university leaders and deans. Once completed, the questionnaires were picked up and handed by hand. The respondents had one day to finish filling out the questionnaires.

### Data Analysis Methods

A researcher's endeavor to accurately and dependably describe data gathered for a study is known as data analysis \([51]\). Massive amounts of unprocessed data obtained via surveys, interviews, or observations are condensed into meaningless information that may be quickly analyzed. According to \([51]\), in order to make data analysis easier, gathered data needs to be precisely scored and arranged in a methodical manner. The researcher coded, tabulated, and prepared the data for use with the Statistical Package for the Social Sciences (SPSS) after scoring the data in Excel. Inferential statistics (Pearson, \(r\)) were used to examine quantitative data gathered from Likert scale items in the surveys. The linear relationship between the availability and use of university money and the fulfillment of the fundamental mandates of Kenya's public universities was established using Pearson’s \(r\). Based on themes developed for the study's goal, descriptive analysis was used to examine qualitative data from the interview schedule. In order to provide as much information as possible in the most straightforward manner, descriptive statistics were employed \([51]\). Tables including information from the interview schedule allowed conclusions about the overall population to be drawn.

### Ethical Consideration

The investigator gave a brief introduction to the participants, outlining his qualifications, field of expertise, and the purpose of the study. The National Commission of Science, Technology, and Innovations (NACOSTI) having granted the necessary license, the participants were informed, so the research in the study's chosen sample could proceed. In order to reduce the possibility of fraud, the researcher was upfront about the subject

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and provided participants with sufficient information. Those who showed up were safe and never put in unnecessary danger over the whole data collection session. Individuals who volunteered to take part did so voluntarily and acknowledged the purpose of the research as well as any potential risks. The researcher had no personal stake in the study’s conduct, removing any potential conflicts of interest and preventing biased findings and generalizations. The researcher employed source citations and referencing to prevent plagiarism. No matter how sensitive or private the information was, the researcher maintained the participants’ identities private in order to maintain their anonymity. It was urged to participants not to mark anything on the questionnaire that might allow others to identify them specifically.

Analysis of Data and Results

To find out how university finances are used and available, as well as how they relate to the primary missions of Kenya’s public institutions, interviews were conducted. Five vice chancellors were surveyed utilizing an interview schedule to obtain data. In order to examine the interview data, the responses were coded and categorized into three main themes based on the interview questions. These topics are: ensuring high-quality instruction and learning; meeting legal payroll requirements; and generating more revenue internally through research and teaching. According to the findings of an interview regarding the methods the university had implemented to ensure high-quality teaching and learning, all vice chancellors (100%) stated that they employed highly trained instructors. This result complies with CUE guideline number four, which establishes the minimal educational criteria for instructors at universities. Of the vice chancellors of universities C and D, two (40%) thought their physical facilities were sufficient for teaching and learning. In this study, universities with sufficient physical resources for instruction and learning were regarded as ancient. Three vice chancellors (60%) of universities A, B, and G lacked sufficient physical resources for instruction and learning. While universities C and D are regarded as old, universities A, B, and G are regarded as new. This suggests that insufficient physical resources and teaching/learning resources are problems faced by more recent universities. Two more elements were required to fulfill payroll statutory obligations: specified unremitted statutory deductions and defaults on statutory deduction remittances. According to the study’s findings, all (100%) of the vice chancellors admitted that they have occasionally neglected to send the required monthly statutory deductions to the appropriate government entities. While acknowledging that they had occasionally neglected to send necessary deductions to the appropriate agencies, they also claimed that low per-student funding—which was around 50% lower than in 2017 and 56% lower than in the 2019–2018 school year—was the reason for the delay or failure. This study implies that public universities in Kenya sometimes rely on statutory deductions to close monthly compensation shortfalls. This suggests that public universities face cash flow issues to the point that they occasionally forget to submit statutory deductions. Four (80%) Vice Chancellors from universities A, B, D, and G said they had failed to remit PAYEE, while one (20%) Vice Chancellor from university C said the university had failed to remit SACCO deductions, PAYEE, NHIF, and Pension. These were the results of an interview on specific unremitted statutory deductions. The two older universities were not among the newer universities that neglected to submit their PAYEE payments. According to these results, PAYEE is the mandatory deduction that public universities in Kenya most frequently fail to provide, suggesting that PAYEE was the most often utilized deduction to close wage discrepancies. Three factors were taken into consideration in relation to the theme “increasing internally generated income through teaching and research”: university graduation rate, and assessing university annual publishing output. According to the interview results, three vice chancellors from universities A, B, and G (or 60% of them) rated their institutions’ annual publishing output as poor. However, two (40%) of the three vice chancellors of universities C and D stated that the quality of their university’s research output is excellent. The two universities with excellent research outputs were both established, whereas the other three, which claimed to have poor research outputs, were all relatively recent. These findings suggested that Kenya’s older public universities produced high-quality research. Kenya’s more recent public institutions find it difficult to boost research output due to a lack of internal revenue-generating tools and insufficient financing for research. The research question, “How are availability and utilization of university funds related to implementation of the core mandates of public universities in Kenya?” needed to be answered in order to determine the relationship between the availability and utilization of university funds and the execution of the core mandates of public universities in Kenya. The hypothesis that states there is no significant association between the implementation of the fundamental missions of public universities in Kenya and the availability and utilization of university funding was tested at the alpha-level, α = 0.05, with 68 degrees of freedom (df) in order to provide an answer to the question. The linear relationship between the availability and utilization of university funds (M = 2.871, S.D = .509) and the execution of the fundamental mandates of Kenya’s public universities (M = 3.136, S.D = .425) was tested using a Pearson product-moment correlation coefficient. By calculating Pearson r values and the p value at alpha level 0.05, it was possible to assess the strength of the relationship between the use of
university money and the fulfillment of the fundamental goals of public universities in Kenya. The Pearson's correlation study of the use of monies in government funding and university key mandates is displayed in Table 2.

Table 2. Pearson’s Correlation Analysis of Utilization of funds in government funding and university Core mandates

<table>
<thead>
<tr>
<th>Correlations</th>
<th>Availability and utilization of university funds</th>
<th>Universities Core mandates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability and utilization of university funds</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Funds</td>
<td>Sig. (2-tailed)</td>
<td>1</td>
</tr>
<tr>
<td>Universities core mandates</td>
<td>Pearson Correlation</td>
<td>.22</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.072</td>
</tr>
</tbody>
</table>

With a P-value of 0.072, the analysis yielded a r value of .22. P-value of 0.072 is higher than 0.05 as the alpha threshold. A weak positive correlation (r (68) = .22, p = .072) was found between the two variables based on the results shown in the table. The hypothesis was upheld since the p-value is higher than the alpha-level (p = .072 > α = 0.05) and indicates that there is no meaningful correlation between using university funds and carrying out the fundamental mandates of Kenya’s public universities. According to these results, financial sources in Kenya’s public universities may be so few that their existence or lack has little to no bearing on how university fundamental mandates are carried out. The [51] recommended that colleges look for additional sources of revenue to finance their operations, even though having alternate sources of funding is welcomed. These results contradict that advice. Although the availability and use of university funds did not significantly correlate with the fulfillment of the core mandates of public universities in Kenya, vice chancellors’ responses to the hypothesis do support the idea that despite the fact that Kenyan universities have excellent physical facilities, secure campuses, well-trained faculty, and spacious offices, there is still controversy surrounding the implementation of these mandates. All colleges had, meanwhile, at some point fallen behind on PAYEE remittances and had utilized the money to close monthly compensatory shortfalls.

CONCLUSION

It was determined that there was no meaningful connection between the execution of public universities’ fundamental missions in Kenya and the availability and use of university money. Subsequent findings demonstrated that endowment money were absent from Kenyan public universities. Because they were primarily dependent on government capitation for their operations, they had severe budget deficits because their internally generated income was less than 30% of their annual budgets. As a result, they were unable to set aside funds for research or promptly remit money withheld for SACCOS or KRA. The findings also demonstrated that reasonably priced student fees might be utilized to reduce budget deficits, which is consistent with the economic theory that supports reasonably cost tuition fees at universities due to the dual benefits of higher education for the public and private sectors.

RECOMMENDATIONS

i) The analysis found that public colleges lacked endowment money from which they may draw in the event of a deficit. Establishing endowment money accounts and growing them is advised for universities to employ in times of deficit.

ii) It is also proven that universities heavily rely on government capitation for their operations, which prevents them from allocating funds for research or promptly returning funds withheld for KRA or SACCOS. As a result, they face severe budget deficits, as their internally generated income accounts for less than 30% of their yearly budgets. Universities need to come up with creative strategies to generate enough revenue internally to cover at least 20% of their yearly budgets.

iii) The study also demonstrates that budget deficits can be reduced by using reasonably priced student fees. Universities should be able to raise tuition in order to better reflect local needs and become more self-sufficient, without interference from the government.

REFERENCES


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