

County Government Funding Interventions' Influence on Trainees' Skills Acquisition in County Vocational Education and Training Centres in Makueni County

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Abstract

This study investigated the influence of County Government interventions on trainees' skills acquisition in County Vocational Education and Training Centres (CVETCs) in Makueni County, Kenya. Guided by General Systems Theory, it examined staffing, facilities, and equipment, and funding interventions. The study adopted a sequential mixed methods approach, targeting 60 managers, 277 instructors, and 4,577 trainees, with a sample of 1,474 respondents selected through simple random sampling. Data were collected using interviews for managers and questionnaires for instructors and trainees, with instruments validated by experts and tested for reliability. Quantitative data were analyzed using SPSS v29 through descriptive statistics and regression analysis, while qualitative data underwent content analysis. The response rate was 93.15%. Findings provide insights into the extent to which county funding interventions influence skill acquisition, offering implications for improving training quality, aligning programs with labor market demands, and enhancing the role of CVETCs in achieving socio-economic development goals.

Keywords: *County government, funding, interventions, skills acquisition, vocational education and training*

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1. Introduction

Skilled labour is a key driver of national development, yet global shortages could reach 85.2 million workers by 2030, causing losses of up to USD 8.5 trillion annually (Korn Ferry Institute, 2018; Lan & Hualupmomi, 2022). Technical and Vocational Education and Training (TVET) offer a practical response by equipping learners with industry-relevant competencies, from engineering and ICT to construction and hospitality (Ahmad et al., 2011; UNESCO, 2017). In Kenya, TVET institutions, now County Vocational Education and Training Centres (CVETCs) under devolution, are mandated to address local skills gaps through infrastructure, staffing, and funding provision (Republic of Kenya, 2021). Funding is particularly critical, as it underpins staff recruitment, facility development, and acquisition of training materials. Studies show that chronic underfinancing limits instructional quality, delays equipment upgrades, and restricts program expansion (Mutuku, 2018; Ziderman, 2018). In Makueni County, despite policies promoting competency-based training, digitization, and partnerships

(Makueni County Education and Training Policy, 2022), resource constraints persist, leading to inadequate staffing, outdated facilities, and limited trainee support (Kirui, 2022).

Globally, adequate investment in TVET correlates with improved employability, entrepreneurship, and economic growth (UNESCO-IIEP, 2021). Financial interventions directly affect the CVETC system's "inputs" such as facilities, tools, and instructor capacity, which in turn shape transformation processes and outputs like skills acquisition and job readiness. In contexts of underfunding, these processes are disrupted, undermining Sustainable Development Goals related to decent work, innovation, and poverty reduction. This study evaluates how Makueni County Government's funding interventions influence trainees' skills acquisition in CVETCs, addressing a gap in localized empirical research.

1.1 Problem Statement

Technical and Vocational Education and Training (TVET) equip learners with market-relevant skills, driving socio-economic development. In Kenya, County Vocational Education and Training Centres (CVETCs) are managed by county governments, mandated to fund staffing, equipment, infrastructure, and learning materials. In Makueni County, such funding interventions aim to improve trainee skills acquisition; however, persistent challenges remain, including inadequate facilities, outdated equipment, and weak industry linkages. Despite investments, questions linger about their effectiveness in enhancing employability and meeting labour market demands. Existing studies focus on general CVETC challenges, with limited empirical analysis of funding impacts. This gap hinders evidence-based decision-making, leaving uncertainty over whether current financial allocations effectively address critical training barriers or contribute to sustainable skills development aligned with the county's socio-economic transformation goals.

1.2 Significance

This study examines how county government funding interventions influence trainees' skills acquisition in County Vocational Education and Training Centres (CVETCs). Findings will guide the County Government of Makueni, the National Government, and other stakeholders in identifying effective funding strategies for market-relevant competencies. For trainees, assessing funding for infrastructure, equipment, and staffing will reveal whether they acquire employable, practical skills, fostering self-reliance and improved livelihoods. For policymakers, managers, and instructors, the study highlights funding gaps affecting training quality and labour market alignment. It also contributes to academic knowledge on TVET financing in decentralized systems, informing evidence-based planning and policy.

2. Literature Review

2.1. Theoretical Review

The study was grounded in General Systems Theory (GST) by Brent D. Ruben (2018), which views organizations as interconnected systems that rely on their environment for survival and growth. CVETCs, like living organisms, operate as open systems that continuously interact with their external environment, in this case, the county government, society, and the labor market. County government interventions, such as funding, staffing, and provision of facilities, constitute inputs into the CVETC system. These inputs are transformed through instructional processes into outputs, namely trainees' technical and soft skills, certifications, and job-readiness. Feedback from employers and the community informs system improvement, ensuring relevance and sustainability. The theory highlights that economic, political, cultural, and educational factors influence system performance, meaning that changes in country

interventions directly impact training quality. Thus, GST provides a fitting framework to understand how resource flows and interdependencies within CVETCs shape skill acquisition and ultimately contribute to socio-economic development.

2.2 Empirical Review

Funding is a critical determinant of Technical and Vocational Education and Training (TVET) effectiveness, given the high costs of specialized equipment, technology, and maintenance (Amutabi, 2019). TVET institutions that rely solely on government allocations without alternative revenue streams risk scaling down or terminating training programs (Norton & Norton, 2018). Globally, public funding dominates, as in Malaysia, where ministries finance TVET (Subramaniam et al., 2023), though mixed models exist. In France, TVET receives full public subsidy, in the UK, private sector financing plays a role, while in Germany, a hybrid public–private approach operates (Fawcett et al., 2014). Other funding avenues include user fees and income-generating activities (IGAs), where institutions produce marketable goods or services, rent equipment to businesses, or partner with enterprises for training, as seen in Paraguay, Ghana, and Nigeria (UNESCO, 2017). These approaches not only raise revenue but also enhance trainees’ practical skills.

In Africa, external funding from NGOs and international organizations such as the African Development Bank and UNDP supports TVET, as in Madagascar (UNESCO-UNEVOC, 2015). In Kenya, financing typically involves cost sharing, donor support, tuition fees, IGAs, and private training provision. However, county-level strategies are often limited. For example, in Vihiga County, bursaries remain the main funding tool, but their inadequacy leads to trainee dropouts and operational paralysis (Amutabi & Livisia, 2019). In Murang’a County, some vocational centers have closed due to insufficient funding, staff shortages, and a lack of equipment (Omwenga & Mugo, 2023).

Makueni County acknowledges similar constraints, noting reliance on county government funding, with competing priorities limiting allocations (Government of Makueni County, 2022). CVETCs lack the capacity to initiate IGAs, creating financial immobility. This underscores the need for empirical research on county funding practices, their influence on skills acquisition, and possible stakeholder-driven strategies to improve the financial sustainability of CVETCs.

3. Methodology

The study employed a Convergent Parallel Mixed Methods Design (Creswell, 2014), collecting quantitative and qualitative data concurrently to examine how County Government funding interventions, staffing, equipment, facilities, and institutional funding affect trainee skills acquisition in CVETCs. Quantitative data came from structured questionnaires administered to trainees and instructors, and identified patterns in interventions. The qualitative data were gathered from interviews with CVETC managers, that in-depth stakeholder insight. This design enhanced triangulation and the reliability of findings. The independent variable was County Government funding interventions in CVETCs. The dependent variable, Trainee Skills Acquisition, was assessed through technical skills, soft skills, certification, and job-readiness outcomes. The study was conducted in Makueni County, Kenya, targeting 60 CVETCs with a total population of 4,914 (60 managers, 277 instructors, and 4,577 trainees). Purposive sampling was used to select Makueni County, while the lottery sampling ensured proportional representation of managers, instructors, and trainees. A 30% sampling rate produced a sample of 1,474 respondents: 18 managers, 83 instructors, and 1,373 trainees.

Research instruments included an interview schedule for managers with open-ended questions, and questionnaires for instructors and trainees structured into sections: Section A on demographics, and Sections B–E assessing perceptions of county interventions using a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). A pilot study in three CVETCs refined the instruments. Content validity was confirmed through expert review, and reliability was tested using Cronbach’s Alpha, with coefficients above 0.70 considered acceptable. Data collection occurred in three phases: pre-field (instrument review, assistant training), fieldwork (questionnaire administration, interviews), and post-field (data organization, secondary data review). Quantitative data were analyzed using SPSS v29 for descriptive and inferential statistics (including regression), while qualitative data underwent thematic content analysis to identify emerging themes and contextualize findings.

4. Results and Discussion

The researcher sought to examine the Influence of County Government funding interventions on trainees’ skill acquisition in County Vocational Training Centers (CVETCs) in Makueni County, focusing on maintenance and utilization of facilities, resource allocation, infrastructure development, and existing challenges.

4.1 The County Government Finances the CVETC’s

This section examines the extent to which the Makueni County Government provides financial support to County Vocational Education and Training Centres (CVETCs) to enhance infrastructure, staffing, and service delivery.

Table 1: County Government Finances the CVETCs

Response	Frequency	Percent (%)
Strongly Disagree	6	10.9
Disagree	9	16.4
Undecided	7	12.7
Agree	28	50.9
Strongly Agree	5	9.1
Total	55	100.0

The data show that 33 (60%) instructors 28 (50.9%) agreeing and 5 (9.1%) strongly agreeing believe County Governments finance CVETCs. Conversely, 15 (27.3%) disagreed or strongly disagreed, while 7 (12.7%) were undecided, suggesting gaps in awareness or consistency of funding. Literature (Munyao & Mutisya, 2021) notes that devolved financing in Kenya often lacks uniformity and accountability, while Ngware et al. (2019) and Owino (2022) stress that adequate, equitable funding improves infrastructure, training, and learner outcomes. These results highlight progress but reveal disparities in allocation and transparency, underscoring the need for structured, needs-based funding models to ensure equitable development of CVETCs across counties.

4.2. County Government earns revenue from CVETC’s

This section explores the extent to which County Governments generate revenue from County Vocational Education and Training Centres (CVETCs). It examines stakeholders' perceptions of this revenue relationship and its implications for reinvestment in training infrastructure and service delivery.

Table 2: County Government earns Revenue from CVETC IGAs

Response	Frequency	Percent (%)
Strongly Disagree	9	16.4
Disagree	9	16.4
Undecided	14	25.5
Agree	19	34.5
Strongly Agree	4	7.3
Total	55	100

From the data, 23 (41.8%) instructors agreed or strongly agreed that County Governments earn revenue from CVETCs’ IGAs, while 18 (32.8%) disagreed or strongly disagreed and 14 (25.5%) were undecided. This divergence suggests limited transparency or unclear policies on revenue-sharing. Studies (Otieno & Muthoni, 2021; Ndung’u & Kimenyi, 2022) note that while CVETCs run IGAs like tailoring, welding, and farming, revenue use is often undocumented, limiting reinvestment. Fiscal opacity (Wanjohi, 2020) further fuels misaligned expectations. These findings highlight the need for structured frameworks, consistent practices, and clear communication to ensure IGA income is reinvested effectively, supporting sustainability and improving training infrastructure.

4.3 County Government collaborates with the private sector to finance CVETC’s

The collaboration between County Governments and the private sector is essential in financing and supporting County Vocational Education and Training Centres (CVETCs).

Table 3: Respondents’ Perceptions on County Government–Private Sector Collaboration in Financing CVETCs

Response	Frequency	Percent (%)
Strongly Disagree	18	32.7
Disagree	10	18.2
Undecided	10	18.2
Agree	16	29.1
Strongly Agree	2	3.6
Total	55	100

A total of 18 (32.7%) instructors strongly disagreed and 10 (18.2%) disagreed that there is collaboration between County Governments and the private sector in financing CVETCs, totaling 50.9% with negative perceptions. Meanwhile, 16 (29.1%) agreed and 2 (3.6%) strongly agreed (32.7% combined), while 9 (16.3%) were undecided. This suggests limited or poorly communicated partnerships. Literature (Khamati & Nyongesa, 2021; Mwangi & Oketch, 2020) shows that well-structured PPPs can bridge resource gaps, improve relevance, and boost employability, but many countries lack formal frameworks. Strengthening stakeholder engagement, formalizing policies, and publicizing outcomes could enhance PPP effectiveness, as recommended by UNESCO-UNEVOC (2022).

4.4 County Government provides bursaries to needy students

The provision of bursaries by County Governments is a critical intervention aimed at promoting equitable access to County Vocational Education Training Centres (CVETCs) for students from disadvantaged backgrounds. Table 4 presents respondents' views on whether County Governments provide bursaries to needy students enrolled in CVETCs.

Table 4: Instructors' Views on County Government Provision of Bursaries to Needy Students

Response	Frequency	Percent (%)
Strongly Disagree	6	10.9
Disagree	4	7.3
Undecided	4	7.2
Agree	33	60.0
Strongly Agree	8	14.5
Total	55	100

A total of 33 (60%) instructors agreed and 8 (14.5%) strongly agreed that County Governments provide bursaries to needy students, totaling 74.5% who confirmed this support. Only 10 (18.2%) disagreed or strongly disagreed, while 4 (7.2%) were undecided. This reflects a generally positive perception of bursaries as an equity tool. Literature (Mutua & Wambua, 2022; Odhiambo, 2020) affirms that bursaries boost enrollment, retention, and inclusion, especially for rural and female learners. However, dissenting and undecided views suggest concerns over adequacy, fairness, or awareness of the schemes. These findings highlight the need for transparent, consistent, and needs-based bursary allocation across CVETCs.

4.5 Instructors' Views on County Government Allowing Renting of Institutional Equipment to Local Entrepreneurs

One of the innovative strategies that County Governments may adopt to enhance the sustainability of County Vocational Education and Training Centres (CVETCs) is the rental of institutional equipment to local entrepreneurs. This approach can help generate income for the institutions while supporting the local economy. Table 5 presents respondents' views on whether the County Government allows the renting out of institutional equipment to local entrepreneurs.

Table 5: Instructors’ Views on County Government Allowing Renting of Institutional Equipment to Local Entrepreneurs

Response	Frequency	Percent (%)
Strongly Disagree	19	34.5
Disagree	14	25.5
Undecided	16	29.1
Agree	5	9.1
Strongly Agree	1	1.8
Total	55	100

The data show that 33 (60%) instructors either strongly disagreed 19 (34.5%) or disagreed 14 (25.5%) that the County Government permits rental of CVETC equipment to local entrepreneurs. Another 16 (29.1%) were undecided, and only 6 (10.9%) agreed or strongly agreed. This suggests limited practice or awareness of such arrangements, possibly due to unclear policies or poor implementation.

Literature (Gathungu & Mwangi, 2021; Wambugu et al., 2023) highlights that renting underutilized assets can strengthen finances, foster innovation, and enhance industry linkages. The findings point to an underused revenue stream, urging structured frameworks for safe, accountable, and mutually beneficial public–private partnerships.

4.6 Measures Makueni County Government can implement to improve the image and address the low perception of CVETCs

This section presents suggested measures that Makueni County Government can implement to enhance the public image of County Vocational Education and Training Centres (CVETCs) and address the prevailing low perception affecting enrolment, stakeholder confidence, and institutional development.

Table 6: Measures Makueni County Government can implement to improve the image and address the low perception of CVETCs

Response	Frequency	Percent (%)
Employ more instructors	5	9.1
Avoid opening new institutions	3	5.5
Dilapidated buildings	3	5.5
Organize workshops for instructors	4	7.3
Construct adequate workshops and provide enough machines	1	1.8
Provide adequate training materials	4	7.3
Increase capitation	15	27.3
Others	20	36.4
Total	55	100.0

The results show varied suggestions for improving the image of Makueni County CVETCs. Most instructors, 20 (36.4%), proposed other unspecified measures, reflecting diverse views. Increasing capitation was suggested by 15 (27.3%), highlighting the need for greater financial investment to boost quality and resources. Other proposals included hiring more instructors 5 (9.1%), organizing instructor workshops 4 (7.3%), and providing adequate training materials 4 (7.3%). Challenges include inadequate staff, limited resources, and poor facilities. Literature (ILO, 2021; World Bank, 2020) stresses funding, infrastructure, and instructor development as key to improving the quality, credibility, and community relevance of vocational training institutions.

4.7. Trainees being employed in local industries

The researcher aimed to investigate the extent to which graduates of County Vocational Education Training Centers (CVETCs) are employed in local industries. The frequency table shows a distribution of responses regarding the employment of CVETC graduates in the local industry.

Table 7: Trainees being employed in local industries

Response	Frequency	Percent
Strongly disagree	6	10.9
Disagree	9	16.4
Undecided	6	10.9
Agree	21	38.2
Strongly Agree	10	18.2
Others	2	3.6
Total	55	100.0

The findings show that 31 (56.4%) instructors agreed or strongly agreed that CVETC graduates are employed in local industries, reflecting a generally positive view of their employability. However, 15 (27.3%) disagreed or strongly disagreed, raising concerns about limited absorption into the labor market. Six (10.9%) were undecided, and 2 (3.6%) did not respond, suggesting possible information gaps.

While many trainees appear to secure local jobs, perceptions indicate room for improvement. UNESCO (2018) and the World Bank (2020) highlight the need for strong TVET–industry partnerships. Strengthening collaboration, aligning curricula with market needs, and expanding work placements could enhance employment outcomes.

4.8. Some trainees are self-employed

The researcher aimed to examine the level of self-employment among trainees from County Vocational Education Training Centers (CVETCs). The frequency table presents the distribution of responses regarding whether CVETC trainees are self-employed after completing their training.

Table 8: Some trainees are self-employed

Response	Frequency	Percent
Strongly disagree	2	3.6
Disagree	6	10.9
Undecided	5	9.1
Agree	26	47.3
Strongly agree	16	29.1
Total	55	100.0

The findings show that 42 (76.4%) instructors agreed or strongly agreed that many CVETC trainees become self-employed, indicating confidence in the training’s ability to foster entrepreneurship. Only 8 (14.5%) disagreed, and 3 (5.5%) were undecided, suggesting limited skepticism or uncertainty.

This strong agreement points to the effectiveness of vocational programs in equipping learners with skills for trades such as tailoring, carpentry, and agriculture. However, self-employment may not suit all due to resource or market constraints. UNESCO (2020) and ILO (2021) emphasize entrepreneurship as a key TVET outcome, with success relying on ongoing mentorship, funding, and market access for sustainability.

4.9 Produce products using the appropriate tools and techniques for local market

The researcher aimed to assess the ability of trainees from County Vocational Education Training Centers (CVETCs) to produce products using appropriate tools and techniques, specifically targeting the local market. The frequency table below outlines the distribution of responses regarding this ability.

Table 9: Produce products using the appropriate tools and techniques for local market

Response	Frequency	Percent
Strongly disagree	2	3.6
Disagree	7	12.7
Undecided	9	16.3
Agree	23	41.8
Strongly agree	14	25.5
Total	55	100.0

The results show that 37 (67.3%) instructors agreed or strongly agreed that CVETC trainees can produce market-ready products using appropriate tools and techniques, reflecting strong confidence in the practical relevance of training. However, 9 (16.3%) were undecided, possibly due to limited exposure to trainee outputs or uncertainty about product quality. A smaller

group, 9 (16.4%), disagreed or strongly disagreed, indicating skepticism about the effectiveness of the training in preparing students for work. While the overall outlook is positive, UNESCO (2018) and the World Bank (2020) stress that combining technical knowledge with hands-on skills is key, suggesting scope for improving consistency and market readiness.

4.10 To be more Creative and Innovative

The researcher aimed to evaluate the extent to which trainees from County Vocational Education Training Institutes (CVETCs) develop creativity and innovation as part of their training. Table 10 provides the distribution of responses regarding this aspect.

Table 10: To be more Creative and Innovative

Response	Frequency	Percent
Strongly disagree	2	3.6
Disagree	7	12.7
Undecided	8	14.5
Agree	20	36.4
Strongly agree	18	32.7
Total	55	100.0

The results show that 38 (69.1%) instructors agreed or strongly agreed that CVETC trainees are encouraged to be creative and innovative, reflecting a strong emphasis on these skills. However, 9 (16.3%) disagreed and 8 (14.5%) were undecided, indicating some inconsistency in how creativity is fostered across programs. While the majority view is positive, the dissent suggests gaps in certain areas of training. UNESCO (2018) and the World Bank (2020) highlight creativity as essential for adaptability and problem-solving. Strengthening teaching approaches and ensuring consistency across programs could enhance innovation capacity and ensure all trainees benefit equally from creative skill development.

4.11 Capable of fulfilling the high demand for Technical skills in the local market

The researcher sought to determine whether trainees from County Vocational Education Training Centers (CVETC) are capable of fulfilling the high demand for technical skills in the local market. The frequency table below presents the distribution of responses on this matter.

Table 11: Capable of fulfilling the high demand for technical skills in the local market

Response	Frequency	Percent (%)
Strongly disagree	3	5.5
Disagree	5	9.1
Undecided	4	7.3
Agree	26	47.3
Strongly agree	15	27.3
Total	55	100.0

The data shows a positive perception of CVETC graduates’ ability to meet local market demand for technical skills. Most instructors 41 (74.5%) agreed or strongly agreed, while 8 (14.5%) disagreed and 4 (7.3%) were undecided, indicating general confidence with minor reservations. This suggests CVETCs effectively equip trainees with relevant competencies, supported by practical, hands-on training. These findings align with the World Bank (2020) and UNDP (2018), which highlight vocational training’s role in bridging skills gaps and promoting economic growth. However, minor disagreement signals the need for continuous alignment of curricula with market demands, stronger industry engagement, and targeted improvements to enhance graduate employability.

4.12. Most trainees can match local contractor skills needs

The researcher sought to assess whether most trainees from County Vocational Education Training Centers (CVETCs) are able to match the skill needs of local contractors. This inquiry aimed to evaluate the effectiveness of CVETC training in preparing students for real-world, locally available employment opportunities.

Table 12: Matching Local Contractor Skill Needs

Response	Frequency	Percent
Strongly disagree	5	9.1
Disagree	4	7.3
Undecided	10	18.1
Agree	24	43.6
Strongly agree	12	21.8
Total	55	100.0

Instructors strongly agree 12 (21.8%) that most trainees are equipped with skills that meet the needs of local contractors. However, a notable portion of the instructors either remain undecided 10 (18.1%) or disagree 9 (16.4%), signaling some level of uncertainty or disagreement about the consistency of training outcomes across institutions. The strong agreement by 36 (65.4%) instructors indicates that most trainees possess skills relevant to industry needs, reflecting well on CVETC curricula. This suggests training is generally aligned with market expectations, likely enhancing employability and contractor satisfaction. However, 18.1% instructors were undecided, possibly due to limited visibility into outcomes or weak engagement with contractors. These findings align with ILO (2021), which stresses the importance of industry feedback and public-private collaboration to ensure TVET programs stay relevant and responsive to evolving labor market demands.

4.13. How County Government funding affects the affordability and accessibility of technical training for trainees

The researcher sought to understand how County Government funding affects the affordability and accessibility of technical training for trainees. The information is presented in Table 13.

Table 13: Instructors’ Views on How County Government Funding affects affordability and accessibility of technical training for trainees

Funding Support Area	Frequency (n)	Percentage (%)
Provision of bursaries	13	23.6
Reduction of trainee fees	5	9.1
Enhancement of funding programs	10	18.2
Provision of adequate and updated equipment	8	14.5
Increased student population due to funding	3	5.5
Others (context-specific insights)	16	29.1
Total	55	100

Out of 55 instructors, 13 (23.6%) cited bursaries as key in reducing trainees’ financial burden, while 5 (9.1%) highlighted lowering fees to boost accessibility. Ten (18.2%) emphasized enhancing funding programs for better infrastructure, materials, and support systems, and 8 (14.5%) stressed providing updated equipment to meet industry standards. Three (5.5%) noted funding increases student populations, potentially straining resources. The largest group, 16 (29.1%), selected “others,” suggesting diverse, context-specific needs beyond listed categories. Overall, the findings indicate that while funding supports access and quality, it must be balanced with resource capacity, equipment upgrades, and tailored interventions to address varied institutional and community priorities.

4.14 Capable of fulfilling the high demand for technical skills in the local market

County Vocational Education and Training Centres (CVETCs) are increasingly recognized as capable of fulfilling the high demand for technical skills in the local market, promoting youth employability and economic growth.

Table 14: Capable of fulfilling the high demand for technical skills in the local market

Response	Frequency	Percent (%)
Strongly disagree	3	5.5
Disagree	5	9.1
Undecided	4	7.3
Agree	26	47.3
Strongly agree	15	27.3
Total	55	100.0

The data shows a positive perception of CVETCs graduates’ ability to meet local market demand for technical skills. Most instructors 41 (74.5%) agreed or strongly agreed, while 8

(14.5%) disagreed, and 4 (7.3%) were undecided. This suggests that CVETCs are largely seen as effective in preparing trainees for market needs, though minor gaps remain. The findings align with World Bank (2020) and UNDP (2018), which highlight vocational training’s role in closing skills gaps and boosting economic growth. Continuous alignment with market demands, improved industry feedback, and curriculum refinement could further enhance graduate employability and CVETCs’ contribution to local economic development.

4.15 Provision of Scholarships by the County Government for Trainee skills acquisition

This examines the provision of scholarships by the County Government, highlighting how these financial supports contribute to enhancing trainees' access to education and skill development opportunities.

Table 15: Provision of Scholarships by the County Government to trainees

Response	Frequency	Percent
Strongly Disagree	204	22.3
Disagree	162	17.7
Undecided	97	10.6
Agree	284	31.0
Strongly Agree	168	18.4
Total	915	100.0

Responses on the adequacy of scholarships from Makueni County Government were mixed: 49.4% agreed or strongly agreed, 40% disagreed or strongly disagreed, and 10.6% were undecided. This near-even split suggests that scholarships exist but face issues in communication, outreach, or selection criteria, limiting their visibility and impact, especially for marginalized trainees. ILO (2023) and UNESCO-UNEVOC (2021) stress that scholarships work best when publicized, equitably distributed, and targeted to the vulnerable. The World Bank (2022) highlights transparency as vital for trust. Strengthening targeting, simplifying applications, and raising awareness would boost inclusion and align with Kenya Vision 2030’s goal of equitable education access.

4.16 The County Government makes Products and Services that are sold to the Community to generate Money for our Institution

The statement, "The County Government makes products and services which are sold to the community to generate some money for our institution," received varied responses from the 915 trainees surveyed, as shown in Table 16.

Table 16: The County Government makes products and services that are sold to the community to generate some money for our institution

Response Category	Frequency	Percent
Strongly Disagree	334	36.5
Disagree	188	20.5
Undecided	76	8.3
Agree	208	22.7
Strongly Agree	109	11.9
Total	915	100.0

A majority of trainees, 334 (36.5%), strongly disagree and 188 (20.5%) disagree, totaling 522 (57%), expressed dissatisfaction with the statement. Conversely, 208 (22.7%) agree and 109 (11.9%) strongly agree, making 317 (34.6%) supportive. Another 76 (8.3%) remained undecided. The high disagreement suggests skepticism due to weak public engagement, poor communication, or a disconnect between efforts and perception. Njuguna and Wanyama (2021) and Otieno et al. (2023) note that limited stakeholder involvement and transparency erode trust. Strengthening communication via local media, forums, and outreach could convert undecided respondents into supporters and improve County Government’s credibility.

4.17 County Government receives fees from parents to finance training

The data presented in this section captures trainees’ opinions on whether the County Government receives fees from parents to finance training programs.

Table 17: County Government receives fees from parents to finance training

Response Category	Frequency	Percent
Strongly Disagree	103	11.3
Disagree	151	16.5
Undecided	85	9.3
Agree	202	22.1
Strongly Agree	374	40.9
Total	915	100.0

A majority of 576 (63%) of respondents agreed, 202 (22.1%) and 374 (40.9%) strongly agreed that parental contributions are a major funding source for county-sponsored training. Conversely, 254 (27.8%) disagreed or strongly disagreed, indicating skepticism toward this model. Another 85 (9.3%) were undecided, suggesting limited awareness of county financing mechanisms. High agreement reflects recognition of parental financial burdens, while disagreement highlights concern over transparency and fairness. This supports Kariuki and Njuguna (2022), who found community-based financing essential yet poorly regulated, and Muthoni et al. (2021), who noted that although parental input sustains programs, weak communication fosters mistrust among stakeholders.

4.18 Financial Support from County Government and Its Impact on Skill Acquisition in CVETCs in Makueni County

County Government financial support enhances skill acquisition in CVETCs in Makueni by providing essential resources, equipment, and infrastructure, enabling quality training and improving earners' employability and self-reliance.

Table 18: Financial Support from County Government and Its Impact on Skill Acquisition in CVETCs in Makueni County

Response	Frequency	Percent
Strongly Disagree	9	1.0
Undecided	4	0.4
Notable Improvement	6	0.7
Retention of Trainers in Class	39	4.3
Helps Poor Students with Materials	91	9.9
To Buy Machines	283	30.9
Retention of trainees	43	4.7
Pay Teachers	4	0.4
Notable improvement	6	0.6
Help poor students with training materials	100	1.1
Others	463	50.6
Help Pay Fees / Provide Bursaries to Needy Children	10	1.1
Provide Jobs	6	0.6
Total	915	100

The findings show that County Government financial support significantly enhances skills training in CVETCs. Most trainees 283 (30.9%) cited funding for purchasing training equipment and machines, linking it directly to improved hands-on learning. However, many noted that existing equipment was obsolete and required replacement. A further 100 (10.9%) acknowledged support for poor students through learning materials, while 43 (4.7%) highlighted trainer retention as vital for maintaining quality. Less common mentions included paying teachers 4 (0.4%), bursaries 10 (1.1%), and job provision 3 (0.3%). Notably, 560 (50.9%) gave no response, suggesting awareness or communication gaps. Literature (UNESCO-UNEVOC, 2021; ILO, 2023; AfDB, 2024) emphasizes targeted, transparent funding for equipment, student aid, and skilled staff to promote equitable, effective vocational training.

4.19 County Government gives bursaries from the NG-CDF to needy trainees

The section sought to establish if the County Government allocates bursaries from the NG-CDF to support needy trainees in CVETCs, promoting equal access to vocational education and reducing financial barriers to skill development.

Table 19: County Government gives bursaries from the NG-CDF to needy trainees

Response	Frequency	Percent (%)
Strongly Disagree	169	18.5
Disagree	129	14.1
Undecided	125	13.7
Agree	280	30.6
Strongly Agree	212	23.2
Total	915	100

A combined majority of 492 (53.8%), 280 (30.6%) agree and 212 (23.2%) Strongly Agree, of respondents believe that bursaries are given to needy trainees. This indicates a generally positive perception of the bursary distribution. A notable portion of 298 (32.6%) disagreed, of whom 169 (18.5%) strongly disagreed, while 129 (14.1%) disagreed, suggesting that a significant group either does not benefit from or is unaware of the bursaries. About 125 (13.7%) were undecided, possibly due to a lack of direct experience or knowledge.

Over half of respondents believe bursaries are distributed, suggesting the NG-CDF initiative is impactful and visible. However, significant disagreement points to issues of access, transparency, and outreach. Literature (Wambua, 2018; Kariuki, 2020) confirms that while NG-CDF bursaries enhance educational access for vulnerable groups, challenges like favoritism, political interference, and weak monitoring persist. These findings reflect both the initiative's strengths and areas needing improvement, highlighting the need for more equitable and transparent distribution to enhance trust and effectiveness.

4.20 Managers' Views on Institutional Funding Interventions by Makueni County Government

The researcher sought the views of institutional managers regarding the funding interventions implemented by Makueni County Government. Capturing the perspectives of managers was critical to provide a comprehensive understanding of how these interventions impact trainee skills acquisition. Their insights were essential in aligning and validating the experiences shared by both trainees and instructors, thereby offering a more balanced and holistic assessment of the effectiveness and adequacy of the funding measures undertaken.

Table 20: Institutional Funding Interventions by Makueni County Government

Intervention	Frequency	Percent (%)
Provision of grants and bursaries	7	58.3
Capitation though inadequate	4	33.3
Construction of workshops and provision of tools	1	8.3
Total	12	100.0

The primary institutional funding intervention in Makueni County is the provision of grants and bursaries, cited by 7 (58.3%) of managers. This indicates the county’s focus on directly supporting students financially, reflecting Kenya’s broader national trend to increase bursary allocations for education (Ministry of Education, 2021). However, 4 (33.3%) highlighted capitation, though deemed inadequate, suggesting that while government funding exists, it remains insufficient for sustaining institutional growth.

This is in line with findings in East African TVET systems, where capitation has been insufficient to meet the growing demands of technical institutions (African Development Bank, 2023). Only 1 (8.3%) of respondents mentioned interventions related to infrastructure, such as the construction of workshops and the provision of tools, a smaller but necessary component for quality training. These findings are aligned with regional TVET reform efforts in Africa, where funding models are continuously being restructured to address gaps in institutional support (AfDB, 2022). Makueni’s approach, while beneficial, needs further financial scaling to sustain long-term educational objectives.

4.21 Managers' views on the main Financial Challenges Faced by Technical Training Institutes

This section presents managers’ views on the main financial challenges faced by Technical Training Institutes, highlighting funding gaps, resource limitations, and budgetary constraints affecting training quality and institutional operations.

Table 21: Managers' views on main Financial Challenges Faced by Technical Training Institutes

Main Financial Challenges Faced by CTIIs	Frequency	Percent
Fees payment	8	66.7
Inadequate funding	2	16.7
Inadequate infrastructure and equipment	1	8.3
Low trainee enrolment	1	8.3
Total	12	100.0

The majority of CVETC managers 8(66.7%) identified fee payment as the most pressing financial challenge, indicating that many trainees delay or default on payments. This directly impacts institutional operations, limits resource availability, and threatens training quality. Inadequate funding was cited by 2 (16.7%) of managers, reflecting persistent gaps despite county and national government allocations. Such shortfalls hinder the ability to maintain operations, invest in infrastructure, and expand training programs.

Infrastructure and equipment shortages 1(8.3%) further constrain effective training delivery, while low trainee enrollment 1(8.3%) reduces internally generated income, compounding financial instability. These findings align with prior studies (Kihoro, 2022; Odhiambo, 2021; UNESCO-UNEVOC, 2021), which highlight systemic underfunding, uneven infrastructure development, and societal undervaluation of vocational training.

Addressing these challenges requires targeted interventions, including flexible payment models, enhanced bursary schemes, improved budget allocations, and public awareness

campaigns to boost enrollment. Without such measures, CVETCs risk compromised training quality and reduced capacity to meet labor market needs.

4.21 Summary of findings

Inadequate and outdated equipment (27.3% and 20.0%, respectively) significantly hinders practical skills acquisition in CVETCs. This affects trainees' ability to gain industry-relevant experience, particularly in technical fields such as carpentry and electrical work. While nearly half of the respondents agreed that scholarships were available, a significant portion (40%) disagreed, pointing to a lack of transparency and fairness in the distribution process. This inconsistency limits access to education, particularly for marginalized groups.

A majority of trainees believe that CVETC graduates are equipped for self-employment (76.4%) and find employment in local industries (56.4%). There are concerns about the alignment of training programs with industry needs and the availability of opportunities in the local job market. Further adjustments to the curriculum and stronger industry linkages are needed for improved employment outcomes.

5. Conclusion

The study concludes that the funding interventions by the Makueni County Government, including infrastructure development, scholarships, and resource allocation, have a significant impact on the skill acquisition of trainees in County Technical and Vocational Education Training Centers (CVETCs). However, challenges such as inadequate equipment, outdated training facilities, and inconsistencies in scholarship distribution limit the effectiveness of these interventions. There is a need for more strategic investments in both infrastructure and financial support to enhance the quality of training and improve employability. The study provides valuable insights into the strengths and challenges faced by CVETCs in Makueni County. While there are positive perceptions regarding the training provided, challenges such as limited access to resources, insufficient industry engagement, and gaps in the communication of funding impacts must be addressed. To enhance the effectiveness of CVETCs, there is a need for more targeted investments in modern equipment, improved curriculum alignment with market demands, and enhanced transparency in funding and bursary distribution.

6. Recommendations

The County Government should invest in modernizing training facilities and resources, ensuring regular maintenance. Additionally, the scholarship process should be streamlined to improve accessibility and transparency, especially for marginalized groups. These will help enhance trainee skills acquisition in the CVETCs.

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