Physical Resource Mobilisation and Internal Efficiency of Technical Training Institutions in Bungoma County

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Abstract
Because of limited resources (physical) being availed to public Technical Training Institutions (TTIs) around the world, as a way of ensuring quality TVET provision, institutions are required to mobilise additional resources. This paper looks at how public TTIs in Bungoma County Kenya were mobilising physical infrastructural resources to ensure achievement of internal efficiency goals. This is because for long, incidents of low internal efficiency have been a common trend in majority of public TTIs in Kenya and beyond. This study was conducted in four public TTIs which are located in Bungoma County. The study methodology was mixed which incorporated both qualitative and quantitative approaches. The respondents for the study consisted of the four public TTIs principals, 16 resource mobilisation officials of the said institutions and 239 faculty members (tutors). The respondents were selected through purposive and stratified random sampling technique. To collect data, questionnaire, and interview and document checklist were used. The research instruments were tested for validity and reliability. The outcomes revealed that

Key: Physical, Resource, Internal, Efficiency, Mobilisation, Infrastructure

Background
Education defines the quality of life; it is the foundation on which the society is built (Olu, Omiyale & Adebola, 2015). Technical vocational training and education (TVET) is the provision of skills, knowledge, attitude, and values needed for the place of work (Kamau, 2013). TVET is centered on applied as opposed to academics, practical as opposed to theory, and skills as opposed to knowledge. The outcome of any education system (including TVET) is based on the relationship between inputs (physical facilities) and output (internal efficiency) as the main focus of this paper. Technical, vocational education and training (TVET), has been used by several developed countries as an instrument of development. Resources are the vital organs of effective and efficient functional education (Uchendu, Ekanem & Jonah, 2013). Hence, the role of resources in ensuring the importance of these educational materials goes beyond their mere provision. A review of research has shown that less emphasis has made by government in resourcing public differs across regions (UNESCO-UNEVOC, 2015). For instance, research conducted in majority of sub Saharan African countries point a grim picture. In Nigeria, Rufai, et al. (2013) found out that inadequate provision of infrastructural facilities was due to low level of funding of educational institutions, particularly Technical Training institutions in Nigeria. In Kenya, Kamau (2013) found out that people tended to view TVET in a negative way, as education and training meant for those who have failed in the society. This has resulted to low internal efficiency levels in majority of public technical training institutions around sub Saharan African countries.

As the country's aligned with UN (2030) sustainable agenda which seeks to ensure access to TVET programmes, to substantially increase the number of youth with relevant skills for employment, decent jobs, and entrepreneurship and to eliminate gender disparities in Education (Mohaffyza Sukri, & Ahmad, 2015). SDG4 Targeted 4.3 expects that by 2030; there would be a substantial increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship (UN, 2015). Public technical training institutions require extensive resources for teaching and learning, especially in the form of specialised equipment and consumable materials (Rahman, Kim & Pei, 2015). Lack of resources is one of the major factors to ineffective TTIs system, which also meant TTI were not effectively equipped, and not all of the available equipment were in good working order or directly relevant to the curriculum being offered (Darvas & Palmer, 2014). The internal efficiency of technical training institutes around the world is low (Haramoto, 2015). This study investigated the internal efficiency of TTIs institutions in Bungoma County, Kenya.

With diminished emphasis and funding to TVET institutions, it is now known how public TTIs are responding through transformative physical resource mobilisation efforts to ensure high internal efficiency levels. Transformative resource mobilization refers to the process by which an institution acquires and manages the physical, financial, human and logistical resources it needs to fulfill its mission (Uko et al., 2014). Resource mobilization involves three key elements; resources, resource providers and resource mobilisation mechanisms. Mechanisms for resource mobilization strategies are used by universities to obtain resources from resource providers. This paper looks at how physical resource mobilisations are acquired to ensure internal efficiency of public TTIs in the county of Bungoma, Kenya.

Problem Statement

A relevant and quality TVET sector is seen as a promising avenue to provide the Youth with marketable skills. Ferej, Kitainge and Ooko (2012) observed that despite increased enrolment in TVET in Kenya, budget towards TVET has been low despite its potential in transforming the quality of human resource for socio-economic development of the country and achievement of Vision 2030. These have direct contribution on the production of competent technicians as facilities have not been able to keep up with changing workplace requirements in terms of physical resources and infrastructure. Because of various reasons such as exponential growth of knowledge, price rise, budget reduction, demand of better services among others, generation and mobilization of physical resources are very much required. The increasing growth in the enrollment of students and researchers, lack of proper and adequate infrastructure further aggravates the overall problems and challenges for public TTIs in Bungoma County. TVET institutions are under ever-increasing pressure to enhance the technological capabilities to meet the academic demands of the users and compete with other alternative information providers. This observation calls for a systematic study to establish the transformative physical resource mobilisation and its influence on internal efficiency of technical training institutes in Bungoma County, Kenya.

Objective of the Study

To establish relationship between physical resource mobilisation and internal efficiency of technical training institutions in Bungoma County

Research Hypothesis

$H0_2$ There is no significant relationship between physical resource mobilisation and internal efficiency of technical training institutions in Bungoma County

Review of Literature

Physical resources can be generally defined as buildings, properties and major infrastructure which include physical and material assets (IES, 2006). Facilities in schools are materials resources that enhance teaching and learning thereby making the process meaningful and purposeful. Facilities in schools can be defined as the entire school plant which school administrators, teachers and students harness, allocate and utilize for the smooth and efficient management of any educational institution, for the main objective of bringing about effective and purposeful teaching and learning experiences (Asiyai, 2012). Physical resources include all of the infrastructure and material resources that are used to support the delivery of quality education (Rufai et al., 2013). Infrastructure refers to basic physical and organisational structures needed for the successful running of the institution (Bakare, 2009). Other relevant facilities in the school environment include text books, laboratory equipment, computer machines, seating facilities, supply of electricity and other technical and vocational facilities which are all paramount to the provision of qualitative education (Omotayo, et al., 2008). Good quality and standard institution of learning depend largely on the provision, adequacy, utilization and management of educational facilities.

Akinsolu (2004) asserted that educational curriculum cannot be sound and well operated with poor and badly managed school facilities. From all indication, facilities in schools are physical resources that facilitate effective teaching and learning. They include blocks of classrooms, laboratories, workshops, libraries, equipment, consumables, electricity, water, visual and audio-visual aids, tables, desks, chairs, playground, storage space and toilets. Physical resources have been identified as a crucial component of education resource and have a vital role to play in the attainment of internal efficiency in schools. In educational institutions, facilities constitute essential inputs, which create favourable learning environment, facilitate interaction and enhance achievement of educational objectives (Oyesola, 2007). The Ministry of Education Science and Technology noted in its report that adequate and modern facilities were essential features of a sound and vibrant TVET system (MoEST, 2008).

Availability of adequate and modern training facilities to cope with rapid technological changes has been an issue even with the richest nations according to the ministry report (Kitui, 2015). In essence, the school curriculum would not be meaningful and functional if required facilities are not provided in adequate quality and quantity at appropriate times through the principal's administrative finesse (Uko & Ayuk, 2014). Rufai et al. (2013) stressed that facilities provision and maintenance are a necessity for effective teaching and learning in technical vocational education. Availability of physical facilities encourages meaningful learning and teaching. The principal should plan for the physical facilities in the schools bearing in mind that school population keeps on changing in line with change in programmes and modernization. The management of material resources entails planning, acquisition, allocation, distribution and controlling the use and maintenance of the materials (Ithuta, 2014). The availability of adequate school buildings, classrooms, chairs, desks and other facilities are necessary for the attainment of educational objectives. The very importance of libraries in the school system cannot be underestimated. Owoeye and Yara (2011) noted that library is an essential factor in teaching-learning process. It forms one of the most important educational services. The educational process functions in a world of books. The chief purpose of a school library is to make available to the pupil, at his easy convenience, all books, periodicals and other reproduced materials which are of interest and value to him but which are not provided or assigned to him as basic or supplementary

textbooks. But, it is noticed with a lot of dismay that the libraries in our schools are not up to standard and students do not well informed on library facilities neither do they have enough access to it (Akinsolu, 2012).

Various research studies have been conducted to determine the relationship between physical facilities mobilisation and internal efficiency of educational institutions around the world. Adeyemi (1989) cited by Onani (2014) who investigated internal efficiency of technical collages in Lagos state. Data was collected using questionnaires. It was analysed with the use of simple percentages and the re-constructed cohort method. The study found that the wastage rate was 2% and 3% and ratio 1.00 and 1.08 respectively for the 2 sets of cohort used. The performance of students was positively related to the availability and rate of utilization of the available resources that is the human and physical resources. Akinsolu (2003) in a study on provision and management of physical facilities for primary education in Nigeria found out that there is a gross inadequacy in facilities for Nigerian primary schools with availability to required percentage ranging from as low as 1.5% to a maximum of 35.2%. Akinsolu study stressed the importance of physical facilities in the management of education system. She opines that stakeholders need to ensure adequate provision of physical facilities in all educational system, be it primary, secondary, and tertiary levels to enhance learning and for improved productivity. The author further affirmed that education objectives could only be achieved with the availability of adequate and relevant physical resources in school.

Uko (2015) study sought to assess and investigate how the proficiency and creativity of principals affect the management of school facilities in Cross River State, Nigeria. The sample of the study included 36 secondary schools, with two drawn from each of the 18 Local Government Areas in the State. The outcome of the study showed that there is a significant relationship between the principal's proficiency, creativity and the overall educational objectives in the management of school facilities. This showed that effective management of school facilities is necessary in creating the enabling conducive academic environment thereby enhancing a corresponding achievement and performance in the teaching – learning process. Uchendu, Ekanem, and Jonah (2013) examined the influence of resources maintenance on the provision of educational services in public and private secondary schools in Rivers State, Nigeria. To achieve the purpose of the study two hypotheses were formulated to guide the study. The study utilized a descriptive survey research design and stratified random sampling technique was used to sample seven hundred and thirty eight (738) principals and vice principals from the population of one thousand five hundred and fifteen (1,515) principals and vice principals of public and private secondary schools in Rivers States. Data were collected using researchers' constructed questionnaire titled. The mean, mean set and rank order as well as standard deviation and t-test were used in analysing the null hypotheses. Result obtained shows that maintenance culture in both public and private secondary school is poor; the school physical resources are regularly maintained. Physical resources in schools if properly maintained influence the provision of educational service and students academic performance in Rivers State; that funds is the major problem militating against the maintenance of school resources. The major limitation is that, is the terrain did not give us easy access to some areas for data collection.

In Cameroon, Ndjebakal and Genevarius (2017) studied the relationship that existed between school facilities and internal efficiency in Government Bilingual Secondary Schools in Yaoundé centre. Both the quantitative and the qualitative approaches were used to collect and analyse data. Results revealed that school facilities significantly influenced the internal

efficiency of secondary schools in Yaoundé Centre. It was concluded that there is a significant relationship existing between school infrastructures and school efficiency in Cameroon secondary schools. Butare (2004) reports that driven by the desire to offer high quality IT education as well as to provide basic IT services to the Rwandan community, KIST established its ICT Centre in 1999. Through the centre, KIST has become one of the major Internet Service Providers (ISP) in Rwanda, second only to the national telecommunication company, Rwandatel. The centre provides Internet service for dial-up and wireless connections, sells Internet accessories for both wide and local area networks and operates an Internet cafe. In addition to providing Internet services, the ICT Centre also provides to the public other computing services and consultancies such as: Webpage design and hosting; networking; developing software packages, e-mail and Internet access; secretarial services, etc. The competitive prices offered by the institute make it the best choice for many customers. The centre is also engaged in preventive maintenance by servicing computer hardware and other electronic equipment. In Ethiopia, Yang (2014) assessed the internal efficiency of primary schools of Nuer Zone of Gambella Regional State. Descriptive research design was used. . The quantitative data was collected from principals, unit leaders, department heads by using available sampling and teachers using simple random sampling, annual abstracts and report through questionnaires. They found out that the zonal trend of dropout rate and repetition rate of upper primary schools was showing oscillating with varying increase and decrease over the years. The research found out that one of the factors influencing internal efficiency was shortage of school facilities. It emerged that school facilities were not mobilised to increase internal efficiency through various mobilization programmes. The research by Yang was conducted in South Sudan primary schools while this research was conducted in public TVET institutions in Kenya.

Sang et al. (2011) research established that government of Kenya (2005) observes that training facilities are critical if education in Kenya is to meet the technological market skill needs and move the country to the vision 2030. The availability of training facilities is critical to quality teaching and training. Majority of the H.O.D respondents (83.3%) indicated that training facilities were not adequate compared to only 16.7% of respondents who indicated that the physical facilities were adequate. This implies that the H.O.Ds felt that T.T.Is operated with inadequate training facilities. Majority of the graduate respondents (63.1%) indicated that the training facilities in T.T.Is were inadequate while 36.9% indicated that the facilities were adequate. This implies that majority of the T.T.I graduates felt that they were trained using inadequate training facilities. Ngunzo (2011) noted in his study on the impact of school infrastructure on access to secondary education in Kisumu Municipality that schools with modern facilities like laboratories and up-to-date equipment significantly attract and enrol more students, perform better and have large transition rates to University and other colleges than those without. Kitui (2015) study investigated the factors influencing access to Technical and Vocational Education and Training in Bungoma East sub-county. The study was conducted through descriptive survey research design. Data was collected using questionnaires from 120 finalist youth trainees, five youth polytechnic managers and one sub-county youth officer. Results showed that most trainees and managers' responses indicated that polytechnics had inadequate physical facilities. In some polytechnics, it was observed that some classes took place under trees; facilities like sewing machines were very few to the extent that ten trainees shared one machine while workshops were not available. This was likely to compromise quality of education.

In Kenya, Ferej et al. (2012) found out that each TVET institution, depending on location and ingenuity of its leadership raise revenue independently through income generation activities.

These activities include running extra courses where students pay higher fees than government stipulated rates. Other activities might be farming, service, repair, and consultancy. Income generation is now so crucial that most TVET institutions depend on it for survival as direct government funds for recurrent expenditure is quite limited. Donor support plays an important role in development of TVET systems. In many developing countries such as Kenya, the large amount of international aid has contributed to the setting up of a base of training capacity (UNEVOC, 1996). Infrastructure and facilities have been created, staff trained and instructional systems implemented through donor assistance. In Meru County, Ithuta (2014) investigated the determinants of internal efficiency in public primary schools in Tigania East district. The study adopted a descriptive survey design. The sample comprised of 10 headteachers, 100 teachers, 10 Education officers and 400 standard 7 pupils in the District. Data was collected by use of questionnaires and were analyzed by use of qualitative and quantitative technique. The study found out that learners did not have adequate sitting place in their class and they sat more than the required number of learners in a single desk. The researcher found out that that pupils' whose schools lacked facilities and materials were significantly more likely to attain lower scores than those learners whose schools were well equipped. This research made a comparison on the degree to which mobilisation of physical facilities influenced internal efficiency to establish whether the correlation was related to Ithuta research.

Onani (2014) study sought to establish the relationship between physical resources and internal efficiency of public secondary schools in Tana River County in terms of number of classrooms, laboratories, textbooks, furniture, toilets/latrines, and electricity among others. The research particularly sought to determine the magnitude of inefficiency in form of dropout, repetition, and completion and aimed at providing possible solutions in relation to physical resources to minimise wastage in secondary schools and establish corrective measures that can minimise dropouts and repetition. The study was guided by the cost benefit analysis theory that aims at achieving optimal output. This theory stresses that the out-put of any investment should be correlated with the in-put in order to assess profitability. The study was conducted using a descriptive survey and correlation research designs and the data was collected using questionnaires, interview guide and documentary analysis from 15 secondary schools. The study found out that school in Tana River County had inadequate physical resources and that those available were in poor condition. On objective two, the study found out that there was no relationship between dropout rates and condition of physical resources. On objective three and four the study found out that, there was Positive significant relationship between repetition, completion rates and condition of physical resources. The research also revealed that the secondary education system in Tana River County as at the period of study was inefficient with a mean dropout rate of 16.0. Based on findings, the study concluded that physical resources are positively correlated with internal efficiency of public secondary schools in Tana River County. Although the studies have exhibited the importance and impact of physical resources on the general operation of educational institutions, studies have failed to show whether mobilisation of physical resources can affect internal efficiency of TTIs, a key area of focus in this research

Materials and Methods

This study was conducted in Bungoma County Kenya. This research used a mixed method research methodology. Mixed-methods approach focuses on data collection and analysis mixing with both qualitative and quantitative data sources in one study or in a series of studies (Al-Dossary, 2008). The study adopted a descriptive survey design that incorporated qualitative and quantitative aspects. The target population for this study involved four TTIs

located in Bungoma County, which are Sang'alo Institute of Science and Technology, Kisiwa Technical Training Institute, Musakasa Technical Training Institute and Matili Technical Training Institute. The respondents from these four TTIs included; four principals of TTIs, 16 managers in charge of resource mobilisation activities and 239 tutors. the final sample size consisted of 4 principals from TTIs, 16 resource mobilisation managers and 150 tutors as respondents for the study. The primary data was collected through questionnaire, interview of respondents and observation checklists. Quantitative data were analysed using descriptive and inferential methods. Inferential method includes Pearson Product Correlation and Descriptive ones were frequencies, percentages, means and standard deviation. The hypothesis was tested at 95.0% confidence level.

Results and Discussions

Institution physical resources are facilities that are required so that teaching and learning of Technical education can take place. RoK (2013) observes that training facilities are critical if education in Kenya is to meet the technological market skill needs and move the country to the vision 2030. The availability of training facilities is critical to achievement of internal efficiency goals. Therefore, the second objective of this study sought to determine how public technical training institutions were mobilising physical resources and its relation with internal efficiency of those institutions. Therefore, tutors were to state the extents to which physical resources were mobilised in their institutions through the following scale: (1), rarely (2), sometimes (3), often (4) and always (5). The findings are presented in Table 1.

Table 1 Frequency of Physical Resource Mobilisation in Public TTIs in Bungoma County

Physical Resource Mobilisation	Never	Rarely	Sometimes	Often	Always	Mean	SD
Our institution ensures that physical facilities are utilised well to minimise wastage	5 (3.8%)	26 (20.0%)	52 (40.0%)	25 (19.2%)	22 (16.9%)	3.2538	1.08057
Our institution ensures that physical facilities are adequate for use by staff and students	6 (4.6%)	31 (23.8%)	60 (46.2%)	20 (15.4%)	13 (10.0%)	3.0231	.99195
Physical facilities are well maintained and up to the required standards to ensure effective learning	4 (3.1%)	37 (28.5%)	63 (48.5%)	13 (10.0%)	13 (10.0%)	2.9538	.95529
All stakeholders are involved in planning and construction of institutional facilities to promote institution wide development	9 (6.9%)	39 (30.0%)	54 (41.5%)	16 (12.3%)	12 (9.2%)	2.8692	1.02970
Institutional facilities are leased for use during holidays to generate extra income for programme expansion	19 (14.6%)	26 (20.0%)	62 (47.7%)	16 (12.3%)	7 (5.4%)	2.7385	1.03095
The institution seeks donor support when developing new infrastructural facilities	3 (2.3%)	26 (20.0%)	51 (39.2%)	33 (25.4%)	17 (13.1%)	3.2692	1.00223

to increase student enrolment							
There is no wastage in utilisation of physical facilities and IGAs to improve efficiency	5 (3.8%)	46 (35.4%)	47 (36.2%)	17 (13.1%)	15 (11.5%)	3.0846	1.97282
The institution leases extra land (farming purposes) to generate income for smooth running of programmes	22 (16.9%)	30 (23.1%)	44 (33.8%)	24 (18.5%)	10 (7.7%)	2.7692	1.16498
The institution seeks grants from government to aid in infrastructure development and increase enrolment	0 (0.0%)	17 (13.1%)	25 (19.2%)	55 (42.3%)	33 (25.4%)	3.8000	.96770
Sale of institution products enable it to meet budget deficits associated with inadequate support for fees and government grants	18 (13.8%)	38 (29.2%)	44 (33.8%)	20 (15.4%)	10 (7.7%)	2.7385	1.11754
Composite scores						**3.0500**	**1.13137**

Findings from Table 1 shows that 52 (40.0%) of tutors indicated that sometimes, their institution ensured that physical facilities were utilised well to minimise wastage and underutilisation. The descriptive scores shows that physical facilities were sometimes (M=3.25 and SD=1.08) utilised well in specific times and at times not. This implies that despite institutions being endowed with adequate facilities, some of these facilities were not well utilised to ensure they accomplish the purpose they were intended for hence affecting internal efficiency of schools. The study findings coincide with Haramoto (2015) found out that there was underutilisation of equipment and facilities that caused low internal efficiency in TVET institutions. Secondly, 60 (46.2%) mentioned that their TTI sometimes ensured that the school infrastructure were adequate for use by students and staff, 6 (4.6%) said that they never ensure, 31 (23.8%) said their institutions rarely ensured, 20 (15.4%) indicated that their institutions often ensured and only 13 (10.0%) always ensured that their school facilities were adequate. The result therefore shows that physical facilities in public TTIs in Bungoma county were sometimes (M=3.02 and SD=0.99) adequate for use by staff and students. This means that when some facilities are not provided in colleges, teaching and learning process may not be done hence hampering the achievement of internal efficiency goals.

Further, it is the duty of school administration to ensure that they provide adequate infrastructural facilities to enhance the delivery of TVET curriculum. However, if this action is not done in earnest, the quality of graduates churned out of those institutions may not compete and succeed in the job market. The study findings relate with Sang et al. (2012) who established that TTIs operated with inadequate training facilities. This unavailability of training facilities affected the relevance of skills to market skill needs by students from the said institutions. This implies that certain courses used facilities that were completely out of tune with facilities used in industries and business organizations. Even in Nigeria, Uko (2015) revealed that in about 80% of the schools, facilities like laboratories, libraries, classrooms, assembly halls, furniture, technical workshops among others were in a complete state of despair. This implies that the situation in Nigeria is the same as in Kenya TTIs in

Bungoma County. Research results also showed that 63 (48.5%) of respondents indicated that sometimes physical facilities are well maintained while at times they are not. This implies that institutional management are failing in their responsibilities in ensuring that there is regular safety and maintenance checks of the physical facilities for effective teaching and learning process to happen and to conform to the TVETA authority requirements. Lack of regular maintenance and repairs of infrastructural facilities may result to various crisis; accidents and destruction of the said facilities to non-repairable levels. To support study findings, Uko (2015) said that effective management is a precursor to facilities sustainability, utilization and maintenance as it enhances effective productivity by the teachers and overall performance of the students.

Fourthly, research results showed that all stakeholders were sometimes (M=2.86 and SD=1.02) involved in planning and construction of institutional facilities which are aimed at promoting institutional wide development. This implies that the management of the schools sometimes involved other stakeholders and at times, they do not hence hampering efforts of TTIs expansion. Lack of involvement of all stakeholders may affect the realisation of the planned projects as their input and perceptions, which could have been critical, is not considered. Furthermore, it is against the MOE policy not to involve stakeholders in planning and construction of school infrastructure. This explains why in some institutions, there were projects that were found not to have been completed on time while others had stalled due to issue of not involving stakeholders (parents, students, members of staff and regulatory bodies). When asked on whether institutional facilities were leased for use during school holidays for conferences and other meetings with the objective of generating extra income for programme expansion, 19 (14.6%) said this did not happen in their schools, 26 (20.0%) indicated that this rarely happened, 62 (47.75) said that this sometimes happened, 16 (12.3%) mentioned that it often happened and 7 (5.4%) said that this always happened. This implies that most schools sometimes (M=2.73 and SD=1.03) leased their facilities during holidays for conferences and others events with the aim of generating extra cash for improving school operations. This implies that most schools have not marketed their facilities to host meetings and conferences and thereby leading to loss of opportunity for revenue that comes with hosting such meetings. Other institutions across the country use this strategy to generate extra revenue to support school programmes.

It was also established that 3 (2.3%) never sought donor support, 26 (20.0%) rarely sought, 51 (39.2%) sometimes sought, 33 (25.4%) often sought and 17 (13.1%) always looked for donor support when developing school infrastructure with the aim of increasing students enrolment. This implies that most institutions sometimes (M=3.26 and SD=1.0) seek donor support and at times they do not hence resulting to admitting similar number of students on year basis. This explains why respondents earlier reported that the facilities for use by students and teachers were inadequate hence affecting internal efficiency of those institutions. This result also shows that most school administrations are not making frantic efforts to seek donor support in developing new infrastructure facilities. The study findings coincides with Awuor (2015) who found out that Forty percent of the respondents said the NGOs were helping them to pay salaries to BOM employed teachers. Thirty percent of the schools engaged the organizations in initiating infrastructure development while 40% said the NGOs were offering bursaries to needy students as the other forty percent had received book donations from the NGOs. When asked as to whether there was wastage when utilising physical facilities and income generating projects to improve internal efficiency, 46 (35.4%) said that this rarely happens and 47 (36.2%) agreed that this sometimes happen. This shows that sometimes (M=3.08 and SD=1.97) there is wastage of resources and sometimes there is

no. This implies that there are no appropriate measures that have been set up to address wastage of resources in the institutions that could lead to inefficiency of operations. Further, it shows that there is pilferage of resources that affects internal efficiency of the public TTIs in Bungoma County.

To generate more income to support TVET educational programmes, 22 (16.9%) never leased extra land for IGAs, 30 (23.1%) rarely leased, 44 (33.8%) sometimes leased, 24 (18.55) often leased and 10 (7.7%) reported that they always leased land for farming purposes to sustain educational programmes in their institutions. The result therefore shows that public TTIs sometimes (M=2.76 and SD=1.16) leases land and sometimes do not to generate additional income to enhance smooth running of institutional programmes. This implies that as a resource mobilisation strategy, public TTIs in Bungoma county are not maximising the resources they have at their disposal to generate additional income hence making them to be dependable on grants from the government. The study findings coincide with Awuor (2015) considering the availability of resources, most of the schools (59.0%) owned school farms as the major physical resource. Those who had school buses (32.8%) followed this. Fishponds were owned by 13.1% while *posho* mills (flourmills) were existent in 3.3% of the schools. The remaining 8.2% of the schools owned greenhouses. It was therefore evident that the schools had the capacity to support their budgets through divergent income generating activities. Results further showed that 55 (42.3%) of respondents agreed that their institutions often sought grants from government to aid in infrastructural development aimed at increasing students numbers. The respondents appeared to agree that this practice is often (M=3.8 and SD=0.96) done in their institutions. The result implies that the institutions board of government support in expanding and constructing new facilities for teaching and learning that are ingredients for effective internal efficiency and would result to high flow rate of students in the system. Corresponding to the study findings, Nwaokeonu (2014) study suggested universities appeared to be over dependence on the government for critical funding hence were not able to compete with other institutions. This implies that a proper relationship needs to be developed by BOM with the ministry to ensure that funding is provided for.

Asked as to whether they sold institutional products to meet budget deficits associated with inadequate support for fees and government grants, 18 (13.8%) said that they do not, 38 (29.2%) rarely sold, 44 (33.8%) sometimes sold, 20 (15.4%) occasionally sold and only 10 (7.7%) reported that they sale their institution products to cover budget deficits associated with inadequate and delayed funding from the government. The result shows that this practice is sometimes done (M=2.73 and SD=1.11) in the four public TTIs in Bungoma County. Money generated from the project is used to finance critical activities that are aimed at realising school goals and objectives. Composite scores shows that physical resource mobilisation initiatives are sometimes (M=3.13 and SD=0.94) conducted in public TTIs in Bungoma county. Through interviews, the resource mobilisation managers were asked to state the extent to which they mobilised physical resource for improving internal efficiency of schools. Officer number 1 said that:

> *The institute acquired COE status from the GOK in 2009. This was supported by supply of equipment and tools for farm machinery, surveying, TD development of tissues culture bananas, bee keeping ,farm tools and equipment among others.*

Another officer No. 2 also remarked that:

> *I have completed science complex labs, workshops, and F-B. Complex, repairs of building and machinery.*

Further, officer No. 9 had this to say:

We seek government support in building of academic tuition blocks. We also seek support from NG-CDF to build school infrastructures. We have also received generators form well-wishers to address power outages in the institution.

The above results therefore show that resource mobilisation managers are making frantic efforts to improve the internal efficiency of public TTIs through mobilisation of physical facilities. In contrast to the study findings, Nyanya (2015) found out that all respondents indicated that school physical facilities affected student dropout and repetition of classes in their schools. The researcher further conducted a correlation analysis to determine the degree of relationship between physical facilities mobilisation and internal efficiency of public TTIs. The results of the analysis are presented in Table 2.

Table 2 Relationship between Physical Facilities Mobilisation and Internal Efficiency of Public TTIs

		Physical Resource mobilisation	Internal efficiency
Physical Resource mobilisation	Pearson Correlation	1	.534**
	Sig. (2-tailed)		.000
	N	130	130
Internal efficiency	Pearson Correlation	.534**	1
	Sig. (2-tailed)	.000	
	N	130	130

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field data (2018)

Table 2 results shows that there exist moderate strong positive relationship (r=0.534 and p=0.001) between physical resource mobilisation and internal efficiency of public technical training institutions in Bungoma County. The statistics is also significant at 99% confidence level (p<0.01) leading rejection of the hypothesis. The finding implies that despite existence of above average strength of relationship, increase in institutional efforts towards mobilising physical resources would improve internal efficiency levels in those institutions. This concurs with Haramoto (2015) who established that underutilisation of facilities and equipments caused low internal efficiency in schools. In addition, Uko (2015) research in Nigeria found out that relationship that exists between a principal's proficiency, creativity and management of school facilities for overall academic performance is mutually reinforcing. Furthermore, Boru (2013) research in Moyale found out that headteachers were of the opinion that physical facilities can help to improve internal efficiency. Through open-ended questions, the respondents were asked to give strategies that could be used to mobilise physical resources in their institutions. They suggested that there is need for their schools to seek funding from other institutions and donors, regular repair and maintenance to be done, tutors to improvisation teaching and learning materials, outsourcing of facilities, planting of crops for sale, leasing of school facilities, start of bakery project and collaborating with other institutions. They indicated this strategies need to be done to improve physical facilities hence promote internal efficiency in schools. This is because availability of adequate physical facilities encourages meaningful learning and teaching.

Conclusion

Physical facilities such as classrooms, laboratories, libraries, workshops, and furniture and fittings which are required for improved internal efficiency. Physical resources are key factors for operations of technical training institutions. Without adequate resources, learning may not take place. The study investigated how physical resources were mobilised by public TTIs in the study area and how they affected the internal efficiency levels. Principals and

resource mobilisation managers mentioned that they have made considerable efforts to improve the status and condition of school infrastructural facilities like; science complex labs, workshops, food and beverage complexes, repair of buildings and machinery. Tutors indicated that mobilisation of physical resources only came through the grants that government provided to the TTIs infrastructure development. On the whole, the findings showed that educational facilities were grossly inadequate in the four institutions, a development which was much more compounded by obvious lack of maintenance culture in almost all the schools. Average statistics shows that physical resources were sometimes (M=3.05 and SD=1.3) mobilised by resource mobilisation heads in the institutions studied. The research findings showed that the majority of those institutions rarely engaged donors; county governments, NGOs, international organisations among others rarely sought grants to aid in infrastructure development. It was also found out that majority of the institutions rarely leased their school properties (lands, buildings, fields and even vehicles) to generate income for improvement of programmes in schools. According to study results, farming was the most common IGA because most institutions were located in rain fed zone and the farms form a teaching learning aid. The school bus project has also become popular with schools though the overhead running costs are quite high and might not be profitable in the end. The tutors mentioned that incidents of wastage of resources were evident in their school although not to a great extent. Correlation statistics showed that there exist a moderate level of relationship (r=0.534 and p=0.001) between physical resource mobilisation and internal efficiency of TVET institutions. This result reinforced the idea that frequent mobilisation of infrastructural resources in public TTIs increased the likelihood of internal efficiency levels. MLR results showed that there exists a significant relationship between physical resource mobilisation efforts and internal efficiency. This implied that physical resource mobilisation contributes to achievement of internal efficiency goals in public technical training institutions in Bungoma County. To improve on physical resource mobilisation efforts, there is need for public TTIs to consider developing systems through which products generated from IGAs are sold to buyers for supplementing budget deficits associated with inadequate support from government and late payment of fees by students. There is also a need for school board of management to consider hiring institutional facilities for conferences and meetings.

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