African Journal of Rural Development, Vol. 5 (3): July- September 2020 pp. 53-64. ISSN 2415-2838
This article is licensed under a Creative Commons license, Attribution 4.0 International (CC BY 4.0)

Financing higher education in Africa: The case of Kenya

E. J. MUKHWANA[1], J. TOO[2], A. KANDE[2] and H. NANDOKHA[2]
[1]Kenya National Qualifications Authority, PO Box 72635-00200, Nairobi, Kenya
[2]Commission for University Education, P.O. Box 54999 – 00200, Nairobi, Kenya
Corresponding Author: jums75@gmail.com

ABSTRACT
Demand for tertiary education in Kenya has significantly increased and continues to swell against the backdrop of insufficient funding thus affecting the quality of teaching and learning. The population of the tertiary education age group in the country (between 18 and 25 years) was 6.9 million in 2019 representing 3 per cent share of the total population. This calls for a review of the higher education spending in order to prioritise providing equitable opportunities for training this critical category that is expected to contribute towards national growth and competitiveness. This paper discusses the status of financing higher education in Kenya and points to developments that have been achieved by the subsector amid the challenges of insufficient funding.

Key words: Funding, Higher Education, Kenya

RÈSUMÈ
La demande d'enseignement supérieur au Kenya a considérablement augmenté et continue d'augmenter dans un contexte de financement insuffisant, affectant ainsi la qualité de l'enseignement et de l'apprentissage. La population du groupement d'âge de l'enseignement supérieur dans le pays (entre 18 et 25 ans) était de 6,9 millions en 2019, représentant 3% de la population totale. Ceci nécessite une révision des dépenses de l'enseignement supérieur afin de donner la priorité à l'offre d'opportunités équitables de formation dans cette catégorie critique qui devrait contribuer à la croissance et à la compétitivité nationales. Cet article examine l'état de financement de l'enseignement supérieur au Kenya et souligne les développements qui ont été réalisés par le sous-secteur dans un contexte de difficultés dues au financement insuffisant.

Mots clés: Financement, enseignement supérieur, Kenya

INTRODUCTION
In Kenya, demand for higher education has significantly increased over the years. The government's blue print - Vision 2030, at its core articulates the need to emphasize science and technology courses to help the country transform into "a newly industrializing, middleincome country providing a high-quality life to all its citizens by the year 2030" (GoK, 2007). Kenya's Vision 2030 has placed special

Cite as: Mukhwana, E.J., Too, J., Kande, A. and Nandokha, H. 2020. Financing higher education in Africa: The case of Kenya. *African Journal of Rural Development* 5 (3):53-64.

Received: 10 January 2020
Accepted: 15 May 2020
Published: 30 September 2020

demands on the tertiary sector as the leading engine that the economy must essentially rely upon to produce adequate numbers of middle level professionals needed to drive the economy towards the attainment of the Vision. The Government continues to reform the education and training sector to respond to the emerging issues aimed at ensuring that the country's goals and aspirations are realized (MOE, 2019).

Tertiary Education and Training in Kenya has experienced modest growth over the last 50 years. However, the country is yet to produce adequate and skilled middle level human resource required to meet the demands for national development. (MOE, Sessional Paper, 2019). To compete internationally, countries need mass high-quality higher education that immediately raises the question of how to pay for it. Kenya Government's effort to support the education sector is evidenced by among other factors the significance increases in the number of higher education institutions across the country as well as growth in enrolment rates.

Growth of Higher Education Institutions, 2015 - 2019. The number of higher education institutions in the country has grown remarkably over the years. As shown in Table 1, the number of Technical Vocational Education and Training institutions in the country rose from 874 to 2,191 between the years 2015 and 2019, a growth of 87%. The significant growth of TVET institutions was occasioned by the deliberate move by the Government to reinvigorate the sector in recognition of the pivotal role that the sector is envisaged to play in the social, economic and technological development of the country; laying a foundation for the vocational skills required for socio-economic development, equipping students with entrepreneurial skills and positive attitudes for self or formal employment, and providing practical training that is responsive and relevant to the country's sustainable economic and industrial development (Akala and Changilwa, 2018). The rejuvenated interest in TVET has exploded into a national debate resulting in the restructuring of the entire arm of education.

The TVET sub-sector has embarked on reforms geared, inter alia, towards enhancing access, retention rate and quality. Unfortunately, inadequate funding has over the years curtailed the anticipated growth, forcing institutions to operate with insufficient resources, thus failing to perform at optimal levels. Other factors aggravating sub-optimal performance include low level of involvement of enterprises in TVET training, out-dated equipment and infrastructure at training institutions, and lack of well-trained teachers (German Development Cooperation in Kenya, 2017; Akala and Changilwa, 2018).

The university subsector has similarly experienced tremendous expansion in the last couple of years (Table 1). Key developments in university education were the establishment of the Commission for University Education (CUE) under the Universities Act, No. 42 of 2012, as the successor to the Commission for Higher Education. The CUE is a Government agency mandated to regulate university education in Kenya. The second development was the initiation of parallel track (of private, non-subsidized) admissions to public universities. Beginning in 1998, courtesy of the pioneering work of Makerere University in Uganda followed closely by the University of Nairobi (UoN), a number of public universities started dual track admission programmes. All public universities now have these programs in place. These initiatives have greatly expanded university education opportunities, leading to a significant increase in university enrolments over the last decade (Mukhwana *et al*., 2017).

Table 1. Number of Higher Education Institutions in Kenya

	2015/16	2016/17	2017/18	2018/19	2019/20
TVET					
Public Vocational Training Centers	816	816	1186	1200	1200
Private Vocational Training Centers	0	29	47	47	47
Public Technical and Vocational Colleges	55	62	91	101	191
Private Tech and Vocational Colleges	0	382	627	628	742
National Polytechnics	3	11	11	11	11
Total	874	1300	1962	1987	2191
Universities					
Public Chartered Universities	23	30	31	31	31
Public Constituent Colleges	8	4	6	6	6
Private Chartered Universities	17	18	18	18	19
Private Constituent Colleges	5	5	5	5	5
Private Universities with LIA	12	12	14	14	13
Registered Private University	1	0	0	0	0
Total	66	69	74	74	74

The number of universities increased by 12.12 % from 66 to 74 universities within the five-year period. Despite its rapid expansion, Kenya's university sector is fraught with a number of serious challenges which, among others, include insufficient/declining public funding, declining quality and inadequate and outdated infrastructure (Gudo, 2016).The case of TVET Education in Kenya.

In Kenya TVET remains fragmented and delivered by different providers at various qualification levels. The fragmentation has arisen from the un-coordinated actions of multiple government and non-government actors. Governmental TVET institutions under the education ministry have been concentrating on producing middle level technical workers. Meanwhile, in non-formal TVET programs, NGOs, and private institutions offer employment-oriented TVET programs to various target groups, including school leavers, people in employment, school drop outs and marginalized groups in the labour market. But unlike formal TVET, these programs are not yet systematically delivered (Mukhwana *et al.,* 2017). Informal on-the-job training is widespread, but due to the absence of a systematic assessment and certification system there are currently no mechanisms to recognize informal occupational learning. Traditional apprenticeships in the small and micro enterprise sector constitute another presumably important, yet entirely un-researched, training environment. As a result of these challenges, the Kenya government embarked on TVET reforms a decade ago.

TVET reforms in Kenya reflects an important paradigm shift of recent years and place quality and relevance as its priority. The reforms focus on integrating global best practices to link to the TVET system outputs with labour sector requirements. TVET must respond to the competence, motivated and adaptable workforce capable of driving economic growth and development. The reforms have been majorly focusing on institutions, Human Resource Development (HRD), and improvement of the quality of teaching and training through infrastructural development and provision of equipment. Kenya hopes to achieve a TVET system which is relevant and flexible, effective, efficient, accessible, sustainable, and which fulfills its general obligations in an integrated training and working environment. TVET reforms aim to provide the Kenyan labour force with market-oriented training, a structural ability to adapt quickly to changing circumstances and market needs, and high quality in teaching through comprehensive and continuous teacher training and system. The Constitution of Kenya 2010 and Vision 2030 acknowledges the need to reform education and training through sessional paper no. 14 of 2012. There is need for better integration between the basic, TVET and University sectors in training. The TVET subsector focuses on providing skills that meet the workplace as well as self-employment guaranteeing human and economic development and therefore its outcomes must be human resources fit for the job market.

TVET funding and reforms in Kenya. Over the last 10 years, the government has enacted the TVET act of 2013 through which it created several institutions. These include the TVET Authority which accredits and carries out quality assurance for TVET training and educational institutions, the TVET CDACC which develops curricular and carries out assessment and examinations for the sector; and the TVET funding to support resource mobilization and management for the sector. In 2014, the Government enacted the Kenya National Qualifications framework act, which established the Kenya National Qualifications Authority (KNQA). The work of the KNQA cuts across the basic, TVET and university to bring better coordination and harmony between the various levels of the education system. In recognition of the important role that the sector is playing in supplying manpower to the nation, the Government is now building and equipping at least one TVET institution in each of the 290 constituencies in the country. Public TVET colleges students are also now funded by the Government according to the number of students that they have enrolled (Ksh 30,000 or US$300 per student per year) and students also have access to higher education loans (upto Ksh 40,000 or US $400 per student per year). Fees for all TVET students has also be standardized at Ksh 56,000 or US$ 520 per year. The Government has also started implementing Competence-based Education and Training (CBET) for the sector; and rebranding is on-going.

Sector Skills Councils and Occupational Standards. Quality and relevant skills development all over the world has been achieved through the involvement of the industry and in most cases coordinated by chambers of commerce and industry. Most of the chambers in many countries draw membership from the corporate sector, both private and public, including SMEs (Mukhwana, 2020). Chambers in many ways have supported skills development through engaging different players which include academia and industrialists as seen in many countries like Germany, Singapore, India, South Korea among other countries. Industry supports skills development through the development of occupational standards (OS) which inform training standards to guide curriculum development, delivery, assessment and certification. Kenya does not have a structured industry that supports skills development. A few attempts that have been made on an adhoc basis but whose success is yet to be felt and these include efforts by organizations like LIWA, KAM, HFCK, among others. A more comprehensive attempt is currently being considered through PWG Permanent working groups, however, this is yet to yield satisfactory results. For the country to develop and implement a comprehensive and sustainable skills development system, the KNQA is now in the process of developing the national skills development council and also formalizing formation of 9 sector skills councils (Mukhwana, 2020). This change of strategy is working to ensure that industry plays a more prominent role in the development of occupational standards through their respective Sector Skills Advisory Committees (SSAC). This system seeks to bring on all the players, with the KNQA developing a national policy on development of a sustainable skills development system; development of occupational standards with various sectors; while TVETA is developing training standards to ensure that training matches expectations of industry. Actual training takes place in technical and vocational training institutions with TVETA providing quality assurance. National Industrial Training Authority (NITA), Federation of Kenya Employers (FKE), Kenya National Chamber of Commerce and Industry (KNCCI), Micro and Small Enterprise Authority (MSEA), and Association of Professional Societies in East Africa (APSEA) are part of the core team that is involved in coordination of this vital sector and ensuring that training is both sustainable and meets industry needs.

Enrolment in Higher Education Institutions, 2015 – 2019. Expansion of the higher education sector has resulted in significant increase in enrolment in TVET institutions and Universities. Between the years 2015 and 2019, TVET subsector recorded a substantial increase in enrolment of approximately 70% from a total of 142,410 in 2015 to 430,598 in 2019. Enrolment in the university sector recorded a minimal decrease from 539,739 in 2015 to 509,473 in 2019 (KNBS, 2020).

University enrolments recorded a decline from 2016/2017 to 2019/2020 due to a decrease of self-sponsored students. Total university student enrolment declined by 5 per cent from 537,689 in 2016/17 to 509,473 in 2019/2020.

The sharp upsurge in TVET enrolment over the years is occasioned by the Government's deliberate effort to sensitize students on relevance of TVET courses and dispeling the long-standing notion that TVET courses are inferior and unmarketable and instead instilling a positive perception of TVET among the general public. Table 3 shows growth in enrolment over the years in both TVET and University subsectors.

Table 2. Trends in enrolment in Universities in Kenya for the period 2016/17-2019/2020

Category of University	2016/17	2017/18	2018/19	2019/2020
Private Universities	85,195	80,928	86,217	96,628
Public Universities	452,494	441,131	433,245	412,845
Total	539,739	522,059	519,462	509,473

Source: Economic Survey, 2020

In	2015/16		2016/17		2017/18		2018/19		2019/20	
	M	F	M	F	M	F	M	F	M	F
TVET										
National Polytechnics	5,717	3,920	18,540	11,676	24,205	16,513	14,508	30,838	60,234	41,844
Vocational Training Colleges	47,625	29,840	46,340	34,565	59,756	44,685	66,894	47,590	81,421	54,129
Public Technical and Vocational Colleges	32,221	23,087	17,589	9,569	29,584	17,982	49,454	34,948	65,347	46,763
Private Tech and Vocational Colleges	-	-	27,280	30,298	35,951	38,689	41,623	43,997	39,484	41,376
Sub Total	**85,563**	**56,847**	**109,749**	**86,108**	**149,496**	**117,869**	**172,479**	**157,373**	**246,486**	**184,112**
Total	**142,410**		**195,857**		**267,365**		**329,852**		**430,598**	
Universities										
Public Universities	278,155	183,655	267,774	191,182	257,252	180,332	241,178	163,936	251,540	161,305
Private Universities	39,125	38,804	45,833	42,527	53,115	47,024	52,154	45,279	51,494	45,134
Sub Total	**317,280**	**222,459**	**313,607**	**233,709**	**310,367**	**227,356**	**293,332**	**209,215**	**303,034**	**206,439**
Total	**539,739**		**547,316**		**537,723**		**502,547**		**509,473**	

Source: Commission for University Education, 2020 / KNBS Economic Survey, 2020

Higher Education financing

Higher education is expensive and expansion of the sector as well as improving quality comes at a price. Typically, countries pursue three goals in higher education namely, larger quantity with good access, higher quality, and constant or falling public spending (Barr, 2011). One of the key challenges to access, equity and relevance in Kenya's higher education has been the issue of funding. Demand for higher education in the country has continued to swell against a backdrop of decreasing ratio of financial allocation to universities from the Government, which has had a significant impact on access, equity, relevance and quality of education (Nyangau, 2014; Gudo, 2016). Many universities lack adequate physical and academic facilities to cater for the numbers of students that they have, such as lecture rooms, internet connectivity, libraries, books, laboratories, hostels, among others. As such the quality of the learning environment has been deteriorating over time and dropout rates are on the increase (Mukhwana *et al*., 2017). This has in turn affected the employability of the graduates with employers contending that many students are deficient in technical skills in the areas they have been trained.

Funding not only affects what is offered in the curriculum but also how it is offered, who teaches and the resources they utilise for teaching, as well as the teaching related support activities that they engage in. Tasked with teaching and research, the university, for example, requires academic staff to engage in both activities, so that newly generated information can impact on teaching and the assimilation of that information (Akuna *et al*., 2017).

Challenges in Kenya's education sectorn financing began way back in 1970s when the International Monetary Fund (IMF) pushed for implementation of Structural Adjustment Programmes when Kenya sought financial assistance to implement some of its development policies. The recommendation by IMF was informed by among other factors, corruption and ethnically inspired inefficiencies and inequity (MOE, 2008). Reduction of government spending in social sectors led to the introduction of user fees also referred to as cost sharing.

The Kamunge Report of 1988 recommended the adoption of a cost-sharing policy for financing education in Kenya. It recommended that the Government was to meet salaries of teachers and education administration as well as fund some limited school facilities while parents were to provide for tuition, textbooks, activity and examination fees. The communities on the other hand were to be responsible for putting up physical structure and ensuring their maintenance (MoE, 2008). Consequently, in 1994 the Government of Kenya decreased the education budget from 37% of its total annual recurrent budget to about 30%. Further, in 2006/07 public expenditure on higher education decreased by 9.4% (Sihanya, 2008). The effect of this included but not limited to a significant drop in enrolment rates, increased dropout rates, rationalized expenditure on education by spending less on teachers' salaries resulting in poor pay for teachers and ultimately a perceived poor quality education (AAIK, 2009). This low budgetary allocation has continued to be a major constraint in the higher education sector and yet the sector is the key vehicle for rapid industrialization as outlined in Vision 2030.

Over the years and in the endeavour to ensure that the tertiary sector is able to contribute to the country's development goals, the Government has been trying to prioritise spending in Higher education; gradually increasing capitation towards the sector, but the capitation has not been adequate to ensure that the institutions have the right infrastructure in place (MoE, 2016; German Development Cooperation in Kenya, 2017). A glance at the expenditure by the Ministry of Education for the period 2015 to 2019 shows that capitation towards recurrent expenses has been increasing at a much higher rate than the development expenses indicating that institutions have not been receiving enough monies for infrastructure and other development projects. Table 4 shows the amount of recurrent and development monies spent in TVET and Universities during the period 2015 to 2019.

An increase in Government spending on higher education was recorded, with funding on TVET institutions remarkably rising by 310% within the 5-year period, while university funding increased with 87%. The education budget in 2019/2020 almost exclusively supported recurrent spending (87%). Despite the notable increase, capitation to higher education institutions has not been commensurate to the expansive growth of the subsector. To ensure that more students are able to access higher education, funding through the Higher Education Loans Board (HELB) has been increasing despite the cuts especially to universities.

State Department for Vocational and Technical Training budget was expected to grow by 5.9 per cent to KSh 9.8 billion in 2019/20. The expected rise in development expenditure for the two State departments is mainly due to increases in funding to support infrastructure development in secondary schools and TVET institutions. The development expenditure for the State Department for University Education was expected to decline by 9.1 per cent to KSh 9.2 billion in 2019/20, on account of the reforms undertaken by the Government on the reduction of the number of public university campuses established (KNBS, 2020).

Table 5 shows Government capitation to HELB, loan repayments, and loans and bursaries awarded from 2014/15 to 2018/19. Government capitation was reduced by 7.9 per cent to KSh 7.0 billion in 2018/19, while loan repayments declined by 12.0 per cent to KSh 4.4 billion in 2018/19. The amount of loans awarded increased by 5.7 per cent to KSh 11.7 billion in 2018/19 from KSh 11.1 billion in 2017/18. The total amount of loans and bursaries awarded stood at KSh 11.9 billion in 2018/19 (KNBS, 2020).

Table 6 shows the number of loan applicants, beneficiaries and amount of loans awarded to students in public and private universities and TVET institutions by Higher Education Loans Board (HELB) from 2014/15 to 2018/19 academic years. The total number of loan applicants increased by 6.0 per cent from 281,044 in 2017/18 to 297,989 in 2018/19, with 171,851 and 126,138 total males and females loan applicants respectively in 2018/19. The total number of loan beneficiaries rose from 275,823 in 2017/18 to 293,249 in 2018/19, representing an increase of 6.3 per cent. The amount of loan awarded increased from Kshs. 11.1 billion in 2017/18 to Kshs.11.7 billion in 2018/19.

Table 4. Expenditure for Ministry of Education, 2015/16 – 2019/ (in Kshs. Millions)

	2015/16	2016/17	2017/18	2018/19	2019/20
Recurrent Expenditure					
State Department for University Education	57,971.43	54,025.03	87,311.67	91,661.06	108,723.07
State Department for Vocational and Tech Training	2,308.13	2,479.53	2,511.6	7,777.79	17,100.86
Subtotal	60,279.56	56,504.56	89,823.27	99,438.85	125,823.93
Development Expenditure					
State Department for University Education	5,002.01	9,106.74	3,569.62	10,155.01	9,253.23
State Department for Vocational and Tech Training	4,248.17	5,746.18	8,454.88	9,245.2	9,787.14
Subtotal	9,250.18	14,852.92	12,024.5	19,400.21	19,040.37
Total Expenditure	69,529.74	71,357.48	101,847.77	118,839.06	144,864.30

Source: KNBS Economic Survey Report, 2020

Table 5. Government capitation, bursaries and loans repayments, 2015 - 2019

Year	GOK Loans Capitation	GOK Bursaries Capitation	Loan Repayments	Total GOK Capitation and Loans Repayment	Loans Awarded	Bursaries Awarded	Total Loans and Bursaries Awarded
2014/15	4514.0	192.0	3257.1	7963.1	6945.3	155.4	7100.6
2015/16	5858.0	192.0	3982.6	10032.6	7573.1	216.3	7789.4
2016/17	6177.8	237.0	4143.0	10557.9	9452.3	254.4	9706.7
2017/18	7651.8	237.0	4954.2	12843.0	11058.9	232.5	11291.3
2018/19	7045.7	237.0	4360.7	11643.3	11685.6	210.4	11896.0

Source: KNBS Economic Survey Report, 2020

Table 6. Loan applicants, beneficiaries and amount of loan awarded by sex

Academic year	No. of Loan Applicants			No. of Loan Beneficiaries			Amount of Loan Awarded (Kshs. Million)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Public Universities									
2014/15	112495	59931	172426	109022	55847	164869	4384.2	2224.2	6608.7
2015/16	119,225	64662	183887	115194	61514	176708	4607.8	2413.7	7021.5
2016/17	137476	74026	211501	134726	72545	202271	5403.2	2909.3	312.2
2017/18	130285	91531	221816	127605	90283	217888	5368.5	3797.7	9166.2
2018/19*	122,522	84777	207299	120094	83568	203662	5320.2	3644.6	8964.8
Private Universities									
2014/15	3335	2390	5725	3011	2050	5061	118.7	80.8	199.5
2015/16	3198	2344	5542	2896	2095	4991	112	80.3	192.3
2016/17	4086	2958	7044	3718	2692	6410	149.1	108	257.1
2017/18	7384	5844	13228	7341	5812	13153	313.9	249.3	563.3
2018/19*	14402	10968	25370	14081	10680	24761	661.3	494.3	1155.6
TVET									
2014/15	5051	2551	7602	5051	2551	7602	88.8	48.2	137
2015/16	9823	5507	15330	9823	5507	15330	224.9	134.4	359.3
2016/17	22326	12058	34383	20093	10852	30945	573.3	309.6	883
2017/18	24425	21575	46000	23791	20991	44782	692.6	636.8	1329.4
2018/19*	34927	30393	65320	34677	30149	64826	806.1	759	565.2
Total									
2014/15	120881	64872	185753	117084	60448	177532	4592	2352.2	945.3
2015/16	132,246	72,513	204759	127913	69116	197029	4944.7	2628.4	7573.1
2016/17	163887	89042	252928	158537	86089	244626	6125.4	3326.9	9452.3
2017/18	162,094	118950	281044	158737	117086	275823	6375	4683.9	11058.9
2018/19*	171851	126138	297989	168852	124397	293249	6787.7	4897.9	11685.6

Source: KNBS Economic Survey Report, 2020

The amount of loan awarded to male applicants increased by 6.5 per cent to Kshs. 6.8 billion in 2018/19 while that of female applicants increased by 4.6 per cent to Kshs. 4.9 billion in the same period. During the period under review, almost all loan applicants from public and private universities, and TVET institutions were awarded loans, based on the needsassessment.

CONCLUSION AND RECOMMENDATIONS

The financial allocation made to higher education institutions is essential to ensure adequate human and physical resources. Considerations of resources include the total amount available nationally for higher education, as well as effective allocation and equitable distribution between and within institutions. Perception of lack of resources is common to all universities and TVET institutions across the world, and desire for additional resources may indeed be limitless. As the Government continues to support growth of the tertiary education subsector, it is worthwhile to note that an efficient sufficiently scaled, well-functioning and efficiently endowed system to support students at tertiary level is critical if Kenya is to achieve its expansionary goals for the higher education sector in a financially sustainable manner, while concurrently ensuring promotion of equity and quality (Blom *et al*., 2017). While an increase in tertiary education funding has been observed in recent years, this has not kept pace with student numbers; and it is important for the Government to increase development funding to the institutions considering the vast growth of the subsector and rapid changes in technology. It is also important that increasingly Kenya Government increases funding for research and outreach to institutions of higher learning in order to leverage their impact n society.

The role of Higher Education, especially, universities has often been stated as teaching/ training, conducting research to get solutions to diverse challenges confronting communities and disseminating their findings. While universities have done satisfactorily well in training and graduating students, the same cannot be said about their research activities and providing solutions to emerging issues in industry or society. It is understandable that universities have experienced huge cuts from the exchequer, but they also stand indicted for not aggressively generating fundable projects, which would interest partners to pump in their resources. As is the practice in the West or developed world, corporate entities, government agencies and NGOs work closely with universities – thus providing the much-needed funds to support research initiatives. This is the direction which universities need to give more attention to in order to remain relevant and sustainable. It is imperative that our higher education institutions involve industry and NGOs in their teaching, research and outreach to achieve this objective. This paper makes the following specific recommendations:

1. The Kenya Government and indeed other African Governments should make deliberate effort to increase funds towards development activities in both TVET institutions and Universities;
2. TVET institutions and universities should adopt financial leakage-proof systems to ensure that internal systems are not susceptible to weak financial management, thus undermining transparency and accountability;
3. There is need for prudent accounting (and auditing) of all resources raised under parallel programs at public universities in Kenya and in other countries implementing such a system;
4. There is need for a comprehensive study and report on sustainable mechanisms for funding tertiary education in Kenya; similar studies should also be conducted in other African Countries;
5. There is need to adopt the Differentiated Unit Cost (DUC) method of sharing funds for public universities as this provides more effective and efficient approach to financing Higher Education; and encouraging universities

to offer programs that are in demand though expensive to run; and

6. Higher Education sector should engender strong partnerships with the private sector that could motivate them to support some programmes or research agenda.

ACKNOWLEDGEMENT

This paper is a result of many years of work by the authors within the higher education sector of Kenya. Our work and research have been inspired by the many universities, TVET institutions, NGOs, development partners and students that we have worked with in ensuring quality education in Kenya. It has been informed by the rich and fruitful interactions that we have had with many people. We believe that the paper will go a long way, not only in creating better understanding of the funding situation for higher education in Kenya, but also help shape its future. We thank RUFORUM for convening some of the meetings and conferences at which we have had opportunity to share and sharpen our ideas.

STATEMENT OF NO CONFLICT OF INTEREST

The authors declare that there is no conflict of interest in this paper.

REFERENCES

Action Aid International Kenya (AAIK). 2009. IMF Policies and their impact on education, health and women rights in Kenya. Nairobi: Action Aid International Kenya.

Akala, W. and Changilwa, P. 2018. Status of Technical and Vocational Education and Training (TVET) in post-secondary education in Kenya. *Journal of Popular Education in Africa* 2 (7) : 15 - 25.

Akuna, E., Ondieki, D., Barasa, P., Otieno, S., Wamuyu, C. and Amateshe, M. 2017. Higher Education Leadership and Governance in the Development of the Creative and Cultural Industries in Kenya. Dakar: CODESRIA.

Barr, N. 2011. Financing Higher Education: Lessons from Economic Theory and Operational Experience. pp. 25-48. In: Shiro Armstrong, C.B. (Ed.), Financing Higher Education and Economic Development in East Asia. Canberra: Australia National University.

Blom, A., Raza, R., Kiamba, C., Bayusuf, H. and Adil, M. 2017. Expanding Tertiary Education for well-paid Jobs: Competitiveness and Shared Prosperity in Kenya. Washington DC: WorldBank.

Commision for University Education (CUE). 2018. University Statistics Report. Nairobi: Commision for University education, Nairobi, Kenya.

German Development Cooperation in Kenya. 2017. Promotion of youth employment and TVET. Embassy of the Federal Republic of Germany, Nairobi, Kenya.

Gudo, C. 2016. Influence of financing on quality of University Education in Kenya. *International Journal of Managerial Studies and Research* 4 (1): 49 - 58.

Kenya National Bureau of Statistics (KNBS). 2020. Economic Survey Report. Nairobi: Kenya National Bureau of Statistics.

Ministry of Education (MOE). 2008. The Kamunge Report on Education and Manpower Training for the next Decade and Beyond. Nairobi: Government of Kenya.

Ministry of Education (MOE). 2016. Education Sector Report. Nairobi: Government of Kenya.

Ministry of Education (MOE). 2019. Sessional Paper No. 1 of 2019. Nairobi: Government of Kenya. Ministry of Education (MOE). 2019. Sessional Paper No. 1 of 2019 on Policy Framework for Reforming Education and Training for Sustainable Development in Kenya. Nairobi: Government of Kenya.

Mukhwana, E., Too, J. and Kande, A. 2017. Transforming University Education in Africa: Lessons from Kenya. *African Journal of Rural Development* 2 (3): 341-352.

Mukhwana, E. 2020. Reforming the TVET Sector for Improved Productivity in Africa. Thought piece presented during the 15th RUFORUM Annual General Meeting, 2-6 December 2019, University of Cape Coast, Ghana.

Nyangau, J. 2014. Higher education as an instrument of economic growth in Kenya. Forun for International Research in Education 1 (1): 7-25.