

Developing Technical Education Institutions with a Focus on Vision 2030, & Cytonn Weekly #27/2018

Focus of the Week

Over the recent months, we have seen the Kenyan Government focus on improving the quality of education offered in government-sponsored technical institutions. Some of the actions the government has taken are (i) increasing budgetary allocation towards the development of the Technical, Vocational Education and Training (TVET) institutions and (ii) proposing to reduce tuition fees for courses offered in TVET institutions. This is motivated by (i) the need to create a workforce that will help in the implementation of the Big Four Agenda in the sectors of manufacturing and affordable housing, and (ii) the need to achieve the Vision 2030 goals on technical training. According to Vision 2030, the government seeks to ensure equitableness and access to Technical, Vocational Education, and Training. This will be achieved by establishing a central body to place government-sponsored students in TVET institutions, building at least one vocational training center per Kenyan Constituency and one technical training center per Kenyan County, incorporating the use of ICT in the dissemination of education and using flexible modes of delivery for the modules, and ensuring enhancement of quality and relevance of skills in industrial development by streamlining management and assessment of industrial attachment. At the same time, Cytonn has recently ventured into Education Investment, with its first institution being the Cytonn College of Innovation and Entrepreneurship, a tertiary institution offering diploma and certificate courses, as well as short professional courses, and focusing on developing entrepreneurship skills for its students.

This week we focus on actions, that in our view, the government and private investors should take to ensure they provide technical training that will create a workforce that participates in the achievement of the Vision 2030. These actions include (i) **improvement of education access and relevance**, (ii) curriculum change to include technical training in lower education levels, and (iii) including entrepreneurship and innovation in technical training. We also highlight the German Dual VET system, which has successfully implemented technical training in their education system and highlight the impact this has had on their economy and the lessons that education providers in Kenya can learn from them.

In our write-up, we focus on 3 sections, namely, actions towards providing technical training for the achievement of the Vision 2030, a case study of the Germany's Dual Vet system, and we conclude with ways Kenya can effect changes in technical education institutions to achieve Vision 2030.

Section 1: Actions towards providing technical training for the achievement of the Vision 2030

a. Improvement of education access and relevance

In 2016, the number of private technical institutions stood at 411, against 898 public technical institutions. According to Vision 2030, the government aims to improve access to technical education

by building nine technical training institutions in nine counties without public TVET institutions. To achieve this, the government has (i) increased its budgetary allocation to the TVET governing body over the years, with the latest increase of 175%, to Kshs 16.5 bn in the 2018/2019 budget from Kshs 6.0 bn in the 2017/2018 budget. The budget increase is to facilitate the construction of new technical training institutions in counties without one, (ii) proposed to reduce the fees charged in technical institutions, thus improving access of training to all students, and (iii) allowed student to apply to join public technical institutions through the Kenya University and Colleges Central Placement Service (KUCCPS).

In addition to what the government has done so far, we believe that the following actions would help in improving access and relevance of the education provided in technical institutions:

- The government should consider Public-Private Partnerships (PPP's) when developing both infrastructure and curriculum for colleges. Such partnerships will ease the financial burden on both the government and the private investors and provide insights on relevant training as required by the market, and,
- ii. Implement regulation to ensure that the quality of institutions is not compromised. With rising enrolment in technical colleges, (a growth with a CAGR of 7.6% in the last 5-years), the quality of education provided is at risk of being compromised if the infrastructure is not improved to support this growth. Continuous assessment of institutions by the Technical and Vocational Education Training Authority (TVETA) to ensure they meet the required quality and standards should be implemented.

b. Implementation of the proposed curriculum change to include vocational training in lower education levels

The government is seeking to conduct a comprehensive curriculum review, reform and digitalization to encourage mentoring, moulding and nurturing talent to align with Vision 2030. The Ministry of Education conducted a review of the 8-4-4 curriculum and introduced the 2-6-3-3-3 curriculum. The curriculum entails that pre-primary will be compulsory for 2-years followed by 6-years in primary school, then 3-years in junior secondary, and 3-years in senior secondary where they will be specializing in fields such as arts and sports sciences, social sciences, and STEM (science, technology, engineering, and mathematics). After completing senior secondary, students will have an option of joining either technical institutions or a university. The change of the curriculum from a merit-based to a competency-based one will produce employable graduates especially in fields such as manufacturing and agriculture that will spur economic growth. In our view, the success of the proposed curriculum will require (i) inclusion of industry players in the development and implementation of the curriculum. This will ensure that the goal of producing employable graduates is achieved, and (ii) training of trainers involved, by both government and private education providers. It will ensure there is transference of information about the latest work place practices to students.

c. Including entrepreneurship and innovation in technical training

In the Kenya vision 2030, entrepreneurs fall under the pillar of economic development. It aims to develop various sectors such as agriculture, manufacturing, tourism and IT-enabled services that will seek to alleviate unemployment and poverty, spurring economic growth. With the rising unemployment rate, which the International Labour Organization puts at 11.5%, the younger generation is encouraged to venture into self-employment. In as much as the government has introduced entrepreneurship in technical institutions offering, there is a need to improve on the delivery method for the course to ensure they are practical and are relevant to the discipline being studied. Various institutions have taken steps to restructure their offerings, in order to integrate entrepreneurship. Some of the methods that are being used to ensure that students are well trained on the subject include:

- i. Early introduction to the subject, as early as primary or secondary school. This will help with creating an interest that can be nurtured into a practice,
- ii. Ensuring that the entrepreneurship courses or units offered are well crafted, are comprehensive and practical,
- iii. Partnering with organizations that are willing to offer opportunities of practical exposure to students on how businesses are run,
- iv. Development of incubation hubs through which students are introduced to mentors and prospective investors, and
- v. Ensuring that tutors and lecturers responsible for the delivery of content are well versed with the subject and have experience in the field.

Section 2: A case study: Germany's Dual Vet system

We now look at the case study of a technical and vocational training system that has successfully ensured access of technical training and enhanced the entrepreneurship skills of the younger generation and highlight the lessons that technical education providers in Kenya can learn from Germany. Germany's Dual VET System has over the years been amended to ensure it provides the best quality of education, vocational guidance and technical training. The system is a combination of theory and practical aspects embedded in a real work environment. Two thirds of the students that leave secondary school go on to join vocational institutions. The apprenticeship scheme provides companies with cheap labour while students are trained, making the country an industrial powerhouse. The training usually begins at secondary school where students study to get qualifications to attend vocational training.

The system provides four options for secondary schools that offer specialized training, therefore influencing their career choices as listed below;

- a. The first option is mostly academically oriented and therefore caters for the most academically able students, thus enabling them to gain entry requirements to university,
- b. The second option caters for more vocationally inclined students, and the focus is more on the world of work. After completion, the student can choose to continue into an apprenticeship, attend full-time vocational college or join the first option to gain entry requirements to university,
- c. The third option caters to those with low ability or social problems. The young people attending this type of school end up in government schemes, unemployed or in further full-time vocational training, and,
- d. The fourth option encompasses all the three options of secondary schools in one school, but the students learn in separate streams.

The government and private education providers can learn and implement the following lessons from the Dual VET system

- a. Inclusion of apprenticeship during technical training: In the German dual system, students spend parts of the week at the institution and the other parts in an apprenticeship in one of the small and medium enterprises (SMEs). The system takes from two to three and a half years to complete. The training conducted by SMEs is governed by the Vocational training act of 1969 to ensure standardized training and assessment, regardless of region and industry. Regarding curriculum, the industry gives its input to enable vocational education trainers to know what skill sets are in demand. The government should start a PPP where students in technical institutions are given weekly duties in the country's emerging SMEs. This will provide cheap labor for the economy while also giving real work practice to the students,
- b. **Quality assurance and quality control**: The German dual system ensures access to quality training by requiring a trainer to register with the appropriate chambers in the industry. Germany has compulsory chambers for various occupations such as architects, dentists, engineers, lawyers, notaries, physicians and pharmacists. The chambers are responsible for the implementation and

content of training. To ensure quality, the chamber form committees to deal with all issues regarding practice. The Kenya government through TVETA should ensure quality of training provided in technical institutions by continually assessing the quality and relevance of content delivered and the employability of graduates from these institutions. In cooperation with various bodies that regulate professions in the country, the government should implement measures to ensure that trainers are qualified for their roles.

- c. Involvement of industry players in curiculum development: The industry plays a key role in the development of curricula for the courses. Employers and trade unions are at the forefront of creating new policies and modernizing any training regulation. The industry gives the latest information about the respective field to students in training and enables them to have input in the TVET curriculum development. The implementation of development in curricula in Kenya should involve all the stakeholders, which will ensure the information in the curricula is up to date and is in line with industry practice, and,
- d. Inclusion of practical entrepreneurship training: In the dual vet system, entrepreneurship aspects are in the school and company training curricula. The vocational education intends to foster global competence within the profession, with the main emphasis being on independence and responsible acting, planning, and reflection. In some cases, training for competencies needed for starting a company or being self-employed is Currently, the Kenyan curriculum in Technical Institutions includes a basic Entrepreneurship course. However, this unit is mainly taught in theory and students rarely get practical exposure and training on entrepreneurship. In our view, education providers should ensure that their students have a practical entrepreneurship training that exposes them to how businesses are started, and run. The government should also encourage private and public companies to integrate some aspects of entrepreneurship in the industrial attachment curricula to ensure they develop practical entrepreneurship skills and promote global competence in students.

Section 3: Conclusion

In conclusion, in order for the technical education provided in Kenya to match what is required for Vision 2030, the government and private education providers should ensure that;

- i. There are sufficient technical institutions in the country to give youth access to technical education while implementing regulation to guarantee the quality of education in the institutions,
- ii. They involve industries in coming up with curriculums to bridge the gap between the education offered and the skill sets needed in the workplace,
- iii. Trainers should also be well experienced in the field of study to ensure the transfer of information is seamless and relevant to the job market, and,
- iv. The entrepreneurship course in the technical institutions is comprehensive and practical while ensuring the trainers involved in delivery of the content are well versed in the field. Also, creation of innovation hubs where students are introduced to investors and mentors would boost the emerging enterprises and ideas.

Public-private partnerships should also be encouraged in the sector, where the Kenyan government focuses on improving access to quality technical education by ensuring every county has a technical training centre and by subsidising the fees to make the technical education accessible, while the private sector is involved in the development of the curriculum, training of students and offering of internships and apprenticeship opportunities to students.

Disclaimer: The views expressed in this publication are those of the writers where particulars are not warranted. This publication, which is in compliance with Section 2 of the Capital Markets Authority Act Cap 485A, is meant for general information only and is not a warranty, representation, advice or solicitation of any nature. Readers are advised in all circumstances to seek the advice of a registered investment advisor.

Liason House, StateHouse Avenue The Chancery, Valley Road www.cytonn.com Generated By Cytonn Report

A product of $Cytonn\ Technologies$