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Enhancing Technical Skills Development for Kenya's Structural Transformation

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Summary

Kenya's transformation agenda to become an industrialized economy offering a high quality of life is dependent on promoting acquisition of requisite skills, and development of technical innovation. The Kenyan government proposed strengthening the country's technical capabilities by enhancing the capacities of Science, Technology and Innovation institutions (STI). Despite the existence of a policy framework to implement this objective, capacity gaps exist: especially the technical skills required to enhance the country's productivity growth. This is partly due to the academic rather than competency-based nature of the training offered in STIs. In addition, the informal sector – which constitutes slightly over 80 per cent of enterprises in Kenya – lacks capacity to upgrade and develop requisite skills to promote growth in productivity.

A 2018 study by KIPPRA, "*Building Economic Complexity in Kenya: Laying the Foundation for Women and Youth Employment"* – aimed at establishing the level of productive knowledge or capabilities within the Kenyan economy – found that the country had limited productive knowledge and capabilities, as reflected in its export structure over time. Based on the study's findings, it is recommended that: The country needs to revamp TVET education from a theory to a competency based focus to advance an economic transformation agenda; The private sector needs to develop a peer to peer learning framework to address the challenge of skill development for small scale and informal enterprises; and Exchange programs and partnerships with successful manufacturing firms from outside the country need to be enhanced to guide and nurture apprenticeship training in Kenyan firms.

Introduction

Kenya harbours ambitions of transforming itself into a newly industrializing, middle income country that offers a high quality of life within a clean environment. This is according to its

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economic blueprint, the Kenya Vision 2030. The AU Agenda 2063 and the UN Sustainable Development Goals (SDGs) also seek to achieve sustainable development through industrialization and technical innovation. Innovation and technological advancement provides strong grounds for industrialization through improvement in production methods and reduction in production costs. According to the World Bank (2017), skills acquisition and development are key elements in the transition from low productivity to high productivity economic activity in African countries.

The Kenya Vision 2030 identifies Science, Technology and Innovation (STI) as a driver of wealth creation, societal transformation, and global competitiveness. To harness the benefits of developments in STI, the document recognizes the need for additional investment – especially in sectors that lag in application of advanced technological methods. As a strategy to promote the use of STI, the Kenyan government proposes strengthening the country's technical capabilities by enhancing the capacities of STI institutions by; upgrading the skills of personnel; enhancing their infrastructure; and strengthening their linkages with players in the productive sectors (Republic of Kenya, 2007). Technical and Vocational Education Training (TVET) centres, National Polytechnics, Technical Training Institutes, Vocational Training Centres, Technical Training Colleges and other institutions specified by the Ministry of Education, offer avenues through which STI capabilities can be built. Apprenticeship and on-job training are other avenues through which skills can be developed.

Despite the above policy provisions, there exist capacity gaps in the technical skills required to enhance the country's productivity growth. Presently, players in the manufacturing and agribusiness sector are unable to find suitable candidates to fill positions because of the skills mismatch between the industry requirements and available graduates in both the primary[1] and support[2] activities of the value chain. Skills mismatches emanate from: disequilibrium between demand and supply for skills in the job market; potential workers not being trained in the relevant field required by employers; and over qualification of workers. The current situation is informed by the country's skill development structure that is more academic oriented.

Skills Development for Structural Transformation in Kenya

In Kenya, the skill set required for structural transformation is often obtained through formal education and training acquired via: formal schooling; technical-vocational institutions; and other institutions of higher learning. The majority of workers who have gone through formal schooling manage to access employment in formal enterprises. It is however, widely acknowledged by employers in the manufacturing sector that presently, the formally acquired skills rarely meet market demands – because the learning in this kind of set up is theory rather than competency based. The graduates therefore end up lacking the requisite employability skills for productivity growth, because their skills do not meet market demands.

Workers in the informal sector are however less privileged in terms of access to the foundational skills acquired through academic training, either as a result of not attending school, very few years of schooling, poor quality of education while in school, or very little learning having been acquired through the formal schooling process. Training in the informal sector is characterized by an un-structured approach to capacity building for the following reasons: high opportunity costs of offering the training (since some enterprises

[1] Primary activities in the value chain include: production, logistics, marketing and sales.
[2] Support activities in the value chain include: human resource management, Information and technology, and procurement among others.

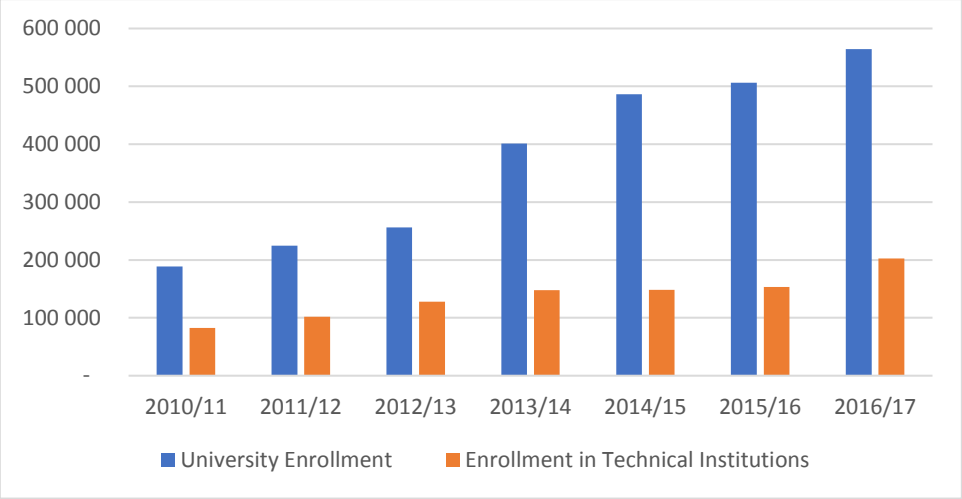
employ very few workers); inadequate capacity to identify training needs; lack of resources to undertake training; or low demand for higher skill sets given the calibre of clientele they serve.

TVET centres are earmarked as vehicles through which the government will produce a critical mass of workers with the requisite technical skills and competencies to drive the country's economic blueprint – Kenya Vision 2030. The low uptake of TVET training, especially among the youth, has created a relative shortage in supply of technically skilled graduates, as compared to degree courses. We now discuss the challenges experienced in terms of the uptake of TVET courses, despite their importance to economic transformation.

Technical Skills and Structural Transformation

Figure 1 demonstrates the extent to which university enrolment has eclipsed technical institution enrolment in the last seven years. The appeal for TVET courses has declined over time, due the perception that it is meant for those who eventually take up blue collar jobs, while university graduates get placement in white collar jobs.

Figure 1: University vs Technical Institution Enrolment 2011-2017



Source: Republic of Kenya, 2017

In the past, TVET education has been associated with students who are unable to proceed with higher education, and would probably end up earning a living in informal employment. In addition, while the quality of training might be enough to run small scale enterprises, it might not meet the threshold for graduates who intend to compete in the global market. Further, the capacity gaps on the part of instructors, coupled with the low quality of equipment, add to the reasons why more and more students opt for university education.

In the above mentioned study[3] conducted by KIPPRA to establish the level of productive knowledge or capabilities within the Kenyan economy, it was found that the country had limited productive knowledge and capabilities – as reflected by its export structure over time. Kenya's export products were comprised of agricultural produce or natural minerals that had undergone marginal value addition. Agricultural commodities like tea, coffee and horticulture have dominated the country's exports over time – most of them in their raw form, while high technology products like machinery or motor vehicle parts did not feature in the export basket. Gaps were identified in higher education, technical and vocational training, and business

[3] Building Economic Complexity in Kenya: Laying the Foundation for Women and Youth Employment (2018)

support programs. The major challenge was the existence of a skills mismatch between the skills on offer in higher education and TVET institutions, relative to the contemporary global market skill demands.

The high quality of skills development programs in countries like Germany is attributed to the duality of practical and theoretical knowledge acquired in the workplace and at vocational training centres. This approach is reinforced by their labor market structure, which rewards occupation-specific skills. Germany's industrial and service sectors are thus able to attract skilled labor sufficient to support its industrialization goals. The European Commission recognizes that a skilled workforce sustains countries' productivity growth, which boosts job creation and alleviates poverty. Another example is the Republic of South Korea where emphasis is laid on skills acquisition and technology training as a way of promoting productivity, as opposed to academically oriented training. This is achieved by creating National Competency Standards that guide workers' performance within an industrial setting. Malaysia employs a demand side skills development approach to vocational training. In this model there is a strong involvement of industries in TVET deliveries alongside institution-based training, but in the final analysis, learning institutions are held accountable for training outcomes.

In Sub Saharan Africa (SSA), skills training is characterized by a lack of practical relevance, a general mismatch with job market needs, low investment in training facilities, and limited capabilities of the core educators. The outcome is a skills development system that barely meets the objectives of its existence. SSA youth face numerous challenges due to the absence of employable skills, while the industrialization process has stagnated over time because of deficiencies in the requisite technical skills essential for productivity growth.

In Kenya, there is a wide range of professions that suffer a deficiency of workers with employable skills. Manufacturers routinely identify capacity gaps in accounting and marketing, yet there are several higher learning institutions offering these courses. The reality is that there is also a challenge for employers in acquiring services of graduates who can apply their training to achieve results in the real world. The academic nature of the training denies graduates valuable problem solving skills that can give the company that hires them, a competitive edge among other industry players.

Information from the "Building Economic Complexity" study in Kenya revealed that there were deficiencies in the supply of graduates with employable skills. This not only applied to graduates with training in technical courses, but also included administrative courses like Marketing and Accounting. Listed below are some positions manufacturers found difficulties in filling, due to the low supply of competent graduates:

1. *Electrical Engineers*
2. *Fashion Designers*
3. *Food science Quality Assurance officers*
4. *Carpenters*
5. *Veterinary services*
6. *Network Developers*
7. *Plant Managers*
8. *Plumbers*
9. *Welders*
10. *Carpenters*

Conclusions and Policy Recommendations

The key challenges in Kenya's structural transformation lie in building the requisite skills and capabilities for productivity growth. Over time, this has not happened at a pace that could help Kenya achieve its envisioned development goals. TVET training, the vehicle through which the country was meant to attain high quality technical skills in line with Kenya Vision 2030, AU Agenda 2063 and the UN SDGs, has not managed to deliver its promise of capacity building students in readiness to face global competition in innovation and technical progress. Firstly, there is a low uptake of TVET courses due to the negative perception of vocational training

in the country. Secondly, learning in these institutions has been geared towards acquisition of theoretical rather than practical skills that are applicable for skill intensive production activities. Thirdly, there exists a mismatch between job market demands and the skills obtained in TVET centres.

Finally, skills acquisition and development has not been structured to cater for the informal sector, yet this sector is comprised of slightly more than 80 per cent of enterprises in Kenya. This explains the low productive nature of the informal sector, and subsequently the low level of sophistication of the country's exports.

1. The country needs to revamp TVET education to advance its economic transformation agenda. For this to happen, there is a need to refocus developing middle level technical institutions as agents of structural transformation.
2. There is a need for the private sector to develop a peer to peer learning framework in order to address the challenge of skill development for small scale and informal enterprises. Large-scale enterprises can develop arrangements with informal players and small-scale enterprises that will see them gain skills and knowledge that will help them enhance their productivity.
3. Efforts to redesign education at technical institutions of learning from theory to a competency-based focus are needed. This will improve graduates' employability, and their output in a practical setting.
4. Exchange programs and partnerships with successful manufacturing firms from outside the country need to be enhanced, to guide the nature of apprenticeship training in Kenyan firms. These linkages will not only build capacity, but will in the long run enhance the global competitiveness of the country's manufacturers, based on exposure to best practices in their respective sectors.

References and useful resources

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