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Education policy, vocational training, and the youth in Sub-Saharan Africa

Moses Oketch*

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Abstract: Technical, vocational education, and training has remained an explosive topic because it can create a divided society in terms of education and the benefits associated with it. Internationally, it has always been a complex and controversial topic compared to the general education strand. It has presented inconsistent arguments over the years, particularly in Sub-Saharan Africa where policies have too often prescribed it as the panacea to addressing youth unemployment. On the one hand, it seems logical means of addressing youth unemployment and on the other hand, vocationalization has never proven to be a straightforward solution or remedy to youth unemployment in Sub-Saharan Africa. It has not been able to address the mismatch between education and the labour market and equally it has failed to prepare the youth adequately for the specific occupations associated with it. Over the years, reality for individuals has been that general education has the promise of better career mobility and higher wages than vocational streams. Technical, vocational education, and training thus acquired the tag of being ‘useless’ education and only useful for those with less aspiration for better paying jobs. Yet to date such strong arguments against full acceptance of vocational education and training have not deterred African countries from continuing vocational education and training programmes in public education systems and there is a growing view that it is what is needed, and yet expansion and investment is never directed at the technical, vocational education, and training. Consequently, technical, vocational education, and training continues to maintain its inherently powerful but also paradoxical appeal in Sub-Saharan African education systems. This paper, using the cases of Kenya, Ghana, and Botswana will examine how policies have shifted over time, what has worked for technical, vocational education, and training and what has not worked and why. The paper is cast around the present theme on youth bulge in Sub-Saharan Africa and the potential demographic dividend associated with the bulge.

Keywords: vocational education, youth, skills, education policy, employment, demographic dividend

JEL classification: A10, E10, I10, J10

*Institute of Education, University of London; m.oketch@ioe.ac.uk

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1 Introduction

Although the incidence of youth unemployment in Sub-Saharan Africa (SSA) is lower than several other regions of the world, it is still high at 20 per cent (African Economic Outlook 2013; ILO 2012). Youth unemployment is therefore a major concern to governments in the region and is seen as undermining Africa's demographic dividend (ILO 2012). To address youth unemployment, too often, technical, vocational education, and training (TVET) is seen both by donor organizations and national governments as the panacea. Consequently, policy prescriptions have, over the years, promoted expansion of TVET in schools (Middleton, Ziderman, and Adams 1993; Oketch 2007).

Based on a survey carried out in 2004, Oketch (2007) noted that TVET is defined to include a range of learning experiences which are relevant to the world of work and which may occur in a variety of learning contexts, including educational and workplace-related. It is important to note that TVET is desperately varied in terms of patterns of emphasis and provision across the countries of SSA (Oketch 2007). Provision of TVET involves lower and upper secondary levels, post-secondary but non-tertiary provisions, and provision at first stage tertiary level (Oketch 2007). The second kind of provision is one that is outside the formal education systems. These tend to be in the informal sector through apprenticeships or traditional forms of training offered via artisan workshops owned by master craftsmen and women. The latter leads to preparation and trades in carpentry, masonry, auto-mechanics, welding, foundry, photography, tailoring, dress-making, cosmetics, and so on (Atchoarena and Dullec 2001). They can be provided as commercial entities where students pay some fees, or through family ties. Often one of the characteristics of these informal training provision is the lack of technical skills although there is great evidence of creativity amongst the master craftsmen/women (Atchoarena and Dullec 2001). The focus of this discussion will be on TVET offered within the formal public education systems.

The work of Philip Foster in the 1960s was the first to challenge the notion that vocational education is what African countries needed to address youth unemployment (Foster 1965). Foster's work was considered to be at the heart of the debate about whether schools and what was taught can influence society through changing students attitudes towards jobs and work, or whether schools and their pupils are themselves influenced by the existing economic structure and reward systems around them. Foster warned about the limitations of schooling to change a society based on his in-depth study in Ghana (King and Martin 2002). As noted by Oketch (2007), he exploded the vocational school myth in Africa. Forster argued and cautioned against full-scale TVET policy and promotion and advocated for small-scale TVET that was more aligned to the actual ongoing development and one that was not within the formal education system (Foster 1965: 154). To operationalize his proposal, he went further to recommend that 'the burdens of vocational training should be shifted to those groups who are demanding skilled labour of various types' (Foster 1965: 158).

There has been much response to Foster proposals, some in support and others offering differing perspectives. Supporters included Blaug (1973) who questioned the prevailing notion that vocational education can offer the best solution to youth skills and employment. However, to date, as noted by Oketch (2007: 220), 'many of the arguments over TVET continue to rest on the assumption that vocational training is more specific to job entry than general education'. Much time has passed and today, vocational education is no longer simply training to facilitate job entry, but instead a way to facilitate vocational-specific skills over lifetime. The content has changed in the rest of the world, but the question is whether this change has also occurred in

SSA in a manner that can harness the youth bulge. To assess this, this paper discusses the effectiveness of formal TVET education systems in Africa, especially in terms of preparing the youth for job markets. The paper elaborates on the strengths and weaknesses of placing greater emphasis on vocational training by reviewing the cases of two countries, Kenya and Ghana, as countries that introduced comprehensive vocationalization policies at the same time, but which failed to address youth unemployment, and in contrast to Botswana that cautiously introduced vocational subjects but considered to have had a successful vocationalization approach along the lines similar to what Foster (1965) had recommended. It reflects on the African youth dividend and the growing interest in TVET as the solution to Africa's youth unemployment.

2 TVET potential and conundrum

The theoretical debate promoting TVET in general is that it produces 'specific human capital' which provide specific job-relevant skills that can make the worker more readily suitable for a given job, thereby making him/her more productive, in contrast to general education which creates 'general human capital' with attitudes and aspirations associated with limited white collar jobs (Tilak 2002). The promotion of TVET is thus based on the notion that it can improve youth attitude towards work so that they embrace skilled manual work as opposed to limited white collar jobs (Middleton, Ziderman and Adams 1993).

Some of the arguments used to advance policies in favour of TVET are as follows: (i) TVET can cure youth unemployment; (ii) TVET leads to technological know-how which is associated with innovation and technical change development; (iii) For those youth who are not very academically capable, TVET offers hope as an alternative to the competitive general education; (iv) TVET trains mid-level personnel who are much needed for the full functionality of the labour force system; (v) TVET can reduce poverty as it offers skills leading to employment and to income – a simple theory of change and the power of TVET; and (vi) global interconnectedness means that TVET needs to be regarded as a means of promoting global technical skills (Psacharopoulos 1997).

The theoretical debate and arguments in support of TVET have seriously been questioned leaving TVET an explosive education topic. TVET has presented inconsistent arguments over the years. On the one hand, it is seen as the panacea to addressing youth unemployment, and on the other hand, vocationalization has proven never to be a straightforward solution or remedy to youth unemployment because it has not been able to address the mismatch between education and the labour market, and it has equally failed to prepare youth adequately for the specific occupations associated with it (Blaug 1973; Oketch 2007). Over the years, the reality for individuals has been that general education has the promise of better career mobility and higher wages than vocational streams. TVET thus acquired the tag of being 'useless' education and only useful for those with less aspiration for better paying jobs (Oketch 2007). Yet, as noted by Oketch (2007) 'such strong arguments against full acceptance of vocational education and training have to date not deterred many countries from continuing vocational education and training programmes in public education systems' (Oketch 2007: 222). Consequently TVET continues to maintain its inherently powerful but also paradoxical appeal in education systems (Oketch 2007). Indeed Middleton, Ziderman, and Adams (1993) argued that TVET had fallen 'under the cloud in the minds of some analysts and policy makers, while it continued to hold a place in the sun for others' (Middleton, Ziderman, and Adams 1993: 69).

SSA's experience with TVET has not been all positive, and the arguments in favour of TVET and the notion that it is a cure to youth unemployment have been contradictory in themselves in the region in the sense that they relegate TVET to a second class type of education, which is

primarily occupational and undesirable for those with higher aspirations (Oketch 2007). In practice, those who have followed the TVET path often take longer to find jobs and when they find employment, the jobs are perceived to be of dead-end in nature career-wise. TVET has also retained its colonial tag as it was what the colonial education policy recommended and provided to a majority of Africans who had a chance of training. It is not surprising that the initial educational policy in SSA emphasized the expansion of access, the elimination of illiteracy and ignorance but did not lay any particular emphasis on the role of TVET in addressing these challenges. The educated African was meant to take over the jobs that were performed by the colonial government and TVET was not considered the means to attain such skills (Oketch 2007).

However, soon after independence, many governments in SSA realized that they needed to embrace TVET, but this was done within the traditional assumptions without much thinking on how to cast TVET to be complementary to general education and vice versa. Instead, what was ensued was a system of education that placed TVET against general education, but relegating it to an education training that did not have prominence and did not attract those with higher aspirations. It was more or less creating two tier education system-general track for those with higher ability, often also associated with their socio-economic status and/or prior education of their parents against TVET, for those of lower ability and always from low socio-economic status and/or low or zero prior education of their parents. Emphasis of TVET by these newly independent nations was bolstered by massive support from international agencies, notably the World Bank, which provided educational loans for the establishment and expansion of public TVET and thus legitimizing pre-employment training as an important component of public education (Middleton, Ziderman, and Adams 1993). Between 1963 and 1976 over half of the Bank's investment in education in developing countries was directed towards TVET. Even as the focus changed within the Bank to embrace and broadened investing towards general education (basic education) after much initial resistance in the 1970s, investing in TVET still held a special central place in the expanded lending (Middleton, Ziderman, and Adams 1993: 4). As noted earlier, there was already a wave of research, led by Foster's work that showed that massive investment in TVET was not yielding the promises that were associated with it, in terms of employment, and meeting the aspirations of the youth. Simply put, the evidence that was gathered by research did not match the benefits that were associated with TVET. Foster questioned this massive assumption that TVET could change the attitudes of the youth to employment, and highlighted the limitation of schools to change society independent of the surrounding environment (Foster 1965).

3 Overview of TVET trends in SSA

Oketch (2007) provides a comprehensive review and discussion of TVET in SSA and notes that school systems in nearly all the countries have maintained two paths: a general education path which enables pupils who gain access to them to continue in their schooling to higher levels, and a vocational path which focuses on immediate entry into the labour market and to address limited access opportunities which crowd out the majority of youth from the general education pathway at the post-primary level. Some countries have tinkered with policies that create integration between general and vocational and to minimize these two running as parallel systems, but there is no evidence of much success. This is mainly because TVET still retains its traditional mould and is perceived as a low status strand of education that has got no proper equivalency and transferability of credits and skills to the general education and vice versa.

By contrast, the general education track graduates enjoy a career pathway that has career progression and often they are also able to continue with their education to the higher levels of

the educational ladder. Moreover, general education track has been the emphasis of the Education for All (EFA) framework which operationalizes the Millennium Development Goal (MDG) commitment to universal access to basic education. The general track is also homogenous and well-organized. Its link to the MDGs has made governments to pay greater attention to it and devote more resources towards expanding access.

In the most part, it is training meant for direct entry into the world of work. TVET acting as a foundation for entry into higher levels of education has remained problematic and in his review, Oketch (2007) notes that there is no evidence of this among the countries studied. It is noted that 'much of TVET is initial vocational training (IVT) undertaken by young people prior to entering the labour market and in preparation for self-employment in both the rural and agricultural sector and the urban informal sector. The study concluded that 'there was lack of massive evidence of any schemes aimed at re-skilling and up-skilling demanded by the knowledge-driven economic set up that has been associated with globalization (Oketch 2007: 224).

The review also noted that most TVET for which there is data is that which is provided publicly within the school systems. Non-formal and informal learning that form part of TVET are mainly not represented in the available data.

Another element reviewed by Oketch (2007) is the level of TVET provision within the formal education systems; there are varied practices. In some cases, TVET is completely parallel to general education with its own separate institutions. In others, which is a majority of cases, TVET is offered alongside general education in an integrated school system forming a dual track system. Much of TVET starts at secondary level in several countries but there is variation with some having TVET starting at what is referred to as junior secondary whereas for others, it starts at senior secondary. Still for others, what is referred to as full TVET starts at post-secondary level, often with their own institutions parallel to the general education strand. Table 1 summarizes some of the features of TVET in SSA countries that were selected on the basis of availability of data.

Table 1: Some indicators on TVET provision in SSA

	When does TVET start	TVET offered in parallel with general education	TVET integrated or follows specific curriculum	TVET share of secondary enrolment, in %
Botswana	Senior secondary school	no data	Integrated	5
Ghana	Lower secondary	-	Follows specific curriculum	-
Senegal	Senior secondary	Not clear	Not clear	-
Seychelles	Post-secondary level	-	-	-
Zimbabwe	Post-secondary	-	12 of curriculum is integrated	-
Eritrea	Secondary level (no distinction as in lower/junior secondary and senior/upper secondary)	-	Specific curriculum	2
Ethiopia	Secondary level (no distinction as in lower/junior secondary and senior/upper secondary)	-	Specific curriculum	2
Malawi	Secondary level (no distinction as in lower/junior secondary and senior/upper secondary)	-	Specific curriculum	2
Namibia	Secondary level (no distinction as in lower/junior secondary and senior/upper secondary)	-	Specific curriculum	2
Niger	Secondary level (no distinction as in lower/junior secondary and senior/upper secondary)	-	Specific curriculum	2
South Africa	Secondary level (no distinction as in lower/junior secondary and senior/upper	-	Specific curriculum	2

	secondary)			
Burkina Faso	Secondary	-	Integrated	9
Togo	Secondary	-	Integrated	9
Congo	Secondary	-	Integrated	9
Gabon	Secondary	-	Integrated	9
Mali	Secondary	-	-	Over 10
Côte d'Ivoire	Secondary	-	Integrated	9
Cameroon	Secondary	-	Integrated	Over 10
Uganda	Secondary	-	Integrated	9

Source: Based on Oketch (2007).

So, there are potentially two policy issues to be addressed here. The first is to seek ways to integrate TVET with general education and vice versa so that TVET is not perceived as second rate education. This integration should make it possible for those with TVET to move through the educational ladder. The second issue is to develop and implement policies that encourage greater investment in TVET. In fact, Lauglo (2005) in his overview of TVET in secondary education notes that Botswana has succeeded because it has been able to invest good levels of resources into TVET. Oketch (2008), however, questions whether it is only resources that will make TVET in SSA to function. Clearly, resources are one aspect, integration and content specificity levels are others. Ambivalence remains in its status and supporting policies that do not relegate it into a lower type of education compared with the general track.

Oketch (2007) notes that governments have in fact failed to provide functional and quality TVET. Instead they should leave it to the private sector and retain a supervisory and/or financing role. Private providers of TVET are growing more than was the case in the 1970s and 1980s, or earlier years of independence around 1960s. Atchoarena and Esquieu (2002) are among the last to conduct extensive research on private TVET provision. From their research, they concluded the following: (i) private provision is experiencing phenomenal growth and in some countries, such as Mali, it is dominant to government provision; (ii) the provision is varied in terms of ownership, where some are operating as individual enterprises and others are organized regarding their institutional framework, legal status, their objectives and ways of financing themselves – however, detailed information is often difficult to obtain; (iii) the majority of the private providers cater to students who come from low socio-economic backgrounds; (iv) many of the private providers operate illegally because they cannot be traced in government registration books; (v) commercial trade courses are dominant among private providers; (vi) They are totally tuition-based, and are market-driven and flexible; and can change courses easily to respond to demand; (vii) they are not co-ordinated in any way to work closely with enterprises but the students themselves make choices which they think respond to labour market skills demand; and (viii) overall the private providers offer better prepared, relevant courses than the government, but they also have greater quality variability because they are commercially-driven rather than being guided purely by merit as institutions.

Like all the other provisions, there is no pathway of access into higher levels of education even for those who access private TVET provision. Nonetheless, the commercial private provisions are thriving and meeting the labour market skills demand for those able to afford them. There is potential that private sector provision can be strengthened and this will require a clear policy framework that allows the government to take an inspection role and in some case, the government can even fund the commercial TVET provision to train the youth in specific skills. The fact that they are flexible and respond to the labour market needs means they would offer value for money to the governments and at the same time meet the educational demand. In fact, in some cases, these commercial provisions have shed off the low perceptions associated with TVET. For example, many that specialize in community and technology related training have thrived and attracted those from the general education strand. They have also thrived because they have modelled their courses in such a way that it does not generate or lead to dead end careers.

TVET financing is also an important aspect that varies in pattern across different countries. It ranges from less than 1 per cent in some countries and over 12 per cent in others as a proportion of total educational expenditure. Like provision, this low investment in TVET signal that it is not an area of priority yet the rhetoric in public documents highlight the strategic role that TVET is supposed to play in the development of relevant skills among the youth in SSA. However, the financing in the private sector is much harder to obtain and the data that is normally cited is only that which is official within government provision.

Oketch's (2007) discussion concluded the following: (i) over the years, TVET has more or less maintained a business as usual trend, with piece meal policies here and there, leaving the TVET framework untouched and guided by the traditional mould which has relegated it to a second class pathway in the education system. This is problematic and policies have not been bold enough to address this; (ii) TVET is entrenched in either junior or senior secondary levels but even here, it forms a marginal position and is not fully desirable education. Consideration should be given to proper TVET that is not an alternative pathway but one equally rewarding pathway in the education system that is well-synchronized with the general education model. The US community college model is one that is less costly and can be easily adopted in the African contexts; (iii) the conversion of polytechnics into universities has simply sent another strong message that TVET is not as valued. While some of these have referred to themselves as technical universities, they have rebranded and taken on a general education outlook rather than promoting high level TVET. This is yet again an example of the policy contradictions within governments whereby on the one hand TVET is praised for its relevance and on the other, stronger TVET institutions such as polytechnics are converted into universities with clear preference for general education; (iv) the image of TVET as last resort pathway of education requires addressing within policies. This has not happened and Foster's view that TVET benefits are a myth still remains. The demand continues to be in general strand; (v) the existence of a dual track system which tracks pupils into ability groupings does not auger well for TVET policy and transformation. Such tracks need to be dismantled and TVET and general education integrated in one way or another; (vi) the potential benefits associated with private provision should be tapped into and encouraged as they appear better able and prepared to offer flexible and alternative provision to government. Expanding private sector provision through close partnerships with government and enterprises is worth supporting by governments in SSA.

From the general review, there is no doubt about the strategic role that TVET can play in meeting skills needs amongst the youth in SSA and contributing to their employability. However, TVET requires transformation, beginning with shedding off its traditional mould, and making it relevant to the skills needs and demands of the labour market (Oketch 2007). On the basis of

these general observations and reviews, the next section assesses TVET policies and youths in Ghana, Kenya, and Botswana.

4 The case studies

4.1 TVET in Ghana

Ghana is one of the peaceful countries in SSA. In the recent years, it has made tremendous progress in political reforms through the strengthening of its democratic space and freedom of expression. A multi-party political system has taken root in the country and is thriving. This has enabled an environment for economic growth. According to the World Bank (2013a) Ghana's population in 2011 was approximately 25 million and GDP growth in 2010 was 8 per cent and this shot up to double digit growth of 14.3 per cent in 2011.

TVET forms an integral part of the Ghana education system and had been so since it attained independence in 1957. Several reforms have been implemented in Ghana to align the education system with the needs of the society. One of the main reforms was the 1987 reform focusing on TVET which also changed the structure of the education system. Before the 1987 reform, the dominant provision at the secondary level was general education. Whatever existed as TVET was minimalist. The education system was cast to promote progression into the university. The existing TVET was at middle school level which prepared participants to enter technical institutes and later on national polytechnics, but as noted earlier, the entire system was basically geared towards promoting general education. The 1987 reform introduced pre-vocational skills programme made up of 12 subjects and pre-technical skills programme made up of five subjects (Akyeampong 2005).

TVET was embedded within the Junior Secondary School (JSS) which now had a dual function: (i) preparation of students for further Senior Secondary School (SSS); and (ii) terminal qualification for entry into the labour market or self-employment. Greater diversification nonetheless was at the SSS level. Akyeampong (2005) has noted that the reforms were so extensive and with significant teaching ramifications, and yet the consultation process leading to the reforms was not inclusive. He notes that the 1987 reforms were politically motivated reforms because there were no consultations with key stakeholders or driven by clear empirical evidence, although he also acknowledges that the noble goal was expanding educational opportunity (Akyeampong 2005: 167-169). A significant feature of the diversified SSS curriculum was and still remains the case, the opportunity it accorded students studying different pathways to also select from other pathways. The combination was such that students in the TVET pathway could also select one or two elective subjects in science or languages such as French. In other words, it requires students to mix subjects as between general core subjects and TVET-related subjects. Elective subjects were as follows (Akyeampong 2005: 171, Table 5.2):

- Science (physics, chemistry, biology, math/technical drawing)
- Technical (technical drawing, physics, maths, applied electricity/metalwork)
- General arts (e.g., geography, economics, French, maths)
- Visual arts (general knowledge in art, graphics, ceramics, economics/French).

The reformed education system and the diversification introduced in the SSS was to address some of the challenges that had beset TVET in Ghana and to remove the dual track model by integrating TVET with general education, under what was referred to as a diversified secondary system. The merit of this was to encourage or allow those in the TVET pathway subjects to have the opportunity for progression into further education similar to those who were in the general

pathway. Soon, however, the universities came up with their own criteria which considered some of the SSS pathways as inadequate preparation for university entrance. As noted by Akyeampong (2005), this was a reflection of preference for general education that had entrenched itself within the psyche of Ghanaians, including the university system which had felt that this integration of TVET and general pathways was ill-conceived and not adequately 'intellectual' for university education. In short, there was still the feeling that even under the integrated system with the combination of electives which allowed students to have knowledge of TVET and foundations in general education did not produce university material students.

The reforms expanded access as had been intended and helped to remove the impediments that had previously existed for TVET. At the JSS level, there was clear input into TVET and at the SSS level, there was diversification based on areas of strength and interests that students brought with them from the JSS. What was clear was that in the SSS, if one was strong in general subjects, they were compelled to also select subjects that were related to TVET and vice versa, for those that preferred TVET at JSS, they would follow that path into SSS but had to select some general subjects as part of the study/curriculum composition. But even this attempt to integrate TVET and general education did not do the trick of amending the negative perceptions that had been associated with TVET subjects. It became more or less window dressing as a majority of students did not like the TVET subjects at JSS. As noted by Akyeampong (2005), TVET remained unpopular with students (2005: 175). TVET subjects were seen as inferior and only suitable for academically weak students, and this was a view that even the teachers held.

Agriculture and business which were classified as TVET were acceptable and enrolled the most students under the TVET subjects cluster. There was also a gender dimension to the reformed JSS and SSS. Girls tended to be the ones who enrolled the most in the pre-vocational subjects at JSS. Still even at this stage, Foster's (1965) views presented earlier on regarding TVET in Ghana, played in the minds of students as many considered TVET subjects at JSS as less likely to lead to better employment in the future. Again, this was now a clear reflection of the mismatch between what policy advocated and the reality and actual choices that students made in their areas of study. Citing King and Martin (2002) in their follow up study on TVET in Ghana, Akyeampong (2005) concluded that curriculum reforms in Ghana aimed at integrating TVET and general pathways as was intended did not achieve their goal. This is because the labour market reward system still valued general education and students could see this for themselves. The analysis presented by Ampiah and cited by Akyeampong (2005) reflects that the diversified model in Ghana did not address the TVET dilemma. Pre-vocational subjects at JSS were still considered inferior and more specialized TVET at SSS level while useful had already suffered the negative perceptions that were associated with the JSS-prevocational programme. They therefore recommend a liberal arts and science model at JSS, more or less following the American model which in many respects does not start from the premise that there are dual paths, but rather that the foundation of functional TVET is well-grounded general education.

The attempt to introduce TVET early on in the system creates an undesirable dual track and the attempt to diversify does not offer a strong solution. The recommendation then is to strengthen liberal arts and science in the early years and allow for different pathways later on with the possibility for lateral and vertical movement. This does mean that the agenda for TVET in Ghana has to shift away from considering it as a means of coping with youth pre-vocational skills and those unable to transit into SSS, but rather that the foundation of all education up to JSS should be general arts and science and at SSS, serious TVET can be introduced. This would also mean that JSS is not terminal as such, but is the preparation for SSS where proper TVET skills can be instilled and those willing to proceed to university from the TVET strand can do so, and those wanting to join the labour market will also feel rather adequately prepared to do so. This is more or less similar to the model that Botswana followed and strengthened, in which

everyone selected to join TVET is not from a pool of those perceived as inferior in terms of their prior education preparation but rather that the general pathway and the TVET pathway at the SSS select from the same pool of students from the JSS. This might do a blow to the perception that TVET is inferior. Indeed, the reform in Ghana missed this opportunity because by introducing pre-vocational skills at JSS and making it terminal, it did not address the negative perceptions of TVET engrained for many years in Ghana and these were carried forward even at the SSS level.

4.2 Kenya case study

Before the ugly 2007 post-election violence, Kenya was regarded as one of the promising countries in SSA. It had managed to lead a peaceful transition of power in the 2002 election but this good image was destroyed in 2007. Corruption was also rampant in the government and tainted all the hope that had been associated with the 2002 elections. According to World Bank (2013b) Kenya's population in 2011 was approximately 41.6 million and GDP growth was 4.3 per cent in 2011, far below its potential. Much of this has been due to political apprehension before the elections which also led to a decline in the number of tourists, one of Kenya's previously vibrant foreign exchange earner sector. The impact of the images of corruption in government and the aftermath of the 2007 post-election violence hampered economic growth. It is hoped that in the coming years, and with now stable political transition, the economy will be transformed to attain double digit growth.

Youth unemployment remains one of the challenges that Kenya faces, and the youth population makes a significant number of the country population and remains the most unemployed and most vulnerable. Since its independence in 1963, TVET has been central in addressing the issue of youth employment. As noted by Mwiria (2005: 227) 'interest in vocationalizing the secondary school curriculum dates back to the mid-1970s and early 1980s following the recommendations of two government-appointed commissions. However, it was not until 1986 that the current system of vocationalizing school curriculum was institutionalized with the implementation of a new national system popularly known as the 8-4-4 system'. This new system restricted the education system to entrench the vocational curriculum right at the primary and secondary level mainly to equip youth with pre-employment vocational skills. The system was changed from what was previously an elite academic model of seven years of primary, four years of secondary, two years of advanced secondary schooling (also known as A level), and three years of university to eight years of primary, four years of secondary schooling and four years of university (8-4-4). There has been much expression that the 1986 reform was rushed without wider inclusive consultation and agreement.

In terms of the curriculum content, the TVET under the 8-4-4 system comprised core vocational subjects and those that were referred to as industrial subjects. The former included agriculture, accounting, commerce etc. while the latter included building construction, electricity, metal work, etc. The aim was to instil among the learners skills for self-reliance in self-employment ventures. The various commissions, but notably the 1999 Koech commission whose official title was 'Totally Integrated Quality Education and Training (TIQUET): Report of the Commission of Inquiry into Education System' made recommendations which appeared to suggest that TVET should be made foundational, but rather the core subject areas should be the focus. It only emphasized information technology and even went further to recommend the scrapping of the 8-4-4 system indicating it vocational idea was a waste of time. This did not auger well with the then President Moi who championed the idea of the 8-4-4 system and much of the commission's recommendations were rejected. There were nonetheless several recommendations relevant to TVET, but these were policy statements in broad terms, not any different from what had been there before and repeated thereafter in several documents. These included the following: (i)

increased training opportunities for those leaving school. This meant pre-employment vocational training opportunities; (ii) focus on training in agriculture, industry and commerce; (iii) Promotion of vocational entrepreneurship skills; (iv) increasing the number of artisans, technicians, and technologists; (v) exposure of students to scientific and technological trends, skills and ideas and promotion of lifelong skills that enable learners to better adjust to their work and domestic worlds through inculcation of competencies that promote creativity, communication, cooperation, innovativeness, and problem-solving abilities; and (vi) promoting and preparation of TVET students for post-secondary middle level institutions as well as university. It appears that policy recommendations (v) and (vi) are in tandem with what can lead to functional TVET. But the downside of these policy recommendations is that they did not go a step further to recommend a national qualification framework that would make TVET a rewarding educational pathway. It had the right ideas in the last two recommendations, but stopped short in articulating how they would be operationalized.

It is not surprising that nothing actually changed and TVET continued more or less with business as usual. This was a missed opportunity to chart a different path for TVET and bring it at par with general education. However, the recommendation that there were to be core competencies that precede TVET is an important one. As noted earlier, one of the moulds that TVET needs to shed off is that idea that it recruits from a lesser ability pool of learners. This is the first transformation that TVET needs to address, and this also has an implication on the level where TVET should start – either at junior secondary or senior secondary, leading to post-secondary training. Mwiria (2005) offers extensive review of the 8-4-4 system and its TVET character, looking at specific examples. He concluded with depressing comments. The whole policy change, including restructuring the education structure was ill-conceived to address the crisis problem of youth unemployment. He agreed with Psacharopoulos's (1997) earlier argument that education is not the solution to an unemployment problem. Here is how Mwiria put it 'By blaming education for this [unemployment] crisis, education was made a victim for a problem it is incapable of resolving' (Mwiria 2005: 294). The main concern was that the causes of unemployment were not well understood and believing that TVET was the solution without first understanding the problem was in itself misplaced. The 8-4-4 system has been much criticized and many parents objected to it. Indeed the super elite simply did not want to follow the system and enrolled their children in international schools that basically maintained the elite British model. In the end, the system was watered down so much such that its vocational orientation that it started with has all but disappeared. Today, the system mainly promotes general education and the combinations that made it vocational are no longer talked of much. Subjects such as computer are readily accepted, and so is business and commerce whereas the core and real TVET subjects such as agriculture, metal work and so forth have become less visible and many pupils do not very much study them.

To make things even more difficult, the Kibaki administration that came to power in 2004 did not change the 8-4-4 system but seemed even less enthusiastic about promoting vocational learning. Once Free Primary Education was introduced as a policy that is what consumed the attention, rather than the TVET curriculum. The government in fact moved away from addressing youth unemployment through the education system, instead, a focus was placed in offering youth manual employment through governments scheme supported by the World Bank. The scheme known as Kazi Kwa Vijana (Swahili word for jobs for the youth) was to employ youth in government projects such as road maintenance, cleaning etc. and in the process enable them to earn a minimal wage. It was hoped that free primary education would encourage completion of primary education. The next stage was the completion of secondary and thus the introduction of free day secondary education policy. The Kibaki administration thus simply 'ignored' TVET.

As noted by Mwiria (2005), the simplicity notion of TVET has not helped. What is needed is recognition that TVET must start with teaching analytical skills, communication skills, democratic values, and environmental awareness. These, he reckons, are what can form strong foundation for TVET. Examination should not be about memorization, but rather applicability of skills and knowledge.

The Kenya Vision 2030 that sets priorities to make Kenya a middle-income country by 2030 does not seem to have simple TVET ideas. It is promoting innovation and high level technical skills. It recognizes the fact that the youth are Kenya's potential for development. It recognizes rapid urbanization and the need to create better jobs, to professionalize and expand the informal sector. This is much different from the 8-4-4 vision of TVET which was aimed at containing the youth in the villages and teaching them to appreciate agriculture.

4.3 Botswana case study

Combining its political stability and democracy since its independence in 1966, freedom from corruption, Botswana is often considered Africa's shining success story. It has experienced sustained economic growth over the years. Botswana is also considered to have been successful in its implementation of TVET. Weeks (2005) attributes this success to Botswana's resistance to implement a full vocationalized secondary school curriculum as the reason for its success. The approach that Botswana implemented was to opt for only providing some pre-vocational education through a limited number of practical subjects. Full vocationalization which Weeks (2005) defines as 'the devotion of more than three to five hours a week to master trade' of secondary schools is not possible in Botswana, nor has the government endorsed it' (Weeks 2005: 136). The other aspect is that initially Botswana had to import teachers but it also made deliberate efforts to train its own teachers. It also invested heavily in TVET infrastructure mainly because it had adequate resources and small population to do so (Weeks 2005).

Education structure

From the time of its independence, Botswana has changed its education structure severally. Before independence in 1966 it was a 8-3-2 structure. It changed to 7-3-2 on the eve of independence, and in 1986 this was again changed to 7-2-3 as an interim step to 6-3-3 structure (Mautle and Weeks 1993 in Weeks 2005).

Reforms

In 1977 and 1979 the first national commission on education stated as follows 'The purpose of the schools at all levels will be to prepare children for useful, productive life in the real world. They should have the basic skills of literacy, numeracy and the knowledge that will make them self-reliant later in life, whether they continue full-time schooling, study on their own, find employment, or become self-employed' (Botswana 1977: 3 in Weeks 2005: 100). The first commission recommended that in senior secondary schools students should not take more than one practical subject. There was the clear belief that to take more than one practical subject might disadvantage a student when it came to tertiary selection (Weeks 2005: 100).

The second commission came about in the 1993-94 period and it simply re-affirmed the need to return to the 7-3-2 structure. It was aimed at guaranteeing universal access to basic education whilst consolidating vocationalizing the curriculum content at the basic education level (Weeks 2005: 100). Botswana is unique in the sense captured by the comment from the second commission below, responding to criticism that it had not vocationalized enough:

‘However, in terms of international trends it could be said that Botswana enjoys the advantage of having a senior secondary curriculum, which may be regarded as contemporary among middle-income developing countries as it has not suffered from, misdirected ‘vocationalization’ efforts. The trend among middle-income countries is that emphasis should be placed on cognitive development, language, mathematics, and science at the secondary level. Training for employment should begin after education. Botswana is therefore correctly aligned in concentrating on the academic disciplines. At the same time the key workplace-related subjects like Commerce and Design and Technology are being introduced (Botswana 1993: 172 in Weeks 2005: 100).

Botswana’s success is also linked to real investment in the education sector, and the practical subjects being given prominence that Weeks calls emphasis that is incomparable to other African countries (Weeks 2005: 115). Schools were rebuilt over the period after 1994 with nearly all the junior schools equipped with laboratories.

As Weeks noted, it is recognized in Botswana that three to five hours a week on a practical subject will not usually lead to the mastery of what is required on the job or in self-employment. This is very different to what is happening in other countries where practical subjects were simply ‘sold’ to students and parents on the grounds that they will lead to employment, or if no jobs are available, at least to self-employment (King and Martin 1999; Lewin and Caillods 2001 in Weeks 2005: 138).

Weeks defined pre-vocational preparation ‘as a general education that combines knowledge, skills, values and attitudes in a form that prepares learners on how to investigate, develop and apply concepts learned in real life situations e.g., the home, community, recreational, social and work environments. Pre-vocational preparation should form a sound basis for further education and training. It should also stimulate innovativeness, problem solving and quality performance in a methodological manner in order to produce self-confident learners who would in turn lead successful lives. (Ministry of Education 1999: 20 in Weeks 2005: 138-139).

Botswana remained committed to systematically promoting its pre-vocational education ‘instead of trying to vocationalize its secondary schools’. It also invested well in the facilities and human resources that supported this commitment. Even Foster who has been famous for writing the vocational school fallacy agreed in 2002, that Botswana had got it right, noting that Botswana has achieved ‘an appropriate structural and institutional environment’ to support pre-vocational education in secondary schools (Foster 2002: 28 in Weeks 2005: 139).

5 Conclusion

This paper has reviewed TVET environment in SSA in general and used the cases of Ghana, Kenya, and Botswana to highlight policy mistakes and the success of Botswana’s approach. It is clear that overall, SSA youth are its potential and yet there is no clear policy focus on how TVET can be harnessed to support youth skills. TVET remains marginalized in the education system and it seems to select from a pool of low ability learners rather than a parallel and high quality pathway of education to the general education. General education remains dominant. The finance of TVET is also weak and the Kenyan government 2012 draft framework for education under its 2010 new constitution acknowledges that the government has paid and continues to pay low attention to TVET (MoE 2012). There is, however, a clear view that private providers are more innovative and can offer functional TVET than governments. However, they have been left to operate without government support and supervision, and therefore there are large

variations in the quality of what is offered. Some countries such as Botswana have some working framework for TVET. They seem to have a better integrated plan for using TVET to address youth employment or the approach is one that has integrated TVET. Botswana has also placed greater resources in TVET and seems to have well thought through the TVET they wanted. For a majority, TVET has remained desperately dysfunctional and nearly useless to address youth unemployment. Policies are prescriptive with general statements about the potential of TVET, but these are immediately countered by systemic weaknesses and threats and conclusions that simply render governments capability in so far as mounting functional TVET meaningless and weak.

The Ghana and Kenya case studies have offered opportunity to present comparison of two countries similar in some aspects and how they have grappled with the youth unemployment and the policies they have put in place to address it. Both followed the same path, Ghana in 1987 and Kenya in 1985/86 with restructuring the education system and introducing heavy TVET pathways. Ghana's aim was to instil pre-employment vocational skills at junior secondary, which is then followed at senior secondary. In a way it created a track system where once one is engaged in TVET at junior secondary that led them to a path of TVET at senior secondary and to a dead end job prospect. Those who did not make it to senior secondary had rudimentary pre-employment TVET that did not offer them the confidence to face the world of work. They remained desperate and weak to solve their unemployment situation. In the end, general education continued to thrive and the reforms have not helped to position TVET as a pathway that can address the youth unemployment problem.

Kenya's case is not much different to Ghana's. TVET started in primary, equivalent to Ghana's juniors secondary. But when learners completed the grade 8 under the 8-4-4 system, what they had been taught such as building grass-thatched huts, and how to dig using a hoe did not make meaningful difference in their lives. Here again the pre-employment skills intended by the policy did not produce desirable outcome. TVET at the senior secondary level was less structured compared to Ghana's and students simply continued as though there was general education with one subject in TVET chosen to make the combination requirements. Overall, the majority just wanted to gain the qualifications that could lead them to university. Once they completed the secondary level, they were unprepared to create jobs or address the youth unemployment through the so called 8-4-4 skills. No wonder, youth unemployment has remained. In the end, policies in both countries, similar in many respects, have not produced TVET that can equip youth with competencies to face the challenges of employment and to deal with youth unemployment. Youth unemployment therefore remains a crisis and the current approach seems to emphasize TVET less. The newly elected Kenyan government had focused on other areas to address youth unemployment. This is perhaps recognition that the TVET path has not worked, because even the youth with general education have now failed to find employment. Expansion of manufacturing, focusing of youth funds to help them in start-ups, accepting and promoting small scale enterprises are now given greater policy priority than the simple notion that TVET in the education system will address youth unemployment.

6 Recommendation

All is not lost though and TVET is still a strategic educational pathway that can address youth unemployment. TVET has been ill-conceived as one that is for low ability learners. It has maintained its colonial mould. Some of the key areas that need to be addressed to make relevant TVET policies include the following: Making TVET select from the same pool as general education. Any policy that does not address the second class type of education tag that TVET has carried all along is bound to not be as transformative. TVET has to be seen as a viable

pathway that along the way practically can join with general education and vice versa. The Botswana model where there is limited TVET track is worth considering.

Instilling general competencies: TVET has to start with a focus on key general competencies that would build the foundation for TVET. These should include instilling analytical skills, communication skills, and numeracy skills as is the case in Botswana. It may be said that the foundation of TVET is a strong general education. This is linked to the first point above because it will enhance the pool upon which TVET selects its participants.

Focus on skills that are of lifetime in nature rather than dead end skills. This is related to key competencies that can lead to easy retraining. Transferrable skills rather than static skills require that analytical skills are enhanced.

Developing a National Qualifications Framework (NQF) is an important step towards transforming TVET and aligning it to the discussions around youth dividend and development in SSA. Young and Allais (2011) have written extensively on this notion of NQFs noting that an estimated 100 countries have embraced the NQF idea. It is the same point highlighted by Adams (2011) in which it is noted that NQFs empowers the workforce and encourages lifelong learning. Dealing with containing the youth in the rural areas and addressing run-away unemployment through low level skills is not what SSA requires. TVET policies need to address qualification transferability and the reward system. It needs to be made one of the strands for education economic pillars rather than a system for those perceived as less capable of entering general education and its reward system. It also needs serious investment that will lead to its graduates being equipped with requisite skills to support industrial growth and related technology in Africa.

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