

SKILLS DEVELOPMENT IN SUB-SAHARAN AFRICA. IS IT ADEQUATE?

AN OVERVIEW AND FOCUS ON FIVE COUNTRIES.

Johann Maree Emeritus Professor, University of Cape Town

Email: johann.maree@uct.ac.za

Introduction:

The aim of the paper is to evaluate whether appropriate and adequate technical and vocational education and training is taking place in Sub-Saharan Africa (SSA) so that enough investment in high-productivity industries can take place to enable the bulk of its citizens to lift themselves out of poverty and lead prosperous and fulfilling lives. It is estimated that currently around 40 per cent of the SSA population live below the international poverty level.

The paper commences with a structural analysis of the SSA economy, pointing out the dominance in many countries of raw material extraction and export, and the need to expand their economies by means of beneficiation and diversification. This will require investment in more skill intensive industries and occupations. The question thus arises whether countries in SSA are educating and training sufficient numbers of people with appropriate intermediate and high skills to meet the demand of skill-intensive industries.

This question is examined by exploring the skills development strategies, policies and practices of five countries in SSA. They are South Africa, Botswana, Zambia, Tanzania and Ghana. Extensive research has been conducted in South Africa while research in the other four countries is still ongoing. All four countries have been visited where interviews were conducted with key informants and a few on-site visits made.

Finally, the paper draws its conclusion on the research findings.

Background: The African Economy and School Education

The decolonisation of Africa commenced in 1957 when Ghana regained its independence. Most African colonies thereupon regained their independence during the 1960s. At first there was a sense of optimism that Africa, freed from its shackles, would soar up and prosper, but these hopes were shattered as the 20th century wore on. Dictatorships, military coups and corrupt leaders became fairly common phenomenon. This condemned millions of Africans to poverty while a small elite usurped the wealth. This led *The Economist* of 13 May, 2000, to label Africa as "The Hopeless Continent".

But *The Economist* got it wrong: the African economy surged upwards in the 2000s; so much so that 11 year later it boldly announced "Africa Rising" on its front cover (*The Economist*, 3 Dec. 2011). This set off what Horman Chitonge (2015) has labelled the "Africa Rising Narrative" (ARN). In his book, *Economic Growth and Development in Africa*, he carefully assesses this narrative.

His evidence is mainly economic. He shows that gross domestic product (GDP) grew sustainably from 2000 to 2007, then declined in 2008 and 2009, but recovered to the same level as before from 2010 onwards (Chitonge 2015:240-241) He points out that there are growth disparities between countries, but 'the majority of countries experienced positive growth, with some – such as Nigeria, Mozambique, Ethiopia, Rwanda and Angola – recording an annual average GDP growth rate of over 7 per cent over the 2000-2010 period' (Chitonge 2015:240).

However, there is also a negative side: He shows that, from 1980 onwards there has been little progress on key issues such as national savings, fixed capital formation and agricultural production. Even more worrying, says Chitonge, is the lack of transformation of the economies of most African countries. The manufacturing sector 'accounts for only a tiny section of the exports of most African countries. The larger share of export earnings for most countries in Sub-Saharan Africa (SSA) still comes from agriculture, where productivity is actually declining' (Chitonge 2015:245)

Where there is not an over-reliance on agriculture, there is an over-reliance on the exports of oil, or minerals and metals such as diamonds, gold, copper and iron ore, i.e. raw materials. For instance, oil accounts for 87% of Nigeria's exports and 91.3% of Sudan's while copper for over 70% of Zambia's exports (Chitonge 2015:245). Chitonge concludes that 'growth seems to be concentrated within the commodity and services sectors, with little or no linkage to the rest of the economy – thereby creating two Africas: the new and rising, and the old and stagnant' (Chitonge 2015:245).

What Chitonge's analysis shows is that most African countries, especially those that depend on a single source of wealth, have not diversified their economies. They have not succeeded in benefiting the raw materials they export by developing processing and productive capacities, i.e. by developing a manufacturing sector. Instead they import the finished products from the countries to which they export the raw material.

Chitonge and many other writers on Africa ignore another serious drawback: The existence of a large informal sector and extensive informal employment. Although reliable figures are hard to come by, some of the most convincing evidence is that at least half, possibly two thirds, of Africa's labour force is working informally.

For instance, Palmer (2004:36) presents a table of the informal sector contribution to urban employment in 17 African countries in 2000. It shows that informal employment as a proportion of total urban employment in 5 countries ranged from 70 to 85 percent, in 8 from 30 to 69 percent and in 4 from 15 to 29 percent. The average for the 17 countries is 52%. The five countries where informal sector workers as a percentage of total urban employment was above 70% are Uganda (84%), Zambia (81%), Ghana (79%), Gambia (72%) and Mali (71%). The 4 countries where it was below 30% are South Africa (17%), Botswana (19%), Mauritius (24%) and Morocco (28%).

The drawback of informal employment and self-employment is that it is mostly situated in low-skill, low productivity and low pay enterprises. It is also not regulated

by the state or by collective bargaining agreements and institutions such as trade unions. Working conditions are thus often poor and unsafe with long working hours.

With regards to school education, the foundation on which sound VET is built, the picture is also mixed. A recent World Bank Study (World Bank 2012) finds that, over the past 20 years, educational levels have risen sharply across the sub-continent. However, there is still a long way to go compared to what Europe and Central Asia have achieved. Whereas in Europe and Central Asia there was a gross enrolment ratio of 91% at upper secondary school level in 2009, in SSA it was only 21%.

A further matter of concern is that children who are at school are not receiving an education of sufficient quality. Combined test scores from three international learning assessment programmes have found that 'Primary school students in low-income Sub-Saharan African (SSA) countries have, on average, learned less than half of what is expected of them' (World Bank 2012:6). It was also found that children from higher income countries in SSA perform better than the average, while children from poorer SSA countries perform worse.

Education in SSA

Education is the foundation on which technical and vocational training is built. A recent World Bank Study (World Bank, 2012) contains considerable useful and up-to-date information about the level of education in SSA. It finds that, over the past 20 years, educational levels have risen sharply across the sub-continent.

However, compared to what Europe and Central Asia (E&CA) have achieved, SSA still has a long way to go. Whereas in E&CA there was a gross enrolment ratio of 91% at upper secondary school level in 2009, in SSA it was only 21%. (World Bank, 2012:3, Figure 0.1).

The low retention rate of schools in Africa indicates that there is a high drop-out rate. The high drop-out rate 'could be an indication that the type and quality of schooling provided is inadequate or does not meet the expectations and needs of students and parents' (World Bank, 2012:3). The drop-out rates of children who are poor or live in rural areas are among the highest.

Another matter of great concern is that even those children who are at school are not receiving an education of sufficient quality. Combined test scores from three international learning assessment programmes have found that 'Primary school students in low-income Sub-Saharan African countries have, on average, learned less than half of what is expected of them' (World Bank, 2012:6). As is to be expected, children from richer countries perform better than the average, while children from poorer countries perform worse.

In spite of the low standard of education, it is pleasing that empirical evidence suggests that education of girls in particular, is correlated 'with significant health and social benefits' (World Bank, 2012:8).

On the other hand it is extremely disappointing that the World Bank study found that 'the rise in educational attainment of the labour force in the region appears to have had little impact on average labour productivity. The weighted average labour

productivity for Sub-Saharan Africa, across all sectors, has remained at practically the same level since 1985. At the same time, the average level of schooling has been increasing across the region.' The World Bank surmises that the lack of impact of rising education on labour productivity could be due to the poor use of human capital (World Bank, 2012:10).

Technical and Vocational Education and Training (TVET) in Sub-Saharan Africa

Since a majority of people are working informally in Sub-Saharan Africa, it is important to know what vocational and technical education and training they are receiving. The aim is to establish how adequate their education and training is to qualify them to move into the formal sector where productivity and pay are higher.

The most common form of vocational training in the informal economy of Sub-Saharan Africa is traditional apprenticeship. According to Johanson and Adams (2004:129) 'traditional apprenticeship training is responsible for more skills development than the offerings of all other training providers combined.' It consists of an oral or written agreement between the parents of an apprentice and a "master". The apprentice then learns how to perform the tasks from the master. It is a process of learning by watching and doing: 'Training consists primarily of observing and imitating the master' (Johanson and Adams, 2004:131). There is no theoretical training involved. Although this form of apprenticeship is practised right across SSA, it is most common in West Africa. 'In Ghana, 80-90 percent of all basic skills training comes from traditional or informal apprenticeship, compared with 5 to 10 percent from public training institutions and 10-15 percent from nongovernment for-profit and non-profit training providers' (Johanson and Adams, 2004:129).

Traditional apprenticeship is self-financing. The parents pay for the training to commence, but some of the payment may come through the value of the work the apprentice is delivering, or taken off the pay of the apprentice. It is however gender-biased with mostly boys being apprenticed. It also screens out the poorest families (Johanson and Adams, 2004:132).

There are advantages and disadvantages to this form of skills development. Advantages are that it is an easy and accessible way for a youth to enter the labour market and that it does not require government financial support or subsidies. Being apprenticed in the workplace the youth gains experience which makes it easier to find employment at the end of the apprenticeship period. Often the apprentice stays on at the enterprise to the benefit of both the youth and the enterprise (Johanson and Adams, 2004:133-134).

The disadvantages are that the level of skill acquired is usually low as the training is 'relatively unsophisticated', technology in use is dated, and there is no standardisation or certification to ensure that a certain level of competence has been achieved (Johanson and Adams, 2004:132-135). This form of training would not normally qualify the apprentice to enter the formal economy where higher levels of theory and knowledge are usually required and where productivity and remuneration are higher.

Apprenticeships by watching and doing in informal enterprises, although widespread and not without benefits, do not prepare workers to enter the formal economy. It is therefore necessary for other forms of human resource development to be on offer, not only in the informal labour market, but also in the formal market.

Johanson and Adams point to three additional institutional bases that can and do advance technical and vocational education and training (TVET) in SSA. They are public training by the state, non-governmental training, and formal-sector enterprises. They also stress the importance of obtaining the finances, or resource mobilisation, to promote training. These are each briefly discussed.

Although vocational training by states is important, their institutions continue to fall short in terms of their relevance, effectiveness, their costs and efficiency, according to Johanson and Adams (2004:4). State institutions have been found to be most effective where stakeholders have been given authority for developing training markets and allocating resources. The authors conclude that state-sponsored training works best when delivered in partnership with other providers to meet market needs and diversify financing (Johanson and Adams, 2004:5).

The nongovernment training sector is very diverse and ranges from NGOs to for-profit trainers. They have been found to play an important role in the supply of skills for SSA. In many cases, their provision of training outshines the contribution from public sources. Often a lack of resources restrains them and public financing could help them become more effective (Johanson and Adams, 2004:6)

‘Resource mobilization,’ maintain Johanson and Adams (2004:9), ‘must be an integral part of national training policy, in view of limitations on public financing.’ Mobilisation of additional resources takes place through payroll levies. In 2004 there were 12 countries in SSA raising payroll levies, but problems were experienced. These included noncompliance among employers, particularly smaller enterprises, and diversion of levy money for other uses as well as misuse of funds. Another way additional resources are mobilised is by means of tuition and other fees that are paid by enterprises or trainees and their families (Johanson and Adams, 2004:9).

The allocation of funds is important in order to enable the poor to gain access to training as well as to help training systems become more demand-oriented and efficient. In 2004 there were 21 countries in SSA with training funds. Effective training funds were found to have transparent rules of allocation and good governance with employer and worker representation (Johanson and Adams, 2004:10).

Finally, training in formal sector enterprises play an important role in the provision of training. In combination with nongovernment training institutions, more skills development has taken place than in state-sponsored training institutions. What is more, ‘enterprise-based training is largely self-financing, self-regulating, and cost-effective. It occurs without much government help’ (Johanson and Adams, 2004:7). As is common the world over, larger enterprises train more than smaller enterprises. There can be considerable variation between them. Larger enterprises with more

than 150 employees, have rates of formal training that are 10 to 20 times higher than small enterprises with 10 or fewer workers (Johanson and Adams, 2004:7).

Skills Development in South Africa: Historical and Contemporary Overview

Historical Overview¹

The foundations for the institutions that shaped skills development in South Africa were laid after the discovery and mining of diamonds in Kimberley in 1871 and of gold in and around Johannesburg in 1886. The diamond and gold mines brought skilled miners from Britain and its colonies, while the unskilled work was performed by Black male migrant workers housed in compounds near the mines.

The skilled miners from Britain pursued the same strategy they had adopted in Britain. They established craft unions that demanded a limit on the number of apprentices in order to preserve their high wages. But in South Africa there was an extra racial dimension: the skilled mine workers were White and the unskilled mine workers were Black.

The skilled White workers' strategy was supported by law. Soon after the Union of South Africa was established in 1910 the South African Parliament passed the Mines and Works Act of 1911. The Act stipulated, amongst other measures, that many occupations could only be carried out by White men (van der Horst 1971:179). The Apprenticeship Act of 1922 gave the power of selection of apprentices to a board on which registered trade unions had representation. The registered White unions dominated the board and actively opposed the registration of Black apprentices.

The Industrial Conciliation Act of 1924 further reinforced the strict colour bar in South Africa. It made provision for industrial councils to be set up by employers' associations and trade unions, but excluded Black male unions from its ambit. The combination of these and other Acts ensured that Black workers were not only systematically denied training for skilled jobs, but also access to skilled occupations by means of closed shop and ratio agreements negotiated by registered unions on industrial councils.

The origins of vocational education and industrial training can be traced back to mission schools for Black and Coloured children in the mid-nineteenth century. When it was first introduced in the Cape Colony it was provided for Coloured males, not White children because it was not deemed to be suitable labour for Whites or females. 'For almost 50 years before 1900, bricklaying, plastering, painting, decorating, engine cleaning, shoemaking, tailoring, carpentry and masonry were in fact widely considered only fit for Coloured men and overseas workers.' (Malherbe, 1977, as cited in Badroodien, 2004:23)

During the first three decades of the twentieth century in South Africa 'technical education institutions evolved mainly in response to the growing needs of the railways, mining and industries for trained and skilled artisans.' (Badroodien,

¹ This section is compiled from numerous historical, labour and labour relations readings. The principal ones are Houghton, 1967; Maree, 1987; Saunders, 1992, and Webster, 1978.

2004:34) The Apprenticeship Act ensured that apprenticeship training was racially biased in favour of Whites. Even as late as 1971 new apprentices registered included 9140 White, 1596 Coloured, 604 Indian and no Black apprentices. (Malherbe, 1977:186). No less than 81 per cent of new apprentices were White.

The rapid growth of the economy during the 1960s drew many Blacks into industrial labour. The Black workers required training, but as there were virtually no provision for Black training the apartheid government took a number of initiatives to provide training up to semi-skilled levels for Blacks. In 1974 considerable tax concessions were granted for training schemes of Blacks. (HSRC, 1989:24)

As a result of the Wiehahn Commission's recommendations the Manpower Training Act (MTA) was passed in 1981. It abolished former acts that embodied discriminatory measures. (HSRC, 1985:19) It 'did not cater exclusively for apprentice training but covered the promotion and training of employees in *all* sectors of the economy.' (Lundall, 1995:5, emphasis in the original.) In terms of the Act a National Training Board was established in November 1981. It was a tripartite body of 21 members with equal representation from state departments, employers and employees. (HSRC, 1989:31)

The MTA was amended further by the Manpower Training Amendment Act of 1990. (Lundall, 1995:5) It devolved control over apprenticeship training from the Department of Manpower to Industrial Training Boards (ITBs). 'These ITBs were established in all industries, and were granted full control over administration and certification of all training undertaken in that industry.' (Kraak, 2004a:55) It was argued that this devolution of authority to ITBs would leave such boards free to 'meet the training needs of its industry in the best way it sees fit, without state intervention in the day-to-day provision of training.' (HSRC, 1989, as cited in Kraak, 2004a:55)

The ITBs were abolished when the post-apartheid government introduced its National Skills Development Strategy in 1998. The question therefore arises how well they performed during their short lifespan. Paul Bennell did an evaluation in 1992 by interviewing executive directors and other senior managers from 24 of the 28 ITBs in existence at the time. (Bennell, 1992:1-2)

Interviews indicated that employers and employers' organisations were 'overwhelmingly positive' about the new training dispensation. The primary reason for this, according to Bennell (1992:2-3), was because 'industry for the first time ever has been given the freedom to provide its own high quality, structured training that caters for its own specific training requirements. This gives an industry a sense of "ownership" over its own training activities which is important psychologically for both employers and employees.'

However, there were also shortcomings in the ITB system. The first was employer domination of the ITB Boards. Out of 17 ITBs for which data was available, only three had equal employer-employee representation on their boards. Seven had roughly two-thirds employer to one-third employee representatives, while a further seven had roughly 90% employer representation to 10% employee representation. (Bennell, 1992:14) Trade test pass rates had historically been extremely poor. The

average pass rate of apprentices for trade tests between 1971 and 1980 was 34,8%. (Lundall, 1995:25)

In spite of these limitations Bennell concluded that the ITBs should be retained and strengthened. He recommended that 'every industry should be legally obliged to have its own ITB,' and that 'there should be equal employer-employee representation on all ITBs.' (Bennell, 1992:19)

The post-apartheid state was, however, not going to heed these recommendations as it completely redesigned the education and training policies of the apartheid regime. In order to make a complete break with the heritage of apartheid education and training the new post-apartheid government passed the South African Qualifications Authority (SAQA) Act in 1995. It was the first educational Act after the transition to democracy.

The most important proponent of the approach adopted in the SAQA Act and National Qualifications Framework (NQF) was the Congress of South African Trade Unions (COSATU).² The principal aim of the SAQA Act was to create an integrated national framework for education and training in the country. In addition it aimed to 'accelerate the redress of past unfair discrimination in education, training and employment opportunities.'³ In order to achieve the integration of education and training the Act set up the South African Qualifications Authority (SAQA) that was given the responsibility to draw up and implementing a National Qualifications Framework (NQF).

The NQF was designed to achieve a number of objectives. Primary among them was the integration of education and training by establishing levels of skills that would be nationally recognised regardless of how they were acquired. Ease of access by everybody was also important, hence skill levels could be acquired in a number of different ways, including experience at the workplace accredited through a recognition of prior learning (RPL) exercise.

Although the SAQA Act is applicable to both education and training, the application of the Act has been far more closely linked to skills training. In fact, the new National Skills Development Strategy was integrated from the outset with the provisions and institutions established under the SAQA Act.

The National Skills Development Strategy (NSDS)

Although Bennell recommended that the Industrial Training Boards (ITBs) should be retained and strengthened, the post-apartheid government had different intentions. It abolished the ITBs and almost all the other existing institutions and practices engaged with skills development and replaced them with a completely new set of

² The dominance of COSATU in formulating the NQF is reflected in SAQA's own account of the history of the NQF. See 'NQF History' on <http://www.saqa.org.za/side.asp>

³ Section 2 (b), (c) and (d) of the SAQA Act of 1996.

institutions and practices collectively known as the National Skills Development Strategy (NSDS). The new strategy was spelled out in two acts, the Skills Development Act (SDA) of 1998 and the Skills Development Levies Act (SDLA) of 1999.

The core of the NSDS is the development and offering of learnerships to anybody in the economy who wishes to acquire skills. The learnerships are developed by 25 Sector and Education Training Authorities (SETAs) that were established under the SDA to cover the whole economy.

It was decreed that the SETAs were to be funded by means of a one per cent levy on the wage bill of all enterprises and organisations outside the public sector with an annual wage bill greater than R250,000.⁴ Eighty per cent of the levy raised by South African Revenue Services (SARS) under the SDLA goes to the SETAs while the remaining 20% goes to a National Skills Fund (NSF).

In practice, the NSF pays for a range of skills development initiatives including social development projects started by NGOs and Provincial Offices, and for training unemployed people. They are expected to find placements where the unemployed can work after completing their training. (Department of Labour, 2001:37; Kraak, 2004b:125-26)

The SETAs are the core new institutions created under the SDA. They are tripartite bodies established by the Minister of Labour. They consist of representatives from organised labour, organised employers, including small businesses, and relevant government departments.⁵ Their core tasks are, firstly, to draw up Sector Skills Plans indicating the crucial demands for skilled labour expected to emanate from their respective sectors in the foreseeable future. (Department of Labour 2001:29) Then, secondly, they have to implement the Sector Skills Plans by establishing learnerships, or by approving Workplace Skills Plans submitted to them by enterprises and organisations within their sectors, and to allocate grants to employers, education and training providers, and learners.⁶

In order to receive back up to a maximum of 70% of the levy as a grant an enterprise has to submit a Workplace Skills Plan (WSP) to its SETA. The WSP has to describe 'what skills are needed, who needs the skills, how they will get the skills, and how much it will cost' (Department of Labour 2001:30).

Learnerships were regarded as 'central to the new ambitious thrust of the new skills development model'. (Kraak, 2004b:122) In contrast to apprenticeships that were restricted to youth below the age of 25 and were confined to a narrow occupational range, learnerships were intended to be open to far more people in the labour market and a much wider range of skills (Kraak, 2004b:121-22).

The NSDS have, over the years, revealed several weaknesses. Firstly, the SETAs had not been able to spend almost half of their money on training, as they were

⁴ Roughly US\$21,000 as of 29 January 2018.

⁵ Section 11 of SDA

⁶ Section 10(1)(a)&(b) of SDA

meant to. Of the R3,1 billion received from levies up to 2004, only R1,6 billion, or 52%, had been paid out in grants.⁷

This underspending points to one of the most serious flaws in the NSDS, namely the voluntary requirement for enterprises to enter into training and the non-provision of training by SETAs themselves. Employers are compelled to pay the 1% wage bill levy, but it is left up to them to decide whether to make use of that levy to provide training or not. On the other hand, the SETAs that receive 80% of the levies are not empowered to set up training and education facilities themselves in order to help meet the skills development needs of their sectors.

Another serious flaw of learnerships is that they are not seen to be filling the gap arising from the declining number of artisans and apprentices in the country. Indentured apprenticeships had declined rapidly from 29,826 in 1986 to 16,577 in 1998, i.e. to almost half their number over a period of twelve years (Kraak, 2003:680, Table 7. See also Lundall, 1998).

With very few exceptions, the SETAs performance dwindled even further. Not only did they underspend the money they received, they managed the money they retained badly in terms of investment and keeping track. Incompetence also featured as they failed to fulfil their key tasks of drawing up Sector Skills Plans which would identify the present and future skills requirements of their sectors and take active steps to ensure that these requirements were met (Coetzee, 2013:68)

A well overdue shake-up commenced in 2009 when authority for skills development was transferred from the Department of Labour to the Department of Higher Education and Training (DHET). After scrutinizing the performance of SETAs carefully, a new SETA landscape was announced by the Minister of Higher Education and Training, Blade Nzimande, in November 2010. The new landscape tightened oversight and control of the SETAs considerably. The aim of the Act was to put an end to the inefficiency of SETAs and to ensure that they focus on their primary reason for existing, namely to provide skills required in their sectors. They no longer enjoyed permanent status as they were only certified for a five-year period from 2011 to 2016 (Coetzee, 2013:64-69).

In April 2013 the SETA grant regulations were revised. They heralded a shift away from workplace skills training to “professional” training in TVET Colleges, Universities of Technology, Universities and professional institutions. In the new dispensation the mandatory grant is reduced to only 20% of the total employer’s levy paid to South African Revenue Services (SARS). For administration the SETAs are allocated 10.5% of the total wage levy while the National Skills Fund continues to receive 20%. The remaining 49.5%, almost half of the employers’ wage levy, goes into the discretionary grant. Of this at least 80% has to be for the newly instituted PIVOTAL Grant. PIVOTAL is an acronym standing for Professional, Vocational, Technical and Academic Learning programmes. PIVOTAL grants which are earmarked for professional and vocational education and training at TVET Colleges, Universities of

⁷ “South Africa’s Skills and Training Crisis: The real story behind the SETAs,” Democratic Alliance, October 2004.

Technology and Universities. They must result in qualifications that fit into the National Qualifications Framework (NQF) and address scarce and critical skills (Coetzee, 2013:23-25).

The SETAs and the legislation pertaining to SETAs have set up formidable requirements for employers to extract money from them for skills training. Even though the mandatory grant only pays back one-fifth (20%) of the wage levy employers paid into the wage level, they have to submit a highly detailed and demanding Workplace Skills Plan (WSP). The requirements read like a bureaucratic nightmare. Besides having to provide statistical information on the company's employees according to age, population group, gender and qualifications according to NQF level, they have to provide the following information:

- C.1 Vision statement of the department
- C.2 Mission statement of the department
- C.3 Specific mandates and functions of the department
- C.4 Strategic objectives identified by the department
- C.5 List of competencies required by the department to enable the department to deliver on its vision, mission, and strategic objectives
- C.6 Skills gap analysis
- C.7 Compiling the training needs matrix for the department

At its simplest, a skills gap analysis compares the actual skills of the current workforce with "real skills" requirements. The training needs matrix consists of a table that lists the type of qualification and NQF level against the number of trainees required according to population group and gender (Coetzee, 2013:249-253). It is no wonder that many employers abandon the effort to apply for mandatory grants, view the wage levy as a tax, and get on with training their work force as and when they need to do so at their own expense.

In order to meet all these rigorous requirements a whole new occupation of skills development facilitation has sprung up. Skills Development Facilitators, appropriately accredited, are now employed by companies to compile and submit their WSPs.

But SETAs have continued to remain a headache to the DHET. In 2015 it drew up a report on the SETA landscape and identified the following problems:

- '1. Many SETAs have failed to meet the annual targets to which they have agreed in their Annual Performance Plans approved by the Minister and the Service Level Agreements signed with the Director General of Higher Education and Training, for example in 2013-2014:

Category	Target set	No. achieved	Difference
Target bursaries	17 658	19 551	1 893
Target learnerships	86 211	75 503	(-10 708)
Target internships	12 072	8 017	(-4 055)
Target FET placements	22 765	11 963	(-10 802)

‘2. Collectively the SETAs have failed to disburse the levies collected meaning training that could have occurred, has not. For example, R2,6 billion was not committed or allocated at the end of 2014/5 financial year, and was transferred to NSF. It is acknowledged though that some SETAs have done very well.’ (DHET, 2015:8)

In spite of the ineptness of the state-driven industrial training system, some individual industries and companies have succeeded in developing sound training programmes integrated with their production and marketing strategies. The best example of this is the motor industry which, at the initiative of the industrial union, the National Union of Metalworkers of South Africa (NUMSA), created an Automobile Manufacturing Industry Education and Training Board in 1992. The employers’ federation of the motor assembly firms and the union then negotiated a training system that was linked with restructuring in the workplace and a strategy to make the industry internationally competitive (Hirschsohn, 1997 and 1998). This was achieved and from 1996 onwards vehicle and component started rising.

Technical and Vocational Education and Training (TVET) in South Africa

Technical and vocational education and training in South Africa has suffered from severe neglect. It was also a victim of the racial ideologies of previous White-only governments. As a result it was racially fragmented in 1994 when the post-apartheid government assumed power. In the early 1990s there were 123 technical colleges that were racially segregated. Sixty seven were White, three Indian, eight Coloured and forty five Black institutions. Twenty three of the Black technical colleges were in the ethnic Black ‘homelands’ away from the major urban-industrial complexes in South Africa. Black enrolment constituted only 0.45 per thousand of the population as compared to 10 per thousand for Whites (Fisher et al, 2003:330).

In 2002 these technical colleges were merged with colleges of education and training centres as ‘Further Education and Training (FET) institutions’ under the Further Education and Training Act of 1998. The result was 50 new colleges misnamed ‘FET

Colleges'.⁸ Each college consists of 3 campuses on average, a result of the merger (Fisher et al, 2003:332). In 2017 the Colleges were more appropriately renamed TVET Colleges.

A remarkable feature in the TVET field has been the extensive social transformation of its student intake in the public colleges sector. Over the 10 years from 1990 to 2000 the racial composition of the public FET colleges reversed from 68% White and 18% Black learners in 1990 to 12% White and 75% Black learners in 2000. Coloured enrolment remained more or less a constant proportion around 7% while the proportion of Indian enrolment declined from 8% to 2%. Female enrolment increased marginally over this period from 38% to 41% (Fisher et al, 2003:331). The social transformation of TVET was accompanied by the rapid expansion of the system as well. Overall, enrolments almost doubled between 1990 and 2000 (Fisher et al, 2003:334). Due to a conscious policy on the part of Department of Higher Education and Training, student enrolment kept growing at a rapid rate. Total student enrolment more than doubled again from 358,393 in 2010 to 737,880 in 2015. In 2015 almost 90% (650,419) of students enrolled in TVET Colleges were Black (DHET 2017:30, Fig.10).

The public TVET colleges offer training in six vocational fields (arts/music, business studies, educare and social services, engineering, general education and utility studies). No less than 89% of provision is concentrated in business studies (48%) and engineering (41%).

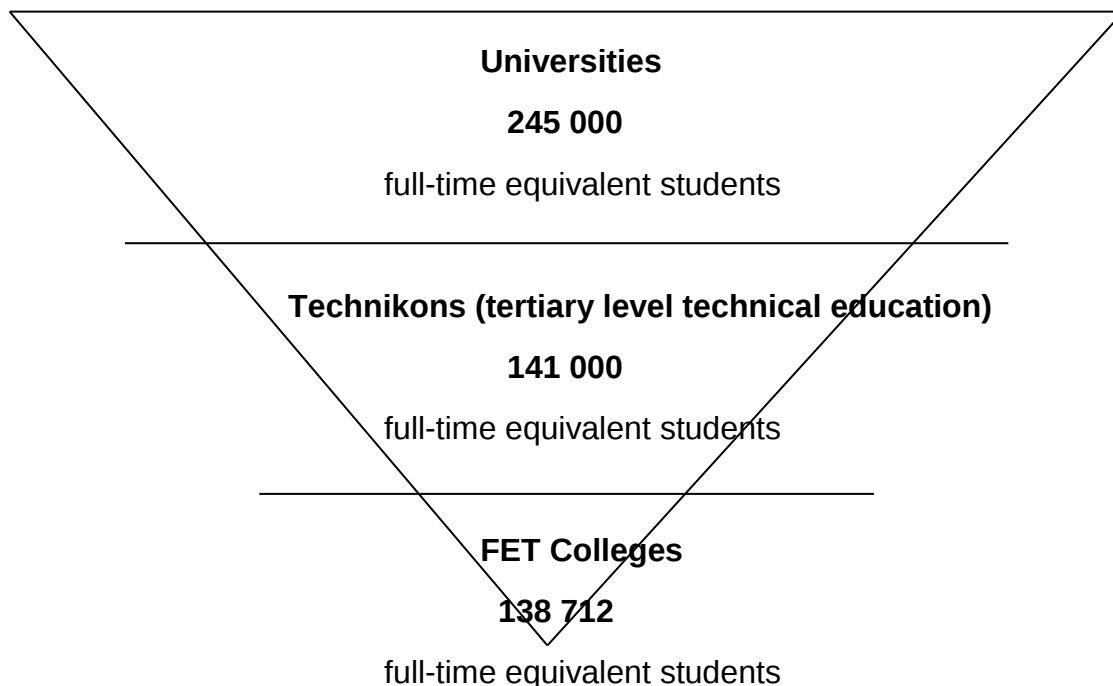
Considerable TVET also takes place in the private sector that expanded rapidly during the 1990s in South Africa (Akoojee, 2003:401). The contents of study fields in the private TVET sector is quite different from that in the public sector. Thirty one per cent in private TVET fall in general school-level education for those wishing to complete formal schooling and Adult Basic Education and Training (ABET). General education is followed by a 15% enrolment in business, commerce and management, then by 13% in mathematical, computer, physical and life sciences (Akoojee, 2003:410).

In spite of the rapid growth of the public FET colleges since the 1990s there is still a 'skewed distribution in South Africa across publicly funded universities, technikons and technical colleges' in that enrolment is highest at universities and lowest at TVET colleges. This is 'a pattern which goes against international trends, where college and polytechnic (technikon) enrolments are usually far larger than university enrolments.' (Akoojee, 2003:399) This result in an 'inverted triangle' of learner distribution as illustrated in Figure 1.

⁸ This is because, in terms of the NQF of SAQA FET (Further Education and Training) refers to the band of education at secondary school level for **general and vocational** education and training. However FET colleges are meant to provide only vocational education and training.

In 2016 the Colleges were appropriately renamed TVET Colleges, but since they were referred to as FET Colleges throughout the period under consideration, the use of the term FET College has been retained in the paper.

Figure 1. The 'Inverted Triangle' of FET and Higher Education provision, 1999



Source: DoE & DoL, 2001, as presented in Akoojee, 2003:399, Figure 1.

The actual headcount of students (including full-time and part-time students) in FET colleges in 2000 was 350 000. This constituted only 8,8% of enrolment of almost 4 million students in public secondary schools in South Africa in the same year. Hence for every one student enrolled in an FET college there are 11 students enrolled in a public secondary school. (Perry and Arends, 2003:305)

In 2015 there were still more students enrolled at Universities and Universities of Technology (the former Technikons) than at TVET Colleges. There were 985,212 enrolled at all the Universities and UoTs as opposed to 737,880 at TVET Colleges (DHET 2017:10 & 30).

The inequality in staffing between general and vocational education in South Africa is even greater. In 2000 there were 6756 teaching staff employed in the FET college sector and 336 026 state-paid educators in public schools.(Fisher et al, 2003:341 and Perry and Arends, 2003:313) The FET teaching staff only constituted 2% or one-fiftieth of the public school educators.

Expenditure on FET colleges has been low in the past. 'Provincial education departments allocate a total of R792.8 million to FET colleges, which is less than 2 per cent on average of their total education budgets.' (Fisher et al, 2003:345)

The TVET curricula used to be designed in consultation with industry, commerce and other clients with norms and standards being set by the national Department of Education. Technical colleges required permission from the Department to offer new programmes. This centralised control of curricula made it difficult to respond quickly

to local demands for changes in the national curriculum. Fisher et al (2003:336) came to the following conclusions about curriculum development in FET colleges:

‘On the whole ... it appears that programme innovation and curriculum development have lagged behind changes in industry and the labour market over the past ten years. The first in-depth situational analysis of the college sector, undertaken ... in 1998, cited a range of problems, including the calibre and competence of examiners and markers, as well as rigid curricula and the lack of relevance of some programmes to changing labour market demands.’

In the light of these findings the Department of Education drew up a re-capitalisation plan for the FET public colleges of R1.5 billion from 2006 to 2009. It motivated this move by stating that ‘it is clear that steps need to be taken to improve the match between the needs of the labour market and the skills developed through and in our FET Colleges’ (Department of Education, 2005:4).

In spite of the recapitalization much of the technology and machinery used for training at TVET Colleges remained obsolete. In a visit by me in 2017 to one of the Colleges in Cape Town in 2017 demonstrated it vividly. On one campus where motor mechanics were being trained all but one of the engines the students could train on still had carburetors. The students were thus training to repair and maintain engines that were obsolete and no longer being produced. On another campus where students were being trained in turning, there were only two lathes that had CNC (computer numerical control), yet CNC lathes are fairly standard in industry.

Much therefore still remains to be done in South Africa to deliver high quality TVET.

State Policies on Skills Development in Botswana, Zambia, Tanzania and Ghana

The paper turns its attention next to skills development in Botswana, Zambia, Tanzania and Ghana. Although Johanson and Adams (2004) found that the most common form of apprenticeship training in Africa takes place informally at the workplace, the governments of these four countries have elaborate technical and vocational training institutions and policies in place. In this section I discuss the policies that these four countries have in place. They are all countries where I have conducted research during brief visits over a three year period from 2015 to 2017. It is work-in-progress as more research will still be conducted at all four countries.

Botswana

The skills development strategy of Botswana bears many similarities to the South African National Skills Development Strategy. Its National Human Resource Development Strategy (NHRDS) was approved by the Botswana government’s Cabinet in January 2009 and officially launched in 2013 with the passage of the Human Resource Development Council Act. The Act established a Human Resource Development Council (HRDC) that became operational on 8 November 2013.

A key function of the HRDC is to formulate Human Resource Development Plans for key sectors of the economy. To this end it established Sector HRD Committees that have to produce sector-specific HRD Plans to ensure a linkage between sector

specific skills demands and the supply of the necessary skills. No less than 12 sectors were identified on the grounds of their strategic importance to the economy. The 12 sectors are: 1) Mining, Minerals, Energy and Water Resources, 2) Tourism, 3) Creative Industries, 4) Agriculture, 5) Health, 6) Information and Communication Technology, 7) Finance and Business Services, 8) Education and Training, 9) Public Sector, 10) Transport and Communication, 11) Manufacturing, and 12) Research, Innovation, Science and Technology. By the end of 2015 the first seven sector committees had already been established.

A Human Resource Development Fund (HRDF) has also been established. The fund is to be used for training and is operated by means of a levy grant system. Companies pay a levy into the Fund and are reimbursed the costs they incur for training their employees. The size of the levy is based on an employer's turnover. If a company's turnover is below P500,000 there is no levy, if it is between P500,000 to P2billion it pays 0.2% of its turnover, and if in excess of P2billion 0.05% of turnover. The amount that can be claimed for training is very generous. It ranges from 7.5 times more than the levy for training expenses below P1,000 to twice as much as the levy for expenses in excess of P5,000.

Workplace training is encouraged as all workplace-based training costs are refunded by the HRDC. In order to qualify for a refund a Workplace Skills Training Plan has to be drawn up and approved before commencing on the training (HRDC 2014:2-23).

By 2016 three of the sectors, Agriculture, Tourism, and Mining, Minerals, Energy and Water Resources (MMEWR) had completed their HRD Sector Skills Plans and the HRCD had launched the remaining five Sector HRD Committees. In addition, the HRDC signed a Memorandum of Understanding with Statistics Botswana, Ghanzi Brigade and the Barefoot College in Tilonia, India, where seven women from marginalised communities were trained to become Solar Energy technicians (HRDC 2016:18-19).

The MMEWR Sector Committee identified skills deficiencies of TVET-trained artisans, so it initiated an upgrade of their training with the assistance of the Botswana Chamber of Mines in collaboration with the German *Gesellschaft für Internationale Zusammenarbeit* (GIZ). The project was launched at the Botswana College of Engineering Technology in Gaborone and the Francistown College of Technical and Vocation Education. The total enrolment for years 1 and 3 at Francistown was 160 and 72 at Gaborone (HRDC 2016:22).

The mismatch of supply of graduates with demands from the economy in Botswana has become a serious problem over the years. Hence both the Tourism and Agriculture HRD Sector Committees paid special attention to this problem. In tourism planning was done in partnership with the industry and tertiary institutions and several of them formed partnerships with hotel in Gaborone and Francistown. The Agricultural Sector Committee disseminated its Sector HRD Plan to the Botswana University of Agriculture and Natural Resources with the purpose of sharing with the University what the priority skills are that employers need (HRDC 2016:23-24).

In order to empower workplaces to improve workplace learning the HRDC introduced Work Skills Plans. During 2015 it conducted 10 Workplace Learning workshops in various places across the country and paid workplace visits to 19 industries. However, industries have been slow in embracing the HRDC's policies and programmes as only 28 out of the 48 levy payer industries submitted work skill plans (HRDC 2016:26-28).

The Botswana HRDC has launched itself well during the first three years of its existence with an active and carefully thought out strategy. However the uptake has been low and its outreach and impact are still very limited.

Zambia

A major feature about the Zambian government's policy towards skills development is that it emphasizes entrepreneurial education and training as much as it does technical and vocational education and training. This is reflected in the very name of the authority in charge of skills development in Zambia: It is called the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA).

The origin of TEVETA dates back to August 1994 when the Minister of Science, Technology and Vocational Training appointed a national Task Force to review Government policy on technical education and vocational training and to recommend changes that would be necessary for the training system to meet new and emerging challenges in the national economy. The Task Force submitted its recommendations in January 1995 which the Government used to draw up a new policy that gave equal emphasis to entrepreneurial training by passing the Technical Education, Vocational and Entrepreneurship Training Act, referred to as the TEVET Act No. 13 of 1998. The Act led to the establishment of the Technical Education, Vocational and Entrepreneurship Training Authority (TEVETA) whose responsibility is to interpret and implement the TEVET policy. The functions of TEVETA include, amongst others, to

- Regulate and coordinate apprenticeship and trade testing facilities;
- Develop national curricula in consultation with all stakeholders;
- Set minimum standards and qualifications for any occupation, skill, technology or trade for institutions in accordance with developments in industry;
- Regulate and conduct national examinations relating to technical education, vocational and entrepreneurship training;
- Approve curricula and standards of certificates in institutions established or registered under this Act;
- Register institutions and cancel the registration of an institution established under this Act (TEVETA 2018a).

Over the years TEVETA increased the scope of its operations. In May 2009 it officially launched a TEVET Learnership Scheme on a pilot basis. The TEVET Learnership Scheme 'is a dual based learning pathway where the employer

becomes the experience provide to add value to the theoretical training offered by training providers. A TEVET Learnership is therefore a training method that combines theoretical training with relevant work experience.' The scheme was piloted by the Zambia National commercial Bank (Zanaco) as the employer and three training providers (TEVET News 2009:3).

By 2016 TEVETA had accredited almost 300 training providers about a third of which are public institutions supported by different ministries, including the Ministry of Higher Education (CoL 2016:ii). On 11 November 2016 the Minister of Finance announced the introduction of a Skills Development Fund during the presentation of the 2017 National Budget in order to address challenges of inadequate skills among craft individuals, artisans, technicians and technologists. The Minister said that the introduction of the Skills Development Fund was part of the long term financing solution for technical and vocational education and training (TVET). He added that the Fund would be jointly managed with the private sector to ensure developed skills were relevant to the requirements of industry (TEVETA 2018b).

In addition to TEVETA, the Directorate of Vocational Education and Training, a department within the Zambian Ministry of Higher Education, administers funding for 24 public training institutions. In 2012 there were approximately 35,000 students enrolled for institution-based training of which roughly 8,000 graduated at the end of the year (CoL 2016:ii).

According to the Commonwealth of Learning the TEVET system in Zambia still faces a number of significant challenges, including the following:

- Training programmes that are not responsive to market needs;
- Low priority for training workers in the informal economy;
- Girls and women still do not have equal access to TEVET; and
- Poor quality of instruction because many teachers do not have recent experience in industry and/or lack pedagogical qualifications (CoL 2016:v).

Tanzania

The Tanzanian Government adopted a different approach from Zambia to skills development. It has drawn a strong and clear distinction between vocational and technical education and training. Vocational education and training (VET) constitutes a lower level of education while technical education is at a higher tertiary level. This has led to an institutional split between VET and technical education. VET is administered and implemented by the Vocational Education and Training Authority (VETA) while Technical Education is overseen by the National Council for Technical Education (NACTE). VETA and NECTA offices are physically and geographically separated from each other by about 10 kilometers. This approach has had consequences for how Tanzanian technical and vocational education has developed.

VETA was established by an Act of Parliament No. 1 of 1994, the Vocational Education and Training Act. The Act charged VETA with the broad tasks of 'coordinating, regulating, financing, promoting and providing vocational education

and training in Tanzania. The history of VETA dates back to 1940 when the Apprenticeship Ordinance was enacted to guide training in industry.' The National Vocational Training Division was established 34 years later in 1974 (VETA 2018).

NACTE was established by The National Council for Technical Education Act No.9 of 1997 with the function of registering and accrediting technical institutions. By the end of January 2018 it had 571 institutions and university department on its registration list. Of these 425 had been granted full registration status, 81 provisional, 7 were at preparatory stage, and 58 were unspecified (NACTE 2018).

In 2010 VETA conducted a nation-wide tracer study for 2004-2009 graduates of vocational education and training on Tanzania mainland. The sample consisted of 4,923 VET graduates of which two-thirds were males and one-third females. It used two questionnaires, one for VET graduates and the other for employers (VETA 2010:x and 13).

The study found that the ten most popular occupations ranked by the number of graduates were, in order of ranking, 1) textile and clothing and tailoring, 2) motor vehicle mechanics, 3) carpentry and joinery, 4) electrical installation, 5) computer applications, 6) secretarial, 7) masonry and bricklaying, 8) welding and fabrication, 9) food preparation, and 10) hotel management. There was a distinct preference for certain VET occupations between female and male graduates. Females' choice of preference were clothing and textile (43% of all female graduates), business administration (18%), then hospitality and tourism (12%). Males preferred motor vehicle mechanics (31%), construction (30%), followed by electrical installation (VETA 2010:18-21).

Of the sample of 4,923 graduates 67.4% of the males were employed and 63.5% of the females. The major reason by far for being unemployed was because they were in training although they would have preferred to work. Of the unemployed males 47.5% were in training and unemployed females 33.6%. The second largest reason among both males (22.3%) and females (32.1%) for being out of work was the lack of resources to start a business (VETA 2010:28-30).

In evaluating the findings of the tracer study it was found that the employability of VET graduates needed to be enhanced by including training for self-employment in urban and rural settings, that there has to be continuous upgrading and updating of skills, and the training for people with disabilities required improvement. The study's concluding findings included, amongst others, that access to VET was less equitable in terms of educational background, geographical distribution and gender, that female participation in VET was concentrated more on "soft skills", and that there was a lack of systematic and strong partnerships with industries in training (VETA 2010:xi-xii).

What is clear about state involvement in Tanzania is that it has a fairly long history and firmly established institutions with considerable outreach over the country.

Ghana

Background

Ghana currently has a population of approximately 27 million people and a labour force of 13.6 million of which an overwhelming proportion work in the informal sector. According to Baah-Boateng and Baffour-Awuah (2015:5) 88% of total employment is found in the informal sector. Most of the labour force work in agriculture (44.7%) and services (40.9%). Only 9.1% are employed in the manufacturing sector (Baah-Boateng & Baffour-Awuah 2015:5). The education level of most of the working age population is very low. Almost three-quarters (72.8%) had either no education or only up to primary school level. Those with vocational or technical education constituted 2.4%, university or polytechnic education 4.1%, and people with professional training like teachers, nurses and agriculturalists accounted for 1.5% in 2013. Students who complete their Junior High School have a choice what to do next. Of those who do not or cannot proceed to Senior High School 10% enter formal TVET institutes in the country and an estimated 15% enter into informal apprenticeships. The remaining 75% either enter low-skilled jobs or remain unemployed . (Baah-Boateng and Baffour-Awuah 2015:7-8)

Unfortunately, 'there are negative perceptions about TVET in Ghana, to the extent that many people see it as a dumping ground for those unable to advance through the grammar education system' (Baah-Boateng and Baffour-Awuah 2015:13). A study done on the topic concluded that 'there is a widely held perception in Ghana that only people who are academically weak undertake technical and vocation education. A significant proportion of current TVET trainees, particularly in the informal sector (primarily apprenticeships), are therefore labeled as school dropouts, which impacts on the self-esteem and external perceptions of trainees' abilities' (quoted by Baah-Boateng and Baffour-Awuah 2015:13).

Nonetheless, the Ghana government has a number of diverse institutions and programs aimed at providing technical and vocational education and training. The diversity of institutions is a strength but also potential weakness as it creates contestation among them.

Council for Technical and Vocational Education and Training (COTVET)

The most important institution is the Council for Technical and Vocational Education and Training (COTVET), which is a national body set up by an Act of Parliament. Its function is to co-ordinate and oversee all aspects of technical and vocational education and training in the country. Its major objective is to formulate policies for skills development across the broad spectrum of pre-tertiary and tertiary education in formal and informal sectors (COTVET 2018). COTVET is an agency under the Ministry of Education in Ghana, but its work, in terms of regulation, in terms of overseeing, cuts across 16 different Ministries.

COTVET was created in 2006, but its work essentially started round about 2010. It was tasked with the responsibility of overseeing and coordinating all participants, bringing the skills supply side and demand side together, and ensure standardisation. It started with the implementation of three different TVET integrated products aimed at reforming the TVET landscape.

The first one is called the Development of Skills for Industry Project, a five to six-year project, that was still running at the end of 2017. With the aid of funding from the African Development Bank its task is to build state of the art institutions equipped to train people with modern technology.

The second project was the Ghana Skills for Industry Project that ended in December 2016. It was sponsored by the World Bank with the aim of building capacity for COTVET and other stakeholders, especially those that are involving in science and technology research. It also introduced one very important aspect of skills development in the country, a Skills Development Fund. It is a challenge fund available to individuals, corporates and any entity that has a need for skills upgrade, skills improvement or technology adoption. They are free to apply, and get a grant if successful.

The third project largely focusses on the informal sector. It was running in August 2017 and sponsored by German Government with GIZ as the chosen principal implementer. Its aim is to formalize the informal sector in order to downsize it.

In order to achieve standardization COTVET has introduced and advocated competency based training (CBT). This was done in close collaboration with industries. This is aided by having a TVET Qualifications Framework in Ghana (Deh 2018).

Returning to the Skills Development Fund, it is a grant that is given to enterprises on the demand side to apply for training of their workforce in upgrading their skills. But there is also a component for the training service providers. They may apply for funding in order to introduce new training methods that are not otherwise available for people in the industry.

In addition, the Skills Development Fund uses a challenge fund approach. It does so for enterprise in more remote rural area or informal sector. With the aid of funding from the World Bank they use the challenge fund as a demonstration, as some kind of taster, so when the employers have tasted and seen the benefits, they themselves can go ahead to invest in further training (Eku and Larbi 2017).

The challenge fund operates in the following way. The Skills Development Fund puts out a call for proposals and invites applicants to submit a concept note. When the concept note is evaluated, those who pass are given the opportunity to write a more detailed proposal, and submit. It is given to outside technical evaluators. The enterprises that make the grade are then visited, after which an approval committee makes the final choice.

There has been a strong monitoring and evaluation of the outcome. In the first phase that commenced in 2011 and ended in 2016 the Skills Development Fund disbursed grants worth more than 50 million Ghanaian Cedi (USD 11 million). It is claimed that 646 grantees benefited from the fund which then extended the training to over 40,000 firms where more than 100,000 individual workers received training. As a result there was a productivity improvement of 46% overall. Both Danida and the World Bank are said to have done their own independent assessments and

confirmed the results. Consequently Danida agreed to renew its funding for the second phase (Eku and Larbi 2017).

National Vocational Training Institute (NVTI)

The National Vocational Training Institute (NVTI) was set up by an Act of Parliament (No. 351 of 12th January, 1970). Its functions, as laid down in the Act, include the following:

- To organize apprenticeship, in-plant training and training programmes for industrial and clerical workers and train Instructors and Training Officers required for the purpose;
- To provide for vocational guidance and career development in industry;
- To develop training standards, and evolve effective trade testing and certification policies and programmes;
- To initiate a continuing study of the country's manpower requirements at the skilled worker level (NVTI 2018).

The Institute has a large number of departments each with a long array of functions, as well as councils and committees, making the NVTI a large and complex organisation. The Departments with extensive functions are the Informal Apprenticeship Department, Testing Department, Training and Development Department, Monitoring and Evaluation Department, Institutional Training Department, and Counselling and Career Development Department (NVTI 2018).

The Institute's geographic range is extensive, covering the whole country, with about 37 training centres. In addition it has 229 vocational institutions and 40 (health) care givers registered with it. In one year it trains roughly 40,000 people and tests around 80,000 (NVTI 2018, Kudesa 2018).

Not only does the NVTI train, it also does theoretical and practical tests and exams. It then certifies those who are deemed competent. There are about 104 different occupations for which students can be tested, and within each occupation there are four levels.

With such an extensive outreach, the question arises whether the NVTI is able to provide high quality training. A site visit at one of its training centres in Accra which takes on about 170 students per year, some of the lathes were at least 37 years old, having been installed in the 1970s. Others were supplied in 1997, making them 20 years old and that is no long of use in industry. None of the lathes used for training had CNC (computer numerical control) which is quite standard in industry.

ICCES is Integrated Community Centre for Employable Skills

The Integrated Community Centre for Employable Skills (ICCES) is an agency under Ministry of Employment and Labour Relations (MELR) with policy objective to increase young person's access to skills acquisition and empowerment for productive employment. It was established in April 1986 with the primary objective of providing employable skills to the rural folk in order to curb the rural-urban drift. It

was also given the mandate to train the youth, especially the unemployed, using competency based training (CBT) in technical and vocational skills that are demand driven (ICCES 2018).

The underlying reason for bringing Integrated Community Centre for Employable Skills (ICCES) into being, was to mop up the excess youth who couldn't go further in their education during those years, and get them trained in vocational technical skills to make them employable.

David Mensah, the Acting Director of ICCES, explained the role of the institution as follows:

'ICCES has been doing training, helping the youth acquire skills in the area of electricals, block lading, concrete lading, carpentry and joinery; dressmaking, ICT, catering, entrepreneurship, English, mathematics and the various sciences, which are generic subjects, because those of them who'd like to further their education, should be able to read and write, and be able to further their education even to university level.

'ICCES has been in existence for 31 years and is the agency that has the largest number of centres. It has 65 centres across the territories of Ghana, even in the most remote part of the country.

'Another unique feature of ICCES is that if a basic education student's passes does not allow her or him to go to certain technical institutions, ICCES' doors are still open to her or him. The aim is not to let education be a barrier to the quest to learn technical occupational skills. Even non-literates are welcome, and we train them in proficiency examined trades' (Mensah, 2017).

Since ICCES is a community-based institution, communities are expected to play a pro-active role in the setting up of training centres. David Mensah explained the process:

'Community people have to accept or take their own decision that they want a training centre. It's a kind of a demand-led kind of concept. We don't go and build centres. It should be an interest which is conceived by the chief and opinion leaders in the community, and then decide that these are the trades we want our youth within our community to acquire. Then they approach ICCES, they apply, fill in forms, then we go and inspect the structures, because the communities are supposed to provide their own classrooms, workshops, tools, equipment. Then, when these things are in place, ICCES will provide the instructors and the centre managers to conduct the training.

The community's commitment will have to provide the infrastructure, the tools and equipment. Honestly, it has been very tough for most communities, because they are mostly rural-based, and the poverty situation is such that most communities are not able to provide adequate workshops, classrooms, tools and equipment. So that have been the greatest challenge; provision of infrastructure, tools and equipment to facilitate adequate training' (Mensah 2017).

The total enrolment of trainees at ICCES is hard to come by. It has been estimated at 4,465 in May 2012, with approximately 30% female trainees. Enrolment in Ashanti alone stood at 1,058 in February 2012. (Darvas and Palmer 2014:127-128).

Conclusion: Ghana

Unlike Botswana, it is clear that skills development institutions have been in existence for a long time in Ghana, some for almost 40 years. In addition there are also a number of well-established government-based training institutions. However, this is also a weakness as it duplicates functions, spreads scarce resources more thinly, and creates conflict between them.

There is a rift between COTVET and NVTI with NVTI suffering from a shortage of funds and training students on dated machinery no longer in use by industry. ICCES is even less well funded and relies on poor communities in many regions to supply the necessary facilities, equipment and tools required for training.

There is a move afoot to unite all the different training institutions under one umbrella, the Ministry of Education. This move has been welcomed by both the NVTI and ICCES. As David Mensah put it:

‘Government’s thinking is that all the skills training institutions in the country, between 12 to 15 of them, are to be moved from their various ministries like Employment and Labour Relations, Agriculture and Transport and Industry and all that, moving all the skills training institutions to Minister of Education. So this whole idea of bringing all of us under Education to rather focus, I think is good’ (Mensah 2017).

Conclusion

The states in all five countries have developed extensive policies and structures to advance technical and vocational education and training (TVET). In the Zambian case entrepreneurship training is given as much emphasis.

Although hard evidence still has to be collected, from the evidence available it seems valid to conclude that the extent of education and training provided is not sufficient to significantly reduce poverty. This is because the training in more productive skills reaches only a small proportion of the total labour force. In addition, the quality of the education and training provided by the state appears not to be at a level that will ensure the high productivity required by producers of goods and services to make them internationally competitive. This restricts the number of workers who can obtain high skill jobs with high wages that will help reduce poverty significantly.

References

- Akoojee, Salim, 2003. 'Private Further Education and Training,' ch.17 in in Andre Kraak and Helene Perold, eds, 386-415.
- Baah-Boateng, William, and Daniel Baffour-Awuah. 2015. Skills Development for Economic Transformation in Ghana. Paper submitted to the African Center for Economic Transformation, Independence Drive, corner Castle Road, Accra.
- Badroodien, Azeem, 2004. 'Technical and vocational education provision in South Africa from 1920 to 1970,' ch.1 in McGrath et al, 2004, 20-45.
- Bennell, Paul. 1992. Industrial Training Boards in South Africa: Performances and Prospects. National Education Policy Investigation (NEPI), Human Resource Development Research Group, Durban.
- Chitonge, Horman. 2015. *Economic Growth and Development in Africa: Understanding global trends and prospects*. New York: Routledge.
- Coetzee, Melinde, ed. 2013. *Practising Training and Development in South African Organisations*. Second Edition. Cape Town: Juta & Co.
- CoL (Commonwealth of Learning). 2016. Situational Analysis & Baseline Study of Open, Distance & Flexible Learning in the Technical Education, Vocational and Entrepreneurship Training Sector in Zambia. Prepared by Ed Du Vivier for Commonwealth of Learning. 8 January.
- COTVET. 2018. Council for Technical and Vocational Education and Training of Ghana – Home. <http://www.cotvet.gov.gh/> Accessed 31 January 2018.
- Darvas, Peter and Robert Palmer. 2014. *Demand and Supply of Skills in Ghana: How Can Training Programs Improve Employment and Productivity?* Washington DC: World Bank.
- Deh, Sebastian. 2017. Interview with Sebastian Deh, former Executive Director of the Council for Technical and Vocational Education and Training, COTVET, up to February 2017. 29 August, Accra.
- Department of Education, 2005. FET Colleges Recapitalisation. Presentation to the Education Portfolio Committee Meeting, 21 June 2005.
- Department of Labour, 2001. *An Introduction to the Skills Development Strategy*. Second Edition. Pretoria: Department of Labour.
- Department of Labour, 2002. State of Skills in South Africa. Pretoria: Skills Development Planning Unit, Department of Labour.
- DHET, 2015. *SETA Landscape: NSDS & SETAs beyond 2016 within the Context of an Integrated, Differentiated Post School Education and Training System*. Republic of South Africa: Department of Higher Education and Training.
- DHET, 2017. *Statistics on Post-School Education and Training 2015*. Republic of South Africa: Department of Higher Education and Training.

- Eku, Dunwell Ekow, and Adwoa Larbi. 2017. Interview at Skills Development Fund offices, East Legon, Accra. 31 August.
- Fisher, Glen, Ros Jaff, Lesley Powell and Graham Hall, 2003. 'Public Further Education and Training Colleges,' ch.14 in Kraak and Perold, 2003, 326-351.
- Gamble, Jeanne. 2002. Teaching without words: Tacit knowledge in apprenticeship. *Journal of Education*, 28, 63-82.
- Hirschsohn, Philip. 1997. 'South Africa: The Struggle for Human Resource Development,' ch.13 in T Kochan, R Lansbury and JP MacDuffie, eds, *After Lean Production: Evolving Employment Practices in the World Auto Industry*. Ithaca NY: Cornell University Press, 231-254.
- Hirschsohn, Philip. 1998. 'Responding to Globalisation and Lean Production: Implementing Training Policy in the South African Auto Assembly Sector,' *South African Journal of Labour Relations*, 22, 2&3, 44-58.
- Houghton D Hobart. 1967. *The South African Economy. Second Edition*. Cape Town: Oxford University Press.
- HRDC. 2014 (estimated date of publication). Corporate Profile. Gaborone, Botswana: Human Resource Development Council.
- HRDC. 2016. Annual Report 2015-2016. Gaborone, Botswana: Human Resource Development Council.
- HSRC. 1985. *The HSRC/NTB Investigations into the training of artisans*. Pretoria: Human Sciences Research Council.
- HSRC. 1989. *The HSRC/NTB Investigation into Skills Training in the RSA*. Pretoria: Human Sciences Research Council.
- ICCES. 2018. Integrated Community Centre for Employable Skills, Ghana – About Us. <https://iccesghana.wordpress.com/about/> Accessed 1 February 2018.
- ILO (International Labour Office). 2013. *Women and men in the informal economy: A statistical picture. Second Edition*. Geneva: ILO.
- Johanson, Richard, and Avril Adams. 2004. *Skills Development in Sub-Saharan Africa*, Executive Summary and ch.6, Building skills for the informal economy. Washington DC: World Bank. Pp. 1-14 and 127-148.
- Kraak, Andre, and Helene Perold, eds, 2003. *Human Resources Development Review 2003: Education, Employment and Skills in South Africa*. Cape Town: Human Sciences Research Council.
- Kraak, Andre, 2003. 'HRD and the Skills Crisis.' Ch.28 in Andre Kraak and Helen Perold, eds, 660-687.
- Kraak, Andre. 2004a. 'Training policies under late apartheid: the historical imprint of a low skills regime,' ch.2 in McGrath et al, eds, 46-70.

- Kraak, Andre. 2004b. 'The *National Skills Development Strategy*: a new institutional regime for skills formation in post-apartheid South Africa,' ch.5 in McGrath et al, eds, 116-139.
- Kudesa, Godwin. 2017. Head of Institutional Training in the National Vocational Training Institute (NVTI). Interview. 31 August.
- Lundall, Paul. 1995. Apprenticeship Training in South Africa: Recasting the Boundaries. *Southern African Labour Monographs 2/95*, Labour Law Unit, University of Cape Town.
- Lundall, Paul. 1998. The Erosion of Apprenticeship Training in South Africa. Paper prepared for 10th World Congress of WCCES.
- Malherbe, E. 1977. *Education in South Africa. Vol.II: 1923-75*. Cape Town: Juta.
- Maree, Johann, ed. 1987. *The Independent Trade Unions 1974-1984*. Johannesburg: Ravan Press.
- McGrath, Simon, Azeem Badroodien, Andre Kraak and Lorna Unwin, eds, 2004. *Shifting Understandings of Skills in South Africa: Overcoming the Historical Imprint of a Low Skills Regime*. Cape Town: HSRC Press.
- Mensah, David. 2017. Acting Director of ICCES, the Integrated Community Centre for Employable Skills. Interview 30 August in Accra.
- NACTE. 2018. List of Accredited, Registered Institutions and Recognized University Departments by National Council of Technical Education, Tanzania. <http://www.nacte.go.tz/> Accessed 31 January 2018.
- NVTI. 2018. National Vocational Training Institute of Ghana – About Us. <http://www.nvtighana.org/AboutUs.aspx> Accessed 31 January 2018.
- Palmer, Robert. 2004. The informal economy in Sub-Saharan Africa: Unresolved issues of concept, character and measurement. Occasional Papers No.98, Centre of African Studies, Edinburgh University.
- Perry, Helen, and Fabian Arends, 2003. 'Public Schooling,' ch.13 in Andre Kraak and Helene Perold, eds, 2003, 302-325.
- Rotberg, Robert. 2013. *Africa Emerges*. Cambridge: Polity Press.
- Saunders, Chris, ed. 1992. *Illustrated History of South Africa. Third Edition*. Cape Town: Reader's Digest.
- TEVETA. 2018a. About TEVETA Zambia <http://www.teveta.org.zm/about/> Accessed 30 January 2018.
- TEVETA. 2018b. Government to introduce Skills Development Fund <http://www.teveta.org.zm/news/read.php?ref=33> Accessed 30 January 2018.
- TEVET News. 2009. TEVET Learnership Scheme Launched by Government. *TEVET News*, 7, 2, pp.3-4.

- Van der Horst, Sheila. 1971 (reprint of first edition 1942). *Native Labour in South Africa*. London: Frank Cass & Co.
- VETA. 2010. Report of the Tracer Study for 2004-2009 Graduates of Vocational Education and Training of Tanzania Mainland. Dar es Salaam: Vocational Education and Training Authority.
- VETA. 2018. Home site of Vocational Education and Training Authority, Tanzania. <http://www.veta.go.tz/index.php/en> Accessed 31 January 2018.
- Webster, Eddie, ed. 1978. *Essays in South African Labour History*. Johannesburg: Ravan Press.
- World Bank. 2012. *Education in Sub-Saharan Africa: A Comparative Analysis* by Majgaard, Kirsten, and Alain Mingat. Washington DC: World Bank.