

# Restructuring Technical and Vocational Education and Training (TVET) For Sustainable Development in Sub-Saharan Africa

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**Abstract:** In order to enhance productivity, stimulate competitiveness, and bring about sustainable economic development, skills development is vital. Technical, Vocational Education and Training (TVET) plays an important role in the provision of the skills, knowledge, attitude, and values needed for the development and has emerged as one of the most effective human resource development strategies that African countries need in order to train and modernize their technical workforce for rapid industrialization and national development. Therefore, skill training is important for sustainable industrialization and poverty reduction in terms of creating a critical mass of technically and entrepreneurially qualified people, who are able to stimulate investment opportunities, create jobs and increase competitive productivity, which can be ensured by a well trained workforce. TVET ensures this through its practical application as opposed to theory, and on acquisition of skills as opposed to acquisition of knowledge. TVET therefore prepares learners for careers based on blue-collar and practical activities. It is a training opportunity in which the learner participates and directly develops specific skills and expertise. However, considering the numerous problems facing sub-Saharan Africa in terms of development, TVET is not only important but it is a prerequisite if at all these problems are to be alleviated. This paper therefore seeks to discuss the current environment in which TVET systems in sub-Saharan Africa operate and to highlight some of the reforms that are underway in a number of countries by critically reviewing some of these problems and the limitations to the growth of this sector and how TVET could be used in alleviating them.

**Keyword:** TVET, Sustainable development, Sub-Saharan Africa, Training.

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## I. Introduction

TVET plays a critical role in the African development. In fact many African governments view it as a poverty reduction strategy, UNESCO (2004) identified the two major objectives of TVET as the urgent need to train the workforce for self-employment and the necessity to raise the productivity of the informal sector.. In the countries of Sub-Saharan Africa in particular, governments are renewing efforts to promote technical and vocational education and training (TVET) with the conviction that development of skills enhances productivity and sustains competitiveness in the global economy. TVET thus plays an orientation role towards the world of work and its curriculum emphasizes on the acquisition of such employable skills, which is a fundamental necessity for driving the industrial and economic growth, and it is a key to building this type of technical and entrepreneurial workforce which Africa needs to create wealth and emerge out of poverty. TVET therefore is a means through which training needs of learners from different socio-economic and academic backgrounds are responded to, thus preparing them for self employment and sustainable livelihoods. The youth, the poor and the vulnerable of society can therefore benefit from TVET. In turn, concerns have been raised by most African countries about the move towards making TVET complementary to post-basic education (Bhuwanee 2006).

## II. Background of TVET

In most developing African countries, education provision by both public and private investors does not serve the rural youth adequately as compared to the urban youth. This is evident in less training and employment opportunities available for them. (Bennell 2007). In most Sub-Saharan African countries the deployment of teachers and other staff in the education sector to rural areas is difficult in many countries. This has led to poor teaching quality, high schooling costs and the lack of proper employment which has reduced the demand for education among poor parents. A research by UNESCO (2007) shows that about 130 million young people of ages between 15-24 years in developing countries are classified as illiterate, among them being women with about 59% illiteracy. And that a high number of illiterate youth and those with low schooling are living in rural areas and are never trained adequately thus are poorly prepared for productive work. Going by such a scheme whereby majority of our youth are not empowered with skills that are necessary for self employment and sustainability, then our countries will still lag behind development. There is therefore need for a sustainable development scheme and therefore learning and teaching towards sustainability is becoming a crucial task in education. In Africa, governments, industries, Non-Governmental Organizations and the general public are much aware of this urgent need as the countries strive to be globally competitive in the economic ties. This urgent need was reflected in the aim of the UN Decade of Education for Sustainable Development plan, (ESD) 2005–2014 launched by UNESCO on 1 March 2005 (UNESCO, 2007). This initiative seeks to integrate the inbuilt values in sustainable development into all aspects of learning to encourage changes in attitude that permit for a more sustainable and independent society.

## III. Current Status of TVET in Sub-Saharan Africa

In most Sub-Saharan African countries, TVET programs are formally school-based. Though in some countries like Kenya, TVET training is incorporated in the syllabus. In general however, students enter the vocational education track at the end of primary school, corresponding to 6 – 8 years of education as in countries like Burkina Faso and Kenya, or at the end of lower or junior secondary school, which corresponds to 9 – 12 years of what is called basic education in countries like Ghana, Nigeria, Mali and Swaziland. The duration of school-based technical and vocational education is between three and six years, depending on the country and the model. Some countries like Ghana, Senegal, and Swaziland in an attempt to expose young people to pre-employment skills have incorporated basic vocational skills into the lower or junior secondary school curriculum. Oversight responsibility for TVET is shared in general between the ministries responsible for education or technical education and labour or employment, although some specialized vocational training programmes (in agriculture, health, transport, etc.) fall under the supervision of the sector ministries.

### Why TVET?

One of the focuses of UN Millennium Development Goals (MDG) is on basic and especially on the universal primary education. The focus neglects post-basic education and training including technical and vocational education and training (TVET) (Fluitman 2005). This was majorly due to the fact that that vocational education and training (VET) was absent in most government and donor poverty reduction strategies in most developing countries i.e. vocational education and training has been receiving less attention. This marginalization of TVET is due to a lack of donor investment and lack of action by many governments, yet TVET is among the key pillars of training for sustainable development. There is need therefore to adjust development efforts and build the human resources and capabilities of the poor. There is a link between poverty reduction and skills training and increased growth, productivity and innovation, in particular for the informal sector (Fluitman 2002). TVET thus plays a vital role in developing the skills which are needed to improve output, quality, variety and occupational safety and improves health, thereby increasing incomes and livelihoods of the poor. It also helps to strengthen knowledge about informal sector, rural organizations and good governance. According to human capital theory, the better educated the agricultural labour, the higher their productivity (Atchoarena et. al. 2003).

#### IV. Structure of TVET in Sub-Saharan Africa

TVET in Africa is delivered by both government and private providers, which include for-profit institutions and non-profit, NGO and Church-based institutions. In almost all countries, non-government provision of TVET is on the increase both in terms of number of institutions and student numbers. This trend is linked to the fact that private providers train for the informal sector (which is an expanding job market all over Africa) while public institutions train mostly for the more or less stagnant industrial sector. Private providers also target “soft” business and service sector skills like secretarial practice, cookery, and dressmaking that do not require huge capital outlays to deliver. A limited amount of in-company or enterprise-based training also takes place in some countries; however, this type of training is often dedicated to the sharpening of specific skills of company employees.

#### V. Shortcomings in formal TVET sector in Sub-Saharan Africa

- (i) massive numbers of poorly educated, unskilled and unemployed youth making it difficult to plan effectively for TVET
- (ii) Weak national economies, high population growth, and a growing labour force;
- (iii) Shrinking or stagnant wage employment opportunities especially in the industrial sector;
- (iv) Poor quality in the delivery of TVET programmes;
- (v) TVET delivery systems are not properly coordinated and in most cases there is no proper regulations followed in its implementation since it has no clearly defined curriculum.
- (vi) Skills offered are in many cases of low quality, which can not fit in well with the competitive global not suited to actual socio-economic conditions and production needs.
  - (vii) Weak monitoring and evaluation mechanisms.
  - (viii) Inadequate financing, poor management lack of proper organizational structures.
  - (ix) Poor public perception on TVET; The public and even parents consider the vocational education track as fit for only the academically less endowed
  - (x) Disregard of the labour market and high unemployment rate among graduates
  - (xi) High cost of training;
  - (x) Various training like dressmaking, hairdressing, and cookery are associated with girls regardless of whether they are gifted in academics or not.

#### VI. Restructuring TVET in Sub-Saharan Africa

There is need to restructure TVET programmes which should be geared towards meeting the market demands. I.e. the curriculum of TVET should primarily focus on the knowledge and skills required for industrial development. Provision of TVET should therefore enhance quality delivery, should assure employability of trainees, should improve consistency and management of its training and should promote life-long learning so as to make it more attractive to the youth. TVET should therefore be in line with the needs and demands of the current industrial development needs (Harrison and Reddan 2010). The following strategies should be laid down so as to ensure long-life restructuring of TVET in Sub-Saharan Africa.

- The governments should mobilize all the concerned stakeholders to share responsibilities for all
- There is need for mobilization of various stakeholders for strong cooperation, technical and financial support towards the reconstruction process and reforms in TVET.
- Adequate training equipment and tools, adequate training materials such as textbooks and training manuals and qualified instructors with experience in enterprises. This will enhance quality delivery in TVET.
- Trainees should be assured of their employability after their training. This should be done by adopting training which ensures acquisition of employable skills that are related to the demands of the current labour market.
- The governments should establish monitoring agencies for vocational training under the ministries of education or as autonomous bodies which should coordinate the training activities of TVET. These bodies should have representation from

all pertinent stakeholders, including policy makers in education, public and private training providers, civil society and development partners. Alongside this unit, should be the development of TVET policy which sets out the government's vision for development of skills. The policy should make provision for the establishment of a leading body to oversee the implementation of the policy.

- Lifelong learning has a beneficial effect on the development of a high quality TVET system. This is because the skills of the workforce can be continually upgraded through a life-long learning approach. This also means that learners who have had limited access to training in the past can have a second chance to build on their skills and competencies.
- Development of a National Vocational Qualifications Framework (NVQF). An NVQF is vital for bringing coherence into the TVET system. An NVQF will prescribe proficiency requirements, qualification levels, and certification standards and increase the portability of TVET qualifications across national frontiers, when linked to other national qualification frameworks. TVET then becomes a factor of regional integration.
- Emphasis should be on TVET programmes such as building and construction, carpentry and joinery, welding, plumbing and production of simple agricultural equipment and tools, crop production and animal husbandry, electrical installation and electronic equipment repair, car repair and maintenance, handicrafts and traditional skills basic ICT skills (word processing, data management, internet, etc.)
- Tourism-related skills (hotel management, tour guides, cooks, waiters);
- Business entrepreneurial skills and attitudes (including time management, marketing, basic accounting, micro-business management; joint ventures);

#### **Governments**

- Give legislative backing to national TVET policies;
- Improve coherence of governance and management of TVET;
- Introduce policies and incentives that will support increased private sector participation in TVET delivery;
- Partner informal TVET trainers to incorporate literacy and numeracy skills into their training programmes;
- Invest in training materials and equipment;
- Invest in TVET instructor training and enhance status of instructors;
- Institute measures to reduce gender, economic, and geographical inequities in TVET provision;
- Introduce sustainable financing schemes for TVET;
- Increase funding support to the sector;
- Set up venture capital to support TVET graduates;
- Build leadership and management capacity to drive TVET system;
- Mainstream vocational education into the general education system, so that the vocational track is less dead-end;
- Introduce ICT into TVET
- Constantly monitor and periodically evaluate the performance of the system and apply corrective measures accordingly.

#### **Training providers**

- Provide training within national policy framework;
- Develop business plans to support training activities;
- Establish strong linkages and collaboration with employers and industry;
- Mainstream gender into training activities and programmes;
- Institute bursary schemes for poor trainees;
- Strengthen guidance and counselling services to trainees;
- Network and bench-mark with other providers.

**Parents and Guardians**

- Support children and wards to choose the vocational education stream;
- Reject perception that TVET is for the less academically endowed.
- Lobby politicians in favour of TVET
- Support activities of training providers.

**Donors and Development Partners**

- Support development of national TVET policies and strategies;
- Fund TVET research and advocacy;
- Support capacity building in TVET sector
- Help in identifying and disseminating best practices in TVET
- Support TVET advocacy initiatives

**Employers**

Employers should:

- Deliver workplace training to employees
- Contribute financially to national training fund
- Provide opportunities for TVET teachers to regularly update their workplace experience;
- Provide opportunities for industrial attachment for trainees
- Contribute to the development of national skills standards

**VII. Conclusion**

This TVET strategy document provides a strategic framework for the development of national policies to address the challenges of technical and vocational training to support economic development and the creation of national wealth and contribute to poverty eradication. The document acknowledges that vocational education and training alone does not provide jobs or eradicate poverty. Good government policies do both. The strategy therefore urges governments to create an economic environment that promotes the growth of enterprises and generally stimulates the economy. When businesses develop and expand, additional labour-market demands for technical and vocational training emerge, new job opportunities are created, more people get employed, and the incidence of poverty reduces. For this to happen on a sustainable basis, however, the TVET system must be labour-market relevant, equitable, efficient, and of high quality. This strategy document provides the framework for the design and implementation of such national TVET systems. This is because the diverse nature of TVET with its longitudinal and transversal dimensions suggests that the implementation of any strategy to revitalize the sector is more likely to be successful within a national policy framework with clear implementation guidelines and policy roles for the various actors as well as action plans for resource mobilization and allocation. Above all, political commitment to the revitalization effort can make the difference between success and failure.

**REFERENCES**

1. Atchoarena, D. and Delluc, A. (2002). *Revisiting Technical and Vocational Education in sub-Saharan Africa: an Update on Trends, Innovations and Challenges*, UNESCO, IIEP.
2. Bennell, P. (2007). *Promoting Livelihood Opportunities for Rural Youth: Paper presented at Roundtable 3: Generating remunerative livelihood opportunities for rural youth, IFAD Governing Council 2007*
3. Bhuwanee, T. (2006). *Reforming technical and vocational education in Sub-Saharan Africa: Case studies of Ghana - Mauritius - Tanzania and Zimbabwe. Dakar, Senegal: BREDA.*

4. Fluitman, F. (2002). *Unpublished plenary discussion on the draft of the World Bank's Vocational Skills Development in Sub-Saharan Africa: Synthesis of a regional review*. Edinburg University, September 2002.
5. Fluitman, F. (2005). *Poverty reduction, decent work, and the skills it takes or: towards correcting a partial view of training needs in African development*
6. Harrison, G. and Reddan, G. (2010). Restructuring the bachelor of exercise science degree to meet industry needs. *Asia-Pacific Journal of Cooperative Education*, 11(1), 13-25.
7. UNESCO. (2004). *Synthesis report: Improving access, equity and relevance in technical vocational education and training (TVET)*. Bangkok, Thailand: UNESCO
8. UNESCO. (2007). *Participation in Formal Technical and Vocational Education and Training Programmes Worldwide - An Initial Statistical Study*. UNESCO Institute for Statistics Montreal, Canada.
9. UNESCO. (2007). *Two pathways, one destination - TVET for a sustainable future*. The final report of the Virtual conference.