

Unleashing youth potentials through provision of quality TVET in Kenya

Dr. Christopher Kibet Yegon, PhD
Nairobi Kenya

Abstract: - The purpose of this paper is to advance discussion on the Technical and Vocational Education and Training (TVET) in Kenya. The discussion is based on the state of TVET in Kenya, as well as the comparative analysis of TVET in other countries. Human resources development is one of the important elements that determine the status of a country, whether it is recognized as a developed, developing or underdeveloped country. To realize its vision as middle income economy, by the year 2030, Kenya's investment focus is on human capital development. This is supported by a significant percentage of National Budget allocated to education and training sector every year. This paper therefore is expected to raise debate on best possible strategies on how TVET system can be used to promote economic development, youth empowerment and achievement of Kenya Vision 2030. Desk top research method was used to analysis policy documents from the government and strategic documents from TVET institutions. This study is meant to provide information that is expected to raise discussion on the best ways to improve TVET in Kenya and to propose a model that is used to implementation effective TVET. The argument is that given supply-driven nature of TVET system in Kenya, it is possible that the needs of the industry are not addressed in training. The paper also proposes various ways that need to be put in place to improve TVET and suggestions on areas that should be addressed to improve efficiency, quality, equity and relevance. A centrally-driven TVET system if not well planned can lead to development of programmes that do not address diversified needs. Similarly, inadequate funding which has persisted could be addressed through involvement of key industry players in financing TVET. Drawing on the recent advances in matching resources to productivity, quality labour transforms an economy. Quality labour is a product of training, poor training leads to poor labour and this leads to poor products. Impact evaluation of the final labour market outcomes of the graduates has to be integral part of the TVET system, and finally discussion on various ways such evaluation is also captured.

Key words: *Technical and Vocational Education and Training, unemployment, and skills*

I. BACKGROUND

As we move to the new dispensation under sustainable development goals, knowledge is critical in driving the process of development. A knowledge economy is essentially one in which knowledge will be the only essential commodity. Therefore, a country cannot afford to channel only those who failed to learn into technical/vocational education programmes. A knowledge economy therefore also requires more people with a sound general education and not just those with limited packages of practical skills (Bah-Lalya and Sukon, 2011).

The Technical and Vocational Education and Training (TVET) in Kenya is not new. It dates back to early 1900s when the native industrial training Dept was started in Nairobi by the missionaries (Elimu Insight, 2016). The TVET refers to a range of learning experiences which are relevant to the world of work and may occur in a variety of learning context (ROK, 2012). The TVET subsector contributes significantly to economic and social development of a country. The achievement of sustainable development and acceleration of economic growth depends on industrial production and expansion of value addition process. To achieve effective industrial and vibrant value addition, diverse skills in various production fields are required. In this endeavor, the Kenyan Vision 2030 and sustainable development goal number four recognizes that education and training of all is fundamental to the achievement of expected economic status (Kenyan Vision 2030; ROK, 2012). The education sector is expected to provide skills that are required to steer the country to attain its economic and social goals as envisioned in the Vision 2030.

Similarly, the Constitution of Kenya 2010, places a lot of emphasis on quality and relevance of education and training to youth. The Sessional Paper No.1 of 2005, a policy framework for education, training and research, emphasize the role of TVET in providing and promoting lifelong education and training for self-reliance. Over the years the TVET sector has faced a number of challenges such as; lack of effective

coordination and disparities in training standards, rapidly changing technology, globalization, short-lifespan for product and taste and preference and ever changing customer requirements and needs. The unpredictable and dynamic business environment has led to continuously shift in demand for improved skills and labour and therefore necessitating restructuring training programs to respond to the industry needs (ROK, 2013).

To address the mentioned challenges and others, several policies have been proposed. Among the policies proposed include; establishment of a national TVET Authority to oversee the national skills training system and regulate quality of training in collaboration with Commission of University Education (CUE), formation of TVET Curriculum Development and Assessment Council (CDACC) to coordinate competency based education and training (CBET), the Kenya National Qualification Framework and the formation TVET Funding Board. The Sessional Paper No. 14 of 2012, a policy framework for education and training on reforming education and training sectors in Kenya, focuses on the need to assure quality in all levels of education and training. In each level, there is a regulator to ensure quality assurance and compliance to standards. The TVET Authority (TVETA) is a regulator for TVET institutions (middle level training below universities) while in basic education while the regulator for basic education is known as Education Standards and Quality Assurance Council (ESQAC).

The TVET Authority is State Corporation under the Ministry of Education Science and Technology and was established as a body corporate by the TVET Act, 2013, Laws of Kenya, to regulate and coordinate Technical and Vocational Education and Training through registration of training institutions and trainers, licensing institutions to offer training programmes, approve managers to run the institutions and assure compliance to training standards and quality assurance.

II. GLOBAL PERSPECTIVE OF TVET

For comparative purpose, a few of the countries were incorporated into this study in order to provide a framework for comparison in TVET development. These countries were purposively chosen without any scientific method. However, of interest to some of these countries are the common projects within the East Africa region and the horn of Africa (LAPSSET). Ethiopia and South Africa are among the countries in Africa that have managed to invest in TVET as a means to drive economic development.

Skills development is important for economic growth, poverty alleviation, youth and women empowerment and social inclusion. Nevertheless, the role of TVET is not effectively captured to a large extent in most of the policy documents. This gap is particularly ‘puzzling’; Governments and donor countries consistently emphasize the need for concerted efforts to build the human assets of the poor. Yet TVET is accorded limited importance in donor financing schemes and discussions since the late 80s’ (Bennell, 1999). The TVET systems in Africa differ from country to country and are delivered at different levels in different types of institutions, including technical and vocational schools (both public and private), polytechnics, enterprises, and apprenticeship training centres. In West Africa in particular, traditional apprenticeship offers the largest opportunity for the acquisition of employable skills in the informal sector. In Ghana, the informal sector accounts for more than 90 % of all skills training in the country (Maajumdar, Khambayat, Tsesoro-Gayondato, &Solla, 2010).

Krishnan and Shaorshadze (2013) alluded that TVET training in Ethiopia was growing and training was provided by government and non-governmental organizations (NGOs). In the year 2008/09, there were total of 458 TVET institutions with an enrolment of over 308,500 students in regular, evening, summer and distance programmes. This shows that Ethiopia was among the countries in Africa with higher number of training institutions. There was a system used to select students to TVET while at the same time students were allowed to join TVET after completing university education. There are two categories of students; those who can join TVET and those who can continue their studies to upper secondary and to university.

The emphasis of TVET is to assist in achievement of development goals and is driven by the fact need to improve labour productivity. In most of the African countries labour productivity is low and earning from domestic wages was about one third of the average wage in Sub-Saharan Africa. The World Bank Investment Climate Assessment (ICA) found out that in terms of annual sales per worker, average labour productivity in Ethiopia in industries of significant presence was less than half of the average for the Sub Sahara Africa Countries, and even smaller fraction of that of the low income country group. Although part of the reason for the

low productivity was due to low quality of tools and equipment used, skills play a key role as well (World Bank, 2009). This implies that specific skills which are critical in industrial sector were still missing.

In most of the developing countries, Skills labour command a high wage premium. Dinh, Palmade, Chandra and Cossar (2012) expounded that the average wage differential between skilled and unskilled labour was 81% in Ethiopia, compared to 14% in China. On average, labour efficiency in medium and large firms in Ethiopia was about 50% of that in similar sized firms in China. In small and micro enterprises, labour productivity is less than 20% of the Chinese level. In 2006/2007; the Ethiopian Development Research Institute (EDRI) with the technical assistance of the World Bank conducted Productivity and Investment Climate Survey. The survey found out that the large proportion of medium and large firms were severely constrained by lack of skilled workers (World Bank, 2009). This implies that most of the firms in Ethiopia uses unskilled labour.

According to Mbaye (2014), basic skills affect labour productivity and earnings. The problem of not supplying adequate skilled labour to the market is influenced by supply driven training system in place. Even though TVET strategies are geared towards improving access, quality and relevance are important. This is in contrast to market-driven TVET systems, where the demand for particular specialization, as well as the fields of study is governed by the “invisible hand”. In the literature the appropriateness of the first versus the second approach has not been consistently settled, and the best approach may indeed depend on the particular contextual and institutional setting.

In Egypt, the International Labour Organization (ILO) report of 2011 showed millions of young people were unemployed while at the same time private sector firms were not able to fill thousands of existing job vacancies. This was also replicated in South Africa with similar situation existing (*Economist*, 2012). The high rate of unemployment among those with higher education is much higher among the youths in middle income countries and low income countries, suggesting that a mismatch between the skills and job market an issue in developing countries among the youth. Further a survey among recruitment and temporary work agencies conducted for this report in nine African countries shows that such agencies have a greater struggle to find suitable candidates with tertiary education in South Africa and Tunisia than in countries with much lower incomes such as Kenya, Ghana and even Niger (*Economist*, 2012).

In Brazil, vocational and technical education is offered in parallel and in conjunction with general secondary/high school education. The Ministry of Education supports a network of vocational education schools that offer programmes aimed at fulfilling the need for vocational training in the areas of services, industry and agriculture. The TVET track of secondary/high school education lasts for three to four years, where each course has a different workload: Primary sector technicians have a work load of a minimum of 2900 hours of which at least 1200 should be vocational courses, complemented by practical skills work; Secondary sector technicians have a workload of a minimum of 2900 hours of which at least 1200 should be vocational courses, complemented by practical training and tertiary sector technicians with a minimum workload of 2200 hours of which at least 900 should be vocational courses (OECD, 2010).

In Kenya, TVET is expected to provide human capital to drive the country attain middle level economy. According to the Second Medium Term Plan for the period 2013 to 2017, one of the key projects expected trigger economic growth in Kenya is the infrastructure (ROK, 2013). The focus is how to use infrastructure as catalyst to economic development. The infrastructure project between Kenya, Ethiopia and South Sudan, popularly known as “Lamu Port-South Sudan-Ethiopia-Transport (LAPSSET)” covers rail way, road and oil pipeline. Its starts from Kenya Lamu Port and connect Kenya with Ethiopia and South Sudan. Kenya is spearheading the development of Corridor Project to strengthen her position as a gateway and a transport and logistics hub to the East African sub-region and the Great Lakes region to facilitate trade, promote regional economic integration and interconnectivity between African countries. The completion of the project is expected to create a lot of employment opportunities to the youths in this region.

III. TVET REGULATORY SYTEMS IN KENYA

Education and training in Kenya is managed and governed under a two-tier system of government, the National Government and County Governments. The promulgation of the Constitution 2010 created two systems of governments’ structure, and made education and training as part of the Bill of Rights. This therefore led to the development of the Sessional Paper No. 14 of 2012, a policy framework meant to reform education and training in Kenya. The sessional paper led to development of legal framework for all the levels of education and training. Namely, Basic Education Act 2013 for Basic Education (Early Childhood

Education, Primary and Secondary); Technical and Vocational Education and Training Act, 2013 for the TVET institutions and Universities Act 2012. There are also a number of legal frameworks on curriculum development, assessment and evaluation (KICD Act, 2013, KNEC Act, 2012). Initially, quality of training differed greatly from one institution to another and from one state department to another. The TVET Act, 2013 established TVET Authority which is a body corporate and governed by the Board. The functions of the Authority as per the TVET Act include; regulate and coordinate training; accredit and inspect programmes and courses; promote access and relevance of training programmes within the framework of the overall national socio-economic development plans and policies; inspect, license, register and accredit training institutions and trainers; assure quality and relevance in programmes of training through undertaking regular monitoring, evaluation and inspection of training and institutions to ensure compliance with set standards, guidelines and maintenance of standards, quality and relevance in all aspects of training.

The mandate of the Authority is to promote access, equity, quality and relevance in TVET by regulating, inspecting, registering, accrediting and licensing institutions and programmes. It is envisioned that through effective quality assurance in TVET, the trainees from these institutions will be able to create jobs and therefore improve standards of living. The regulator (TVET Authority) is empowered to register and license training institutions, trainers and managers to run TVET institutions. In terms of quality assurance, the shift is to enhance institutional internal quality assurance mechanism as well as engage specialist in various fields in quality assurance. These specialists are known as monitors and evaluators and their main work is to ensure that there is compliance to training standards in TVET.

IV. CHALLENGES IN ATTAINMENT OF QUALITY AND RELEVANCE

There has been a lot of debate on quality in TVET. Different scholars have defined quality in different ways. Newton (2007) looked at quality in three perspectives as a; measure to assess the level of academic attainment, method to assess services provided, and norm expressed in formal statements about expected practice. Perspectives on quality in technical and vocational education and training can be defined in terms of what it serves. Bartram and Rees (2000) defined quality assurance as all those planned and systematic actions needed to provide adequate confidence that a product, service or result will satisfy given requirements for quality and be fit for use. A quality assurance programme is defined as “the sum total of the activities aimed at achieving required standard” (ISO, 1994). For instance, it can mean excellence, zero-defects, uniform quality, satisfying customer needs or operational improvement. Instead of creating a pervasive and unequivocal definition of quality, it is more relevant to examine it as a relative and contextual concept. Quality is always bound to satisfying customer needs. Defining quality is ultimately a common task for training providers as this would improve customer satisfaction.

In order to improve quality, deliberate steps need to be taken such as; promote capacity of society and citizens (knowledge-based society) to know their rights and obligations, diversify skills training to meet broader spectrum, improve on quality of students entering TVET, improve quality of trainers and curriculum delivery skills (pedagogy), assessment and develop clear qualification framework. One of the key strategies for economic development and prosperity is to ensure productivity of world class labour. To achieve economy growth and prosperity there must be critical mass of skills required to drive industrial processes (ROK, 2015). The Kenyan Vision 2030 identifies human capital development as a priority area to trigger momentum required in achievement of the Vision. The TVET subsector is a major player in this process.

To assure quality, vibrant quality system is required. Ayonmike, Okwelle&Okeke (2015) state that quality assurance refers to all forms of internal and external systems to ensure acceptable standards are maintained. Quality assurance means those procedures, processes or systems used to guarantee and improve the quality of operations. The definition covers quality assurance and quality improvement. Quality management aims at facilitating continuous improvement and development of operations and results. Quality management is an integral part of TVET system and thus is linked to all functions and levels within an organization.

In order to provide quality in TVET, provision of service/training should be aimed at producing human resources who drive technological and economic growth of the nation by ensuring quality and standard of service is of unquestionable nature. Factors such as; students, institutions and government have been identified to have an impact on attainment of quality in TVET. The strategies that are needed to address the challenges of quality in TVET include; a workable quality assurance mechanism that foster quality and standard in every aspect (such as input, process, and output) of TVET programmes (Ayonmike et al, 2015).

Yegon (2015) posit the importance of ensuring training efficiency in training as it encompasses assessment of the training and defining expected output in terms of skills attained by the trainee. Similarly, Kirkpatrick (2005) postulated that quality in training is directly related to achievement of learning outcomes such as; knowledge, skills and competence achieved at the end of the learning process that fulfills the key stakeholders' expectations (students, employers, parents and community). Given the inevitable turbulence in global environment, it is imperative that the strategies are put in place to ensure expectations of various stakeholders were met effectively.

As a move to enhance productivity, most of the Africa countries have initiated public sector reforms aimed building sustainable institutional capacity, efficient and effective service delivery. Kenya on her part has initiated a number of reforms, key of which is linking labour productivity to resource usage in production process. For some time, there has been an outcry from the labour market and commerce that the products produced were not meeting the demand of the market (consumers' needs). Low quality products (goods and services) are associated with low quality labour in production process (ROK, 2007). This means that to enhance quality of workforce, training provided should equip trainees with relevant skills that would enable them to perform specific tasks.

V. STRATEGIES TO ADDRESS QUALITY AND RELEVANCE IN TVET

Whiteman (2001) alluded that entrepreneurs fail to recognize changes, where such changes come from, and how they affect business operation. The need to recognize the trends in business operation requires proactive mechanism to identify changes in the market and how such changes impact on business organizations. This implies that proactive mechanism and intelligent system should be put in place to ensure changes occurring in whatever form were captured and incorporated into production and business operation for survival.

Maajumdar, Khambayat, Tsesoro-Gayondato, &Solla (2010) explained quality assurance as a process of verifying or determining whether products or services meet or exceed customer expectations. This implies that quality assurance is inherent in the system management as such in-built quality mechanism ensures production of quality products. The ISO 9000 and ISO 9001 has seven quality principles of management; customer focus, leadership, engagement of people, process approach, improvement, and evidence based decision making and relationship management. Ayonmike et al (2015) alluded that quality is directly related to achievement of learning outcomes that are expected to solve societal problems.

Despite the fact that youths in Kenya have high aspirations, they lack necessary support structures to help them achieve these aspirations. In most of the developing countries, youths have limited access to quality education and training, high levels of unemployment, high crime rate rates, violence and drugs, alcohol and substance abuse (ROK, 2009). This is supported by the National Report of the Fifth Participatory Poverty Assessment of 2014, which identified causes of poverty in developing countries as; unemployment, low agricultural production and poor marketing systems for agricultural produce, livestock diseases, abuse of alcohol and drugs, poor road networks, shortage of water, lack of access to quality education and training. Strengthening quality TVET system will therefore solve some of these challenges.

Kenyan views education and training (E&T) as the primary means of upward social mobility, national cohesion and socio-economic development (ROK, 2012). The Kenya Vision 2030 places great emphasis on the link between E&T and labour market, the need to create entrepreneurial skills and competencies, mainstreaming natural values in E&T and involvement of the industry in training is expected to address challenges in TVET. Kenya is part of international community and therefore it committed in implementing the Sustainable Development Goals (SDGs). The SDGs if implemented is expected to free human race from tyranny of poverty and to heal and secure our planet. Through goal number four; which is to ensure inclusive and equitable education and promote lifelong learning opportunities for all, Kenyan would be able to transform the country and create wealth through quality TVET (UN, 2015).

As envisaged in most of the policy documents and the Kenya Vision 2030; education and training is fundamental to the success of the Vision because it equips citizens with understanding and knowledge that enables them to make informed choices about their lives and those facing the society. Poverty and education have a positive correlation; lack of education deprives people from accessing gainful employment. Poor education and training is manifested in the cycle of poverty, poor nutrition, deprivation of social needs such as quality of training and high dropout rate from school and training institutions (ROK, 2014).

Most of the governments in developing countries use youth employment as a political tool in their campaign. Youth's unemployment, poverty, social unrest and insecurity are among the most pressing challenges presently facing many countries across the globe. This conviction is amply reflected in numerous contemporary educational literatures (Obgbunaya, Udoudo and 2015). Key issues that drives political agenda is job creation and increasing youth participation in economic activities in most countries including Kenya. Most of the development plans and policies are anchored on skills to drive their implementation; this is corroborated by

Kenya Second Medium Plan 2014-2017(ROK, 2013). The plan has prioritized key areas that the government needs to invest in order to achieve the plan. The critical areas identifies for training at artisan level and apprenticeships. These training levels are expected to meet the demand for human resource skills required in transformation of an economy.

In order to maximize gains on investment in education and training, issues of quality and relevance, is important. Quality training unlocks potential of the youths to participate in economic activities. Socio-economic support programmes for the youths such as; youth employment and entrepreneurship, and credit schemes like Youth Fund and Uwezo Fund provides financial assistance and empower the youths to run businesses. The government through constitutional framework has developed schemes to provide youths, people with disabilities and women opportunities to participate in government procurement. Each government entity is expected to set aside a percentage (30%) of items to be procured to the group (ROK, 2015, ROK, 2013). This initiative is in recognition that youth unemployment is major threat to national security in many countries including Kenya. Unemployed youths are responsible for all manner of social problems such as; violence, crime, cultism, radicalization, drugs and substances abuse and irresponsible sex behavior.

VI. ISSUES ON EQUITY AND RELEVANCE

Placement of students for training and university education is normally done after candidates have sat for form four examinations. The Kenya Certificate for Secondary Examinations (KCSE) registered a total of about 525,000 candidates. A total of 68,126 candidates attained grade B and above which is normally cut-off point for those who get government scholarship through Kenya Universities and Colleges Placement Service (KUCCPS). Those with B- and C+ were 97,640 and this group can either join universities through self-sponsorship programmes popularly known as Module II (self-sponsorship). A total of 346,864 students scored grade C and below and these are the group that is expected to join TVET institutions (KNEC, 2016).

In 2014, 483,630 candidates sat for Kenya Certificate for Secondary Examinations (KCSE) and 67,790 (14%) got admission to 31 public universities (KNEC, 2014). The declared capacity in TVET institutions was 41,550 but only 11,500 (2.4%) candidates applied for admission to TVET institutions. The enrolment in TVET institution in 2014 was 65434, assuming an average of 250,000 students in universities both public and private and TVET institutions, a big number (233,630) of candidates were not able to get any training and therefore may not attain skills required to create self-employment. This implies that security of the nation is not guaranteed when high number of youths misses opportunities to engage in gainful employment.

In 2003, the government made education free in primary and day secondary schools. This initiative improved enrolment in class one to an extent of attracting over 1,200,000 pupils. For the same cohorts, only about 525,000 were able to sit for form four examinations (KCSE) in 2015. From the statistics, about 700,000 pupils who enrolled in standard one were not likely to sit for form four examinations. It is expected that this 700,000 pupils who were unable to continue be encouraged to enroll for skill training which is provided by TVET. The enrolment in TVET was still lower and some people attribute low enrolment to many factors such as; high cost, negative attitude towards technical colleges, inadequate training opportunities and issues on relevance. Expansion of TVET is affected by; insufficient number of trained trainers, inadequate and uncoordinated funding, limited availability of training facilities and lack of industry involvement, limited community participation; mismatch between skills acquired and demands of industry and weak collaboration with professional accreditation bodies.

Most developing countries (except India and sub-Saharan Africa) the youth population was expected to reach peak from 2015. This demographic bulge represents a great economic opportunity: Young people will have fewer children and ratios of productive to dependent population will improve (Commonwealth, 2009). This is an opportunity for youth who graduate from universities in the developing countries; however, the benefits will only accrue if the training sector is able to focus their training in the priority skill areas. Currently, the youth in most of the developing countries were among the highest people without relevant skills and training, unemployed, and majority were engaging in drugs, alcohol and substance abuse, radicalization and criminality (ROK, 2009).

The Sustainable Development Goals is targeting the youths who are likely to be the main engine of economic development and poverty reduction. Globally and even in Kenya, youth account for 50% of unemployed despite the fact that there is marked significant improvement in transition from primary to secondary. In Kenya, there are many youths who were not doing any economic activity not because they were not able to do anything, but they lack skills and competence required. Similarly, HIV/AIDS have ravaged economic and social base among the youths; it has caused high death in Sub-Sahara Africa and it is estimated

that the AIDS pandemic and related problems will constrain human capital and income to the levels of 1990s by 2030 (Commonwealth, 2009).

Currently, our focus on policy should not be the normal things that we have been doing over the years but instead the focus should be on matching training with industry needs, use of technology and innovation, creation of collaboration and linkages with the industry, involving professional bodies and industry. Focusing on such collaboration will provide skills that are required to identify market trends and innovations in dynamic environment. In marketing, customer loyalty is what brings income to business.

VII. POLICY INTERVENTION IN TVET

A number of policy intervention measures have been put in place to improve quality and relevance of TVET in Kenya. Both the government and the private sector have supported TVET through funding, development of curriculum and curriculum support materials. The private sector have also supported training of artisans through project work and training the youths on management of small and microenterprises. The country is focusing on the training of huge number of artisans: that would assist in expansion of infrastructure such as irrigation projects, roads and standard gauge railway (SGR). Vocational training centres have been expanded to provide trainees with skills to enable them engage in gainful occupations and job opportunities (ROK, 2013). A number of legal instruments have been developed to reform management of various sectors of education and training.

To engage the youths effectively, quality education and training which provide diversified curriculum is required. A report of Kenya Private Sector Alliance (KEPSA) proposed strategies that can support human capital development from early childhood education up to TVET level of training. The specific support programmes targeted include; curriculum support materials, training of trainers, establishment of resources centres, provision of textbooks and training facilities, support nomadic education and internship programmes (KEPSA, 2016).

The gaps attributed to inadequate quality assurance, poor curriculum design and delivery leads to instances offering training that does not meet expectations of the labour market. To address this challenge, the focus should shift from the traditional curriculum where emphasis is on “subject and time bound based training” to competency based education training (CBET) which lays more emphasis on training outcomes, and upgrading equipment and facilities in TVET institutions. Similarly, innovative approaches to financing education and training should be adopted to supplement current funding systems in place.

Another hindrance to national development is lack of national skills inventory which assists in informing planners on labour market requirements. Through robust labour market information system, a country would be able to achieve optimum utilization of available human resources. This information is also useful in allocating resources to education and training institutions so as to respond to the needs of the labour market and tailor training to fill existing gaps. The establishment of national skills database can be done by setting up tracer studies in TVET.

The National Manpower Survey of 2011, identified areas with high demand for skills. The demand for middle level personnel was at 66.76% of the total labour demand in 2014. It is expected that majority of the demand labor will be in wholesale and retail; repair of motor vehicles and motor cycles and manufacturing. In terms of skill shortage the same sectors were also leading (ROK, 2013). The report of the National Manpower Survey implies that training should be targeted on agriculture and manufacturing. The manufacturing sector constitutes 70% to industrial sector to GDP and contributes 10% of GDP (KIPPRA, 2013). In Kenya, since this sector is labour intensive then production of relevant TVET skills should be enhanced to ensure value addition in agriculture and manufacturing was improved.

In summary the milestones in the TVET sector in Kenya include; fair access to training opportunities, expansion of training opportunities through establishment of TVET institution in every constituency and at least one vocational training centre at every ward. Similarly, the government is focusing on; streamlining management and assessment of industrial attachment process, institutionalization of quality assurance and accreditation system and monitoring, evaluation, reporting and inspection in TVET, and establishment of labour market information system. These initiatives are expected to enhance employability of TVET graduates and provide a framework to bring together all stakeholders involved in TVET training.

VIII. GOVERNANCE AND ADMINISTRATION

Kenya has made great strides in education and training since independence in 1963. The Constitution of Kenya 2010 provides a framework for governance and leadership. This framework aims at eliminating opportunities for corruption by promoting transparency and accountability. Through creation of placement agencies, students are given an opportunity to choose the courses they want according to their performance. However, the actual matching is done through the matching system at the regional level, and it allocates fairly courses and specialties with high demand to applicants. The number of places allocated to different specializations is based on what is perceived to have demand by industry and based on capacity in TVET institution.

Most of the public TVET institutions in Kenya are headed by managers who are vetted before appointment. The Constitution 2010 has a section that deals with leadership and integrity. Any person appointed to head a public institution must comply with the constitution and must have certificate of good conduct. The TVET Act, 2013 also sets the procedure on appointment of the board of governors for TVET institutions (ROK, 2010). These requirements are manifestation of shift in management of public property and resources to ensure prudent use of scarce resources for posterity. Similarly, other documents in the registration of a TVET institution requires that a manager of a TVET institution must have at least a high qualification than the level of training an institution is offering. This requirement also applies to the trainers employed to train in TVET. The registration requirement also provides that an institution offering TVET training must have financial capacity to offer training. This ensures that a training institution must provide quality training through provision of adequate training facilities.

IX. SKILL COMPETENCY ASSESSMENT

The TVET expectation world over, is that training should focus on quality and relevance to ensure provision of skills required in development process. Policies on development made by any government are based on human skills expected to achieve them. This therefore means that education and training planners should be able to translated national plans and vision into training objectives. Through “outcome based” strategy the training planned in TVET should be measurable to skill expectation by the producers of wealth based on the market needs. Through skills occupation standards, the industry players are able to express their needs on skills requirements which must be translated into curriculum needs. This “outcome-based” approach will ensure the labour market is always provided with the relevant skills.

Occupational standards are the competencies needed to be considered for qualification for a certain field. The government and the private sector should develop occupational standards that guide curriculum development. Occupational standards are developed at the national level. The development of occupational standards is done through collaboration between the state organs and the private sector. The government and the private sector are key consumers of TVET skills and therefore they should be involved in development of these standards.

X. STRATEGIES FOR EVALUATING TVET

Evaluation of any training programs is long term and the typical tools for evaluation uses labour market information measured through outcomes of performance metric. Training can be evaluated using knowledge-creation model developed by Nonaka and Takeuchi. The model assesses the ability of a trainee to innovate and create new ideas (Nonaka&Takeuchi, 1995). The model explains how a worker can use implicit knowledge to produce competitive products. Yegon (2015) highlighted indicators which measures staff efficiency such as; ability to comply with organizational objectives, reduction of cases of deviations and ability to come up with new innovations. Training received is evaluated by looking at training process, reactions of trainees to labour needs and impact on organization. Development indicators, such as rate of unemployment and labour force participation are the key information required in evaluating the quality of TVET. The other indicator is wages, the impact evaluations typically aim to investigate if the program affect wages of participants. The actual wages that the graduates of TVET earn may not be equal to their marginal productivity. The actual wages may be attributed to bargaining power of workers versus that of employers. If a firm has high bargaining power, then at least some of the increase in worker productivity will accrue to the firm in terms of higher profits.

Consumption is another indicator of quality of TVET. Consumption is influenced by purchasing power of an individual. An individual with high income tends to consume more than a person whose income is low. Other indicators of quality skill workers engaged are manifested in asset ownership. Durable asset ownership

information is as a proxy for the permanent income. Durable assets may include own dwelling and household appliances.

Productivity is another indicator of quality TVET. Typically evaluations of vocational education training emphasize the outcomes of the individuals involved in training. Even though training may improve productivity of an individual, increased productivity may not translate into higher wages. This is either because of the increased supply of trained labour, or due to the bargaining power of an employer. In this case, the benefits accrue to the employer. Unfortunately the productivity in most occupations is hard to measure. In certain occupations it may be possible to measure output. Where piece rates are used output are clearly determinable. For instance, a work can be assigned to produce a given number of shirts in a day. These measurable terms uses skills as a standard parameter. It might also be possible to obtain qualitative assessments of productivity which might be a useful proxy.

XI. SKILL GAPS IN KENYA

The Nation Manpower Survey Report of 2011, show high rate of skill shortage in TVET related areas confirm that our training may not be matching requirements of the labour market. The skill gap according to the study was more pronounced in the rural and marginalized areas (ROK, 2013). Although there was large number of unemployed youths, a constantly growing labour supply and many enterprises in the rural areas were struggling to attract qualified workers. The constitution 2010, created devolved government where the focus on development is at the lower level of administration. This has further constraint distribution of labour in the country.

For instance, skills mismatches could be a pointer to poor quality training and this is a manifestation of weak linkages between training providers and employers. Youths are confronted with university degree desire which has traditionally been focused on provision of education for public sector employment, with little regard for the needs of the private sector. Often a degree from a tertiary institution is an entry requirement for government employment, with little attention paid on a specific skill set. At the same time tertiary education in technical fields tends to be significantly more expensive than in the social sciences, which makes expansion of such faculties more challenging for public education institutions. Private training providers could fill this void and leave the government to concentrate on quality control and oversight.

As a result of not focusing on the key skills with high demand, unemployment was high while graduates with TVET skills such as engineering and information technology (IT) have advantage in employment than those with social sciences skills. At the same time social science have much higher enrolment and graduation numbers in TVET institutions. The high number of graduates in social sciences consequently leads to much higher unemployment numbers. According to the World Bank report, the most difficult sectors in which to find candidates with tertiary education are those that need specific technical qualifications, such as the extractive industries, logistics, chemical and pharmaceutical industries, manufacturing in general and agri-business. Given Africa's comparative advantage in agriculture and the great potential for international trade in processed agricultural products, the low number of graduates in the area of agriculture and manufacturing was striking. With 2% of students specializing in agriculture the discipline occupies the same rank among graduates in Africa as it does in Europe, even though agriculture contributes 13% to Africa's GDP compared to 1.4% in Europe (World Bank, 2011). Agri-business is one of the few sectors for which finding high level managerial candidates is almost impossible in Africa including Kenya. Given the important role extractive industries play in many African countries, lack of graduates in technical and related training areas could affect growth of most of the Sub-Saharan Africa countries.

XII. CONCLUSION AND RECOMMENDATIONS

Conclusion

It is clear from the study that development of TVET has an impact on employment, security and economic development of a country. In order to provide TVET programmes that can create impact in the development of human resources who can be the driving force for technological and economic growth of the nation, quality and standard is a necessary condition. Youth forms a significant number of populations of a country. If they were not properly engaged they could stifle development and destabilize a country. A part from engaging in drugs and substance abuse, they can form networks with aim of radicalization and therefore being a security risk.

Despite the fact that TVET is important in promoting socio economic development, available statistics shows that image of TVET is still an issue. Though there could be many reasons for poor attitude on TVET by young trainees. The main reason for poor attitude could be attributed to; lack of employment, low pay to those

who do skill-oriented jobs, unclear progression in job market, inappropriate infrastructure and equipment, weak quality of trainers, poor management of TVET institutions, weak curriculum, examination and competence assessment procedures and low funding. Effective rebranding and modernization of TVET would improve the image and enhance enrolment. Rebranding strategy can be done effectively by improving training conditions facilities. This can be done effectively by involving the industry in the whole TVET training process. It is expected that such all-round initiative would lead to: Increased student enrolment in TVET institutions, increased employability of TVET graduates, expanded scope on innovation within TVET institutions and improved partnership and collaboration between TVET institutions and industry.

Recommendations

From the analysis of various policy documents and findings of other scholars, the model that would transform TVET system in Kenya has tripartite characteristics. The collaboration between the training providers, regulators and the industry creates a framework that would make TVET a success story that could be used to drive socio-economic development. A model for skill tracking in TVET is given below.

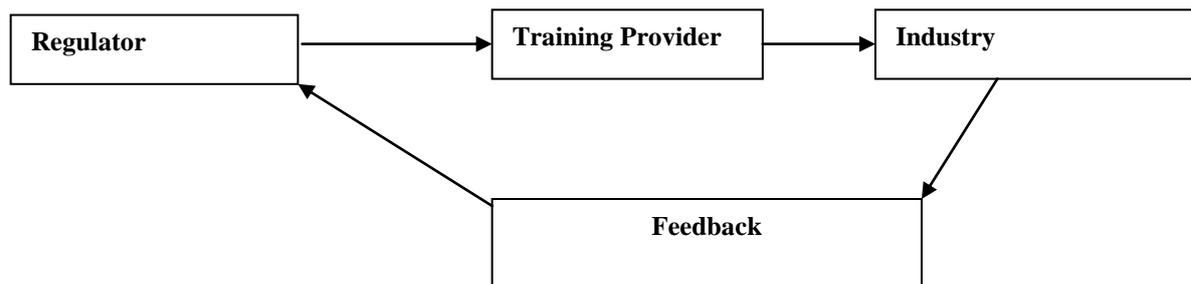


Figure 1: TVET quality standards and assurance framework

The focuses on provision of skills required by the industry, the regulator ensures that the training institutions comply with the industry standards. The regulators use industry skills inventory provided through feedback mechanism report to register, accredit training programs and in ensuring training institutions compliance to quality assurance. To be abreast with the dynamics in the market, the industry players study the customer needs and package them into skill inventory data records. The training provider is involve in skills development in line with the regulators' and industry's expectations.

REFERENCES

- [1] Ayonmike, C. S., Okwelle, P. C., &Okeke, B. C. (2014). Competency based education and training in technical vocational education: Implication for sustainable national security and development. *Journal of Education Policy and Entrepreneurial Research*, 11(2), 290-300.
- [2] Commonwealth Secretariat (2007). *The Commonwealth Plan of Action for youth empowerment 2007-2015*. Commonwealth.
- [3] Dinh H. T., Palmade V., Chandra V., Cossar F. (2013). *Light Manufacturing in Africa. Targeted Policies to enhance Private Investment and Create Job*. Washington. International Bank of Reconstruction and Development.
- [4] Elimu Insight (2016). East Africa's Leading Magazine. Issue No. 009, April May 2016.
- [5] Bartram J., and Rees G. (2000). *Monitoring Bathing Waters - A Practical Guide to the Design and Implementation of Assessments and Monitoring Programmes*. New York. E& F. N. Spon publisher.
- [6] Bah-LalyaL., and Skon K. (2011). *Peer Review in Education in Africa. Mauritius 2000- 2005 Education Reform*. Association for Development of Education in Africa(ADEA)
- [7] Shaorshadze I. and Krishnan P, (2012): *Technical and Vocational Education and Training in Ethiopia Paper for the International Growth Centre*. Addis Ababa. Ethiopia Country Programme
- [8] ISO (1994). Australian/New Zealand Standard Quality Systems – Model for quality assurance in design, development, production, installation and servicing.
- [9] KEPSA (2016). The 6th Presidential Roundtable held on 26th May 2016. Nairobi. KEPSA
- [10] KIPPRA (2013). *Kenya Economic Report of 2013. Creating an enabling environment for stimulating investment for competitive and sustainable counties*. Nairobi, KIPPRA

- [11] Kirkpatrick, D. (2005). *Quality assurance in open and distance learning in commonwealth of learning*. Monash University, Australia.
- [12] Maajumdar, S., Khambayat, R. P., Tsesoro-Gayondato, T. J., & Solla, R. M. (2010). *Integrating quality assurance in TVET system in support of qualifications framework*. *International Conference on Harnessing Qualifications Framework towards Quality Assurance in TVET*.
from: <http://www.voced.edu.au/handle/ngv:51199>
- [13] Mbaye M. A., (2014). *The informal Sector, Growth, Employment, and Sustainable Development*. Discussion Paper. Dakar. ILO
- [14] Nonaka I., and Takeuchi H., (1995). *The Knowledge-creating Company. How Japanese Companies create dynamics and innovation*. London: Oxford University Press.
- [15] Republic of Kenya (2013). *National Manpower Survey Basic Report*. Nairobi. Ministry of Labour
- [16] Pramila Krishnan and Irina Shaorshadze (2013). *Technical and Vocational Education and Training in Ethiopia*.
- [17] Ogbunaya T.C & Udoudo, S. E., (2015). *Repositioning Technical and Vocational Education and Training (TVET) for Youths Employment and National Security in Nigeria*. *Journal of Education and Practice*. Vol.6, No.32, pp 141-147.
- [18] OECD (2010). *Encouraging Lessons from a Large Federal System*. Paris: Organization for Economic Cooperation and Development. Accessed: 01 October 2013.
- [19] Republic of Kenya (2014). *Draft Technical and Vocational Education and Training (TVET) Policy*. Ministry of Education Science and Technology. Kenya
- [20] Republic of Kenya (2013). *Second Medium Plan (2013-2017). Transforming Kenya: Pathways to devolution, socio-economic development, equity and national unity*. Nairobi. Government Printer.
- [21] Republic of Kenya (2013). *Second Medium Term Plan for 2013-2017, Transforming Kenya: Pathway to devolution, socio-economic development, equity and national unity*. Nairobi, Government Printer.
- [22] Republic of Kenya (2008). *The Kenya Constitution 2010*. Nairobi. Government Printer.
- [23] Republic of Kenya (2008). *Technical, Industrial, Vocational and Entrepreneurship Training Strategy*. Nairobi. Ministry of Higher Education, Science and Technology
- [24] Republic of Kenya (2012). *Sessional Paper No 14 of 2012 on Reforming Education and Training Sectors in Kenya*. Nairobi. Government Printer.
- [25] Republic of Kenya (2013). *The Technical and Vocational Education and Training Act, 2013*. Nairobi. Government Printer.
- [26] Republic of Kenya (2009). *National Plan. Youth Leisure, Recreation and Community Service Component of the MOYAS Strategic Plan (2007-2012)*. Ministry of Youth Affairs.
- [27] Republic of Kenya (2014). *National Report of the Fifth Participatory Poverty Assessment*. The Presidency Ministry of Devolution and Planning.
- [28] Republic of Kenya (2015). *National Education Sector Plan (NESP), Volume Three: Programme Rationale and Approach for TVET, University and Science, Technology and Innovation 2015/2016-2019/2020*. Nairobi, Ministry of Education.
- [29] Yegon C. K. (2015). *Effect of Enterprise Risk Determinants on Financial Performance of listed firms in Kenya*. PhD Thesis, Jomo Kenyatta University of Agriculture and Technology. Kenya