
Exploring the Availability and Reliability of Information and Data for Technical and Vocational Education and Training (TVET) in Liberia

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Abstract. The world is facing a worsening youth employment crisis. In response, Technical and Vocational Education and Training (TVET) is back on the development agenda after years in oblivion. This article explores the availability and reliability of data and information sources for TVET in post-conflict Liberia. The research aims to map and analyze the existing sources of research, knowledge and information on TVET in the country. Adopting an eclectic approach to data collection, the researcher used desk review and content analysis of available literature and conducted selected interviews with key stakeholders discussion (remotely) to source information on the topic under review. The study finds that there exist limited reliable information and data on TVET in the country. This is largely due to the negative impact of the debilitating civil war that left the country institutionally incapacitated and deficient in human resource. The study established that even in situations where skills may be in demand by the economy and employers, it is not necessarily the case that TVET and other learning opportunities in these skills are being demanded by learners. Even the little information and data that are available, they provide limited picture in respect of the differences between what obtain in counties and between urban and rural development indicators. The article concludes that the TVET has scarce data and information that could inform decision making on the sector in the country.

Key words: Technical, Vocational, Education, Youth Employment, Labour Market, Demand-Side, Training

Introduction

UNESCO defines Technical and Vocational Education and Training (TVET) as “those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic life”. It comprises of technical education, vocational education, vocational training, on-the-job training, skills development and apprenticeship training (Katz 2008).

UNESCO is the only United Nations organization with a mandate that covers all aspects of education globally. The agency recently launched several programmes that aim to guide the TVET systems of its member countries towards achieving more quality, equity and relevance. UNESCO has also developed a Strategy for TVET (2016-2021) in alignment with Sustainable Development Goal 4 and the Education 2030 Framework for Action to strengthen TVET systems of Member States and advance youth employment, access to decent work, entrepreneurship and lifelong learning opportunities in specific national contexts. The TVET Strategy for 2016-2021 has three priority areas: fostering youth employment and entrepreneurship, promoting equity and gender equality, facilitating the transition to green economies and sustainable societies, and fostering youth employment and entrepreneurship.

TVET in most developing plays two fundamental roles in engendering national sustainable development. First, TVET provides training opportunities and plan career development for the unemployed and under-employed youth [population]. Second, it is designed to provide skilled human resource requirements of the country much needed to bring

about the socio-economic transformation and sustainable development. The skills so developed should be able to lead to self-reliance in the absence of formal employment and enhance the industrialization process.

This study sets out to explore the availability and reliability of data and information sources for TVET in post-conflict Liberia. It analyzed the available sources of information and data on the demand-side for TVET in the country. Additionally, the study employed an all-embracing approach in analyzing the available and accessible of information on the formal, non-formal and informal TVET, the challenges of accessing information and proffers some recommendations that could inform the development of the National TVET Policy of Liberia.

More than ever before, the need for data and information collection and analysis to inform decision-making on TVET cannot be appropriate, timely and apt. This is part of a trend towards evidence-based policy formulation and implementation. It involves an analysis of the information and data sources pertaining to the demands on and supply of TVET.

Literature Review

Many scholars and policy makers have contributed to the burgeoning literature on TVET (Angel-Urdinola et al. 2010; Betcherman et al. 2004; Betcherman et al. 2007; Card et al. 2011; UNESCO 2016; Simon, Coles & Buiskol 2015; Sajith et al 2013; Greenberg et al. 2003; Katz 2008; Kluve 2006; Kluve & Schmidt 2002; Puerto 2007; Stavreska 2006; Van Adams 2007).

Card et al. (2010) argue that TVET needs to be as dynamic as the economies and communities it serves. They further state that "...rapid changes in technology and employment patterns, in demographic growth and social expectations and many other factors drive the need to reform and expand TVET". Global occurrences such as globalization and the recent financial crisis, youth unemployment and under-employment, and the emerging challenge of an ageing workforce are rapidly changing the ways in which individuals and communities organize and go about work. Such transformations have also prompted governments to take a renewed interest in TVET policy and practice as an important part of their development agendas. Nevertheless, while TVET has stimulated extraordinary economic growth in some countries, it has failed to live up to expectations in others (Card et al 2011).

Employment and under-employment especially among the youthful population remain a critical challenge to developing countries in Africa thus increasing poverty levels. There are also concerns relating to security of these countries as discontent youths have turned their anger against state apparatus. UNESCO addresses the issue of growing youth unemployment through TVET by supporting countries in providing access for young people to quality skills training for the world of work and self-employment. To ensure a smoother transition between education and the world of work, the world body supports cross-sector collaboration and partnerships with the private sector, for relevant incorporation of entrepreneurship skills. Based on needs and contexts of the specific countries, UNESCO supports Member States in reviewing their TVET policies through analysis and alignment of key policy areas. It also supports the development of sustainable TVET financing mechanisms, with the view to mobilize resources for the implementation and of the implementation from the TVET Strategy (TVET Strategy, 2016-2021).

TVET in developing countries plays two fundamental roles in engendering national sustainable development. First, it provides training opportunities and charting career advancement avenues for the very many unemployed and under-employed youths. Second, it is designed to provide skilled human resource requirements of the country much needed to bring about the socio-economic transformation and sustainable development. The skills so developed should be able to lead to self-reliance in the absence of formal employment and enhance the industrialization process. That notwithstanding, the availability, reliability, coverage and quality of information and data on TVET remain a challenge for most low-

income countries and should be addressed to ensure that TVET remains relevant to youth employment and employability resulting in poverty reduction and sustainable development and peace.

There is hardly any central coordinating unit in many developing countries that provides policy direction on TVET and serves as a hub where researchers can access information and data on the TVET sector. It is very clear that funding constraints pose a fundamental challenge particularly non-formal and informal TVET where information and data on the availability are difficult to come by. Some TVET data and information are produced by the countries themselves through state institutions such as Ministries, Departments and Agencies/Commissions responsible for the sub-sector or by international organizations such as UNESCO, UNICEF and UNSAID or by NGOs and the private sector. Information and data, even where they exist, often vary in quality, accuracy and coverage depending on the methodology adopted, timeframe for the study, resources available to carry out the research and, most importantly, the competence of the researchers to conduct the study. Also worthy of note is the fact that these information and data are not sometimes reliable and, therefore, their utility in decision-making and policy development to improve the quality of TVET remains a challenge.

There is an increasingly heightened sense of awareness among political commentators and policy makers in many African countries and the international community of the critical role that TVET can play in national development. The growing importance that African governments now attach to TVET especially in post-war countries is reflected in the various Poverty Reduction Strategy Papers that governments have developed in collaboration with International Financial Institutions such as the World Bank, the International Monetary Fund (IMF), the African Development Bank (AfDB) and donor agencies such as the EU and USAID. One of the most important features of TVET is its orientation towards the world of work and the emphasis of the curriculum on the acquisition of skills. TVET delivery systems should, therefore, be well placed to train the skilled and entrepreneurial workforce especially the youth that Africa needs to create wealth and emerge out of poverty.

Critical too is the fact that TVET can be seen as a vehicle for promoting access to entrepreneurship and quality skills training, stimulating economic growth, creating sustainable employment and reducing poverty. This means that TVET institutions should respond to the different training needs of learners from different socio-economic and academic backgrounds, and prepare them for gainful employment and sustainable livelihoods. This will in turn assure society at large of reaping the benefits of sustained economic development, social cohesion and equity and improvements in livelihoods. The youth, the poor and the vulnerable in society are, therefore, the biggest beneficiaries of TVET.

Youth unemployment, underemployment and vulnerable employment, are major issues that have negative implications for socio-economic and livelihood development, social inclusion and stability, national security and enduring peace. Liberia is a youthful country with 79% of the total population of about 5million below the age of 36 years in 2018*. The increasing number of youth population coupled with a growing youth unemployment crisis has consequences for the education and training system as well as job creation. Technical and Vocational Education and Training (TVET) provides an important avenue for the acquisition of employment-oriented and life coping skills and attitudes. It must be noted that a lot of data on TVET was lost during the intractable civil war that has implications for today's revitalization of TVET system in the country.

* See the Liberia TVET Policy of 2018 for details

Materials and Methods

The researcher employed a participatory approach to data collection, which included but were not limited to comprehensive literature review and content analysis and stakeholder interviews. Interviews were conducted remotely due to COVID 19 pandemic. This was one clear limitation to the study because other data collection methods such as focus group discussion were not undertaken. The focal points for the study were the key Ministries of the Inter-Ministerial Task Force (IMTF) namely the Ministry of Youths and Sports, Ministry of Education, Ministry of Commerce and Industry, Ministry of Finance and Development Planning and the Ministry of Labor. The researcher also focused attention on reports/studies undertaken by the development partners, International Non-Governmental Organizations (INGOs) and other non-state actors and sample TVET institutions in the capital city Monrovia and few cities such as Kakata.

The study adopted purposive, convenient and snowball methods to identify those considered to have expert view, and in-depth knowledge on the subject matter for key informant interviews and elite interviewing. Elite interviews were carried out in key Ministries and in those counties such as Kakata in Bong County where the famous Bucker T. Washington Institute is located. Data was collected by documentary analysis and key informant Interview guides. The data processing was done by undertaking data cleansing involving editing, verification and structural checks. Data was triangulated from the various sources, which informed the writing of this article.

Results and Discussion

Data Scarcity on TVET in Liberia

There is paucity of data and information on TVET especially on the demand-side at all levels in Liberia. What is more evident is the fact that information and data available are hardly accurate and reliable. The study established that even in situations where skills may be in demand by the economy and employers, it is not necessarily the case that TVET and other learning opportunities in these skills are being demanded by learners. Even the little information and data that are available, they provide limited evidence as to what is available at the national level and in the counties, and in the public and private domains.

Since the end of one of the most brutal conflicts (1989-2004) in human memory that was characterized by low capacity and resource scarcity, Liberia's TVET system continue to face major challenges. The insufficient institutional capacities and the low human capabilities make sourcing information and data on TVET difficult and problematic. The problem has been further deepened by the delay in establishing a center coordination mechanism for TVET sector in Liberia that could have brought on board various government Ministries, Departments and Commissions (MDCs) involved in the promotion of TVET in Liberia.

Information and Data from Employable Categories of People in Liberia

Liberia has a youth bulge. According to the Liberia's TVET Policy, Liberia has a youthful population, with 79% of Liberians under the age of 36. Youth constitutes half of the Liberian labour workforce and their share is expected to grow in the years to come. Yet, youth is the most marginalised labour force in the country. According to the 2018 Liberia Labour Force Survey, only over half of the youth population in Liberia (52.4%) was employed. 91% of youth work is in non-wage or salary positions, and 80% are in vulnerable employment. The majority of youth employed are self-employed (76.9%), mostly in the informal sector. Agriculture is by far the largest youth employment sector. Only 24% of paid jobs are held by women. Young Liberians generally lack employable skills and are illequipped to access economic opportunities. Only a small proportion of Liberian youth (5.1%) participates in

vocational education or training, mainly supply driven TVET. The lack of qualified youth is creating a bottleneck in the supply of labour in the professional occupations sought by employers. Nearly half of young workers in Liberia (47.8%) are undereducated for the work they do and do not hold the level of qualifications required for the job.

Liberia's Human Development Index (HDI) value for 2019 was 0.480 according to UNDP Human Development Report of 2019. This puts the country in the low human development category positioning it at 175 out of 189 countries and territories. The rank is shared with Congo (Democratic Republic of the) and Guinea-Bissau. The same report states that life expectancy stands at 64.1 years: 65.5% for females and 62.7 for males. The expected years of schooling is 9.25 and 10.4 for females and males respectively, while the population with at least some secondary education is 18.5% for females and 40.1% for males. The UNDP HDI report looks grim for a country that had suffered from a brutal and atrocious fourteen-year conflict, a debilitating Ebola Epidemic for nearly two years and a series of man-made and natural disasters including flooding with its concomitant negative impact on the socio-economic conditions of the country.

According to the World Bank Country Report of 2019, 62.9% of the population is multi-dimensionally poor. It is also a country where poverty continues to constrain the number of young people who can stay in education. Many young Liberians continue to wallow in poverty and want, earning money through occasional informal employment and being left behind through the exploitation by the governing class.

The Labor Market Transition of Young Men and Women in Liberia, 2013 states that "Youth unemployment and underemployment represent a major cost to Liberia in economic, political and societal terms. One in every three young persons in the labour force is unemployed in the country. Half of young Liberians are working, but the quality of employment is often low, which does not allow young people and their families to make the most of their economic potential". The report further argues that high share of labour underutilization means a loss of investment in education and training, a reduced potential tax base, high costs for social assistance and a bottleneck in fueling the economic transformation of the country. Furthermore, high levels of unemployment and underemployment among young people can be a source of social instability. This report has high quality of information and data and could be relied upon for TVET policy implementation and generating an MIS on TVET and skills development. It is, therefore, recommended for its utility by policy makers in the implementation of the National TVET Policy of Liberia.

The National TVET Policy states that a TVET Management Information System (TVET-MIS) and the Labor Market Information System (LMIS) can both promote training relevance and employability by facilitating a better alignment of TVET programs with the requirements of the labor market. The report indicates that the formal sector is incapable of absorbing or guaranteeing all graduates jobs from TVET programs. The policy is clear that preparing young Liberians for self-employment cannot only be part of the bigger strategy of enhancing employability but also reducing the huge unemployment rate in the country. To the end, the policy strategically places emphasis on integrating entrepreneurship education into the TVET curricula to serve as the vehicle for self-employment. Very little information, if any, was made available to the consultants on small enterprises, which does not preclude the fact that no information exist.

The Pro-poor Agenda for Prosperity and Development (PAPD) has two high-level goals: (1) to build more capable and trusted state institutions and (2) to provide greater income security to an additional one million Liberians. Priority interventions have been organised around 4 pillars: Power to the People; Economy and Jobs; Sustaining the Peace; and Governance and Transparency. For each pillar, specific targets have been identified, aligned

with the SDG targets. Results regarding TVET are included under Pillar 1 (Power to the People) and 2 (Economy and Jobs).

The most relevant sector policies for TVET include: The National TVET Policy and Operational Plan (2015), which is based on 10 pillars aiming to revitalise the Liberian TVET system through better governance, strengthened quality and relevance, and the promotion of competitive workforce in strategic sectors, the policy promotes access to quality skills training, stimulating economic growth, creating sustainable employment and reducing poverty.

There is also the Education Sector Plan (ESP) 2017-2021, which includes TVET as key priority subsector. It aims at improving the TVET information base, both on the demand and supply sides, and the quality of TVET delivery by building the capacity of training providers. It also lays the foundation for a national qualification framework. The National Policy on Girls' Education (2013) promotes the education of girls through several measures. The Education Reform Act (2011) establishes free compulsory education up to junior high level and a framework that includes post-basic education and skills development. It also provides the roadmap for decentralization of the education sector.

The ILO report on Youth Unemployment generally maintains that persistent and high youth unemployment could have adverse longer-term consequences, such as a higher risk of future unemployment, a prolonged period of unstable jobs and potentially depressed income growth. At the same time, the longer the unemployment spells, the more likely prospective employers are to carry negative perceptions of the concerned young jobseeker whom they start to see as unemployable[†].

The Availability of Data and Information from the National and Local Sectors of the Economy

Desk review revealed that data and information on the demand-side TVET from the various sectors of the economy are available in government MDCs responsible for TVET sub-sector. In other instances, some useful information and data are found in reports by Development Partners (DPs), International Non-Governmental Organizations (INGOs), employers and unions stating what skills are required in these sectors of the economy.[‡] For instance, mining companies that have been revamped after the war do carry information on skills required (accountants, geologists, heavy machine operators, electricians etc.) for people to be employed, while at the same time undertaking on-the-job training programs that capacitate their employees.

The USAID published report, *Advancing Youth Project: Labor Market Assessment in Liberia, 2012* indicates that since the end of the civil war and in the absence of reliable labor market information, the selection of skills training areas has been predicated on trainee preference and the educated guesses of training service providers. The report further states that, "We just look around and find the job that foreigners are doing and that tells you the fields where we need to train Liberians."[§] The report referenced fields such as basic computer skills, financial management skills and marketing skills. The report indicates that determining the demand for skills in a severely depressed economy such as Liberia's should start with local, even village-level surveys of demand for goods and services—preferably surveys conducted

[†] See the ILO Report on Youth Unemployment, 2017 for details.

[‡] Education Sector Assessment-TVET Sector in Liberia, 2016; Labor Market Transitions of Young Men and Women in Liberia, 2013; Capacity Assessment of TVET Sub-Sector in Liberia: A Comprehensive Desk Review Report, 2013; National TVET Regulator: The Missing Link in Liberia's TVET Governance Structure, 2013.

[§] See USAID Advancing Youth Project for details.

by young people themselves.** It is imperative for the government and other agencies to allocate resources/funding in conducting labor market surveys that could generate reliable and quality information on the demand for TVET system and skills development opportunities in the informal and non-formal sectors in Liberia. A lot of information is still lurked at the towns and village levels, and in the collective memories of people relating to what skills are available and skills are in demand. This is critical in developing and generating and in providing available and reliable data and sources of information that could develop an information system for decision-making on TVET.

The researcher found that the USAID report covered only four counties: Lofa, Montserado Bong and Grand Bassa, and, therefore, its coverage is limited in scope. Because of the limited information and data on skills in demand in the other counties, the researcher could only get information on development priorities at the national level from the County Development Agenda 2008-2012 from which they found skills in demand at the national level.

The various County Development Agenda Reports^{††} were the by-product of Liberia's Poverty Reduction Strategy 2008-2011 (PRS) that centered on the four main pillars namely, Peace, Security and Rule of Law, Economic Transformation, Human Development and Governance and Public Institutions. The reports clearly represent the local expression of the national aspirations in the PRS. The researchers of these reports employed a participatory approach to collect data and information including but not restricted to consultations/interviews, focus group discussions, workshop sessions at all levels in the counties and a Strength, Weaknesses, Opportunities and Threats (SWOT) analysis. Because the study took place immediately after the brutal civil war when the country lacked the human and institutional capacity to carry out a comprehensive and objective study of that nature, the researcher cannot guarantee the veracity and quality of data and information contained in the reports. Second, the researcher noted that most of the available information and data on all of the Counties are very similar, which leaves room to speculate inadequacies. Third, the studies did not list specific skills needed and occupations for every county and disaggregating them by sex. Further, there were no skills strategies found in the reports. This invariably, makes it compelling for a comprehensive study to be carried out that could investigate existing opportunities and skills in each area and/or skills shortages at county level.

The study found sources of information and data in other reports. Two such reports are the International Labor Organization (ILO) and the Liberia Institute of Public Administration (LIPA). The two institutions undertook a comprehensive research on the 'Labor Market and Training Needs Assessment'^{‡‡} targeting demobilized and disarmed Child Soldiers in Liberia in the immediate post-civil war. The study employed both qualitative and quantitative methodologies to collect and analyze data. In its assessment, the study put together a comprehensive list of sectors, jobs available in the market, employment prospects and skills in demand for the jobs.

The study found 55% males and 46% females of the workforce are active. Although limited in scope (the study was carried out in only four counties due to security challenges), the report further went to state that one needs to consider that current employment trends are based on a depressed economy that is recovering from 14 years of war. It is an underestimation to say that most Liberians find themselves working within the informal sector such as petty trading in, for instance, used clothing, imported food items (rice, cooking oil etc.) and

**Ibid., p. 17.

†† The researcher found that these reports are available on all of the counties in Liberia *albeit* their reliability cannot be guaranteed because of the reasons stated in the text.

‡‡ Labor Market and Training Needs Assessment, 2005

vegetables, auto repair, cook shops, scavenging for scrap metal, charcoal burning, currency exchange and other service businesses. These activities and engagements provide their means of livelihood. The informal economy is, however, not recognized or protected under the legal and regulatory frameworks, thus denoting high degrees of vulnerability. Many Liberians will not be able to take up formal employment due to their lack of education and training and thus remain in the informal economy. Here subsistence farming, trading and construction are the predominant economic activities.^{§§}

What is emphasized in the ILO and LIPA report is that the demand for labor can be contingent upon the assessment of the current need for employment and a projection of socio-economic conditions in the near future. The current demand for labor has been mostly for unskilled agriculture workers and attendants for home duties, and in the trading sector mostly small businesses. Liberians are mostly engaged in petty trading. It is clear from the report that this area is dominated by a small group of Lebanese, Indian and nationals from neighboring West African countries, particularly from Nigeria.

Important information in the report indicates that youth employment opportunities have been in three main domains namely: casual workers, apprentice/cadet and vacation workers. Youths in Liberia serve as casual laborers in the mining, farming, rubber, tailor shops, welding, factory hands, carpenter shops and logging factories. At the same time, relatives and friends take young people as apprentices especially during vacation when youths can stay longer at their workplace.^{***}

With respect to availability and reliability of data and information, the researcher noted that no comprehensive document exist where demand for skills by county are recorded aside of the County Development Strategy, as noted above. The County Development Strategy reports cannot certainly provide and captured an accurate picture of the demand for TVET system and skills development in Liberia. Inadequate information and data on TVET by county makes this study instructive, compelling and timely. The researcher recommends the need to conduct a comprehensive study on County Development Strategy taking into consideration the qualification of the researchers employed for the study, the sources of further information particularly in the informal economy, sample size, list of skills available, occupations of residents, other methodological considerations and the coverage with the view to ensure the reliability, accuracy and quality of data and information on demand-driven TVET and skills development in these counties.

The Availability of Information and Data from Vision 2030

There is no denying the fact that the Liberian civil conflict gave birth to what development experts and practitioners not to mention political commentators refer to as the “lost generation”. This phenomenon presupposes a generation of deprived and marginalized youth that lack primary and secondary basic education and technical, vocational and employable skills. This presents a gloomy picture for a country that had suffered from the scourge of Ebola and now the COVID 19 pandemic that is decimating populations and depriving people of livelihoods. Youth unemployment and underemployment represent a major cost to Liberian society in economic, political and societal terms. One in every three young persons in the labour force is unemployed in the country. Half of young Liberians are working, but the quality of employment is often low, which does not allow the youth (and the country) to make the most of their economic potential. The high share of labour underutilization means a loss of investment in education and training, a reduced potential tax base, higher costs for social assistance and a bottleneck in fueling the economic transformation of the country.

^{§§}Ibid.,p. 1.

^{***}Ibid., p. 17.

Furthermore, high levels of unemployment and underemployment among young people can be a source of social instability.

Most of the country's youth unskilled. Expectedly, that the quality of the workforce is low, with more than half of those employed described as "uneducated". The Women's Refugee Commission report state that more than 56 percent of female and 39 percent of male youth have reportedly never attended school. While literacy rates are over 50 percent for both males and females, Liberia's educational system is remarkably weak. These have implications for both economic growth and development on the one hand and productivity and decent livelihood, on the other. The list of skills in demand in the four Counties under review can be found in the USAID report on Advancing Youth Project: Labor Market Assessment in Liberia.

The labor market in Liberia is one defined by inequality and stagnation. Unemployment and under employment are challenges to both young men and women, though women are predominantly affected, with 44% of women and 23.9% of men aged 15-49 reporting that they had not worked in the last 12 months.^{†††} However, this is dramatically more severe for AGYW ages 15-24, for whom that percentage rises to about 65%. According to the Job Demand and Employment Market Analysis undertaken in 2018, most employed Liberians are engaged in informal (79.9%) and vulnerable (79.5%) forms of employment. Women are over-represented in the informal sector, with 90.9% of employed women working informally compared to 69% of men. Informal work is more common in rural (86.5%) than urban areas (72.5%). There are also major regional differences in informality – in the counties of focus in this report, informal employment is lowest in Montserrado (69%), followed by Margibi (73.4%), Grand Cape Mount (80.5%), and finally Bong (89.7%). The North Western region as a group (more than one county) has the highest level of informality (73.6%).^{‡‡‡}

This study found that some information and data on the TVET sector and skills development exist in the country's national development documents. The PAPD, for example, states that "Liberia's economic growth strategy will focus on creating widespread private sector opportunities for unskilled and semiskilled workers, including the unemployed, disenfranchised young men and women and persons with disabilities, through a robust agricultural sector, down-stream processing of natural resources, and in the longer term through competitive labor-intensive manufactures and services." The Employment Sector Report of 2010, 2014 and 2018, and other surveys referenced in this article carry information sources and data on demands in sectors such as agriculture, processing of natural resources, manufacturing and services. The agriculture sector remains the mainstay of the Liberia economy in which more than 70% of the population is engaged. In particular, women, most of whom are unskilled, are engaged in subsistence farming and small scale gardening for livelihood. The manufacturing and processing of natural resources sectors are more attractive to youths. Yet, they lack the necessary skills needed to be employed in these sectors. Some of the data provided in this study indicate the various skills needed for youths to gain employment in the manufacturing and processing of natural resources sectors. However, the available information lacks clarity on the number of people, particularly youths and women, engaged in agriculture and disaggregated by sex. A study that could compile information and data into the agriculture sector is critical.

A critical examination of Pillar Three of the National TVET Policy is instructive and compelling. The policy establishes that one of the key strategies is to "build a demand driven TVET system in partnership with industry...such a system will be provisioned with...market relevant skills that can be adapted to changing production technologies or for self-employment

^{†††} LISGIS, Ministry of Health and Social Welfare, National AIDS Control Program, ICF International. (2018)

^{‡‡‡} For details, see the Job Demand and Employment Market Analysis, p. 34, 2018 for details

in a wide range of fields”.^{§§§} The policy emphasized the demand for skilled youths to feed the growing manufacturing, industrial and construction sectors of the country. The omission observed in the document is the identification of skills in demand in the job market that can absorb the growing youth population that remain unemployed or vulnerably employed. The information and data available in Labor Market and Training Needs Assessment survey conducted by ILO and LIPA could serve as possible skills in demand by the various sectors of the economy that could engineer sustainable growth and development.

The LIPA/ILO report was a Market and Needs Assessment survey covered Montserrado, Bomi, Grand Bassa, Lofa, Bong, Margibi and Cape Mount Counties. Its coverage was not national. The researchers of the report collected data and information using different approaches including interviewing and collecting information from key government ministries, NGOs, vocational centers and technical institutes, chamber of commerce, business associations and trade unions, UN agencies and members of the wider community. The report, though limited in coverage, presents a comprehensive and reliable information on the demand for data and information on TVET in the country. The report listed, among others, skills training institutions, courses offered and duration, availability of skills and skills needed in various sectors, assessments of skills, listing of major service providers and their skills. It is, therefore, a useful tool for decision-makers in TVET. What is recommended here is to have a standardized methodology and scope particularly for public institutions undertaking studies on TVET to ensure the quality, reliability and coverage of information and data are in place.

It is, therefore, clear that a well-designed and structured technical and vocational education that is in sync with Liberia’s Pro-Poor Agenda for Prosperity and Development (PAPD)^{****} and Vision 2030 and the current demand on the job market is strategic to solving the growing unemployment among the youths and poverty pervading the Liberian society. The PAPD Pillar 2 specifically has information and data on TVET in the country. Pillar 2 intends to achieve the following: creating the right policy environment; expanding the fiscal space, increasing the competitiveness of existing industries, diversifying the economy etc. In a large measure, improving the economy translates into creating jobs for the unemployed that will trickle down to poverty reduction much anticipated in this poverty reduction document. Vision 2030 has some information that relates to this study. For instance, it talks about transforming Liberia into a middle income country with equal opportunities and access to all and the need to provide an enabling environment for the private sector, which will serve as the engine for creating job and employment opportunities for young people, to thrive in Liberia. Provision of training and skills development and the need to prioritize the youths in all sectors of the Liberian society cannot be overemphasized.

Data and Information from Public and Private Sectors

The study established that there are information and data available for demand for skills within government institutions, development agencies such as UNICEF, EU, USAID, UNESCO, ILO, UNDP to name a few; and within national and international NGOs. Further, the various reports referenced in this article carry relevant information and data on skills in demand from both the public and private sectors. Literature review also revealed that the Liberia Chamber of Commerce (LCC) has a collection of information and data on the subject under review. As a business organization and belonging to the private sector, the LCC has

^{§§§} See the National TVET Policy of 2014

^{****} Liberia’s national development priorities have five pillars: Pillar 1 is Peace, Security and the Rule of Law; pillar 2 talks about Economic Transformation; pillar 3 is about Human Development; pillar 4 covers Governance and Public Institutions and pillar five relates to Cross-Cutting Issues.

developed and produced annual reports on its activities that contain information on the role the private sector plays in the economic development of the Liberia. Aside, some of its associate organizations namely the Liberia Marketing Association, the Liberia Bankers Association, the Liberia Rubber Plantation Association also have information and data on employment and skills development issues in Liberia that could be relevant for a MIS. It will be necessary for further studies to be undertaken to examine what information exist in these institutions on TVET and the quality of such information.

The private sector is a key stakeholder in TVET although at present this role is not completely formalised in TVET governance or in TVET design and delivery and in practice engagement is more than limited.^{††††} Some private enterprises have established their own internal training programmes (e.g. ArcelorMittal, Orange) and generally do not rely on public TVET institutions. There is a lack of a TVET specific market information system, leading to a weak alignment of TVET programmes with labour market needs as well as to low effective involvement of private sector in official TVE strategy and legislation. However, formal participation of the private sector is underlined in the National Policy for Technical and Vocational Education and Training (TVET) 2015-2020 that foresees improving the governance, management and efficiency of the TVET system with the establishment of a TVET governance body and coordinating body (Liberia TVET Commission – LiTCOM) with representation from all relevant stakeholders, including industry, employers, public and private training providers and civil society.^{††††}

In the four-year education sector plan “Getting to Best Education Sector Plan (G2B-ESP) 2017-2021”, developed by the Ministry of Education with to address the most urgent challenges facing the education sector in Liberia, it is reported that legislation seeks to establish a Liberia TVET Commission (LiTCOM) and that the TVET legislation is in the process of submission for Cabinet approval. In the absence of LiTCOM, an Interim Governance Structure has recently been proposed by the MoE - IMTTF (Inter-Ministerial TVET Task force) comprising representatives from the MoE, MYS, Ministry of Commerce and Industry, National Investment Committee, Ministry of Agriculture, Ministry of Labour, non-governmental organisations (NGOs) and the private sector. While waiting for the final formalisation of LiTCOM, the EU funded initiative “Youth Rising ” (linked to Component 1 of this action) supported the National Trade Advisory Committee (NATC), which has adequate labour market representation (formal and informal), to develop curricula as prescribed by the Liberia Curriculum Development Process (LCDP). “Under that framework, both components of this action will directly promote the role of the private sector in design and delivery of TVET programmes, including through capacity building activities with sector associations (i.e. the Association of Liberian Construction Contractors (ALCC), the Liberian Chamber of Commerce (LCC), Liberian Architects Association, Electricians Association and others). Development of occupational and training standards in selected industrial sectors and closer alignment of skills training with labour market demand will provide a model of public-private partnerships to further inform the strategic and policy direction of the national TVET system and replicated in all TVET institutions in Liberia once it has been implemented successfully in the target institutions”^{§§§§}.

The key government stakeholders are the Ministry of Education (MoE), who offers vocational education at the senior high school level (Grades 10 to 12) alongside the general education, and the Ministry of Youth and Sports (MYS) who is operating vocational training

^{††††} The Education Sector Policy of 2018

^{§§§§} For details, see the National TVET Policy of Liberia

^{§§§§} Ibid., p. 6.

centres offering short term trainings. The latter centres target students who have dropped out of high school at or before Grade 10 for training at the basic skills level while students who have completed at least the Grade 10 qualify for training at the intermediate level. The certification is currently not standardized.*****

Other ministries involved in TVET are the Ministries of Finance and Development Planning, Labour, Commerce, Public Works, Gender, and Agriculture, which also run non-formal or informal TVET programmes. In 2014, the President constituted the Inter-Ministerial Taskforce (IMTF) on TVET with non-indefinite mandate comprising all ministries to perform defined tasks; develop a TVET policy, operational plan, and organise a financing conference.†††††

Information and data from the Employment Sector Report of 2010 is instructive. It states that Liberia's economy is largely dominated by the agriculture and agro-forestry sector that was badly hit by the civil war. The sector has rebounded in the post-conflict era accounting for 61 per cent of GDP in 2007, and almost 77 per cent in 2008.††††† The report also indicates that only timber production is still struggling to attain its pre-war export levels. The majority of the Liberian workforce, and particularly women, are engaged in agricultural production. The Government is seeking to revitalize the sector in particular to ensure that the country is once again self-sufficient in food production.

Available information on this sector notes that the qualifications and skills possessed by most Liberians do not meet the standards required by companies to fill posts for which higher skills are necessary. For instance, an accountant with a university degree who is not familiar with accounting software cannot be employed as an accountant as the necessary skills are lacking to work in a computerized company.§§§§§

Although the current job opportunities in the agricultural sector are skewed towards unskilled labor, even these posts have certain skills requirements, according to the Employment Sector Report.***** This is an indication that gaps exist between the skills required and the qualifications of candidates to fill these jobs. It becomes clear, therefore, that there is demand for skills in these sectors. The skills in demand in this sector include but not limited to: rubber manufacturing engineers, certified rubber technicians, product development technicians, heavy equipment operators, agronomics, land clearing skills, agro-economic principles, Skills in tapping rubber, soft skills, managing plantations, managing people, plantations managers, factory managers, accountants, grafters, supervisory skills, quality control skills, administrative and operations managerial skills, skills in the maintenance of factory equipment, skills in financial reporting, rubber technicians, farming techniques

The researcher also noted that mining remains to be a capital intensive sector that requires high technology for its operation. Ideally, this sector is operated by formally trained and qualified professionals who meet international standards. The data and information in the Employment Sector Report reveals that the mining sector will offer extensive employment opportunities in the coming years as operations move to the production stage. It further suggests that future recruitment is expected to amount to at least 13,515 among the six MNEs surveyed, with over 90 per cent of the jobs likely to be filled by young persons below the age of 35. It is estimated that the company starting operations has the potential to generate around 2,000 to

***** New European Consensus on Development 'our world, our dignity, our future', OJ C 210 of 30.6.2017.

††††† Ibid., p. 8.

††††† Ibid. p. 15.

§§§§§ Employment Sector Report, 2010

***** Employment Sector Report, 2010

4,000 jobs, depending on the size of the operation. The actual number of direct employment opportunities to be generated in the mining sector as a whole is likely to exceed the estimate by a few thousand jobs.^{†††††}

Some of the skills required in this sector include the operations and maintenance of trucks. This will require high level of literacy and training with a commercial drivers' license and hazardous-material driving certification. The companies need experience in driving trucks, together with the ability to maintain equipment. The primary gap is finding candidates with commercial licenses and experience driving trucks. With regards to heavy machinery operations such as caterpillars, excavators and bulldozers, the minimum requirement for this position is a high school diploma with preference for employees with university degrees and the ability and experience to operate heavy equipment, such as caterpillars, excavators, and bulldozers. The companies emphasize that the gaps include the need for experienced and motivated personnel.

The researcher established that the following fields were identified by skills training providers as being necessary and in demand in Lofa County: animal husbandry (animal health, safe butchery, fodder production), Aquaculture, Basic soil science, Crop management, Extension services (training of trainers), Market access and pricing, Pest control, Post-harvest preservation, Tilling and planting, Vegetable gardening.^{‡‡‡‡‡}

The researcher established that there are stronger available data in the formal sector than in the other sectors. As a centralized state, most of the formal TVET institutions and skills training centers in Liberia are located in the capital city and major county headquarters. Aside, researchers concentrate their study in communities that are easily reached leaving out hard-to-go communities in the rural areas. More importantly, information and data on the informal and non-formal sectors are mostly unwritten, which makes it difficult to access and analyze.

Conclusion

Liberia is a post-conflict country, which is grappling with many political, economic, social, and demographic problems. The civil war left in its wake an enfeebled economy, a dilapidated social infrastructure and a declining political system. In other words, Liberia remains to be a fragile state needing political, economic and social reordering to maintain its statehood. However, the country has been on the path of peace, democracy and economic development since the end of the civil war in 2003. Youth unemployment, which includes underemployment and vulnerable employment, is a major issue that has negative implications for social stability and national security. Liberia is a youthful country with 79% of the total population of about 5 million below the age of 36 years.^{§§§§§}

This study concludes that there is scarce information and data on TVET in Liberia in all sectors but more so in the informal and non-formal sectors. The reason for this abound: scarce resources especially in the public sector to manage and maintain TVET institutions; recruitment of trained and qualified instructors for TVET training and skills development; lack of professionals in the field of TVET; lack of resources and human capacity deficiency at all levels of the Liberian society to undertake the collection and management of data and information on TVET; the pervasive perception problem of TVET that it is designed for those who fail in formal education, and many others.

Moreover, TVET is theory based rather than being pragmatic. The theoretical aspects of TVET are emphasized resulting in producing graduates that can hardly find jobs in the job

^{†††††} Employment sector report, 2010

^{‡‡‡‡‡} Ibid., p. 7.

^{§§§§§} Ibid., p. 8.

market. What needs to be emphasized in future researches is the practical aspects and what skills are in demand and available in the job market for the youths to engage in employable livelihoods. It is, therefore, compelling for the GOL to set up an information system that can be accessed by young people who are considering what skills are in demand and what labour market opportunities exist.

Recommendations

1. Establish and institutionalize an information system that is accessible to young people who want information on TVET institutions, courses offered and market opportunities;
2. Focus on market responsiveness and skills development programs in all researches and studies with the view to provide accurate and reliable information and data for the development of TVET in Liberia.
3. Build the capacity of and provide funding for the national, county and district EMIS to collect, analyse and manage information and data on TVET;
4. Allocate adequate resources to conduct surveys on public and private institutions at all levels of the Liberian society on TVET that are disaggregated by sex;
5. Provide adequate funding to the Liberia Chamber of Commerce (LCC) to attract private sector investment with the view to providing the youths with reliable and accurate information on the needs of the private sector especially on business and entrepreneurship;
6. Establish a standardized methodological approach to data collection and information gathering on TVET in Liberia;
7. Synergize the fragmented TVET sub-sectors and activities under the umbrella of the Liberia TVET Commission as recommended by the approved National TVET Policy;
8. Identify a suitable government institution to host the proposed TVET Management Information System in the Country.

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