Republic of Liberia
Liberia Skills Development Constraints for Youth in the Informal Sector

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ABBREVIATIONS AND ACRONYMS

AfDB          African Development Bank
AfT           Agenda for Transformation
CPS           Country Partnership Strategy
CWIQ          Core Welfare Indicators Questionnaire
DHS           Demographic and Health Survey
EPAG          Empowerment of Adolescent Girls and Young Women
ICT           Information and Communications Technology
KTF           Korea Trust Fund
LFS           Labor Force Survey
NGO           Non-Governmental Organization
OECD          Organization for Economic Cooperation and Development
OTJ           On-the-job
PASET         Partnership for Skills in Applied Sciences, Engineering, and Technology
SPF           State and Peacebuilding Fund
TVET          Technical and Vocational Education and Training
UNDP          United Nations Development Program
USD           United States Dollar
YES           Youth, Employment and Skills

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EXECUTIVE SUMMARY

Liberia has enjoyed a stable, democratic government since conflict ended in 2003, and President Ellen Johnson Sirleaf is now completing her second and final six-year term, which will end in 2017. Liberia remained stable despite the challenges of last year’s Ebola outbreak. However, the aftermath of the long years of conflict is still evident in the members of the generation who are coming of age and embarking on their most productive work years. It is this generation—which will determine the short- and medium-term future of Liberia’s economy—on which this report is focused.

The labor force in Liberia is particularly young compared to other African and Western nations. Youth, defined for this report as those aged 15 to 34, constitute over a third of the population in Liberia, according to the 2008 census. As a group, they are somewhat concentrated in urban areas. For example, just over 40 percent of the population of Greater Monrovia is between the ages of 15 and 35, compared to 33 percent of those living in rural areas.1 This report assesses skills development challenges and opportunities for youth, with a particular focus on vocational trades and the informal sector, where most of this age group is employed.

The economy in Liberia is undiversified and heavily reliant on a few primary export commodities. As a result, limited opportunities exist for formal sector employment. Paid employment covers only 17 percent of the total workforce, while unpaid family work and self-employment cover 48 percent and 32 percent, respectively. Among 15-to-24-year-olds, informal sector work, interpreted as non-wage work, is even more common than the average: only 6.2 percent of this cohort finds paid employment.2 The rest are occupied in unpaid family work or self-employment, mostly in agriculture and small-scale household enterprises. Thus the majority of youth are employed in what can be considered the informal sector.

Given the limited potential for employment growth in formal sector industries, informality or non-wage work will continue to dominate Liberia’s labor market over the medium term.3 Therefore, it is crucial to increase labor productivity in non-wage occupations and sectors so that young people are able to provide for themselves and make a successful transition to adulthood. Understanding the options for increasing labor productivity in non-wage occupations and sectors is an important priority.

A key feature of our analysis is the first comprehensive survey of training programs. Building Markets interviewed 139 formal, non-formal and informal TVET training providers and 354 youth involved in training programs in February 2015. Other sources used for the report include the 2010 Labor Force Survey, the 2007 and 2010 Core Welfare Indicators Questionnaire, the 2013 Demographic and Health Survey and the 2008 Census in Liberia.

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3 World Bank (2010), Liberia: Employment and Pro-Poor Growth. Report No. 59124-LR.
Youth Education

Many youth have low levels of education, and their basic skills are limited. For example, in 2010 around 60 percent of males and females 15 to 19 years old had not finished primary school. Over 50 percent of females 25 to 34 years old had no schooling at all. Among a sample of youth apprentices interviewed for this study, 50 percent had not finished primary school, while 70 percent lacked basic reading and mathematics skills. In part, these figures reflect the large number of youth who were still trying to complete their education while at the same time working or holding household responsibilities. It is likely that poor educational quality also contributes to these low levels of basic skills. Even among Liberians who complete secondary school, limited skills are a problem. Of the 27,651 Liberian candidates who sat for the Senior High School Certificate with the West Africa Examinations Council in 2014, only 48 percent passed, and only five of those students got as high as the second tier of scores. All the other candidates fell in the bottom three tiers of test-takers.4

Administrative data confirms that only a small proportion of youth (10 percent) participate in vocational training. These youth have relatively high levels of education, having completed secondary education, or even university. Thus, in Liberia, vocational training appears to complement rather than substitute for schooling. However, many of these highly educated youth enroll in training for manual or low-skill vocations, such as masonry, carpentry, mechanics, tie-dye, tailoring and pastry. This may reflect the tightness of the youth labor market in Liberia, where even the more educated struggle to find high-skill occupation vacancies, as well as a lower quality of education that leaves even secondary school graduates without the academic skills required for paid employment.

Youth Employment and Income

Education, gender and age all seem to contribute to determining the sector and type of work youth find. For both males and females and in urban and rural locations, employment in agriculture tends to fall as education level and age increases. Females are more likely to work in commerce, while males find employment in commerce, mining, manufacturing and construction. Technical/business activities and services are concentrated among the highest educated youth in the urban areas, and attract slightly more males than females.

A demographic breakdown shows that there are more female youth than males, and that the transition out of the household as a dependent to become a spouse or household head happens earlier for girls. Fifty per cent are married or household heads by 24 years of age, compared to 28 for men. Educational attainment among females remains low, particularly those above 25 years old, despite recent improvements among younger age groups. Females appear to miss out on the opportunities afforded to youth who are able to remain as dependents in the household of their parents or others, as these youth are much more likely to be in school.

Even when education levels are comparable, gender bias exists in pay. At each level of education, females on average make less than males, and paid employees on average earn considerably

4 Liberia – Africa Economic Outlook, 2015 (AfDB, OECD, UNDP).
more than self-employed workers. Since they have less education and less representation in paid employment, young women earn considerably less than young men.

The analysis of incomes shows some other striking findings. First is the very low incomes that youth obtain. To support a family of four (two adults and two young children) an individual would need to earn at least USD 1,486 per annum. Currently, only 13 percent of youth obtain such incomes. Second is the limited earnings improvement by youth without post-secondary education. Again this helps explain some of the earnings differential between males and females, since it is only really males that complete secondary education and then break into the technical and business sectors of employment. Third, contrary to the trends in developed countries, among the most lucrative types of paid employment are nonprofit and government work.

The lack of earnings equalization by gender and by education is suggestive of labor market frictions, implying that the earnings of youth do not correspond one-to-one with their productivity. While other explanations exist, such as a girls having a stronger preference for occupations that pay less or paid employment selecting the most able youth, it is likely that part of the observed friction is due to differential access to work opportunities. Other evidence in this study shows that youth have different levels of information about employment and training, and face high costs searching, matching and changing jobs.

**TVET Overview**

For the purposes of this report, providers of technical and vocational education training (TVET) in Liberia are classified into two types: formal TVET, which provides classroom-based training in both vocational and technical skills, and non-formal or informal TVET, which refers to institutions that provide on-the-job training or apprenticeships in a particular type of trade or skill outside the school system. Most training programs are concentrated in urban areas, particularly Monrovia. Youth pursue training for personal advancement, but also hope for better employment and earning power. Almost all formal TVET learners hope for formal employment, as do a substantial minority of apprentices.

Course content and tuition fees influence access to training programs. For example, as most apprenticeships focus on manual trades there is low enrollment of females. While apprenticeship providers claim to be willing to enroll females in these opportunities, they admit it may be difficult for females to be as successful in these trades given the traditional gender norms in Liberia. This likely affects females’ interest in pursuing such opportunities. ICT and business skills are more gender-neutral, and formal TVET courses thus see more equal enrollment by both genders. However, formal TVET training is more common among older and more educated youth due to the funding structure, where participants are largely responsible for their own tuition fees.

Training programs vary across the different skills providers. Apprenticeships and on-the-job training typically involve daily attendance and several hours of work or training per day, while formal TVET students only meet a couple of times per week and spend less than five hours per week on both theory and practical instruction. Formal TVET courses also are of limited duration: most are completed within 12 months, and a large number finish in less than three months.
Apprenticeships and on-the-job training last longer. Formal TVET courses rely on practical and theoretical exams for students, while informal TVET students take trade tests. Whether the program is formal or informal, the exams and tests often do not lead to formal accreditation. While most seem to think connections and job-placement opportunities are the most reliable channel into employment, a formal accreditation process may help improve this outcome and also provide youth with more flexibility to move between different employers.

**Formal TVET Programs**

Formal TVET institutions attract better-educated, wealthier youth. Most have relatively high levels of education--secondary education or even university. TVET training is largely funded by the individuals taking the training or their parents. Most of those surveyed report that they find tuition fees affordable and not a constraint on enrollment. The most popular courses are in information and communications technology (ICT), business and vocation-specific technical skills.

In an important finding for the future of formal TVET programs, the survey conducted for this report found that even though TVET candidates could be considered top job candidates, with high education and training, most of them have not found jobs. Three-quarters of the youth who graduated from TVET programs were unemployed at the time of the Building Markets survey. There are several possible explanations for the failure of TVET graduates to find work:

- They may be choosier about taking a job. Since these youth come from more affluent backgrounds, they may have a higher reservation wage and not need to seek out work. Put another way, they are willing and able to remain unemployed over taking lower-paid jobs. This would fit with the finding that TVET trainees are generally unemployed before pursuing training and have higher socio-economic characteristics, such as the ability to cover tuition fees and the ability to attain a higher level of schooling.

- The quality of formal TVET training programs may be insufficient to affect employment prospects. TVET students spent less than five hours per week on theoretical and practical learning activities, and nearly half, 45 percent, of courses are less than three months long. The limited length and intensity of training may limit students’ ability to acquire or develop new technical skills.

- Training courses may focus on developing skills for which there is less demand in the Liberian labor market. For example, information and communications technology (ICT) and business skills are sought after by TVET students because they are prerequisites for formal employment, but there are likely fewer positions offered than there are candidates with these skills.
Non-Formal and Informal TVET Programs

On-the-job skills acquisition is the most common form of training in Liberia, mostly for manual trades such as carpentry, welding, construction, auto mechanics, and artisanal skills. Some on-the-job training opportunities also exist in the service sector in fields such as tailoring, cosmetology, hospitality and catering. Youth from lower socioeconomic classes and with lower levels of educational attainment are more likely to choose apprenticeships and on-the-job training. These opportunities are thus better aligned with the majority of Liberian youth.

The most common ways for youth to find out about training opportunities are through word of mouth or personal connections. About half of informal and non-formal TVET students are related to another employee or the primary employer. The geographic location of most training programs in Montserrado means that youth in rural locations likely have limited access to these opportunities. Finally, while travel restrictions at the time of the survey made the collection of data on agricultural skills training providers difficult, their limited presence in accessible locations is indicative of a weakness in the provision of these skills.

Most apprenticeship and on-the-job training providers have substantial industry experience, in contrast to formal TVET program instructors. More than half, 62 percent, of apprenticeship providers have over ten years of relevant work experience, and 81 percent of on-the-job training providers have more than five years of industry experience (most TVET trainers have less than five years of either industry or teaching experience). Anecdotal evidence gathered during the survey found that apprenticeships and on-the-job training are mainly offered by master craftsmen with their own businesses. Trainers are well connected with their industry and better able to follow up with and support the youth they train.

Non-formal and informal training programs are associated with better employment outcomes than formal TVET programs. The factors cited above may help contribute to these trainees’ stronger employment outcomes.

Constraints on TVET in Liberia

While TVET programs overall present an opportunity for youth to improve their skills and earnings prospects, several factors constrain the effectiveness of the different types of training and the ability of young people to benefit from it.

Lack of access to capital or resources is a widespread problem, challenging training providers as well as the youth trainees themselves. Informal training providers report challenges in securing workspace, obtaining consistent access to the electricity needed to operate machinery, and providing tools and materials to operate effectively while training apprentices. Their trainees, meanwhile, say that financial constraints may limit their ability to attend or complete the training. This is despite the fact that in most cases informal TVET trainees receive stipends from their trainers and don’t pay fees. Trainees say they struggle with the cost of tools and transportation, can’t bring in enough income to meet their economic responsibilities within their households, or can’t access the start-up capital to embark on their own ventures. Given apprentices’ improved prospects for employment and earnings, we believe liquidity may be at the root of this problem.
More specifically, youth are limited in their ability to take full advantage of training because their households lack the resources to support them during this period, and there are alternative activities that offer higher returns over a couple of days at a time in the short term.

Facilities and resources also are a limiting factor in formal TVET training: for example, those involved in ICT courses often must share computers and face internet connectivity and electricity outage problems. However, strengthening these programs may not be effective, due to the high degree of mismatch between courses offered and skills in demand previously noted: while ICT may be an important skill to access the highest-paying jobs, for example, these employment opportunities are limited. In addition, most Liberian youth do not take advantage of these programs, either because they cannot afford to or because the programs are not offered in their geographic area.

Actual outcomes for both trainees and apprentices also show a mismatch between expectation and reality. Contrary to their expectations, most youth who complete training programs and secure employment will find non-wage work. In fact, from the survey evidence it appears that at least some formal TVET trainees are choosing unemployment over non-wage work. The employment outcomes of apprentices and on-the-job trainees were better, but this may reflect wealth dynamics: youth enrolled in apprenticeships and on-the-job training have fewer financial resources and thus may have a greater need to find work.

TVET trainees surveyed identified lack of employment opportunities as their most common challenge (67 percent), followed by lack of start-up capital available to start a business and low earnings from the work they do find.

Access is a problem for potential TVET trainees. As noted above, word-of-mouth was the most common way to find out about non-formal and informal TVET, and nearly half of the trainees surveyed were related to someone else in the shop. Limited social networks will thus play an important role in restricting access to such opportunities. When it comes to formal TVET programs, many youth may not be aware of them because most of the programs are located near the capital and advertise in media that rural youth may not see. Lack of money and education level prerequisites also limits access to formal TVET programs for many youth. Until a new TVET policy took effect in 2014, many institutions required at least a ninth-grade education (mid-secondary). Even now, students are expected to have completed primary education in most cases.

As mentioned above, gender bias is another problem in the informal TVET sector. Although all trainers say they enroll trainees regardless of gender, fewer females participate in informal training. Some of the skills taught through apprenticeships are typically associated with traditionally male-dominated professions such as carpentry, automotive, construction and engineering, which may affect females’ desire to enroll. However, to ensure equal access to productive work opportunities, this finding needs consideration in future programming.

**Recommendations**

The findings of this report indicate several directions to consider for policy action. In particular, we suggest that programming focus on the strengthening training in three dimensions: improving
the quality of programs, particularly informal and non-formal programs; improving access to informal and non-formal TVET programs for female and rural youth; and encouraging skills development programs related to agricultural productivity and management, since agriculture is the primary employment sector for this population.

**Improve training outcomes.** Youth pursue skills programs, particularly TVET courses, with high aspirations for employment in the formal sector, or at least outside agriculture. However, given the structure of the economy in Liberia, wage employment opportunities are scarce. It is important to empower youth to develop their own income-generating enterprises and facilitate their deeper knowledge of how to improve productivity in agriculture, commerce and low-skilled services.

**Offer agricultural programs.** Agriculture is by far the largest employer of youth. The survey did not cover training programs offered in this sector, possibly due in part to its timing (February 2015, during the EVD crisis). Nonetheless, there is an acute need to help youth increase productivity and earnings in this sector. Possible programs might include practical activities that place students in different parts of the agricultural sector (such as farms or processing companies). Lessons can be taken from the ongoing community livelihoods program implemented by the Liberian Agency for Community Empowerment, which focuses on strengthening agricultural livelihoods of youth in rural locations. Adding agriculture to the mainstream school curriculum, as was the practice before the civil conflict, may improve young people’s basic knowledge of agriculture and traditional farming practices, as well as raise their awareness of the potential benefits from agricultural activities.

**Support funding for apprenticeship and on-the-job training providers as well as for their trainees.** Training providers report challenges in securing workspace, obtaining consistent access to the electricity needed to operate machinery, and providing tools and materials to operate effectively while training of apprentices. Trainees, on the other hand, say that financial constraints limit their ability to attend or complete the training. This is despite the fact that in most cases they receive stipends from trainers and don’t pay fees. Given apprentices’ improved prospects for employment and earnings, we believe liquidity may be at the root of this phenomenon. More specifically, youth are limited in their ability to take full advantage of training because their households lack the resources to support them during this period, and there can be temporary alternatives that may pay them better for a day or two of work. Trainees say they struggle with the cost of tools and transportation, can’t bring in enough income to meet their household economic responsibilities within their households, or can’t access the start-up capital to embark on their own ventures.

It would be beneficial to explore financing solutions that would provide greater incentive for youth to make the most of their training, while supporting the capacity of businesses to take on youth trainees. This could involve replacing fixed-level stipends with a scheme paying youth trainees a proportion of the income they generate for the training provider’s business. This will align the incentives of both the trainees and the trainers to maximize trainees’ productivity. More explicitly, trainees will have an incentive to learn quickly and increase their contributions to the business, and trainers will have a corresponding incentive to invest in teaching trainees and pass on skills in order to improve their bottom line. Simultaneously, capital resources could be
directly provided to businesses on condition of their taking on apprentices, for example, through the provision of a capital equipment allowance or a work space subsidy by the government or development partners. This would again better align the incentives of businesses to both take on apprentices, and to invest in these apprentices so that they contribute to productivity. At the same time, this solution would help alleviate the capital constraints faced by many small businesses that limit the quality of training they can offer to youth. Furthermore, both incentives (performance-related pay and capital subsidies conditioned on offering apprenticeships) may help to encourage stronger meritocracy in the selection of trainees, as youth that are willing and able to work will be more attractive candidates than those that are not.

**Standardize curriculum and certification for informal/non-formal TVET programs.** Lack of standardization currently limits the utility of training because it is not recognized by other potential employers. Curriculum and testing for on-the-job training and apprenticeships varies widely across the board, and regulation is lacking for both testing and curriculum. While certification may not be a requisite for a specific skill or trade, it is important that training programs lead to the development of skills that youth can transfer to different employers. Certification can also help inform potential clients that a particular youth is a skilled service provider. In addition, given the poor quality of their education, many youth felt that they would benefit from additional training in literacy and numeracy, as well as customer service skills. Finding ways to integrate this element of skill development will be beneficial for future informal and non-formal TVET programming.

**Focus on the quality of formal TVET programs.** Given the limited number of youth who access formal TVET training and the large number who fail to find employment after completing it, TVET institutions may not be an immediate priority for policy makers when addressing the constraints to skill development for the broader population of youth. However, in the long term this will be necessary. As noted above, trainers in TVET institutions have limited teaching and industry experience, and access to equipment and facilities, such as computers, electricity and internet connectivity, can be a problem. Creating a certification program for TVET instructors and ensuring that TVET institutions have the facilities and equipment they need will enable the TVET system to be more effective in the long term. Again, however, improving these institutions may not improve employment outcomes for most youth in the short term.

**Equalize access to apprenticeships and on-the-job training.** Almost half of apprentices and on-the-job trainees reported that they were either related to another employee or to the owner of the business. Word-of-mouth was the most common way to find out about this type of training. Thus, social networks play an important role in connecting youth to opportunities and may limit access. Policy makers should consider ways to spread the word among young people about these opportunities. This will be particularly important if resources are directed towards strengthening these TVET programs.

**Improve geographic distribution of training.** The majority of youth live near Monrovia (Montserrado County), while about a third live in other parts of Liberia. However, 70 percent of skills providers are based in Montserrado. A key recommendation is to expand skills development (TVET and apprenticeships) outside Monrovia. This may require partnering with other ministries to support the development of private enterprises and one-man businesses that
can host youth trainees and are best placed to facilitate their training in these locations. Examples of this support could include provision of a basic training curriculum and accreditation services, as well as direct financial incentives. Connections and networks seem to play a critical role in how youth find opportunities in Liberia, which means that without more government intervention, the most able or willing youth will not get access to the same options as others.

**Improve young women’s utilization of all types of TVET programs.** The majority of training opportunities, especially the most successful, are accessed more readily by young men than young women. Although women are a slightly larger proportion of the youth labor force, their skills development and work opportunities outside the family appear to be more limited. This implies a labor market friction that ultimately will distort incentives and lead to misallocation of labor, reducing aggregate income in the country. Cognizance of this problem is needed during the design of projects and programs, as special attention to this issue in conversations with stakeholders could help overturn the status quo. Furthermore, innovative communication materials may help to encourage a shift in social norms, providing women more equitable access to work and broadening the perception of their roles in society. At the same time, a clear, transparent process for recruiting youth for training opportunities should be put in place, and support offered only to training providers that adhere to these principles.

**Encourage more young women to seek apprenticeships.** A specific example of the young women’s underutilization of TVET programs is their limited enrollment in apprenticeships and on-the-job training. While all trainers say they enroll trainees regardless of gender, few enter these programs. Some of the skills taught through apprenticeships are typically associated with traditionally male-dominated professions such as carpentry, automotive, construction and engineering, which may affect females’ desire to enroll. Shifting social attitudes and finding ways for females to confidently and successfully enter these professions would help to rebalance the scope of different economic opportunities between genders.
1. INTRODUCTION

The labor force in Liberia is quite young. Youth aged 15 to 34 constitute over a third of the population in Liberia and are somewhat concentrated in urban areas, according to the 2008 census. For example, just over 40 percent of the population of Greater Monrovia is between the ages of 15 and 35, compared to 33 percent in rural areas. These youth represent both a demographic dividend and a concern. Most are able-bodied and willing to work and contribute to the economic growth of the country, yet many find employment hard to come by. This has led to some becoming marginalized.

The educational attainment of Liberian youth is steadily improving but remains low on average. Only 59 percent of Liberians over age 15 are literate. In addition, there are significant gender and regional disparities in literacy. For example, 72 percent of males over age 15 are literate, compared with just 48 percent of females. In urban areas, 75 percent of Liberians over age 15 are literate, compared with 43 percent of those in rural areas. In terms of schooling, over 50 percent of females above 25 years old have no education, and over 60 percent of all youth in rural areas have not completed primary school. Many youth combine school with work, and for this reason it is not unusual to find youth above the age of 19 still pursuing basic primary education. This means that many youth enter the labor market in Liberia with a low level of skills and lack preparation for productive employment.

Youth recognize that their lack of skills and experience are impediments to employment. Approximately 68 percent of youth age 18-34 believe that they lack the skills or experience needed to find a job, a slightly higher rate than their older counterparts. While this statistic would seem to imply that the demand for skills training is high, in fact little is known about the supply of skills training accessible to youth and how these services affect labor market outcomes. Formal, government-operated technical and vocational education and training (TVET) institutions are limited in number, and generally serve a minority of more literate and better educated youth. Non-government training providers typically operate on a smaller scale and provide less formal training (for example, through apprenticeships and on-the-job training) without necessarily offering any type of certification. A greater understanding of the scope and capacity of these providers will help policy makers understand the options for improving the employment readiness of youth.

The objective of this report is to assess youth skills development in Liberia. In Liberia, the economy is undiversified and heavily reliant on a few primary export commodities, which limits prospects for formal sector employment. Furthermore, growth has decreased in the export-driven mining and natural resource sectors as commodity prices have fallen. Agriculture remains the largest sector, contributing 35 percent of GDP in 2013, followed by wholesale and retail

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5 Liberia – Africa Economic Outlook, 2015 (AfDB, OECD, UNDP).
6 Core Welfare Indicators Questionnaire, 2010.
9 For example, until 2014 government sponsored TVET institutions required students to have a 9th grade education before being considered for admission.
(including repair of vehicles, household goods and restaurants and hotels) at 14.1 percent, mining and quarrying at 12.4 percent, finance, real estate and business services at 9.6 percent and manufacturing at 7.3 percent. However, out of the total labor force, only 17 percent work in formal paid jobs, while unpaid family work and self-employment cover 48 percent and 32 percent, respectively.

Given the composition of Liberia’s economy and the concentration of the labor force outside formal employment, this report has a particular focus on skill development in vocational trades and the informal sector. Among 15-to-24-year-olds informal sector work, interpreted as non-wage work, is even more common than the average: only 6.2 percent of this cohort finds paid employment. Given the limited potential for employment growth in formal sector industries, informality or non-wage work will continue to dominate Liberia’s labor market over the medium term. Among youth, self-employment is the most common form of employment, followed by unpaid family work. The majority of youth are employed in what can be considered the informal sector, with wage or paid employment covering only a minority.

Box 1. Defining the Informal Employment Sector
There is no official definition of the informal work sector in Liberia. This report adopts the definition in the World Bank Employment and Growth Report for Liberia from 2010, which interprets informal sector employment as non-wage employment. In Section Two of this report we show how informal employment can be broken down further into own-account and unpaid family work. Section Three analyzes both formal TVET providers and informal training arrangements. Although many youth undertake formal TVET programs with a goal of securing wage-based employment, the skills they develop can be used in non-wage employment as well.

This report comprises three analyses. Section Two constructs a profile of Liberian youth from existing administrative data. It examines the demographic and geographic trends in Liberia, showing the representation of both males and females in both rural and urban areas. Education and skill attainment are studied to enable a more detailed understanding of the current skill levels among working youth. The profiles consider how attributes such as gender, age, education, training, location, wealth impact the type of work youth pursue and the earnings outcomes they obtain. This helps to set the foundation of where skills gaps lie among youth in Liberia and where potential policy actions should be focused.

Section Three first assesses skills development providers based on new survey data. This summarizes the results of original analysis carried out on data collected on a sample of 139 skill providers’ training offerings, capacity, target beneficiaries, and other criteria. The institutional and funding structure is discussed, as well as potential for expansion, to identify where service

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10 Liberia – Africa Economic Outlook, 2015 (AfDB, OECD, UNDP).
15 Data was collected by Building Markets.
delivery is stretched and quality insufficient. Recruitment into training programs is examined as this is an important aspect governing access to training opportunities.

Next section three goes on to present young trainees’ perceptions of skills development opportunities and limits, based on 354 interviews with recent trainees. Why youth choose to pursue training and their work aspirations are compared to their post-training outcomes. Information is collected directly from the youth about their experiences in training courses, the challenges they faced, and where they feel programs could be improved. A final section summarizes these findings and draws out implications for action and policy.

This report contributes to the Government of Liberia’s Agenda for Transformation (AfT) and the World Bank’s Country Partnership Strategy (CPS) 2013-2017. Both recognize that inadequate skills and vulnerable employment are key constrictions on rapid, inclusive and sustainable growth. The Government is concerned about high rates of joblessness, especially among youth, whose prolonged idleness may pose risks to the country’s peace, security, and economic recovery. This challenges cuts across the three pillars of the AfT. Economic transformation requires a skilled labor force to utilize new technologies in an expanding private sector and to maintain rehabilitated infrastructure. Human development is impeded by the low level of education and skills and high levels of vulnerable employment. Strengthening governance and public sector institutions also has an effect on skills and employment by providing more reliable and high-quality social services and enhancing transparency and state legitimacy. This report helps to increase the understanding of where skills gaps exist and where opportunities for closing them lie.

This report provides practical recommendations that align with pillars of the National TVET Policy 2015-2020. In 2015 an inter-ministerial task force, including the ministries of youth and sports, education, agriculture and health, released an ambitious, ten-pillar TVET policy that aims to achieve goals specific to youth skill development in the AfT. This report makes recommendations specific to three pillars: promoting productivity in the agricultural sector through TVET, promoting productivity in the informal sector through TVET, and financing TVET.
Box 2. Overall Youth Employment Agenda in Liberia

In support of Liberia’s Agenda for Transformation, as outlined in its Country Partnership Strategy, the Bank is supporting several analytical and operational programs in Liberia related to youth employment. Former and current Bank-funded operations to promote youth employment and employability—particularly the Empowerment of Adolescent Girls and Young Women (EPAG) and the Youth, Employment and Skills (YES) projects—have engaged approximately 70,000 participants since 2008 and provided valuable information on the profile and interests of youth, the capacity of training providers, and the limits of the nascent private sector’s demand for employees. Analytic work includes:

- Economic and labor market analyses of constraints on job creation in the formal sector
- Development of a qualitative toolkit for understanding constraints on productivity and employment growth in household enterprises, funded by the Korean Trust Fund (KTF)
- Support for drafting the Private Sector Development Strategy, including policies to help micro, small and medium sized enterprises (MSME) grow and expand their employment potential
- Dialogue on the Partnership for Skills in Applied Sciences, Engineering, and Technology (PASET) initiative to promote advanced education

The Government, with Bank support, is currently developing a new youth project that will benefit from our ongoing analysis and this report. The project will utilize the lessons learned from the EPAG and YES projects and operationalize aspects of the new national TVET policy. For example, the project is expected to support various types of skills development for youth: life skills, business development skills, and vocational/trade skills, as well as more advanced technical skills. This project will benefit from the profile of Liberian youth created in this report, in addition to the mapping of skills development providers’ capacity and quality, and analysis of constraints on skills acquisition. This data sheds light on the little-known trainees and training providers in the informal sector.
2. PROFILE OF LIBERIAN YOUTH

Before analyzing the benefits and disadvantages of existing TVET programs, it is useful to first understand the challenges facing this generation of Liberian youth. This section constructs a profile of youth based on administrative data.\(^\text{16}\) It examines the demographic and geographic trends in Liberia, showing the representation of both males and females in both rural and urban areas. Education and skill attainment are studied to enable a more detailed understanding of the current skill levels among working youth. The section considers how attributes such as gender, age, education, training, location, and wealth affect the type of work young people pursue and the earnings outcomes they obtain. The aim is to identify where skills gaps lie among youth in Liberia and where potential policy actions should be focused.

2.1 Demography and Geography

Youth aged 15 to 34 constitute over a third of the population in Liberia, according to the 2008 census. There are more females than males, and the transition from being a dependent to becoming a spouse or household head happens earlier for girls: 50 percent are married or household heads by aged 24 years, compared to age 28 for men. Youth are more concentrated in urban areas. Just over 40 percent of the population of Greater Monrovia is age 15 to 35, compared to 33 percent of the population in rural areas. Youth are both a demographic dividend and a concern: they are able-bodied and willing to contribute to economic growth but often find employment hard to obtain, leading to some youth becoming marginalized.

This study adopts the common definition of “youth” used across the region: people between the ages of 15 and 34. This reflects the traditional age-based hierarchical structures that relied heavily on the labor of people in this age range and their limited participation in community decision-making. It also reflects the reality that because of numerous disruptions, young people often do not finish even secondary school before their mid-twenties. These youth constituted over a third of the population of Liberia as of the 2008 Census.

The youth population of Liberia has more females than males, with the 2008 Census showing about a 5 percent surplus in the 15-34 age range (Figure 1 and 2). This could be due to several reasons: gender differences in mortality or emigration trends, or a failure of even the census to capture young people living in non-traditional households (for example, young men living on the streets or sleeping in the shops where they work). It is likely, however, that this demographic misbalance is also at least partially a result of the years of conflict where young men incurred higher mortality rates and higher separation rates from their households.

There is a higher concentration of youth in the urban areas, especially Monrovia (Figure 3). Just over 40 percent of the population of Greater Monrovia is between the ages of 15 and 35, compared to 33 percent in the rural areas. The gender breakdown of youth does not vary between urban and rural areas, but is consistently just over 50 percent female.
The age range under consideration is a time of transition for these young people, as they ideally finish their schooling, start work and set up their own households (Figure 4). In the 2010 CWIS, only 5 percent of 15-19 year olds are the head/spouse of their own household, compared to 77 percent of 30-34 year olds. For marital status, 95 percent of 15-19 year olds have never been married, and this goes down to 22 percent for 30-34 year olds. Females tend to become independent or marry somewhat earlier: 50 percent of females are the head/spouse of a household by age 24, while for males, this shift (where more than half are heads/spouses) does not occur until age 28.

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17 All women who lived with a male partner were classified as “spouse.” Those women who are classified as “head” are those heading their own household without a male partner.
2.2 Education and Skills Development

The educational attainment of youth is steadily improving in Liberia, and women are catching up to men in this regard. However, average educational attainment remains low, particularly among older young women and among youth in rural areas. Only 10 percent of youth enroll in formal vocational training. Many of these youth have relatively high levels of education - secondary education or even university. This may in part be due to TVET institutions requiring a minimum level of education. Until the 2014 TVET policy took effect, many institutions required at least a ninth-grade education (mid-secondary). Even now, students are expected to have completed primary education in most cases.\textsuperscript{18}

Primary school enrollment is steadily improving in Liberia, with females catching up to males (Figure 5). The multiple household surveys conducted over a six year period allow examination of the education outcomes of different cohorts based on year of birth.\textsuperscript{19} Looking at the percent who have ever attended school, there is a slow but steady increase for males and a rapid catching up for females. Of the cohort born 1970 to 1974, 76 percent of the males and only 40 percent of the females had ever attended school by 2013. For the youngest cohort, those born 1995 to 1999, these numbers and 93 percent and 91 percent respectively. If we consider mean years of education instead, we see a similar pattern of small gains for the males and catching up from a much lower baseline for the females.

![Figure 5 School Attendance by Gender and Cohort](image)

However, educational attainment remains low, and decades of lower participation have left many older female youths with no schooling (Figure 6). An examination of the level of education obtained by different cohorts of youth shows that over 50 percent of females above 25 years old have no schooling. While the educational attainment of the youngest cohorts of females more closely matches that of males, education levels are still very low in Liberia. For example,

\textsuperscript{18} National Policy for TVET, MYS 2015.

\textsuperscript{19} We use data from the 2007 CWIQ, the 2010 CWIQ and the 2013 DHS to look at various cohorts who would qualify as “youth” over the time period.
in 2010 around 60 percent of both males and females 15 to 19 years old had no or incomplete primary education. This in part reflects the large number of youth who are still trying to complete their education.

**Many youth in Liberia continue to pursue an education even after they begin working (Figure 6).** A full 75 percent of 15-19 year olds are still in school. This percent declines to 46 percent for 20-24 year olds, 22 percent for 25-30 year olds and 10 percent for 30-34 year olds are also in school. A significant number of these youth are still trying to complete their basic education: 37 percent of 15-19 year olds are still in primary school. Comparing males and females, we see that as well as higher education attainments for males, they also stay in school longer. Fifteen percent of males in the 30-34 years old group are still in school, compared to only 6 percent of females. Looking again at individuals in the 30-34 years old group, 29 percent of males have completed secondary school, and another 30 percent have completed primary school. For the females in this age group, only 14 percent have completed secondary school and another 18 percent primary school.

**Educational attainment is somewhat higher in the urban areas, particularly greater Monrovia.** But a substantial fraction of youth (between 37 percent and 49 percent) across all areas are still in school (Figure 7).
The legacy of civil conflict and the pervasive poverty levels throughout the country likely contribute to the low levels of education. The youth cohort of 2010 grew up during the civil wars in Liberia, and whose education was likely disrupted as a result. Many other factors contribute to the length of time it takes to complete basic education -- lack of funds leads to students having to suspend their education, overall poor quality of education can lead to students retaking exams several times before continuing to the next level. Currently, youth are struggling to finish their education at the same time they are getting married and starting their own households.

A significant number of youth who are in school are working as well. In 2007, 25 percent of youths aged 15-19 combined work and school, and these youth transition into just work as they age (Figure 8). This is one area where there seems to have been significant changes in the pattern over time. The 2010 LFS, using very similar questions, finds that, compared to 2007, almost twice as many younger youth, both male and female, are able to devote all their time to school (Figure 9). In 2007, 30 percent of 15-19 year olds are in school and not working, in 2010 that number is 57 percent. There is still a similar pattern of transitioning from education to work during the 15-35 age range.

![Figure 8 Work and School by Age and Gender](image1)

![Figure 9 Work and School by Age and Gender](image2)
Combining work with school is more common in rural than urban areas (Figures 10 and 11). Comparing the participation of youth in work and school across different areas, in 2007, significantly more youths were working in the rural areas (72 percent) as opposed to Monrovia and other urban areas (40 percent and 58 percent respectively). The percentage of youth in school is significantly lower outside Monrovia. By 2010, we see a different pattern, with youth in other urban areas catching up to Monrovia in school attendance.

Youth who are able to remain as dependents in the household of their parents or others are much more likely to be in school (Figure 12). The gains in school attendance between 2007 and 2010 have been concentrated in dependents. Looking at females, there is little difference between those who are “spouses” (living with a male partner) and those who are “heads” (heading their own household without a male partner), both are unlikely to be in school (15 percent and 12 percent respectively).
Overall, the 2010 LFS finds that 10 percent of youth have participated in vocational training (Figure 13). The rates are higher for males and for females, and for older youth as compared to younger youth. As participation in vocational training also increases with formal educational attainment, this suggests that for most youth it is a complement for formal schooling, not a substitute (Figure 14).
Vocational training subjects are somewhat segregated along traditional gender roles, although computer training is popular with both young men and women (Figure 15). For males, the most common subjects are computers (24 percent), auto mechanic (11 percent), carpentry (11 percent) and masonry (11 percent). For females, they are tailoring (24 percent), computer (13 percent), pastry (13 percent) and tie and dye (12 percent). There are also some differences between urban and rural areas, with computers being by far the most common subject in greater Monrovia (31 percent) compared to 4 percent in rural areas. Agricultural courses are unknown in Monrovia, but make up a small but significant percentage of courses taken (8 percent) in rural areas (Figure 16).
Many vocational training subjects are concentrated around manual occupations. Given the high level of educational attainment of the youth participating in vocational training, it is somewhat surprising to see the degree to which most training courses are focused on manual or low-skill service occupations such as masonry, carpentry, mechanics, tailoring and pastry. This may reflect the lack of high-skill jobs available even to educated youth, as well as poor skill acquisition in high school graduates. Of the 27,651 candidates who sat for the Senior High School Certificate in 2014, 48 percent passed, with only 5 scoring in the 2nd tier, and all others scoring in the bottom of three tiers. Only 58 percent of examinees passed the Junior High School Certificate.

In 2013, all 23,000 candidates failed the entrance exam at the University of Liberia, and in October 2014, only 15 of 13,000 examinees passed the exam.20

2.3 Labor Market Participation, Employment Industry, and Contract Type

Employment starts young in Liberia: more than 20 percent of 15-19 year-olds work. As youth get older and form their own households, labor force participation grows and school attendance declines. Own-account is the most common form of employment, followed by unpaid family work. A minority of youth earn wages or pay. Agriculture is by far the largest sector of employment, followed by commerce. In both sectors most youth work as unpaid family members or own-account workers. Paid work is concentrated in sectors where few youth obtain employment: mining, manufacturing, utilities, transport and construction; at nonprofits; and in government. Employment in agriculture tends to fall as education level and age increase for both genders and all geographic areas.

Youth participation in the labor market is common at all ages but increases with age and household position (Figures 17 and 18). 77 percent of 30-34 year olds are actively working, compared to 25 percent for 15-19 year olds. This transition to work correlates with leaving school, marrying and forming a household. Supplementary analysis shows that youth who are

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20 Liberia – Africa Economic Outlook, 2015 (AfDB, OECD, UNDP).
dependents in upper-income households delay labor market participation the longest. On the other hand, youth in rural areas tend to move into work earlier (Figure 19). Patterns are similar for males and females, except that females are more likely at all ages to be inactive in the workforce for reasons other than school and begin the transition out of school at an earlier age. It is notable that only very recently have Liberian youth begun staying in school longer. Earlier surveys found that youth were active in the labor market at a younger age.\textsuperscript{21}

\textbf{Figure 17 Labor Market Status by Age and Gender}

\textbf{Figure 18 Labor Market Status by Position in Household and Gender}

\textsuperscript{21} The CWIQ 2007 shows much higher rates of labor market participation for younger youth as discussed in the section above on work and school.
Own-account work is the predominant form of work for youth (Figure 20). Participation in the workforce rises steadily as youth age, and youth who were unpaid family workers switch mainly into own-account employment. Fifteen percent of all 15-19 year-olds (64 percent of all working 15-19 year-olds) are unpaid family workers. By the time youth reach the 30-34 age group, only 6 percent of them are still doing unpaid family work. Wage work covers a small proportion of the youth, and mostly only older males.

Employment among youth is highest in rural areas, due to more unpaid family work (Figure 21). Once youth are heads or spouses in their own households, they are more than twice as likely to work. The majority are own-account workers. Wage employment is concentrated among males who are household heads, but only around 20 percent of these males obtain this type of employment (Figure 22). Very few male heads are unpaid family workers, although a
significant number of young women, mainly spouses, continue to fill this role even after forming their own households.

![Figure 21 Employment Status by Monrovia/Other Urban/Rural](image1)

**Figure 21 Employment Status by Monrovia/Other Urban/Rural**

![Figure 22 Employment Status by Household Position and Gender](image2)

**Figure 22 Employment Status by Household Position and Gender**

Labor force participation is greatest among males who have completed secondary education and then among females who have no or incomplete primary education (Figure 23). This may reflect the fact that girls with very low education levels have limited opportunities to gain independence and most are working as unpaid family members or own account workers. For males, the highest rates of employment, and by far the highest rates of paid employment are for those who have completed secondary school or more. Among even educated females, far fewer relative to males find employment in paid employment.
Rates of labor market participation are very high in the poorest households, where unpaid family work is common for spouses and dependents and own-account work is common among household heads (Figure 24). The household wealth quintile for the census data is constructed based on various measures of household wealth, mainly housing characteristics and durable goods ownership. Overall, rates of labor force participation decrease as household wealth increases, for both dependents and heads/spouses. There is a decrease in the fraction of youth doing unpaid family work as household wealth increases, again, both for those who are heads/spouses and those who are dependents, and an increase in the fraction working as a paid employee, especially for those who are heads. This indicates that much labor force participation by youth, particularly in unpaid family work, is likely an economic necessity, rather than a choice.

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22 The construction is discussed in more detail in the appendix.
Agriculture is by far the largest youth employment sector, followed by commerce. In both, most youth are unpaid family members or own-account workers. Paid work is concentrated in the sectors where few youth obtain employment (Figure 25). The highest rates of wage or salaried employment for youth are in the technical/business and service sectors (76 percent and 64 percent respectively). These are relatively small sectors, however, so each only accounts for less than 5 percent of all working youth. Further analysis shows that technical and business employment covers workers in government and nonprofits (6 percent and 16 percent, respectively, of paid employees). Another 33 percent of youth obtain paid employment in the mining, manufacturing, utilities, transport and construction industries that comprise the service sector. Unpaid family workers as well as own-account workers are concentrated in agriculture (76 percent and 46 percent, respectively). Another 38 percent of own-account workers are in commerce.

While agriculture is the largest sector in which youth work, there is some transition out of agriculture into other sectors as youth get older (Figure 26). Males move into employment in both the mining, manufacturing and construction sector and the commerce sector, while females are more likely to transition into the commerce sector. Looking across different types of locations, agriculture is by far the largest sector in the rural areas, and remains a substantial share in urban areas outside of Monrovia (Figure 27). For those youth not working in agriculture, the distribution of sectors is fairly similar across geographic area, with commerce always being the largest, followed by mining, manufacturing and construction.
There is a clear negative correlation between employment in agriculture and education, suggesting that higher levels of education allows youth to access employment in other sectors (Figure 28). For both males and females and in urban and rural locations, employment in agriculture tends to fall as education level increases (Figures 28 and 29). Again, females tend to instead be more likely to work in commerce, while males find employment in both commerce and mining, manufacturing and construction. Technical/business activities and services are concentrated among the highest educated youth in the urban areas, and somewhat more for males than females.
Employment in agriculture is also strongly correlated with poverty in the household (Figure 30). There is a sharp decline in employment in agriculture if households are disaggregated by wealth quintile. Over 70 percent of those in the bottom two quintiles work in agriculture, while the number falls to 18 percent and 5 percent respectively for the two top quintiles. Patterns are similar for heads/spouses vs dependents, and all other sectors increase fairly evenly as household wealth increases.
2.4 Labor Market Earnings

One indicator of economic welfare for youth is their individual incomes. For this analysis, we define a “living wage” as at least $1,486 per year. This would allow a youth to support a family of four (two adults and two young children) at or above the poverty line. Only 13 percent of youth have such jobs. Our analysis of youth income also finds a significant degree of earnings variation by gender and type of employment, even at comparable education levels. At each level of education, females earn less, and paid employees earn considerably more than own account workers. As females also tend to have lower levels of educational attainment and lower representation in paid employment, on average they earn considerably less than male youth. The lack of earnings equalization by gender and by education is suggestive of labor market frictions, where the earnings of youth do not correspond one-to-one with their productivity, possibly due to costly search and matching, or even simply nepotism. Also of note is that nonprofit and government work are the highest-paying jobs.

At almost all levels of educational attainment males earn more than females, and there is remarkably little improvement in incomes until secondary education is pursued (Figure 31). There are large increases in incomes for youth who have finished secondary school or higher education. The preceding subsection found that it is only really males with complete secondary education that break into the technical and business sectors of employment. At the lowest levels of education most youth are engaged in agriculture, which is also includes unpaid family work, or, as is particularly the case for females, basic commerce. Females appear to catch up in earnings with males once higher education is achieved. However, the labor force survey records only 8 females with university education. Given the earning differentials and the earlier findings on the lower levels of educational attainment by females, particularly at secondary levels, this implies that female youths in the labor market in Liberia earn considerably less on average than males.
Looking at income by employment status, we see that those who are paid employees do significantly better than others (Figure 32). Next are youth who employ others. However, these categories cover a minority of youth: 6 percent of all youth are paid employees or 17 percent of those on whom we have income data, henceforth called “earning youth”, while youth employers are an even smaller group: only about 2 percent of earning youth.\textsuperscript{23} The largest group of earning youth, own account workers, have significantly lower incomes. Altogether less than 20 percent of male youth earn a living wage and this decreases for younger youth and females, where less than 10 percent on average earn living wages (see supplementary figure in appendix). This implies that most youth could be considered as underemployed. They are working, but not earning sufficient income to support themselves and their dependents.

\textsuperscript{23} The Labor Force Survey records 71 youth as employers in total.
When incomes are broken down by educational attainment, there are stark differences between the absolute returns to education in the cross-section between paid employees and own account workers (Figure 33). For example, an employee with at least a secondary degree (secondary complete or university) has a median income of USD 1182, compared to USD 480 for an own account worker. The figures are USD 675 and USD 206 for workers with no education, respectively. This is interesting as it shows that there is a lack of earnings equalization across different types of work at a given educational level. While some individual heterogeneity in productivity, such as talent, skill, aptitude, can account for some of this earnings differential it is implausible that it can cover the full differences. Similarly, concerns about under reporting of own account incomes cannot explain such a large earning differential. This implies labor market frictions, such as costly search and matching, or even simply nepotism, could be causing differentiation in earnings.

Figure 33 Income by Education and Employment Status

Those that break into paid employment as technical professionals (often, ironically, with nonprofits) have the highest earning potential, while among the categories of self-employment technical occupations and those in the construction, mining, and transportation pay best (Figures 34 to 36). Incomes for youth who are employees vary widely across industries (although this variation may be partly driven by small sample sizes), with the highest incomes reported for those in the technical/business sector. There is less variation in the much larger group of youth who are own account workers, both within industries and across industries, with most of them making very modest incomes. There is a similar pattern looking at income by type of occupation. For enterprise type, the highest wages are paid in non-profit organizations (8 percent of youth who are paid employees work for non-profits), followed by government employees (19 percent). There is very little difference between the two biggest groups of employees, those in non-farm private enterprises (37 percent) and those in farm private enterprises (21 percent). Own account workers are highly concentrated in non-farm and farm

24 There may be systemic biases in asking respondents to estimate their net profits from small informal businesses.
private enterprises (36 percent and 46 percent respectively of youth own account workers). Those in the non-farm sector make somewhat more, although incomes are very modest.

Figure 34 Income by Occupation

Figure 35 Income by Industry
Figure 36 Income by Type of Enterprise
3. VOCATIONAL SKILLS DEVELOPMENT PROVIDERS

With a better understanding of the educational challenges Liberian youth have coped with growing up and the ongoing challenge many face of trying to secure an education while simultaneously supporting themselves, it will be evident how this history contributes to some of the problems experienced by TVET trainers and trainees. This section assesses skills development providers based on new survey data, and discusses their institutional and funding structure as well as their potential for expansion, to identify where service delivery is stretched and quality insufficient. In addition, we examine methods used to recruit trainees, as this is an important aspect governing access to training opportunities.

Building Markets collected survey data on TVET providers in February 2015. From a sample of 470 training providers, 139 were selected: 41 TVET providers, 58 apprenticeship providers, and 40 on-the-job training providers. They were located in the counties of Montserrado, Grand Bassa, Lofa, Margibi, Maryland and Nimba. The selection of training providers to include in the survey was guided by the length of time institutions had been established (preference given to more established institutions), the familiarity of institutions in their local communities (preference given to better-known institutions), whether they had traceable graduates and whether the institution was operating and reachable at time of survey.

3.1 Types of Training Providers

Training providers in Liberia can broadly be classified into two types of institutions: those that provide on-the-job training or apprenticeships in a particular type of vocation or skill and often in a non-formal or informal set-up, and formal TVET programs that provide class-room based training in both vocational and technical skills. Popular formal TVET courses include ICT, business and vocation-specific technical skills.

Although the Building Markets survey distinguished on-the-job training providers from apprenticeship providers, the cross-sectional and qualitative information collected on the two categories is very similar, except perhaps that on-the-job training tends to be offered in larger establishments than apprenticeships. Training in manual trades such as carpentry, welding, construction, and auto mechanics, as well as certain artisanal skills, are popular subjects for informal and non-formal TVET training. In addition, on-the-job training offers opportunities for service-based sectors such as tailoring, cosmetology, hospitality, catering, and catering.

The geographic location of most training programs in Montserrado means that a majority of youth in rural locations have limited access to these opportunities. A final critical point: while travel restrictions at the time of the survey made the collection of data on agricultural skills training providers difficult, their limited presence in accessible locations is indicative of a weakness in the provision of these skills. Given the employment profiles of youth outlined in the preceding chapter, this demonstrates a mismatch between opportunities for employment and the focus of training programs.

There are two forms of training provided in Liberia outside of the education system: formal technical and vocational educational training (TVET) and informal education in the
form of on-the-job training or apprenticeships. According to the Building Markets 2014 assessment, there are around 470 training providers in Liberia. Roughly three-quarters, 74 percent, offer apprenticeships and on-the-job training, and 26 percent offer facility-based formal TVET programs. Training providers are concentrated in Montserrado around the capital, where 70 percent are based. There are also clusters of training providers in Grand Bassa (7 percent), Margibi (5.5 percent) and Nimba (6 percent).

Private or for-profit institutions provide most of the training (70 percent). The remaining 30 percent is provided by nonprofits including faith-based and community-based organizations. Outside the workplace, training is provided by training centers. On-the-job training is mostly provided by independently or privately operated enterprises. Of the 40 formal TVET institutions, 15 were privately operated, for-profit institutions. Another 19 were operated by non-governmental, faith-based and community-based organizations or the government. International NGOs financially support several of these institutions, although they rarely provide training directly. Most of the on-the-job and apprenticeship training was provided by master craftsmen (80 out of a sample of 98), technical businesses and service providers. These were classified as private or for-profit, since the income of these enterprises was generated from their business activities rather than supported by the government or an NGO. However, the most commonly stated reason that these training providers take on trainees was to assist unemployed youth and provide a service to their community. They do not appear to take on trainees to improve their incomes.

Formal TVET providers offer courses in ICT, business and vocation-specific skills (Figure 37). TVET providers offer courses in three areas: vocation-specific skills, such as cosmetology, engineering, construction, healthcare and hotel services; business management and financial literacy; and information communications and technology (ICT). A majority of trainees enrolled at these institutions specialize in one course at a time. In rare cases, trainees enrolled in business management courses take ICT courses concurrently. ICT courses are popular and were offered by more than a quarter of TVET providers surveyed. Many of these are basic computer courses, including typing and web browsing, as well as subject-specific courses such as ICT for accounting, payroll or logistics. TVET courses vary depending on whether trainees are full-time or part-time and whether they attend classes during the day or in the evening. A majority of courses (66 percent) last from one to six months. Many of the institutions providing ICT courses lacked proper equipment and facilities, such as computers and internet connectivity.

![Figure 37 Types of Training Courses Provided by TVET Institutions (number of institutions)](image_url)
On-the-job and apprenticeship training, by comparison, focuses on manual trade skills or service-specific skills, with a few trainers offering business, ICT or financial literacy development. The largest categories of apprenticeships are in carpentry and woodworking (33 percent); motor mechanics, auto electric and repairs (24 percent); and artisanal skills including weaving, tailoring and design (21 percent) (Figure 38). Similarly, the most common form of on-the-job training, 24 percent, is in metalwork, carpentry and engineering (Figure 39). In Liberia, carpentry and woodwork apprenticeships are reportedly popular because of the substantial forestry resources in the country and the anticipated opportunity carpentry offers for self-employment. On-the-job training also facilitates training in more female-dominated sectors such as tailoring and garment-making (15 percent), hair dressing, beauty therapy and cosmetology (12 percent), training in business skills, consulting, accounting (22 percent), and hotels and restaurants service (10 percent).

Although most of the informal employment in Liberia is predominantly agricultural, the Building Markets study did not survey any informal training provider offering agriculture-related training. This may be due to the difficulties in accessing these training institutions following the peak of the Ebola crisis.

![Figure 38 Types of Training Offered by Apprenticeship Providers](image1)

![Figure 39 Types of On-the-Job Training](image2)
Options for apprenticeships are similar across geographic locations, with the exception of building and construction. Far more building and construction apprenticeships were found in Montserrado (88 percent). Slightly more motor mechanics and auto electronics (57 percent) were found outside of Monrovia. Most of the on-the-job training providers surveyed were based in Montserrado (30 of 41). Of the providers outside of Montserrado most focused on metal work, carpentry and engineering.

Many Montserrado-based formal TVET providers (35 percent) offer different ICT courses than those based in other counties (18 percent). As will be seen later in the report, this correlates with the access to internet and ICT-related equipment available in each geographical region.

More than half (52 percent) of formal TVET programs surveyed were funded by the trainees (through fees), most of whom are taking courses at private/for-profit institutions. The most common courses in this category are ICT and management courses. Government agencies, local NGOs, and international organizations also provide some funding, while faith-based organizations and private/for-profit institutions provide a very small amount of funding for TVET programs (Table 1). The government provides funding for small-scale training courses which are run and managed by government entities and aimed at providing short-term skills-based training in a variety of subjects. This includes literacy, business management and work-based skills. These are different from the more formalized programs offered at formal TVET training programs and community colleges, which are accredited and tend to be longer in duration and more structured. International organizations supply funding for training offered by CBOs and local NGOs, as well as for their own programming.

Table 1: Funding for Different TVET Providers

<table>
<thead>
<tr>
<th>Type of organization providing training</th>
<th>Gov’t</th>
<th>Int’l Org</th>
<th>Trainee</th>
<th>Local NGO/FBO</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Association</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>CBO</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Faith-Based Organization</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Government</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>International organization</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Local NGO</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Private/For-profit Institution</td>
<td>-</td>
<td>-</td>
<td>15</td>
<td>-</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>4</td>
<td>24</td>
<td>2</td>
<td>1</td>
<td>40</td>
</tr>
</tbody>
</table>

Most apprenticeship providers cover the cost of training through the income they generate for master craftsmen and technical businesses in the informal sector. More than half of apprenticeship providers surveyed offer financial incentives to their apprentices, as they believe apprentices should be compensated for the labor they provide. However, those who do not provide monetary compensation maintain that skills acquisition is compensation for labor, since
apprentices did not pay for their training programs. Relative to apprentices, where only some receive remuneration, in all cases, on-the-job trainees are employed in some capacity and training providers are mainly private/for-profit institutions (68 percent). As with apprenticeships, business-generated income covers the cost of training provided by private/for-profit institutions. Some on-the-job training is supported by local NGOs, the government and CBOs, where trainees are most likely sponsored to learn on-the-job through placement in private/for-profit institutions.

Table 2: Apprenticeship Funding

<table>
<thead>
<tr>
<th>Type of apprenticeship training provided</th>
<th>Number of cases (N)</th>
<th>Type of organization providing apprenticeship training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Government</td>
</tr>
<tr>
<td>Artisanal skills</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Building and construction</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Carpentry and woodwork</td>
<td>19</td>
<td>0</td>
</tr>
<tr>
<td>Motor mechanics and auto electrics</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>Welding, engineering &amp; steel works</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>1</td>
</tr>
</tbody>
</table>

3.2 RECRUITMENT

Enrollment in training courses is influenced by training type, cost, and educational prerequisites. Most of the apprenticeships focus on manual trades, and few females enroll in them. Most youth in TVET training courses tend to be slightly older and to have a higher level of educational attainment. TVET training is largely funded by the individuals taking the training or their parents. Formal TVET is accessed by youth with higher levels of education than the national average and those who can afford tuition fees, while apprenticeships and on-the-job trainees are more accessible to youth in lower socio-economic groups. Recruitment channels also govern access to training. Formal TVET providers use radio and newspapers, but the majority of youth involved in any training program found out about it through word of mouth. Among apprentices and on-the-job trainees about half are related to another employee or the primary employer. Finally, the geographic location of most training programs in Montserrado likely means that the majority of youth in rural locations have limited access to these opportunities.

TVET institutions use formal channels, such as radio and newspapers, for advertising their training courses. Radio is the most common method and is more popular in the counties (used by 88 percent of TVET providers) than in Montserrado (used by 41 percent). Outside Montserrado, radio is often community-based or county-based (e.g. Radio Nimba, Radio Sinoe, etc.) and an important source of information. Monrovia has approximately 20 daily papers and the counties each have only one or two daily papers with limited distributions. For this reason, newspaper advertising is more prevalent in Montserrado than in the counties. Only a few institutions in Montserrado use other advertising channels such as posters, internet or television (Figure 40).
Institutions offering on-the-job training most commonly use word of mouth to advertise their training and job opportunities (Figure 41), while apprenticeship providers typically offer opportunities to those within their network. As with TVET providers, radio advertising is higher outside Montserrado (used by 40 percent of OJT providers) than inside Montserrado (used by 16 percent). On-the-job providers only marginally use other advertising methods such as career events, newspapers and job advertisements. Since in many cases OJT providers train people they already employ, they have little need to advertise their training. Nearly all apprenticeship providers (97 percent) report offering training in order to assist trainees and the majority of trainers recruit apprentices from within their networks and communities.

According to trainees, word of mouth is by far the most common way that they find out about training (Figure 42). Over 75 percent of on-the-job trainees and apprentices found out about the training opportunity through word of mouth. Almost half of these trainees reported that
they were related to either another employee or the owner of the business connected with the training (Figure 43), demonstrating that social networks play an important role in connecting youth to these opportunities. For TVET trainees, radio communication was more common, but word of mouth still accounted for over 50 percent of the way youth found out about training courses. Close to half of the TVET trainees reported being competitively recruited, often through written applications followed up by interviews, but the majority (over 70 percent) reported that enrolling was easy (Figure 44).
Training providers are concentrated in Montserrado, around the capital. From a listing exercise carried out in November 2014, out of 470 training providers in Liberia, 70 percent (330) were based in Montserrado. There are small clusters of training providers in the following counties: Grand Bassa (7 percent), Margibi (5.5 percent) and Nimba (6 percent). Across locations there were a few notable differences in the types of training provided. First, far more building and construction apprenticeships were found in Montserrado (88 percent) than elsewhere. Second, slightly more motor mechanics and auto electronics apprenticeships (57 percent) were found outside of Monrovia. Third, most of the on-the-job training providers surveyed were based in Montserrado (30 of 41). Of the providers outside of Montserrado most focused on metal work, carpentry and engineering. Fourth, for TVET, Montserrado-based providers offered more ICT courses (35 percent) than those based in other counties (18 percent). Thus, access to training is more abundant close to Monrovia and the types of training opportunities vary by location, with construction apprenticeships and ICT courses being more readily available near the capital.

All types of trainers report enrolling trainees regardless of gender. However, enrollment information shows fewer females in general accessing training, and particularly low numbers in specific sectors and in on-the-job or apprenticeship training (Figure 45). Courses that are traditionally male dominated, such as engineering, enroll more male than female trainees, while courses that are traditionally female dominated, such as catering and cosmetology enroll more female trainees. Among apprenticeship training providers, many of them anecdotally report gender preferences for particular courses based on traditional gender roles. They report that attracting female trainees for courses in the carpentry, automotive, construction and engineering sectors is difficult. Female trainees tend to prefer courses in the service sector such
as catering, hospitality and cosmetology, which are more often provided by on-the-job training programs or in formal TVET institutions.

Across the different types of training, gender enrollment is most balanced in the programs offered by formal TVET providers. Courses in ICT, business and financial skills are popular among both genders (Figures 46 and 47). There is a strong bias towards males among the apprenticeship providers, likely due to their concentration in manual, typically male-dominated sectors. Among trainees surveyed only 14 of 150 apprentices were female. Similarly, among on-the-job trainees only 26 of 95 trainees were female. Traditional societies, including those in Africa, have long associated males and females with particular occupations based on gender, which create some obstacles for those wishing to train for jobs outside of these stereotypes. Information gathered from apprenticeship and on-the-job trainers indicates that these perceptions are still persistent in Liberia and discourage females from training for traditionally male dominated occupations and vice versa.
The majority of the trainees surveyed were between 15 and 24 years old (Figure 48). Apprenticeships engaged slightly younger youth, with 53 percent 15-24 year olds, 30 percent 25-34 year olds, and 12 percent above 34 years old, while TVET trainees were slightly older, with 36 percent 15-24 year olds, 34 percent 25-34 year olds, and 28 percent above 34 years old. On-the-job trainees were approximately in the middle of these age distributions.
Educational attainment varies across different types of training programs. About 50 percent of apprentices had no schooling or incomplete primary, while this dropped to 21 percent for on-the-job trainees and 10 percent for TVET trainees (Figure 49). Among TVET and on-the-job trainees about 60 percent had completed secondary school or higher. Given our discussions on the profiles of youth in the preceding chapter, where higher educational attainment in Liberia is very low among youth, this implies that a minority of youth are likely accessing these training programs, or at least have been covered in the survey data. The national TVET policy has since reduced the educational prerequisite to grade 6 schooling, yet this is still above the average level of education for youth. Figure 50 shows the literacy and numeracy of trainees. This further shows the weaknesses in the basic skills of youth, even among those enrolled in TVET and on-the-job training programs. Apprentices have the lowest skill levels with about 70 percent having low or no literacy and numeracy.
3.3 Training Program Quality and Capacity

The years of conflict have significantly impacted the level of experience offered by trainers in TVET institutions. Trainers in most formal TVET institutions began working or teaching in their subject area after the civil war ended, which means that as a group they lack industry or teaching experience. Formal TVET institutions also lack standardized curriculum and accreditation processes, facilities that correspond to their subject area, such as computers and internet access for ICT courses, and the resources to provide the necessary training materials and tools to their students. Few TVET institutions currently track their students so it is hard to evaluate the success of their training programs.
In contrast to formal TVET trainers, apprenticeship and on-the-job training providers almost all have at least five years of industry experience. They have stronger links to industry and are better equipped to track their trainees after their apprenticeships. They are able to facilitate some degree of trade testing, although opportunities of formal accreditation are minimal. These training providers also lack resources, with inadequate facilities, equipment or materials to offer effective training.

The industry and teaching experience of most TVET trainers is relatively limited, in part due to the disruption the civil war caused to training institutions. Most TVET trainers (65 percent) surveyed had an average of zero to five years of industry experience and only 10 percent have an average more than ten years of industry experience (Table 3). As most TVET institutions opened after the end of the civil war they had to hire from a limited pool of candidates. As a result, they employ recent graduates with little or no work experience. Only international organizations and local NGOs were found to employ staff with an average of 11 or more years of industry experience. As with industry experience, the majority of TVET trainers have less than five years of teaching experience (Table 4). Qualitative evidence from provider interviews suggests that most institutions employ recent graduates. Trainers with little teaching or industry experience may decrease the effectiveness of training programs.

Table 3: Staff average years of industry experience by type of TVET training provider

<table>
<thead>
<tr>
<th>Type of TVET trainer</th>
<th>Number of cases</th>
<th>Average years of industry experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0 - 5 years</td>
</tr>
<tr>
<td>Business Association</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>Community-Based</td>
<td>5</td>
<td>40%</td>
</tr>
<tr>
<td>Faith-Based Organization</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>Government</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td>International Organization</td>
<td>2</td>
<td>50%</td>
</tr>
<tr>
<td>Local NGO</td>
<td>7</td>
<td>43%</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
<td>67%</td>
</tr>
<tr>
<td>Private/For-profit Institution</td>
<td>15</td>
<td>73%</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>65%</td>
</tr>
</tbody>
</table>

Table 4: Staff average years of teaching experience by TVET training provider

<table>
<thead>
<tr>
<th>Type of TVET training provider</th>
<th>Number of cases (N)</th>
<th>Average years of teaching experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0 - 5 years</td>
</tr>
<tr>
<td>Business association</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>CBO</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>Faith-Based organization</td>
<td>3</td>
<td>100%</td>
</tr>
<tr>
<td>Government</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>International</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Organization</td>
<td>7</td>
<td>57.14%</td>
</tr>
<tr>
<td>--------------------</td>
<td>---</td>
<td>--------</td>
</tr>
<tr>
<td>Local NGO</td>
<td>3</td>
<td>66.67%</td>
</tr>
<tr>
<td>Private/For-profit Institution</td>
<td>15</td>
<td>86.67%</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>85%</td>
</tr>
</tbody>
</table>

In contrast to TVET programs, most apprenticeship providers and on-the-job training providers have substantial industry experience. 62 percent of apprenticeship providers have more than ten years of relevant work experience, while only 12 percent have five years or less (Table 5). 81 percent of OTJ providers have six or more industry experience (Table 6). From anecdotal evidence gathered during the survey, apprenticeships and on-the-job training offered by private businesses are mainly provided by master craftsman. In contrast, programs facilitated by local NGOs employ less experienced staff.
### Table 5: Work experience of apprenticeship providers

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>Number of cases (N)</th>
<th>Work experience of apprenticeship providers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-5 years</td>
</tr>
<tr>
<td>Government</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>Local NGO</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td>Private/For-profit Institution</td>
<td>53</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>12%</td>
</tr>
</tbody>
</table>

### Table 6: OTJ trainers' years of experience

<table>
<thead>
<tr>
<th>Type of OTJ provider</th>
<th>Number of cases</th>
<th>Years of experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-5 years</td>
</tr>
<tr>
<td>Government</td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td>Local NGO</td>
<td>5</td>
<td>40%</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Private/For-profit</td>
<td>28</td>
<td>21%</td>
</tr>
<tr>
<td>Total</td>
<td>41</td>
<td>19%</td>
</tr>
</tbody>
</table>

TVET training courses and local NGO apprenticeships cater for larger class sizes, while on-the-job and apprenticeships with private businesses usually take on less than ten trainees at a time. The majority of TVET providers (64 percent) limit class sizes to 30 or less trainees at one time, but are willing to cater for class sizes this large. In Montserrat, the average number of youth participating in apprenticeships with local NGOs is 46. In contrast, private businesses offering apprenticeships had only eight to nine apprentices across locations and most on-the-job training providers trained only one to ten trainees at a time. Although many businesses indicate their desire to train more people than currently enrolled, many explained that they are unable to do so because of current constraints on capacity and finances (and presumably business activity).

The length of TVET training courses varies by type of course. Apprenticeships and on-the-job training typically last between one to six months (Figure 51). Duration tends to depend on the complexity of the subject area and trainees’ previous experience. Artisanal skills, such as weaving and tailoring, on average take less training time than more technical skills, such as carpentry and welding.
While most TVET institutions had access to classrooms, many lacked other important facilities and equipment associated with providing training. All TVET institutions interviewed have access to classrooms and trade area spaces, but more than 75 percent have no access to administrative facilities (Figure 52). Access to a standardized curriculum, library, ICT facilities and internet connectivity remains a serious challenge both inside and outside Montserrado. Furthermore, there is an educational disassociation between the courses offered and the access to facilities available. For example, a large proportion of TVET providers offer ICT courses, but only a small number have access to internet connectivity. Moreover, though providers may have access to computers for training, the number of computers are limited and many are outdated. This is an issue primarily in the counties, where TVET providers may train up to five trainees per computer, limiting hands-on, practical training. Thus, while 73 percent of institutions report having space for more students, many do not have the appropriate facilities. This inevitably limits institutions’ ability to adequately train an increased number of students.

![Figure 51 Apprenticeships and On-the-Job Training Duration](image)

![Figure 52 TVET Facilities](image)
TVET providers repeatedly noted a lack of financial resources as a constraint to delivering courses. Donor-funded institutions are vulnerable to funding cycles, and TVET providers who rely on these funds cease to provide training when their funding ends, leaving the youth in these communities underserved. Though nonprofit institutions generally provide training free of change, they often require trainees to supply their own learning materials. For example, cosmetology trainees must bring their own hair dressing equipment. If students are unable to acquire such materials they often drop-out of the training program. Private and for-profit institutions in the counties compensate for a lack of financing from students by decreasing training cost, which negatively affects training quality. This is reflected in both trainers’ and trainees’ comments on the lack of adequate tools and equipment.

Almost half (48 percent) of the apprenticeship training providers believe that their facilities are not suitable for proper training (Table 7). Facilities refer to trade area space, infrastructure and other immovable hardware (including machinery) required for training. Apprenticeship providers offering training in welding, engineering and steel works report the lowest level of facility suitability and sufficiency (20 percent), while those providing training in building and construction report the highest (75 percent). Many say they are renting facilities which are often poorly equipped and in many cases have no access to electricity. The use of generators to supply electricity is expensive and providers note that this affects not only training but also their business viability. In order to improve training, apprenticeship providers say they need more space and established and/or permanent locations, as many operate from rented facilities which only accommodate a few people. This limits the number of people they can train, as well as their ability to secure their tools and to expand their business operations. For apprenticeships in manual trades access to better materials and tools was also required. The proportion of trainers with limited access to appropriate and sufficient tools is high in the counties, at 84 percent, as well as in Montserrado, at 71 percent.

Table 7: Adequacy and Sufficiency of Facilities Used by Apprenticeship Training Providers

<table>
<thead>
<tr>
<th>Type of apprenticeship training</th>
<th>Do you think your facilities are suitable/sufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Artisanal skills (N=12)</td>
<td>50%</td>
</tr>
<tr>
<td>Building and construction (N=8)</td>
<td>25%</td>
</tr>
<tr>
<td>Carpentry and woodwork (N=19)</td>
<td>47%</td>
</tr>
<tr>
<td>Motor mechanics and auto electrics</td>
<td>50%</td>
</tr>
<tr>
<td>Welding, engineering &amp; steel works</td>
<td>80%</td>
</tr>
<tr>
<td>Total (N= 58)</td>
<td>48%</td>
</tr>
</tbody>
</table>

As with apprenticeships, on-the-job training providers believe they do not have access to sufficient tools and equipment. 64 percent of providers outside of Montserrado and 47 percent inside Montserrado reported having insufficient access to tools and equipment. Again, as with apprenticeship providers, this presumably has a negative effect on the providers’ business activities and ability to expand.
Institutional management and organizational administration of TVET programs, or lack thereof, affects the effectiveness and impact of training. The majority of these institutions have human resource mechanisms in place, as well as attendance tracking systems and graduate placement services. However, trainees consider most of these services to be inadequate (to be discussed further in the next chapter). An example of inadequacy can be seen from the lack of financial audits: 52 percent of institutions surveyed did not participate in any financial auditing in the previous year, making it difficult to determine if these institutions are properly managed and operate efficiently (Figure 53).

Most TVET providers also lack the administrative capacity to properly track previous trainees. As a result, they do not monitor the employment status of graduates or investigate why some trainees drop-out. Among other things, this limits their ability to measure their training programs’ success in terms of job placement or to improve their courses based on trainee feedback (current, drop-out or graduates). Tracking graduates would also allow them to maintain an alumni network that could be used to make employment connections for their trainees in the future.

Apprenticeship providers demonstrate greater success in tracking youth learners’ outcomes and facilitating trade testing, although connections to external training institutions are weak (Figure 54). 74 percent of the apprenticeship providers facilitated trade testing with the relevant governing authorities and just over half of apprenticeship providers track apprentices after they complete their training. More than half do not advertise their training opportunities but recruit apprentices through personal networks. Although this may be cheaper and faster than formal advertising, it excludes young people who may not be directly linked to the training providers. More than half of apprenticeship providers offer financial incentives to their apprentices, as they believe apprentices should be compensated for the labor they provide. However, those who do not provide monetary compensation maintain that skills acquisition is compensation for labor, since apprentices do not pay for their training programs.
3.4 Trainees

This subsection discusses the findings of survey data collected by Building Markets on youth involved in training programs. Youth pursue a training program for personal advancement but also hope for better employment opportunities and better earning opportunities. Most apprentices expect to realize these improvements through self-employment, although a fair number wish to pursue formal employment. Almost all formal TVET learners hope for formal employment. Employment outcomes were much stronger among apprentices and on-the-job trainees than among formal TVET trainees. However, given their higher educational attainment and their ability to afford tuition fees, it is possible that formal TVET trainees choose unemployment over low-wage employment or work they do not want to do. The challenges trainees faced varied by type of training program. The costs of transportation, tools, and materials were indicated as a challenge by youth pursuing on-the-job and apprenticeship training, and many young people suggested that financial incentives could be improved. However, most youth would recommend their training program to others. The survey also found that formal TVET courses are not accessed by the bulk of youth and seem set up to provide skills such as ICT that are not highly marketable in Liberia. In addition, the funding structure for apprenticeships and on-the-job training would benefit from further thought. Last, the majority and most successful training opportunities are currently accessed more readily by males than females.

Based on the trainee records provided by training providers, the survey firm Building Markets collected information on 354 youth who had enrolled in training programs (Figure 55). 256 trainees were current learners (130 apprentices, 65 on-the-job employees, 61 formal TVET trainees), 15 dropouts (2 apprentices, 1 on-the-job employees, 12 formal TVET trainees), 53 employed graduates (12 apprentices, 25 on-the-job employees, 16 trainees) and 30 unemployed graduates (6 apprentices, 4 on-the-job employees, 20 formal TVET trainees). The majority of the current learners (47 percent) and drop outs (40 percent) were in the 15 to 24 age group, while the employed and unemployed graduates were mostly above 25 (83 percent and 66 percent, respectively). The majority of trainees surveyed were male (262 of 354) and based in Montserrado (229 of 354), and these ratios persisted over categories of current learners and graduates.
Most training courses required daily attendance, but youth are not always able to attend their training (Figure 56). 81 percent of apprentices and 86 percent of on-the-job trainees reported that their training required daily attendance, while slightly fewer TVET trainees (66 percent) reported this requirement. However, only 68 percent of apprentices reported always attending their training, compared to 82 percent and 84 percent of on-the-job and TVET trainees respectively. When asked why apprentices did not attend all the time, most explained it was due to alternative responsibilities, such as domestic work, or because they were unwell.

According to the TVET trainees surveyed, class sizes rarely exceeded 20 students, and most courses finished within 12 months (Figure 57). 42 percent of trainees were in classes with less than ten students and a further 38 percent report their class size was between 10 to 20 students. During their classes, most students spend less than 5 hours per week on both theory and practical (Figure 58). This, along with the finding that many courses are less than 3 months in length (45 percent) and the majority shorter than 12 months (81 percent), suggests that TVET
courses provide a limited opportunity for youth to acquire or develop a new technical skill or vocation.

![Course Length and Class Size](image1.png)

**Figure 57 Formal TVET Course Length and Class Size**

![Time Spent Learning in Formal TVET Programs](image2.png)

**Figure 58 Time Spent Learning in Formal TVET Programs**

**Learning outcomes are measured through a variety of approaches (Figure 59).** Homework and role play exercises are more common among apprenticeship and on-the-job training, while in class exercises are more popular in TVET programs. This likely reflects the difference in learning environments, whereby TVET trainees are commonly in the class room, while apprentices and on-the-job trainees are not. Relatedly only TVET trainees report taking any type of exam during their program. Instead 63 percent of apprentices and on-the-job trainees take trade tests. Unfortunately, however, this only leads to 35 percent obtaining some form of certification (Figure 60).
The employment outcomes of on-the-job trainees and apprentices are stronger than those of TVET graduates. 27 of the 36 graduates of TVET programs reported being unemployed, while 37 of the 47 apprentices and on-the-job trainees who had completed their training reported being employed. Most TVET graduates thought that their employment outcomes could be strengthened if the learning program facilitated internships and job exposure, and most felt that lack of connections was limiting their employment prospects. It is worth noting that most TVET trainees also reported being unemployed before the enrolling in programs, which along with the information on their higher level of educational attainment suggests that they may be from relatively more well-off socioeconomic groups, where not working is an option. Of the 12 youth who dropped out of TVET programs, most reported financial challenges, sickness or becoming pregnant as the reason.

By far the most common reason youth enrolled in training programs was “personal advancement.” More than half, 56 percent, of apprentices and on-the-job trainees and 60 percent of TVET trainees reported that “personal advancement” was their motivation for pursuing training. Other popular reasons were increased employment opportunities (34 percent of apprentices/OTJ trainees and 43 percent TVET trainees) and increased earning opportunities (36 percent and 34 percent, respectively). Very few chose to take training to start their own business (9 percent and 7 percent, respectively) and even fewer took courses to meet the needs of a family business or occupation.

Financial problems were the most common problem that youth faced while accessing their training. Financial problems were more common among apprentices and on-the-job trainees who reported having trouble covering the costs for transport, tools and materials. Other problems included inconsistent electricity supply and lack of workspace, as well as payment issues. Only 20 percent of TVET trainees reported any challenges, and half of these trainees faced problems due to a lack of money to secure a place on the course. Again this seems to indicate that youth accessing TVET courses in Liberia are from relatively more well-off socio-economic groups.
while those accessing apprenticeships and on-the-job training are from lower socio-economic groups.

Costs faced by youth, beyond tuition fees, typically included the cost of transportation, study materials and tools (Figure 61). Work tools and study materials were the highest cost youth faced and were highest for on-the-job trainees ($285 per term), then TVET trainees ($176 per term) and apprentices ($104 per term). Food and transport were common frequently occurring costs and were in the range of $7 to $12 per week.

Formal TVET tuition fees were considered affordable by the majority of formal TVET trainees (Figure 62). 71 of the 109 trainees reported being able to pay all the TVET tuition fees and only 25 of 109 said they found them expensive or too expensive. Most TVET trainees were either paying the fees themselves or their parents were covering the costs. Again this indicates that youth accessing TVET courses in Liberia are from relatively more well-off socio-economic groups.
Slightly more than half of on-the-job trainees and apprentices report receiving wages or stipends. These wages average $70 per month among apprentices and $80 per month among on-the-job trainees (Figure 63), helping to offset the weekly costs incurred on transport and food.

**Figure 61 TVET Fees**

**Figure 62 On-the-Job and Apprentice Wages**
3.5 Trainees’ Experience of TVET Programs

Most youth who completed training did not achieve the earnings or employment they expected. However, most trainees would still recommend their training program to others. Formal TVET trainees attributed their failure to find jobs to a lack of job placement or internship components in their programs, and suggested that providers create these components. On-the-job trainees and apprentices said that they lacked access to practical equipment, tools and materials, secure training spaces, and consistent electricity supplies. Many of these youth also felt that they would benefit from additional training in literacy and numeracy, as well as in customer service skills. Start-up capital for self-employment was another suggestion made by trainees.

Almost all youth enrolled in training programs reported that they expected higher employment and earnings chances after completing their training (Figure 64). Close to 90 percent of each type of trainee reported that they thought that the experience of training would give them better or much better employment and earnings prospects. Among the apprentices most (56 percent) expected to realize these improvements through self-employment, while a fair number (32 percent) wished to pursue formal employment. Almost all TVET learners hoped for formal employment.
The majority of youth thought that teaching was the most important aspect of a training course. 65 percent TVET trainees thought that teaching was the most important aspect of the course, while 53 percent of apprentices and on-the-job trainees thought the quality of teachers was the most important aspect of the training program (53 percent), followed by the learning environment (26 percent). In terms of usefulness, the practical and theoretical aspects of the courses were ranked highly by TVET trainees and the practical experience gained from the course most useful for apprentices and on-the-job trainees.

Surprisingly, all TVET trainees surveyed reported that they would recommend their training program to other youth. Similarly, 98 percent of on-the-job trainees and apprentices would recommend their training program to others. The majority of youth feel that the overall quality of their training program is satisfactory to excellent (Figure 65). At first glance, there appears to be a discrepancy between trainees’ perception of the courses and the level of unemployment among graduates (at least among TVET graduates where 75 percent surveyed were unemployed). However, this is due in part to trainees’ belief that there are limited jobs in the Liberian economy. Additionally, youth taking TVET courses believe that certain courses (such as ICT in Montserrat) are a prerequisite to employment rather than a course that will lead directly to employment opportunities. In other words, ICT skills are seen as basic skills needed in tandem with other skill sets (and perhaps additional training) in order to obtain employment.

Interestingly, while the youth trainees felt that the overall quality of their training programs was high, many felt that the quality of the other student enrolled in the program was relatively low (Figure 65). This latter finding is intriguing and suggestion of misconception among youth about their own ability and efforts. For example, for the majority of students to think that their peers are of a lower quality than themselves shows that youth may not be willing to identify their own shortcomings. This is concerning to the extent that it could limit their ability to take ownership of their own economic and employment prospects.

![Figure 64 Employment and Earnings Expectations of Youth](image-url)
With regards to teaching most students were satisfied with the teaching and the student-teacher ratio (Figure 66). Close to 80 percent of youth in each type of training felt that the student-ratio was adequate, although there may be some room for improvement as only around 40 percent felt that it was excellent. Almost 90 percent of youth felt that the teaching was adequate to excellent, with close to 60 percent reporting that it was excellent.

Curriculum and facilities and tools are areas where training programs were lacking (Figure 67). 33 percent of apprentices, 21 percent of on-the-job trainees and 25 percent of TVET trainees felt that the training program curriculum was unsatisfactory or inefficient. 24 percent of

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**Figure 65 Overall Quality and Quality of Students Enrolled in Training, Rated by Peers**

**Figure 66 Training Program Quality: Student-Teacher Ratio and Teaching**
apprentices, 20 percent of on-the-job trainees and 21 percent of TVET trainees also felt that the training facilities and access to tools was unsatisfactory or inefficient.

**Figure 67 Training Program Quality: Curriculum and Facility and Tools**

Industry links and career support was ranked by youth to be the weakest parts of their training programs. 60 percent of apprentices, 44 percent of on-the-job trainees and 54 percent of TVET trainees felt that the links to industry offered by their training program was unsatisfactory or inefficient. For career support, only 38 percent of apprentices, 42 percent of on-the-job trainees and 30 percent of TVET trainees felt that the training program offered satisfactory or better support.

**Figure 68 Training Program Quality: Industry Links and Career Support**
Among TVET trainees the most frequent challenge that youth felt they faced was simply the lack of employment opportunities. 67 percent of TVET trainees referenced lack of employment opportunities as the main challenge for graduates. This reinforces the earlier perception, that even after pursuing training, most youth feel employment will be difficult to obtain. The second most common challenges were the lack of start-up capital available to youth and low earnings. When asked how TVET programs could be improved, youth provided a variety of responses: better links with industry, job placement support, higher quality teachers, better teaching resources and improvement in accreditation. Better links to industry and job placement were the most popular responses.

Among apprentices and on-the-job trainees the most critical areas they needed support were funding (58 percent) and technical resources (40 percent). In terms of skills where they felt they needed to improve technical skills was most important with 40 percent of youth feeling like they need to improve these skills. Literacy and numeracy, as well as customer relations were also seen to be important areas for improvement, with 24 percent and 20 percent of youth wishing that training programs incorporated a greater focus on these skills. In terms of improving the arrangements for their training, 54 percent youth felt their training program would benefit from newer learning resources and 47 percent suggested that financial or other incentives could help trainees get more from their training.
4. SYNTHESIS AND RECOMMENDATIONS

The objective of this report was to assess the opportunities and constraints to skills development for youth in Liberia, with a particular focus on vocational trades and the informal sector. Given the economy in Liberia is undiversified and heavily reliant on a few primary export commodities, there exist limited opportunities for formal sector employment. Out of the total labor force, paid employment covers only 17 percent, while the unpaid family work and self-employment cover 48 percent and 32 percent, respectively. This is even more the case among youth where only 6.2 percent of 15 to 24 year olds find paid employment. Given the limited potential for employment growth in formal sector industries, informality or non-wage work will continue to dominate Liberia’s labor market over the medium term. Understanding the options for increasing labor productivity in non-wage occupations and sectors is an important priority.

Many youth have only reached low levels of education and basic skills are limited. Over 50 percent of females between 25 to 34 years old have no schooling. While younger cohorts of females have higher educational attainment and more closely match that of males the same age, education levels are still very low in Liberia. For example, in 2010 around 60 percent of both males and females 15 to 19 years old had no or incomplete primary education. This in part reflects the large number of youth who are still trying to complete their education at the same time as pursuing work or holding other household responsibilities. Among the youth apprentices interviewed, 50 percent had no schooling or incomplete primary and 70 percent had low or no numeracy or literacy skills.

The majority of youth work in agriculture and as own account workers. By far the largest sector of employment is agriculture, followed by commerce. In these sectors most youth work as unpaid family members or as own account workers. Overall own account work is the most common form of employment for youth, followed by unpaid family work. Paid work is concentrated in the sectors where few youth obtain employment, such as: mining, manufacturing, utilities, transport and construction; at NGOs; and in government.

Substantial variations exists among the earnings of youth, even at comparable education levels. For example, at each level of education, females on average earn less than males, and paid employees on average earn considerably more than own account workers. As females also tend to have lower levels of educational attainment and lower representation in paid employment, on average they earn considerable less than male youth. Non-profit and government work are the most highly paid types of work. While multiple explanations exist, such as youth having different preferences in work, the lack of earnings equalization by gender and by education is also suggestive of labor market frictions. For example, the earnings of youth may not correspond with their productivity, possibly due to problems regarding access to work opportunities, such as a lack of information available to youth or high costs associated with searching, matching or changing jobs.

Training providers in Liberia can be classified into two types of institutions: those that provide on-the-job training or apprenticeships in a particular type of trade or skill, and

those that provide class-room based training in both vocational and technical skills. This typology of training providers aligns with the definitions of formal and non-formal or informal TVET discussed in the 2015 National TVET policy. The policy labels class-room based vocational and technical training as formal TVET and labels on-the-job training and apprenticeships as informal and non-formal TVET. Informal or non-formal on-the-job based skill acquisition or through apprenticeships is the most common form of training in Liberia, with around 70 percent of the training providers surveyed offering this type of training. These providers are more heavily concentrated in urban areas, particularly around Monrovia, indicating that training opportunities are more limited outside the capital. Apprenticeships and on-the-job training tend to be concentrated in manual trades such as carpentry, welding, construction, auto mechanics, as well as artisanal skills, which have greater enrollment of males than females. Some on-the-job training opportunities also exist in service based sectors such as tailoring, cosmetology, hospitality and catering, however, overall their appear to be more options that appeal to males than females, given current gender norms in Liberia. The most popular courses offered by TVET training providers were on ICT, business and vocation-specific technical skills. Among TVET courses there is a more even enrollment of males and females.

TVET training institutions currently attract and target youth with higher levels of education and the economic means to cover tuition. Administrative data shows that only a small proportion of youth (10 percent) participate in vocational training and these youth have relatively high levels of education, having completed secondary education, or even university. This may be due to TVET institutions requiring a minimum level of education. For example, until the 2014 TVET policy many institutions required at least 9th grade education (mid-secondary) and even since the policy most students are expected to have completed primary education (6th grade).26 TVET training is also largely funded by the individuals taking the training or their parents, and most report that they find tuition fees to be affordable and not a constraint to enrollment.

A large number of youth are unemployed after completing TVET training. While the sample is small, about three-quarters of the 36 youth surveyed who had graduated from TVET programs reported being unemployed when they were interviewed. There are several explanations for this finding. First, TVET trainees have a higher reservation wage, so they are more willing to remain unemployed over taking lower paying work options. This fits with the finding that they are generally unemployed before pursuing training and have higher socio-economic characteristics, such as the ability to cover tuition fees and have been able to reach a higher level of schooling. Second, the quality of TVET training programs may be insufficient to impact their employment prospects. TVET students spent less than 5 hours per week on both theoretical and practical learning activities, and a large number of courses finish in under 3 months (45 percent). This length and intensity of training may limit the ability for youth to acquire or develop new technical skills. Third, training courses may focus on the development of skills for which there is a lower demand in the Liberian labor market. For example, ICT and business skills may be pre-requisites to employment in paid work, but there is likely fewer positions offered than there are candidates with this skills. As youth indicated when interviewed, taking an ICT or business skills course may only be part of the extra-curricular training they will pursue while searching for employment.

26 National Policy for TVET, MYS 2015.
The capacity and quality of TVET institutions is limited. However, only a minority of youth access these institutions. Teaching and industry experience of trainers in TVET institutions was found to be very low, with most TVET trainers having less than five years of either industry or teaching experience. Access to relevant equipment and facilities, such as computers, electricity and internet connectivity, was also reported to be a problem. Youth also felt that programs would benefit from more practical training and job placements or internships to better prepare them for work. Only a minority of youth, however, access these types of training and their employment outcomes after training programs are poor. This suggests that investing in TVET institutions may not be an immediate priority when addressing the constraints to skill development for the broader population of youth.

In contrast to TVET programs, most apprenticeship providers and on-the-job training providers have substantial industry experience. These training programs also lead to stronger employment outcomes. 62 percent of apprenticeship providers had more than ten years of relevant work experience and 81 percent of OTJ providers have more than five years of industry. Anecdotal evidence gathered during the survey, found that these apprenticeships and on-the-job trainings were mainly offered by master craftsmen who run their own businesses in the respective trade. This tended to mean that trainers were well connected with the industry and were better able to follow up and support the youth they had trained. This may have helped contribute to their trainees’ employment outcomes as close to 80 percent of the apprentices and on-the-job trainees who had completed training reported being employed. Apprenticeships and on-the-job training were also found to be taken up by youth from lower socioeconomic classes and with lower levels of educational attainment, more in alignment with the current characteristics of the majority of youth in Liberia.

There are, however, several limiting factors with regards to apprenticeships and on-the-job training as they currently are offered: access to these opportunities, gender biases and certification of the skills acquired. Almost half of apprentices and on-the-job trainees reported that they were related to either another employee or the owner of the business connected with the training. Word-of-mouth was stated as the most common way of finding out about this type of training. This demonstrates the extent to which social networks play an important role in connecting youth to these opportunities and may limit who has access to them. Related to access, while all trainers report enrolling trainees regardless of gender, enrollment information shows fewer females are involved in these types of training. Some of the skills taught through apprenticeships are typically associated with more male dominated professions, such as carpentry, automotive, construction and engineering, which may impact females’ preference to enroll. However, to ensure equal access to productive work opportunities this finding should be considered in future programming. Across on-the-job trainings and apprenticeships there is a lack of regulation on the curriculum of programs and testing of skills youth obtain. While certification may not currently be a requisite for working in all skills or trades, it is important that these training programs lead to the development of skills and that the youth are able to demonstrate that they have achieved meaningful learning outcomes.

Being able to certify this skill acquisition is also important for the longer run income security of youth as it can help them to demonstrate to other potential employers or customers their credibility.
Another limiting factor for providers of apprenticeships and on-the-job training is capital, or a lack there of. This is also a challenge for the youth trainees themselves. Training providers report challenges regarding the securing of work space, obtaining consistent access to electricity required to operate machinery, and being able to provide adequate tools and materials to operate effectively while facilitating the training of apprentices. Youth trainees, on the other hand, report financial constraints can limit their attendance and completion of the training. This is despite, in most cases, receiving stipends from their trainers and not paying fees. Youth trainees note that they struggle with the cost of tools and transportation, meeting their economic responsibilities within their households, and start-up capital necessary to embark on their own ventures. Given the improved employment and earning outcomes apprentices obtain, this suggests that liquidity may be at the root of the problem. Specifically, youth are limited in their ability to take full advantage of the training because of the lack of resources within their households and the alternative activities they can pursue in the short term.

The findings in this report indicate several directions to consider for policy action. In particular, we suggest that programming focus on the strengthening training in three dimensions: the integration of agricultural skill development in schools and throughout rural communities, improving the quality of programs already offered through formal TVET, supporting the success of on-the-job training and apprentices, while addressing some of its shortcomings.

By far the largest sector for employment of youth is agriculture. Fostering the integration of agricultural skill programs in schools and throughout rural communities will help youth to access more productive livelihoods in this sector. These programs could include practical activities that place students within different parts of the agricultural sector (farms, processing companies) to appreciate the theory that is being taught and better understand how agriculture can be a profitable industry. Lessons can be taken from the ongoing community livelihoods program implemented by the Liberian Agency for Community Empowerment that focuses on strengthening agricultural livelihoods of youth in rural locations. Reinforcing the role of agriculture in the mainstream school curriculum, as occurred prior to the years of civil conflict, may help to improve the youth’s basic knowledge of agriculture and traditional farming practices, as well as raise their awareness of the potential benefits from agricultural activities.

The quality of education across all levels from primary to university and formal TVET is lacking. Addressing this shortfall is necessary to see an improvement in the levels of human development in Liberia. The education quality in Liberia is extremely weak: this can be evidenced through the meagre progression through primary and secondary education, as well as the low levels of attainment and graduation. Many youth leave school without finishing their primary education and even when they do, many have still not become fully numerate or literate. Youth, hence, come into TVET with low levels of basic and foundation skills. Formal TVET education continues this trend of low quality, and is weak in its capacity to impact meaningful skill development as its courses offer few practical activities, have short course durations and limited classroom hours. Inadequate equipment and limited links to industry and workplace experiences, further constrain youth in their ability to graduate from courses and into employment. Formal TVET courses should work to address these limitations in their existing programs, particularly focusing on lower cost measures such as greater facilitation of
practical-based experiences and extending the number of hours that trainees have to practice their skills.

While formal TVET is weak and lacking in quality, focusing on apprenticeship providers and the on-the-job training providers will benefit a larger number of youth, particularly those from the most disadvantaged groups. Non-formal and informal TVET opportunities are more numerous in Liberia, and accessible to youth from lower socioeconomic groups that are not currently served by formal TVET courses, given the prerequisites on educational attainment and training fees involved. These programs have also shown more success in placing youth in income-generating work after their completion. However, there are several areas where these programs could be improved: increasing access to these opportunities across social networks and to both males and females, introducing financing structures that better align with both trainees and training providers’ interests, and providing certification of the skills acquired.

Equitable access and gender-balanced opportunities. While the majority of youth live in the Monrovia areas, a good proportion (33 percent) live in the other parts of Liberia. However, 70 percent of the skills providers are based in Montserrado. Therefore, a key recommendation is to look into expanding the skill development activities available to youth outside of Monrovia, particularly with regards to on-the-job training and apprenticeships. This will likely require coordinating with other ministries to support the development of private enterprises and one-man businesses that can host youth trainees and will be best placed to facilitate their training in these locations. Examples of this support could include the provision of a basic training curriculum and accreditation services, as well as direct financial incentives that are discussed below. Connections and networks seem to play a critical role in how youth find opportunities in Liberia and this may mean that the most able or willing youth do not get access to the same options as others. Relatedly females have more limited training and labor opportunities. Ultimately this implies a labor market friction that will distort incentives and lead to a misallocation of labor, reducing aggregate income in the country. Cognizance of this problem is needed during the design of projects and programs as special attention to this in the dialogue with stakeholders may help to overcome the current status quo. Furthermore, innovative communication materials may help to encourage a shift in social norms towards more equitable access and broaden the perception of the roles applicable to females. At the same time, a clear and transparent process for the recruitment of youth into opportunities funded by training programs should be put in place and support offered only to training providers that adhere to these principles.

Funding structures for apprenticeships and on-the-job training. It would be beneficial to explore a financing solution that provides stronger incentives to youth to make the most of their training, while supporting the capacity of businesses to take on youth trainees. This could involve replacing fixed level stipends with a scheme paying the youth trainees a proportion of the income they generate for the training provider’s business. This will align incentives of both the trainees and employers/trainers to work towards maximizing productivity of the youth. Explicitly, both the trainee will have an incentive to learn and increase his contribution to the business and the trainer will have a corresponding incentive to invest in teaching the trainee and pass on skills. Simultaneously, capital resources could be directly provided to businesses on condition of taking on apprentices, for example, through the provision of a capital equipment allowance or a work space subsidy by the government or development partners. This would
again better align the incentives of businesses to (a) want to take-on youth, and (b) invest in youth so that they contribute to the productivity of the business. At the same time, it would address the capital constraints faced by many small businesses that also limit the quality of training they can offer to youth. Furthermore, both sets of incentives (performance related pay and capital subsidies conditioned on offering apprenticeships) may help to encourage stronger meritocracy in the selection of trainees as youth that are more willing and able will be more attractive candidates. Attention will be needed to check that this does not undermine the existing intrinsic motivation of training providers to take on youth and “provide a service to the community”. To this end, it will be important to increase regulation to ensure that these training programs lead to the development of skills and the youth have meaningful learning outcomes.

**Related to regulating the curriculum of apprenticeships and on-the-job training, it will also be valuable to invest in standardizing the accreditation process to certify the skills obtained through these opportunities.** While apprentices and on-the-job trainees take trade tests, most of these tests do not lead to formal accreditation. Even though most youth think that social connections and job-placement opportunities are the most reliable channel into employment, a formal accreditation process may help change this current status quo and also provide youth with more flexibility to move between different employers. For example, apprentices with well-recognized formal certificates may be better able to move from their current employer to another employer or to develop their own customer base. Regulation of certification process, as well as the curriculum, would also be beneficial to ensure a minimal level of learning outcomes among on-the-job trainees and apprentices.
5. APPENDIX A: TRAINEE FIGURES AND TABLES

**Figure 69 Living Wage by Age and Gender**

**Figure 70 Age of Trainees by Learner Status**
Figure 71 Types of Support Requested by Informal TVET Trainees

Figure 72 Improvements to Training Suggested by Informal TVET Trainees

Figure 73 Skills Training Requested by Informal TVET Trainees