

LABOR MARKET ASSESSMENT REPORT

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Project Title:

YOUTH EMPLOYMENT AND EMPOWERMENT THROUGH PRIVATE SECTOR AND VALUE CHAIN DEVELOPMENT

PRESENTED TO:



LABOR MARKET ASSESSMENT IN FIVE TARGETED LOCATIONS IN SOUTH SUDAN

FINAL REPORT

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INTRODUCTION

Nine years after independence, South Sudan remains one of the world's most conflict-affected and fragile countries. Political turmoil and conflicts in December 2013 and July 2016 disrupted the country's development and restricted the population's ability to engage in productive economic activities, to access valuable resources and basic services, and to remain rooted in their communities. In fact, the aggregate effects of years of conflict have displaced approximately 4.2 million people from their homes -nearly 2 million displaced internally and 2.2 million outside of the country - and in 2019 alone seven million people (more than half of the population) were acutely food insecure and thus in dire need of humanitarian assistance¹. Despite the attempts for achieving a peace agreement, ongoing conflicts and security concerns continue to impose a tremendous cost on the country's economy. Stunted growth is evident by the fact that the country's GDP has decreased substantially in the past years, with the GDP per capita dropping from \$1,111 in 2014 to less than \$200 in 20172. With that, South Sudan's economy is characterized by high levels of poverty with more than 80% of South Sudanese living under the absolute poverty line3, low diversification and productivity with oil accounting for almost the totality of the country's exports and more than 40% of its Gross Domestic Product (GDP)⁴, and high price instability with the ongoing depreciation of the country's currency and dwindling foreign currency reserves. Against this backdrop of strenuous socio-economic conditions, the development of human capital inevitably presents some significant challenges. Here it is worth noting that the South Sudanese population is among the youngest in the world with around 72% of the total population being younger than 30 years old⁵, and while this demographic makeup presents a large potential for adequate labor market supply, South Sudan is characterized by high youth unemployment which exceeds 30%, with 31.9% for men and boys, and 27.1% for women and girls6.

There are three major impediments in the face of youth engagement in the labor market:

- Large barriers to education and skills building: The workforce has a high illiteracy rate (72%), as 94% of youth enter the labor market with less than a primary education, reflecting the weak formation of human capital in South Sudan⁷. The fact that 70% of school-age children are not attending school perpetuates this cycle of illiteracy, intensifies labor market mismatch, and ultimately undermines economic mobility⁸. Additionally, unemployment fuels violent conflict, as youth often join armed and criminal groups as a last resort to gain a livelihood.
- **Insufficient labor demand**: The composition of youth employment slightly varies across states, but the common denominator is that agriculture and livestock sectors take the largest share, where 58% of employed youth are engaged in non-wage work in the agriculture sector and, in contrast, only 9% are salaried employees⁹. A restrictive investment climate combined with limited economic diversification limit private sector's ability to create jobs or for an entrepreneurial culture to develop, with reportedly 90% of young people lacking proper job opportunities¹⁰.
- Lack of a sound policy, legal and regulatory framework for youth employment: The policy, legal, and regulatory
 environment for youth employment is South Sudan is still nascent. Until the Labour Act (No. 64) was enacted in
 2017, South Sudan was operating without a national labor law since gaining independence. While the South
 Sudan National Youth Development Policy represents a noteworthy step in the right direction, there is still a
 significant need to reduce fragmentation across government and align relevant stakeholders on key strategic
 orientations with regards to youth employment.

Given the above-mentioned limitations, there is tremendous need to further understand labor market trends and supply/demand dynamics in South Sudan. Strengthening TVET (Technical and Vocational Education and Training) has been identified as one of the government's strategic pillars for human capital development, and as such, there is also a need to understand how technical and vocational programs can be enhanced – both in capacity and quality – to better meet existing skill gaps. Thus, considering the limited amount of quantitative data about the labor market in South Sudan, this labor market study aims to provide a base for the design and implementation of labor market activation policies/programs. This study comes in parallel to another study looking into the development of an agriculture and value chain analysis in South Sudan. Convergence between the two will be highlighted in few sections across this study, however, they remain independent in terms of methodologies, focus, and approaches.

¹ UNOCHA, 2019 Humanitarian Response Plan.

² The World Bank, South Sudan Overview.

³ The World Bank, South Sudan Economic Update: Poverty and Vulnerability in a Fragile Environment. February 2020.

⁴ The World Bank, South Sudan Overview.

⁵ United Nations, Department of Economic and Social Affairs, World Population Prospects: The 2017 Revision. 2017.

⁶ South Sudan National Youth Development Policy, 2019

⁷ UNESCO, Labour Market Assessment and Review: South Sudan. 2018.

⁸ The World Bank, South Sudan Overview.

⁹ South Sudan National Youth Development Policy, 2019

¹⁰ UNDP, South Sudan 'The Challenge' Accelerator Lab Project (2019)

METHODOLOGY

Research Objectives and Approach

This objective of the labor market assessment is to guide programmatic intervention through:

- Understanding labor market trends as well as supply and demand dynamics
- . Analyzing the capacity and responsiveness of vocational programs and how they can better meet skill gaps

The assessment offers insight into the key challenges and opportunities in the South Sudanese labor market, both at the national and regional levels, particularly in Yambio, Torit, Bor, Rumbek, and Juba. According to this base of evidence, a set of recommendations is proposed with the aim of enhancing the effectiveness and relevance of TVET and skills training programs in the country, in order to unlock the potential of South Sudan's generation of youth and enable human capital accumulation.

The labor market assessment adopted a number of principles, including the following:

- Context-specific, the labor market assessment adopted a context-specific approach whereby the research incorporated social, economic, cultural, political, and location-specific variables and challenges in South Sudan and in the selected localities in the design of the data collection tools, the implementation of the exercise, and the analysis of the gathered data.
- Participation, the research was conducted in a participatory and inclusive manner. While the research team was
 not able to be present in any of the five regions, local partners played a central role in ensuring that the study
 captured the voices of various stakeholders.
- Adaptability, the various tools used in this study were adapted where needed to fix the context and the
 specificities of the research participants.

The research relies on a mix of qualitative and quantitative methods to collect relevant data from the following five areas in South Sudan: Yambio, Torit, Bor, Rumbek, and Juba. The development of the labor market assessment progressed over five phases, and covered a number of objectives, as described below:

Pha	ase	Objectives
1.	Inception Phase	 Understand of the holistic context and underlying dynamics Conduct interviews with local and national players Develop the research methodology Identify local data collection partners
2.	Data Collection Preparation	 Develop qualitative and quantitative data collection tools Train the selected data collection partners Prepare for data collection in close coordination with local partners and UNDP coordinators Select sectors of focus, based on their labor absorptive capacities Finalize list of stakeholders for interviews and focus group discussions, with local partners Finalize the sampling methodology for business surveys, with local partners
3.	Data Collection	 Conduct Key Informant Interviews at the national and regional levels Conduct Focus Group Discussions at the regional level Collect a business survey with businesses in the 5 regions
4.	Data Analysis	 Collect and consolidate data findings Conduct qualitative and quantitative data analysis based on the data collection matrix
5.	Develop the Recommendations and Final Report	Develop recommendations at the level of the labor market and TVET education

Data Collection Matrix

This detailed data collection matrix has been developed to identify the indicators measured and the data collection tools to be used for each indicator.

			Desk review	rey informatic interviews				FGD	Survey
General objectives	Specific objectives			Business	VTIs	Local NGO	Experts & INGOs	Students, graduates	Business
	Study business and labor regulations	Legal requirements for employment	Х						
	Identify key sectors	Potential and challenges for growth	Х	Х		Х	Х		Х
	lucitary key sestors	Labor absorptivity	Х	Х		Х	Х	Х	Х
		Needed technical skills		Х					Х
	Identify critical skills in need and identify	Needed business skills		Х					Х
Understand labor montest	their types and levels	Needed soft skills		Х					Х
Understand labor market trends		Capacity building for employees		Х					Х
Trendo	Identify perceptions of mismatch and gaps	Perceptions of required and needed skills			Х	Х	Х	Х	
		Employers' perceptions of skill gaps		Х					Х
	Understand labor acquisition practices	Inclusivity of hiring practices		Х		Х	Х	Х	Х
		Factors considered when hiring		Х		Х	Х	Х	Х
	Attitudes and norms' effect on employability	Discriminatory practices		Х		Х	Х	Х	Х
	Graduates' perception of the VTI program	Skills utilization rate			Х			Х	
		Incentives for joining and completing the program						Х	
	Challenges in employment	Graduates' perception of challenges						Х	
		Infrastructure			Х			Х	
A		Management practices			Х				
Analyze the capacity and responsiveness of		Potential expansion			Х				
vocational programs		Sustainability			Х				
	Assess the capacity of VTIs	Training curricula			Х			Х	
		Quality and standardization			Х			Х	
		Training delivery modalities			Х			Х	
		Trainers' capacities, qualifications and skill levels			Х			Х	
		TVET policy framework	Х		Х				

Data Collection and Analysis

The data collection for this study occurred in various modalities:

- 1) The research team conducted data collection remotely mostly for interviews and focus group discussions with English-speaking stakeholders.
- 2) Local partners conducted data collection mostly for interviews and focus groups with stakeholders who do not speak English, as well as for the administration of the survey. The research team coordinated with local partners to brief them on the data collection methodology and to follow up with them on the data documentation process.
- 3) **UNDP Coordinator in each region** supported in identifying potential research participants, organizing focus groups and maintaining some quality control over the local partner's data collection activities.

The following sections elaborate on the qualitative and quantitative data collection processes.

QUALITATIVE DATA COLLECTION

In addition to a comprehensive desk review of the existing literature, key informant interviews with vocational training institutes, development actors, local NGOs, businesses and chambers of commerce were conducted in the five regions, as well as at a national level. Additionally, focus group discussions were conducted with VTI students and graduates. Students represented different programs including, hospitality for hotels and catering services, automotive, hairdressing, computer and IT repairs, and public health and medicine. The groups were mixed between young men and women, graduates who found jobs and those who were still looking and current students. The qualitative data collection provided insight into the national and regional context and helped triangulate trends emerging from the quantitative data. This allowed a deeper analysis of business needs and skills gaps, employability patterns, and sectors with absorption capacity.

Key informant interviews and focus group discussions were conducted as described below:



The table below depicts the qualitative data collection objectives and guiding questions. The full data collection tools were added to Annex I.

Tools	Objectives
	Understand the institutional capacity of VTIs:
Interviews with	 What is their management/operation model? What is the condition of their physical infrastructure? How are they sustained? Is there potential for expansion?
Vocational Training	Assess the effectiveness of VTI programs:
Institutions	- What are the curricula offered? How are they selected?
	- How are they devised and adapted to private sector needs?
	- What is the training methodology and modality?
	- How is quality ensured and standardized?
	- What are the trainers' capacities and qualifications?

Understand the labor absorptive capacity in the pre-selected sectors:

- How ready are the businesses to expand in terms of recruits?

- What are opportunities and barriers to absorbing additional labor?

Identify skill gaps from employers' point of view:

- What technical, business and soft skills are missing and/or limited in new recruits?
- What are skills essential to the development for the businesses' work?

Understand capacity development channels of existing recruits:

- Where and how did current recruits acquire their skills?
- Do businesses provide their employees with in-house or external training? Understand local hiring practices in the pre-selected sectors:
 - What mechanisms are used to recruit new workers?
 - What factors are taken into consideration and/or favored while recruiting?
- What are outstanding attitudes and cultural norms that affect recruitment of new workers? Understand influence of local dynamics on business:
 - How do local conflicts and political dynamics influence your operations?
 - What impact did Covid-19 and the measures taken have on the business and what long term influence do they expect it will have?

Understand the perception of local youth towards VTI programs:

- What are expectations that youth have when they enroll? What keeps them motivated to commit?
- What is the general perception about women economic participation? Does it differ by sector?
 Does it differ by region?
- What are cultural and societal factors that affect the perception towards youth and women and their economic activity?
- How do those factors influence women and youth participation and their choice of programs?
- Has the vocational training contributed to finding a new job?
- How effective has the vocational training been? Did they use what they learned?
- What are other formal or informal sources of learning that they have acquired? How do they compare to the VTI program?
- What would they like to see enhanced or changed in the program to help them better?

QUANTITATIVE DATA COLLECTION

Quantitative data collection and analysis was utilized for an in-depth assessment of labor market trends, specifically from the demand side. The findings of the assessment are based on a survey that was administered to 453 businesses in South Sudan distributed over different regions, forming a representative sample size at the national level.

Tools	Objectives					
	Understand the labor absorptive capacity in the pre-selected sectors:					
 How ready are the businesses to expand in terms of recruits? What are opportunities a 						
Survey of Local	to absorbing additional labor?					
Businesses	Identify skill gaps from employers' point of view:					
	- What technical, management and soft skills are missing and/or limited in new recruits?					
	- What are skills essential to the development for the businesses' work?					

SAMPLE DESCRIPTION

Interviews with

Local Businesses

Focus Groups with Graduates of VTIs

(or current

students)

The sampling methodology for this study, detailed in Annex II, determines the number of surveys needed for a nationally representative sample. The below table shows the actual sample size per region, in comparison with the target number of surveys, as identified in the sampling frame:

Region	Target number of surveys	Number of surveys collected
Juba	148	148
Bor	88	94
Rumbek	60	81
Torit	60	70
Yambio	60	60
Total	416	453

The sampling methodology determines a sectoral focus for the labor market assessment, as to over-represent businesses in the trading, hospitality and industry and artisanry sectors, given these sectors' higher potential for labor absorptivity. Trading businesses thus constitute 32% of the total sample, hospitality businesses constitute 23.4%, and industry and artisanry businesses constitute 15.7%. Respondents from other sectors were also included in the sample based on their presence in the respective localities. The following table shows the sample distribution over the 5 regions, and different sectors.

Sector	Juba	Bor	Rumbek	Torit	Yambio	Total
Agriculture, agro-food processing and herding	-	10	7	3	8	28
Construction	9	3	5	3	5	25
Health	8	3	7	1	10	29
Hotels	16	10	10	6	5	47
Industry and artisanry	21	16	12	12	10	71
Restaurants	16	9	8	16	10	59
Services	25	5	10	5	0	45
Trading	53	37	21	24	10	145
Total	148	94	81	70	60	453

The sample covers businesses of different workforce sizes, ages and owners' nationality.

- Previous studies have found that the average age of a business in South Sudan is 4 years¹¹ ¹². The average age of surveyed businesses is 5.66 years. This number is higher than the average considering that data collectors were asked to sample larger businesses and focus on sectors that have high potential for labor absorptivity.
- Similarly, the average workforce size of surveyed businesses is 10.5 employees, exceeding the average of 2.7
 employees per business in South Sudan.¹³ This is also due to the sampling methodology that focused on larger
 labor absorptive businesses, and excluded businesses with only 1 employee.
- The sample includes businesses that are owned by citizens and foreign nationals. 131 surveyed businesses (28.9%) are owned by foreign nationals, while 322 (71.1%) are owned by South Sudanese.

Figure 1 Sample Distribution by Age

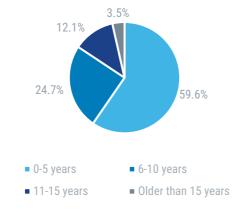
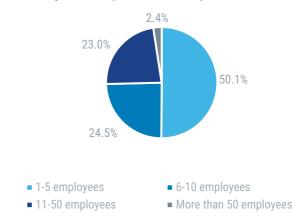


Figure 2 Sample Distribution by Workforce Size



¹¹ The Republic of South Sudan National Bureau of Statistics (2010). *Business Survey Listing Form 2010*. Available at: http://ssnbs.microdatahub.com/index.php/catalog/10/datafile/F1

¹² World Bank (2014). Enterprise Surveys South Sudan Country Profile.

¹³ World Bank. (2019). South Sudan: Linking the Agriculture and Food Sector to the Job Creation Agenda.

Limitations and Challenges

Given the travel restrictions due to the global Covid-19 pandemic, the methodology and modality of data collection were adapted to be conducted remotely and in close coordination with local partners. As such, there were some limitations and challenges to the study:

Limitations and challenges at the level of the desk review:

- The data is not readily available or current: Considering that South Sudan is a relatively young country, the breadth and depth of data about it is very limited, and in many cases outdated.
- The data is not comprehensive: Relevant data and figures are very rarely available for a set of different continuous years, and many useful region-specific and sector-specific figures are not available.
- The data is not nationally representative: While a number of recent relevant surveys have been conducted in South Sudan, the sample is rather small and as a result, might not be representative of the national/regional context.

Limitations and challenges at the level of data collection and analysis:

- Logistics management: Both qualitative and quantitative data collection processes were somewhat disrupted by
 logistical issues. The process of conducting remote key informant interviews and focus group discussions was
 slowed down by that fact that internet connectivity and internet penetration is low in South Sudan, and the
 process of conducting surveys was interrupted by transport constraints due to COVID-19 protocols in addition to
 the general South Sudanese context of underdeveloped transport infrastructure.
- Availability of respondents: Given the perceived difficulties related to phone interviews, many stakeholders were not available to participate in the research. For instance, the research team was not able to interview any government officials for this study given the difficulties of reaching them over the phone.
- Low levels of literacy and language barriers: Low levels of literacy and English-speaking capacity required a simplified approach in content and language of the data collection tools.

Limitations and challenges at the level of sample selection:

Outreach to local businesses: Outreach to local businesses was more difficult in particular areas and for
particular sectors. Survey respondents from Konyokonyo and Jebel markets in Juba were reluctant to share
information about their businesses, while in Juba town and airport road sites business owners were more
forthcoming with providing information. In terms of sectors, hotels and restaurants were easier to interview as
they were more familiar with the survey concept, while artisanal businesses showed much more resistance in
participating.

LABOR MARKET FINDINGS

Private Sector's Labor Absorbitivity

RESPONDENTS' PROFILES

South Sudan has a nascent private sector that is mostly composed by small and informal entities. Given that only 9% of youth are in salaried employment¹⁴, and that the country's economy has to absorb 250,000 jobs per year¹⁵, private sector growth remains one of the few avenues for providing youth with jobs, combating violence and political instability, and diversifying the country's economy. The following section will present the profiles of business respondents in terms of informality, foreign and national ownership and regional disparities. It will then examine the labor absorptive potential of the various sectors across the five regions.

INFORMAL SECTOR

Although there are no reliable statistics for the size of South Sudan's informal economy, it is generally acknowledged that there are multiple taxing considerations influencing citizens' livelihoods in South Sudan – such as access to credit and currency, displacement, price stability, security conditions, and so on – which drive citizens into informal income generating activities that provide the flexibility needed during these unpredictable circumstances.

Some studies suggest that 76% of the population survives on subsistence activities – in which the labor force is primarily concentrated in low productivity non-wage employment – implying substantial engagement for the vast majority of South Sudanese in the informal economy¹⁶. A USAID report notes that the informal economy is strongly associated with herding considering that there are 950,000 cattle farmers and 350,000 herders in a country where the population estimate hovers around 12 million¹⁷. Even outside the agriculture and herding sector, there are concrete barriers to participating in the formal economy, in which businesses find little incentives to formalize their businesses, and as a result incur larger associated fees and taxes, when they perceive limited returns through social services and government-led benefit schemes. Informal businesses however, have limited access to finance, and restricted business opportunities, as they are not able to provide the needed documentation to supply their products and services to larger formal organizations.

Business respondents (N=453) answered a question about whether they were registered in the chamber of commerce or other official entity. The answers came as follows:

- 85.7% responded that they were registered
- 12.1% responded that they were not registered
- 2.2% preferred not to answer that guestion

While the sample is biased to include larger businesses that have high hiring potential, an 85.7% registration rate remains significantly higher than estimates for the size of the formal economy in South Sudan. Nonetheless, it is important to note that business registration in this case does not always imply formality, as key informants have highlighted that often businesses only registered with the city council that oversees the market, or even with the chamber of commerce without having registered in the Ministry of Finance and Economic Planning, nor the ministry of Labour, Public Service, and Human Resource Development. A business in this case does not pay taxes, nor does it exist in the business registry's records. Additionally, it is possible that some businesses might have indicated that they were registered for fear of being reported to the authorities: Therefore, the following report does not use a business' registration status to imply formality.

Out of those respondents who reported not being registered (N=55), 85.5% have under 10 employees, compared to an overall average of 74.6% of businesses with less than 10 employees for the whole sample (N=453). Such a finding is expected considering that smaller businesses have a relatively higher burden of formalization in terms of cost, and human resources needed to ensure compliance. It is also worth noting that most of the unregistered businesses (87.3%) were owned by South Sudanese nationals.

Respondents in certain sectors were more likely than average to be unregistered. For instance, 28.1% of respondents in the agriculture, agro-food processing, and herding sector (N=32), 18.6% of responding restaurants (N=59) and 14.7% of responding businesses in the trading and services sector (N=190) indicated operating informally.

¹⁴ South Sudan National Youth Development Policy, 2019

¹⁵ The World Bank. (2014) The Private Sector and Job Creation: Matchmaking Jobseekers and Enterprises in South Sudan's Capital

¹⁶ African Development Bank. (2013) South Sudan: A Study on Competitiveness and Cross Border Trade with Neighboring Countries.

¹⁷ USAID. (2017)

FOREIGN BUSINESS OWNERSHIP

Foreign-owned businesses proliferate within the South Sudanese labor market, as many East African nationals start businesses in the country. Businesses were asked if South Sudanese nationals or foreign national own the largest share in the business. Businesses in the agriculture, agro-food and herding as well as the health sectors were predominantly owned by South Sudanese (96.9%, N=32 and 93.1%, N=29 respectively), while businesses in the hotels industry were more likely to be owned by foreign nationals (51.1%, N=47). The figure below demonstrates business ownership by nationality across sectors:

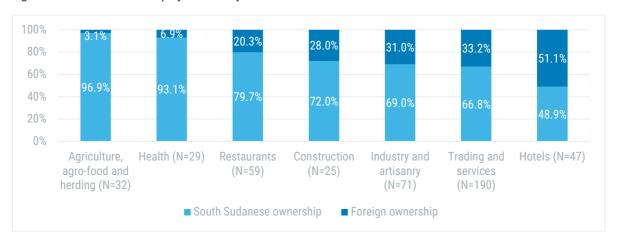
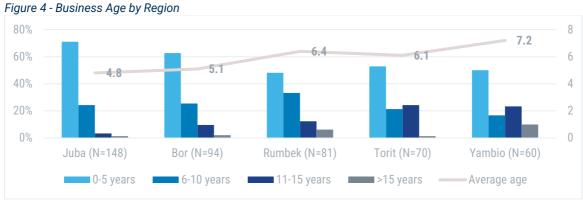


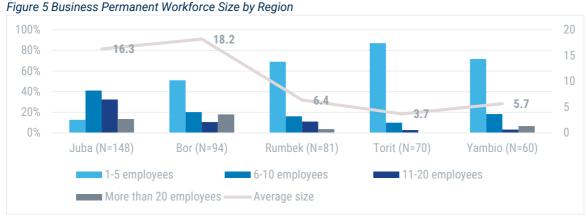
Figure 3 - Business Ownership by Nationality Across Sectors

REGIONAL CHARACTERISTICS

Business respondents from different regions were of different ages. Respondents' businesses were the youngest on average in Juba, and the oldest in Yambio. The following graph shows the age distribution of businesses in each of the 5 regions, in addition to the average age in each region.



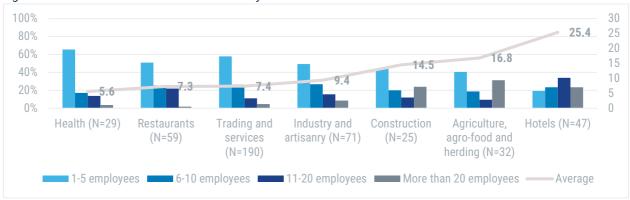
Business respondents also had different workforce sizes, with businesses in Bor and Juba having the largest workforce size per enterprise on average and those in Torit having the smallest. The following graph shows the workforce size distribution of businesses in each of the 5 regions, in addition to the average workforce size in each region.



SECTORAL CHARACTERISTICS

Businesses across various sectors in South Sudan demonstrate different characteristics in terms of workforce size. The average number of permanent employees per business for the survey sample is 10.5 employees. Businesses in the hotel industry as well as in the agriculture, agro-food and herding sector employ the highest average number of permanent workers (25.4 and 16.6 per business respectively), as both are labor-intensive. The figure below compares the breakdown of workforce sizes across different sectors, and the average number of employees for businesses included in the survey.





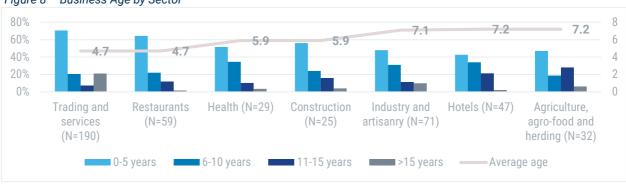
In terms of the size of the temporary workforce, the average number of temporary employees per business for the whole sample is 5.5 employees. The agriculture, agro-food and herding as well as construction sectors employ the highest average number of temporary workers (22.1 and 17.6 per business respectively). The higher prevalence of temporary work in these two sectors is expected considering that the seasonal fluctuations of the workload, coupled with the cost-effectiveness of hiring non-permanent employees, creates an incentive for using temporary work arrangements as a flexibility mechanism for businesses. The figure below compares the size of the temporary workforce across different sectors, and the average number of temporary employees for businesses included in the survey.

Figure 7 - Business Temporary Workforce Size by Sector



In terms of age, the largest share of young businesses is in the trading and services sector as well as the restaurant industry (4.7 years of age on average). As The figure below compares breakdown of business age by sector.

Figure 8 - Business Age by Sector



SECTORS' GROWTH POTENTIAL AND LABOR ABSORBTIVITY

Sector analysis, as characterized in this study, is at the core of the skills-gap investigation for two reasons. First, looking at the potential and challenges for growth within various sectors, and assessing the labor absorption capacity allows for a more specific focus on the skills that will increase the potential for employment within businesses that have the potential to hire new workers. Second, the accuracy of the skills gap analysis is directly affected by the general framework of business sector specifications, including the barriers that businesses face as well as the macro context within which they thrive or struggle. For this reason, this section provides an outlook of promising sectors, specifically their growth expectations and potential in terms of growth and labor absorption capacity.

SECTORS' GROWTH POTENTIAL

Various sectors of the South Sudanese economy have different potential for growth, and therefore expanding their workforce, most notably:

- The National Development Strategy of South Sudan identifies the **agriculture sector** as a key driver for sustainable economic growth in the country. The sector indeed shows promise and has significant potential, especially considering that it accounts for 36% of the country's non-oil gross domestic production with 80% of households depending on cultivation as their primary source of livelihood Among the total 64.7 million hectares of land, around 75% of the area is suitable for agriculture and 50% of it is suitable for cultivation, yet only 4% of the land is currently cultivated by smallholder subsistence farmers. Increasing the total land cultivated by only 6% would raise the country's value of total agriculture production from US\$808 million to US\$2 billion, demonstrating the outstanding potential of South Sudan's untapped lands and the impact of sustainable agriculture on driving economic growth, mitigating food insecurity, and alleviating youth unemployment. However, multiple studies report that the country's agriculture sector continues to operate primarily within lowinput and output subsistence farming with 84% of workers predominantly engaged in non-waged work. The African Development Bank cites a number of reasons for the following, which include:
 - The need to improve agriculture inputs and techniques, including storage facilities and deployment of irrigation technology, coupled with the need for access to quality seeds and planting materials.
 - The difficulty farmers face when accessing markets due to weak infrastructure, unnecessary taxes, and bribes
 - The absence of farmer and rural producer associations.
 - The lack of security and recurring conflicts in multiple greenbelt regions prevent continuity and sustainability in the sector
- The **herding subsector** within agriculture also plays a crucial role within the South Sudanese labor market considering that 85% of the population owns at least one animal²⁴, and as such, it merits further exploration. The livestock industry contributes over \$3 billion to national income and currently employs about one million farmers, which implies that South Sudan has one of the highest livestock per capita rates in Africa²⁵. However, it is estimated that only 20% of the commercial value of the subsector us realized²⁶, in part due to a 40-60% reduction in herd sizes from recurrent conflicts, an increase in disease outbreaks in the presence of limited animal health services and poor husbandry practices, as well as limited access to animal feed.
- **Hospitality sector**: Particularly in Yambio and Juba, businesses in the hospitality sector (hotels especially) are well positioned for growth and this is partly driven by the international community that has been increasingly settling in these regions. The main challenges that stand in the way of the sector remain the volatile security situation in South Sudan, as well as poor infrastructure which undermines connectivity between regions.
- Construction sector: As conflicts are subsiding in parts of the country and internally displaced people are increasingly returning to their regions of origin, the construction sector is witnessing a boom as houses and infrastructure are rehabilitated and rebuilt. This is especially the case in Yambio and Torit. For example, 95% of IDPs in UN POC (Protection of Civilians) sites in the Juba expressed the fact that they are "not in immediate fear for their lives or seeking protection"²⁷.

¹⁸ Ministry of Agriculture and Food Security.

¹⁹ FAO. (2015) Country Programming Framework for South Sudan (2016-2017).

²⁰ Ibid

²¹ The Borgen Project. (2019) Sustainable Agriculture in South Sudan Making Gains Amid Crisis.

²² UNESCO (2014). TVÈT Policy Review South Sudan

²³ AFDB. (NA). Development of Agriculture in South Sudan.

²⁴ UNESCO. (2018) Labour Market Assessment and Review: South Sudan.

²⁵ Ibid

²⁶ Ibid

²⁷ United Nations Peacekeeping. (2018)

Industry and Artisanry sector: The manufacturing industry in South Sudan bifurcated between a handful of large, Juba-based, foreign-owned companies on one hand, and many small informal companies such as brickmakers and welders on the other hand. Despite the fact that there are constraints to the development of the sector (erratic power supply, poor infrastructure, security conditions, etc.), there is significant potential for producing goods that are aimed at the domestic market as consumer demand rises. At the macro-level, an expansion of manufacturing can serve to decrease the country's persistent current account deficit and partially remedy the scarcity of foreign currency, considering that South Sudan is the one of the most oil-dependent countries and that it heavily relies on imports to sustain local demand.

RECRUITMENT OVER TIME

Analysis of the dynamics between the age and size of the workforce for the businesses in the survey sample provides insight into the recruiting potential of different types of businesses. After plotting the number of permanent employees in a business in relation to it age, and fit the result within a linear model, we can deduce that businesses had on average one additional employee every 6 years.

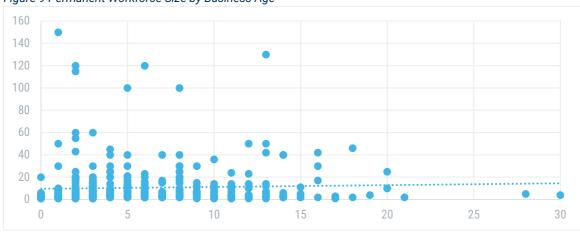


Figure 9 Permanent Workforce Size by Business Age

A closer look at young businesses with high recruitment potential shows that out of the 20 businesses that are younger than 5 years, and have more than 20 permanent employees:

- 4 are hotels, that have on average 93 permanent employees each
- 4 are large agricultural producers, that have on average 42.5 permanent employees each
- 7 are construction companies and larger industry and artisanry businesses, that have on average 39 permanent employees each

On the other hand, looking at old businesses with low recruitment potential shows that out of the 52 businesses that are older than 10 years, and have less than 10 permanent employees:

- 14 are trading businesses, that have on average 2.7 permanent employees each
- 12 are businesses in the industry and artisanry sector, such as carpenters, furniture-makers, and tailoring and mechanical repair workshops, that have on average 4.5 permanent employees each
- 8 are restaurants, that have on average 4 permanent employees each
- 7 are agricultural and agro-food processing ventures, such as grain mills, and butcheries, that have on average 4.5 permanent employees each

SECTORS' LABOR ABSORPTION CAPACITY

According to a 2014 World Bank report the hospitality, construction and service sectors have higher potential than others in absorbing employees and creating jobs²⁸, and some of these conclusions are reinforced by the business survey where respondents answered a question about whether or not they were planning to hire additional employees in the upcoming year. While 55.2% of respondents stated that they were planning to increase the size of their workforce, only 5.3% responded that they were not hiring, and a large share (39.5%) indicated that they did not know whether or not they were growing their workforce.

Even though all sectors show good potential for hiring, some sectors were more promising in terms of the possibility for expanding their workforce in the coming year. For instance, surveyed hotels (70.2%), businesses in the services sector (68.9%), restaurants (59.32%) and businesses in the industry and artisanry sector (57.8%) were more likely to

²⁸ Ibid.

report that they were expanding their workforce. The below chart shows the surveyed businesses' responses to the above question.

68.9% 57.8% 60% 39.0% 35.2% 28.9% 27.7% 40% 20% 2.2% 1.7% 2.1% 0% Hotels (N=47) Services (N=45) Restaurants (N=59) Industry and artisanry (N=71)■ Yes ■ No ■ Don't know 80% 56.0% 53.1% 51.7% 49.0% 60% 43.5% 41.4% 40.0% 40.6% 40% 20% 7.6% 6.9% 6.2% 4.0% 0% Construction (N=25) Trade (N=145) Health (N=29) Agriculture, agro-food and herding (N=32) ■ Yes ■ No ■ Don't know

Figure 10 Businesses' Prediction of Workforce Size Growth by Sector

The business respondents that were more likely to expect hiring in the upcoming year were from the following sectors, in each of the 5 regions:

Region	Sectors with high hiring potential	
Juba	 Health sector, 7 out of 8 respondents Hotels, 13 out of 16 respondents Services sector, 20 out of 25 respondents Industry and artisanry, 13 out of 21 respondents 	+ - 2 *
Bor	 Hotels, 10 out of 10 respondents Restaurants, 9 out of 9 respondents Agriculture and agro-food processing, 10 out of 10 respondents Industry and artisanry, 13 out of 16 respondents 	- ×点父
Rumbek	 Trading sector, 13 out of 21 respondents Hotels, 6 out of 10 respondents Industry and artisanry, 6 out of 12 respondents Services sector, 5 out of 10 respondents 	
Torit	 Construction, industry and artisanry, 12 out of 15 respondents Restaurants, 10 out of 16 respondents Trading and services, 16 out of 29 respondents 	☆ ※ 厘 ≥
Yambio	 Hotels, 3 out of 5 respondents Construction, 3 out of 5 respondents Restaurants, 3 out of 10 respondents 	

Labor Market Demand

The labor market demand, and the subsequent businesses' capacity to absorb labor, depends businesses' capacity to grow. Skill mismatch at the supply side of the labor market is less relevant where businesses are not capable of hiring. This section discusses obstacles that businesses face in growing and generating employment opportunities, in addition to employment practices that restrict access to employment for particular groups.

OBSTACLES TO BUSINESS GROWTH AND EMPLOYMENT

Businesses in South Sudan operate within a context of high insecurity, volatile economy, poor infrastructure and nascent regulatory framework. These different factors affect businesses' capacity to grow and expand the size of their workforce.

453 businesses determined the challenges that they face in their daily operations. Most businesses identified access to finance and business support as the major challenge that they faced (66.7%), followed by security threats (53.6%) and difficulties in access to markets (51.9%)—meaning the ability to physically access a market. While the limited access to adequate human resources was identified as a challenge by 20.5% of responding businesses, it was significantly less cited as a challenge than other factors, thus highlighting the importance of examining challenges to employment from the demand side.

The below graph shows the percentage of respondents per region who indicated that their business faced the following challenges.

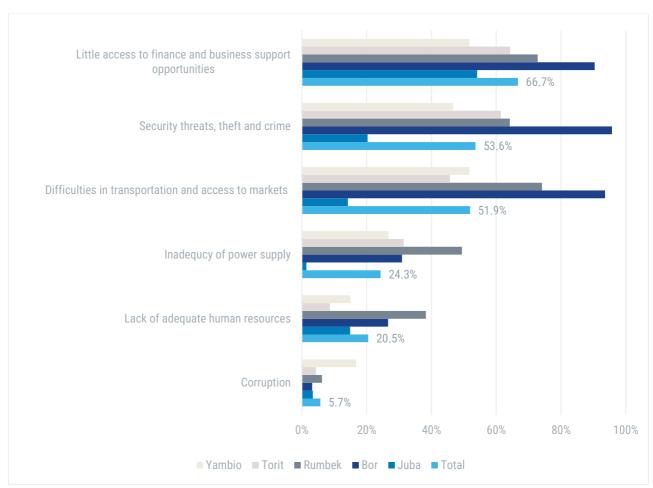


Figure 11 - Challenges Businesses Face in their Daily Operations

ACCESS TO FINANCE AND BUSINESS SUPPORT OPPORTUNITIES

As demonstrated in the chart above, the most pressing challenge for businesses across the 5 regions in South Sudan is access to finance and business support services, with the exception of Bor, where security, theft and crime take precedence due to the prevalence of conflict. This is partly a function of the financial infrastructure in South Sudan, which is still in its early stages of development. In fact, South Sudan does not have a securities market nor any public registries or credit bureaus, and as such, lacks the ecosystem that enables efficient financial flows. Of the few respondents in the survey sample who did have access to financial services (only 4.2%), most indicated that they received financial support from family members for their business, with a few respondents having access to finance and micro-finance institutions as well as village savings and loans associations.

The persistent concerns about financing is consistent with the findings of an employment survey that was conducted in 2013, which also revealed that about 77% of businesses in South Sudan found the lack of access to finance as a primary obstacle to their business²⁹. Furthermore, the study examined the sources of financing for surveyed businesses that had access to it and showed that 60% of businesses borrowed informally through their social networks including family or friends. 20% from commercial banks, and 12.5% from microfinance institutions³⁰.

In terms of regional distribution, access to finance and business support opportunities represented a challenge for:

- 51.7% of the respondents in Yambio (N=60)
- 54.1% of the respondents in Juba (N=148)
- 64.3% of the respondents in Torit (N=70)
- 72.8% of the respondents in Rumbek (N=81)
- 90.4% of the respondents in Bor (N=94)

Regionality disparities are due to security being intimately connected with access to finance and business support opportunities, as respondents in Yambio, Juba and Torit indicated that they had little threat of communal conflict, while Rumbek and Bor are highly insecure. For instance, Bor lacks financing opportunities, and formal business support opportunities. Conversely, Rumbek has 3 commercial banks, but limited access to finance for businesses, as financial institutions are subject to a much higher risk exposure by lending capital in unstable regions.

Key informants in Bor confirm that security issues due to political turmoil and conflicts are a key challenge for businesses. This is due to the convergence of a number of factors:

- Persistent insecurity and armed conflict often result in damage to households' productive assets and their access
 to inputs. As a result, residents in regions like Bor have less secure livelihood opportunities since they could be
 sporadically disrupted, implying a lower ability to make due on their financial obligations.
- The compounded impact of instability and conflict imply that there are few sources of collateral that banks can rely on as a form of guarantee or security for a loan. This comes in addition to the already weak national structures for land registry and limited regulatory framework for the financial sector.
- On multiple occasions, conflicts escalate in regions such as Bor to the extent that financial institutions are robbed, destroyed, or damaged, implying a lower appetite for banks and other financial institutions to set up operations there.
- Residents in regions like Bor often do not feel safe saving money in financial institutions, which in turn, hinders the economic cycle of saving and investment and drives more scarcity in the credit market.

Here it is also worth noting that at the national level, the scarcity of foreign currency coupled with hyperinflation also impose large risks on financial institutions which curb their lending practices and as a result reduce residents' access to finance. From the other side, businesses often lack the information about the requirements to apply for loans. Moreover, culture also plays a role in some cases in preventing businesses from seeking financial support or even mentoring support. For instance, in Yambio, cultural perceptions of envy, and judgment towards those perceived as being overly ambitious often prevent businesses from seeking support (material, financial, or advice) to expand their business. Nonetheless, some NGOs and development actors who operate in the regions provide small grants, or seed funds for businesses, but this practice remains limited, as most assistance takes the form of equipment or start-up kits rather than cash assistance.

While the rate of access to finance, including banks, micro-finance institutions and village savings and loan associations reached 4.8% (N=453), the rates of access differed based on the nationality of the business owners. Only 2.8% of businesses owned by South-Sudanese nationals (N=322) indicated having access to finance, while 7.6% of the businesses owned by foreigners (N=131) indicated the same. While the rate of access to finance is low for both types of businesses, it is notable that foreigners' level of access is almost triple that of South Sudanese nationals. Access to finance is intimately tied to registration status, as financial institutions are more likely to reject loan applications from unregistered businesses. Given that the rate of registration is higher for foreign-owned businesses than South-Sudanese ones, these tend to have better access to finance. Nonetheless, local institutions have started, in some cases, catering for unregistered South Sudanese businesses. For instance, the chamber of

²⁹ The World Bank. (2014) *The Private Sector and Job Creation: Matchmaking Jobseekers and Enterprises in South Sudan's Capital* ³⁰ Ibid

commerce in Torit acts in some cases as the grantor for unregistered businesses seeking financial services. Businesses can thus have access to finance while only having registered in the city council, with no need for them to be registered in the business registry, ministry of labor, nor chamber of commerce.

In terms of sector distribution, access to finance and business support opportunities represented a challenge for:

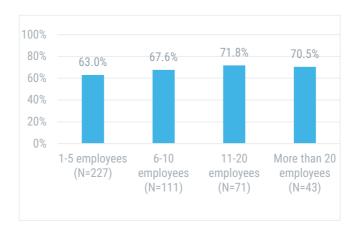
- 81.3% of businesses in the agriculture, agro-food processing and herding sector (N=32)
- 79.7% of restaurants (N=59)
- 76.6% of hotels (N=47)
- 72.4% of businesses in the health sector (N=29)
- 66.2% of businesses in the industry and artisanry sector (N=71)
- 58.4% of businesses in the trading and services sector (N=190)
- 48% of businesses in the construction sector (N=25)

Based on the above, businesses in the construction, and trading and services sectors have less of a need for finance and business support services while agricultural ventures, hotels and restaurants have the most, different interviewees link that to foreigners mainly working in trading, construction and services. A few businesses in various sectors highlighted their needs in terms of equipment, infrastructure and expertise to expand and improve their operations:

Sectors	Equipment, infrastructure and expertise needs
Agriculture, agro-food processing and herding	 Affordable boats, and fish preservation techniques for fishing businesses Seeds, fences, and adequate tools, and equipment for agriculture Packaging technologies and materials for honey-making Machinery maintenance for rice mills Know-how in disease management for herding
Industry and artisanry	- Machinery to automate and improve furniture production
Services	- Field allocated for driving for a driving school

In terms of workforce size, access to finance and business support opportunities was more of a challenge for larger businesses as opposed to smaller ones. The figure below presents the percentage of respondents by workforce size who reported access to finance and business support opportunities as a challenge.

Figure 12 - Access to Finance and Business Support Opportunities for Businesses of Various Workforce Sizes



This can be attributed to the fact that larger businesses have higher needs for financing and business support, which can only be catered to through established institutions, while smaller businesses can rely on family and friends for financial support, or on informal networks such as the village savings and loans associations. Another explanation cited by key informants is related to the type of institutions that offer finance and business support services. For instance, many local NGOs and ecosystem actors offer such business support services to entrepreneurs and micro and small businesses. Larger businesses do not always fall within the target group for this type of programs, which leaves them in need for business support.

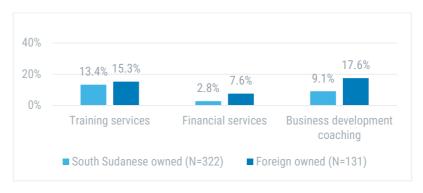
In terms of access to business support opportunities, responding businesses (N=453) identified the following:

- 77% responded that they did not have access to any business support services
- 14.3% responded that they had access to training services
- 11.5% responded that they had access to business development coaching

It is notable that, similarly to access to finance, businesses owned by foreign nationals were more likely to have access to training and business development coaching services, as owners of such businesses tend to have higher levels of education, and more access to networks within the economic development ecosystem. They therefore find business support opportunities to be more accessible than South Sudanese business owners. The figure below demonstrates the access to business support opportunities by owners' nationality.

Lastly, some key informant interviewees noted that favoritism comes into play when some NGOs and INGOs offer business support services. As explained, if a business doesn't have a direct contact within the organizations chances are that they won't know of certain support opportunities.





SECURITY THREATS, THEFT AND CRIME

Security threats, theft and crime were cited as a challenge by more than half of the surveyed sample (N=453). Insecurity does not only prevent businesses from accessing finance, it also disincentivizes them from investing in their businesses' equipment, engenders higher costs, and creates logistical complications in a business' day-to-day operations.

Business across the regions reported that security threats, theft and crime were a challenge to different extend. For instance, security threats were the most cited challenge by businesses in Bor. In terms of regional distribution, security threats, theft and crime represented a challenge for:

- 20.3% of the respondents in Juba (N=148)
- 46.7% of the respondents in Yambio (N=60)
- 61.4% of the respondents in Torit (N=70)
- 64.2% of the respondents in Rumbek (N=81)
- 95.7% of the respondents in Bor (N=94)

These finding highlight that security is in fact a crucial issue for business sustainability and growth, especially in Bor and Rumbek where recurrent communal fighting disrupts businesses' operations, and access to markets. Even businesses in more relatively peaceful towns such as Torit and Yambio were highly likely to report security as being a challenge, as the threat most commonly materialized in the form of theft. For instance, businesses in Torit's town center create their own local arrangement where each contributes a security fee to ensure their shop's safety from theft. Security risks thus incur extra costs on businesses. Theft is particularly risky for many of those businesses, as they are often unbanked, and therefore keep their capital on their business' premises.

In terms of sector distribution, security threats, theft and crime represented a challenge for:

- 75% of businesses in the agriculture, agro-food processing and herding sector (N=32)
- 67.6% of businesses in the industry and artisanry sector (N=71)
- 59.3% of restaurants (N=59)
- 53.7% of businesses in the trading and services sector (N=190)
- 40% of businesses in the construction sector (N=25)
- 38.3% of hotels (N=47)
- 20.7% of businesses in the health sector (N=29)

Businesses that tend to be located in town centers, such as hotels and health clinics, typically suffer less from security threats than others. On the other hand, security is a particular challenge for agriculture and herding businesses, as they often lose access to their lands, herds and tools due to conflict, crime and theft and as a result cannot participate in productive agricultural activities. One of the surveyed businesses in the herding sector mentioned that it was difficult to access water and animal feed due to security threats. Livestock keepers are also

faced with the challenge of not being able to follow the traditional migratory patterns for their animals to graze. Cattle raids also arise in the context of recurring conflicts, often creating more tensions between agropastoral communities which rely on animals for their livelihoods. Violent conflicts in many cases also imply a high level of internal displacement and asset losses, resulting in low crop yields as farmers leave their lands uncultivated for fear of crops' theft or being unable to access their lands In high-conflict regions like Bor, there are few opportunities to extend cultivated land to nearby residential areas or to resort to the cultivation of far fields due to the lack of resources and fears of crops' theft. This has dire implications not only on economic activity, but also on food security. Even in South Sudan's most productive greenbelt regions, disruptions in agricultural activities due to security threats sometimes drive households to sell their assets as a coping mechanism to food insecurity.

In terms of workforce size, security threats, theft and crime were more of a challenge for smaller businesses with 1-5 employees (65.2%) as opposed to medium sized ones (45.1% for businesses with 6-10 employees, and 33.8% for businesses with 11-20 employees). Large businesses (more than 20 employees) were more likely (47.7%) than medium sized businesses to report security threats, theft and crime as a challenge, partly due to the fact that these businesses have made more sizable investments in expensive equipment and tools which imply a higher cost for business disruption. The figure below demonstrates how likely businesses are to report security threats, theft and crime as a source of business disruption:

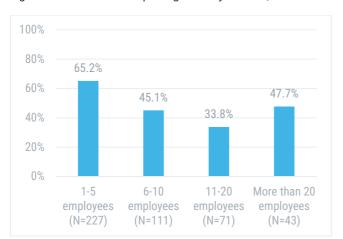


Figure 14 - Businesses Reporting Security Threats, Theft and Crime as a Challenge by Workforce Size

DIFFICULTIES IN TRANSPORTATION AND ACCESS TO MARKETS

Businesses in South Sudan face challenges related to the multifaceted limitations in terms of rural, regional, and national connectivity, which renders trade networks and market linkages particularly difficult and result in highly inefficient markets. In this context, the main difficulties when it comes to transportation can be summarized as follows:

- Poor transport infrastructure: South Sudan has the lowest road density in all of Africa, with less than 2% of the primary road network being paved, which greatly limits trade and the transport of goods³¹. The country also lacks an all-weather road system with only 4,000 km of all-weather roads, in comparison to 160,000 km in its country peer Kenya, which implies that roughly 60% of land area become inaccessible during the rainy season³². Furthermore, the absence of routine maintenance for roads coupled with low design standards make roads increasingly susceptible to damage and closures during harsh climate conditions. The international transport infrastructure is also underdeveloped, as there is one main artery in the regional road network connecting South Sudan to neighboring countries such as Uganda and Kenya, and river transport from Sudan to Juba is frozen due to unresolved conflicts.
- Road taxes: Transport vehicles encounter many transit bottlenecks which come in the form of unofficial
 checkpoints along different routes. For example, a study conducted by the National Bureau of Statistics noted
 that between Juba and Nimule there were 6 checkpoints, between Juba and Aweil 32 checkpoints, and between
 Juba and Wau 24 checkpoints, all of which demand various payment amounts. Many surveyed businesses which
 indicated that transportation was an issue, highlighted that road taxes were a significant cost for their businesses
 and thus create a large disincentive for delivering products to various markets.

³¹ World Bank World Development Indicators.

³² World Food Programme. (2014)

Security concerns: Conflict and instability often imply a high-risk operational environment for transporters.
 Complex trade logistics could cause transport vehicles to reroute their paths, and sometimes they could be subject to theft and return empty.

The implications of the above are dire on the economic level, and can be summarized as follows:

- Low national/regional connectivity and integration: Knowing that South Sudan is landlocked, difficult road conditions make it difficult to access national and regional markets. This results in irregular trading patterns within South Sudan and with neighboring countries, and ultimately hinders growth and development.
- **Undermined competitiveness:** Infrastructure constraints imply that transport vehicles need longer travel times, and security issues often cause them to carry smaller transport loads, all of which raise transport costs. As a result, freight tariffs in South Sudan are roughly three times the average in East African countries and four times the average in Southern African countries³³.
- Rise in prices of domestic and imported goods: High costs of production due to inefficiency in the transport infrastructure and the supplementary cost of road taxes trickle down to the end consumer in the form of higher prices. For example, it is estimated that more than 15% of the costs of production in the food and beverage industry are directly related to transport³⁴.
- Dampened agricultural production: Many agricultural areas that could potentially be very productive become underutilized and isolated from markets. There are limited opportunities for connecting producers and traders and for facilitating the flow of agricultural inputs or outputs. In many cases, farmers are not aware of the channels for selling their produce where there is most demand beyond local markets.
- Encumbering international trade regulations: South Sudanese regulations for importing and exporting are
 significantly costlier and more time-consuming than those in neighboring East African countries, and in other
 South-Saharan countries. Given that the South Sudanese economy heavily depends on imports, encumbering
 international trade regulations trickle down to many of the country's businesses that import most of their
 products, primary materials, and equipment. Some business respondents also mentioned that customs
 procedures and requirements were constantly changing, which made it difficult for businesses to plan for import
 costs and delays.

In terms of regional distribution, difficulties in transportation and access to markets represented a challenge for:

- 14.2% of the respondents in Juba (N=148)
- 45.7% of the respondents in Torit (N=70)
- 51.7% of the respondents in Yambio (N=60)
- 74.1% of the respondents in Rumbek (N=81)
- 93.6% of the respondents in Bor (N=94)

Access to markets is least likely to be an obstacle for businesses in Juba, as well as in the border towns of Torit and Yambio. For instance, Torit's connectivity has significantly improved with infrastructural improvements to the international road connecting Juba to Uganda. On the other hand, difficulties in transportation and access to markets due to insecurity, bad infrastructure and road taxes constitute a major issue for businesses in Rumbek and Bor. Key informants note that from Juba to Bor there are 23 roadblocks, all of which come with an arbitrary cost that the passerby must pay. This comes in addition to import taxes, and international trade costs when goods are being transported into South Sudan, meaning that traders are subject to double taxation. Considering that Bor heavily depends on Juba for supplies, and by extension Uganda, an efficient trade corridor is critical for the markets there to properly function.

In terms of sector distribution, difficulties in transportation and access to markets represented a challenge for:

- 28.8% of restaurants (N=59)
- 46.5% of businesses in the industry and artisanry sector (N=71)
- 48% of businesses in the construction sector (N=25)
- 48.9% of hotels (N=47)
- 55.8% of businesses in the trading and services sector (N=190)
 - 66.9% of trading businesses (N=145)
 - 20% of businesses in the services sector (N=45)
- 65.6% of businesses in the agriculture, agro-food processing and herding sector (N=32)
 - 71.4% of businesses in the agriculture and agro-food processing sector (N=28)
- 69% of businesses in the health sector (N=29)

Based on the findings, we can deduce that trading businesses, agricultural and agro-food businesses and businesses in the health sector were most likely to indicate that transportation and access to markets was a challenge to their business. Agricultural and agro-food businesses often indicated that they needed facilities for storage, refrigeration

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³³ The World Bank. (2011) South Sudan's Infrastructure: A Continental Perspective

³⁴ Ibid

and packaging, indicating that they had difficulties preserving and packaging their products to be able to deliver them to markets that are further than their immediate vicinity. While 16 out of the 20 businesses in the health sector that indicated that transportation and access to markets were a challenge for their businesses operated pharmacies and sold medicine. Conversely, businesses in the services sector and restaurants were the least likely to indicate that transportation and access to markets was a challenge, as their markets do not typically extend far away from their premises. Nonetheless, these businesses still suffer from the loss of business opportunities given the restricted mobility of potential clients.

INADEQUACY OF POWER SUPPLY

South Sudan has the second lowest electricity power consumption in the world³⁵ which greatly limits industries and businesses that need electricity for production. The power generation network includes fragmented power plants in urban centers, with installed capacity that is meaningfully lagging behind regional benchmarks. Despite the fact that the country has rich hydropower potential, it is estimated that more than 90% of the South Sudanese population lacks access to electricity, with more 70% of businesses depending on costly diesel-powered generators for their operations while most households relying on kerosene lamps or candles³⁶. The low installed capacity is compounded by weak governance of the electricity sector as a whole, which is burdened with a number of structural limitations: electricity network coverage remains low, electricity tariffs remains far below cost recovery level, and existing power plants have very high system losses, high operational costs, low revenue collections, and high inefficiencies at the level of transmission and distribution.

The erratic power supply in the country inevitably results in higher costs of production as businesses are forced to rely on expensive private generators, and also implies a limited or absent cold chain supply that depends on electricity to transport perishable items like agricultural products.

In terms of regional distribution, inadequacy of power supply represented a challenge for around a quarter of business respondents (24.3%, N=453), distributed as follows on the 5 regions:

- 1.4% of the respondents in Juba (N=148)
- 26.7% of the respondents in Yambio (N=60)
- 30.9% of the respondents in Bor (N=94)
- 31.4% of the respondents in Torit (N=70)
- 49.4% of the respondents in Rumbek (N=81)

Power supply was thus significantly less likely to constitute an obstacle for businesses Juba. On the other hand, Rumbek is the region that struggles the most with the inadequacy of power supply, with roughly half of businesses based there citing it as a challenge.

In terms of sector distribution, inadequacy of power supply represented a challenge for:

- 12% of businesses in the construction sector (N=25)
- 16.8% of businesses in the trading and services sector (N=190)
 - 15.9% of trading businesses (N=145)
 - 20% of businesses in the services sector (N=45)
- 17.2% of businesses in the health sector (N=29)
- 21.9% of businesses in the agriculture, agro-food processing and herding sector (N=32)
- 31% of businesses in the industry and artisanry sector (N=71)
- 36.2% of hotels (N=47)
- 39% of restaurants (N=59)

Inadequacy of power inadequate power supply was mostly problematic for businesses in the hospitality sector, as power outages would hinder their capacity to serve their clients. Within businesses in the industry and artisanry sector, power supply was mostly an issue for workshops that work in car and motorcycle repairs, as these also offer time-sensitive services to their clients. Carpenters and welders were also highly likely to report power outages as a challenge for their business.

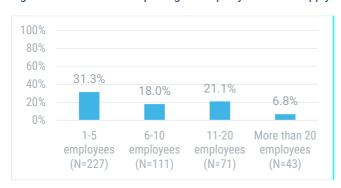
In terms of workforce size, inadequacy of power supply is more of a challenge for smaller businesses as opposed to larger ones, as power outages constitute a high cost for these businesses in proportion to their profit margins. Moreover, in many cases, it is not economically feasible for smaller businesses to secure private generators that provide adequate power supply in comparison to larger businesses. The figure below demonstrates how likely businesses were to report the inadequacy of power supply as a source of business disruption:

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³⁵ World Bank World Development Indicators.

³⁶ Xinhua News Agency. (2019)

Figure 15 - Businesses Reporting Inadequacy of Power Supply as a Challenge by Workforce Size



MACRO-ECONOMIC CONTEXT CHALLENGES

In addition to the challenges faced in their daily operations, businesses often deal with hurdles that are intimately tied to challenges with the macro-economic context. For instance, many businesses cited the **fluctuation of the exchange rate**, and the resulting fluctuation of prices as a challenge. Even though the 2009 Investment Promotion Act guarantees the "unconditional transferability in and out of South Sudan in freely convertible currency of capital for investment, payments ... and the remittance of proceeds...," a stark majority of small and medium enterprises have limited access to foreign currency as they are only able obtain it under the commercial exchange rate which is significantly higher than the official rate³⁷.

Additionally, the dire economic conditions have considerably reduced clients' purchasing power, and the size of the many businesses' market. For instance, many businesses highlighted having lost many of their customers due to inflation. Business also complained that unpaid credit from clients was also an issue they were facing, as they accommodated to their clients' purchasing power. Businesses in the hospitality, industry and artisanry, and health sectors, also cited delays in payments, and one hotel in particular noted that the government had failed to settle its bills for the services it provided.

REGULATORY CLIMATE CHALLENGES

South Sudan presents multiple constraints for the private sector in terms of business regulations. While the business regulatory framework is nascent and not fully implemented, many businesses identified the regulatory climate as a hurdle. For instance, the 2020 Doing Business Report highlights the challenging investment climate in South Sudan, as it ranks at 185th out of 190 countries³⁸. The table below demonstrates some of the indicators and their rankings for South Sudan in comparison to its peers:

Figure 16 - A Comparative Analysis of Ease of Doing Business Rankings for South Sudan and its Peers

Ease of Doing Business Indicator	South Sudan	Uganda	Kenya	Ethiopia	Democratic Republic of Congo
Starting a Business	172	169	129	168	54
Dealing with Construction Permits	171	113	105	142	144
Getting Electricity	187	168	70	137	177
Registering Property	177	135	134	142	159
Getting Credit	181	80	4	176	152
Paying Taxes	74	92	94	132	180
Enforcing Contracts	84	77	89	67	178

³⁷ The World Bank. (2014) The Private Sector and Job Creation: Matchmaking Jobseekers and Enterprises in South Sudan's Capital

³⁸ The World Bank. (2020) Doing Business 2020

South Sudan is clearly one of the worst performers in the ease of doing business on multiple fronts, and in particular the below focuses on the indicators highlighting difficulties in registration and financial compliance:

- High registration fees: The cost required to complete the procedures for legally starting and formally operating a
 business constitute 77.4% of income per capita, which is significantly higher than the south-Saharan regional
 average of 36.3%. However, South Sudan has no paid-in minimum capital requirement, which outperforms the
 regional average of 9.3% of income per capita.
- **Difficult registration procedures:** There are 12 procedures required in South Sudan to legally start and formally operate a business which take 13 days. The number of procedures is higher than the Sub-Saharan regional average of 7.4 procedures and more than twice as much as the OECD average of 4.9 procedures. The time required for registration in South Sudan outperforms the regional average of 21.5 days but underperforms the OECD average of 9.2 days.
- Unaffordable taxes: The total tax contribution rate constitutes 31.4% of commercial profits on average, which is lower than both the regional and OECD averages, which are 47.3% and 39.9% respectively. While the tax rates in South Sudan are comparatively low, businesses still reported that high tax rates were one of the major challenges for registered businesses. This is partly due to the fact that unofficial payments and corruption constitute a significant cost for businesses, in addition to official tax rates. Moreover, businesses do not receive governmental services in return for paid taxes. The lack of adequate security, transportation infrastructure, and power supply incur extra costs on these businesses that thus perceive the taxes to be high.
- **Complicated financial reporting:** The time required to comply with tax filings is 210 hours per year, which is lower than the regional average of 280.6 days, but higher than the OECD average of 158.8 days.

Registered and unregistered businesses (N=433) selected the hurdles of business registration that their business faced, or that prevented them from registering. The following graph shows the percentage of registered, unregistered, and total businesses that selected each of the below hurdles:

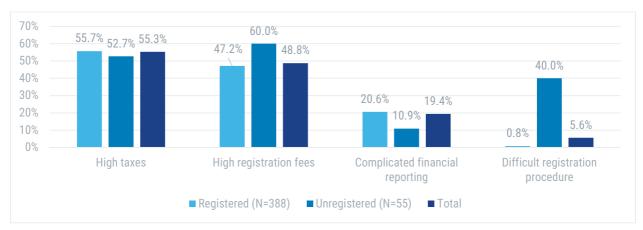


Figure 17 – Regulatory climate challenges by Registration Status

Out of the 388 businesses that indicated being registered, 55.7% thought that the taxes were too high, and some complained that they had to pay bribes. 47.2% thought that registration fees were high. Only around a fifth of registered businesses thought that the financial reporting process was difficult. Nonetheless, it is notable that many of the respondents are only registered in the city council, and not in the business registry nor ministry of finance. Therefore, many who indicated being registered are in fact semi-formal, and do not pay official taxes, nor adhere to financial compliance procedures. Additionally, a few registered businesses complained that they lacked the information about bureaucratic requirements, and other mentioned that the process of renewing their license yearly was cumbersome.

Out of the 55 businesses that indicated being unregistered, 60% thought that the high registration costs were a barrier to registration, and 52.7% reported that high taxes prevented them from registering. 40% thought that the registration procedure was too complicated, and only 10.9% thought that the financial reporting mechanism was cumbersome. Some businesses specified that they lacked the information about how to and where to register, others explained that they were reluctant to register because they thought that their business was precarious and that it was not sustainable enough to be registered. Finally, some respondents did not see any benefits from registering their business.

CORRUPTION

Businesses in South Sudan often face corruption as they are consistently subjected to informal payments and bribes. The World Bank Enterprise Survey published suggests that it is not uncommon for businesses to make "unofficial" payments, or bribes effectively, to public officials for facilitating various regulatory procedures. For example:

- 30% of businesses are expected to give gifts in meetings with tax inspectors39
- 34% of businesses are expected to give gifts to secure a government contract⁴⁰
- 39% of businesses are expected to give gifts to get an import license⁴¹
- 37% of businesses are expected to give gifts to get an operating license⁴²

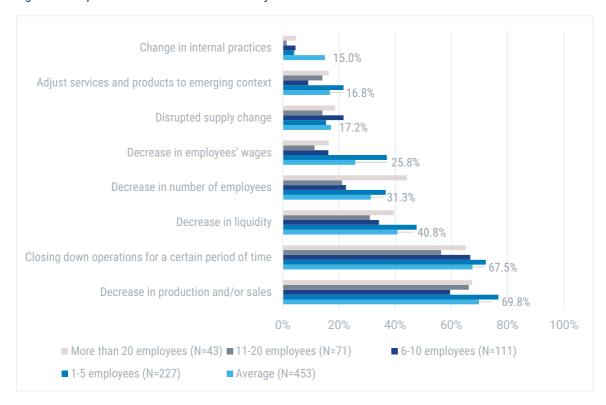
The survey findings show that only 5.7% of respondents reported that corruption was a challenge for their business. Key informants highlighted that corruption was still a taboo, as businesses were often worried about retaliation from those in power. They thus speculated that respondents' rate of reporting corruption were a conservative estimate of those occurrences.

Nonetheless, an analysis of the finings shows that larger businesses were more likely to indicate that corruption was a challenge for their business operations. While on average 5.7% of businesses (N=453) reported that corruption was a challenge they faced, 13.6% of businesses with more than 20 permanent employees (N=44) reported the same. Moreover, responding businesses in the construction sector (N=25) were three times more likely than average to suffer from corruption, as 16% of those indicated that corruption was a challenge for their business. The construction sector is indeed captive to political patronage and clientelism which is fueled by poor procurement and contracting practices across government for construction projects. Here it is worth noting that the World Bank Enterprise Survey found that 45% of businesses are "expected to give gifts to get a construction permit"43.

COVID-19'S IMPACT ON BUSINESSES

South Sudan is no exception when it comes to the disruptive impact of COVID-19 on the country's economy. Many businesses cited business slowdown due to COVID-19 as a challenge, particularly highlighting the fact that while their revenues were in steep decline, their expenses (such as rent), were still due to be paid. Moreover, border closures meant that businesses had less access to much needed commodities. The figures below demonstrate the percentage of businesses (N=453) mentioning how COVID-19 affected their business depending on their workforce size:

Figure 18 - Impact of COVID-19 on Businesses by Workforce Size



³⁹ The World Bank. (2014) South Sudan Country Profile (Enterprise Survey)

⁴⁰ Ibid

⁴¹ Ibid

⁴² Ibid

⁴³ Ibid

Based on the above, we can deduce that smaller businesses, with a workforce less than 5 employees, were the most affected overall, as they were more likely to witness a decrease in production and sales, closing down operations for a period of time, a decrease in liquidity and a decrease in employees' wages. Larger businesses with a larger workforce were the most likely to decrease their number of employees.

DECREASE IN PRODUCTION AND SALES

Although businesses from all sectors experienced a decrease in production and/or sales, businesses in the agriculture, agro-food and herding sector were mostly affected in this regard, as businesses in this sector cited challenges in accessing imported primary materials and production inputs due to the border closure. Their production capacity was therefore decimated. Restaurants and hotels also saw their sales dwindle after COVID-19 regulations limited their maximum capacity, and after many customers lost their mobility due to lockdown measures. In the health sector, pharmacies also witnessed a drop in sales due to clients' limited purchasing power. While sales were not discontinued, clients often purchased medicine on loan.

While construction businesses were the least affected, one construction company reported facing delays in payments and contract renewals because clients were working remotely and were therefore less responsive. The figure below demonstrates the percentage of surveyed businesses by sector which indicated that COVID-19 led to a decrease in their production and/or sales:

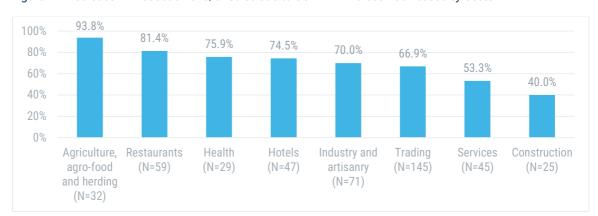


Figure 19- Decrease in Production and/or Sales due to COVID-19 Across Businesses by Sector

CLOSING DOWN OPERATIONS

In terms of closing down operations for a certain period of time, businesses in the services, construction and industry and artisanry sectors were most likely to close down for a certain period of time. Businesses in the health and hospitality sectors were less likely to close down, with only half of them indicating that they closed down for a certain time.

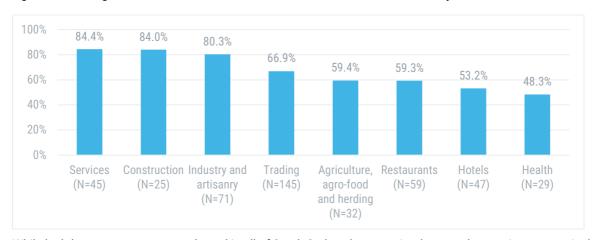


Figure 20 - Closing Down for a Period of Time due to COVID-19 Across Businesses by Sector

While lockdown measures were adopted in all of South Sudan, they were implemented to varying extents in the different regions, as regulations were loosely enforced. Businesses did not only close down as a result of government-imposed lockdown, they also halted their operations for other COVID-19-related disruptions, such as lack of business, or disruptions in the supply-chain. For instance, 85.2% of businesses in Rumbek (N=81) and 84% of those in Bor (N=94) reported closing down for a certain period of time, while the rate of closure was lower for Torit (70%, N=70), Juba (55.4%, N=148), and Yambio (45%, N=60). The lockdown period also varied for different

businesses. As the economic situation worsened, most businesses resumed their operations and reopened in spite of lockdown measures. Moreover, businesses were sometimes allowed to open after bribing local officials.

DECREASE IN LIQUIDITY

In terms of decrease in liquidity, businesses with a smaller workforce size-less than 5 employees-were the most likely to see their liquidity decrease (47.6%, N=227), followed by larger businesses having more than 20 employees (39.5%, N=43). The figure below demonstrates the percentage of businesses by workforce size which have been affected by COVID-19 in terms of the decrease in liquidity:

100%

80%

60%

47.6%

34.2%

31.0%

39.5%

0%

1-5

6-10

11-20

More than 20

employees

(N=111)

employees

(N=71)

employees

(N=43)

Figure 21 - Decrease in Liquidity due to COVID-19 Across Businesses by Workforce Size

employees

(N=227)

Businesses in the agriculture, agro-foods and herding sector (N=32), restaurants (N=59), and hotels (N=47) were disproportionately affected in terms of decrease in liquidity, as 75%, 55.9%, and 46.8% of respondents, respectively, indicated having a decrease in liquidity versus an average of 40.8% for all respondents (N=453). Overall, businesses struggled with their obligations to pay workers and rent while their operations were halted or significantly disrupted. Additionally, businesses often had to pay bribes to avoid receiving fines, as policemen often abused their power while enforcing regulations.

DOWNSIZING THE WORKFORCE

Around a third of responding businesses (31.3%) indicated that they decreased the size of their number of employees due to COVID-19. Businesses with a large workforce, more than 20 employees, were the most likely to shed jobs, as 44.2% of respondents in this category (N=43) reported witnessing a decrease in their number of employees. Businesses with a small workforce (less than 5 employees) were also highly likely to reduce the size of their workforce, with 36.6% of respondents in this category (N=227) reporting that they witnessed a decrease in their number of employees.

Moreover, businesses reported downsizing their workforce differently for various workforce compositions. For instance, businesses with larger numbers of temporary employees, those with more South Sudanese nationals, and those with more women as employees were significantly more likely to report downsizing as a result of the pandemic than average. The below 3 graphs show the percentage of businesses that reported downsizing their workforce based on the different workforce compositions:

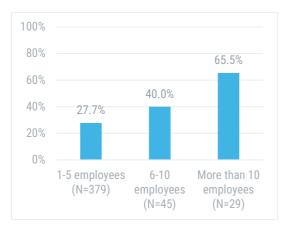
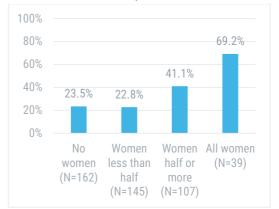


Figure 22 Downsizing due to COVID 19 by Business Size

Figure 23 Downsizing due to COVID 19 by the Workforce's Gender Composition



100% 80% 60% 37.8% 31.9% 40% 23.8% 20% 0% No South South Sudanese South Sudanese All South Sudanese (N=21) less than half half or more Sudanese (N=47)(N=147)(N=238)

Figure 24 Downsizing due to COVID 19 by Workforce Nationality Composition

Sectors that were most likely to have a decrease in sales and production, such as agriculture, agro-food and herding sector, and the restaurants industry, were also the most likely to have a decrease in their number of employees, except for the health sector which shed jobs at a slower rate compared to the corresponding decrease in sales. Here it is worth noting that the reduction in workforce size also often meant cutting opportunities for internships and apprenticeships, which reduces the chances for TVET graduates to gain practical experience in the labor market.

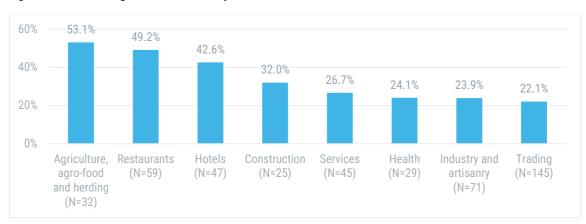


Figure 25 - Downsizing due to COVID 19 by Business Sector

DECREASING WAGES

Around a quarter of responding businesses (25.8%) indicated that they had reduced their employees' wages as a result of COVID-19. The smaller a business' workforce, the more likely it was to report decreasing wages. For instance, 37% of businesses with less than 5 employees indicated having reduced their employees' wages, which is significantly lower than the average for all businesses.

Sectors that were most affected in terms of reducing employee wages were restaurants (33.9%, N=59), trading (29%, N=145), agriculture, agro-food and herding (28.1%, N=32), as well as construction (28%, N=25). Those less affected were the industry and artisanry (18.3%, N=71) and health (17.2%, N=29) sectors. The figure below demonstrates the percentage of businesses who reported decreasing their employee wages by sector.

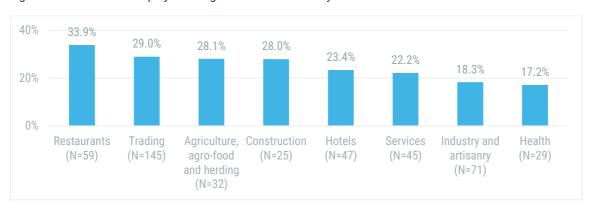


Figure 26 - Decrease in Employees' Wages due to COVID-19 by Business Sector

SUPPLY CHAIN DISRUPTION

In terms of supply chain disruption, restaurants (22%), agriculture, agro-food and herding sector businesses (21.9%) and trading businesses (20.7%) were more likely than average to consider it as a considerable challenge related to COVID-19. Businesses owned by South Sudanese nationals were significantly more likely to have their supply chain disrupted that those owned by foreign nationals, with 18.6% of the former (N=322) and 5.6% of the latter (N=131) indicating that COVID-19 had disrupted their value chain.

Key informants highlighted that the border closure was enforced in many cases, thus disrupting businesses' capacity to reach markets across borders. For instance, many trade businesses reported suffering from losing access to importing products, and a construction company reported no longer being able to find essential materials for its operations. Businesses in the agro-food processing sector complained from similar hurdles; a rice mill was no longer able to import the rice to be milled, and a honey-producer complained that border closure had rendered exporting honey more expensive. Several businesses also complained about losing the transnational mobility of their own staff

Respondents also highlighted difficulties of movement of people and goods within the country. For instance, some businesses cited the inaccessibility of markets due to the suspension of transport linking major towns as a challenge. Moreover, an online business mentioned being affected by mobility-restricting regulations that made deliveries increasingly difficult.

CHANGES TO SERVICES AND INTERNAL PROCEDURES

Only 16.8% of respondents indicated that they needed to change their product and/or service offerings to respond to the emerging context. 41.4% of businesses in the health sector (N=29) reported adjusting their services and products to respond to the health crisis. Similarly, 25.5% of responding hotels (N=47) reported adjusting their services and products; one hotel reported discontinuing its food service offering, and another had to close down is pool.

In terms of changing internal procedures, only 17 (3.8%) businesses indicated such adjustments to cope with the evolving context. For instance, businesses reported having to cancel staff meetings, and find different modalities for working. Many businesses complained that it was not possible for them to work remotely.

Other COVID-19 related factors cited as affecting businesses are associated with government enforcement of COVID regulations. For example, some customers in the restaurant industry did not want to comply with the Ministry of Health's COVID-19 guidelines and protocols, and as a result, threatened businesses with closure due to non-compliance. Other examples include the intervention of security forces, where some cited that the police were harassing workers who needed to get to work, or companies themselves for in exchange for bribes.

EMPLOYMENT REGULATIONS AND PRACTICES

Even though a business might have the capacity to hire new employees, it does not necessarily provide an equitable opportunity for a stable and secure livelihood. This section will address labor regulations in South Sudan, and the legal protections for employees. It will then examine labor acquisition practices, and factors that employers favor when hiring, as well as discriminatory attitudes that affect women's and South Sudanese nationals' participation in the workforce.

LABOR REGULATIONS AND EMPLOYMENT BENEFITS

Within the South Sudanese context where the informal economy is estimated to dominate the country's economic activities, labor market regulations are severely limited in terms of coverage, and do not serve to protect the most vulnerable workers who tend to be employed within the informal economy. For instance, only 13% of workers have formal salaried employment and 19% work in the tertiary sector⁴⁴. Even within the formal economy in South Sudan, the policy, legal, and regulatory environment for employment is still nascent, considering that the country's Labour Act (No. 64) was only enacted in 2017.

Even in formal employment, labor has weak legal protections on multiple fronts considering that relevant legal provisions are often unfavorable for workers or not implemented. For example, the country does not have a statutory minimum wage, and the Labour Act does not include restrictions on overtime work, nor does it prohibit fixed term contracts for permanent tasks⁴⁵. While employees receive severance pay that is proportional to their years of service, and that is higher in terms of number of salaries than severance pay in neighboring countries, the redundancy notice period is fixed at 1 month regardless of the number of years of service⁴⁶. Additionally, given that there is no social security fund nor institution in South Sudan, employees have little access to social insurance⁴⁷. For instance, respondents mentioned the difficulty in securing insurance for their employees as an obstacle to hiring. Moreover,

47 Ibid

⁴⁴ UNESCO (2014). TVET Policy Review South Sudan

⁴⁵ The World Bank. (2020) *Doing Business 2020*

⁴⁶ Ibid

key informants note that awareness on labor rights are limited and enforcement of the laws are arbitrary depending on the businesses and their relationship to their employees. They also mention that it is not uncommon for low-skilled workers to work in excess of 12 hours per day with minimal leave time, and remain captive to such conditions since their contracts are at will with their employers and can be terminated at any time with no protections.

In terms of gender, labor regulations include various provisions protecting women's employment. For instance, the Labour Act prohibits discrimination in employment based on gender, and mandates equal remuneration for work of equal value⁴⁸. The regulatory framework imposes criminal penalties and civil remedies in case of sexual harassment in employment⁴⁹. The law prohibits the dismissal of pregnant women, but it provides fathers with only 10 days of parental leave, versus 40 days for mothers, thus assigning the heavier burden of parenthood to women⁵⁰. Even though the labor law does include provisions to protect women in employment, employees' lack of awareness of their rights, and patchy implementation of the law often mean that women are in practice still subject to discrimination.

The South Sudanese labor market is characterized by a prominence of foreign workers who often occupy high skilled jobs to fill skill gaps. Here it is worth noting that existing labor regulations have some implications in terms of restrictions on foreign labor, of which we note the following:

- 2009 Investment Promotion Act: which stipulates that foreign investors can employ workers of any nationality, on the condition that preference is given to South Sudanese with similar qualifications and experience in recruitment for non-managerial positions.
- 2012 Companies Act: which stipulates that small enterprises, with less than seven employees, are solely the
 "domain of South Sudanese nationals," and investment in medium and large enterprises requires at least 31%
 South Sudanese ownership.

Although the above regulations are intended to protect domestic labor, particularly for micro and small enterprises, anecdotal evidence suggests that it is not the case in practice, as high skilled jobs are often dominated by foreign workers. This phenomenon has important implications on the composition of South Sudan's labor market, as domestic labor becomes further excluded from formal sectors which are more likely to employ highly skilled workers.

The difficulty of ensuring adequate levels of labor protections through formal employment can partly be traced back to the fact that formalization of businesses is indeed challenging in South Sudan. Thus, we conclude that employment laws and regulations fall short in providing adequate protections for workers for many reasons including their limited coverage of the working population which is predominantly engaged in the informal economy, weak government capacity for implementation and enforcement and gaps in the regulatory framework.

DISCRIMINATION IN EMPLOYMENT, ATTITUDES AND CULTURAL NORMS' EFFECT ON EMPLOYABILITY

While labor regulations aim to protect against discrimination in employment, labor acquisition practices, where labor market demand and supply meet, often are a crucial site for cultural perceptions and discriminatory attitudes to permeate employment processes. Such perceptions and attitudes create a barrier to access to employment for some groups, and might even hinder a business' capacity to meet its own skill needs. Most business owners and employers indicated that they adopted informal hiring practices, as they advertised their employment opportunities through word of mouth. Employers often asked people around them to link them to potential hires, or asked their employees if they knew any people who would be a good fit for the job. Some employers also advertised their jobs on bulletin boards, and others hired through cooperation with TVET institutions, as they received invitations to graduation ceremonies where they introduced their businesses and invited graduates to apply. In other instances, businesses were invited by TVET institutions to give presentations to certain classes about the sector and potential employment avenues.

EMPLOYERS' CONSIDERATIONS WHEN HIRING

When hiring new workers, business respondents (N=453) selected the most important factors that they take into consideration in their labor acquisition practices. A majority of respondents (58.1%) thought that a person's honesty and trustworthiness were important, 48.3% prioritized motivation and positive attitude, 44.6% found a person's age to be an important factor, and 40% thought that a person's relevant professional experience was important. Factors such as gender (35.1%), nationality (26%), TVET educational attainment (22.5%), and secondary educational attainment (22.3%) were also often taken into consideration.

NEW RECRUIT'S ATTITUDES

Factors related to new recruit's attitude were most often cited by businesses as important factors in hiring. Nonetheless, these factors were cited to different extents by businesses in different sectors:

Businesses in the health (79.3%, N=28), and agriculture, agro-food processing and herding (71.9%, N=29)

50 Ibid

⁴⁸ The World Bank (2020) Women, Business and the Law

⁴⁹ Ibid

- sectors, were most adamant on hiring employees that they were able to trust and that they deemed to be honest. It is notable that businesses that indicated needing honest and trustworthy employees in both sectors were small businesses with less than 5 employees; they were mostly small pharmacies, and small agricultural producers. Such businesses are unlikely to have supervision and quality assurance mechanisms, and are heavily reliant on individual employees, hence the importance of personal attitudes.
- Conversely, businesses in the construction sector (36%, N=25), and hotels (46.8%, N=47) were less likely to consider honesty and trustworthiness as crucial to employment. Businesses in these sectors that did not choose honesty and trustworthiness as important factors in employment were mostly businesses with a larger workforce; construction businesses in this category had on average 16.9 employees, and hotels in this category had on average 38.6 employees. Such businesses are more likely to have multiple layers of management, as well as supervision mechanisms, that downplay the importance of individual employees' personal attitudes. Hotels (31.9%, N=47) were for also the least likely respondents to indicate that motivation and positive attitude were important in hiring.

Moreover, common stereotypical views stipulate that South Sudanese employees lack a positive and self-motivated attitude. These attitudes were reflected in employers reporting on their preferences for the most important factors for hiring. For instance, 50.1% of businesses with a majority of South Sudanese employees (N=385) selected motivation and positive attitude as a crucial factor for hiring, versus 33.8% for businesses with a minority of South Sudanese within the workforce (N=68).

NEW RECRUIT'S EDUCATION AND EXPERIENCE

Factors related to a new recruit's previous professional experience and education were also important to recruiters, as 40% cited the first as being crucial in hiring, 22.5% indicated that it was important for them to hire a TVET graduate, and 22.3% indicated that it was important to hire a secondary education graduate. Businesses in different sectors attributed different levels of importance to each of the 3 factors. For instance, educational attainment and professional experience were most important for businesses in the health, hotels, and industry and artisanry sectors. They were least important for businesses in the agriculture, agro-food processing and herding sector, and restaurants. The below graph shows the percentage of businesses in each sector that considered TVET education, general secondary education and professional experience to be important when recruiting.

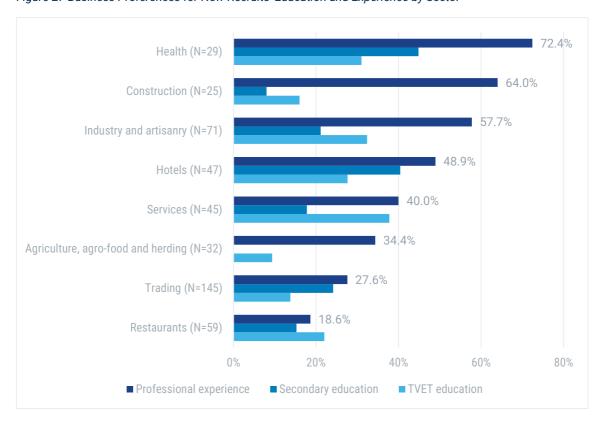


Figure 27 Business Preferences for New Recruits' Education and Experience by Sector

As shown in the above graph, the importance of professional experience for employment varied across sectors:

Professional experience was mostly important for businesses in the health (72.4%, N=29), construction (64%, N=25) and industry and artisanry (57.7%, N=71) sectors, as more than half of respondents in these sectors highlighted the importance of that factor. Businesses in these 3 sectors require highly specialized skills, and onthe-job training for inexperienced employees would be costly for the business.

• Conversely, restaurants (18.6%, N=59), trading businesses (27.6%, N=145) and agriculture, agro-food processing and herding businesses (34.4%, N=32) were less likely to consider experience to be an important factor. In such sectors, fresh graduates are less likely to face barriers to entry, as employees in these sectors tend to develop their skills on the job. Moreover, agriculture and herding skills are often acquired through family networks, as traditional methods of farming, herding, fishing and hunting are passed on from parents to children. While previous experience might be important for employers, that experience does not necessarily need to be acquired through previous employment.

Businesses in different sectors had various levels of interest in hiring TVET graduates:

- TVET education attainment was most important for businesses in the services sector (37.8%, N=45), with many
 of the respondents in this sector who prefer hiring TVET graduates being hairdressers and beauticians, or printing
 and computer graphics centers.
- TVET education was also an important hiring factor for businesses in the industry and artisanry sector (32.4%, N=71), with 6 out of 19 car and motorcycle repair shops, 6 out of 16 metalworkers, blacksmiths and welders, and 7 out of 20 carpenters and furniture makers reporting a preference for hiring TVET graduates. Notably, only 1 out of 12 responding tailors preferred to hire TVET graduates.
- Businesses in the agriculture, agro-food processing and herding sector (9.4%, N=32), and those in the construction sector (16%, N=25) were the least likely to report a preference for hiring TVET graduates.

Secondary educational attainment was most important for businesses in the health sector (44.8%, N=29) and hotels (40.4%, N=47). It was the least important for businesses in the agriculture, agro-food processing and herding sector (none of the 32 businesses in this sector selected it as an important factor), and in the construction sector (8%, N=25).

It is also notable that respondents' interest in professional experience and educational attainment varied considerably with the nationality of the business owners. While South Sudanese businesses showed higher interest in hiring TVET graduates, foreign businesses were significantly more interested in hiring secondary education graduates and employees with previous relevant experience. The following graph shows employers' interest in hiring graduates with the following attributes based on their nationality.

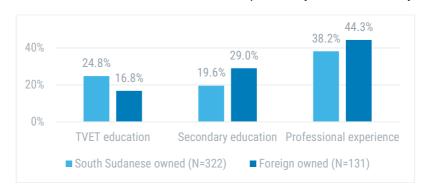


Figure 28 Business Preferences for New Recruits' Education and Experience by Owners' Nationality

NEW RECRUIT'S PERSONAL ATTRIBUTES

Personal attributes were often cited as an important factor for recruitment, with their importance often surpassing that of education and experience. For instance, businesses often highlighted the importance of age, gender and nationality when hiring. Businesses in the health sector were the least likely to highlight the importance of such factors, while restaurants, and businesses in the agriculture, agro-food processing and herding sector were the most likely to report accounting for them in employment.

WOMEN'S PARTICIPATION IN THE WORKFORCE

More than a third of employers (35.1%) reported gender as being an important factor in employment, thus showing discriminatory predispositions in hiring. Indeed, women have been persistently disadvantaged when it comes to both access to the labor market and working conditions when they do engage in the workplace. For example, a business survey conducted by the World Bank showed that women were 31% less likely to have a full-time position and 18% more likely to work less than twenty hours per week"51. Other studies show that women comprise the majority of agricultural workers that are engaged in vulnerable employment or unpaid work⁵². While labor regulations prohibit

⁵¹ The World Bank. (2014) *The Private Sector and Job Creation: Matchmaking Jobseekers and Enterprises in South Sudan's Capital* ⁵² Ibid

discrimination in employment based on gender, including the kind of jobs that women can be employed in and their working hours, employers often argue that women are legally prohibited from being assigned to night shifts. Such cultural perceptions can thus create barriers for women employment, dissuading them from applying to jobs, and employers from hiring women. In terms of women's participation in the workforce, we observe significant regional discrepancies.

- More than half of the business respondents (51.9%) in the Rumbek (N=81) had no women employees, and
 around half (45.7%) of the respondents in Bor (N=94) reported the same. This is aligned with anecdotal
 evidence from key informants which note that regions like Bor and Rumbek are characterized by high levels
 of stigmatization against women and young girls, compounded with little access to education opportunities.
- Businesses in Juba (N=148) were the most likely to have women within their workforce, as only 19.6% of respondents did not have any women employees in their workforce.
- Torit (N=70) and Yambio (N=60) were the most likely to have women-majority businesses, with 22.9% of respondents in the former, and 16.7% of respondents in the latter being all-women businesses. This can partly be explained by the presence of training and support services offered by local NGOs and development actors exclusively for women to encourage their engagement in the labor market and in launching their own ventures. For example, UNDP delivered in coordination with a local NGO (ART), a livelihood training for 400 women in Torit on skills related to the agriculture sector and restaurant industry, while UNDP led a program in Yambio for rural women training them on multiple trades (tailoring, embroidery and creative arts, ornamentation and decoration, hairdressing, catering services, fruit and food processing and marketing such as juice production, vegetable production and marketing, etc.)

The figure below shows the share of women in the workforce of businesses by region:

Juba (N=148) Bor (N=94) Rumbek (N=81) Yambio (N=60) Torit (N=70) 0% 30% 60% 90% 10% 40% 50% 80% 100% ■ Half or more than half ■ Less than half All employees ■ None

Figure 30 - Participation of Women in the Workforce of Surveyed Businesses by Region

As demonstrated by the fact that businesses with more women in their workforce were more likely to report shedding jobs as a result of COVID-19, women's labor tends to be more precarious than that of men. UN Women suggested that women' employment was disproportionately affected by the pandemic given that women tend to work in informal and smaller businesses that suffered drastically from the health crisis. ⁵³ For instance, businesses with a majority of women in their workforce (N=146) were 4% less likely than average to report being registered with any official authority. Additionally, all-women businesses were most likely to be small businesses, as 31 out of the 39 businesses that had an all-woman workforce were businesses with 1 to 5 permanent employees. Moreover, these businesses tended to be younger than average, as they had an average age of 4.5 years, compared to the sample's age of 5.6 years, showing that many of these businesses were entrepreneurial ventures.

Women's participation in the workforce also tended to be restricted to certain sectors:

- Restaurants were the most likely to have significant women participation within the workforce. For instance, 40.7% of those surveyed (N=59) were all-women businesses, and 47.5% had women constitute half or more than half of their workforce. No restaurants did not have any women employees. Hotels as well were inclusive of women's participation, with 78.7% of hotels having women constitute half or more than half of their workforce.
- A significant portion (40.6%) of businesses in the agriculture, agro-food and herding businesses (N=32) also have a majority of women employees. The 13 businesses in this sector that had a majority of women

⁵³ UN Women. (2020) *Small Business Owners in South Sudan Bear the Brunt of COVID-19 as Livelihoods Shrink.* Available at: https://www.unwomen.org/en/news/stories/2020/7/feature-south-sudan-small-businesses-face-covid-19

employees were farms that produce cereals, vegetables and groundnuts. These farms varied greatly in size, with 8 out of the 13 farms having more than 20 permanent employees. The 12 businesses in this sector that had no women employees were either agro-food processing businesses, namely mills, or herding businesses.

- In the health sector, 11 of businesses (N=29) have a majority of women employees. Nonetheless, these businesses are small in size, as they have on average 5 employees.
- In the services sector, 8 businesses (N=45) are all-women businesses; all of these businesses are hairdressers and beauticians. Women were likely to be completely absent from other businesses in the sector, such as computer centers and graphic design shops.

Sectors that were more exclusive of women include trading, industry and artisanry, and construction.

- Around half (45.5%) of businesses in the trading sector (N=145) did not have any women in their workforce.
 Nonetheless, most of these businesses had a small workforce, with 1 or 2 employees.
- Around three quarters of businesses (74.7%) in the industry and artisanry sector (N=71) had no women at all
 in their workforce. Tailoring and sewing businesses were the only type of businesses in this sector that were
 likely to have a majority of women in their workforce, and this is aligned with anecdotal evidence from key
 informants that TVET programs geared towards women are driven by perceptions of "female friendly"
 trades which place particular emphasis on tailoring skills.
- Women were also highly unlikely to be present within the workforce of businesses in the construction sector, as 24 out of 25 respondents in this sector had a minority or no women within their workforce.

Therefore, women have more access to employment opportunities in sectors that are in line with traditional gender roles, such as hospitality, subsistence farming, health and personal care. The figure below highlights the women's participation in the workforce of surveyed businesses by sector:

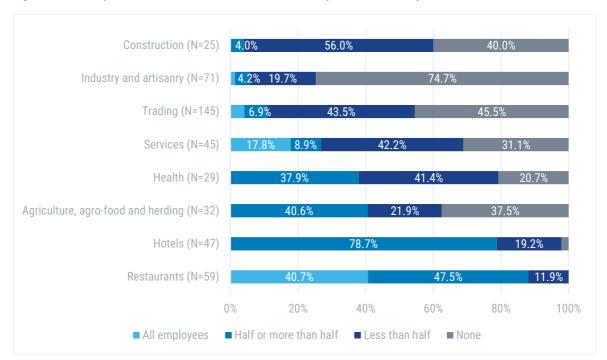


Figure 31 - Participation of Women in the Workforce of Surveyed Businesses by Sector

SOUTH SUDANESE NATIONALS PARTICIPATION IN THE WORKFORCE

When it comes to nationality, one perception that persistently surfaces about South Sudanese labor is that it is lacking when it comes to advanced skills and when it comes to strong work ethic. There is high demand for highly skilled workers, but such demand is often filled through recruitment from a small pool of foreign nationals. In fact, average wages in South Sudan for professional occupations like accounting and engineering are roughly 80% above the Common Market for Eastern and Southern Africa (COMESA) averages. This phenomenon has large implication on the composition of the workforce in South Sudan, which partly marginalizes locals from engaging in high-skilled labor. Discrimination in employment against South Sudanese nationals persists even for low-skilled jobs, as many small and medium enterprises prefer hiring foreign nationals in low-skilled positions.

Predictably, South Sudanese were more likely to be employed in nationally owned businesses as opposed to foreign-owned ones. 72.1% of nationally owned businesses (N=322) employed South Sudanese exclusively, while only 4.6% of foreign-owned businesses (N=131) relied solely on South Sudanese labor. Similarly, only 2.8% of South Sudanese owned business had less than half their employees from South Sudan, whereas 29% of foreign owned businesses had a workforce composition with less than half of South Sudanese. The figure below demonstrates the participation of South Sudanese in the workforce of surveyed businesses by ownership:

Foreign owned (N=131) 52.7% 29.0% South Sudanese owned (N=322) 0% 20% 30% 40% 50% 90% 100% 10% 60% ■ All employees ■ Half or more than half Less than half ■ None

Figure 32 - Participation of South Sudanese in the Workforce of Surveyed Businesses by Owners' Nationality

As with women employment, South Sudanese labor tends to be more precarious than foreign employment, as businesses with more South Sudanese employees in their workforce were more likely to report shedding jobs as a result of COVID-19. Additionally, businesses only South Sudanese in their workforce (N=39) were 7% less likely than average to report being registered with any official authority. Additionally, South Sudanese employment tended to vary by sector:

- In terms of sector distribution, trading businesses were most likely to exclude South Sudanese from their workforce. This is explained by the fact that foreign ownership is most likely for trade businesses.
- The industry and artisanry sector as well as the hotels industry were also characterized by a high level of reliance on foreign labor, with 14.1% of business in the former (N=71) and 12.8% of businesses in the latter (N=47) having less than half of their workforce composition consisting of South Sudanese. This is consistent with the earlier findings which suggest that businesses in these two sectors have a higher share of foreign ownership, and thus implying a higher utilization of foreign as opposed to domestic labor. It is important to note that participants in different focus group discussions and interviewees mentioned that as the political and security situation deteriorated, many foreign workers left the country, giving the option for many nationals to be recruited. However, employers stated that certain skills are not found locally and therefore, there is a need to transfer certain skill sets to South Sudanese, through vocational training programs or on-job trainings before more foreigners leave.
- On the other hand, the agriculture, agro-food and herding sector was most likely to have an all-South Sudanese labor force, knowing that this sector often offers informal, seasonal, and low-paid employment opportunities.

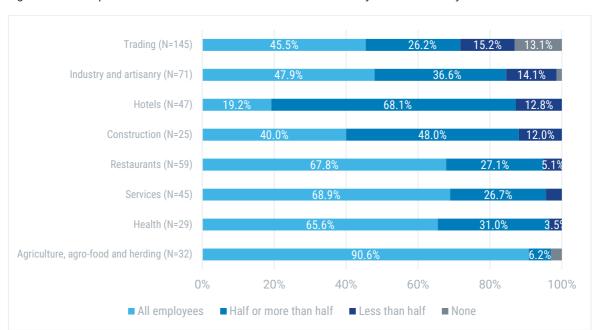


Figure 33 - Participation of South Sudanese in the Workforce of Surveyed Businesses by Sector

Labor Market Supply

Skill mismatch at the supply side of the labor market is an essential challenge hindering business growth, and exacerbating youth unemployment. This section discusses the challenges that businesses face in employment, in addition to the skill mismatch at the level of technical, business and soft skills.

INADEQUACY OF HUMAN RESOURCES AS A CHALLENGE FOR GROWTH

When asked to select challenges for business growth, only around a fifth of business respondents identified the inadequacy of human resources as a challenge. In terms of regional distribution, the inadequacy of human resources, whereby the labor market skill supply failed to meet the labor market skill demand. represented a challenge for:

- 8.9% of the respondents in Torit (N=70)
- 14.9% of the respondents in Juba (N=148)
- 15% of the respondents in Yambio (N=60)
- 26.6% of the respondents in Bor (N=94)
- 38.3% of the respondents in Rumbek (N=81)

Businesses in Rumbek and Bor tend to be the most impacted by the inadequacy of human resources. Key informants explained that instability and conflict in those towns often resulted in educated youth migrating to other regions leaving a gap in human resources. Conversely, the relative peace that Yambio and Torit have experienced resulted in higher levels of human development, and a more educated workforce. Juba, being the capital, attracts both the educated South Sudanese workforce and foreigners to meet skill needs.

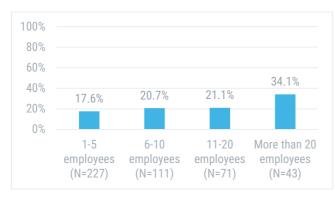
In terms of sector distribution, the inadequacy of human resources represented a challenge for:

- 13.2% of businesses in the trading and services sector (N=190)
- 15.5% of businesses in the industry and artisanry sector (N=71)
- 24.1% of businesses in the health sector (N=29)
- 25.4% of restaurants (N=59)
- 31.9% of hotels (N=47)
- 32% of businesses in the construction sector (N=25)
- 37.5% of businesses in the agriculture, agro-food processing and herding sector (N=32)

Based on the findings, we can deduce that businesses that suffer the most from the inadequacy of human resources are those in the agriculture, agro-food processing and herding sector, those in the construction sector and hotels.

In terms of workforce size, it is notable that businesses with a larger workforce, more than 20 employees, were significantly more likely to identify the lack of human resources as a challenge for the business, considering that larger businesses are more in need for human resources, and are thus more likely to encounter challenges while recruiting them. Additionally, larger businesses often need more specialization in their workforce, so they are more likely to suffer from a labor market that is characterized by a low-skilled workforce. The figure below demonstrates the percentage of businesses that identified the lack of human resources as a challenge by workforce size:





CHALLENGES IN EMPLOYMENT

Responding businesses cited the difficulties that they faced in hiring new employees, and identified technical skill gaps (43.9%), high salaries (43.3%) and new recruits' lack of innovative input (41.5%) as the most pressing challenges in employment. The two most pressing challenges for hiring, inadequacy of technical skills and high salaries, are aligned with the findings of a UNESCO labor market assessment conducted in 2018, which found that the lack of well-trained candidates, and their expectations for receiving high salaries were the most commonly faced challenges in recruitment (noting that the regions covered in the study were Juba, Fangak, Bor, Twic, and Wau)⁵⁴.

The following graph shows respondents' challenges in hiring new workers.

60% 43.9% 43 3% 41.5% 35.8% 35.1% 33.1% 40% 28.7% 20% 4.6% 1.5% 0% Lack Require high Lack Lack Lack Lack Leave within Are not Nο motivation short period adequate salaries innovative adequate adequate trustworthy challenges technical input business and positive soft skills of skills skills employment attitude

Figure 35 Businesses' Challenges in Hiring

LACK OF ADEQUATE SKILLS

When it comes to the lack of adequate skills, 43.9% of business respondents thought that new recruits lacked the technical skills needed for the business, 35.8% thought that they lacked business skills, and 33.1% thought that they lacked soft skills. The table below shows the type of skills that businesses perceived to be missing in potential candidates across regions:

In terms of sector distribution,

- the inadequacy of technical skills was mostly noted for the health (62.1%, N=29), industry and artisanry (62%, N=71) sectors as well as the hotels industry (61.7%, N=47). In the health sector, businesses that indicated needing technical skills were mostly pharmacies and clinics. In the industry and artisanry sector, 8 out of 12 responding tailors, 12 out of 12 carpenters, woodworkers and furniture makers, 11 out of 19 car and motorcycle repair shops and 8 out of 14 metalworkers, blacksmiths, and welders indicated needing technical skills that are relevant to their business.
- the inadequacy of business skills was also mostly perceived in the hospitality sector, in both restaurants (52.5%, N=59) and hotels (48.9%, N=47), in addition to the agriculture, agro-food and herding sector (50%, N=32),
- the inadequacy of soft skills was primarily noted among businesses in the hotels industry (44.7%, N=47), as well as the services (44.4%, N=45) and agriculture, agro-food and herding (40.6%, N=32) sectors.

The below chart shows the type of skills that businesses perceived to be missing in potential candidates across sectors:

⁵⁴ UNESCO. (2018) Labour Market Assessment and Review: South Sudan.

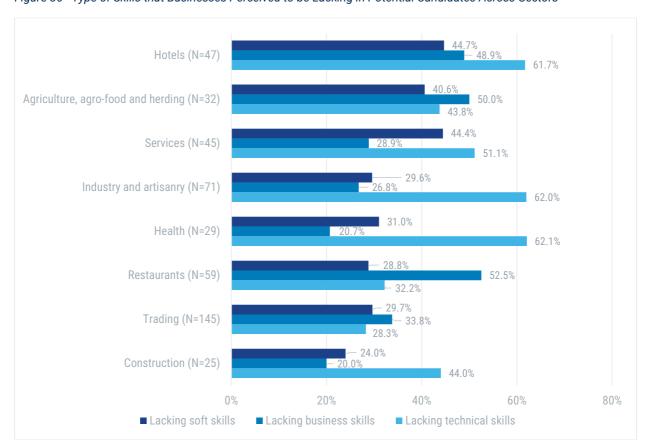


Figure 36 - Type of Skills that Businesses Perceived to be Lacking in Potential Candidates Across Sectors

The below section on skill mismatch will explore the specific skills that are needed by businesses in each of the above sectors.

HIGH SALARIES AND HIGH TURNOVER

High salary expectations among candidates was also a significant challenge for businesses to hire, as 43.3% of respondents indicated that high salaries were a challenge they faced in recruitment. Likewise, but to a lesser extent, high employee turnover was cited as a challenge, with 28.7% of respondents indicating it as a recruitment hurdle.

- High salary expectations were predominantly a concern in Bor (83%, N=94) and Rumbek (56.8%, N=81). Given the
 insecurity in both regions, and the gap in human resources, businesses in often find themselves having to offer
 higher salaries to attract employees having the skills they need.
- High turnover was mostly a concern for businesses in Yambio (61.7%, N=60) and Torit (48.6%, N=70). Key
 informants highlighted that employee retention is often an issue because of a cultural perception of jobs that
 does not value continuity in employment. For instance, youth often seek employment to meet imminent needs,
 and leave them once those are met. Turnover was also an issue for many businesses in Rumbek (43.2%, N=81).
 Informants explained that foreign workers often discontinued their employment and left town when the security
 situation deteriorated.

In terms of sector distribution, businesses in the agriculture, agro-food and herding sector as well as restaurants were most likely to indicate that high salaries and high turnover were a challenge to hiring. The health sector also suffered from high salary expectations among candidates (62.1%, N=29) but had one of the lowest likelihoods for high turnover (20.7%, N=29). High salaries and high turnover were mostly a challenge for businesses with a small workforce across all sectors. For instance, 55.1% of businesses with less than 5 permanent employees thought that high salaries were a barrier to employment (versus an average of 43.3%), and 39.2% of them thought that high turnover was a challenge (versus an average of 28.7%).

The figure below shows the percentage of businesses which indicated that high salaries and/or high turnover were a challenge to hiring by sector:

80% 65.6% 62.7% 62.1% 60% 52.5% 50.0% 42.6% 41.4% 33.8% 40% 28.9% 28.0% 28.2% 25.5% 24.0% 20.7% 20.0% 0% Services Construction Industry and Trading Hotels (N=47) Health (N=29) Restaurants Agriculture, (N=45)(N=25)artisanry (N=145)(N=59)agro-food and $(N=7)^{-1}$ herding High salaries ■ High turnover (N=32)

Figure 37 - Businesses which Indicated that High Salaries and/or High Turnover Were a Challenge to Hiring by Sector

EMPLOYEES' ATTITUDES

Businesses also noted challenges in new workers' attitudes when it comes to recruitment. 41.5% of respondents thought that new workers lacked innovative input (lack on motivation and/or willingness to perform tasks), 35.1% thought that they lacked motivation and positive attitude, and only 4.6% of thought that they were not trustworthy. Key informants note that these perceptions are often associated with South Sudanese nationals, which are allegedly identified as "lazy" and lacking desire for employment in the first place. For instance, businesses with more South Sudanese workers in their workforce were more likely to report challenges in potential recruits' attitudes than average. The most pronounced variation was in terms of new recruits' innovative input, whereby 44.1% of businesses with an all-South Sudanese workforce (N=238) complained from facing a challenge at that level, versus only 9.5% of businesses with an all-foreigner workforce (N=21) reporting the same.

The following graph shows the percentage with which employers cited facing challenges in new recruits' attitudes based on their workforce compositions.

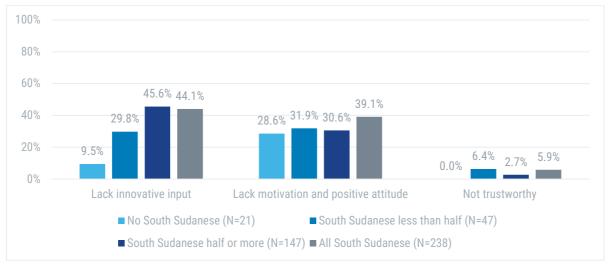


Figure 38 Challenges Faced due to New Recruits' Attitudes

Business respondents also cited difficulties in training new employees, language barriers in communicating with employees, difficulty in transporting employees to the workplace, or the lack of punctuality among candidates as challenges in recruitment.

SKILLS MISMATCH

There is anecdotal and quantitative evidence which suggest that South Sudanese jobseekers do not possess the proper skills and training in order to meet the needs of the private sector. The skills mismatch takes different forms:

 Highly skilled labor is in short supply: A 2014 employment survey found that the demand for "skilled" workers significantly exceeds existing supply, where businesses surveyed needed 41% of new hires to be skilled, while only 23% of the jobseeker sample was deemed qualified for such vacant positions⁵⁵. This reinforces the need for foreign workers to fill in the human capital gap that exists within the South Sudanese workforce. In fact, 60% of skilled labor in Juba are East African nationals as opposed to South Sudanese.

Deficiencies in technical skills are also coupled with soft skills and business skills gaps: Key informants note
that a range of soft and business skills are often missing in fresh graduates, and they are often as important for
recruitment as technical skills. Soft and business skills range from punctuality, strong work ethic, and customer
service/communication skills to more advanced financial literacy, market analysis and business management
skills. A more detailed account of such skills is explored in further detail below.

TECHNICAL SKILL NEEDS

Survey respondents specified the technical skills that their business needs, based on their sector of operation. Respondents had the option to select from a preset list of potential skills in need, as well as to input any additional needed skills.

HOSPITALITY SECTOR

HOTELS

46 hotels, in the 5 regions specified the technical skills needed for their business. Front desk management (80.4%), housekeeping (78.3%), food services (71.7%) and hotel management (71.7%) were reported to be the most needed skills. The below chart shows the skills that respondents reported needing in their hotels.

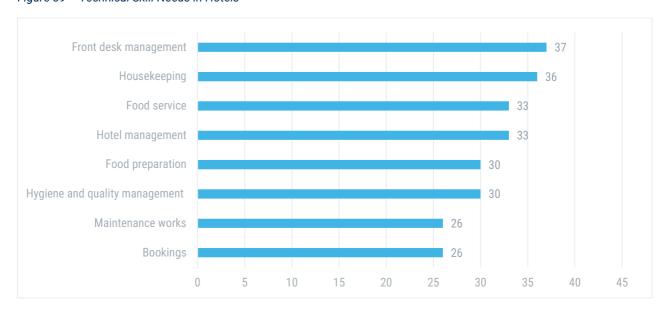


Figure 39 - Technical Skill Needs in Hotels

RESTAURANTS

60 restaurants in the 5 regions specified the technical skills needed for their business. The responses show that restaurant management (86.7%), hygiene and quality management (76.6%), food service (75%) and food preparation (75%) are in high need. Some respondents also indicated that they needed customer care and hosting skills. The below chart shows the skills that respondents reported needing in their restaurants.

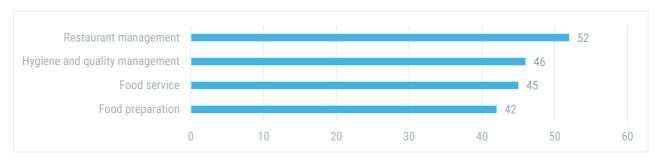


Figure 40 - Technical Skill Needs in Restaurants

⁵⁵ The World Bank. (2014) The Private Sector and Job Creation: Matchmaking Jobseekers and Enterprises in South Sudan's Capital

The hospitality industry, which has high potential for youth employment, is most likely to employ graduates who have the following skills:

- Hotel management and restaurant management
- · Food service
- Food preparation
- · Hygiene and quality management
- · Front desk management
- Housekeeping

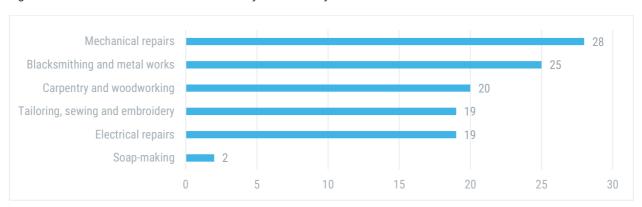
INDUSTRY AND ARTISANRY SECTOR

78 businesses in the artisanry and industry sector specified the technical skills needed for their business. Responses show that mechanical repairs (35.9%), blacksmithing and metal works (32%) were highly sought after.

- Among the 18 mechanics, and car and motorcycle repair workshops who responded to this question, 14 indicated that they needed mechanical repair skills for their business.
- Among the 12 blacksmith and welder respondents, 11 indicated needing blacksmithing and metal works skills.
 Other businesses that indicated needing such skills included car and motorcycle repair workshops. Additionally, some businesses in the construction sector indicated needing the skill of welding to make windows, doors and gates.
- Among the 9 tailors who answered the survey, 6 indicated needing tailoring, sewing and embroidery skills.
 Furniture makers often indicated that they also needed those skills for their businesses.
- Among the 19 carpenters and furniture-makers who responded to the survey, 15 indicated needing carpentry and woodworking skills for their businesses.
- Electrical repair is a skill that respondents from different types of businesses, including car and motorcycle repair shops, blacksmiths and welders, carpenters and furniture makers reported needing. Moreover, a large percentage of hotel respondents also indicated needing maintenance works, which would include electrical repairs. It is notable that bigger businesses are more likely to need electrical repairs than smaller ones; while the average business that indicated working in the industry and artisanry sector has 9.8 employees, those that indicated needing electrical repairs as a skill have on average 13.3 employees. Larger businesses needing electrical repair skills were most often automotive shops providing specialized services, or larger blacksmiths and furnituremakers.
- Finally, 2 businesses indicated needing panel beating and painting as a skill for car body repairs.

The below chart shows the skills that respondents in the industry and artisanry sector reported needing.

Figure 41 - Technical Skill Needs in the Industry and Artisanry Sector



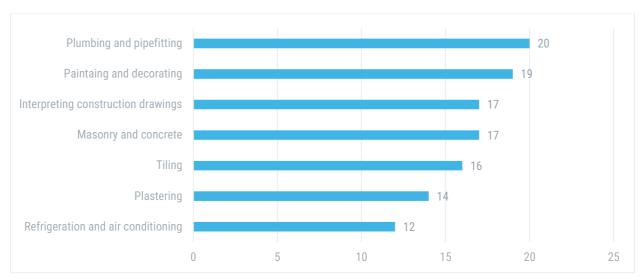
Moreover, interviewees indicated that TVET graduates in trades under the industry and artisanry sector often took the route of opening their own workshops and businesses after pursuing an apprenticeship. The industry and artisanry sector, which has potential to both employ youth, and offer them entrepreneurship opportunities, needs the following skills:

- · Mechanical repairs
- Electrical repairs
- Blacksmithing, metalworks and welding
- Carpentry and woodworking
- · Tailoring, sewing and embroidery

CONSTRUCTION SECTOR

28 businesses reported working in the construction sector, and identified technical skills needed for their business. Responses show that plumbing and pipefitting (71.4%), painting and decorating (67.9%), masonry and concrete (60.7%), interpreting construction drawing (60.7%) and tiling (57%) are skills in demand in the construction sector. The below chart shows the skills that respondents in the construction sector reported needing.

Figure 42 - Technical Skill Neseds in the Construction Sector



The construction sector is thus most likely to employ youth who have the following skills:

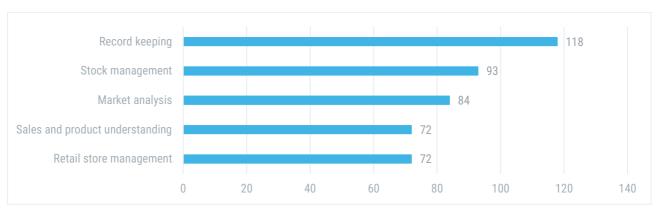
- Plumbing and pipe fitting
- · Painting and decorating
- Interpreting construction drawings
- Masonry and concrete
- Tiling
- Plastering

TRADING AND SERVICES SECTOR

TRADING

140 businesses in the trading sector listed the technical skills that they needed for their business. Record keeping was listed as the most needed skills (84.3%), followed by stock management (66.4%), then market analysis (60%)—meaning the capacity to develop an analytic understanding of client segments and competitors in the market —sales and produce understanding (51.4%) and retail store management (51.4%). The below skills were needed for businesses from various sizes, and trading with items as diverse as foodstuff, clothing, spare parts, building materials, and hardware. The below chart shows the skills that respondents in the trading sector reported needing.

Figure 43 - Technical Skill Needs in the Trading Sector



SERVICES

Businesses in the services sector manually entered the skills that they needed for their businesses.

- 6 out of the 14 hairdressers who responded to the survey indicated that they needed hairdressing skills
- Some businesses in the services sector reported needing skills in the following: computer repairs and computer technology, cargo logistics management, and training.

The trading and services sector are thus most likely to employ youth who have the following skills:

- · Record keeping
- Stock management
- · Market analysis
- Sales and product understating
- Retail store management
- Hairstyling

HEALTH SECTOR

28 businesses working in the health sector identified technical skills needed for their business. Responses show that nursing (75%), and midwifery (53.6%) were in high need. Additionally, respondents highlighted their need for high-skilled personnel, including 8 businesses reporting their need for pharmacists, 8 reporting their need for clinical or laboratory officers, and 7 reporting their need for lab technicians. Some businesses also needed medical doctors, surgeons and X-ray experts.

The health sector is thus most likely to employ youth who have the following skills:

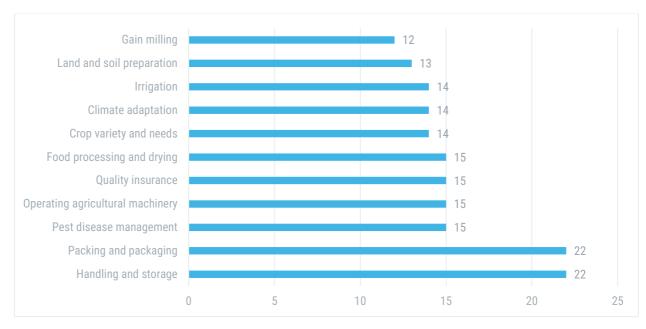
- Nursing
- Midwifery
- Pharmacy
- · Clinic or laboratory service
- · Lab technician

AGRICULTURE. AGRO-FOOD PROCESSING AND HERDING SECTOR

AGRICULTURE AND AGRO-FOOD PROCESSING

26 businesses working in the agriculture and agro-food processing sectors identified technical skills needed for their business. The most needed skills in the sectors were handling and storage (84.6%), packing and packaging (84.6%), pest disease management (57.7%), operating agricultural machinery (57.7%), quality insurance (57.7%), and food processing and drying (57.7%). Some respondents also indicated that they needed skills in fish preservation techniques, refrigeration and preservation techniques, beekeeping, weighing skills, and poultry management and disease control. The below chart shows the skills that respondents in the agriculture and agro-food processing sectors reported needing.





HERDING

5 businesses working in the herding sector identified technical skills that they need. Responses show that herding methods (80%), animal health management (80%), animal husbandry and breeding (60%) and cattle management (40%) are the skills needed in this sector.

The agriculture, agro-food processing and herding sectors are thus most likely to employ youth who have the following skills:

- Handling, storage and refrigeration
- Packing and packaging
- Pest disease management
- Operating agricultural machinery
- · Quality insurance
- · Food processing, preservation and drying
- Crop variety and climate adaptation
- Irrigation
- Land and soil preparation
- Grain milling
- · Beekeeping and honey-making
- Herding methods and cattle management
- Animal health management
- Animal husbandry and breeding

It is important to note that these findings were also identified in the Agriculture and Value Chain analysis study conducted in parallel to this Labor Market Assessment. A sample of the key findings from the Agriculture and Value Chain analysis come as below and the details of which are available in length in the study:

- Infrastructure: specifically linked to the road conditions, electricity cut offs impacting storage, harvesting, and access to markets. This is also directly impacting the prices of foods as they increase with less availability and the lack of ability to deliver products to different regions. As transportation costs increase, this addition is also put as a markup on food costs.
- Water and Irrigation Infrastructure: the limited irrigation infrastructure is impacting agriculture despite the presence of growing technology for on-farm irrigations. It also noted that training was important to farmers to know how to better use water more efficiently and to be able to use more modern irrigation approaches such as drip and sprinkler system.
- Production Challenges: primarily access to good quality seeds as this differs based on their availability.
 Many farmers highlighted that they prefer local seeds as opposed to imported ones because they can't use
 the latter for more than one season. Therefore, stimulating local seed production is needed. In addition, a
 key challenge in production is access to market afterwards especially as the security situation hinders
 movement.
- **Pest Management:** farmers lack the tools, means and know-how to be able to manage and control pest. Some of them use safe agro-pesticides and chemicals however the suggestion was to expand this use further. There are different pests depending on the season, so knowledge around how to deal with these is deemed beneficial.
- Skills and Know-How: In line with the above, skills and know-how are required in marketing crops and
 products, better management of lands and facilities, crop diversification, and research specific to the
 agricultural sector in the country.
- Lack of Financing: A major challenge that farmers face was access to finance to expand what they plant and produce. Very few financial institutions are available to support farmers but access to them is limited to very few who are able to couple this support with a capital to increase their investment or repay their loans. Moreover, unlike other countries agriculture in South Sudan is not yet seen as an exciting sector for youth to innovate in in order to attract investments of financial support.

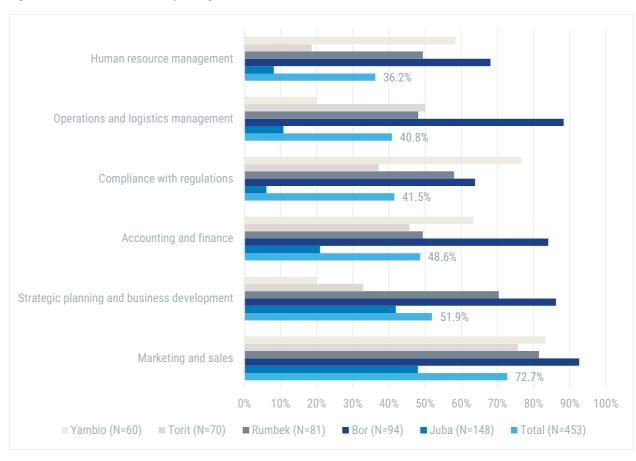
BUSINESS SKILL NEEDS

453 survey respondents specified the technical skills that their business needs. Businesses were most likely to need marketing and sales skills (72.2%), strategic planning and business development skills (51.9%) and accounting and finance skills (48.6%). Needed business skills varied greatly per region,

- Respondents in Bor were significantly more likely that respondents in other regions to report needing most of the listed business skills. The most needed business skills in Bor (N=94) were marketing and sales (92.6%), operations and logistics management (88.3%), strategic planning and business development (86.2%), accounting and finance (84%) and human resource management (68.1%). Businesses in the region were therefore in high need for business skills allowing them to increase their sales and reach new markets. Moreover, the region's state of insecurity resulted in challenges at the levels of retaining the skilled workforce, and managing logistics, hence the acute need in various business skills.
- Respondents in Rumbek were also in high need for business skills. Rumbek's responding businesses (N=81) were most likely to highlight their need for marketing and sales skills (81.5%), strategic planning and business development (70.4%), and compliance with regulations (58%). Additionally, Rumbek's respondents were similar to those in Bor in terms of reporting a high need for human resource management (49.4%) compared to the average for the total sample (36.2%).
- Respondents in Yambio (N=60) were most likely to report a need in marketing and sales skills (83.3%), compliance with regulations (76.7%) and accounting and finance (63.3%).
- Respondents in Torit (N=70) were most likely to report a need in marketing and sales skills (75.7%), operations
 and logistics management (50%) and accounting and finance (45.7%). Key informants highlighted that Torit falls
 on the international trade route linking Uganda to Juba, and that businesses in the region are often highly involved
 in importing their needed products and primary materials, hence the importance of operations and logistics
 management skills. Moreover, respondents from Torit were significantly less likely than average to report a need
 in human resource management; as only 18.6% of responding businesses from Torit reported that need versus an
 average of 36.2%.
- Respondents in Juba (N=148) were significantly less likely than average to report needing business skills. 48% of responding businesses from Juba reported needing marketing and sales skills, and 41.9% reported needing strategic planning and business skills. Conversely, businesses in the capital were unlikely to report needing skills related to compliance with regulations (6.1%), human resource management (8.1%) and operations and logistics management (10.8%). Business skills are less in need in Juba given that the labor market in the capital is characterized by a high presence of foreigners, and educated South Sudanese, and that access to markets, transportation and the overall infrastructure constitute less of a challenge in the capital than in other regions.

The below chart shows the number of respondents who indicated needing the below business skills per region.





Moreover, the need for business skills varied across sectors.

- Businesses in the agriculture, agro-food processing and herding sector (N=32), and restaurants (N=59) were more
 likely to report needing business skills than average, with marketing and sales (93.8%, and 88.1% respectively),
 and accounting and finance (71.9% and 62.7% respectively) being the business skills that are most needed for
 businesses in this sector.
- Hotels (N=47) were more likely than average to report needing business skills, with the most needed skills being
 sales and marketing (72.3%), and strategic planning and business development (70.2%). Hotels also needed
 human resource management more than average, with 46.8% of responding businesses reporting it as a need,
 versus an average of 36.2%.
- While construction businesses (N=25) were less likely than average to need marketing and sales skills (44%), they
 were more likely to need strategic planning and business development skills (60%). Construction businesses
 were also highly likely to need skills in human resource management (56%) and operations and logistics
 management (52%).
- Conversely, businesses in the health (N=29), and services (N-45) sectors were the least likely to report needing business skills. Nonetheless, health businesses were more likely than average to need human resource management skills, at 51.7% of respondents indicating that it was in need, versus an average of 36.2%.

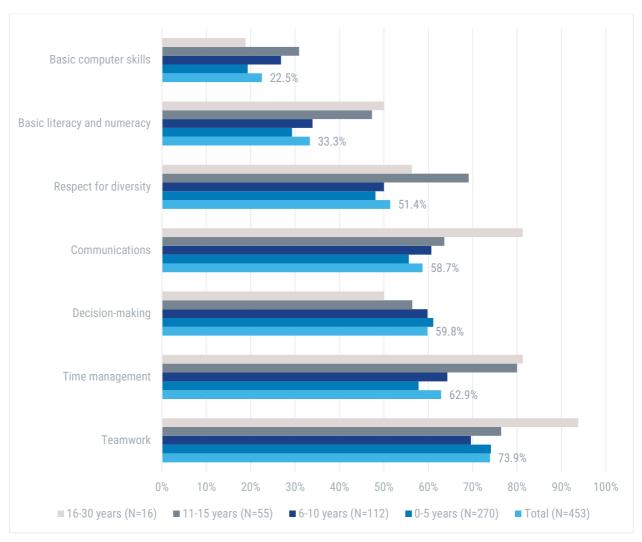
SOFT AND LIFE SKILL NEEDS

453 survey respondents specified the soft and life skills that their business needs. Businesses were most likely to need teamwork skills (74%), time management skills (62.9%), decision-making skills (59.8%), communications skills (58.7%), and an attitude of respect for diversity (51.4%). Some businesses added that they needed employees who were patient, committed, compassionate, caring and supportive. Needed soft and life skills varied greatly based on the business' age,

- Businesses that are older than 15 years (N=16) were the most likely to report needing basic and literacy and numeracy (50%), versus only 29.3% of businesses aged less than 5 years reporting the same.
- The need for basic computer skills was most needed for businesses aged between 5 and 15 years, with entrepreneurial ventures with less than 5 years, and businesses that are older than 15 years less likely to need such skills.
- The need for communications and teamwork skills was also more acute for businesses older than 15 years, at 81.3% and 93.8% respectively. Conversely businesses younger than 5 years (N=270) were less likely to need such skills, as 55.6% reported needing communications and skills, and 74.1% reported needing communications skills.
- Time management was also a challenge for older businesses with 81.3% of businesses older than 15 years needing this skill, while only 57.8% of businesses younger than 5 years reported needing it.
- Decision-making skills—meaning the ability to seek relevant information, solve a problem and select the best
 course of action in a given situation—were more needed for younger businesses than older ones, with 61.1% of
 entrepreneurs with businesses younger than 5 years (N=270) reporting needing such a skill, versus 50% of
 businesses older than 15 years (N=16) needing the same skill.

The below chart shows the number of respondents who indicated needing the below soft and life skills per business age.

Figure 46 – Soft and Life Skill Needs by Business Age



TVET EDUCATION FINDINGS

Context Analysis

TVET POLICY FRAMEWORK IN SOUTH SUDAN

The policy environment for TVET in South Sudan remains underdeveloped, as it is characterized by a high level of fragmentation in the presence of a multitude of actors and the absence of a coherent and comprehensive policy framework. Nonetheless, although there is no clearly articulated approach or strategic orientation for TVET at the national level, there is wide consensus around its importance in "preparing beneficiaries for the world of work" and its purpose being "directed at establishing effective and improved livelihoods." ⁵⁶

The TVET governance system includes 21 government entities⁵⁷, of which we highlight three major ones and their respective policy instruments (adopted or in draft format) which are relevant to TVET in varying degrees:

Governmental Body	Policy Instrument Relevant to TVET	Main Components
Ministry of General Education and Instruction (formerly the Ministry of Education, Science and Technology)	National TVET Policy Focus: Formal TVET	Recommendations regarding governance: establishment of a central TVET authority and council, as well as a decentralized management system under the purview of the national authority Requirements for VTIs: compliance with occupational standards, but with no obligations to adopt a national curriculum Recommendations for increasing relevance and responsiveness of TVET,
		providing more learning opportunities for out of school youth and adults, developing tools for examination and certification, as well as a technical training system for teachers
	General Education Strategic Plan 2017- 2022	 Proposal of a National Vocational Qualifications Structure Outline of key objectives regarding access and equity, quality and management of TVET, such as:
	Focus: General education with TVET as one component	 Improving infrastructure Expanding size and upgrading qualifications of instructor/teacher pool Implementing accreditation as per the MoGEI policy proposal
		 Recommendations for developing a unified TVET policy and an outcomes- based competency system
Ministry of Labour,	South Sudan	- Accreditation and registration requirements of VT providers
Public Service and Human Resources	Vocational Training Policy	- Requirements for the use of MoLPSHRD national curricula
Development	Focus: Formal and informal TVET	- Recommendations for flexible modes of TVET delivery (especially in regard to informal apprenticeships)
		- Minimum requirements for certified trainers/facilitators
		- Minimum academic requirements for long term programs
	Labour Act	- Training requirements for health and safety at work
	Focus: TVET as it relates to minimum conditions for	- Training requirements for underperforming employees prior to termination - Training requirements for workers involved in union activity

⁵⁶ UNESCO (2018). Rapid Assessment: Technical and Vocational Education and Training

⁵⁷ Here it is worth noting that only two public institutions have dedicated organizational structures and a governance model for TVET, namely the Ministry of General Education and Instruction and the Ministry of Labour, Public Service and Human Resources

	employment	- Minimum conditions of employment including provisions regarding the minimum working age (typically 14 years, with then exception of those are in vocational training above 12 years of age)
Ministry of Culture, Youth, and Sports	South Sudan Youth Development Policy	- Recommendations for establish a TVET governing body and developing a National TVET Policy
	Focus: Youth empowerment through TVET	 Recommendations to establish TVET institutions and non-formal education centers in all states with proper infrastructure and equipment as well as improved curriculum and tutor training
		- Recommendations for promoting apprenticeships, establishing a youth enterprise development fund to support entrepreneurship development

Other public institutions involved in TVET include⁵⁸:

Disarmament, Demobilization and Reintegration Commission	Ministry of Health
Ministry of Agriculture, Forestry Cooperative and Rural Development	Ministry of Higher Education, Science and Technology
Ministry of Animal Resources and Fisheries	Ministry of Interior
Ministry of Electricity and Dams	Ministry of Lands, Housing and Urban Development
Ministry of Environment	Ministry of Mining and Industry
Ministry of Finance and Economic Development	Ministry of Petroleum
Ministry of Gender, Social Welfare and Religious Affairs	Ministry of Telecommunication and Postal Service
Ministry of Transports, Roads and Bridges	Ministry of Wildlife Conservation and Tourism
Ministry of Water Resources and Irrigation	Relief and Rehabilitation Commission

Here it is worth noting that despite the inter-ministerial and cross-sectoral nature of TVET, there is presently no strategic or technical level coordination body at the national level, which drives duplication, incoherence and resource misallocation as each institution operates in a silo to fulfill its respective mandate. This is turn affects the lack of unified curricula of the programs, a disconnect between labor market demand of skills and the supply of these institutions, and little, if any, coordination between the different actors. The need for an established governance structure/coordination platform becomes more acute considering that there is an abundance of non-governmental actors that also play a large role in the TVET ecosystem, adding more fragmentation to an already pluralistic landscape.

QUALITY AND DYNAMICS OF TVET EDUCATION IN SOUTH SUDAN

The fragmentation and incoherence at the policy level for TVET in South Sudan trickles down to the institutional level, particularly when it comes to service delivery and access, as well as quality control. A deeper look at the dynamics of TVET education on those two fronts allows for some observations.

Service Delivery and Access:

- There is high reliance on the private and non-state actors for TVET provision (delivery and funding), as the institutional capacity of public VTIs is limited in terms of infrastructure, equipment, management, and sustainability. Multiple non-state actors (NGOs, private entities, faith-based/community-based organizations, multilateral/bilateral agencies) implement separate programs which are often not coordinated efforts with other offerings. It is estimated that about 80–90% of TVET provision is through non-governmental actors⁵⁹.
- There is high concentration of TVET activities in urban areas, in which 73% of total enrolled students and 58% of VET centers and technical secondary schools are located in Central Equatoria. This implies limited geographic coverage and inclusiveness, as 60-70% of rural communities are excluded from accessing TVET education⁶⁰. In

⁵⁸ UNESCO (2018). Rapid Assessment: Technical and Vocational Education and Training

⁵⁹ UNESCO (2014). TVET Policy Review South Sudan

⁶⁰ UNESCO (2018). Rapid Assessment: Technical and Vocational Education and Training

fact, FGDs in rural areas of South Sudan reinforce the notion that proximity to VT centers was one of the major barriers to enrolling in TVET, as centers are not as available as the need determines.

Access to TVET is not equitable, in part driven by the limited scale and availability of programs, but also due to
non-inclusive programming which is catered to select categories of learners, mainly those that could be reached
within the geographic area of the center/institute or to refugees or to young women in some. This automatically
leaves out people who live in more rural remote areas, men who have less access to education or work
opportunities, and other vulnerable communities such as the disabled groups as most enters are not equipped.

In terms of TVET program availability, public TVET offerings are limited in coverage and diversity:

- Vocational education is provided through public secondary technical schools which fall under the purview of the Ministry of General Education and Instruction⁶¹.
- Vocational training is provided through public VTCs that operate under the tutelage of the Ministry of Labour, Public Service and Human Resources Development. These centers mostly target the unemployed, internally displaced and returnees⁶².
- Other TVET programs and courses (informal, non-formal and formal) are offered by several other ministries.
 Here it is worth noting that there are 2 operational youth training centers in Juba and Wau (with one in Yambio under construction) which fall under the auspices of the Ministry of Culture, Youth, and Sports⁶³. These centers mostly provide informal basic occupational skills training courses (1 week to 3 months in duration) through some type of apprenticeship at the community level.

Certainly, programs provided by non-governmental actors serve to fill some of the geographic and programmatic gaps, although it is difficult to ascertain their exact coverage as a comprehensive mapping of all programs has not been completed thus far.

In terms of the inclusivity of TVET programs, anecdotal evidence from various focus group discussions suggest that:

- TVET programs targeting women (or offering disciplines typically associated with women) are in higher supply than those targeting men. However, this does not translate into higher labor market participation, as access to the job market is notably lower for women compared to men due to multiple attitudinal, economic, and social factors. Some challenges raised during FGDs which prohibit women from enrolling/completing TVET or engaging in the labor market include gender-based violence, forced and early marriages, early pregnancies, as well as societal norms which limit women's productive potential to caretaking. Moreover, it is worth noting that TVET programs targeting women often reinforce gender stereotypes and exclusively offer trades that are perceived to be "female friendly" such as sewing, tailoring, or juice making. This can also partly explain low female labor participation, as women are trained for skills that may not necessarily be the most needed in the market.
- Many TVET programs do not accommodate the special needs of certain vulnerable groups. An accessible
 environment for people with disabilities, transportation and accommodation for IDPs and refugees, and
 dignity kits for women of reproductive age are cited in FGDs as some of the limitations to
 enrolling/completing TVET programs.
- There are limited opportunities for work-based learning or apprenticeships. TVET programs lack effective
 engagement with employers to enable on-the-job training and create a bridge into the labor market for graduates.
 Furthermore, interviewees for VTIs highlighted that many of their programs are not coupled with a practical
 component because they lack the equipment and spaces to do so, such as computer repair, machinery, and
 automotive programs.

Quality:

- There is no standardized TVET curriculum along with the lack of consolidated guidelines for the development of training programs at the national level. In terms of public TVET, the Ministry of General Education and Instruction (MoGEI) and the Ministry of Labour, Public Service and Human Resources Development (MoLPSHRD) each have their own curriculum frameworks which specify the standards for various trades, target beneficiaries, and desired learning outcomes. Furthermore, non-governmental actors also develop and deliver their own curricula (sometimes adapted from foreign frameworks that might not be suitable for the local context) with little to no oversight from government, implying a clear lack of synergies between formal and informal TVET provision.
- The design of TVET programs is rigid and demonstrates inadequate responsiveness to the labor market. This can be attributed to limited support structures for data collection and M&E which can inform policy formulation and programming to ensure that it is demand driven. Currently, the Ministry of General Education and Instruction

62 Ibid

63 Ibid

⁶¹ Ibid

houses data in its education management information system, yet there is no TVET specific monitoring tool or labor market information system in place. In addition, there is little horizontal and vertical data sharing structures, making it difficult for data collected in other line ministries or at the local VTI level to be aggregated at the national level. In the absence of a continuous and comprehensive evidence base, there is limited capacity to evaluate the effectiveness and relevance of TVET programs and align them with labor market opportunities. Thus, there is a need to improve the capacity for strategic planning such that existing programs can be repurposed, and design features adjusted to ensure maximum impact.

- The quality of teacher/facilitator instruction varies significantly between different TVET programs/institutions, and in some cases, is sub-par. The first observation in this regard is the discrepancy between the quality of instruction in public versus private sector VTIs, and this can be attributed to the limited TVET-specific teacher trainings in the public sector in addition to the lower salaries/incentives, which skews the higher-quality workforce supply in favor of private sector and third sector providers. The second observation is that qualitative improvements to the TVET system are hindered by the limited investment in teacher training overall, noting that there are no technical teacher training colleges in South Sudan. As a result, highly qualified technical teachers are in short supply, often having to take training in neighboring countries or directly hired from abroad. Many participants in FGDs and interviewees from VTIs reinforced the need for teachers to be more technologically and pedagogically adept, to introduce new learning tools, and to strike the right balance between theory and practice.
- The TVET certification mechanism is not streamlined which renders the process scattered across different implementing agencies. Certifications are provided by the relevant public or private entity that the TVET program adheres to, which creates large discrepancies in the validity of acquired skills in the labor market. To date, South Sudan lacks a harmonized national qualification framework to standardize the certification system.
- Many short/accelerated TVET programs do not enable sufficient skills building/human capital development. FGDs across all 5 areas in South Sudan (Juba, Bor, Rumbek, Yambio, Torit) were unanimously aligned on the fact that short TVET programs were not enough for graduates to gain valuable skills and become prepared for the job market. There was a clear preference for longer term programs, ranging between 9 months and 3 years. However, it must be acknowledged that shorter programs are effective in encouraging enrollment for underprivileged groups who cannot afford to spend an extended amount of time in education or training, due to the high opportunity cost of remaining outside the labor force and suffering from destitute poverty.
- Many TVET programs lack a graduate support component (job placement, career counseling, orientation, etc.)
 or alumni tracking (through tracer studies, etc.). Considering that post-training employment rates are low with
 few graduates finding employment opportunities upon graduation, there is a dire need to ensure more effective
 labor market linkages. Participants in FGDs across the country also emphasize the of lack of post-graduate
 support for entrepreneurship, as many graduates have the intentions of starting their own business but are not
 equipped with tools to do so (startup-kits, access to finance, etc.).
- TVET course offerings are mostly supply-driven and dependent on available funding. Development partners play a significant role in driving the direction of programming in South Sudan, with the major donors being the EU, Canada and Japan. Acknowledging this, there is a need to first ensure that programs are relevant and reflect the needs of different population groups (urban/rural, IDPs/refugees, youth/overage out of school children, etc.) and second that they are coordinated with other donor-funded/government-led programs. Second, there is a need to ensure that the relevant demand-driven programs are allocated sufficient financial and human resources, rather than tailoring programs based on existing resources. In many cases, program or curriculum selection is based on the availability of qualified trainers, which are often lacking in TVET institutions given that the local pool of teaching talent is narrow for many disciplines and often necessitates tapping into costly foreign labor to compensate. Furthermore, curriculum selection may also be influenced by the available equipment rather than equipment being procured for training programs that provide relevant skills for the labor market.
- The quality of TVET programs sometimes becomes compromised due to the lack of continuity and sustainability. Considering that many programs are bound to donor agendas and strategic orientations of international organizations, there is little knowledge accumulation within TVET institutions once those financial and human resource investments have run out or shifted elsewhere. In this context, NGOs and non-governmental TVET service providers often utilize their own trainers (and curricula) on a short-lived project basis rather than a long term institutionalized approach that lasts beyond donors' funding cycles. Coupled with the fact that government funding is limited for TVET, there is little organizational capacity to sustain the quality of existing programs or develop new ones. In fact, key informants note that the government is severely under-resourced and short on liquidity to the extent that public TVET employees are often not paid their salaries for a number of months, thus creating a clear disincentive for public servants to drive continuity.
- Most VTIs lack the proper infrastructural capacity (equipment, facilities, materials etc.) to place more emphasis
 on practical application as opposed to theoretical instruction. Although the intrinsic advantage of TVET is that it
 enables the development of "hands on" skills with tangible value, a large majority of VTIs in South Sudan are
 underfunded to the extent where there are little to no investments in much needed technical tools. For example,
 one anecdote from a FGD in Yambio showed that teachers sometimes resort to showing students videos of the
 practical application of certain concepts rather than allowing students to actually physically practice.

• There is limited investment in introducing more advanced and innovative disciplines which allow for greater human capital accumulation and larger productivity gains. While the need exists for many traditional disciplines (such as auto mechanics, building and construction, welding and metal fabrication, etc.) considering that they are often oversubscribed, there is little diversity and availability of more advanced programs. For example, there are a limited number of TVET programs that teach modern agricultural techniques or innovative farming practices which would allow cultivators to improve the output and quality of their crops.

TVET Education Potential for Employability

GRADUATES' PERCEPTION OF EMPLOYABILITY PROSPECTS

FGDs in the 5 selected regions of South Sudan consistently revealed that TVET graduates generally have favorable perceptions of TVET as credible avenue for acquiring relevant skills, enabling better access to employment opportunities and business networks, receiving higher compensation, and as a result achieving self-reliance. For example, a group of young women who received training to become beauticians or hairdressers noted that their TVET education helped them secure internships and, in some cases, full time jobs. Moreover, many FGD participants expressed the importance of TVET as an avenue towards starting their own businesses and gaining a level of financial independence and stability. Here it is worth noting that the choice of programs among TVET graduates is often driven by availability of programs and awareness about them in their region. FGD participants in Yambio, for example, noted that limited internet connectivity prevents them and other members of the community from knowing about potential learning opportunities. Some participants enroll after receiving calls about programs from various organizations, others through radio ads, posters, letters, or other forms of media outreach, and these channels seem to be critical for increasing visibility around existing programs. In some cases, incentives such as transportation and books are provided, which further drives motivation to participate.

However, negative perceptions begin to arise when it comes to:

- 1. **TVET program duration:** FGD participants across all 5 regions in South Sudan expressed the fact that short duration (3-6 months) programs did not provide adequate job preparedness. Longer programs (minimum of 9 months duration, maximum 3 years) were seen as more favorable, noting that there was an expectation that the extended duration would be accompanied with more practical application.
- 2. Non-technical skills training: FGD participants noted that securing opportunities in the job market was not only a function of their technical skills and experience, but also on their business and soft skills. The lack of financial management, communication, customer service, and business/strategic planning skills as well as basic computer literacy were cited as some of the top challenges in gaining employment.
- 3. Post-training support: Most FGD participants interested in the entrepreneurship route expressed dissatisfaction with the challenges of securing funding, gaining access to mentors and coaches, obtaining the necessary business support, and also having a general orientation of how to start their businesses. Even those who have successfully launched their own ventures note that their operations are mainly homebased, and that funding is a main bottleneck to expansion. Several participants in the FGDs highlighted that the requirements by banks to access loans are often complex and challenging for them in terms of the capital required, documentation needed, and their ability to pay back the loan. Moreover, some participants mentioned that the lack of access to funding opportunities and business support services such as grants make it harder for them to follow through the expansion and growth of their business.
- 4. Outlook on the job market: Many graduates in FGDs across the country attribute their unemployment primarily to the lack of available job opportunities. Overall, the dominant narrative during FGDs is that graduates are relatively satisfied with their own job preparedness but have a heightened awareness of the fierce competition in the marketplace over only a few available jobs. Participants in select FGDs also emphasize that employability prospects are not merit-based, implying that clientelist practices and nepotism are key culprits for exclusion in the job market.

EMPLOYERS' PERCEPTION OF TVET GRADUATES

Employers' perception of TVET education is characteristic of the situation in many African countries, where TVET is deemed somewhat inferior to the academic path and as a result is thought to attract a lower caliber of students. The poor reputation of TVET education in general, coupled with the low entrance requirements to VTCs and their limited capacity, may create a bias among employers against TVET graduates regardless of their skillset. Employers often

note that fresh TVET graduates lack practical experience and thus, significant upfront investments must be made in advance in terms of orientation. With that, they cite the need for TVET institutions to facilitate on-the-job training and internships so that TVET students are more prepared for the transition into the labor market.

While word of mouth is one of the dominant forms of labor acquisition, recruitment also sometimes occurs through linkages between employers and TVET institutions. Some employers note that they do in fact visit TVET institutes and engage with students. Moreover, they receive invitations upon graduation to announce employment opportunities and this is one potential formal channel for hiring.

However, where employing businesses exist, a large segment of them are owned by foreigners, such as Ugandans, Kenyans, Sudanese and Ethiopians⁶⁴. While these businesses have some capacity to absorb employees, they often hire foreigners, as they have the perception that South Sudanese lack professional discipline and motivation such as committing to work hours, taking responsibility of their actions, and cooperating with colleagues, where they "leave in the middle of the day and show up to ask for money"⁶⁵. In contrast, foreigners are perceived to have more practical experience than locals, but are also more unaffordable for businesses given the deteriorating economic environment.

Capacities of TVET Education

INSTITUTIONAL CAPACITIES, IN TERMS OF INFRASTRUCTURE, MANAGEMENT AND SUSTAINABILITY

TVET institutions across all five regions are faced with many limitations to their capacity in varying degrees.

- Poor infrastructure is cited as one of the major challenges as VTIs are unable to secure adequate training facilities, training equipment, materials, etc, with this issue being more acute for VTIs in rural areas. A study on the TVET sector found that, with the exception of some VTIs in Juba, "most TVET infrastructure is obsolete⁶⁶." Certainly, this has direct impact on the quality of delivery as facilities need to be outsourced in some case, and TVET students are not able to gain the proper practical experience.
- Sustainability of programs presents a major limitation to human capital accumulation as any quantitative
 or qualitative improvements to the TVET sector are reliant on foreign donor support rather than nationally
 owned sustainable financing mechanisms. Knowing that TVET access and quality are directly associated
 with the level of investment in the sector, the issue of financing takes two forms:
 - Low public spending: A cursory look at government funding for TVET education is enough to reveal that the sector and its institutions are severely underfunded. South Sudan's budgetary allocations for TVET represent only about 1% of public expenditures⁶⁷.
 - Inconsistent donor funding: While it is difficult to pinpoint the size of investment in the TVET sector
 coming from donors and non-state actors in general, key informants note that donor-funded programs
 are often temporary and captive to top-down strategic orientations which may not be evidence based.
 TVET programs as a result remain standalone initiatives with a limited expiry date rather than
 becoming institutionalized.

This dichotomy between the public sector and non-state actors in the TVET sector perpetuates a self-fulfilling cycle within the political economy of education in South Sudan: Weak governance of TVET services provision - characterized by the lack of effective coordination and the absence of a comprehensive legal/policy framework - together with lacking political will for policy reform, drive low investment in public education infrastructure. In turn, this leaves the government with limited capacity for service delivery, compromises the quality of TVET, and reduces the state capability to address labor market needs and mismatches. In this context, non-state actors become obliged to fill in the gaps left by the state and to assume its role in responding to TVET education needs, which creates a set of incentives and interests that further diminish the margin of development of state capabilities, at the same time, is not sustainable as it is directly linked to external funding which might not necessarily remain available in South Sudan.

66 UNESCO (2014). TVET Policy Review South Sudan

⁶⁴ Humanitarian Policy Group, Markets in Crisis: South Sudan Case Study, 2015

⁶⁵ Key Informant Interviews

⁶⁷ UNESCO (2018). Rapid Assessment: Technical and Vocational Education and Training

RECOMMENDATIONS

The findings of the labor market assessment demonstrate that fundamental structural reforms are required in the TVET education system and the business environment in order to ensure both human capital and economic development. Moreover, changes are required at the programmatic level to stimulate labor market demand, and optimize the impact of TVET programs in order to enhance labor market supply. With that, the following recommendations are proposed at the levels of policy, high-level reforms and programs, to enhance both labor market demand and supply.

Labor Market Demand Recommendations

Enhancing labor market demand is key in ensuring that youth in South Sudan have better access to employment and entrepreneurship opportunities. The issue of skills mismatch becomes marginal if the needs of businesses are not catered to such that they can achieve sustainability and growth. With that, the following recommendations are proposed to improve the overall business climate in the country, whether through long-term recommendations addressing the legal and policy context, as well as improvements to infrastructures hindering business operations, or through short-term programmatic recommendations to support businesses in growing and expanding their workforce.

LONG-TERM RECOMMENDATIONS

- Address barriers to formalization: The labor market assessment reveals that some of the major challenges that stand in the way of businesses formally registering are cumbersome registration procedures, high registration fees, complicated financial reporting, and difficulties trading across borders. In this regard, it is recommended to 1) streamline and compress the 12 procedures required to legally start and formally operate a business; 2) reduce registration fees for small and medium sized businesses to accommodate their contribution capacity; 3) simplify financial reporting/tax filings; 4) provide tax incentives for small businesses and businesses in high potential sectors; and 5) improve customs procedures to enable more efficient flow of goods across borders. Encouraging formalization can have multiple positive externalities in the labor market, as it can ensure better working conditions for workers (through social security, labor law protections, etc.) and can enable businesses to access formal financing channels for scaling up. Additionally, the business regulation processes need to be made more transparent, through publishing needed procedures, time for completion and costs for each procedure, and instituting effective anonymous complaint mechanisms in order to combat corruption in public institutions.
- Increase access to finance: The scarcity of credit in South Sudan is certainly one of the factors that stifles business growth. In this context, there is dire need for structural improvements in the financial infrastructure in South Sudan which includes, at the outset, establishing a credit registry and improving the legal framework that governs the operations of microfinance institutions. For instance, instituting a collateral registry-or a registration institution for security interests granted over movable property by incorporated and nonincorporated entities-would facilitate access to credit to micro and small enterprises, especially if the registry is notice-based, thus allowing for simplicity in registration⁶⁸. In addition to systemic changes, there is also a need for shorter term interventions that would revitalize the business environment in the country. In particular, it is recommended to develop a mechanism for providing incentivized loans for businesses that are either established by TVET graduates or employ TVET graduates. This is important to enable businesses to transition through various growth stages and subsequently expand their labor absorption capacity.

Collateral registry in Ghana

Ghana introduced the first modern collateral registry in Africa in a reform project implemented between 2008 and 2014. The registry facilitated in its first 5 years of operations USD 1.3 billion in financing for small businesses using only movable assets as collaterals for loans. Women borrowers accounted for 40% of total registrations and a USD 100 million of financing.

• Enhance labor protections: With a stark majority of the working population engaged in informal labor, it is important to address vulnerable employment and ensure that decent work standards are preserved. In this context, it is recommended to first raise awareness at the national level on matters of labor rights and employer obligations, then to ensure that labor regulations are adequately implemented.). For example, the existing legal framework in South Sudan does not have explicit provisions that prohibit discrimination in access to credit based on gender and does not provide a minimum of 14 weeks of maternity leave in conjunction with international

⁶⁸ Doing Business (2017). Getting Credit: Legal Rights – Two Approaches to Developing an Integrated Secured Transactions Regime.

conventions. At the same time, the law could be very supportive of employees and their rights, what is missing though is people understanding the law and its articles. Hence, developing awareness material to explain the law in the form of videos, leaflets and easy to understand material is important. Moreover, as many participants in focus groups discussions indicated that they resort to the Chamber of Commerce in case of disputes with their employers, they also suggested that the Chamber might not be fully capable of doing so. Equipping the Chamber of Commerce with the necessary skills to be able to provide support.

• Improve quality of infrastructure and government services: Security, transportation, access to markets and quality of power supply remain key challenges for businesses to grow and expand their workforce. Surveyed businesses in Juba, Bor, Rumbek, Torit and Yambio cited these challenges as hindering business growth more often than they cited the inadequacy of human resources. Structural solutions at the level of securing not only commercial and agricultural areas, but also international and national roads is therefore essential for business operations in the country. Achieving and sustaining this type of change requires political will at the national level, Nonetheless, local governments' investment in security initiatives could potentially reduce the cost of insecurity on businesses, especially in regions where ethnic fighting is uncommon. Additionally, infrastructural improvements of both quality and coverage are needed at the levels of the road network and electricity supply.

SHORT-TERM RECOMMENDATIONS

Recognizing that support for businesses is a crucial element for expanding businesses' labor absorption, it is recommended to offer support to businesses through programmatic interventions:

- Increase access to business support services for new businesses. This includes providing mentorship, business development coaching, and seed funding/business plan development for entrepreneurial ventures. There is also high need for driving awareness around the procedures for starting a business and the legal framework for employee rights and employer obligations. Regional Chambers of Commerce can assume these prerogatives and develop programs in collaboration with local partners to provide such business support services.
- Support businesses on the technical level to improve production/service outcomes. In addition to traditional
 business support services, it is important to facilitate access to specialized technical consultants which could
 advise businesses on advanced and innovative techniques within their respective disciplines. For example,
 businesses in the agricultural sector could be linked to consultants that would provide counsel on new farming
 techniques or methods to adapt to climate change, which in turn would help them increase their yields and quality
 of crops.
- Assist businesses in adapting their products and services to the emerging business context due to the COVID-19 pandemic. This could include simple interventions such as providing businesses with sanitizing kits or simplifying delivery logistics (for businesses like restaurants) to more elaborate labor market activation measures such as assisting businesses in re-skilling and up-skilling their existing employees or potential ones to improve productivity and retention during the recovery phase. The latter can be achieved through training subsidies for businesses (demand-side measures) or subsidized vouchers for employed/unemployed workers (supply-side measures). Here it is worth noting that such initiatives should be targeted at businesses whose workforces have been most affected, in particular small businesses (less than 5 employees) and large businesses (more than 20 employees) in the hospitality, health, agriculture, agro-food and herding sectors.
- Build partnerships between TVET institutions and employers to enhance reciprocated capacity building
 opportunities. For example, businesses can send their employees to develop their capacities in VTIs and in return
 they take apprentices from VTIs and provide them with on-the-job training. Such an initiative would bring positive
 returns to both parties, as businesses can improve productivity and potentially reduce employee turnover, while
 VTIs can provide a more hands-on learning experience for TVET students.

Labor Market Supply Recommendations

The labor market supply in South Sudan is characterized by low levels of educational attainment and low skills. Given that he TVET system is the predominant provider of skill training in the country, the following recommendations are centered around TVET education, at the policy level and at the level of TVET programs.

LONG-TERM RECOMMENDATIONS

Acknowledging that the TVET system in South Sudan is characterized by a high level of fragmentation and is significantly under resourced, it is suggested to:

- Enhance coordination within the sector: The lack of coordination mechanisms between international partners, local actors and government institutions results in the duplication of efforts and misuse of resources. In order to remedy this, a multi-stakeholder platform should be developed which is inclusive of all civil society/private sector actors, government entities and international partners involved in the design and/or delivery of TVET education. The platform should not only be participatory, but also sustainable, meaning that it should be established with the intent to institutionalize it as a framework for TVET policy design. Moreover, the following functions should be assumed by this multi-stakeholder platform to reflect true engagement of the different stakeholders in decision making that can eventually improve the TVET ecosystem:
 - **Needs assessment** as a continuous evidence-based exercise that can provide a baseline for setting labor market needs and subsequent TVET education priorities.
 - **Prioritization of needs** based on urgency/need and in relation to availability of resources.
 - **Resources allocation** provided by government or international governmental and non-governmental actors in an efficient and transparent manner.
 - Coordination of efforts between the different local and international stakeholders, programs and standards that would allow proper transfer of knowledge for future sustainability.
 - **Implementation of initiatives and programs** by a clear division of roles and responsibilities based on a set of criteria pertaining to capacity, competence and understanding of the context.
 - Monitoring impact of all initiatives agreed upon within the platform to adjust strategic orientations as needed.
- Harmonize quality standards: A holistic and integrated national TVET system that recognizes and validates learning achievements from all learning environments under a single certification and qualifications framework is a pre-requisite for harmonizing and standardizing skills competencies. In the absence of a standardized TVET curriculum across all implementing partners, it is inevitable that the quality of TVET provision lacks coherence and consistency. As such, it is recommended to develop standard modules for the various disciplines, coupled with a system for quality assurance. In the short term, this could include a routine audit of quality standards jointly established and conducted by a committee formed of the Ministry of Education and Instruction, Ministry of Labor, Public Service and Human Resources Development, and a representation of TVETS and NGOs, and in the long term, a more rigorous accreditation system can be put in place for TVET providers under a clearly defined competency framework. With that, the drivers of education and training quality (teacher/instructor qualifications, infrastructure/equipment/tools, linkages with employers, etc.) can be synchronized to prevent disparities in skills building across regions. Additionally, a standardized qualifications framework would allow informal sector workers with no educational credentials to validate their technical skills acquired in the job market, and receive appropriate rewards by their employers.
- Improve monitoring and evaluation systems: Without a clear outcome-oriented approach to TVET provision, the relevance of and impact of existing programs cannot be measured, assessed, and ultimately optimized according to current needs in the labor market. As such, it is critical to first establish mechanisms for data integration, updating, and sharing, to have a solid evidence base of educational outcomes that can inform policy making, fundraising plans, and curriculum changes. Moreover, it is important to feed this data into established M&E systems (perhaps through a tracer studies system⁶⁹) which can enable more effective design for TVET programs such that they are more labor-market-responsive.

⁶⁹ "In a tracer study, data is collected and analysed repeatedly over time. For monitoring and evaluation purposes, tracer studies are often designed to track changes at individual level, following a development intervention. Tracer studies are most useful when change is intended to be long-term and significant." https://www.intrac.org/wpcms/wp-content/uploads/2017/01/Tracer-studies.pdf

- Streamline certification mechanisms: Aside from contributing to further fragmentation in the TVET sector, the absence of a standardized certification regime undermines trust in the TVET system as a whole since implementing partners with their various levels of credibility adopt divergent pathways to certification. The way it currently happens is not based on set agreed upon standards or quality control. As such, the establishment of a comprehensive TVET qualification framework is warranted and much needed which only allows for accredited implementing partners to deliver trainings and provide certifications. Acknowledging that developing such a framework is a lengthy and costly exercise, it is suggested in the short term to ensure that the quality standardization and quality assurance initiatives discussed earlier include both the delivery of TVET and certification.
- Develop a sustainable financing mechanism for TVET: It is clear that one of the main limitations to the
 progression of the TVET education sector is not only limited funding, but also inefficient allocation of existing
 resources. In the absence of fiscal space to ensure additional government funding, effective donor resource
 mobilization becomes critical in the short term. As such, it is recommended to conduct a periodic mapping of
 - resource needs across TVET institutions in the country, prioritize those needs according to criteria clearly set by the multi-stakeholder coordination platform described earlier, and ensure that all resources from external donors are channeled systematically according to the needs map. In the long term, the diversification of funding sources might decrease reliance on external donors and ensure sustainability, and in this regard it is suggested to increase funding for the TVET sector through a mix of government budgetary provisions and internally generated revenue sources from VTIs. More specifically, the South Sudanese government can earmark an appropriate fraction of oil revenues for the technical vocational skills training and development considering its strategic importance for the country's development, and VTIs can be encouraged to launch entrepreneurial ventures internally (based on the disciplines offered) to partially cover operational costs.
- between the TVET- labor market linkages: The disconnect between the TVET education system and the labor market is a major contributor to the current supply-demand mismatch. As such, it is critical to develop localized coordination for matters of implementation alongside national centralized coordination for matters of policy. One proposed mechanism is to develop deeper ties between TVET institutions and regional Chambers of Commerce so that there is a feedback loop between the needs of businesses and existing TVET offerings, this could be done through the joint committee mentioned above or through a sub-coordination group, an online platform similar to the example below, which could also be issued in a hard copy bulletin every 3 months given that the internet penetration and connectivity might be a challenge.

Production units in Nigeria's technical colleges

"In Nigeria, it is the government policy for each technical college in the country (state or federal) to establish a Production Unit. This is meant to serve two purposes: for students to have practical hands on experience, especially since there is a dearth of industries, and secondly to generate funds for the institutions. The take-off grant is provided by the state government. The resources generated are used to sustain the Unit and pay the relevant departments involved in the job. Monitoring is carried out by the regulatory body." (Amina Idriss, Nigeria)

Labor Market Observatory in Lebanon

Al Mashghal is a platform developed by Beyond Group for the Lebanese market, aiming to become a resource hub on labor market data for job seekers, as well as private, public, and international stakeholders. It includes a labor market observatory which is an online research tool and database providing students, universities, the private sector and international organizations with regular data and analysis on the status of the market in terms of jobs and skills required, trends, sectors in demand and other relevant information

Linking Mali's VTCs to the labor market

The school-enterprise liaison bureau (Bureau de Liaison Ecole Entreprise, BLEE) was created to dynamize the career services of training centers, by strengthening technical, organizational and financial capacities, and to establish partnerships between these units and the labor market. Ten pilot centers were selected and supported by LuxDev and the regional council in the Ségou area, receiving subsidies and logistical support. Involved actors included stakeholders from three areas:

- 1. Governance local authorities, government technical bodies and DPs;
- 2. Demand sector bodies, professional associations, enterprises; and
- 3. Supply training centers.

This approach enabled an increase of the professional integration rate to 84 percent for VTCs with a BLEE, against 16% for those without one, reflecting an improvement in the quality of training thanks to the closer links between training centers and the world of work.

SHORT-TERM RECOMMENDATIONS

Improvements at the level of TVET policy and regulatory framework should be accompanied by programmatic interventions aiming at improving the access, quality, and job-market relevance of specific TVET programs, as well as enhancing VTIs' infrastructure and institutional capacity.

ACCESS, QUALITY, AND JOB-MARKET RELEVANCE

Acknowledging that **access** to TVET is not equitable either due to the limited scale and availability of programs or due to non-inclusive programming, it is recommended to:

- Expand access to TVET for marginalized groups and accommodate their unique needs to improve enrollment/retention rates. This includes ensuring an accessible environment for people with disabilities, covering transportation and/or accommodation for IDPs and refugees, providing dignity kits for women of reproductive age, scheduling classes in a way that would allow women to attend to family matters while also being able to receive education, and adapting application requirements/curricula for TVET candidates who are illiterate. Furthermore, current teachers should be trained in gender-sensitive behavior, language and methodologies to make sure that they don't directly or indirectly push women away from joining TVET programs. Training and recruiting more female teachers and trainers would also encourage families to be more comfortable in sending their girls to TVET institutions and would make girls more comfortable. Ensuring physical accessibility to provides more chances for people with disabilities to join these programs; in addition, to the provision of programs in which they can excel that do not necessarily require physical strength.
- Expand access to longer TVET programs that are accompanied with a more extensive practical component. While accelerated TVET programs are important for ensuring that vulnerable groups (particularly those who are destitute and have a high opportunity cost to receiving education) gain access to skill building opportunities, there is merit in marrying longer TVET programs with income generating opportunities. This can be done by extending existing short programs to a 9 month duration, ensuring that the practical component is lengthy enough for effective capacity building, and creating space in between the extended program duration for students to receive on-the-job training to practice their skills and generate income temporarily. The 9 month extended programs, therefore, can include 3 months of preliminary training on a particular discipline, job matching with a relevant business for 3 months for students to practice their skills and generate income, and then 3 months of follow up training to refine the students' skills and gain a higher level of mastery.

Dual apprenticeship in West Africa

A dual-apprenticeship TVET system was adopted in a number of West African countries, including Benin, and Burkina Faso. The learning happens in two sites, as apprentices rotate between learning at a VTC and in the industry, whereby employers sign on apprentices intermittently during their TVET studies. Such an approach allows for a better integration of theory and practice.

Enable physical access to VTIs in rural areas. This includes establishing more training centers in peripheral areas
in the presence of adequate resources or covering transportation costs for rural residents that do not live within
close proximity of existing VTIs under a more resource-constrained scenario. Other forms of ensuring physical
access to VTIs in the absence of funding for establishing centers, could be to partner with local
councils/townhalls/existing schools to rent out spaces for short term programs.

Moreover, knowing that certain **quality** enhancements are well overdue for most public and private TVET programs, it is recommended to:

- Ensure that TVET programs are demand-driven and responsive to labor market needs by ...
 - Targeting TVET programs to the needs of larger businesses as they have higher potential for employing youth and have more capacity to invest in graduates who have the needed skills. Sectors that have been identified to have high labor absorption capacity and that simultaneously contribute to the local/national economy are hospitality, services, as well as industry and artisanry.
 - Enhancing the practical component of TVET programs and strengthening links between vocational training and the labor market. Some concrete ideas for creating such linkages include 1) providing equipment to businesses in exchange for taking apprentices, complemented with support to develop business plans for growth; 2) developing a platform which connects freelance TVET graduates with potential clients on a project/task basis; 3) encouraging entrepreneurial ventures within TVET institutions within the scope of existing disciplines offered such that they generate income for the institution, enhance skills building for students, and meet market needs for goods and services; 4) initiating partnerships with VTIs outside of South Sudan and establishing fellowship programs where TVET students can travel to neighboring countries and practice relevant skills; and 5) activating the role of Chambers of Commerce to increase awareness and outreach about regional TVET offerings and NGOs which provide support services for businesses.
 - Complementing technical skills training with business skills, soft and life skills, as well as literacy and numeracy skills. Business skills that were identified to be in high need are marketing/sales, strategic planning, business development, and accounting/finance. Soft and life skills that were identified to be in high need are

teamwork, time management, decision-making, communication, and an attitude of respect for diversity.

... Ensure that TVET programs are contextualized for the national/local environment by ...

- Developing user friendly manuals where students can relate to the content. For example, provide TVET manuals that account for the fact that some participants may be illiterate and use simple visuals rather than detailed text
- Encouraging specialization in TVET centers depending on local needs and matching equipment requirements based on the selected specializations. For example, in highly agricultural areas TVET centers could focus their offerings on topics like: pest disease management, crop variety, climate adaptation and inter-cropping skills, irrigation and so forth based on the skills needed as detailed below.

• Ensure adequate post-graduate support for TVET students by ...

- Developing follow-up mechanisms after training programs are complete (e.g. alumni tracer studies) and designing opportunities for students to remain in touch with their cohorts to build camaraderie and drive accountability (e.g. support teams of 2 or more to launch joint entrepreneurial ventures)
- Developing the business skills of graduates and equipping them with soft skills such as communications on the job, team work, interviewing skills, how to start a business, business management and so forth.
- Developing and encouraging women's participation in the labor market through tailored business support to women to be able to manage with their social and familial responsibilities. Support women through targeted business support grants to start their own businesses.
- Investing in developing job placement, career counseling, and orientation services to better prepare TVET graduates for career decisions and the job search. To enable this, TVET institutions (in collaboration with regional Chambers of Commerce and employers) can collect data about job vacancies and recruitment needs and match/guide students accordingly.
- Establishing a Labor Market Observatory (LMO) to continuously identify and analyze labor market trends and challenges. The objective of the LMO would be to monitor and disseminate relevant and timely information which would guide job seekers, students, training institutions, and employers on different occupations and needs for skills acquisition. In the South Sudanese context, it is suggested that the Chambers of Commerce play this role and report to the Ministry of General Education and Instruction and the Ministry of Labor, Public Service and Human Resources Development. Moreover, given the challenges to connectivity, data aggregation and visualization could occur through a non-digital format (e.g. bulletin that Chambers of Commerce publish periodically) in the short term, with the prospect that more real-time, interactive applications could be developed in the long term as internet penetration increases in the country.
- Fostering entrepreneurship upon successful completion of training through the provision of start-up kits, facilitating access to finance and mentorship, supporting the development of business plans, and maintaining periodic follow-up with entrepreneurs.

In addition to the above, it is recommended that TVET providers focus their programs on closing the existing **skills gap** in the labor market. The skills that were identified to be most in need and which were matched in the Agricultural Value Chain study are detailed below by sector and in order of priority:

Agriculture, agro-food processing and herding		Industry and artisanry
Agriculture and agro-food processing	Herding	muusti y anu artisam y
 Handling, storage and refrigeration Packing and packaging Pest disease management Operating agricultural machinery Quality assurance Food processing, preservation and drying Crop variety, climate adaptation and intercropping skills Irrigation Grain milling Beekeeping and honey-making Land and soil preparation Good agricultural practices (GAP) Food Safety Post-harvest Management 	Herding methods Animal health management Animal husbandry and breeding Cattle management	Mechanical repairs Blacksmithing, metalworks and welding Carpentry and woodworking Electrical repairs Tailoring, sewing and embroidery
Hospitality		Health
Restaurants	Hotels	
Restaurant management Hygiene and quality management Food service	Front desk management Housekeeping Food service	Nursing Midwifery Pharmacy

4. Food preparation	4. Hotel management	4. Clinic or laboratory service
		5 Lah technician

		0: Eub teolillolali	
Trading and services		Construction	
Trading	Services	Construction	
1. Record keeping	1. Hairstyling	1. Plumbing and pipe fitting	
2. Stock management		2. Painting and decorating	
3. Market analysis		3. Interpreting construction drawings	
4. Sales and product understanding		4. Masonry and concrete	
5. Retail store management		5. Tiling	
		6. Plastering	

INFRASTRUCTURE AND INSTITUTIONAL CAPACITY

The quality of TVET provision – by virtue of it being practical in nature – is heavily influenced by the infrastructure and institutional capacity of VTIs that enable, or conversely restrict, a "learning by doing" approach. With that, a recurring theme across a stark majority of VTIs is the scarcity of equipment and the limited institutional capacity to facilitate hands-on learning.

Thus, in regard to **infrastructure**, it is recommended to:

Ensure that proper equipment is provided to enhance simulation-based training. This can be achieved through
mapping equipment needs across VTIs on a regional level, prioritizing these needs according to criteria clearly set
by the multi-stakeholder coordination platform discussed earlier, and channeling donor funding accordingly.
Moreover, TVET centers can be incentivized to specialize in certain disciplines (based on local needs) to
streamline equipment requirements and evade duplication of spending.

Furthermore, in regard to institutional capacity, it is recommended to:

- Enhance teacher capacity through rolling out uniform Training of Trainers (TOT) programs. Moreover, such programs should be complemented with 1) coaching for teachers/instructors to not only advance their technical skills, but also their teaching and communication skills as well as increase their motivation for professional development, and 2) feedback sessions with teachers/instructors based on the results of monitoring and evaluation of their classes.
- **Develop mechanisms for knowledge accumulation** through an archiving system at the level of VTIs to capture all materials and teaching tools utilized. This creates a type of "institutional memory" for VTIs and enhances sustainability for the long term.

ANNEX I – DATA COLLECTION TOOLS

Interviews with Local Stakeholders (Government, LNGOs, INGO)

OBJECTIVES

- · Understand major sectors in the regions, and the situation of employment in them
- · Understand the local perception of vocational programs
- Identify key actors to be part of future interviews or focus groups

Name:

Phone number

E-mail:

Position:

Region:

QUESTIONS

GENERAL OVERVIEW

- 1. Can you give us an overview of the situation in your area: Social, economic, political?
- 2. What are key challenges facing the community in your area today?
- 3. How was the overall situation impacted by COVID19?
- 4. What is the situation of youth and women in your area? Are they active? How?
- 5. What are key challenges that face women and youth?

BUSINESS AND EMPLOYMENT ENVIRONMENT

- 6. What are the most active sectors in the area?
 - a. Name the main sectors, and discuss the following:
 - i. agriculture,
 - ii. herding,
 - iii. agro-food,
 - iv. hospitality,
 - v. restaurants,
 - vi. construction,
 - vii. trading (clothing and household appliances)
 - viii. industry and artisanry
 - ix. health
 - x. other
 - b. What are challenges in those sectors? (infrastructure, human resources, policies, security, etc.)
 - **c.** What are opportunities for growth in those sectors? (i.e. expanding in number of businesses, using local resources for growth, etc.)
 - d. Which sector is likely to expand and recruit? Why?
 - e. What kind of organization / business model is found in the main sectors? (shops, MSMEs, individuals...)
 - f. Who owns the businesses in those sectors? (locals, foreigners, families, authorities, etc.)
 - g. Which sector contributes to local income more than others?
 - h. Which sector has more local demand? (list the top 3)
 - i. What kind of skills are required in each of those sectors? Are those skills found locally?

- 7. Where are locals usually employed? How do people find jobs?
 - a. What are main sources of income for local people in the area? (individual business, retail shops, agriculture, etc.)
 - **b.** How do people find jobs? (through family, informal hubs, recruitment agent, etc.)
 - c. Who is most likely to be employed? (men, women, youth, people from specific families/backgrounds, education level, etc.)
 - d. What are challenges of being employed in the area? (long hours, low wages, safety and security risks, etc.)
 - e. What are advantages of being employed in the area? (income security, social perceptions, etc.)
- 8. What kind of businesses are likely to recruit graduates of vocational programs?
 - a. Which sectors are more likely to recruit graduates of vocational programs?
 - b. What type of businesses are more likely to recruit graduates of vocational programs?
 - c. Why do they look for graduates of vocational programs?
 - d. What type of skills is mostly needed?
 - e. Do TVET graduates start their own businesses? What are the challenges they face when they start businesses?
- 9. How is vocational training perceived by locals and local youth? Do they feel it is an added value?
 - a. How common is vocational training in the area?
 - **b.** Why do youth enroll in such programs?
 - c. Why do youth hesitate to enroll in such programs?
 - d. What are the characteristics of youth who are likely to enroll in vocational programs?
 - e. What are the characteristics of youth who are less likely to enroll in vocational programs?
 - f. Do such programs have actual influence on employability? How? (more likely to find a job, enhanced skills, etc.)
- 10. What is the quality of vocational programs and how can they improve?
 - a. What are schools and programs available?
 - b. How are those programs developed? Who teaches them?
 - c. What do they lack? How can they be improved?
- 11. Which of the following support services are available in for businesses? Who provides these services?
 - a. Finance and micro-finance institutions
 - b. Training center
 - c. Business development coaching
 - d. Other, please specify
- 12. Can you name specific local businesses that have more than 5 employees? Can you provide their contacts?

Interviews with Vocational Training Institutes

OBJECTIVES

- Understand the institutional capacity of VTIs
- · Assess the effectiveness of VTI programs

OUESTIONS

GENERAL OVERVIEW

- 1. Can you give us an overview of the situation in your area: Social, economic, political?
- 2. What are key challenges facing the community in your area today?
- 3. How was the overall situation impacted by COVID19?
- 4. What is the situation of youth and women in your area? Are they active? How?
- 5. What are key challenges that face women and youth?

VOCATIONAL TRAINING

- 6. What programs do you offer?
 - a. Name the different programs
 - b. What programs are more attractive to students? Which ones are less attractive? Why?
 - c. What programs would you like to expand on? Why those programs in specific?
 - d. What are challenges that you face in some or all your programs in terms of content and material covered?
 - e. Do your programs have an on-site technical trainings or are they only classroom based?
- 7. Who enrolls to your programs?
 - a. What is the number of students enrolled in your school/program every year?
 - **b.** What is the gender distribution among students?
 - c. Who enrolls to each of the programs? (number of students, gender, socio-economic background, locals vs non-locals)
 - d. What mostly motivates students to come? (family support, higher income level, peer support)
 - e. What keeps students from enrolling? (accessibility, social pressure, psychosocial pressure, etc.)
 - f. What is the percentage of students who complete the full training?
- 8. How do you deliver your programs? methodology and duration of delivery, etc.
 - **a.** Who delivers the programs? (one or more instructors? What is their background in terms of nationality, educational background, and other details)
 - **b.** How long does a program last on average? How do you evaluate the efficiency of program delivery within this timeframe? What would you propose to enhance the duration component of your programs?
 - **c.** What are challenges at the level of program delivery? (tension or resistance in the classroom, student and/or teacher commitment, availability of training equipment, etc.)
 - d. What is the physical setting of program delivery? Any challenges or advantages at that level?
 - e. Which educational values and methods are the core of your program delivery? (participation, commitment, student-led, etc.)
 - f. What is a good model of program delivery that you opt for? Have you had any previous successes that you would like to replicate or build on?
- 9. Who develops the training programs? Based on what are the curricula devised or adapted?
 - a. How are the program topics selected? Who selects them and based on what criteria? (by looking at studies, conducting quick assessments, consulting experts, etc.)
 - **b.** How is the curriculum developed? (individual or collective work, and who is involved?)
 - c. What programs or skills? do you believe are needed in the labor market? Do you provide them/ plan to provide them?
- 10. How do you ensure the quality and standardization and effectiveness in your programs?
 - a. To what extent is the content standardized? Is there flexibility for teachers to have their input in the training content?
 - b. Do you provide any technical or soft support to teachers through meetings or trainings for them?
 - c. Do you have a mechanism to evaluate the quality and effectiveness of your programs?
 - d. Do you have a mechanism to measure student satisfaction with the curricula?
 - e. Do you have knowledge about the journey of your students post-completion of the program?
 - f. How many students find jobs after undertaking your programs?
 - g. How many students start their own businesses?

- 11. How you do recruit your teachers? What are required capacities and qualifications?
 - a. What are requirements for joining your school as a teacher?
 - **b.** What are your expectations from teachers at the soft level? (personal qualities)
 - c. What are good or bad experiences with teachers that you find repeated in your school?
- 12. How is this school managed and sustained? Tell us more about the structure, roles, and revenues.
 - a. What are sources of income to cover the school fixed and running costs?
 - b. What are resources missing for the good management of the school?
 - c. What are strong points that you have in terms of management and resources?
 - d. What connections do you have with local and/or government organizations?
 - e. How do policies and regulations affect your work positively or negatively?
- **13.** Are there plans to expand the school? How? (location, number of students, number of programs, length of programs, etc.)
- 14. What are main challenges that you face as a school? Discuss the following levels:
 - a. Training equipment and physical condition of the space
 - b. Training programs
 - c. Location and accessibility
 - d. Funding and sustainability
 - e. Relationships: Teacher-student relationships, management-teacher relationships
 - f. Management: roles, human resources, operation
- 15. Can you provide a list of students/graduates and their contact details? (for future focus group discussions)

Interviews with Local Businesses

OBJECTIVES

- Understand the labor absorptive capacity in the pre-selected sectors
- Identify skill gaps from employers' point of view
- Understand capacity development channels of existing recruits
- Understand local hiring practices in the pre-selected sectors

OUESTIONS

GENERAL OVERVIEW

- 1. Can you give us an overview of the situation in your area: Social, economic, political?
- 2. What are key challenges facing the community in your area today?
- 3. How was the overall situation impacted by COVID19?
- 4. What is the situation of youth and women in your area? Are they active? How?
- 5. What are key challenges that face women and youth?

BUSINESS OVERVIEW

- 6. What is the status of your sector?
 - a. Do you see your business expanding and recruiting more workers in the upcoming year?
 - b. Do you see other businesses in your sector expanding and recruiting in the upcoming year?
 - **c.** What challenges stand in the way of your expansion? Financial/material resources, equipment, human capacity, security situation, unfair competition, smuggling, policies, etc.
 - d. How do political and conflict-related challenges affect your business?
 - e. What are opportunities available for you to grasp in the market?
- 7. How was your work affected post Covid-19 outbreak?
 - a. How did your daily operations change? Did you close your business? Did you adjust your production or services?
 - b. How was the demand for your products changed?
 - c. How did the situation of your employees change? Did your change the size of your workforce?
 - d. How long do you expect to recover from the negative changes? What will you do in order recover?
 - e. What has changed in the policies and practices of y our business?
- 8. How do local conflicts, security events and political dynamics affect your operations?
 - a. Has your business experienced any thefts or criminal activity? Do you pay for security?
 - b. How does conflict affect your daily operations? How does it affect your access to the market?
 - c. How do political dynamics and ethnic tensions affect your business?
- 9. What are external partnerships or regulations that affect or can affect your work in the future?
 - a. What unions, trade groups, or other networks are you part of?
 - b. If not, would you like to be part of such groups? Which ones and why?
 - c. How do/would such connections and partnerships affect your work?
 - d. What are regulatory restrictions or challenges to your work? Explain more.
- 10. What stands in the way of recruiting more workers?
 - **a.** Possibilities: regulations/taxes, lack of skills required for the job, financial restrictions, security situation, organizational support, etc.
- 11. Where and how did the workers who currently work at your business acquire their skills?
 - a. What are important learning opportunities in your sector? (on the job training, unpaid internships, working for a family business, personal research, etc.)
 - b. Have you recruited graduates of VTIs? What is the value that they added?
 - c. Have you provided training to your employees? What was the form of that training? (internal, external, duration, etc.) What was the training on?

- 12. What are skills that you would want your employees to have in order to enhance your work?
 - a. What are technical requirements for your business? (operating machinery, advising on new technical methods, integrating technology, using computers, etc.)
 - **b.** What are soft skills important for your work? (communications, working within a team, etc.)
 - c. What are management-related skills missing in your work? (accounting, finance, managing human resources, sales, etc.)
- 13. How do you find and choose the people that you employ?
 - a. Possibilities: employment agents, vocational schools, neighborhoods, family connections, etc.
 - b. What kind of contract is predominant within your business? (permanent, temporary, hourly-contracts, etc.)
- 14. What are problems you face with new recruits?
 - a. Possibilities: They lack the skills required for the job; They lack innovation; They lack motivation; They lack communication
- 15. Did you hire any TVET graduates in the past few years? If yes, did you think the training they had received was adequate for your business?
- 16. What are important factors that you consider when looking for a recruit? Do you have preferences?
 - a. Possibilities: nationality, age, background, location of residency, gender, personality traits, cultural traits, etc.
 - b. Explain how those factors affect your choices.
- 17. Do you currently have any vacant positions? If yes what and what skills are needed?

Focus Group Discussions with Students and Graduates of VTIs

OBJECTIVES

- Understand the perception of local youth towards VTI programs
- Understand the aspirations and concerns of local youth regarding employment
- Understand cultural and social factors affecting youth economic engagement, especially for women, IDPs and refugees

QUESTIONS

GENERAL OVERVIEW

- 1. Can you give us an overview of the situation in your area: Social, economic, political?
- 2. What are key challenges facing the community in your area today?
- 3. How was the overall situation impacted by COVID19?
- 4. What is the situation of youth and women in your area? Are they active? How?
- 5. What are key challenges that face women and youth? How did you enroll to this vocational program? (third party, relative advice, personal initiative, peer support, etc.)

VTI FOCUS

- 6. Why did you enroll? What are your expectations out of this program? (at the level of learning, opportunities, social bonding, etc.)
- 7. What are challenges to your presence at the VTI, and what motivates(ed) you to keep coming?
- 8. What are challenge specific to girls and women students? Do they face extra hurdles in attending the program or finding employment?
- 9. What are challenges specific to IDPs and refugee students? Do they face extra hurdles in attending the program or finding employment?
- 10. How much are you learning? Do you feel you will use what you learned?
- 11. What are other ways you have learned things that would help you in your future work, other that the vocational training? Where and how did you learn the most?
- 12. Has the vocational training increased your chances of finding a job? Do you have hope that it will? How?
- 13. Has the vocational training increased your interest in starting your own business? How?
- 14. How and where will you look for a job?
- 15. What are the challenges that you could face in finding a job or starting your own business?
- 16. What are the skills that you need to find a job or start a business?
- 17. What companies/businesses are likely to recruit you as VTI graduates?
- 18. What are things you would like to see enhanced or changed in the vocational program? How will those changes affect your journey as a job seeker or entrepreneur? (duration, curriculum, teachers, location, etc.)

Business Survey

OBJECTIVES

- Understand the labor absorptive capacity in the pre-selected sectors
- · Identify skill gaps from employers' point of view

OUESTIONS

- 1. Name of the business
- 2. Where are you located? (select one)
 - a. Bor
 - **b.** Jubek
 - c. Rumbek
 - d. Torit
 - e. Yambio
- 3. What sector do you operate in? (select one)
 - a. Agriculture and agro-food processing
 - b. Herding
 - c. Hotels
 - d. Restaurants
 - e. Construction
 - f. Trading (clothing and household appliances)
 - g. Industry and artisanry
 - h. Health
 - i. Other, specify
- 4. Which sub-sector do you operate in?
 - a. [Insert text]70
- 5. What year did you found your business?
 - a. [Insert number]
- 6. Are you registered in the chamber of commerce or other official entity?
 - a. No
 - b. Yes, specify
 - If no: What are regulatory challenges that stop you from registering: (select multiple)
 - a. High registration fees
 - b. Difficult financial reporting mechanisms
 - c. Unaffordable taxes
 - d. Other, specify
 - If yes: What are challenges that you face as a registered entity? (select multiple)
 - a. High registration fees
 - b. Difficult financial reporting mechanisms
 - c. Unaffordable taxes
 - d. Other, specify
- 7. Who owns the largest share in the business?
 - a. Foreign nationals
 - b. South Sudanese nationals
- 8. Main challenges that your business faces: (select multiple)
 - a. Political instability and conflict
 - **b.** Corruption
 - c. Security threats, (theft and crime

⁷⁰ Based on the testing of the tools, this question might have a closed list of sub-sectors for businesses to select from instead of the open-ended text field

- d. Little access to finance and business support services
- e. Electricity Outages
- f. Difficulties in transportation and access to markets
- g. Lack of adequate human resources
- h. Other, specify
- 9. How did the situation of Covid-19 affect your work? (select multiple)
 - a. Decrease in production/sales
 - b. Decrease in number of employees
 - c. Decrease in wages
 - d. Close down operations for a certain period of time
 - e. Adjust services and products to emerging context
 - f. Decrease in liquidity
 - g. Changes in internal practices, specify.
 - **h.** Other, specify?
- 10. How many permanent employees do you have?
 - a. [Insert number]
- 11. How many temporary employees do you have?
 - a. [Insert number]
- 12. How many women employees do you have? (select one)
 - **a.** None of the employees
 - b. Less than half the employees
 - c. Half or More than half the employees
 - d. All employees
- 13. How many South Sudanese employees do you have? (select one)
 - a. None of the employees
 - b. Less than half the employees
 - c. Half or More than half the employees
 - d. All employees
- 14. Will you hire more employees in the upcoming year?
 - a. Yes
 - **b.** No
- 15. What are skills that your business is missing? (select multiple)
 - a. Technical skills specific to your sector
 - b. Management skills to manage business operations
 - c. Soft skills and life skills related to communication and attitude
- 16. Specify technical skills that you need for your business
 - a. If the sector is agriculture and agro-food processing:
 - i. Land and soil preparation
 - ii. Crop variety and needs
 - iii. Pests disease management
 - iv. Climate adaptation
 - v. Irrigation
 - vi. Handling and storage
 - vii. Working with agricultural machinery
 - viii. Quality insurance
 - ix. Food processing and drying
 - x. Grain milling
 - xi. Production of animal products
 - xii. Packing and packaging
 - xiii. Other, specify
 - b. If the sector is herding:
 - i. Herding methods
 - ii. Animal husbandry and breeding
 - iii. Cattle management
 - iv. Animal health management
 - v. Other, specify
 - c. If the sector is hotels:
 - i. Hotel management

- ii. Front desk management
- iii. Bookings
- iv. Housekeeping
- v. Hygiene and quality management
- vi. Maintenance works
- vii. Food service
- viii. Food preparation
- ix. Other, specify

d. If the sector is restaurants:

- i. Restaurant management
- ii. Food service
- iii. Cooking
- iv. Quality management
- v. Other, specify

e. If the sector is construction:

- i. Plastering
- ii. Painting and decorating
- iii. Tiling
- iv. Plumbing and pipefitting
- v. Masonry and concrete
- vi. Refrigeration (AC)
- vii. Interpreting construction drawings
- viii. Other, specify

f. If the sector is trading (clothing and household appliances)

- i. Retail store management
- ii. Sales and product understanding
- iii. Stock management
- iv. Record keeping
- v. Market analysis
- vi. Other, specify

g. If the sector is industry and artisanry

- i. Tailoring, sewing and emroidery
- ii. Soap-making
- iii. Blacksmithing and metal works
- iv. Carpentry and woodworking
- v. Electrical repairs
- vi. Mechanical repairs
- vii. Other, specify

h. If the sector is health

- i. Nursing
- ii. Midwifery
- iii. Other, specify
- i. If the sector is other,
 - i. [please specify]

17. Specify business skills that you need for your business

- a. Marketing and sales
- **b.** Accounting and finance
- c. Operations and logistics management
- d. Strategic planning and business development
- e. Compliance with regulations
- f. Human resource management
- g. Other, please specify

18. Specify soft and life skills you need for your business

- a. Basic computer skills
- b. Basic literacy and numeracy
- c. Communications
- d. Teamwork
- e. Decision-making
- f. Respect for diversity
- g. Time management
- h. Other, please specify

19. What are main problems in hiring new workers? (select multiple)

- a. They do not have the technical skills required for the business
- b. They do not have the business skills required for the business
- c. They do not have the soft skills required for the business
- d. They lack innovative input
- e. They lack motivation and positive attitude
- f. They require high salaries
- g. They leave the business within a short period of employment
- h. Other problems, specify

20. What are the 3 most important factors to consider when hiring new workers? (select three)

- Age
- **b.** Nationality
- c. Gender
- d. Recipient of relevant TVET training
- e. Secondary education graduate
- f. Relevant professional experience
- g. Honesty and trustworthiness
- h. Motivation and positive attitude

21. Which of the following support services does your business have access to? (select multiple)

- a. Finance and micro-finance institutions
- b. Training center
- c. Business development coaching
- d. Other, please specify

ANNEX II - SAMPLING METHODOLOGY

The sampling methodology uses convenient stratified sampling to generate sample sizes that allow for understanding the labor market trends in the five regions of Juba, Rumbek, Bor, Yambio and Torit. The sample is stratified by region and sector, and convenient sampling is used to reach businesses needed in different sectors through referrals and onsite recommendations. Furthermore, the sample size in each region is calculated proportionally to the business population size as detailed below.

The primary sampling unit of the study is an establishment. The establishment is a physical location where business is carried out. Businesses without a physical location will thus be excluded from the sample, as they have little potential to employ youth. The sample size accounts for the region, sector of operation and business size, as detailed below.

REGION

Regional stratification is defined in 5 regions: Juba, Rumbek, Bor, Yambio and Torit. Given that the number of businesses in each of the 5 regions is unavailable, the sampling methodology distributes a nationally representative sample over the 5 regions in a way that is proportionate to their county population estimates from the 2008 South Sudan population census. A minimum sample size of 60 businesses will be adopted for each region, in order to allow for data analysis based on sectors of operation and size of business.

SECTOR OF OPERATION

According to the National Bureau of Statistics, out of 7,333 surveyed businesses in 2010⁷¹:

- 69.8% worked in the wholesale and retail trade sector, including the repair of motor vehicles and motorcycles;
- 14.1% worked in the accommodation and food services sector;
- 4.9% worked in the human health and social work activities sector;
- 2.7% worked in the manufacturing sector.

Those numbers only reflect formal businesses, and they do not account for informal ones, hence the underrepresentation of businesses in the agricultural sector, in which most of South Sudan's population is employed. The sampling methodology addresses all sectors of operations, including agriculture and agro-food processing, accommodation and food services, construction, trading and industry and artisanry. The sampling methodology has a specific focus on the trade, hospitality and industry and artisanry sectors, as interviewees in the inception phase highlighted these sectors' higher potential for labor absorptivity in the coming phase.

BUISNESS SIZE

Businesses in South Sudan have an average of 2.7 employees per business, with a standard deviation of 15.5.⁷³ Size information collected during the survey process was then used to categorize these businesses.

UNIVERSAL ESTIMATE

The number of businesses in South Sudan was estimated as follows:

- An estimated total of 17,001 new businesses registered in South Sudan between 2011 and 2016⁷⁴;
- Estimating that the same number of new businesses registered in the period between 2014 and 2016, as in the period between 2016 and 2019, the total number of new businesses in South Sudan between 2011 and 2019 would be estimated to be around 21,486;

⁷¹ The Republic of South Sudan National Bureau of Statistics (2010). *Business Survey Listing Form 2010*. Available at: http://ssnbs.microdatahub.com/index.php/catalog/10/datafile/F1

⁷² World Bank. (2019). South Sudan: Linking the Agriculture and Food Sector to the Job Creation Agenda.

⁷³ idim

⁷⁴ World Bank (2016). *World Bank's Entrepreneurship Survey and Database*. Available at: https://data.worldbank.org/indicator/IC.BUS.NREG?locations=SS

- Given that the average age of a business in South Sudan is 4 years,^{75 76} the number of new registered businesses between 2011 and 2019 is an over-estimate of the number of registered businesses in South Sudan in 2020;
- The above calculations only account for formally registered businesses. In order to account for the informal economy, the sampling methodology uses estimates for the distribution of formal and informal businesses in comparable countries.⁷⁷ If 90% of businesses in South Sudan are estimated to be informal, the total number of businesses in South Sudan would be approximately 214,860.

SAMPLING FRAME

A nationally representative sample, with a margin of error of 5%, and a confidence level of 95% would need to consist of 384 businesses. If the businesses are distributed across the 5 regions, and keeping a minimum of 60 per region as detailed above the sample would be as follows:

Region	Number of surveys
Juba	148
Bor	88
Yambio	60
Rumbek	60
Torit	60
Total	416

Therefore, the minimum sample size is 416 establishments to get a nationally representative sample, based on the extrapolation of data from the five cities. The sectors of operation and the size of businesses were monitored in real time once data collection started to ensure a higher representation of labor absorptive sectors and larger businesses.

⁷⁵ The Republic of South Sudan National Bureau of Statistics (2010). *Business Survey Listing Form 2010*. Available at: http://ssnbs.microdatahub.com/index.php/catalog/10/datafile/F1

⁷⁶ World Bank (2014). Enterprise Surveys South Sudan Country Profile.

⁷⁷ World Bank Blogs (2020). Insights from enterprise surveys: Including the informal economy in policy responses to COVID-19 (coronavirus). Available at: https://blogs.worldbank.org/developmenttalk/insights-enterprise-surveys-including-informal-economy-policy-responses-covid-19