



Challenges of Transitioning from Education to Self-Employment: A Study of TVET Graduates in Transportation and Leather Processing Programmes in Tanzania

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Abstract: *The purpose of this study was to assess the duration of job searches and the challenges encountered by self-employed Technical and Vocational Education and Training (TVET) graduates in the transport and leather processing sectors in Tanzania. The study was conducted using tracer study reports of the National Institute of Transport (NIT) and the Dar es Salaam Institute of Technology (DIT) Mwanza Campus, focusing on TVET graduates of the academic years 2020/2021, 2021/2022, and 2022/2023. A documentary review methodology was employed. The target population of the study was TVET graduates in transport and leather processing programmes. The sample comprised graduates who provided comprehensive information regarding their job search duration and the challenges associated with self-employment. Quantitative data analysis was employed to discern trends and patterns. The key findings revealed that graduates from the DIT Mwanza Campus experienced notable improvements in employment outcomes, with 84.8% securing employment within six months during the 2022/2023 academic year. Conversely, NIT graduates encountered extended job search periods, with 39.4% taking over 12 months to secure employment. Concerning self-employment, graduates from DIT Mwanza Campus primarily faced challenges related to funding, while NIT graduates contended with inadequate marketing conditions and a deficiency in entrepreneurial skills. The study recommends the integration of comprehensive business education and entrepreneurship courses within TVET curricula to equip graduates with essential competencies for effective business management. Additionally, it is imperative to establish collaborations with financial institutions to facilitate access to grants and loans, alongside creating market access programs, to enhance employment outcomes for self-employed TVET graduates.*

Keywords: *TVET graduates, Job search, Self-employment, Transport, Leather processing*

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1. Introduction

Studies in both developed and developing countries have demonstrated that the transition from education to employment is a multidimensional process influenced by various factors, including industry demand, skills

relevance, and economic conditions (World Bank, 2020). Transition into the labour market involves the acquisition of a job, usually linked to the skills and qualifications obtained through education, and the adaptation to the labour market's demands (Breen, 2005). This transition involves graduates being employed on contract, permanent

or part-time bases, self-employed, internships, unemployed and seeking job or unemployed and not seeking job. These variations highlight that the transition from education to employment is often accompanied by various challenges, such as skills mismatch and the labour market's absorption capacity(Allen, 2001).

Technical and Vocational Education and Training (TVET) is recognised as a crucial means for preparing graduates with practical and technical skills to meet labour market demands. TVET programmes are designed to facilitate and enhance the development of skills to meet the changing needs of the industry and economy(UNESCO -UNEVOC, 2016). African countries have focused on TVET as a critical strategy for addressing unemployment, alleviating poverty, and bridging skills gaps. African countries like Kenya, Tanzania, and South Africa have implemented extensive policies designed to reform their TVET systems to better align with the labour market needs(Oketch, 2017). These strategies include upgrading infrastructure, modernising curricula, and fostering stronger partnerships between TVET institutions and industry sectors. However, the successful integration of TVET graduates into the workforce remains challenging. Despite efforts to strengthen TVET systems, youth unemployment rates remain high, particularly in developing countries (International Labour Organization, 2022).

Transitioning from education to employment among TVET graduates in Tanzania is still challenging. A major challenge facing TVET graduates in Tanzania is the mismatch between the skills acquired during training and the actual demand of the labour market(Wickramasinghe & Perera, 2019). This skill mismatch is due to factors such as ineffective curricula and inadequate facilities (Munishi, 2016). The skill mismatch is further influenced by rapidly changing technology, which creates demands for new skills in enterprises and business environments(Bitegera & Bisanda, 2022). To address these challenges, the Tanzanian government has undertaken several initiatives, including strengthening partnerships between TVET institutions and industries, continuously updating curricula, and involving industry in TVET development. The government has also worked with development partners to establish specialized TVET institutions in key sectors such as transportation, renewable energy, and agro processing, which are critical for economic development(Komba & Billett, 2020). Despite these initiatives, the Tanzanian TVET system still faces significant challenges in addressing youth unemployment and meeting industry demands.

In Tanzania, approximately 90 percent of the employed population is self-employed, primarily in the informal sector, while less than ten percent of the population is in wage work(Haji, 2015). This highlights the failure of the

economic system to generate a sufficient number of formal job opportunities. A significant number of TVET graduates in Tanzania secure jobs in the informal sector, particularly in fields like construction, automotive repair, and small-scale manufacturing. This trend often arises from the scarcity of formal employment opportunities, prompting individuals to turn to the informal sector for self-employment and entrepreneurial ventures. However, working in this informal sector is frequently marked by unstable income and a lack of social security benefits(Mwinuka, 2021).

In Tanzania, several studies have been conducted on the employability of TVET graduates, focusing on skills mismatch TVET and industries. A study conducted by Msigwa (2022),revealed that many TVET graduates face difficulties in finding employment due to a lack of soft skills and limited exposure to practical, industry-based training. It has been noted that graduates of TVET programs lack essential support for navigating the job search process and connecting with potential employers, leading to increased rates of unemployment or underemployment among them(Lugembe, 2019). Also, numerous employers indicate that TVET graduates often do not possess the necessary skills required for industries, especially in growing sectors like information technology, renewable energy, and advanced manufacturing(Mgaiwa, 2022).

While prior research has primarily examined the general employability of TVET graduates, there exists a notable gap in the literature specifically addressing the challenges encountered during the transition from education to self-employment, particularly evident in sectors such as transportation and leather processing. This study assessed the duration of searching for employment and challenges faced by self-employed TVET graduates in transport and leather processing programmes using graduate tracer studies of the National Institute of Transport (NIT) and the Dar es Salaam Institute of Technology (DIT) – Mwanza Campus of the academic years 2020/2021, 2021/2022 and 2022/2023. This research study was set to address the following research questions.

1. What is the duration of job search among TVET graduates in transport and leather processing programmes?
2. What are the challenges faced by self-employed TVET graduates in transport and leather processing programmes?

This research presents empirical findings that can guide policymakers and educational stakeholders in enhancing the employability of graduates from Technical and Vocational Education and Training (TVET) programs. Using data from graduate tracer studies, the study provides insights rooted in genuine graduate experiences, thereby

grounding its conclusions in real-world contexts. Furthermore, it contributes to the academic discourse on strategies for mitigating youth unemployment, particularly within the transportation and leather processing sectors.

2. Literature Review

2.1 Theoretical Review

The development of human capital through education and the transition to employment has been a key focus of numerous theoretical frameworks. Two prominent theories that significantly inform this study are the Human Capital Theory and the Transition System Theory.

The Human Capital Theory, initially proposed by economist Theodore W. Schultz in 1961, was further developed by Gary S. Becker in 1964. This theory posits that investments in education and training enhance individuals' skills, knowledge and capabilities, which in turn increase their productivity and employability in the labour market (Becker, 1993). In the context of TVET graduates, the Human Capital Theory provides a framework for understanding how TVET contributes to the development of employability skills that meet the labour market demands.

TVET programmes are designed to develop skills that meet the changing needs of the labour market. These skills include both technical and soft skills that meet labour market needs. Studies revealed that the acquisition of relevant skills through TVET enables graduates to contribute effectively to productivity and innovation in various sectors of the economy (Mgaiwa, 2022). The Human Capital Theory suggests that a skilled workforce is essential for the competitiveness of businesses and industries. This relates to the employability of TVET graduates.

Conversely, the Transition System Theory posits that the transition from education settings to employment is not a linear or uniform process, but instead, it follows structured pathways that are influenced by the interaction between education systems and labour market dynamics (Raffe, 2008). These pathways vary by country and depend on how well the education system equips students with skills that match the labour market needs, the availability of career guidance, and labour market conditions and policies. Researchers have found that in countries where the transition system is less structured, young people experience greater difficulties in securing stable employment, particularly in developing countries or regions with high youth unemployment (Bynner, 2005).

In the context of Transition System Theory, TVET systems are designed to create more structured pathways for graduates to transition into employment. This approach is

aimed at enhancing employability by aligning the education provided with the skills and competencies demanded by employers, thus fostering a seamless integration of graduates into employment trajectories. In developing countries such as Tanzania, the transition from TVET to employment is still challenging due to skills mismatch. This makes approximately 90% of young people self-employed (Haji, 2015).

According to the International Labour Organization (2015), self-employment refers to a situation where individuals work for themselves rather than an employer and are responsible for paying their taxes, social security contributions and complying with relevant regulations. According to Schoar (2010), self-employment frequently serves as a means for individuals to avoid unemployment, particularly in environments where formal job opportunities are scarce. Nevertheless, it may also indicate the absence of viable employment alternatives. Self-employment is characterized by several challenges that relate to human capital development and structures of transition to employment.

2.1.1 Duration of Job Search Among TVET Graduates

Studies have shown that the average time TVET graduates spend searching for jobs tends to be shorter in developed countries compared to developing nations. A study by Müller & Wolter, (2020) found that many TVET graduates in Switzerland secured employment within six months of graduation. In Germany, where the dual education system is well-established, a majority of TVET graduates say they find jobs rapidly after finishing their training, with many even receiving job offers before graduation (Wydra, 2021).

In contrast, in developing countries like Tanzania, a report by the National Council of Technical Education indicated that among TVET graduates from 2014/2015 to 2018/2021, those in the transport and logistics sector experienced the longest job search duration, averaging 20.2 months, followed by tourism and hospitality at 17.3 months. Conversely, Information and Communications Technology (ICT) graduates found employment the quickest, averaging 4.6 months (National Council for Technical Education, 2020). Additionally, Kakengi (2019) reported that 41% of TVET graduates were unemployed for less than a year, with 29% securing employment in under a month, 19% unemployed for one to two years, and 11% taking over two years to find a job.

2.1.2 Challenges Facing Self-Employed TVET Graduates

Self-employment is a common outcome for many TVET graduates, particularly in contexts where formal employment opportunities are limited. The challenges

faced by self-employed TVET graduates vary significantly between countries. In Sweden, TVET graduates encountered challenges such as market competition and regulatory frameworks, yet they had access to financial support and entrepreneurial training. In countries such as the Netherlands, graduates of TVET have indicated that they have access to mentorship programs that offer support for launching and maintaining businesses (Van den Berg, 2020). Additionally, a study by Salman et al., (2020) found that self-employed TVET graduates in Malaysia and Indonesia face challenges, including lack of financial capital, limited knowledge of social media, and difficulties in maintaining business operations in weak economic conditions.

In developing countries, self-employed TVET graduates encounter considerable challenges, primarily attributed to restricted access to financial capital, insufficient training in essential business skills, and adverse market conditions. A study conducted by Msigwa and Kipesha (2021) in Tanzania revealed that many self-employed TVET graduates face challenges in expanding their businesses due to a lack of financial resources and difficulties accessing credit. Another study in Ghana found that self-employed TVET graduates faced challenges such as high operational costs, limited access to modern technologies, and inadequate support from government programmes aimed at promoting entrepreneurship (Owusu-Mensah et al., 2020). Adebisi et al. (2020), observed that in Nigeria, although self-employment presented a viable opportunity for TVET graduates, a majority did not possess the essential entrepreneurial skills required to effectively manage and maintain their businesses successfully. These authors highlighted financial resources and entrepreneurial skills as major challenges facing TVET graduates in developing countries.

In contrast, a study conducted by Hailu (2012) in Ethiopia revealed that self-employed TVET graduates rejected the notion that the lack of start-up capital was a major factor for not being employed. It highlighted that self-confidence, a positive attitude towards risk-taking, and strong work effort were the most significant traits for self-employment success.

3. Methodology

3.1 Research Design

The researcher employed a document review methodology, specifically focusing on the analysis of the published tracer study reports from the National Institute of Transportation (NIT), which specializes in transport and logistics TVET programmes and Dar es Salaam Institute of Technology (DIT) Mwanza Campus, which specializes in leather processing TVET programmes. A quantitative approach

was employed to unveil significant trends, patterns and challenges encountered by TVET graduates in transition to self-employment.

3.2 Population and Sampling

The target population of this study was TVET graduates from NIT specializing in transport programmes and DIT-Mwanza Campus specializing in leather processing programmes. The sample was purposely selected and comprised graduates who provided comprehensive information regarding their job search duration and the challenges associated with self-employment.

3.3 Data Collection

The data source for this study was tracer study reports from NIT and DIT Mwanza Campus, which covered the graduates of the academic years 2020/2021, 2021/2022, and 2022/2023. The reports contained detailed information on graduate demographics, employment status, self-employment, job search, and the relevance of training programs to industry demands. This study focused on information about job search and self-employment. The study focused on information provided related to the duration of job search and challenges faced by self-employed graduates.

3.4 Data Analysis

The data collected were analysed descriptively using quantitative techniques. Percentages were calculated to determine the trends in different years. Challenges faced by self-employed graduates were grouped thematically to enable comparison between the two institutions. Microsoft Excel software was primarily used in data analysis.

3.5 Ethical Considerations

Since this study was based on document analysis, several ethical considerations were upheld to guarantee the integrity and responsible use of data. The researcher used the documents in a manner consistent with their original purpose and context. All used tracer study reports were cited in line with ethical and academic standards. Additionally, all the findings were reported accurately and objectively.

4. Results and Discussion

4.1 Job Search Duration Among TVET Graduates in Transport and Leather Processing

The first objective of this study was to assess the duration of job search among TVET graduates in transport and

leather processing sectors. Tables 1 and Table 2 below provide a summary of the findings from DIT Mwanza Campus and NIT.

Table 1: Duration of Job Search for Graduates at DIT Mwanza Campus

Duration	2020/2021	2021/2022	2022/2023
0-6 months	11(68.7%)	34(38.6%)	246 (84.8%)
7-12 months	4 (25.0%)	9(10.2%)	11(3.8%)
More than 12	1(6.3%)	45 (51.1%)	33(11.4%)
Grand Total	16	88	290

Source: DIT Mwanza Tracer Study Reports 2020/2021, 2021/2022, and 2022/2023

Table 2: Duration of Job Search for Graduates at NIT

Duration	2020/2021	2021/2022	2022/2023
0 -6 months	67(40.3%)	82 (35.0%)	125 (33.2%)
7-12 months	81(48.6%)	106 (45.3%)	103(27.4%)
More than 12 months	19 (11.1%)	46(19.7%)	148(39.4%)
Grand Total	167	234	376

Source: NIT Study Reports 2020/2021, 2021/2022, and 2022/2023

The finding revealed that the number of employed TVET graduates increased significantly in leather processing TVET programmes compared to transport TVET programmes. The findings revealed a substantial disparity in the duration of job searches between DIT-Mwanza and NIT graduates, particularly in the 2022/2023 academic year. DIT-Mwanza recorded a remarkable increase in the employment rate of its graduates, with 84.8% securing jobs within six months, up from 38.6% in the previous year. This suggests significant improvements in job placement support or favourable market conditions for TVET graduates in leather processing programmes. In contrast, only 33.2% of NIT graduates found employment within the same timeframe.

Additionally, NIT graduates experienced greater challenges in securing timely employment, with 39.4% taking more than 12 months to find jobs in 2022/2023, compared to only 11.4% of DIT-Mwanza graduates. While DIT-Mwanza demonstrated a strong recovery from prior challenges, particularly in 2021/2022, NIT graduates continued to face a less favourable job market dynamic,

reflected in declining rates of employment within six months and an increase in longer job search durations. A study by the National Council for Technical Education in Tanzania revealed that transport and logistics graduates took the longest time to find employment, with an average of 20.2 months(National Council for Technical Education, 2020). A tracer study report by Ethiopia Technical University revealed that 60% of TVET graduates in leather and leather products technology TVET programmes found employment within 0-3 months, while 40% found within more than a year (Ethiopia Technical University, 2021).

4.2 Challenges Facing Self-Employed TVET Graduates in Transport and Leather Processing

Another objective of this study was to assess challenges faced by self-employed TVET graduates in transport and leather processing sectors. The findings are presented in Table 3 and Table 4 below.

Table 1: Challenges Faced by Self-Employed TVET Graduates of NIT

Challenge	2020/2021	2021/2022	2022/2023
Lack of business education and entrepreneurial skills	10 (9.1%)	30(20.3%)	50(22.3%)
Inadequate marketing conditions	31(27.3%)	48(32.1%)	94(35.4%)
Difficulty in getting funds	31(27.3%)	36(24.2%)	73(27.4%)
No difficulty	31(27.3%)	12(8%)	0(0%)
Other	0(0%)	23(15.4%)	35(12.9%)
Grand Total	113	150	268

Source: NIT Study Reports 2020/2021, 2021/2022, and 2022/2023

Table 2: Challenges Faced by Self-Employed TEVT Graduates of DIT Mwanza Campus

Challenge	2020/2021	2021/2022	2022/2023
Difficulty in getting funds	6(40.0%)	10 (20.0%)	55 (74.3%)
Inadequate marketing conditions	4(26.7%)	19 (38.0)	4(5.4%)
Lack of working equipment and raw materials	2(13.3%)	17 (36.0%)	3(4.1%)
Others	3(20.0%)	4(6.0%)	12(16.2%)
Grand Total	19	50	83

Source: DIT Mwanza Tracer Study Reports 2020/2021, 2021/2022, and 2022/2023

The findings in Table 3 and Table 4 above reveal that TVET Graduates from DIT Mwanza Campus are experiencing increasingly severe funding challenges, with the percentage of those affected rising dramatically from 40.0% in the 2020/2021 academic year to 74.3% in 2022/2023. In comparison, graduates from NIT also report difficulties related to funding, but these are less dominant compared to the challenges related to market access and the adequacy of their business education. NIT graduates consistently encounter obstacles in effectively marketing their services or products, with this challenge rising from 27.3% in 2020/2021 to 35.4% in 2022/2023. Conversely, at DIT Mwanza Campus, the prevalence of this challenge has markedly decreased over the same period, from 26.7% in 2020/2021 to merely 5.4% in 2022/2023. The challenge of a lack of business education and entrepreneurial skills remains particularly significant for NIT graduates, whose reports of this issue have increased from 9.1% in 2020/2021 to 22.3% in 2022/2023. In stark contrast, graduates from DIT Mwanza Campus do not identify this as a major concern. Furthermore, NIT graduates have reported an increasing array of challenges, with the 2022/2023 data indicating that no graduates experienced a lack of difficulties, a stark shift from the 27.3% of graduates reporting no issues in 2020/2021. Meanwhile, graduates of DIT Mwanza Campus have shifted towards a primary focus on funding complications over time, with a decrease in reports of other challenges such as inadequate equipment or marketing deficits. According to Oketch (2017), among the significant challenges facing self-employed TVET graduates was a lack of access to capital and financial resources. A study of graduates in Rwanda

revealed challenges faced by TVET self-employed graduates in energy, transport and agro-processing sectors, including lack of collateral, scarcity of resources, and lack of support for entrepreneurs (Ministry of Public Service and Labour, 2024). These findings are also supported by McGrath and Powel (2017), who posed that although TVET graduates are equipped with technical skills, many lack business and entrepreneurial knowledge necessary to run a successful enterprise.

These findings highlight the critical need for reforms in TVET curricula to include enhanced training in business and entrepreneurial skills and establish supportive mechanisms for TVET graduates related to market access and funding opportunities. It is essential that policymakers and educational institutions take proactive measures to address these challenges to improve employment outcomes for self-employed TVET graduates.

5. Conclusion and Recommendations

5.2 Conclusions

This study revealed significant differences in job search outcomes and challenges among TVET graduates in transport and leather processing TVET programmes from the two institutions. Graduates from DIT Mwanza Campus who focused on leather processing TVET programmes experienced a significant improvement in their employment outcomes over the years. The majority secured employment opportunities within six months in the year 2022/2023. On the other hand, graduates from NIT

specializing in transport TVET programmes have experienced little change in their employment outcomes, with a significant portion facing delays in finding jobs.

However, a primary challenge of self-employment DIT Mwanza TVET graduates was mainly funding issues. In contrast, NIT self-employed graduates reported issues related to insufficient marketing conditions and a lack of business education and entrepreneurial skills, which have negatively impacted their ability to succeed in entrepreneurship.

5.2 Recommendations

Based on these findings on the duration of job search and challenges faced by self-employed TVET graduates, the following recommendations can be made:

1. TVET institutions should integrate comprehensive business education and entrepreneurship courses into their curricula. The focus would be on equipping graduates with essential skills for effectively marketing their products and services and managing their enterprises sustainably.
2. TVET institutions and policy makers should establish and enhance potential partnerships with other stakeholders and financial institutions to develop grants, loans, and micro-financing initiatives specifically for TVET graduates.
3. TVET institutions should consider establishing market access programs that connect graduates with industries, markets, and consumers. This could be done through incubation and mentorship programmes and strategic industry partnerships, ultimately bridging the gap between educational outcomes and labour market needs.

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