



Understanding Carpentry Trained Youths' Livelihood: Evidence from Bukoba, Tanzania

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Abstract

Carpentry provides youths with access to income generating opportunities, which improve their quality of life through the products they create. Consequently, it enhances the livelihoods of these youths. This study aimed to understand the livelihood of carpentry trained youths in Bukoba Municipality in Tanzania. Specifically, the study sought to identify the sources of livelihood for these youths and analyze the role of carpentry in contributing to their livelihoods. A descriptive research design was adopted. The study used a sample of 45 respondents. Semi-structured interview was used to collect data, which were then analysed through thematic analysis. The findings indicated that the livelihoods of carpentry-trained youths relied on carpentry. Besides, the youths were able to accrue assets through their carpentry work, including work plots, permanent houses, transportation, barber shops, work tools and kiosks. Furthermore, carpentry was a source of income that catered for the youths' family service bills. The study concludes that carpentry results in stable financial earning avenues for youths, enhancing their financial stability and contributing to societal sustainability and well-being.

Keywords: Carpentry, entrepreneurship, youths' training, youths' livelihood, youths' income, vocational education and training

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Introduction

Carpentry has been considered as potential and income generating work by both rural and urban communities. Like other vocational education and training (VET), carpentry was one of well-publicized interventions designed to provide appropriate skills for rural and urban informal sector settings, aiming to improve life either employment or self-employment (Nuwagaba, 2012). Vocational training catalyzes employment opportunities through increased investment and job creation (Esmail & Sakwari, 2021; Nuwagaba, 2012) also Machumu et al. (2016), add that most of VET programmes provided to youths are labour-market-driven, demand-driven and offer self-employment opportunities. Moreover, carpentry is essential for self-employment among many youths in the community, as most of VET graduates tend to establish their own businesses. This is facilitated by the availability of forestry that provides raw materials for carpentry (Esmail & Sakwari, 2021). Carpentry skills comprises and aggregate of several other skills, including masonry, welding, tailoring, plastic arts, mechanics, shoe making to mention a few. This diversity increases yield and multi-faceted production compared to other trades. The focus of this study was to concentrate on carpentry as a skill. Carpentry products help the youths to generate profit and assist other people in reducing household poverty (Lyimo, 2016). This does not mean that other vocational skills are less significant to youths' livelihood and income stability. As it stands, youths tend to specialize to a particular vocational skill on the basis of its merit in income generation (Aloyce, 2011).

According to Lyimo (2016), carpentry is one of the oldest construction trades in the World and one of the most resourceful projects. Carpenters develop structures by building and installing frameworks. They also build doorframes, stairways, rafters, partitions and various other wooden structures. Carpentry has been categorized into commercial and industrial sectors. Historically, in 1960s, a number of vocational education and training (VET) provisions were established globally and developed in different parts of the world, including America, Asia, Europe and others. For instance, in the early 20th century, European countries like French and Germany implemented a dual educational system which

combines apprenticeships in the company and vocational education at a vocational school in one course. In the same way, Australia established the VET system to produce competent and skilled individuals (Chonjo, 2018). Among other objectives, it aimed at improving livelihoods and fostering economic development. In Tanzania, the major sector for youth livelihood is agriculture. Mushi (2009) indicates that carpentry was the most popular trade during colonial era. The sector assured the supply of furniture, roofing works and other facilities under the supervision of highly trained colonial counterparts. In 1938, there were carpentry enrollees 30,980: 15 for metal work, 124 for tailoring, 23 for printing, 18 for masonry and 9 for rural industry. Currently, the informal sector has contributed to increased number of employment opportunities among youths, with 65.2 percent of youth population is employed in this sector. The informal sector is the second-largest employer, accounting for 23.3 percent employment. This does not mean other skills are neglected; they also contribute to livelihoods to a smaller extent. These activities include varieties of vocational skills (National Bureau of Statistics, 2015).

From the colonial governments (the German and British administration), the missionaries provided training for both vocational education and skills. This role was carried over to the post-independence period during which policies for improvement of vocational education and skills training were given even greater emphasis by the newly acquired national government. VET gathered a lot of momentum after the enunciation of the policy of Education for Self- Reliance. It was the time when education providers were required to impart knowledge and skills among recipients.

For example, carpenters develop structures by building and installing the framework. Additionally, they build doorframes, stairways, rafters, partitions and other products made from wood. Carpentry has been categorized into commercial and industrial forms of carpenters. For example, commercial carpenters build and remodel offices, schools, hotels, hospitals and other commercial structures. In contrast, industrial carpenters work on civil engineering projects where they build footings, partitions and concrete forms. The activities carpenters do can fall under commercial and/or industrial carpentry realms. Therefore, from the

flexibility in carpentry work is a multi-sectoral endeavor, and thus it has a broader spectrum in improving individual's livelihood. In terms of income, it is one of the most secure professions within the construction industry. For instance, residential carpenters specialize in building and remodeling single-family homes and townhomes (Prasetya & Rosdiana, 2018a). In view of this, it is considered as helpful in contributing to youths' livelihood. This happens through different skills from carpentry, an individual applies in a number of activities. Lyimo, (2018) underscores that the average monthly income for carpenters in Tanzania is just under \$45,000. However, carpenters with specialized skills, or who own their own business can earn quite a bit more compared to those who are not specialized.

Alhasan and Tyabo (2013) assert that carpentry enhances youths' access to income generating opportunities, which has improved youths' quality of life. The youths achieve this through making products from wood. The products are such as tables, doors, sofa sets, cupboards, chairs and stools. Despite the possibilities to earn income from carpentry, Kinyaduka et al. (2019) establish that circumstances may hinder professionals from executing their obligations as expected besides everything needed to do the activity being in place. Furthermore, Heikkinen (2014) affirms that enlightening enterprise development, employability and individual livelihoods specifically to youths is the only pathway to accommodate their skills for better livelihood through carpentry. Indeed, carpentry has more benefits over other trades.

Several scholars have studied carpentry as it relates to youths' livelihood. Studies on carpentry have been aggregating several other trades such as tailoring, lumbering, food and catering (Imoro & Nti, 2009; Olutumise et al., 2021). As it is, the studies violate the scientific principle of narrowing; Achiro and Mwesigwa (2022) reviewed the contributions of youths' livelihood programme in practice. John (2021) established how youth development funds contributed to the improvement of youths' livelihoods by generating activities that youths engaged in, thereby frustrating our understanding of youths' livelihoods specifically from carpentry. Youth is a priority group in many countries' societal well-being. However, recognising youth creativity, demands, innovation, and capacity to effect change in the community is another potential aspect that deserves support. Youth

are crucial actors, leaders, and partners when trained in specific areas of expertise such as carpentry, engineering, teaching, plumbing and masonry (UNESCO, 2014).

Defining and understanding youth from a single perspective is very challenging. We aim to apply an integrated approach characterised by several variables that differ from nation to nation, such as the relative sociocultural, demographic, institutional, psychological, political and economic contexts (Krishnan & Sethuramalingam, 2017). These integrated factors influence and shape youth and their personalities. The United Nations defines 'youth' as anyone aged 15 to 24, while Rojas (2020) considers youth to be those aged 14 to 29. In Malaysia, young are those aged 15 to 40. The Commonwealth Youth Programme defines youth as those aged 16 to 29. According to the African Youth Charter, 'youth' is defined both as a category delineated by the age range of 15 to 35 and as a social construct that encompasses biological and developmental processes (Worth, 2009; World Bank, 2007). The legal definition of youth in Tanzania varies depending on the specific purpose such as marriage (the Law of Marriage Act of 1971 allows a young person of 15 years to get married), voting rights, employment and criminal issues (URT, 2007). This outlook conflicts with the adolescence and reproductive health strategy, which discourages early marriages, particularly among young girls. Consequently, the Government of the United Republic of Tanzania created a harmonised definition of youth as 'young men and women from the age of 15 to 35'.

However, young people in challenging job markets are left in a state of 'transitional limbo,' unable to fulfill the social obligations, expectations, and responsibilities that come with becoming an adult (Burgess & Burton, 2010). Despite receiving training in various fields, some young people still struggle with unemployment. This situation demonstrates a lack of creativity, competence, and ability to create jobs. Then, there are young people in Bukoba who have received training in carpentry and appear to earn a living from their work, which is a topic worth investigating. In this study, we define 'trained youths' as empowered youths (aged 18-35 years in our context) with specific knowledge, skills and competencies, enabling them to be creative, competent and skilled to deliver expected outcomes. Building from the foregoing definition, we define carpentry-trained

youth as young people developed and empowered in several skillsets related to woodworking that enable them to generate income for their sustainable livelihoods. It should be noted that every society has a social structure, procedures and fabric that teach its young people specific values and expectations. So as in Tanzania. Studies have done a good job in elucidating youths' livelihood, but not in carpentry trained youths' livelihood in particular. In this situation, the current study is important since it strives to understand carpentry trained youths' livelihood in the study area providing exemplary to the other areas globally.

With the above understanding, this study strives to achieve two research objectives, and to answer two questions. The objectives are: (i) to identify sources of livelihood among carpentry trained youths and (ii) analyse the role of carpentry in contributing to sources of livelihood among carpentry trained youths in Bukoba Municipality. The research questions are: (i) What are the sources of livelihood to carpentry trained youths in Bukoba Municipality? (ii) What role does carpentry play in contributing to sources of livelihood among carpentry trained youths in Bukoba Municipality?

Literature Review

Theoretical Basis

This study is guided by Human Capital Theory. Human Capital Theory advocates that vocation education and training results in generation of useful knowledge and skills, which culminate in increased production and income of individuals (Becker, 1964). Becker as a founder of the theory views human capital as similar to "physical means of production" like factories and machines: one can invest in human capital through education and training. As a result, education and training contribute to a return of an investment. Therefore, human capital is regarded as a means of production and additional output and is from supplemented investment. The theory provides explanations on patterns of lifetime earning of an individual. The human capital theory states that earnings begin when individuals are young considering that the young individuals are in a better position to invest in human capital, and at the same time being able to forego earnings during their investments.

Young individuals tend to invest more in human capital than older ones. This is because the young have longer working life than the older individual counterparts. Equally important, the older the workers grow, the less they invest in human capital and the less they become productive. From this understanding, without doubt, the earning of an individual when old declines. In addition, there might be depreciation of skills of an individual at the end of person's work life. Many experienced carpenters are trained regarding the finer things in carpentry life and, eventually, more complex responsibilities are handed to carpentry-trained youths as a long-term investment (Bednall et al., 2014). Consequently, it results in the downturn in average earnings near retirement age (Ehrenberg et al., 1996).

Although the assumptions on informal education are not at the locus of this paper, it might be a good idea to have a comprehensive understanding of the theory. As such, the professional experience at work is correlated with informal education, being considered a long-term investment. Because the educational effort is indirectly related to the preference rate in time and directly related to the school efficiency, the present study is interested on carpentry-trained youths' investment for their livelihood. The theory is relevant in that it emphasizes on the youths' investment in human capital, and it explains about returns from the same in terms of income through skills before retirement age. The theory can justify the findings of all objectives in this study.

Trained Youths

Trained youths—these are lads—and young men who have attended special classes and apprenticeship programs to sustain their individual and societal wellbeing. Trained youths possess fundamental and potential knowledge, competency and skills highly needed for societal sustainability. Trained youths earn a living from their expertise, such as carpentry, plumbing, football, playing games, piano and mechanics, to mention a few. This can be equated with youth work as advocated by Jeffs and Smith (2010), who argue that 'youth work was born and remains fundamentally a part of civil society (Davies & Batsleer, 2010; Jeffs, 1979; Jeffs, 2001). In other words, because they participate in a variety of community

activities that generate revenue, trained youths in vocational programs, for instance, tend to be safer and more economically active. In the past, church elders taught basic education to youths and provided them with mentorship in a variety of areas according to their interests (Smith, 2013). Through a variety of communal activities, churches in England and Ireland greatly influenced how adolescents will develop in the future. Notably, weekly services and evening lectures were offered by Anglican and Catholic priests to individuals who desired them. According to Sweatman (1867), cited in Smith 2013, the three 'R's (reading, writing and arithmetic) were taught to those who needed and wanted them. Most of the mentoring programs and instructions were voluntary with youths choosing to be involved in the work. Since the start of youth work, classes, talks, training programs and other chances to increase and develop their knowledge, experience, and skill set have all been crucial components for trained kids (Smith, 2013). Today's adolescents receive training through participation in formal, informal or non-formal education programs, internships, and/or apprenticeships. In this study, trained youths, therefore, can be defined as potential youths with skills, knowledge and competencies acquired to perform specialised activities such as carpentry, plumbing, hotels, gardening, cleaning, transportation, mechanics and home economics.

Sources of Livelihood among Carpentry-trained Youths

Aloyce (2011) conducted a study on the impact of Vocational Training Centers (VTCs) in improving youths' livelihood in Dodoma Municipality. The study aimed at assessing the relevance of vocational education training centers in improving youths' livelihood. According to this study, most of the youths had acquired skills on carpentry, catering, tailoring, mechanics and electrical installation. The youths earned not less than T.sh. 500,000/= through carpentry. The study did not study the youths trained in carpentry only, but those with aggregate of skills.

Moreover, Imoro and Nti (2009) conducted a study on Sustainable Vocational Skills Development for Poverty Reduction in Northern Ghana. Carpentry was found to be a useful programme in terms of employment generation and reduction of out-migration

through the cost-effective utilization of master craftsmen as trainers. Furthermore, there was effective utilization of skills among individuals who were in carpentry, and they excelled in business. Moreover, carpentry skills helped them open their own shops.

Apart from that, Mudzengerere (2013) conducted a study on Effective Project Management Skills for Sustainable Rural Projects: A Case Study of Mutuwa Carpentry Project in Mutoko District of Zimbabwe. The study establishes that carpenters had a high output of quality furniture from which they benefited. Furthermore, carpentry provided with opportunities related to servicing townships, schools and mission centres, thereby making products available at affordable prices. Indeed, carpentry can enable youths improve their livelihoods, provided other critical factors such as health, education, safety, and good governance are in place (Rufai et. al, 2021). This means that careful coordination, planning and implementation of these linkages is inevitable to obtain the intended outcomes.

Various strategies have been implemented for the purpose of assisting youths in acquiring physical assets such as equipment, tools and clothes among others. The strategies include special programmes to enhance access to assets for young people, programmes for access to land and housing as well as livelihood sustainability grants. For example, USAID and other donor agencies often assist youths living in rural areas get back on their feet by providing them with equipment or supplies after an armed conflict or natural disaster (De Guzman, 2020). The grants need to be carefully managed to avoid a series of common pitfalls. The pitfalls include flooding a limited local market with the same micro-enterprise start-ups such as carpentry or tailoring. As such, this may result in not understanding that capital goods can be re-sold, and the cash diverted for other purposes (Making Cents International, 2008). Since there is dearth and old literature on carpentry-trained youths and their sources of livelihood, this study strives to establish these sources.

Role of Carpentry to Sources of Livelihood among Youths Trained in Carpentry

Youths with a carpentry education can become proficient experts in woodworking and open doors to possibilities. Thus, the youths trained in carpentry may have an opportunity to earn their living through the production of facilities needed in educational institutions. In this way, the youths can improve their livelihood (Lowe & Tejada, 2019). Kiernan (2023) argues that carpenters with hands-on training possess both practical and theoretical expertise and skills of woodworking, enabling them to acquire valuable skills for working life. Research has indicated that youths trained in carpentry have a substantial role to play in offering chances for a living. These opportunities include are prospects for entrepreneurship, job creation, and skill development. Skilled carpenters can become financially independent by opening their own companies and providing services such as custom woodworking, renovations, and furniture manufacturing (John, 2021).

Furthermore, Ngowi et al. (2016) contend that the informal sector is the biggest employer and source of livelihood for youths in developing countries, despite its lack of co-ordination and standardisation. In addition, Charles (2015) observed that carpentry empowers youths economically through opening avenues for income generation, which have improved the quality of youths' life. Carpentry improves one's livelihood through self-employment or through being employed. This is to say, carpentry acts as a source of livelihood among youths.

In recent years, there has been a tendency to value more carpentry products from informal sector than those from the technical and vocational education and training (TVET) sector. This is because the products from the informal sector have been perceived as better than those of the formal sector (Monk et al., 2008). By TVET, we mean that programmes designed mainly to prepare students for direct entry into a particular occupation or trade (or class of occupations or trades) (UNESCO, 2014). To sum up, carpentry is an essential means of subsistence for skilled young people in Tanzania, encouraging sustainable practices, employment, and community development while also protecting cultural heritage. Accordingly,

because there is very scanty literature on the sources of livelihood for carpentry-trained youths, ; this study attempts to bridge this gap.

The Context of the Study

Tanzania is a country in East Africa, bordered by Burundi, Rwanda, Kenya, Ungada, Malawi, Mozambique, the India Ocean and Lake Tanganyika. Half of Tanzania's population is youth aged below 35 years (URT, 2022). Data shows that young people aged 15-34 are projected to increase from 17.8 million to 62.3 million by 2065 (URT, 1998, 2022). Tanzania boasts a youthful population, with 77 percent under 35 and 34.7 percent aged 15–35 (URT, 2022). As such, the population makes an engine to the sustainable development of the country. Youths in Tanzania, like in other low-income countries globally, form the majority and their major demands are employment, education, and skills (URT, 1998; URT, 2022). According to Tanzania's Vision 2025, the country will need a highly educated and skilled workforce to advance to a semi-industrialised middle-income economy.

In order to effectively address the nation's development difficulties and the position it to be competitive both regionally and globally, high-quality education is considered to be a crucial component of Vision 2025 (URT, 2021). For Tanzania to improve its human capital, significant investment is required (URT, 2016). Today, a sizable fraction of young people lacks the necessary skills, and many of them are unemployed – a confluence of conditions that depress the prospects for faster economic growth. It should be noted that, in Tanzania, carpentry is a well-known source of income in urbans, peri-urbans and rural areas, employing many youths as well as individuals of all ages (Lymo, 2026; Mudima, 2011; URT, 2021). This study was carried out in urban and peri-urbans of Bukoba Municipality. It involved the wards of Nyakanyasi, Hamugembe, Kashai and Rwamishenye. Bukoba Municipal council is situated in the Eastern part of Kagera Region and in the southern part of Equator with area of 947,000km². The area was selected due to the presence of borders with some districts which are bordering neighbouring countries like Rwanda, Uganda and Burundi where some youths get carpentry knowledge interchangeably.

Furthermore, there is a presence of industries in Bukoba Municipality, including 7 large scale industries, 12 medium scale industries and 130 small scale industries. Small-scale industrial activities also play a significant role in the town's economy. These activities include production of goods and commodities that were sold locally. The town is characterized by other activities, namely carpentry, water selling, seamstress, maize processing, brick making, tailoring and embroidery, masonry, and mechanical repair in cars and motorcycle and bicycles. However, carpentry was the major economic activity among the dwellers of the study area. Additionally, many of the town structures are at Lake Victoria basin surrounded by escarpments invariably decorated by pine trees, which are a good source of timber. The availability of enough trees and forests like Kyamunene, Maruku, Rubale and Ijuganyondo estate cypress pines trees which facilitates carpentry activities. Figure 1 shows the study area.



Figure 1. A Map of Bukoba Town, Rwamishenye Division

Methods

Research Approach and Design

This study used a qualitative approach. Qualitative approach is useful in exploring perspectives and meaning of experiences. This is to say, it draws insights and identifies social processes explaining behavioral meaning of people. The approach dwells in interaction between a researcher and the targeted population; thus, uncovering unanticipated information. The study adopted this approach to gather new information regarding the sources of livelihood among carpentry-trained youths. The study adopted descriptive qualitative research design to understand the sources of livelihood among carpentry-trained youths, as well as their monthly income and utilities. In this respect, the purpose was to understand the livelihoods of carpentry-trained youths in Bukoba Municipality. The design's relevance is supported by scholars (Rashid et al., 2019) as far as situation for this study is concerned.

Sample and Sampling Techniques

The targeted population of the study was carpentry-trained youths. Specifically, the study involved carpentry trained youths with the age ranging from 18 to 35 years in Bukoba Municipality. A smaller sub-set of youths in carpentry represented the total population of all youths in such a way that the knowledge gained on carpentry was representative of the entire group. The youths were assumed to have rich information on sources of livelihood among carpentry trained youths and had a good understanding of carpentry's contribution to these sources. The study involved forty-five (45) respondents to glean enough information. Carpenters in their workshops were categorized according to their age to identify those who were youths, relying on carpentry as the skill, this simplified sampling techniques.

In the current study, the expert sampling technique was applied to select carpentry trained youths. Thus, only youths trained in carpentry were included in the study, while older carpenters were excluded. Carpenters were only those who exceeded the youth age and not those who dealt with other trade skills in the workshop.

The study used interview guide as a data collection instrument, and it adopted semi-structured interview as a data collection method.

The purpose of using semi-structured interview for data collection was to obtain additional information during the interview process. The semi-structured interview was considered useful in drawing the required information from the respondents. This method was assumed useful in drawing information about the experience of carpentry-trained youths. Also, the method provided in-depth information about the sources of livelihood among carpentry-trained youths and role of carpentry in contributing to these sources. Additionally, these people had a lot of tasks to perform. Therefore, it was more feasible and meaningful for them to be interviewed than having them fill out questionnaires.

Data Analysis and Validation

The collected data on carpentry-trained youths were edited and coded, then classified and condensed for evaluation and tabulation. During analysis, several procedures were followed, as many carpentry-trained youths affirmed during interviews that they accrued various assets from carpentry as a job. This was important because it helped the researcher to draw a meaningful conclusion based on the analysed data. Thematic analysis was used to analyse the data from carpentry-trained youths, identifying both themes and sub-themes. Initially, the data were familiarized, and rough notes were developed to create preliminary themes. The second step involved searching for themes in line with the main objectives of the study.

Themes were reviewed and modified to align with the major study objectives. The third step was to establish if themes made sense. The final step was to refine the themes to understand what each one represented. To ensure validity, the instruments were subjected to peer review and were piloted to a few interviewees; consequently, necessary modifications of the instruments were made, where semi-structured interview had to be translated from English Language to Swahili Language and back translation was conducted after data collection. This process was used to evaluate the accuracy and quality control of the collected and analysed data.

Findings

Sources of Livelihood among Carpentry-trained Youths

The study sought to understand the sources of livelihood among carpentry trained youths in Bukoba Municipality. In relation to this objective, some carpentry trained interviewees showed the how carpentry trade and other sources supported their livelihood. The sources of livelihood included barber shops, *mashamba* (fields), carpentry in welding and seamstress, tailoring, water selling, carpentry in masonry, stipendiary Kiosk, horticulture and Bodaboda (motorbike). This is as corroborated by the interviewee voices in Table 1.

Table 1

Interview Extract on Sources of Livelihood among Carpentry Trained Youths

Interview Extract	Sub-themes	Themes
Ok, through carpentry I handle all parental jobs without any problem. I can afford to pay for my bills such as health insurance, school fees for my children and harness foodstuffs for my family. I trained at VET for two years. Soon after managing to construct some furniture with different styles, I managed to start my own carpentry table with the capital I owed from my uncle. (C1, 2022 July 16 th)	Carpentry in welding, masonry, hair cutting salon, barber shop and stipendiary kiosk as a source of livelihood	The sources of livelihood
“....Being a college-trained carpenter, I have fulfilled several needs for myself and my family. I earn a living through a hair cutting salon and a barbershop. (C2, 2022 July 16 th)	Hair cutting salon and one barber shop	The sources of livelihood
“....I got some skills through VET carpentry training, and as time went on, I was able to	A motorbike (Bodaboda) and hair cutting salon	The sources of livelihood

Interview Extract	Sub-themes	Themes
buy a plot for building, a motorcycle (Bodaboda), and a hair-cutting saloon..." (C3, 2022 July 16 th)		
Besides carpentry, I earn a living from farming (shamba) and horticulture around my house. (C4, 2022 July 17 th)	Agriculture, Horticulture, Carpentry	The means of subsistence
I live with my parents and am not married." ... The money I make from carpentry job goes towards our rent payments, outings, water bills, transportation, and food consumption inside the house..." (C5, 2022 July 17 th)	Carpentry, home expenditure, transportation, food consumption	The sources of livelihood
"...The little money I earn from carpentry goes towards multiple payments, such as rent, my family's health insurance, electricity and water bills, and emergency savings..." (C6, 2022 July 17 th)	Payments of health insurance, rent bills, energy bills, contingency expenses	The sources of livelihood
"...Carpentry is my vocation, and it sustains me. Through carpentry, I established a kiosk for my spouse, from which we earn cash for family maintenance..." (C19, 2022 July 17 th)	Money, kiosk, vocation, family business	Source of income

This study found that youths in Bukoba Municipality had various sources of livelihood, including carpentry, masonry, *mashamba* (fields), stipendiary kiosks, horticulture, barbershop, tailoring, seamstress and motorbike (Bodaboda) services. The sources of livelihood improved the lives of youths by enabling them to accrue assets and invest in the sustainability of their trade and well-being. Youths with carpentry skills and their families have enhanced their

living standards by using the money earned from carpentry to invest in other entrepreneurial pursuits, helping them advance in life.

Role of Carpentry in Contributing to Sources of Livelihood among Carpentry-trained Youths

From carpentry, ten interviewed carpentry trained youths out of thirteen managed to establish and invest in other business for their livelihood. Carpentry made the youths own and rent working places. Through additional investments from carpentry, they were able to increase their income by starting other businesses. The businesses started from carpentry as a job were motor bikes (Boda boda), hired working places, bought oneness plots, established barber shops and stipendiary Kiosks, farm (*shamba*) for agriculture as evidenced in Table 2.

Table 2

Interview Extract on the Role of Carpentry in Contributing to Sources of Livelihood among Carpentry Trained Youths

Interview Extract	Sub-themes	Themes
'...With carpentry work, I was able to get capital hiring a small stipendiary Kiosk where my wife works in to make our family livelihood more favourable...' (C4, 2022 July 17 th)	Utilizing the carpentry skill/investing in other trades	Carpentry in contribution to sources of livelihood
Ahaa! '... It might be caused by some reasons since carpentry products sometimes take longer to be bought. Some of us use other trades to stabilize our livelihood, but mostly we base on our livelihood improvement. " I have a barber shop here in town which I got from carpentry income". (C5, 2022 July 17 th)	Hair cutting Barber shop	Carpentry contribution to sources of livelihood

Interview Extract	Sub-themes	Themes
<p>‘...Notably, almost all carpentry trained youths engage in multi-activities by hiring people from various trades to work on our behalf to propagate our livelihood apart from carpentry work...’. We are satisfied with our customers in both trades...Otherwise we don not see other viable trades which would make our life become more favourable. Therefore, we are satisfied with our customers in both trades... Some of us are attracted by the demand of our customers’ tenders. Additionally, carpentry tenders may make carpenters remain or temper with another trade for it takes longer for our furniture to be brought...’ (C6, 2022 July 17th)</p>	<p>Employing un-skilled labour to supervise other gained sources of income from carpentry job</p>	<p>Carpentry contribution to sources of livelihood</p>
<p>Augh! ‘...I know that carpentry satisfies my livelihood needs, despite the fact that transition of youths in carpentry is a storm period from childhood to adulthood. Knowing that carpentry is my source of livelihood to me, the society and the whole nation at large...’ (C7, 2022 July 18th)</p>	<p>Awareness</p>	<p>Carpentry contribution to sources of livelihood</p>

Interview Extract	Sub-themes	Themes
<p>‘...There is a motive; I like to work as a carpentry artisan because it assists me economically; for example, selling furniture of different designs boosts my life. I can fulfil the rest of my needs throughout this trade. I can fulfil my needs through this trade. Gaining knowledge from various artisans has transformed me from a newbie to a real carpentry artisan. Fine furniture never stays long due to its quality. I rely on this work since I don’t have any other activity to make my life more favourable in this World as it pays me better’. (C8, 2022 July 18th)</p>	<p>Investing by selling genuine furniture</p>	<p>Carpentry contribution to sources of livelihood</p>
<p>‘...You know as you concentrate on one career for some years you have established close relationship with a large number of customers, also found yourself established some investment activities from carpentry work like small business and agriculture (horticulture)... So, when I shift it will cost me to come back to look after them...’ also, the support given by co-workers in designing furniture and</p>	<p>Stipendiary kiosk and agricultural business, co-workers support</p>	<p>Carpentry contribution to sources of livelihood</p>

Interview Extract	Sub-themes	Themes
<p>love from other carpentry artisan made me to stay here for some years. Generally, if I move, I am going to serve the same trade in a similar place for my livelihood improvement'. The carpenter commended. (C9, 2022 July 18th)</p>		
<p>The business opportunities?" I, currently, own a barber shop and small garden for horticulture; in the village I have a <i>shamba</i> for agriculture. These businesses are mastered by my wife with the aim of supporting our livelihood when furniture customers delay buying the read made furniture, this becomes life supporting carrier". (C10, 2022 July 19th)</p>	<p>Gardening and horticulture business</p>	<p>Carpentry contribution to sources of livelihood</p>
<p>..., "Truly, there are many issues among us which are commitments towards carpentry work and already as investment done in this trade. Also, there are some few investment opportunities on carpentry rather than other trades in which I get clear revival in towns compared with other places out of town where customers' facts are not reliable. Issues like lack of</p>	<p>Devotion and sense of investing</p>	<p>Carpentry contribution to sources of livelihood</p>

Interview Extract	Sub-themes	Themes
capital and exaggerated taxes and tolls reduce our working enthusiasm". (C11, 2022 July 19 th)		

From the above extracts, eight carpenters were attracted by the available investment opportunities, except one carpenter who was not attracted by the available investment opportunities claiming insufficient funds, inadequate government and financial institutions support, low safety and improper social relationship. Hitherto, carpentry remained a proper source of livelihood, enabling carpentry trained youths start new businesses and make new investments.

Discussion

Sources of Livelihood among Carpentry-trained Youths

Carpentry was the core source of livelihood to some carpentry trained youths. It enabled them to survive and earn a living. This implies that the livelihoods of carpentry-trained youths depend mainly on carpentry jobs and skills for improving their livelihood. The diversity of sources of livelihood sources empowers carpenters earning more money and valuables. This also accords with our earlier observations, which showed that gardening, housing and carpentry workshops and masonry works are sources of income generation (Lutta et al., 2020). The livelihood of carpentry-trained youths was mainly derived from carpentry jobs. However, one interesting finding is that carpentry trained youths in Bukoba had other sources of livelihood stemming from carpentry jobs. These results corroborate the ideas of Imoro and Nti (2009), who suggested that people utilizing the carpentry skills have been capable of opening other sources of income from carpentry jobs. From these sources, carpentry trained youths used earnings from their expertise to service their whole family. According to Lyimo (2016), most of the community's youth will be able to generate income and start their businesses thanks to the carpentry project. He also found that the project will be sustainable and necessary because the youth will be able to lower their households' risk of poverty thanks to the profits

from their products. It is evident that some youths in carpentry spend their income by expanding their workshops and accruing more livelihood assets (ChildFund. Org, 2011).

Role of Carpentry to Sources of Livelihood among Carpentry-trained Youths

Carpentry trained-youths have started additional income generating activities from carpentry (Carpentry). James (2008) asserted that youths' livelihoods encompass the work (carpentry) and service-related activities that young people engage in as they transition to adulthood, from being mainly dependent on family and community to being householders and/or full-fledged community members. Adam (2012) contends that there is a growing number of youths in developing countries who have been gaining variety of skills needed in their livelihood. Similarly, Adam and Pattenella (2013) conclude that informal carpentry sector contributes to economic development through income generation and poverty reduction. This implies that carpentry contributes to their livelihood endeavors. This is because carpentry-trained youths can earn through diverse products; thus, becoming taxpayers from income generating activities.

Conclusion

This study is important not only for youths who joined VET but also for creating awareness among parents and school students who are likely to join carpentry after school graduation. Carpentry trained youths have various sources of livelihood, and the sources are by-and-large attributable to carpentry. The excess return from carpentry job helped youths to invest in other sources of livelihood for their well-being. The income from carpentry supported carpentry-trained youths in improving their lives and becoming productive members of society. Carpentry as a job serves as a central aspect of their livelihood, fulfilling functions such as performing parental duties and establishing workshops for a prosperous livelihood. Carpentry, as a source of livelihood, can support carpentry-trained youths by enabling them to develop other sources of livelihood. As it stands, Carpentry enables the youths trained in it to become contributors of their livelihood endeavors. Moreover, the government should consider the strategies proposed in this paper to resolve exaggerated

taxes, to support carpentry trained youths to access loans from financial institutions and to get some grants and revise tolls on forestry materials. Education policy should be revised repeatedly basing on VET curriculum to meet the market demand for carpentry programmes as an enterprise, thereby, improving the living standards of carpentry trained youths. Hitherto, carpentry has been a source of income that covers the youths' family service bills. The study concludes carpentry results in stable financial earning avenues and life stability for youths.

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