#### Factors Affecting Youth Accessibility to Vocational Education Training (VET) in Singida Municipality

Bahati Shagama<sup>1</sup> and Barakaeli Pallangyo<sup>2</sup> <sup>1</sup>Lecturer, Management Studies, Tanzania Institute of Accountancy (TIA), Dar es Salaam, Tanzania; E-mail: bahati.shagama@tia.ac.tz <sup>2</sup>Assistant Lecturer, Management Studies, Tanzania Institute of Accountancy, (TIA), Singida, Tanzania E-mail: barakael.pallangyo@tia.ac.tz <u>https://dx.doi.org/10.4314/ajasss.v6i1.12</u>

#### Abstract

This study examines the factors affecting youth accessibility to vocational education training (VET) in Singida Municipality. Random and purposive sampling techniques were used to obtain a total of 114 youth enrolled, graduates and those who did not acquire training from VET colleges for survey questionnaires and 10 key respondents' informants for interviews. Data were collected through questionnaire survey and semi-structured interviews. *Oualitative data were coded and transcribed and subsequently thematically* analyzed, with regard to quantitative data: both descriptive and inferential analysis was done including the Likert scale and binary regression adopted to measure factors affecting youth accessibility to vocational education training (VET). The findings revealed that the age, household size, few number of institutes, awareness, readiness of youth was positively affecting access to VET. The study concluded that, youths who do not have any other opportunity of pursuing studies and ultimately get employment, need to have access to VET as one of the means of acquiring skills demanded by the labour market. The study recommends that, more efforts should be placed in attracting more youths to join VET studies as a means of increasing their employability by conducting mass awareness programmes on the need, availability and accessibility to VET. Also, efforts to increase the number of VET colleges in Tanzania should go in hand with extension of tertiary education loans provided by the Higher Education Students' Loan Board (HESLB) to cover more VET programmes as a means of enabling youth to overcome inaffordability caused by large family sizes.

Keywords: VET, Access to VET, perception toward VET, labor market

# **1.0 INTRODUCTION**

Education and training play a key role in ensuring achievement of the sustainable development goals 2030 Agenda. The United Nations General Assembly recognized Technical and Vocational Educational Training (TVET) programme

as significant instruments amongst others to achieve the 2030 Agenda for Sustainable Development Goals (SDGs). The operational target 4.4 of SDGs reads that, "By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship" (UN, 2015). Globally, youth unemployment is critical. More than half of young people – around 776 million – are outside the labor force, meaning they are not in employment (ILO, 2020). Unfortunately, the problem of unemployment increased day after day from 1999 up to 2019. The global rate of participation fell by almost 12 percentage points over this period, from 53.1 to 41.2 percent; the total number of young persons in the labor force declined accordingly from 568 to 497 million, even though during this period the youth population rose from 1 billion to 1.3 billion (ILO, 2020). More attention is given to technical and vocational skills development, especially on access to affordable quality technical and vocational trainings; and provision of technical and vocational skills to enhance employment (UNESCO, 2021).

Currently the world is heavily reliant on technologically skilled workforce. In that general sense, encouraging more graduates in both TVET and VET fields can be said to be important for a society's overall development in order to achieve a competitive advantage in the global economy (Khan, 2021). Entering the labor market poses major challenges for young people in many countrieswhile it is true that in general young people tend to be in a more vulnerable position than prime-age workers (Biavaschi *et al*, 2013). Providing young people with opportunities for skills acquisition is widely perceived to be a fair and effective use of public resources. Job training programmes have therefore emerged as important – and widely studied – class of social policy experiments (Cho *et al*, 2015). Relying on comparative youth unemployment data from World Bank sources covering different world regions, one can see that most countries witnessed an increase in youth unemployment in recent years (Biavaschi *et al*, 2013).

VET has proved to be key to economic and social transformation in many parts of the World. Countries such as Germany, Switzerland, Austria, Netherlands, Denmark and Finland that have placed TVET and VET at the core of their education and training system, both in terms of curriculum review and financing, have ultimately succeeded in attaining structural transformation and industrialization, maintaining low youth unemployment rates and achieving prosperity. In Germany for instance, VET is based on nationally recognized occupations and vocational training regulations, which guarantee a national standard (EU, 2020). Notwithstanding, VET has played an important role in South Korea's economic development by producing a skilled labor force (Agrawal, 2013). In the past, Korea's VET has contributed substantially to economic and social developments. Despite such achievements, there are various challenges regarding VET that need to be addressed as observed by Agrawal (2013), that there is still mismatch between demand and supply, low participation rates of adult workers in education, linkage between school and industry, rigidity and linkages of VET.

In order to address the unemployment problem, many African countries have introduced Vocational Education and Training (VET) to develop competencies in the relevant technical and vocational subjects for the world of work (Sarfo, 2016; UNESCO & ILO, 2002). This is because, most of the courses offered under VET provide training that lead to skilled occupations, whereby learners are pursuing competence based training to become skilled workers for meeting the specific requirements of occupations (Sumra & Katabaro, 2016). The Government of Kenya forinstance has made significant efforts over the past few years, including devolving the vocational training centers (VTCs), offering student loans and bursaries, and subsidizing fees (Okinyi *et al.*, 2021).

In Tanzania TVET is an integral part of the education system as it is among five sub-sectors of the system and it aims at enabling and expanding the acquisition of life skills needed to meet the changing needs of industry and the economy. According to Mihayo *et al.*, (2020) TVET in Tanzania is categorized into two; - technical education and training (TET), and vocational education and training (VET). The former focuses on advanced technical skills and the latter focuses on providing training on basic vocational skills. According to NACTVET, (2022) TET and VET together form a ten levels qualifications framework (i.e level 1 to level 10) whereby VET takes the lowest three levels i.e. Level 1 - 3 and TET takes the rest beginning from Level 4 to level 10.

The Government of Tanzania established an agency namely Vocational Education and Training Authority (VETA). VETA was established by the Vocational Education and Training (VET) Act No. 1 of 1994 Cap 82 with revised edition 2006. Under Section 4(1) (a) - (n) of the Act, VETA is entrusted with controlling, coordinating, supervising, and continuous improvement on provision of quality vocational education and training. VETA is entrusted with ensuring stable financing for the vocational education and training system in the country. Moreover, under Section 13 (2) b of the Act, VETA is required to conduct tracer studies on the employment outcomes of the vocational training graduates (VETA, 2019).

This paper is focusing on factors affecting youth accessibility to VET. Tanzania has witnessed an increased enrollment in VET centers in ten years consecutively from a total of 102,217 (52,027 males and 50,190 females) in the academic year 2010/2011 to a total of 320,143 (202,718 males and 117,425 females) in the academic year 2020/2021.(NACTVET, 2022). According to Leyaro and Joseph, (2019) the increased enrollment is the result of various factors including: increased realization that vocational trainings are necessary for one's employability, vocational and apprenticeship training are particularly important in acquiring formal employment, technical and vocational training are very instrumental in addressing the rising youth unemployment. Despite such rise, only few studies have been conducted to examine factors limiting more youth accessibility to VET and it is for that reason this study intended to bridge the gap. Basing on youth accessibility to VET, this study focuses on age, household size, youth awareness, perception, cost, number of institutes, training facilities, and readiness of youth to get training. In this sense, it is therefore important to determine factors affecting youth accessibility towards vocational educational training in Singida Municipality.

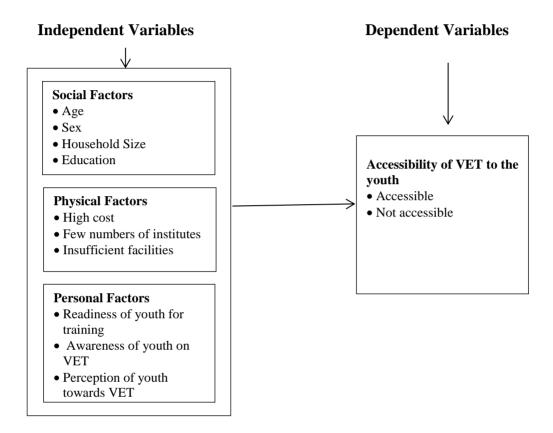
# **1.1 Theoretical Framework**

This study is guided by Experiential Learning Theory (ELT) to examine individual youth's perception and attitude toward VET. EL is learning by being involved in experience. Kolb (1984) defines EL as a learning method that is based on "learning by doing, experiencing and reflecting". Kolb (1984) further noted that ELT perceives learning as "the process in which knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience". So, EL is a collection of teaching-learning strategies that empower students to become actively involved in practical activities through doing. The strategies entail helping students to connect the learning from the real-world situation by applying the ideas, concepts and theories to the interactive setting (Greene, 2011). In connection with the present study, the argument is that by participating in real-life activities during skills development, young people can transform the knowledge learnt from the classroom and training manuals into their understanding. The core characteristic of skills development is learning by doing, experiencing and reflecting. For the skills acquisition to happen, learning must be characterized by learning by doing or hands-on learning.

#### **1.2** Conceptual Framework

The conceptual framework used in this study include independent variables which were factors affecting youth to access vocational education training (VET). Those factors are categorised into three groups namely: social factors,

physical/economic factors and personal factors. Moderating factors were government policies, rules and regulations governing VET. Youth accessibility to VET is the dependent variable. The following conceptual framework was used to guide the study.



# Figure 1: Conceptual framework on factors affecting youth accessibility to vocational education training

# 2.0 METHODOLOGY

#### 2.1 Description of the study area

The study was conducted in Singida Manicipality in Singida Region, Tanzania. Singida has a working age population of 48.5% of the total population whereby 16% of its total population resides in urban areas including Singida Municipal (URT, 2022). As it is the case for other urban areas, the Municipality has experienced increasing number of youth unemployment as is reported by USAID (2020). Although overall unemployment in Tanzania is reported by the International Labor Organization (ILO) and World Bank at 2%, youth unemployment fluctuates around 10 % whereas urban youth unemployment is

five times higher than rural. The unemployment trend is both a result of the economy's failure to absorb the growing workforce and a result of lack of necessary skills demanded by the labor market among youths. It would therefore be of interest to youths to reveal challenges they face in acquiring VET which has proved to be a solution to youth unemployment in several other parts of the world.

## 2.2 Research design

A cross-sectional research design was used because it allows collection of numerous data at once, which is useful in both description and determination of relationships between variables which are examined to detect patterns. Also, the design is inexpensive and easy to conduct (Wang & Cheng, 2020).

#### 2.3 Sampling procedure and sample size

The sampling frame for this study was youth enrolled for VET, graduates of VET and those who did not access VET. Systematic sampling technique was used to obtain students of VET and the graduates of VET. Simple random sampling using the lottery method was used to select respondents who did not access VET training. A total of 114 respondents participated in this study, where 66 respondents were youth not enrolled in VET institutes and 48 were youth from VET institutes and graduates.

#### 2.4 Data collection

A structured questionnaire was used to collect quantitative data from selected respondents while qualitative data were collected using key informant interviews. Purposive sampling approach was used to obtain key informants namely, principals of VET institutions, teachers of VET institutions, Ward Community Development Officer (WCDO) and District Community Development Officer (DCDO). A total of ten key informant interviews were conducted with principals of VET institutions, teachers of VET institutions, Ward Community Development Officer and District Community Development Officer.

#### 2.5 Data analysis

Qualitative data were analyzed thematically while quantitative data were analyzed by inferential analysis. The decision to access or not access VET is a binary decision that can be analyzed using binary choice models. A logistic model was employed. Logistic regression is useful for situations in which one wants to be able to predict accessibility or inaccessibility of a VET. Binary regression model is the applicable model where the dependent variable is dichotomous. Logistic regression coefficients can be used to estimate odds ratios for each of the independent variables in the model. The estimated model is expressed as follows:

 $Y = \alpha + \beta o + \beta 1x1 + \beta 2x2 + ....\beta n xn + \varepsilon$  (2)  $Y = \alpha + \beta x1$  age +  $\beta x2sex + \beta x3$ household size +  $\beta x4$  education +  $\beta x5$  perception of youth on TVET +  $\beta x6$  cost of attaining VET +  $\beta x7$  Number of VET institutes +  $\beta x8$  awareness of availability of institutes +  $\beta x9$  facilities +  $\beta x10$  readiness of youth +  $\beta 11$  ...... $\beta n xn + \varepsilon$ Where;

Y = Chance of youth to access or not access VET (1 = If the youth has access to VET, 0 = If a

youth has no access to VET)

X1 = Age - Age of respondents measured in years

X2 = Sex (1 = If the youth is male, otherwise 0)

X3 = Household size (Number of household members)

X4 = Education (Level of education attained by household measured in years of schooling)

X5 = Perception of youth on VET training (positive 1, negative 0)

X6 = Cost of attaining training measured in TZS

X7 = Number of VET institutes available measured in (Number of institutes)

X8 = Awareness on availability of Institute (number of visits by VET officers)

X9 = Facilities for training apart from classes measured (Available 1, Not available 0)

X10 = Readiness of youth for VET training (Ready 1, 0 Not ready)

 $\alpha$  = Constant term  $\varepsilon$  = An error term.  $\beta$ 1..... $\beta$ 11 is the coefficient for variables

# 3.0 FINDINGS AND DISCUSSION

# 3.1 Respondents' socio-demographic characteristics

The data is presented in both frequencies and percentages for a total of 114 respondents. In terms of gender distribution, the survey included 67 male respondents, making up 58.0% of the total, while 47 female respondents accounted for 42.0% of the total sample. Regarding the age distribution, the respondents were categorized into four groups. The age group with the highest representation was 15-25 years, comprising 58 respondents, or 51% of the total. The next groups, 26-35 years, comprising 32 respondents which is 28%, the other group was 36-45 years were 15 which is 13%. The age group of 46-55 years had 6 respondents, contributing 5% and the group of 55 years and above were 3 representing 3% of the total sample.

As for educational background, the respondents were classified into six categories. The largest educational group was those with a primary education, accounting for 40.0% of the respondents (46 individuals). The secondary education holders represented 26% of the total, with 30 respondents. The degree

holder respondents were the smallest group, constituting 4.0% of the total with 4 individuals. Additionally, respondents with certificate and diploma education were 14.0% and 11.0% of the total, respectively, with 14 and 11 individuals in each category.

## 3.2 Factors affecting youth accessibility to VET

Binary logistic regression was used to determine the factors that affect youth accessibility to vocational education training (VET). The dependent variable, accessibility of VET, was regressed on the 10 predictors as indicated in Table 3.2. The regression was carried out in order to determine the influence of each of the variables on the probability of the youth in accessing VET. The likelihood ratio 0.687 with a p-value of 0.000 indicates that the model was statistically significant. According to Louviere *et al.* (2000), a model with an R2 of 0.2 and above is considered as an excellent fit. Table 1.2 presents the coefficients, their standard errors, Wald and associated p-values. The results show that age, household size, negative perception, few number of the institutes, unawareness of youth and readiness of the youth were significantly (p < 0.05) influencing youth accessibility to VET. The rest of the predictors particularly sex, education, high cost and insufficient facilities had no significant influence.

Findings indicate that age of the youth was positively affecting youth access to vocational education training, with a coefficient = 8.612, p-value = 0.001. This result implies that youth is the age category that is demanded by the labour market and it is the group that need employment to sustain their livelihood. Likewise, findings relate to the studies by REPOA (2020) and Ntallima (2014) which noted that VET students were relatively youthful with a mean age of 21 years. OECD (2016) indicated that VET plays a prominent role in education and training systems in European countries to individuals aged 15 to 34 who fall under youth category.

accessing	<b>JIVEI</b>				
Variables	Coefficient	S.E	Wald	Sig.	
Factors influencing					
Constant	742.260	2310.44		3.289	
Age	8.612	2.458	3.71	0.001*	
Sex	-0.923	0.58	1.68	0.068	
Household size	0.023	0.11	0.62	0.002*	
Education	0.78	0.58	0.033	0.058	
Negative Perception	0.39	0.62	.63	0.005*	
High Cost	0.07	0.38	0.59	0.881	
Few Number of	1.06	0.75	0.62	0.001*	
institutes					
Awareness of Youth	3.08	0.68	0.74	0.000*	

 Table 1: Binary Regression Results on the factors influencing youth in accessing TVET

Insufficient Facilities	2.04	0.59	2.41	0.453
Readiness of Youth	0.62	0.89	0.64	0.003*

Bahati Shagama and Barakaeli Pallangvo

R = 0.687; R2 = 0.472; Std Error of Estimate = 2.070; P= 0.000 NB: \*, refers to Significance at the 5 (0.05) percent.

The results further show that household size of the respondents had a coefficient = 0.023 at a p-value = 0.002. The result indicates that the larger the size of household the more it affects the possibility of youth to access vocational education training. However, dissimilar findings revealed that males and females living in households with large family size had a higher probability of working in agriculture and lower probability of working in formal and informal jobs. On the one hand, this finding could be attributed to the fact that agriculture offers more opportunities for child care since more hours are spent at home (Joseph et al., 2019). On the other hand, the big size of the household means that the household is likely to have some dependants, hence some youth members of the particular household are likely to join VET that can facilitate them to easily gain employment. As such, according to VETA (2019) some VET graduates reported to have other people that depend on them. It is believed that one having vocational skills has a great chance of employment opportunities. This was also revealed by Ntallima (2014) who found that most of the graduates from VETA depend on vocational skills application to get income for their daily life. The vocational education sector has been contributing significantly in reducing unemployment by providing occupation-oriented training (Mtebe et al., 2020).

The negative perception of the youth on vocational training had a significant influence at p-coefficient = 0.39 and p-value = 0.005. The result implies that negative perception of the youth on vocational education training affects their accessibility to VET. Most youth perceive that VET training is for those who failed their primary or secondary completion examinations (Standard Seven or Form Four and Form Six respectively). The findings relate with those of USAID, (2017) which noted that in most cases, the choice to enroll at a technical school was seen as Plan B after failing academic school. In similar vein it was disclosed that usually parents or the guardians send their female children to vocational schools considering these institutes as a last resort (Naseem, 2021).

Furthermore, the model results indicated that few numbers of vocational institutes is statistically significant and positively affecting accessibility of VET at coefficient = 1.06 and p-value 0.001. The finding implies that, few numbers of vocational institutes available affects the youth accessibility to vocation education training. The results relate with those of URT (2021), which demonstrated the distribution of VET which were controlled by VETA in Tanzania Mainland which included Arusha 3, Dar es Salaam 2, Dodoma 1, Geita

1, Iringa 1, Katavi 1, Kigoma 2, Kilimanjaro 1, Lindi 1, Manyara 3, Mara 1, Mbeya 2, Morogoro 4, Mtwara 2, Mwanza 1, Njombe 1, Pwani 1, Rukwa 1, Ruvuma 2, Shinyanga 1, Simiyu 1, Singida 1, Songwe 1, Tabora 3, Tanga 2. A region having one, or two or three VET colleges means they are not proportional to the number of youth who would like to aquire technical skills.

The model also shows that unawareness of youth on vocational education training is positively and significant affecting youth accessibility to VET, at the coefficient = 3.08 and p-value = 0.000. The findings were also supported by the interview from the Key Informant who said that;

".....Most of our youth are not aware about availability of vocational education training as a means of acquiring skills for their future development. Most of the youth who complete Standard Seven think about continuing with secondary education. Those finishing secondary school think about continuing with advanced secondary education......." (KI at Majengo Ward, 23 March, 2023).

That means youth unawareness on availability and importance of VET affects their access to vocational education training. As such, findings related with those of USAID, 2017 which revealed that most VET students felt comfortable in their institutions and specializations, they chose their respective specializations basing on parental advice, personal preference, and as advised by the institute. However, (Naseem, (2021) in his study found that parents' (including general public) negative perceptions about the viability of their wards' potential professional careers through TVET educational stream remain ingrained and challenging to alter from the old notches. All stakeholders, presumably, disregard the TVET skills as subpar and unprofitable in terms of technical and vocational abilities (Naseem, 2021).

As shown in Table 1.0, readiness of the youth to access vocational education training is positively and significantly (influencing) affecting youth accessibility to VET, at the coefficient = 0.62 and p-value = 0.003. The findings show that youth without readiness for vocation education training affect the youth to access VET. The findings relate with those of ILO, (2012) who established that many families are reluctant to send their daughters to TVET institutions which do not provide hostel facilities. Security is a serious issue for girls since sexual harassment ranks as a high violation not worth risking. Male students can find accommodation around the location of the training centres and do not suffer from the same safety concerns as the female students. If female participation is to be encouraged, one of the first requirements is to provide safe and secure housing facilities (ILO, 2012).

#### 4.0 CONCLUSION AND RECOMMENDATIONS

#### 4.1 Conclusion

Youth is the age category that is demanded most in the labour market. However, the labour market needs skilled, qualified and experienced human resources. In this sense, youth who do not have any other opportunity of pursuing studies and ultimately get employment, need to have access to VET as one of the means of acquiring skills demanded by the labour market such as civil construction, IT, carpentry and others of the kind. However, youth access to VET is significantly affected by age, household size, negative perception, and few number of VET institutes. It is therefore necessary for VET stakeholders to put into consideration such factors so as to ease youth enrollment. The study further concludes that, majority of the VET students and graduates had positive perception towards VET. In that sense, VET is considered as the major contributor for the youths' economic and moral development. Individuals who are skilled with VET have a great chance to be employed or have self-employment.

## 4.2 Recommendations

The study recommends that, more efforts should be placed in attracting more youths to join VET studies as a means of increasing their employability by conducting mass awareness programmes on the need, availability and accessibility to VET. Also, efforts to increase the number of VET colleges in Tanzania, should go hand in hand with extension of tertiary education loans provided by the Higher Education Students' Loan Board (HESLB) to cover more VET programmes as a means of enabling youth to overcome unaffordability caused by large family sizes.

# REFERENCES

- Agrawal, T. (2013) Vocational education and training programs (VET): An Asian perspective. *Asia-Pacific Journal of Cooperative Education*, 14(1), 15-26.
- Asian Development Bank (2020). Enhancing Gender Responsiveness of Technical and Vocational Education and Training in Viet Nam. Mandaluyong City, Metro Manila. Philippines http://dx.doi.org/10.22617/BRF200034.
- Biavaschi, C, Eichhorst, W. Giulietti, C. Kendzia, M.J. Muravyev, A. Pieters, J. Rodríguez-Planas, N. Schmidl, R. Zimmermann, K. F. (2013). Youth Unemployment and Vocational Training. Background Paper for The World Development Report.
- Cho, Y., Kalomba, D., Mobarak, M.A., Orozco, V. (2015). Differences in the effects of vocational training on men and women: Constraints on women and drop-out behavior. Employment Policy Department. Employment Working Paper No. 189. Employment and Labour Market Policies Branch. International labour office (ILO). Geneva.

- Greene, H. (2011), "Freshmen marketing: a first-year experience with experiential learning", Marketing Education Review, Vol. 21 No. 1, pp. 79-88.
- International Labour Organisation (ILO) (2012): Upgrading informal apprenticeship, A resource guide for Africa, ILO.
- International Labour Organisation (ILO). (2020). Global Employment Trends for Youth 2020 Global Employment Trends for Youth 2020: Technology and the future of jobs (Fist editi). International Labour Organization.
- Joseph, Cornel; Leyaro, Vincent (2019): Gender differential effects of technical and vocational training: Empirical evidence for Tanzania, CREDIT Research Paper, No. 19/04, The University of Nottingham, Centre for Research in Economic Development and International Trade (CREDIT), Nottingham
- Khan. N.A, (2021). Gender norms of employability; a case study of females' technical and vocational education in Multan and Bahawalpur, South Punjab, Pakistan. Thesis for award of MA degree at Oslo Metropolitan University, Oslo, Norway.
- Kolb, D. (1984), Experiential Learning Theory: Experience as Source of Learning and Development, Prentice-Hall, NewJersey.
- Mihyo, P, Mmari, D and Msami, J (eds) 2020, Youth transition from school to work in Tanzania: a case study of the vocational education and training in Tanzania (VETA), Organisation for Social Science Research in Eastern and Southern Africa, Addis Ababa, viewed 17 Jun 2022, https://www.repoa.or.tz/wp-content/uploads/2021/03/Youth-Transitionfrom-Schhol-To-Work-in-Tanzania-The-Case-of-TVET-compressed.pdf
- Mtebe, J., Kissaka, M. M., Raphael, C., & Stephen, J. K. (2020). Promoting Youth Employment through Information and Communication Technologies in Vocational Education in Tanzania. *Journal of Learning for Development*, 7(1), 90-107.
- NACTVET, (2022). Review of TVET policy implementation in Tanzania. Presented at East African regional TVET conference, AICC-Arusha, Tanzania from 28<sup>th</sup>-29<sup>th</sup> April, 2022. https://www.nacte.go.tz/wpcontent/uploads/2022/05/Review-of-TVET-Policy-Implementation-in-Tanzania.pdf
- Naseem, A (2021). Gender norms of employability; a case study of females' technical and vocational education in Multan and Bahawalpur, South Punjab, Pakistan. Thesis for the award of MA degree at Oslo Metropolitan University, Oslo. Norway.
- Ntallima, T. (2014). The contribution of vocational education to youth employment: a case study of VETA and non VETA graduates in Morogoro region (Unpublished doctoral thesis). Sokoine University of Agriculture,

Tanzania.

- Okinyi, A.R., Nyerere, A.K.J and Kariuki, I.S (2021). Internal efficiency of public vocational training centres in Kenya. African Educational Research Journal Vol. 9(2), pp. 375-384,
- Rastogi, P. (2002). Sustaining enterprise competitiveness –is human capital the answer. Human System Management. 19 (3), 193-203.
- Research on Poverty Alleviation, (2020). *Youth transition from school to work in Tanzania:* a case study of the vocational education and training in Tanzania (*VETA*) (Msami and Mihyo (ed.)). REPOA.
- Sarfo, F. K. (2016). Psychological framework for quality technical and vocational education and training in the 21st-century. In C. M. Spector, & B. Lockee (Eds.), Learning, design, and technology (pp. 1–26). Springer, Cham. https://doi.org/10.1007/978-3-319-17727-4\_65-1
- Sumra, S., & Katabaro, J. (2016). Education foundations of the development of skills and productive capabilities. Retrieved from http://www.thdr.or.tz/docs/THDR2017BP10.pdf%5Cnhttp://esrf.or.tz/doc s/THDR2017BP-10.pdf
- International Labour Organisation (ILO) VET Reform Project, (2012). Resource Guide on Gender Mainstreaming into Technical and Vocational Education and Training (TVET) in Bangladesh. ILO-TVET Reform Project, Dhaka, Bangladesh
- United Nations Educational, Scientific and Culture Organisation (UNESCO) and International Labour Organisation (ILO). (2002). Technical and Vocational Education and Training for the 21st-Century. Retrieved from http://s3.amazonaws.com/ineeassets/resources/Technical\_and\_Vocational \_Education\_and\_Training\_for\_the\_Twenty-First\_Century.pdf
- United Nations Educational, Scientific and Culture Organisation (UNESCO), (2021) Draft document for UNESCO Strategy for TVET 2022-2029: Transforming Technical and Vocational Education and Training for Successful and Just Transitions. https://unevoc.unesco.org/pub/unesco\_strategy\_for\_tvet\_20222029\_discu ssion\_document.pdf
- United Republic of Tanzania (URT). (2021). *TVET Indicators Report*. Dodoma, Tanzania: Ministry of Education, Science and Technology
- United Republic of Tanzania (URT). (2022). Age and sex distribution report Tanzania. Key findings. Ministry of finance and planning, National Bureau of statistics Tanzania and President's office, Ministry of finance and planning, office of the chief government statistician, Zanzibar.
- United States Agency for International Development (USAID), (2017). Gender Analysis of Technical and Vocational Education and Training in Lebanon. Performance Management and Support Program. Lebanon.

- USAID, (2020): USAID Tanzania youth assessment for strategy development. USAID/Tanzania data for development project. ME&A (Mendez England & Associates). 4350 East-West Highway, suite 210.
- Vocational Education and Training Authority (VETA) (2019). Tracer Study Report for 2010-2015 VETA. Dar es Salaam.
- Wang, X., & Cheng, Z. (2020). Cross-sectional studies: strengths, weaknesses, and recommendations. *Chest*, *158*(1), S65-S71.