

Assessment of the contribution of Technical and Vocational Education Training projects in enhanced income levels

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Abstract

TVET (Technical and Vocational Education Training) projects have been contributing to socio-economic development in Africa, particularly in control joblessness within childhood. In Rwanda, TVET is not familiar within the education sector. The sub-sector grows very diminutive consideration and budget establishment. The purpose of this work was to assess the contribution of technical, Vocational Education Training companies with in enhanced income levels. The study employed a cross-sections survey design. The target population of the study was 100 youths. The sample size (n=80) of the study was single-minded by using Taro Yamane's formula. The study used a combination of purposive and convenience sampling techniques. The study used of both secondary and primary methods of collection of data and the examination charity the (SPSS) Version 23 software. The findings indicated that there was never correlation between the TVET construction project within manipulating the knowledge of young and how the TVET construction project empowers youth economically. However, here was a positive correlation between the TVET construction project for job opportunities and how TVET construction project increase the house hold income economically (0.559±0.000)

Keywords:

Technical , vocational education , trainings , project, socio-economic development, Rwanda.

1. Introduction

Technical Educational Education and Training (TVET) offers an organized manner for the developed nations. For example, Australia has prepared and equipped their workers with quality and updated information, knowledge, and fundamental proficient skills (Chinedu & Oladiran, 2015). It

signifies that TVET is an education system that equips individuals with practical knowledge and skills and understanding of particular vocational understanding. The knowledge is meant to enable the recipients to become productive in society through leading productive lives (UNESCO *et al.*, 2001). One of the variables that improve productivity and increases competitiveness in the world is investing in skill training. Many countries are striving to re-light skill technical training and vocational. It is one of how young people can be prepared for the work ahead, enhancing their preparedness to indulge in income-generating projects (Usman *et al.*, 2013). TVET has a role of socio-economic development in Africa, especially in handling unemployment among the youths. Many African governments have signaled their concern in increasing youth unemployment.

In Rwanda, technical and vocational instruction training is not recognized in the education sector. The sub-sector gets very little attention and budget provision. The results are poor infrastructure, facilities, and resources meant to instill skills among the young, energetic generations. A meeting in 2000 of government leaders agreed to end the increased poverty through achieving the Millennium Developmental Goals (MDGs). Indeed, Rwanda is among the countries that have continuously emphasized boosting technical education through different projects. Despite such efforts, escalating poverty, unemployment, and underemployment of the graduates have been experienced, which has resulted in increased frustrations and brain drain, among other social issues of concern. The growing problem of the function of technical and vocational training has raised concerns between the existing affiliations among this edification and advanced, which has been ricocheted in some celebrated philosophies like human investment theory and supportable development (Alam, 2007).

2. Review of Literature

2.1 TVETs in Rwanda

According to Akpomi (2009), there is a nation that has the potential of improving economically, industrially, and technologically without creating wealth, reducing poverty rates through developing skills through education. The competency of TVET in offering practical training is key to nations that aim at attractive scientifically applicable and worldwide inexpensive in the universal market. TVETs are also realized as the furthestmost operative implements secondhand by countries to stimulate supportable countrywide growth, improving the excellence of lifetime, employment, reduce poverty rates, and encourage the culture of peace, democracy, and freedom. It is not improvement proverb that settled countries like Japan, China, USA and Germany obligate achieved marvelous elevation in terms of progress as a upshot of dependable capital within permitting citizens' technical awareness (Ibeneme, 2011). Hence, the reputation of TVET addicted to domestic expansion strategies has suggestively heightened efficiency and financial growth.

2.2 Vocation Technical Education

Technical and vocational education (TVE) is a form of education structured in a way that is aimed at equipping learners with necessary skills for employment. VTE was defined by (Okoro, 2013) as a section of education that is anchored on the provision of skills, attitudes, and knowledge that enable a person to fit into a specific occupation. (Dawudo, 2010) opined that TVE was the most reliable tool for economic prosperity, political supremacy, and self-sustenance as it was a procedure of schooling that factors within the homework of an individual's engagement addicted to several firms for dedicated schooling for which there were acknowledged social requirements, and which could be most properly be learnt within colleges.

Technical and vocational education comprehensively refers to elements in the education process that involve more additions into the general education, technical training of technically oriented persons who are aimed at either imitating facilitating, or implementing technological development of nations through acquired knowledge, which in turn leads to the sustainability of nations (Uwaifo, 2010). It is an instrument that has been used for the promotion of complete and maintainable environment on shortage mitigation strategies.

In Rwanda TVET colleges, a sensible majority of the colleges, 40.4% had women populaces that were under 100 apprentices though men learners populace was consistently dispersed crosswise the colleagues with in scopes of 3.8%, 5.3% or 5.7% of the colleges

for populace levels reaching from 15 learners to 794 (Maringa & Maringa, 2013).

3. Materials and Methods

The study was employed a cross-sections survey design. A cross-sections survey design is used to collect data and make inferences about study populations at one point in time (Lavrakas, 2008). In this case, the researcher was make conclusions about the impact of TVET projects on the socio-economic development of Nyamirambo sector at the time of the study. Cross-sectional survey provides a snapshot of the population about which data was gathered from.

Data from official documents at Saint Joseph TVET indicated that the institution had successfully implemented a construction project related to the support of 100 youths between 2017 and 2019. Hence, the study populations of the research were 100 participants. Purposive sampling was used to select project beneficiaries from Saint Joseph TVET. Convenience sampling is a non-probability sampling method characterized by selecting study participants based in their convenience or accessibility to the researcher

Once questionnaires were filled, the researcher was sorted them out, code them, and feed them into (SPSS) Version 21 software for analysis. Descriptive statistics in the form of frequencies, %, means, and SD was used to elucidate data which was presented in the form of tables. Person correlations were used to determine the relationships between the variables and data presented in correlation and regression coefficients.

4. Findings and discussion

4.1 Demographic data

This part of socio-demographic characteristics indicate the frequencies of socio-demographic characteristics especially age, gender and sector of employment. The table 4.1 highlights the socio-demographical characteristics of surveyed people of Saint Joseph

Demographic data

Variables	N(%)	SD	MEAN	STD. E
Gender				
Male	37(46.3)	0.502	1.54	0.056
Female	43(53.8)			
Age				
below 25 years	17(21.3)	1.11	2.5	0.124
26-35 years	24(30.0)	1	8	
36-45	19(23.8)			
Above 46 years	20(25.0)			

Sector of employment	N	%	Mean	Std. Deviation
Self-employment	31	38.8	1.14	2.2
Public Sector	15	18.8	1.4	1
Private Sector	20	25.8		
Not Employed	14	17.5		

Source: Primary data, 2020

Table 4.1 highlighted the socio-economic characteristics characterized by gender, age and employment sector of respondents.

The dominant gender were the females with the rate of 43(53.8%) of respondents while the males were 37(46.3%) of respondents. Identified age group were below 25 years old 17(21.3%) of respondents, group of 26-35 years old 24(30.0%) of respondents, group of 36 to 45 years old 19(23.8%) of respondents and 20(25.0%) of respondents were above 46 years old.

4.2 Contribution of TVET projects in enhanced income levels

The figure 4.1 presented the respondents' appreciation for graduating in TVET project of Saint Joseph project and how they get job after that graduation to enhance the income levels.

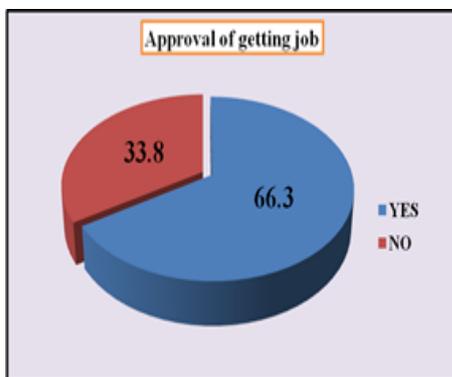


Figure 4.1 Appreciation of getting job after graduation from Saint Joseph

Figure 4.1 highlighted the findings about respondents' appreciation to get job after graduation. Therefore, 66.3% of respondents agreed that to get job immediately after graduation is possible while 33.8% of respondents did not agree about getting the job immediately after graduation in TVET project to enhance the income levels of Saint Joseph.

The next table presented the reasons for failure to secure job.

Table 4.2 highlighted the reasons that make failure to secure job after graduation.

Table 4.1 Reasons for failure to secure job after graduation

Reasons	N(%)	S	M	STD. EM
Lack of experience	21(26.3)	1.526	3.0	0.171
Lack of referees	11(13.8)			
Lack of job opportunities	13(16.3)			
Skills Mismatch with Labor Requirements	17(21.3)			
Low salaries	18(22.5)			

Source: Primary data, 2020

The respondents agreed that lack of experience 21(26.3%) were a reason that makes fail to secure job. 11(13.8%) and 13(16.3%) of respondents agreed that lack of referees and lack of job opportunities were the reasons to fail for securing job respectively. The respondents agreed that skills mismatch with labor requirements 17 (21.3%) and low salaries 18 (22.5%) of respondents were the reason for failure to secure job.

The next figure indicated the role of TVET entrepreneurial instruction practices for enhancing income levels.

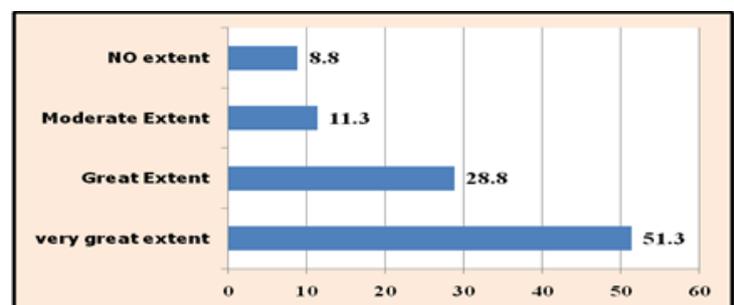


Figure 4.2 Roles of TVET entrepreneurial instruction practices

The roles of TVET entrepreneurial instruction practices were reported by the respondents with the rate of 51.3% were very great extent to the role of TVET entrepreneurial instruction practice as the enhancing way of income levels. The respondents

replied great extent (28.8%) about the role of TVET entrepreneurial instruction practice to enhance income levels. Moderate extent replied by 11.3% of respondents about the role of TVET entrepreneurial instruction practice as the enhancing way of income levels and 8.8% of respondents reported no extent viewed about the role of TVET entrepreneurial instruction practice as the enhancing way of income levels.

Table 4.3 highlighted the view of respondents about how the construction project has enhanced daily income levels.

The findings indicated that respondents reported that 26.3% strongly agreed that they became self-

entrepreneurs in construction while 13.8% of respondents strongly disagreed about becoming self-entrepreneurs in construction to enhance daily income. The daily income level from FRW 0 to FRW 2500 were strongly agreed by 51.3% of respondents while have strongly disagreed by 8.8% of respondents. The daily income from FRW 0 to FRW 4500 have strongly agreed by 56.3% and disagreed by 2.5% of respondents. Construction project with the daily income from FRW 2500 to FRW 4500 were strongly agreed (48.8%) of respondents and strongly disagreed (8.8%) of respondents. The respondents got daily income above FRW 4500 have strongly agreed by 41.3% of respondents and disagreed by 3.8% of respondents.

Table 4. 2 Construction project for enhancing daily income levels

Statement	Strongly Disagree	Disagree	Un Decided	Agree	Strongly Agree	SD	MEAN	SEM
	%	%	%	%	%			
Subsistence (buying food + supplies)	5	18.9	28.8	12.5	35	1.222	2.34	
Health insurance	8.8	21.3	11.3	18.8	40	1.397	2.35	
Fruits and vegetable (eat meal)	12.5	25	25	8.8	28.8	1.331	2.51	
Asset buying	6.3	16.3	26.3	22.5	28.8	1.243	3.51	
Cooperative (saving)	6.3	11.3	36.3	15	31.3	1.252	2.54	
Loan re-servicing	10	12.5	10	22.5	45	1.66	2.40	
Owning house	8.8	10	18.8	11.3	51.3	1.391	2.16	
School fees pay	12.5	15	10	8.8	53.8	1.458	2.11	

4.3 Discussion

About demographic characteristics and TVET construction project for its contribution to socio-economic development in urban areas, the findings showed that 53.8% were the females while 46.3% were the males. The respondents of the age group of 26-35 years old were 30.0% and these of age group of 36 to 45 years old were 23.8% and these above 46 years old were 20(25.0%). This is sorely contrary supported by the report of Maringa & Maringa(2013), in 2011 where an estimated 200 million Africans were aged 15 to 24, and around 40% had secondary education and the percentage of employed women were aged 15 to 49 who were in rural area were occupied by agriculture from 86% in 2005/06 to 77% in 2010/11, while the percentage of employed men relatively constant at 62%.

Similarly, in Rwanda TVET schools, a reasonable majority of the schools, 40.4% had female populations that were below 100 trainees while Male student population was evenly distributed across the schools in proportions of 3.8%, 5.3% or 5.7% of the

schools for population levels ranging from 15 trainees to 794.

According to Malunda (2011), in Rwanda, youngest are definite as individuals elderly among 15 to 35 years old. With admiration to the person appeared the college particular practical schools this description comprises both unwaged adult young elderly among 25 and 35 years and maybe indicates the courtesy to newfangled contestants hooked on the employees' marketplace elderly between 15 to 24 years till youth. This encounters the circumstances of the flows training where the possible central age assemblies were amongst 26-35 years old.

About getting job after graduation, the surveyed reported that 66.3% were agreed that TVET construction project enhance the income levels cause of high chance of employability after graduation. This is supported by the study conducted by Ganter (2019) about innovation in TVET and reported that entrepreneurship education in Europe is not only supporting higher rates of start-ups and creating successful ventures. Free enterprise training within the Europe also indicates various effect at the

discrete level, like advancing occupation motivations, developed rate of employability, commercial skills and insurances and defensive persons in contradiction of community elimination (European Commission, 2015).

The current study is solely the same as the study conducted in developing country by Kingombe (2012) and suggested that in order to kind actual usage of TVET to balance monetary consequences within different clusters of persons, politicians first have to approximation the effects of numerous kinds of TVET on employ and upsurge of effects. These estimations never unavoidably undertaken that employability and revenue alterations reproduce efficiency alterations. Employability and profits are assumed only to reproduce the worth that communities chairs on convinced teaching and exercise diplomas at all the social or fiscal reason (Kingombe 2012). Consequently, Saint Joseph TVET construction project inspiration and enhance the salary levels for its ex-students.

The respondents reported that the reason to make failure to secure job after graduation were lack of experience (26.3%), lack of job opportunities (16.3%), skills mismatch with labor requirements (21.3%) and low salaries (22.5%). This study is in the same line with the Subrahmanyam and Ananiadou (2013) noted that lack of work experience and the lack of job opportunities as reported by an unemployed university graduate from Kenya that it is still a problem and this is caused by a lack of entrepreneurial skills specially in young people unfavorable economic climate discouraging entrepreneurship and job creation. The particular financial records that contestants shared emphasized two general challenges: skills misalliances and absence of job occasions.

According to Subrahmanyam and Ananiadou (2013), absence of applicable awareness and nonexistence of evidence about the labor marketplace in youth people are the chief origins of frequently have problems resulting occupations since they absenting the awareness that companies request. Thus, the youth people protested that various alumnae permission colleagues deprived of applied services. The present education are intensely comparable to the preceding poetry nearby the sources or reason for catastrophe to protected work subsequently graduation in TVET creation projection of Saint Joseph.

About TVET entrepreneurial practice, over a half of the respondents 51.3% were very great extent to the role of TVET entrepreneurial instruction practice as the enhancing way of income levels.

According to UNESCO, (2015), in practice within TVET capabilities, commercial education propositions a representative and practicable capitals of developed the manageable assistances that the

social order and the budget are challenging of countries. It is a critical accidental to grow and rehearsal the commercial skills wanted to generate their personal vocation paths as TVET alumnae. Consequently, through TVET commercial repetition this is vital for TVET alumnae transversely lifespan, exertion and occupational innovativeness conception as the technique for upsurge revenue heights.

The most TVET programmes accentuate the enhancement of knowledge of the young labours strength or sustenance the making of young business persons, and the importance is positioned on development of superiority within the supply of employable labour (Winstead, Adams & Sillah, 2009).

Findings from two educations showed in 2006 about employability in youth people from different technical colleges in Rwanda; demonstration that 52% of 25 questioned enterprises were pleased by the alumnae's recital. Both magnates needed that the alumni must obligate more real-world abilities. 54% of the bosses prefer on-the-job exercise for their workforces (MINIDEC, 2008). This discovery brands the present education to fit to this earlier teachings because once the alumnae achievement they upsurge the revenue stages.

The respondents reported that the daily income level were cited from FRW 0 to FRW 2500 (51.3%), from FRW 0 to FRW 4500 (56.3%), FRW 2500 to FRW 4500 (48.8%) and above FRW 4500 (41.3%). In Rwanda, the current study fit to the report of NISR (2017) where noted that the regular revenue from salaried employ of workers at main occupation was about 55,230 RWF per month while the median was 20,800 RWF. The countrywide average hourly cash salary from employ of employees at foremost work was 407 RWF per hour. The conforming values were 215 RWF per hour in cultivation, 502 RWF per hour in manufacturing and 574 RWF per hour in facilities (NISR, 2017).

Correspondingly to the education shown about UNESCO-UNEVOC International Centre for TVET, UNESCO (2019), described that the conforming median regular cash imbursement was 35,000 RWF, the median two-week cash imbursement was 15,000 RWF, the median one-week cash imbursement was 5000 RWF and the median everyday cash imbursement was 800 RWF.

According to these outcomes, the median revenue from paid service of workers at main works was about 20,800 RWF per month while the unkind scheduled income was 55,737 RWF. Therefore, the recent homework is well buttressed by the aforementioned studies concerning the daily moneys salary.

The results about contribution of TVET construction projects in improved living standard of graduates revealed that there were a remarkable improved living change and different categories change

reported were including subsistence conditions (35%), health insurance (40%), fruits and vegetables (28.85%), by buying asset (28.8%), un-decided about savings (36.3%), loan re-servicing (45%), Owning house (51.3%) and pay school fees (53.8%).

5. Conclusions

As conclusion, the research findings of the study conducted in Nyamirambo Sector of Nyarugenge District concerned the graduates from Saint Joseph construction project. Respondents reported great role of TVET project to enhance their income levels but the lack experience led them to fail for securing job. And the daily income varied from RFW 0 to RFW 4500.

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