

Tracing Rwandan TVET Graduates' Competences and Employability with their Potential Employers' Satisfaction

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Abstract

The government of Rwanda set its development agenda with a focus on transforming the country from a predominantly agrarian to a knowledge-based and service-driven economy by the year 2020. The role of WDA in strengthening linkages between education and employment is imperative for sustainable economic development. However, the relationship between education and employment cannot be ascertained without conducting a tracer study. It's against this background that a tracer study about the employment status of TVET graduates across the trades/ disciplines was needed to assess their employability and the employers' levels of satisfaction with the graduates' competencies in the various agencies where the latter are employed, an in-depth assessment of how graduates assess themselves concerning the relevance and quality of their training and the labor market demands and research-based recommendations on what curriculum changes TVET institutions could be adapted to enhance the competence and employability level of the TVET graduates. We found that the employment rate of IBT graduates was quite impressive, as 70.1% of the graduates were employed, and the average earning per month was 63,592 Rwf. In addition, findings reveal that most respondents (64.9%) reported having spent less or equal to 3 months before they got employment, 14.4% indicated 4-6 months, and 15.2% reported 7-12 months. Regarding employer satisfaction of IBT graduates, competencies, 90.6% noted that they were delighted with the graduates' work. This directly implies their level of performance on the job. However, some of the following challenges were highlighted. These included high student-teacher ratios, insufficient time for training, lack of meaningful network, and lack of job-related information and opportunities for further training.

Keywords: Rwandan TVET Graduates, Competencies, Employability, Employers' Satisfaction

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Introduction

The GoR, through WDA, with financial support from the World Bank, launched a Skills Development Project (SDP) to support improving access to quality and demand-responsive technical and vocational training (TVET). The project aims to contribute to the alleviation of the current and long-term skills constraints to pave the way for Rwanda’s transition into a middle-income status economy as articulated in its long-term development aspirations enshrined in Vision 2020. The planned interventions under SDP include, among others, support to the overall TVET management and strengthening of the delivery system through conducting relevant research that will inform future strategic and policy decision-making and building capacity for research within WDA (Republic of Rwanda, 2015).

The research and development component focuses on two main categories of research. The first one aims to enable WDA to have a sustainable financing framework for TVET delivery in Rwanda. The second one seeks to address TVET skills needs that are considered critical bottlenecks to the economic growth in Rwanda. Therefore, WDA commissioned this study to review and analyze the status of SDF (Skill Development Fund) graduates after their training programs through various interventions of the Skills Development Fund (Republic of Rwanda, 2015).

TVET and Skills Development in Rwanda

Before establishing the WDA, education policy in Rwanda had emphasized general education development with less emphasis on technical and vocational skills. Rwanda did not have an explicit legal and policy framework to guide TVET for a long time. The TVET system was fragmented, and policy and strategic planning responsibilities were assigned to different institutions. Hence, during this period, coordination and harmonization of operating procedures were virtually non-existent. Consequently, training institutions faced serious challenges (MINEDUC, 2013).

Recently, a consensus has developed that all countries face similar challenges, including the liberalization of markets, rapid innovations in technology, and the importance of knowledge to a country’s competitive advantage. Against these pressures, many countries turn to their education and training systems as a solution for dealing with a range of social and economic issues. In light of this, and considering the previous second-class status of TVET, the Government of Rwanda has undertaken

significant steps to strengthen the education delivery of TVET. TVET is a constructive development initiative to redress gaps in education and progress in social and economic outcomes (Miller, 2020) in all countries. The dual system between school and industry partnership in training career students should be a key role model of TVET (Remington, 2018).

At the forefront of these efforts is the Ministry of Education (MINEDUC), primarily through the Ministry of State in charge of TVET and the Workforce Development Authority (WDA) both have recently made great efforts in promoting TVET and the labor market responsiveness of the education system. TVET has emerged as one of the most influential human resource development strategies that Rwanda has embraced to train and modernize the technical workforce for national development (MINEDUC, 2013).

The new direction for TVET has orientated towards the world of work and the emphasis of the curricula on the acquisition of competency-based skills. This change is necessary to train Rwanda's skilled and entrepreneurial workforce to create wealth. TVET will respond to the needs of different types of industries and the different training needs of learners from different socio-economic and academic backgrounds, including nine- and twelve-year basic education, university graduates, and others from the informal, non-formal, and formal sectors. A skilled workforce is a basic requirement for driving the engine of industrial and economic growth, and TVET – in close collaboration with the private sector - holds the key to building this technical and entrepreneurial workforce (Republic of Rwanda, 2014).

Labor market context in Rwanda

Economic growth in Rwanda has been impressive since 1995, with over 10% achieved between 1996 and 2000. Following 2001, rates slowed to around 6%, but these are still above the 5% average for countries in Sub-Saharan Africa. According to the National Bank of Rwanda, the economy grew 8.8% in 2011, a solid 7.7% in 2012. GDP growth is projected to moderate to 7.1% in 2013. The inflation rate is expected to arrive at 6.0 % in 2013 (National Bank of Rwanda, 2014).

In 2011, the industry sector was the best performer, collecting 15% growth in total, with 22.3% growth in the construction sector, 15% growth in the mining sector, and 6.8% in manufacturing. The agricultural sector was also noted as among the best performers in 2011, with 9.5% growth during the last three years. The services sector grew 7.2%, boosted by a gradually favorable business environment: finance and insurance grew 10.3%, transport and communications grew 5.6%, and wholesale and retail trade

grew 4.9%. By 2012, the agricultural sector accounted for 32,1% of Rwanda's GDP, the industry sector 15%, and services for 52,8% of GDP.

Nevertheless, the World Bank notes that to compensate for the high population growth, economic growth will have to increase by an additional 3% to significantly impact poverty reduction (Rwanda EDPRS II, 2014). According to the latest figures (WDA, 2012), enrolment levels for the vocational training centers are around 13,577, and enrolment levels for the upper secondary technical schools, including IPRCs, are 60,763 (WDA, 2015).

Rwanda's labor market has also seen important structural changes over the past 8 to 9 years, which will have implications for the contents of TVET programs. The share of waged workers in the agriculture sector from 2000 to 2006 period has increased from 4 percent to 12 percent. Meanwhile, over the same period, those employed in manufacturing tripled, albeit from a small base, and has increased to just over 5% of the total workforce. Similarly, the share of service workers doubled from around 10% to just over 20% of the country's workforce.

As the country's manufacturing and service base continues to expand, the type of skills produced by the TVET institutions will need to be more complex. Increasingly, workers will require employability skills to perform tasks and to cope with a continually changing work environment, which is defined as a "set of knowledge, skills, and attitudes that all labor market participants should possess to ensure they have the capability of being effective in the workplace" (NCBS, 2014).

Employer's satisfaction and National Skills survey reports

The term employers encompasses all potential job providers of TVET graduates and the local community in general; satisfaction refers to the appreciation of the service delivery of TVET graduates and the fulfillment of requirements as defined in the curricula framework for TVET professions (WDA, 2013).

The concept of job satisfaction has been developed in many ways by many different researchers and practitioners. It is also important to note that job satisfaction is "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences." Others have defined it as simply how content an individual is with his or her job, whether he or she likes it or not. It is assessed at both the global level (whether or not the individual is satisfied with the job overall) and the facet level (whether or not the individual is satisfied with different aspects of the job). There are 14 common

facets: Appreciation, Communication, Co-workers, Fringe benefits, Job conditions, Nature of the work, Organization, Personal Growth, Policies and procedures, Promotion opportunities, Recognition, Security, and Supervision) (WDA, 2013).

According to Suzanne (2010), employers' satisfaction focuses on analyzing the perception of employers about how graduates (employees) apply their acquired competencies and skills at their respective workplaces. In the same line with this survey, the information obtained from employer evaluation of employees is used to inform the TVET curriculum design and delivery process. In addition, tracer studies assess graduates' level of satisfaction about the relevance of the skills acquired during training and other various work components.

In 2012, RDB commissioned skills surveys in 8 sectors, including Agriculture, Manufacturing, Tourism, Construction, Mining, ICT, Financial, and Energy. The rationale for conducting these skills surveys was to generate credible and comprehensive labor market data and information from market and supply sources to inform the processes of strategic and sustained investments in skills development. The skills surveys covered the entire spectrum of the skills mix triangle, spanning from the managerial and supervisory skills at the top and middle to the technical and artisans (TVET) at the base of the skills mix triangle. However, the information provided in the TVET section of the survey reports for the selected sectors is not comprehensive enough to address the issues of existing mismatch between the skills delivered by TVET institutions and the requirements in the labor market in terms of numbers and quality (MINALOC, 2013).

Whereas the information provided in the skills survey reports regarding TVET skills needs to be required in the market indicates the gap in terms of numbers per occupation trade in a given economic sector of activity, there are no details relating to TVET qualification levels that correspond to the numbers of TVET professional identified as missing. This level of detail is quite important as it forms a major ingredient in evidence-based planning, and it is a determinant of quality delivery of TVET skills considered the critical bottleneck to sustained and improved competitiveness of the Rwandan economy across various occupational trades. Furthermore, the survey reports do not reflect key information on the supply side relating to the availability and quality of TVET curricula and TVET trainers in terms of numbers and their professional ability to deliver the required TVET skills. These constitute an important ingredient in the delivery of quality TVET (NCBS, 2014).

Historical underinvestment in education in general and workforce development, compounded by the 1994 genocide, resulted in a low level of human capital in Rwanda. Over the past few years, progress has been made through the rapid expansion of capacity-building initiatives, including technical and vocational education, training, and higher education. Despite these, capacity constraints remain one of the main impediments to the country's realization of its ambition of becoming a middle-income country by 2020. Hence, interventions may need to be scaled up significantly and better targeted (MINALOC, 2013).

A range of audits and surveys validate that Rwanda has an acute human capital shortage, with staff capacity assessed at 60% of labor market short-term requirements and a deficit of 40%. The private sector has the most acute deficit, equivalent to 60 percent of short-term needs. The public sector deficit is estimated at 30 percent, and civil society at 5 percent.

According to the National Capacity Building Secretariat's Skills deficit report (NCBS, 2014), the entire spectrum of skills deficit severity ranges from well over 90 percent in the land and environment to zero in the security sector. The deficits in the public sector are concentrated mainly in the professional cadre. There are, however, two notable exceptions, land/environment and agriculture, which report an acute deficit in artisan cadre skills. The governance-related sectors (i.e., justice, governance, and security) report the lowest deficits.

Employment and its projections in Rwanda

In 2010, RDB initiated a study on employment and its projection in Rwanda as part of key information packages needed in its LMIS database. However, the information on the TVET section in the employment report and its projection does not provide the expected details on the current status of TVET graduate employment across various sectors of the economy in various TVET occupation trades and forecasts over a stated period to provide a basis for short, medium and long term plans to inform TVET delivery processes appropriately (MINALOC, 2013).

Progress towards the Vision 2020 and Reducing Poverty

According to the Ministry of Finance and Economic Planning Reports (MINALOC, 2014), this impressive progress made by Rwanda since the implementation of EDPRS 1 is clearly shown by the fact that the poverty rate has dropped almost 12% in five years from 56.7% in 2006 to 44.9% in 2011. There are several reasons for this success, empowering every citizen to take the lead in their own community's

development being one (Tusiime, Ndayambaje en Ndiokubwayo, 2022). Other reasons for the poverty rate decrease are (i) the notable improvement in agricultural production and national infrastructure, (ii) the slowing of population growth, and (iii) an increase in non-farm wages and income transfers.

The existing evidence would indicate that the country's skill base is very bottom-heavy, with technicians comprising only 7.7% of the workforce, creating a situation described as the "missing middle." The Ministry of Education views the lack of qualified technicians and skilled workforce as one of the major barriers to quality TVET education, hence the poor public perception of TVET graduates.

The 2010 National Skills Audit identified serious and significant skills gaps throughout the labor market. This is especially the case in the private sector, with a skills deficit of 60% of their short-term needs and a slightly lower 40% for the public sector. The extents of the gaps vary between sectors and for different occupations. For instance, in the Construction sector, the gap for technicians is enormous, with a 91% gap between the demand for qualified technicians and the supply. In the Tourism and hospitality sector, there is an even greater 96% gap for technicians and a 70% gap for artisans. Other sectors experiencing high skill gaps include mining and finance.

If the levels of the skill gaps are not closed, the private sector will start to experience serious bottlenecks to production and the delivery of quality services; the public sector will be unable to manage change and provide an environment conducive to entrepreneurship and investment, all of which could further undermine progress towards achieving the 2020 vision to eliminate poverty.

Research questions

1. What is the relationship between TVET Graduates and employability?
2. How do employers appreciate TVET Graduates' competencies and delivered services?

Methodology

The population of the study

The study population consists of graduates who have completed the IBT in Hospitality Occupations in 4 hotels, namely Urumuli Hotel located in Gicumbi District, Moriah Hill Resort in Karongi Eastland Motel in Kayonza District, and Virunga Hotel in Musanze District. The graduates and employers' perceived satisfaction and graduates' competencies and relevancy of skills constituted the unit of analysis.

However, the scope and range of the total population made it impossible to collate data from all the graduates and employers owing to time, cost, and access restrictions. Hence, a sample frame became imperative for the study groups of respondents.

Sampling Techniques for the Employers

The non-judgmental sampling approach was used to capture the perception of graduates' competencies by their employers. Unlike the graduate category, the total number and the whereabouts of employers of IBT graduates were not known. The researchers relied on the information from the employed graduates to trace the employers. The graduates' questionnaire was also designed to capture their employer's telephone contacts, and this approach helped researchers locate employers.

A sampling of the Graduates

Upon consultation with the WDA team and securing secondary data, IBT 1 and 2 were 1035. It was agreed that the total sample of 258 graduates was appropriate for the IBT graduates. On a positive note, the research team collected data from 270 IBT graduates, which was slightly above the sample (Tusiime, Ndayambaje en Ndiokubwayo, 2022).

Ethical Consideration

The research was conducted in a manner that ensured participants were guaranteed anonymity and confidentiality. The research process respected the rights of participants as outlined above and engaged participants based on informed consent. The questionnaire was also translated into Kinyarwanda to ensure that respondents thoroughly understood the purpose of the study, the questions, and what was requested of them.

Findings and Discussion

This tracer study covered a population of 797 IBT 1&2 graduates, from which a sample of 239 graduates was drawn. However, the research team was able to collect data from 270 graduates. The study also covered a representative sample of their employers and Heads of Hotels where IBT graduates had attended their respective training. From all these categories of respondents, qualitative and quantitative data was collected, processed, and analyzed, and thematic patterns were established to benchmark the findings and provide a basis for discussion.

Geographical location

In this study, the geographical location of the sampled IBT graduates was one of the demographic characteristics of interest. The distribution of the graduate respondents by location is illustrated in Table 1.

Table 1. Category of IBT graduates by geographical location

Province	District	Frequency (N)	Percent (%)
Kigali City	Gasabo	11	4.1%
	Kicukiro	11	4.1%
	Nyarugenge	2	0.7%
	Total	24	8.9%
East	Kayonza	46	17.0%
	Rulindo	4	1.5%
	Rwamagana	2	0.7%
	Total	52	19.3%
North	Gicumbi	71	26.3%
	Musanze	64	23.7%
	Total	135	50.0%
West	Karongi	58	21.5%
	Rusizi	1	0.4%
	Total	59	21.9%
Grand total		270	100.0%

As indicated in Table 1, Kigali City had the least graduate respondents (8.9%), while the Northern Province had the highest (27.3%). The Eastern Province had 19.3%, and the Western Province had 21.9% of the sampled IBT graduates. The socio-economic opportunities available in Kigali appeared to have motivated some of the graduates from other provinces to migrate to Kigali from the IBT training Hotels, all located there. In fact, during the Focus group discussion with some of the IBT graduates who live and work in Kigali, it was revealed that Kigali offered hopes for employment to the point that even those who are unemployed would rather be unemployed in Kigali and not in a rural area. Creating employment opportunities in rural and sub-urban areas, especially in the hospitality sector, would provide a solution to continued unemployment in urban areas.

IBT graduates' Age category

The age of the graduates was another important demographic variable considered in this study. Overall, the biggest proportion (81.1%) of the sampled graduates was aged between 21 and 32. Those who were above 32 years accounted for 3.3%, and the age bracket of 15-20 years accounted for 15.6%.

As observed in the results, 37.7% of the IBT graduate respondents are aged between 21-26 years, and most others are also below 32 years old. This age category is considered industrious, risk-taking, and socially active. People in this age bracket tend to have the zeal to acquire skills and knowledge and can easily adapt to workplace changes and innovations. Further, it should be noted that acquiring skills at a very young age, like 15-20 years, prepares graduates for employment as soon as they are legally accepted to work at 18 years old.

Finding 1: Employment status of graduates

IBT training paved the way for young graduates' employability because it equipped them with the required skills relevant to the job market.

Employability of IBT graduates

IBT training aims to equip the youth with skills and competencies that can enable them to get salaried employment and/or create their own jobs. In this regard, one of the key aspects of the focus of this survey was to find out which percentage of graduates were employed and the reasons for unemployment for those who were not employed.

This finding indicates that more than two-thirds of IBT graduates (70.1%) are employed, while 29.6% are unemployed. These statistics underscore the role of skill-based training programs in Rwanda in creating employment, particularly the Hospitality-based IBT training supported by WDA. This finding shows how employment in the Rwandan TVET field is still available compared to other countries, such as Kenya (Kiboi en Dimo, 2019), where there is a low rate of graduates finding employment after completing their courses. Youth constitute most Rwandan demographics, so youth employment programs are critical to Rwanda's socio-economic development. For the 20.9% who were not employed, the main reasons for unemployment ranged from not having connections with potential employers, lack of experience, and lack of job opportunities.

Monthly income of employed trainees

On average, IBT graduates earn 63,592 Rwf as monthly income. As indicated in Table 4.4, over 60% of the employed respondents earned between 40,000Rwf and 80,000Rwf. 8.3 % earned between 101,000 Rwf and 150,000Rwf, while about 3.1% earned between 201.000Rwf and 250,000Rwf (see Table 2).

Table 2. Monthly income of employed respondents

Monthly income in RWF	Frequency (N)	Percent (%)
Less than 20 000	14	14.6%
21 000 – 40 000	22	22.9%
41 000 – 60 000	24	25.0%
61 000 – 80 000	18	18.8%
81 000 – 100 000	7	7.3%
101 000 – 150 000	8	8.3%
201 000 – 250 000	1	1.0%
Above 250 000	2	2.1%
Total	96	100.0%
Average Monthly Income		63,592 FRW

It was also revealed that some of the graduates were involved in off-and-on activities that earned them extra income and their monthly incomes. Although this cannot be assumed as a stable income, it nonetheless contributes to their saving capacity.

Graduates' employment status while studying at the IBT institutions

An investigation was conducted into whether the graduates were employed while studying at the IBT center. It shows that most (66.7 %) were not employed during their academic pursuits, while 33.32% were working and studying simultaneously.

This finding suggests that some graduates had already secured jobs and probably joined IBT institutions to upgrade their skills. While this may be interpreted as a random opportunity, some employers revealed that IBT students employed during their studies tend to work hard to impress their employers and bring their learned skills to the workplace. On the other hand, most of the graduates had no prior employment before they acquired their training. Given the employment rate for IBT, which was 70%, it can be concluded that IBT has enhanced employability among the youth.

IBT program and the creation of off-farm jobs

One of Rwanda's development ambitions is to create opportunities for the youth to develop skills that allow them to transition from subsistence agriculture to off-farm activities. WDA's effort to empower the youth with practical skills fits Rwanda's overall mission well. As such, this tracer survey investigated whether IBT training helped graduates acquire skills for off-farm jobs and how many are involved in off-farm activities.

The findings from the survey show that out of 270 IBT students who were sampled, 93.4 % expressed that their training equipped them with the skills to create off-farm jobs, and about 6.6% said they were not equipped with the skills to create off-farm jobs. However, some graduates equipped with skills to develop off-farm activities did not carry off-farm activities due to challenges like lack of financial capital and start-up tool kits. According to Haolader's (2015) study in Bangladesh, teachers need training to effectively deliver TVET courses as their entrepreneurial experience and self-efficacy affect their teaching activity. Thus, the incapacity of trainers hinders TVET graduates from starting up their businesses (Haolader, 2015).

IBT graduates' involvement in off-farm jobs

The Government of Rwanda strives to build knowledge and a skill-based economy to facilitate its development agenda. However, such a skill base cannot be achieved if a significant portion of its population still relies on low-income-generating agricultural activities. One of the Ministry of Education's key targets through WDA is to increase the graduate's creation and involvement in off-farm jobs to generate stable incomes. Because of this, this study investigated how many graduates were involved in off-farm activities.

This finding indicates that 54.7% of the graduates noted that they were involved in off-farm activities, while 45.3% said they were not. It should also be noted that the number of graduates who said they had the capacity to create off-farm jobs is higher than those who are involved in off-farm jobs. A lack of finances and materials partly causes this discrepancy. Thus, it is a call to create further strategies to empower graduates with basic infrastructure to start off-farm activities after graduation. As Rwanda strives to build a service- and knowledge-oriented industrial base, such statistics provide evidence that the IBT program positively contributes to the development of a skilled workforce that can feed into the desired development sectors.

IBT graduates' monthly incomes from off-farm activities

This tracer survey also graduates' monthly incomes from their off-farm activities. Table 3 indicates the monthly income earned by the graduates from off-farm activities.

Table 3: Graduates' monthly incomes from off-farm activities

Monthly income in RWF	Frequency (N)	Percent (%)
20 000 and less	9	11.5%
21 000 – 40 000	17	21.8%
41 000 – 60 000	17	21.8%
61 000 – 80 000	19	24.4%
81 000 – 100 000	8	10.3%
101 000 – 150 000	6	7.7%
201 000 – 250 000	1	1.3%
Above 250 000	1	1.3%
Total	78	100.0%

Referring to Table 3, the greatest proportion (24.4%) of IBT graduates earns a monthly income between 61,000FRW - 80,000FRW from off-activities. By computation, the average earnings are about 60,000Rwf per month. From these projections, it can be observed that IBT creates opportunities for engagement in off-farm jobs and the generation of new incomes. This trend implies a positive socio-economic change since the young population continues not to rely on agricultural activities as a source of income. Pieces of training in beautician and tailoring consistently show strong impacts on employment—graduates of these training programs are more likely to have any (non-farm) employment and are also more likely to be working within the trade for which they were trained (Chakravarty *et al.*, 2019). Both trades also show large impacts on monthly hours worked and some of the earnings indicators. Our study only focused on the hospitality field; therefore, more studies are needed to check outcomes from other fields.

Time spent from completion of training to graduation

In this study, it was important to determine the time lag between completion of training and getting employment. Findings reveal that most respondents (64.9%) reported having spent less or equal to 3 months before they got employment, 14.4% indicated 4-6 months, and 15.2 % reported 7-12 months. A proportion of 5.2% stated having spent more than 12 months before securing employment.

Generally, it can be inferred that most of the graduates sampled were able to get employment in a short period after completion of training. One of the reasons for securing employment within a relatively short period is that the IBT program predominantly focuses on providing skills needed in daily life and responding to people's immediate needs, especially within the context of the prosperous hospitality industry in Rwanda. Unlike some countries like Cambodia (Miller, 2020), young graduates need to spend time immigrating to tourist areas such as Siem Reap to find employment.

Job search mechanism used by TVET graduates

For IBT program graduates who were employed, this study was interested in finding out which job search mechanisms they used. The evidence shows that graduates use multiple approaches while searching for employment.

This finding reveals that 49.1% of the respondents said that they got employment through personal contacts through friends and relatives, 18.8% indicated that they got work by responding to adverts on media platforms, 16.1% noted that they were employed before they completed their studies and 15.2% got their jobs through industrial attachments. The remaining proportion of graduates got employment by setting up their businesses and being hired by WDA-supported training centers. We can infer that social capital/ social networks play a critical role in the graduates' chances of employment in the new job search mechanisms. It is also recommended that WDA, through its supported training centers, connect graduates with employers. It is also recommended that specific components of social networking be an integral part of WDA-supported training programs.

Number of employers contacted before getting the first job

Although the number of employers contacted before graduates secure jobs does not necessarily indicate the graduates' potential competencies, it can also be argued that the fewer the employers contacted, the more employable the graduates are and vice-versa. Therefore, this study sought to investigate the number of employers contacted by the graduates before the latter secured their first jobs.

This finding reveals that 73% of the respondents contacted two or fewer employers before they got their first employment after graduation, 14% indicated 3-4 employers, 9% mentioned 5-6 employers. Overall, 87% of the graduates contacted between 1 to 4 employers before they got their first

employment, which projects a positive picture. However, it should be noted that a few graduates contacted as many as ten employers before they secured their employment.

Membership in TVET trade associations

Associations help members to share experiences pertaining to their areas of specialization. In addition, through association, members share relevant information related to employment and career development opportunities. Graduates were thus asked whether they were members of any association of their trades.

As revealed in this finding, only 2.6% of the respondents were members of associations of their trade (professions) while 97.4% were not. The number of graduates who are affiliated with associations/cooperatives is still very low concerning the potential advantages of belonging to associations/cooperatives, which include, among others, pooling scarce resources to start joint ventures, increasing the possibility of securing loans from lending institutions, and related benefits of working as a team. Because of these advantages, there should be efforts to sensitize TVET graduates to join or establish associations based on their trades to pull resources and even start joint business ventures.

Employment retention of IBT graduates

A great proportion of respondents noted that they are still in their first job. To a great extent, this partly implies that graduates are competent to be retained by employers. On the other hand, the few who have changed could have done so because they were competent to afford mobility in the labor market.

The majority (68.8%) of respondents argued that they were still in their first jobs. Considering the relatively high demand Hospitality related trades, this retention of employees could imply that employees are relatively motivated and that employers are satisfied with graduates' competencies. This can also explain the significant productivity of the hospitality industry.

Finding 2: Views from graduates' employers

The employers' views were examined on issues like recruitment procedures, familiarity with graduate competencies, TVET training, work performance, prospects of employment of TVET graduates, levels of satisfaction with graduates' skills, areas of improvement in TVET training, and their overall recommendations. Precisely, (a) Employers' rating of graduates' training and their productivity, (b)

Employers' prospect of employing TVET graduates in their organizations, and (c) Employers' level of satisfaction of TVET graduates were measured (see Figure 3).

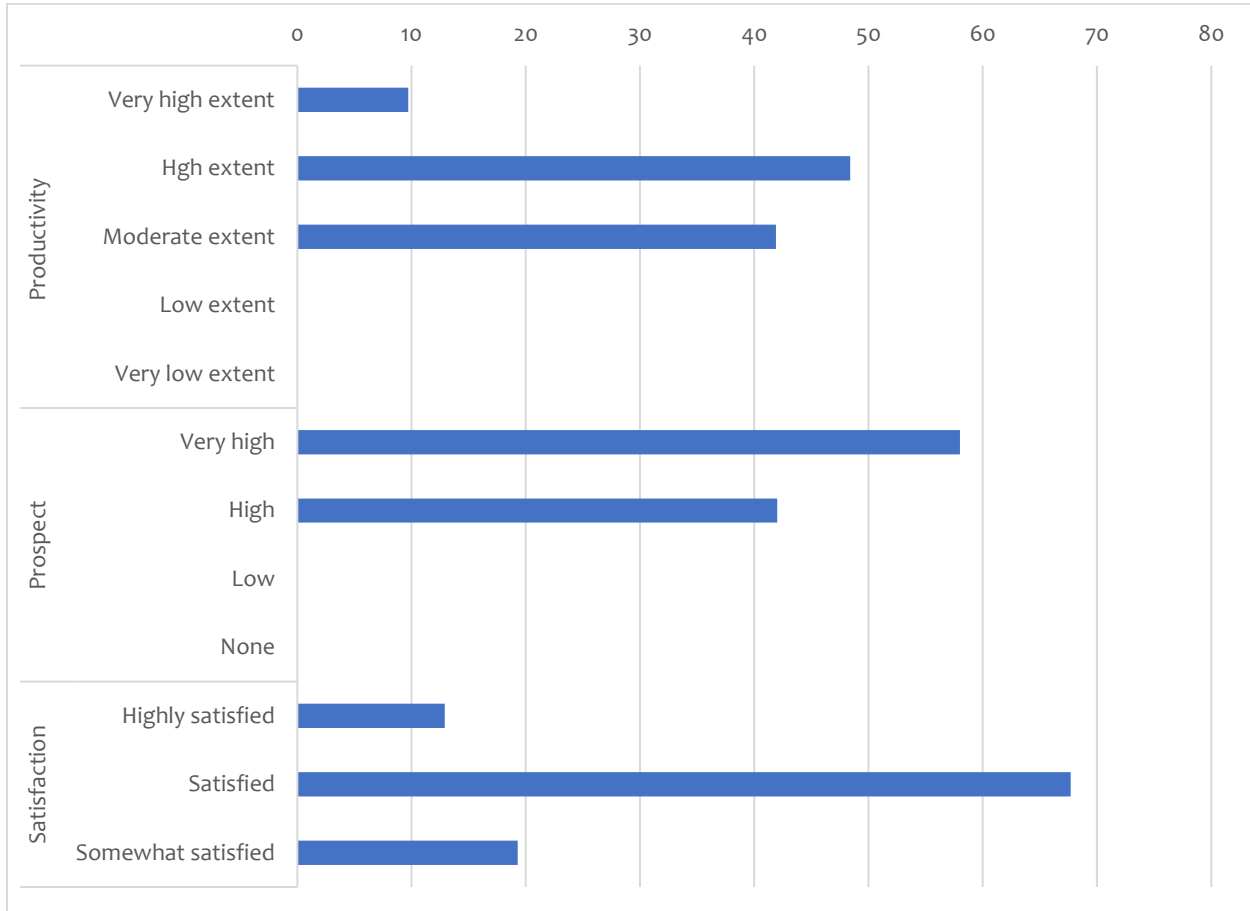


Figure 3. Views from potential employers

Concerning the employers' rating of the extent to which the knowledge and skills acquired by TVET graduates affected productivity and performance in the organization. The findings in Figure 3 show that knowledge and skills affect productivity to a higher extent (58.1%) while 41.9% estimate that skills and expertise from TVET graduates have moderately affected their work.

Findings in Figure 3 show that 100% of employers would be willing to recruit TVET graduates in their organizations. In other words, employers appreciate the quality of knowledge and skills provided by TVET institutions to graduates. It is important to note that employers highly suggested they would hire other TVET graduates in their organizations. This implies the latter's competence level and the perceived quality of training they have acquired.

To have a clear picture of the quality of TVET training and the increased opportunity for employment, this survey explored the employer's ratings on many components. First, the employers were asked to indicate the overall satisfaction levels of graduates employed in their respective organizations. The findings indicate that most employers were satisfied with the TVET Graduates' work (12.9% highly satisfied and 67.7% satisfied). Also, 19.3% noted they were somewhat satisfied. These statistics indicate a positive perception of TVET graduates by employers. Such positive perceptions are critically important, especially about the continued focus on TVET as an impetus to building a self-sustaining and productive economy.

In Anane's (2013) study, the relationship between TVET graduates' competences and competence-based training was traced. The author appreciates that countries such as Japan, South Africa, and the Netherlands have implemented these kinds of training (competence-based) long ago and have succeeded. Mason et al. (2009) found that structured work experience and employer involvement in degree course design and delivery have apparent positive effects on the ability of graduates to secure employment in graduate-level jobs.

Conclusion and recommendations

Although 73% confirmed that they acquired skills for potentially employing themselves, only 54.7% have been involved in off-farm jobs. As much as possible, emphasis should be put on helping graduates with tool kits to start their off-farm jobs or linking them to financing agencies where they can secure start-up capital. This study revealed that the employment rate among IBT graduates was 71%. This implies the employer's overall appreciation of the skills of IBT graduates. Although this reflects a positive trend, the remaining 29% could also secure employment if concerted efforts were made right during the start of their training. As a recommendation, TVET institutions should develop a formalized strategy with partners to create employment pathways. During the survey, it was also revealed that the majority of IBT graduates (64.9%) secure employment within 1-3 months after graduation. This is a high percentage compared to the overall time taken to secure a job after graduation. However, the mean salary was 63,000 Rwf, which is relatively low compared to the purchasing power. In addition, only 2.6% said they belonged to the association of their trade. Efforts should be made to sensitive graduates to establish trade associations to re-enforce their collective bargaining power and joint collateral if they need to secure business loans from financial institutions.

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