OROMIA JOB CREATION AND VOCATIONAL BUREAU
HOLETA POLYTECHNIC COLLEGE

TRACER STUDY REPORT

GRADUATES OF 2021

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TRACER STUDY REPORT OF HPC GRADUATES OF 2021

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LIST OF ABBREVIATIONS

AAHS   Advanced animal health service
APMM   Animal production marketing management
APT   Agro processing technology
COC   Center of competence
CPMM   Crop production marketing management
CT-   Cooperative training
EOS   Ethiopian occupational standard
FGD   Focus group Discussion
FTI   Federal training institute
FVPT   Fruit & vegetable production technology
HNS   Hard ware and network service
HPC   Holeta polytechnic college
ICT   Information communication technology
KfW   Germen donated project
KII   Key Informant Interview
MPT   Meat production technology
MSE   Micro and small enterprise
NCA   National competency assessment
NRCUM   Natural resource conservation utilization management
OS   Occupational standard
TVET   Technical, vocational and education training
VGC   Vocational guidance and counseling

ABSTRACT

The purpose of this study was to examine the job placement profiles of the graduates. competences of trainers and graduates, institutional capacity, and industry linkage in their respective fields. To that effect, the commitment and competence of graduates and trainers, the qualitative and quantitative aspects of resource supplies, training and assessment practices including industry involvement and cooperative training (CT), and the relationships with and influence of the human and material resources on graduate competence were examined A survey was administered using the standardized questionnaire. Accordingly, 120 level IV and degree graduates, 11 employers and 23 college administrative staffs, department heads & instructors that was 154 in total were interviewed.

Results indicated that most of the respondents didn't employed with areas related to their training program for about 1-8 months. The total number 2021 graduates cohort employed in the organization were 55 out of which 27 graduates were from degree program previously employed in government organization and 28 of them were level based graduates. Out of the total employed graduates, 37% employed on the related position, 24% employed on low extent related position where as 39% were employed to the position which has no relation to their field of study. The study revealed that employment opportunities are affected by nepotism and corruption, demand of huge investment by some professions and market informality are the graduate's main bottlenecks to get jobs. Most technical and vocational skills development suffers from weak links with the market. Even after graduating, the graduates might still lack the appropriate skills needed for the project formulation. improving information on job search, employment conditions and work are taken as signals of the labor market chances of graduates.

Key words: AFP, graduate competence, trainer competence, Institutional capability, employability,

CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

Holeta Polytechnic College (HPC) is one of the aged government-owned colleges established in 1975 in Oromia Regional State. The College has been training in the fields of Agriculture and currently working to become Center of Excellence in Agro-processing in the East Africa that produces skilled and employable work force by delivering market-oriented and gender sensitive quality training through acquiring and adapting modern technologies that meets Ethiopia Occupational Standard (EOS). That is through practical-oriented education and training in the agricultural occupation in order to produce self-reliant citizens as per Ethiopian TVET strategy of 2008; which focus on introduced occupational standards and outcome-based curriculum to ensure relevance of the TVET for the economy and social development.

Holeta Polytechnic College was providing training in the agricultural sector (Crop Production and marketing management, Animal Production and marketing management, Advanced Animal Health services and Natural Resources conservation and utilization management) from level **I** to **IV** which is currently replaced by new EOS (Crop Production, Animal Production, Advanced Animal Health services and Natural Resources Conservation and Utilization). It also offers training in industry development sectors such as Dairy Processing and Fruit & vegetable processing and in the Economic Infrastructure sector (ICT) from level I to IV based on the labour market need assessment. Beside to this, the College is currently serving as one of the selected satellite campuses of the Federal (TVI) institute providing training to the future TVET trainers in Bachelor of Science (BSc) degree level in the Five fields of study (Dairy processing technology, Meat processing technology, Fruits and Vegetables processing technology, Animal production technology, plant production technology).

However, producing skilled man power and supplying trainees for the labor market alone is not the final goal of HPC. So tracing the where about graduates and checking the effectiveness of the training program is mandatory. A tracer study is a form of program evaluation that measures a TVET output in a holistic view based on the interacting elements in its environment. Tracer studies play indispensable roles in evaluating the employability of graduates, the perceptions of graduates on their learning experience and competence, to understand graduates' preparedness

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and success (Burke, 2005). Besides gauging the success of TVET institutions in preparing their trainees for the labor market, the contribution of tracer study in the entire socio-economic development in general and in human resource development in particular is multidimensional (Gasskov, 2000; Psacharopoulos & Woodhall, 1985).

The logical frame work indicated below shows the contribution of related factors on the competence and employability of our graduates in the world of work.

Training and Assessment Processes

Trainers
(competence, commitment, counceling service, etc.)

Trainees
(desire, motive, commitment)

Competence,and employability of graduates

TVET- Industry linkage

Facilities And material resources,
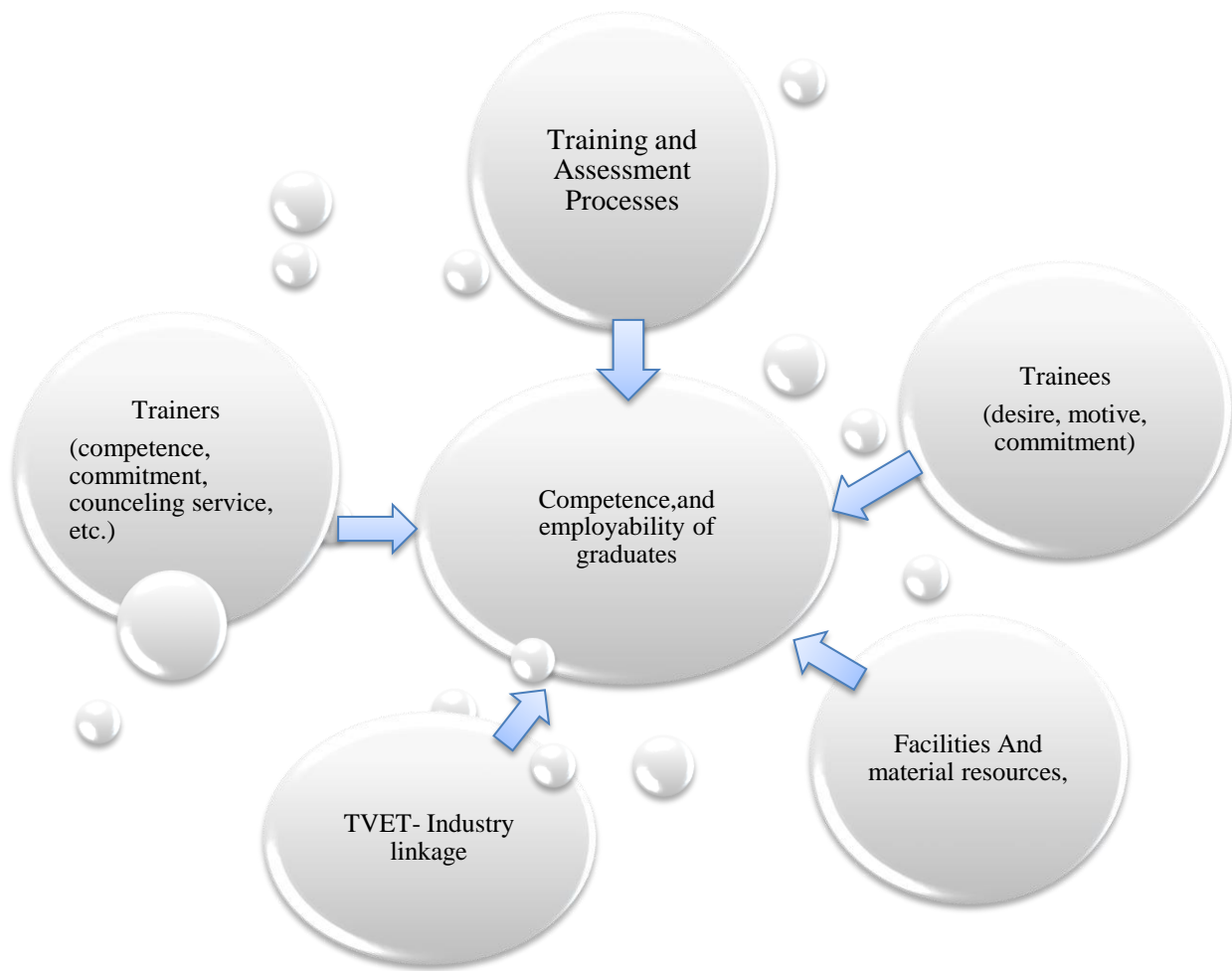
Figure 1: The Conceptual Framework of the Study

1.2. Rationale of the Study

In the context of dynamic and complex labour markets, gathering relevant information on current and future skill needs can support better matching of training and jobs, which is of paramount importance for every country.

Therefore, the purpose of this study is to assess the contribution of the training programs on the graduates knowledge, skill and attitude, the training relevance to labour market needs, the employment status of the graduates, and the effectiveness of HPC with respect to the graduates of 2021. In other words, it is to trace the number of graduates who have been waged, employed in different governmental and non-governmental organizations (NGO) or self-employed by creating their own job and who remains unemployed so far. The study also tried to illicit the reasons behind un employability as well as the skill gaps of graduates and the relevance of the OSs training had been provided at HPC in the year specified.

1.3. OBJECTIVES

1.3.1. General Objective

The objective of the study was to assess 2021 graduates of HPC employability, skill gaps on work and their satisfaction level

1.3,2 Specific Objectives of the Tracer Study were:

1) Assess graduates current employment conditions
2) Identify the efficiency, relevance and quality of the HPC training programs, industry requirements
3) Assess the socio-economic impact of families on graduates performance
4) Track employment and income status of the graduates'
5) Assess the satisfaction levels of employers towards graduates' competence

1.3.3. Study Questions

The principal decision problem of the study was the issues related to TVET delivery, quality and relevance and labour market outcomes. Based on this decision problem, the study sought to address the next key questions:

1. What happened to graduates after leaving the training institutions?

2. What is the perception of graduates about the match between their overall competence and workplace requirements?
3. Is there a significant difference in the employment rate of HPC graduates in terms of type of occupation and level of qualification?
4. To what extent the 2021 graduates of HPC satisfied with their occupation and jobs?
5. Is there a significant difference between the employers' perceptions and competence of HPC graduates?

1.4. SCOPE OF THE STUDY

This tracer study focused on investigating the graduates' socio demographic characteristics, job placement profile, the skills/competencies that they acquired during their training in the collage that enhance their employability. It also investigate the trainings provided by the college that enhanced these skills/competencies and work-related values to help them meet the demands of their present work. This covered only the graduates Cohort of **2021** in five fields of study in level **IV** namely (Crop Production and Marketing Management, Animal Production and Marketing Management, Advanced Animal Health service, Natural Resource Conservation and Utilization Management and Hard ware and Network Services) and in four Departments of Degree programs (Animal Production Technology, Plant Production Technology, Meat Processing Technology and Fruit and Vegetable Processing Technology) at HPC and Holeta Satellite Campus respectively.

1.5. LIMITATION OF THE STUDY

Despite the attempt made by the vocational guidance and counseling (VGC) research team to reach out as many graduates as planned in the sample size in the occupation in focus, there were major challenges faced to reach them all as desired. To begin with, due to poor data base system by the colleges, it was found very difficult to trace and identify the appropriate address of graduates. Secondly, malfunction of registered phone number and problem of network connections obviously had significance effect to trace the whole graduates.

CHAPTER TWO: METHODS

2.1. Description of the Study Area

The study was carried out at Holeta Polytechnic College (HPC) which is located in special zone of Oromia region on the main road to Ambo, about 30 km due west of the capital city. The data were gathered from graduate cohort and employer organization found in different part of the country using different mechanism.

2.2. Methodology and Tools of Survey

Tracer studies are widely utilized in the TVET sector as a valuable tool to improve the quality and relevance of TVET provision within a country or at an individual institution level. Most tracer studies focus on one homogenous group of graduates who completed their study at the same time. This tracer study tends to assess the 2021 graduates of the Holeta polytechnic college single cohort. The survey collected data related to the graduates' socio economic characteristics, their competence, employability status, perceptions and opinions.

2.3. Target Population

This study attempted to garner baseline information from Holeta polytechnic college graduates of 2021 cohort. The study unit includes college teaching staff (department heads, senior instructors' college management team), people from employing organizations were respondents

2.4. Sample Size and Sampling Techniques

Sample size refers to the number of items to be selected to constitute a sample that represents the population. In this respect, care was taken to incorporate samples that are representative enough to arrive at a sound conclusion and to prescribe appropriate remedies for the problem raised from the outset. The sample size was determined by taking into account confidence level of 95% (i.e., how sure one can be that the results are accurate) and margin of error of 5% (i.e., the range the results would fall if the confidence level is true).

To this effect, the sample size for the study was determined using the formula developed by Yamane (1967).

$$n = \frac{N}{1 + N(e)^2}$$

Where n = the sample size, N = the population size, and e = the level of precision.

N = 168+49 = 217 (Where 168 are from level graduates and 49 is of degree program graduate of the cohort 2021). Thus by using the above formula the sample of 140 has taken from the total population of 217 out of which 120 graduate respondents have participated on the study.

Both quantitative and qualitative data were gathered and analyzed using appropriate techniques and software applications. Depending on the requirements and existing situation, **convenience** sampling technique was selected which involves collecting information from members of the population who were conveniently available to provide it.

2.5. Data Gathering Instruments

I. Questionnaire

In this survey, data was collected through questionnaires and interview guides. The instruments were prepared by the vocational guidance and counseling (VGC) Research team based on the research questions set.

II. Interviews

Semi-structured interviews (focus group discussions and key informant interviews) were conducted with different participant groups in this survey. College management, trainers, heads of the departments, Graduates and employers were involved in it. Six to eight participants have been involved in each FGD a total of 23 respondents. Key informant interviews (KIIs) were another important data collection method employed to garner data from sources that have particular access to the information.

III. Observation

In this study some data were also collected through observation to gauge the status of resource supply. In this respect, all forms of resources with particular emphasis to different facilities, workshop organizations, as well as hand tools and equipment were observed.

2.6. Data Analysis Methods

The collected quantitative data were analyzed using the Statistical Package for the Social Science (SPSS) version 21 application and excel data sheet. The qualitative data were elicited and narrated

obtaining respondents' opinion, feelings perceptions and suggestions and triangulated ways the quantitative information gained and finally summarize the outcomes.

CHAPTER THREE: RESULTS AND DISCUSSION

3.1. Return Rate

Before analysis took place the data garnered were cleaned and organized by the research team, keeping respondents relevant original information as they involved in the survey. Out of the 168 level IV and 49 of degree graduate of the targeted graduate, 118 level IV and 27 degree graduates were selected as a sample of the study. Among this, 93 level IV and 27 degree graduate respondents have provided the information. Based on their acquaintance with the study and their willingness to participate in it, the involved relevant participants were from Graduates, trainers, heads of the departments, College management and employers were involved in it providing the necessary data.

3.2. Demographic Data and its Implications

As Table 1 demonstrates, 88 (73.33%) respondents were males whereas 32 (26.67%) of them were females. This implies that males have probably a greater involvement than their female counterparts in the study. As shown in table 1 also among graduates of the 2021 cohorts, about 27 of them had upgraded their TVET qualification while other is level based.

Table 1. Characteristics of the graduate respondents; sex, age, marital status & qualification level

Occupations	Sex		Total	Age		Total	Marital Status		Total
	Male	Female		20-30	31-40		Married	Single	
Natural Resource Conservation & Utilization Management	13	6	19	19	0	19	1	18	19
Crop Production & Marketing Management	12	14	26	25	1	26	1	25	26
Animal Production &Marketing Management	5	2	7	7	0	7	1	6	7
Hard ware and Network Services	6	1	7	5	2	7	3	4	7
Advanced Animal Health Services	28	6	34	33	1	34	4	30	34
Fruit & Vegetable Processing	10	2	12	9	3	12	7	5	12
Plant Production Technology	2	0	2	1	1	2	2	0	2
Animal Production Technology	7	0	7	6	1	7	3	4	7
Meat Processing Technology	5	1	6	5	1	6	3		6
Grand Total	88	32	**120**	110	10	**120**	25	95	**120**

As indicated in the figure 2, 68.82% respondents were males, 31,187% females and 88.88% males, 11.11% were female respondents from the level based and degree program respectively.

The low number of female respondents was come from the number of female graduates which were approximately less than male respondents by half up on graduation.
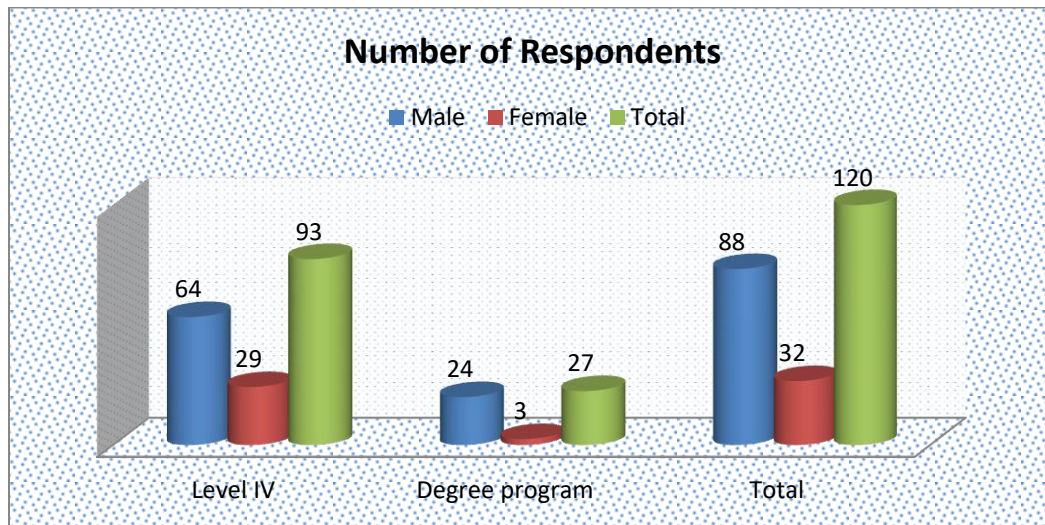
Figure 2. Percentage of respondents by program and gender

3.3. Competency Assessment of the Graduates

Table 2 describes, Among 93 level based graduates about 95.70% of them were competent in all levels (i.e, Level I-IV) during the National assessment from the center of competence (COC). Whereas the rest 4.30 % were achieved their competence up to level III only. Similarly, about 50% the degree program graduates respondents were competent in national assessment from level I-IV and others were competent from level I to III. 100% of the degree program graduates were already employed even though their satisfaction level may vary during their stay in the study institution.

This might implies that competency in National assessment did not grant employment opportunity in the case of both level and degree graduates. With respect to promotion, it is one of the criteria for employed graduates of degree program and future carrier development after two years of service for the level based graduates. However, because the sector obviously facing the OS instability, this fluctuation un-doubtfully does also affecting the graduates career promotion sustainability too. According to the focus group discussion panelist

> *.....the frequent change of EOS by the industry and revision of curriculum is one the problem on the socio-economy status of graduates. The OS and curriculum of study reshuffled and lost acceptance even before the enrolled cohort complete their training on a given program and leave the institution. Here, the graduates are forced to take assessment twice or more at different levels to get acceptance.*

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..... Obviously, the reshuffling of the curriculum and frequent change of OS is, not upon the basis of trainee' need and current market demand. According to the participant respondents, the frequent revision of the OS is due to lack of predefined standardized theory that fit to the specific level of training program. Expertise capability and coordination to set readily accepted occupational standard is under question. OSs usually seen with lots of missed points and unedited. According to this discussion, the change and revision of curriculum is important to include some missed topics to make the OS complete. On the other hand the frequent change of the OS has great impact on trainees' satisfaction their competence acceptance since the accreditation criteria is also not stable. OS setting is beyond the roll of the college. So far training institution didn't study or comment on OS. The OS has even got changed before the target cohort has completed their training.

Table 2. National competence assessment (NAC) of the graduate respondent /both program

Level of Qualification			Level of competence					
			0	L- I	L- II	L- III	L-IV	Total
Level IV	Have you take National Assessment	Yes				4	89	93
	Total					4	89	93
Degree program	Have you take National Assessment	Yes	0	5	4	4	13	26
		No	1	0	0	0	0	1
	Total		1	5	4	4	13	27
Total	Have you take National Assessment	Yes	0	5	4	8	102	119
		No	1	0	0	0	0	1
	Total		**1**	**5**	**4**	**8**	**102**	**120**

3.4. Employment Rate

Graduates' profile were also assessed from the viewpoint of employment status, sex and the level of qualification as indicated in table 3 and table 4 clearly. The study concluded that about 69.89% of the level based graduate respondents are still unemployed or economically inactive and only about 30.11% of them was employed.

As stated by one of the key informant respondent from employer organization:

...this year there are vacancies to hire graduates of the cohort, but due to shortage of budget allocated this year for the sectors we were unable to employ graduates as planned in governmental organizations

Table 3. Employment and rate of turnover

Level of Qualification	Are you currently Employed ?		Is this your first job since graduation			total
			0	Yes	No	
		Yes	0	28		28
	currently Employed	No	65	0		65
Level IV			65	28		93
Degree program	currently Employed	Yes		23	4	27
				23	4	27
		Yes	0	51	4	55
	currently Employed	No	65	0	0	65
Grand Total			65	51	4	120

Among these employed graduate respondents, 34.38 % of them were males whereas the rest 20.69 % were females implying that the female graduates have less number up on completion. This implies that the graduate cohort under study has not been absorbed in the economic activities by the lobour market as were designed and planned. The study also indicated that the high graduate unemployment rates are due to a mismatch between supply and demand and the situation of the country particularly the region which may require further study in relation to market need information. Degree program graduates were already employed graduates coming to the satellite campus for upgrading.

Table 4. Sex, Employment rate and Level of Qualification

Sex	Current employment status	Yes or No	Level of Qualification				Total	%
			Level IV	%	Degree	%		
Male	Employed	Yes	22	34.38	24	100	46	52.27
		No	42	65.62	0	0	42	47.73
	Total		64	100	24	100	88	100
Female	Employed	Yes	6	20.69	3	100	9	28.13
		No	23	79.31	0	0	23	71.87
	Total		29	100	3	100	32	100
Total	Employed	Yes	28	30.11	27	100	55	45.83
		No	65	69.89	0	0	65	54.17
	Total		93	100	27	100	120	100

As far as the occupation of graduates is concerned, a greater proportion of respondents 67.85% were Advanced Animal Health Services (AAHS), 10.71% were Crop Production & Marketing

Management (CPMM), 10.71% were Hard Ware and Network Services (HNS), 7.14% were Natural Resource Conservation & Utilization Management (NRCUM), 3.57% were Animal Production & Marketing Management (APMM). Whereas 44.44% were Fruit & Vegetable Processing Technology (FVPT), 25.93% were Animal Production Technology (APT) 22.22% were Meat Processing Technology (MPT) whereas the smallest ones 7.41% were Plant Production Technology participant were involved respectively

Table 5. Employment rate of graduate respondents in terms of occupations and study program

Level of Qualification	Are you currently Employed?		Name of Occupation									
			NRCUM	CPPMM	APMM	HNS	AHS	FVPT	PPT	APT	MPT	Total
Level IV	Currently Employed	Yes	2	3	1	3	19					28
		No	17	23	6	4	15					65
	Total		19	26	7	7	34					93
Degree	Currently Employed?	Yes						12	2	7	6	27
program	Total							12	2	7	6	27
G Total			**19**	**26**	**7**	**7**	**34**	**12**	**2**	**7**	**6**	**120**

3.5. Job Search

Graduates search job in the labor market through different mechanisms. As indicated in the figure 3, 46% the respondent were used the watching of notice board, 20% were used personal contact, 8% used advertisement, 4% were through apparent ship contact and the rest 22% were search job through the combination of two or more options.
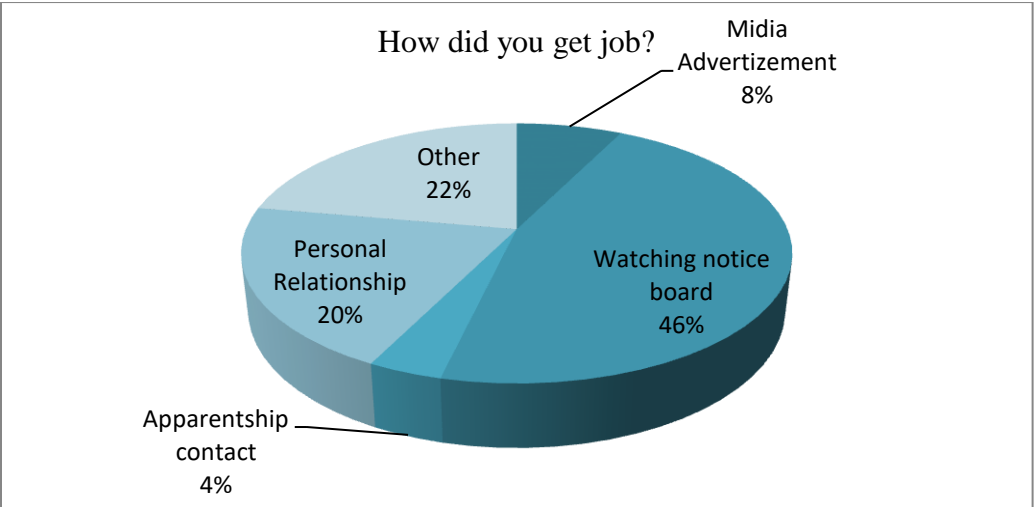
Figure 3. Pie chart showing Graduates job search ways

Among the total 30.11% employed graduates respondents, 73% of them were employed with in 6months duration, 14% were employed between 6 –8 months and the rest 13% were employed after 9 months to 1 year stay (figure 4 below),
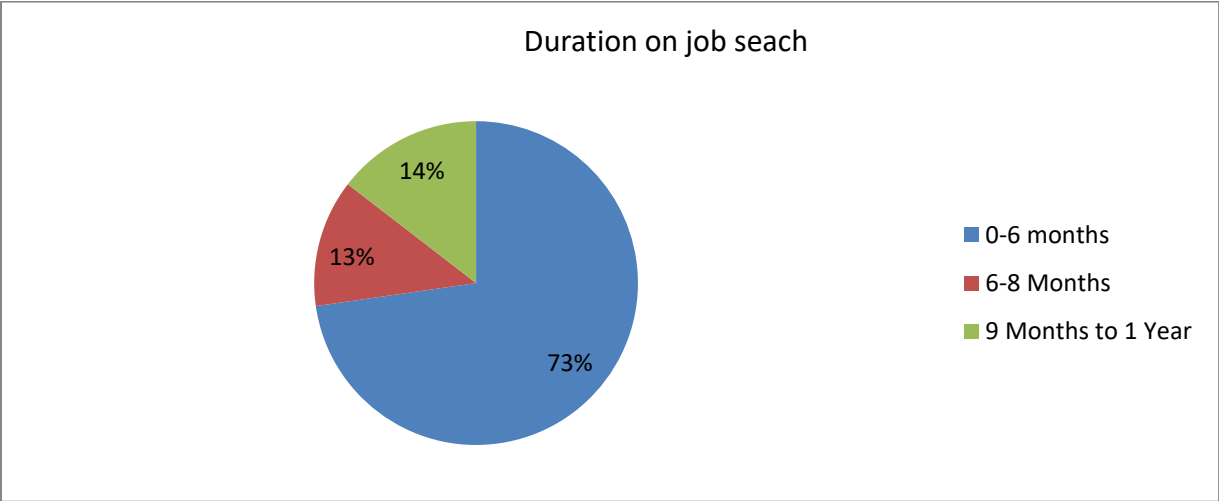
Figure 4. Pie chart showing duration on job search

Moreover, the statistically computed data of graduates' not yet employed responded to the question that says 'how they are searching for job' indicates more emphasis to some usual accustomed methods of job searching like watching job vacancies, using government agencies and the combinations of the two or more options

Figure 5. Job searching method for job seekers
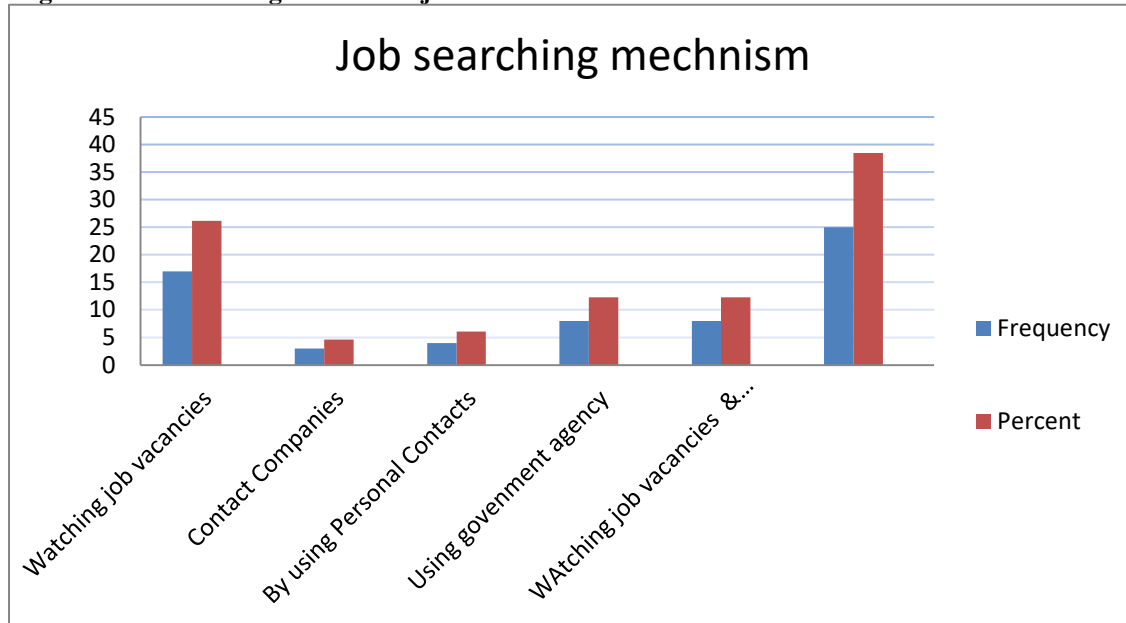
The major bottleneck in search of and get employment was assessed in the table 6 below. Accordingly, respondents figure out that nepotism, corruption and lack of capital to create their own jobs were mentioned as a major bottleneck to job seekers. Beside this, lack of vacancies in the labor market that addresses their occupation, market informality and unable to win competition were among the obstacles that might hinder the employability of graduate job seekers.

Table 6. unemployed graduate response on the major bottle neck not to get a job

variables	Bottle necks	Frequency	Percent
1	Your profession is not demanded in the market	7	10.8
2	You cannot win in the competition for employment	4	6.2
3	Market informality	6	9.2
4	Your profession demands a huge investment	6	9.2
5	You dislike self-employment	0	0.0
6	Salaries are not attractive	1	1.5
7	Employment opportunities are affected by nepotism and corruption	12	18.5
8	4 and 7	13	20.0
9	3, 4 and 7	2	3.1
10	3 and 4	2	3.1
11	3 and 7	7	10.8
12	1 and 7	3	4.6
13	2 and 4	2	3.1
	Grand total	**65**	**100**

3.6. Employment Occupation Relationships

Type of employment and the extent to which the employing organization engaged in hiring the graduates of the Holata polytechnic college specifically the cohort under study was discussed parallel to the tables 7&8 below. There is no significant difference regarding the rate at which employing organizations involving in job opportunity creation action to absorb the TVET graduates as it is observed. Graduate respondents either engage in self-employment activities or join private employing organization temporarily. Accordingly, insignificant number of the graduate cohort got work in government sectors implying less job opportunities in the sector.

Table 7. Where both program graduates employed separately

Program	Where they employed	Frequency	Percent
Level graduates	Un employed	65	54.2
	Government Organization	6	21.43
	Private Organization	12	42.86
	Self Employed	10	35.71
	Total	28	100.0
Degree Program	Government Organization	27	100
	Total	27	100
	Grand total	55	100

As indicated in table 8, the employed graduate respondents rated where they are employed using 5 scale rating (i.e as Full time employment, Part time employee, Temporary employee, Self-Employee and others). Based on this finding 35.71 % of the level based graduates employed as self-employ, 32.14% temporary employee followed by 28.57% as full time employee and the least is part time employee which is 3.57 %. This data supports majority of our graduates are self-employee that coincides with the objective of TVET institution.

Table 8. Type of employment vs level of qualification

Program	Type	Frequency	Percent
Level graduates	Full time employment	8	28.57
	Part time employee	1	3.57
	Temporary employee	9	32.14
	Self-Employee	10	35.71
	Total	28	100
Degree Program	Full time employment	27	100
	Grand total	**55**	**100**

The extent of the graduate respondents' current work related to the field of their training was shown in figure 7 below. Accordingly, majority of the graduate respondents, nearly 39% engage in the work that has no relationship with their field of study, about 24% of graduate respondents work were more or less related to the occupation they have trained in or less related to the occupation, and only 13% of them were seen engaged in work that has direct relationships with the occupation in which they have been trained. This indicates that there might be a mismatch between the training program of the TVET institutions and the labour market demand of the

qualified workforce. The pie chart indicated below clearly shows that, to what extent the respondent to the profession they received from HPC
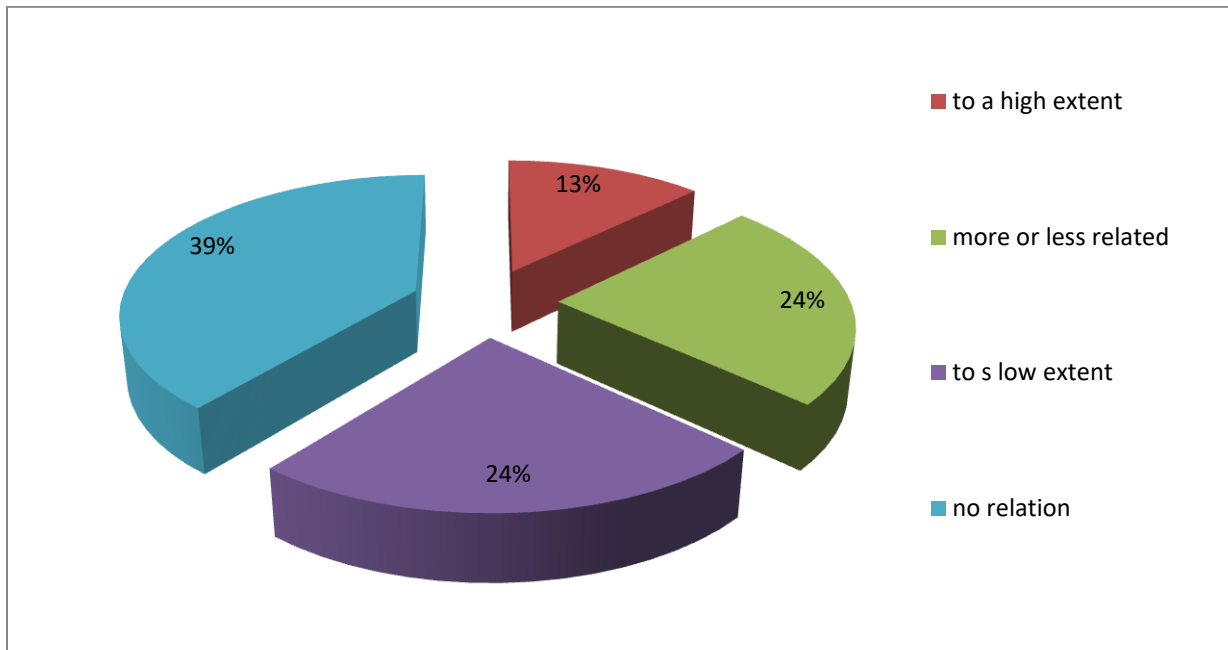
Figure 6. Pie chart showing Job - profession relationship

As Key Informant Interviewee argued

….. , graduates are largely engaging on the job that has no direct relation with area of training or less likely relevant to their occupation. This is due to market demand variation and lack of accurate forecast for the labor market need that could result in huge number of unemployment. The industry and training institution should precisely work jointly to minimize the mismatch between the training program design and the labor market demand of qualified workforce, and hence minimizing unemployment rate. As the Key informant interview observations

… the graduates are working in different organizations where job opportunity invite them as part time worker and contract bases in unrelated field until professional vacancies found and invite them to be hired like Floriculture farm, commercial bank, guard of different organizations. Beside to these, regardless of the agro processing technology demand in the country majority of degree graduate respondent indicated that as they deliver training by their previous profession obtained at Diploma or level program in colleges where there is no Agro processing program

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before upgrading. Some examples are fruit and vegetable processing, meat processing and dairy processing technology graduate respondents from different colleges

The trainings help fullness to current job

Figure 8 reveals the helpfulness of the training that trainers attended during their study at the Holata polytechnic college. To this regard majority of the graduate respondents assert that the knowledge and skill they acquired is highly helpful regardless of the training program frequent change in the OS and curriculum design that might put pressure on the occupational certification accreditation and its acceptance to compute for the available job vacancies in the labor market. The statistical figure measure computed mean and standard deviation shown on the chart verify the responded facts on the issue.

Elaborating the case, participants on the focus group discussion and the key informants as well assert that;

> *…the training delivered is not fully equipping the trainees on agro-food processing program. Its quality and effectiveness are not as expected due to lack of training materials and poor competence of trainers in the field*
>
> *... Respondents also suggested that there is a wide opportunity for employment in the labor market regardless of graduates' skill competence seems poor in the occupation*
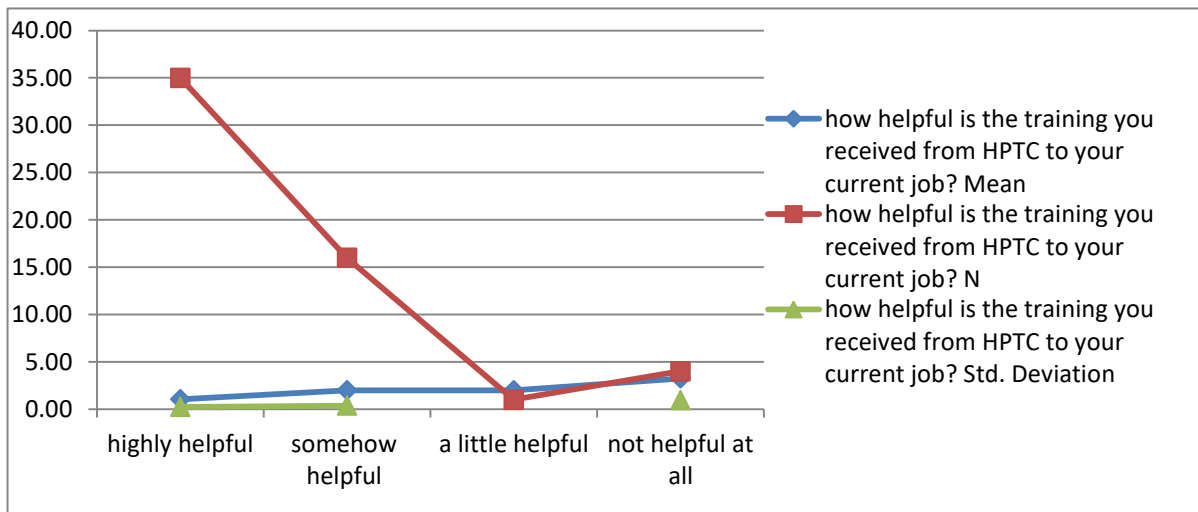

Figure 7. Graduates' rating of Helpfulness of training received at HPC

Type of employment (employee being hired in government sectors, at private organization or able to create their own job as a self-employment) and their job satisfaction status were explored using the table: 9 below. Indeed, 5 out of 12 individuals, nearly 41.66% from level based training program and 8 out 27 individuals 29.63% of the satellite campus graduate respondents were seen dissatisfied with the current job they are engaged. On the other hand among 10 individuals who were able to create their own job 100% responded that they are satisfied with their work. This encourage entrepreneurships or self-governing of individuals at work that develop sense of ownership and one's level of self-confidence. Therefore, it is advisable to encourage the new graduating youth to rather focus on creation of own job to lead self-employment and maximize their level of work satisfaction, than wasting time looking for wage employment from this deteriorated socio-economic circumstance

Table 9. Type of employment vs level of qualification

Level of Qualification	Where are you employed?		Are you satisfied with your current job?			
			0	Yes	No	Total
	Where employed?	No where	65	0	0	65
		government organization	0	4	2	6
		Private Organization	0	7	5	12
Level IV		Self Employed	0	10	0	10
	Total		65	21	7	93
Degree program	*Where employed?*	*government Org.*		*19*	*8*	*27*
	Total			19	8	27

Income and job satisfaction of graduates

The employed graduates' monthly income as a measure of rate of employee satisfaction with their current job was seen in the table 10. Indeed, among the all graduate employed respondents, 77.77% responded they have satisfaction with their current job. Rate of satisfaction, for the level based training graduate seem increasing with the amount of income they earn increase. Accordingly, 8 out of 11(72.72%), 6 out of 8 (75%) and 4 out of 5 individuals 80% claim that they are satisfied with their current job with the income level of up to birr 2500, Birr 2500- 3500 and birr 3500 & above respectively. This shows a linear relationship between income level and job satisfaction.

On the other hand, 19 (70.37) respondents from the degree program graduate, all are government organization employee, respond satisfaction while 29.63% complain they are dissatisfied. This clue leads to see other factors to measure job satisfaction beside the increment of the income level.

Table 10. Monthly income vs employee's satisfaction with their current job

Qualification Level	Monthly income?		Are you satisfied with your current job?			
			0	Yes	No	Total
Level IV	Monthly income?	Up to birr	65	3	1	69
		up to 2500	0	8	3	11
		Birr 2500- 3500	0	6	2	8
		birr 3500 & above	0	4	1	5
Degree	Monthly income?	birr 3500 & above		19	8	27
program	*Total*		*65*	*21*	*7*	*93*
	Total			19	8	27

Employee's job satisfaction was observed from different viewpoints in summary. Type of employment; full time employment, part-time employment, temporary employment or self-employment was one parameter. This study to this regard reveals, self-employment end with high level of job satisfaction. The type of employing organization was another parameter used to see the employee's satisfaction level. Again the self-employing organization as entrepreneur yields the highest satisfaction to the employee. The extent to which the job engaged in related to the profession the individual, and the individuals' income rate were another viewpoint to measure one's job satisfaction. The correlation between job satisfaction with the amount of individuals' income and the extent that the work related to the profession is almost linear. Most respondents also assert that they are satisfied with job; because they are working with the occupation they have attended training.

As indicated in figure 9 below, Employment across sectors are assessed using the above chart revealing that agriculture sector take the lead followed health related sector that absorbed relatively higher number of the graduates of the cohort under study. The rest, ICT and construction commercial, trade, crafts and public administration hire fewer numbers of the graduates.
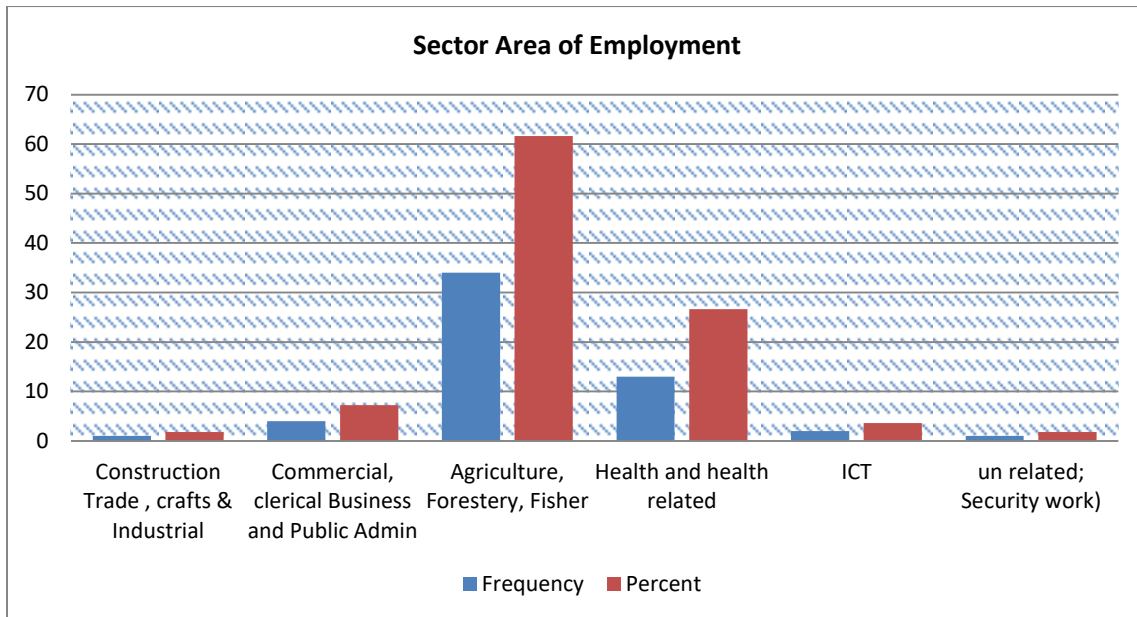
Figure 8. Employment across sectors

3.7. Socio-Demographic characteristics of parent Respondents

The socio-economic, education and livelihood of community can impose a direct impact upon the achievement of educational studies and latter job attachment of their children. In conducting this tracer study of a single cohort of the Holata polytechnic college graduates, here, the research team interested to asses the family background of the gradate respondents.

As it is clearly shown in the table 11 below, majority of the graduate respondent come from rural community of which nearly 60% family were without basic literacy and numeracy background indicating the challenges and consequential impact up on the trainee to attend their education easily and achieve fully. about 90% of the their family engage self-employment job, obviously, agricultural activities to lead their life that consume much of the trainees' time involving in the production activities than study their lesson. Therefore, the graduates employability into different economic sectors could be seen in relation to this socio backgrounds.

Table 11. Parents' Educational level and Work status

		Fathers' Education &work		Mothers' Education &Work	
	Education	Frequency	%	Frequency	%
Education	No formal Education	71	59.2	71	59.2
	Primary School	35	29.2	35	29.2
	Secondary School	6	5.0	6	5.0
	TVET Graduate	2	1.7	2	1.7
	Higher Education	6	5.0	6	5.0
Work	Yes, Permanent Employment	10	8.3	4	3.3
	yes, Part time/Temporary work	2	1.7	2	1.7
	Yes, Self employed	103	85.8	108	90.0
	No unemployed	5	4.2	6	5.0

3.8. Occupational Relevance

Occupational relevance to the economic sectors demand to easily absorb the new graduate require careful understanding of the circumstances in OS formulation and curriculum design. Table 12 reveals some key concepts to measure the fitness of training to some standardized criteria (Average mean score out of 5.00) so that graduate from the training program can compete to fulfill the required standard. To this regard, respondents' argue that training they have attended was at an acceptable level.

Table 12. Occupational relevance

Variable	Indicators	Graduates (n=120)	
		Mean	Std. Dev
Occupational relevance	Relevance of Your Occupation to the job market	2.71	.691
	The Theoretical contents of the OS	2.77	.658
	Emphasis to IS and best practices	2.65	.785
	Fitness to Workplace dynamics	2.79	.672
	Fitness to the Local Industry market	2.58	.751
	Counseling and Career guidance Services	2.56	.924
	Average	**2.68**	

3.9. Training Deliverology

Deliverology is one of the governing elements that can determine the quality of education/training. Items that contribute training methods in support of the implementation of quality teaching were listed and diagnosed in the table 13 below. Here, the statistical data

computed from participants' response to assess whether the necessary items were practiced and effectively implemented were observed slightly at an average value level. The key vocational training elements like industry attachment, regular practice in workshops and effective material utilization, and giving due attention to practical exercises needs an immediate reform. Therefore, to implement an effective delivery of the vocational training and yield with competent qualified workforce that industry demands from the labor market and as result maximize production in the economic sector, training institution should work to implement effective training methodologies, assessment practice and feedback deliveries

Table 13. Graduates' Response on Training method, assessment practice and feedback

Variable	Indicators	Graduates (n=120)	
		Mean	Std. Dev
	Reliance to Training Session plans	2.71	0.726
	Emphasis to training for trainees learning needs	2.76	0.767
	Adherence to Work Safety	2.73	0.744
Training	Reliance on Trainees Record book	2.52	0.898
methods	Continuous competence Assessment	2.92	0.681
Assessment	Feedback delivery	2.62	0.676
practices	Practice of Competence based training	2.64	0.742
	Industry Attachment	1.91	0.907
	Workshop and material Utilization	2.23	0.864
	Attention for practical Exercise	2.40	0.771
	Attention for theoretical concepts	2.66	0.772
	Average	2.55	

3.10. Facilities and Resource and Utilization

In an attempt made to assess the quantity and quality of training resource supply and utilization in the institution under study, graduates were inquired to rate items using a Five-point scale (i.e. 1= not at all; 2= inadequate; 3= some adequate; 4=Adequate and 5=more than adequate for quantity). In table 14 it is indicated that, the supply of resources was adequate in terms of quantity. According to the graduates' interview respondent, it can be concluded that the quality is also inadequate that can determine the training quality. This can be traced from the qualitative data sources from trainers and employers who attributed obsolescence of machines and equipment and poor organization of workshops the challenge behind producing graduates

KII participant from the college delivered important information that indirectly shows the poor practical competence of trainers in the college. When requested about the availability of material resources in the college this participant stated the following that also informed the competence defects of trainers:

> *...the college was supplied with a training material for Agricultural sector and Agro processing sector from KfW and Nuffic donors, The machine is not installed nor started functioning until the second batch graduation of Agro processing so far due to lack of an expert with the experiences and skills on how to design a workshop and install the machines. The problem is still not resolved after trainers were given short term trainings by the KfW experts.*

> *...Rather than putting in use, the trainers of Agro processing, Advanced Animal health services and Animal production in the college compute for sharing and storing in their laboratory idle. This can also ascertained by our observation*

Table 14. Responses on Facilities & Resources Utilization

Variable	Indicators	Graduates (n=120)	
		Mean	Std. Dev
	Workshops	2.18	.857
	Hand tools and Equipment	2.40	.920
	Machinery	1.98	.855
	Consumable materials	2.40	.902
	Workshop furniture	2.06	.964
Availability of training facilities at HPC	Maintenance Services	1.95	.849
	Power Supply	2.40	.844
	Computers	1.96	.844
	Internet Access	2.24	.879
	Water Supply	2.81	.813
	Reading Materials	2.50	.926
	Models and Teaching Materials	2.57	.914
	Grand mean	2.29	

3.11. Trainers' Competence

One of the objectives of this study was to measure trainers' competence as a factor that enhances the graduate competence and empowers their employability. To that effect, how the following six independent variables were perceived by respondents of the study were assessed using five scale parameter. Accordingly, respondents react to the items taking an item-by-item analysis into account under the parameter scales inadequate, somehow adequate, adequate, and more than adequate from 1-5 range. In this respect, the mean scores of the participant groups depicted in table 15 inform that trainers' competences (knowledge, skill and attitude) are seen above average. According to these data, it can be argued that trainers do not have that much serious defect in their performance and competence in both the level based training and the degree programs.

Table 15. Responses on Trainers' Competence

variable	Items	Graduates (n=120)	
		Mean	Std. dev
	Subject Material Knowledge	2.68	0.747
	Practical skill	2.58	0.785
Trainer	Project Formulating Competence	2.03	0.869
competence	Competence Assessment Practice	2.58	0.762
	Communication Skills	2.67	0.781
	Determination to trainee Competence	2.66	0.716
	Grand Mean	**2.53**	

3.12. Trainers' Commitment

Similarly, the commitment of trainers was gauged by graduate respondents as that of the competence case. Here, the mean scores of the graduates' response regarding the commitment of their trainers were found slightly higher than average value. A comparison of the mean scores displayed in the table, just like that of their competence, informs that graduates rated trainers' commitment as higher, contrary to the response by the trainers themselves, who felt that they did not deliver what was required of them especially project formulation and the likes. This may raise the issue of trainers' satisfaction to be reassessed.

As indicated Table in 16, the mean scores (out of 5.00) of graduates on trainers' commitment indicators were higher than average that implies the standard mean of all items were above average. During this survey the graduate respondents perceived as the trainers have the commitment for equipping their trainees with necessary competence except some reservation on practical skills.

Table 16. Respondents on Trainers' Commitment

variable	Items	Graduates (n=120)	
		Mean	Std. dev
	Trainee Motivation	2.63	0.789
	Class room management Capability	2.58	0.752
	Respect for trainees	2.76	0.733
	Workplace Availability	2.58	0.717
Trainer	Counseling Services	2.51	0.767
commitment	Preparation	2.63	0.581
	Occupational Passion	2.85	0.729
	Work Place Ethics	2.71	0.814
	Occupational Knowledge	2.88	0.651
	Occupational Skills	2.75	0.713
	Grand mean	**2.69**	

3.13. Graduates' Employability

The adequacy of skills as articulated by graduates was compared to those perceived by employers. Employers indicated that they employ graduates from the institutions to work as skilled and good personnel attitude. When the employers were asked to rate the level of competency of HPC graduates, as shown in table 17 rated it as high. And they indicated that they agree with the statement that "as employers, they are satisfied with performance of HPC graduates. The assessment with the level of competency of employers notes with the self-assessment by graduates**.**

Table 17. Employability status of graduate respondents

variable	Items	Graduates (n=120)	
		Mean	Std. dev
Graduate employability	My Training Adequately Prepared me for work	3.66	0.939
	My Employer was satisfied with my level of knowledge and skills	2.85	1.47
	It is Easy for me to get a job	2.76	1.438
	It can easily be trained to improve my level skills	3.5	1.25
	I find myself to be very effective	3.13	1.402
	I can easily change employers with in my area of specialization	2.69	1.694
	Grand mean	**3.1**	

3.14. Respondents Reflection on their Current Work

In an attempt made to assess the reflection of respondents situation on their current work out of the institution, graduates were inquired to rate it using a Five-point scale (i.e. 1= not at all; 2= to a little extent 3= to some extent; 4= to a greater extent and 5=don't know). The responses to this regard were very low that all data lie below the little extent scale level. This clearly show that the dissatisfaction that graduate respondents have in terms of employability and livelihood status

Table 18. Respondents Reflection on their Current Work

variable	Items	Graduates (n=120)	
		Mean	Std. dev
Status	I received instruction in the usual work tasks before I was regularly involved in the work	1.43	1.628
	I have a supervisor /co-workers, who control my work	1.39	1.646
	I received continuous feedback about my performance at the work place	1.38	1.604
	My regular work tasks focuses on routine activities	1.53	1.763
	I plan, carry out and oversee my work tasks independently	1.55	1.796
	My work tasks encompasses a wide variety of activities	1.42	1.658
	My work is related to the profession i was trained in.	1.43	1.733
Grand mean		**1.44**	

3.15. Employers Opinion & Satisfaction

On the other side, employing organizations were also invited to rate the graduates competence on work and to what extent the skill and knowledge they have acquired is fit to the level of their expectation of performance based on the 5 point likert scale. Here, employers' response shows satisfaction towards the employed graduates as indicated in table 19. This is encouraging response it could be representative of all graduates of the college who are not yet employed. This finding also indicates that the employed graduates might have good competency and adaptability to the work environment which need further investigation.

Table 19. Employer opinion on satisfaction with HPC graduates

Indicators	Items	Graduates (n=11)	
		Mean	Std. dev
Skill & knowledge	Occupational Knowledge	3.73	.905
	Occupational Skill	3.82	.751
	Problem Solving Capability	3.55	.934
	Communication Skill	3.82	.982
	Planning & programing Capability	3.36	.674
	Information Technology	3.09	.701
	Learning New Skills & Adaptability	3.64	.809
	Organizing & Leading Cap.	3.27	.905
	Decision making skill	3.55	.820
	Project Management Skills	3.27	.905
	Time Management Skills	3.45	.820
	Ability to work Independently	3.82	.982
	Negotiation Skill	3.73	.467
	Risk taking and Risk Analysis Skill	3.55	1.036
	Average	**3.55**	
Behavioral characteristics	Creative Thinking	3.45	.934
	strategic Thinking	3.36	.809
	Self Confidence	3.64	.809
	Work Ethics	3.82	1.079
	Professional Passion	3.82	1.079
	Ability to work under Pressure	3.45	.688
	Average	**3.59**	

3.16. Companies Involvement in TVET

Companies' involvement in TVET was assessed in the following table 20 below. Accordingly, enterprises involvement in TVET delivery keeping all constraints was observed above the average value point. Here, the FGD panelists on the issue of TVET Industry linkage quote the following;

> … the roll of cooperative training is to facilitate training provision and strengthen the TVET industry linkage. However, the implementation of cooperative training is not effective so far. The act is rather seems "field trip". Although cooperative training is implemented with the best tie with the existing industry, respondents equivocally assert that cooperative training engaged up to now were purely theory based. It did not incorporate practical activities. The other problem is industry

is not willing to open their door for cooperative training. There is reluctance even to sign memorandum of understanding MoU. According to respondents, to implement effective cooperative training, institutional leaders should enthusiastically work with the industry owners and other Town administrative leaders to make the provision of cooperative training meaning full. To fit this awareness creation should get emphasis. Mapping cooperative training site is mandatory. However, industries participate in cooperative training on the basis of their will. There is no law base to obligate industry to open their door to participate in cooperative training. In one or another way the problem we face everywhere hide in the effectiveness of our implementation level

Table 20. Companies/enterprise involvement in TVET delivery

Indicators	Items	Graduates (n=11)	
		Mean	**Std. dev**
	In Training Delivery	3.55	1.508
	In involving your staff as instructors in TVET Co	3.64	1.567
	In Designing Curriculum	2.73	1.618
	In Occupational Assessment	2.64	1.502
	In conducting Need Assessment	3.00	1.612
	In vocational Counseling	2.82	1.722
Involvement in TVET delivery	Means you use to recruited employees from TVET Most of the time	3.18	1.991
	How Much is your satisfaction with the performance of employees from HPC	2.82	1.471
	Are there skill gap among employees graduated from HPC?	1.55	.688
	How Often do you have to send your TVET Trained employees for further training to improve their skill level?	2.36	1.206
	Do you Employ graduates of TVET other than HPC?	1.09	.302
	How do you compare HPC graduate competency to others	2.73	1.191
	Average	**2.68**	

CHAPTER FOUR: SUMMURY OF FINDINGS AND RECOMENDATIONS

4.1. Summary of findings

I. The employment rate among respondents of level IV graduates was 30.11%. The majority of these graduates (35.71%) were self-employed, 32.14 were employed on a temporary basis and the rest were employed as full-time. The proportion of graduates respondents unemployed and looking for a job was relatively high, standing at 54.2%.

II. The major reasons behind unemployment included scarcity of enterprises that demand large number of graduate, widespread nepotism and corruption in the selection and recruitment process, lack of startup capital for job creation, lack conducive work place, lack of market information, in efficient job searching mechanism and the impatience among graduates to engage in self-employment.

III. Although majority of graduate respondents asserts that their occupation is relevant to the labour market, large number of the graduate employees are currently engaging on jobs that has no direct relation with their occupation.

IV. The institutional capacity of the college is in efficient on data base management, availability training of resources, facilities, workshops, machines, hand tools and equipment, consumable materials, workshop furniture and maintenance services are below the required standard. On the other hand water supply, internet access, reading materials and modules are evaluated as adequate by the graduate respondents.

V. Even though, competence and commitment trainers for equipping their trainees with the necessary competences is rated as good except project formulation, data obtained from graduate respondents reflection on the current work out of the intuition is less than average and strongly refute it.

VI. Most trainers graduated from our college in AFP in upgrading program do not train in their field of specialization in their previous college which might cause a mismatch with the intention of the government and misuse of qualified personnel in line with labour market demand

VII. Employer organization participated in the survey responded on the involvement in TVET delivery was good, however during data collection the research team has observed that the TVET Industry linkage is insufficient due to several barriers. \

4.2. Conclusion

This study provides an important implication for our college and other TVET institutions. More, specifically, we confirmed that level IV graduates' transition from institution Training to work is a multidimensional phenomenon which is affected by several parameters including democratic characteristics, cooperative training, their competences levels (knowledge, skill and attitudes) and several Bottlenecks. Significant difference found in the majority of factors that affect the competence and employability of graduates.

4.3. Recommendations

i. Changing mindset of the society towards TVET to transform TVET is one of the key factor

ii. A rigorous and continuous market analysis is essential at institutional level to widen the employment opportunity of our graduates.

iii. Improving the method of LMNA and its utility through proper implementation that shows the real demand on the ground.

iv. Strengthening Vocational guidance and counseling research team to implement the responsibility endorsed to it fully.

v. Implementing proper organization of trainees in the college to save some money before leaving the institution that helps them to be an entrepreneur up on the completion training.

vi. The institution must strengthen their relationship with Industries and other similar private enterprises and let the industries to take the initiatives.

vii. The college has to improve the practical competence of trainers by filling their skill gaps

viii. Improving the institutional capacity of the college on data base management, availability training of resources, facilities, workshops, machines, hand tools and equipment, consumable materials, workshop furniture and maintenance services and their utilizations

ix. The competence and commitment of trainers, the passion and characteristics of trainee as well as the training and assessment practice need be closely monitored to foster the overall competences and employability of the graduates.

x. HPC must conduct the need-based programmes in diversified occupations rather than repetitively producing graduates of the same occupations for years.

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