

## TVET Colleges' Supports and The Performance of Micro Small Medium Enterprises in Addis Ababa

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### Abstract

*The study's goals were to look into how TVET colleges support small, medium, and large businesses in Addis Ababa and what role they play in raising those businesses' performance. Judgmental sampling was used on a total of 376 properly completed and returned surveys. Both qualitative and quantitative methodologies were used in the study, which used a descriptive and explanatory (mixed) design. The data analysis was carried out using the SPSS software version 25 and a descriptive statistic (frequency, percentage, mean, and standard deviation) as well as an inferential statistical analysis of correlation and relative relevance index. Internal consistency's Cronbach's alpha coefficient was used to evaluate reliability. The results of the study showed that TVET College support has a big impact on how well MSMEs succeed. TVETs in Addis Ababa, however, do not considerably improve MSMEs' performance. The relationship between TVET and MSME was shaky, TVETS did a poor job of putting policies and plans into practice, and TVETS played a little role in supporting entrepreneurship, transferring technology, and providing skilled labor to MSMEs. It is advised that TVET and MSMEs establish a shared agenda for making decisions on shared issues in order to strengthen their relationship. TVET institutions should close the technological gap with businesses. The MSMEs and TVEs should communicate and work together frequently.*

**Keywords:** MSMEs, TVETs, skilled manpower, technology transfer, entrepreneurship

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## **Introduction**

TVET is a wide-ranging term denoting the educational process, which comprises, in addition to general instruction, the education of technologies and related sciences and the achievement of practical skills and knowledge relating to a profession in numerous sectors of pecuniary and social life (UNESCO, 1984). TVET is the major link joining the school system and the labor market; this implies that developments in TVET are intimately linked to overall movements in the economy (UNESCO, 1990).

Micro, Small, and Medium-Sized Businesses (MSMESs) play a critical role in the advancement of socioeconomic development and the quality of life for individuals. The majority of highly industrialized countries, like Japan, China, and Taiwan, have placed their development industries on MSMES, making them role models for emerging nations in terms of how to utilize available resources, jobless labor, and indigenous technologies (Chemed, 2003; Rudjito, 2003). By facilitating demand-driven, top-quality technical and vocational education and training relevant to all sectors of the economy, at all levels, and to all sections of society, the National TVET Strategy for Ethiopia aims to develop a skilled, motivated, adaptable, and innovative labor force in Ethiopia that will aid in reducing poverty and facilitating social and economic development (MOE, 2008).

Since the 1990s, Ethiopia's Micro, Small and Medium-Sized Businesses (MSMEs) sector has expanded, with the aim of reducing poverty and improving the lives of the underprivileged. Entrepreneurs have a huge amount of potential in the MSME sector to use their skills to their fullest potential and achieve their professional and personal goals, but the sector faces various obstacles that hinder MSME performance. Financial issues, a lack of skilled staff, a lack of sufficient financial records, marketing issues, a lack of workspace, and a lack of adequate technological assistance are only a few of the primary contributing causes. In addition, the MSMES contexts were impacted by social, economic, cultural, political, legal, and technological variables. In addition, there are internal elements that affect the performance of MSMES, which are connected to technical expertise, training, and personal attitudes (Bezabih, 2010). In general, MSMES performance is still being negatively impacted by both internal and external causes.

TVET is crucial in equipping people with the knowledge and skills they need for the labor market, which supports the economy's vitality and the processes of technological modernization (Excel in Ed, n.d.). It is vital in this regard to enhance the TVET system's capacity as well as the standard, value, and importance of the teaching and learning process (MoE, 2008). Teachers' thoughtful subject-matter grasp, practical skills, pedagogical knowledge, and functional activity on the basis of educational standards and attitudes are some of the important components that are contributing to improvements in TVET's quality and capability. By developing and implementing high quality education programs for TVET experts, technical and vocational education and training must be strengthened and advanced. Unfortunately, a number of obstacles prevent the implementation of result-based education (MoE, 2008; Yostena, 2014).

The study discovered that numerous works of literature have evaluated the success of MSMEs from a variety of angles, including skill and capacity, access to capital, job creation, and others. Unfortunately, no research has been done to determine how TVET colleges' assistance of MSMEs affects their performance. As a result, this study helps to provide current and trustworthy data on the subject for more studies that are similar.

Examining the impact of TVET institutions' support and their function in Addis Abba's MSMEs' (Micro, Small and Medium Businesses) performance is the study's primary goal. The study aimed to address the following specific goals: i) To evaluate the plans, actions, and assistance provided by TVET colleges for MSMEs in Addis Abba. (ii) Examining how TVET college support affects MSME performance (iii) Examining the success of the assistance provided by TVET Colleges to MSMEs (iii) Examine the supply of skilled workers from TVET Institutions to MSMEs. (v) To gauge how well TVET College and MSMEs communicate, understand one another, and have trust in one another. The following research questions are listed after the above-mentioned particular objectives: I What plans, actions, and assistance have TVET institutions provided for Addis Ababa's MSMEs? (ii) How much does TVETs Assistance influence MSME success in Addis Ababa? (iii) Do TVET Schools provide MSMEs with adequately skilled labor? (iv) How well are TVET colleges and MSMEs communicating with one another? Are they aware of one another? Do they trust one another?

## **Review of Related Literature**

### **Theoretical Literature Review:**

#### **Economic theory of Entrepreneurship**

"The inner drive of a man is related with economic gains, which drive him into economic activity," claim J.R. Harris and G. F. Papanek. As a result, they see economic growth as a requirement before there can be an adequate supply of entrepreneurs. This notion contends that an entrepreneur always acts in the best interests of their business. According to proponents of this view, the primary motivating factor that transforms a person into an entrepreneur is the profit motivation. As a result, an entrepreneur appears as a result of incentives and financial gain. As a result, any sort of society has a drive to increase actual income and economic gains. This propensity fosters the spirit of economic growth. They think that the primary prerequisite for entrepreneurship is an economic incentive.

#### **Theory of Human Capital**

According to the Human Capital Theory (e.g., Schultz, 1961; Becker, 1993; Mincer, 1974), investing in HE is a decision that governments and their citizens must make both publicly and privately. The central claim is that public spending on education generates economic growth through higher productivity, social stability, and healthier lifestyles. On the other hand, investing in education as a private investment option results in higher lifetime incomes for people with more education; access to better-paying positions; less time spent on the job market; and quicker transitions to improved career opportunities (Wahrenburg and Weldi, 2007).

Human capital can be built up in a variety of ways, according to Becker (1964), including through education, training, migration, and health. Employees acquire knowledge, skills, and abilities in a variety of ways through such forms. Companies engage in human capital because they see people as an asset and anticipate that their investment will pay off and provide value in the future. In other words, a person invests in their education or training with the hope that the knowledge and skills they acquire would help them grow in their careers.

**Empirical evidences:****Technical and Vocational Education and Training**

TVET has received a lot of attention in Ethiopia's Education and Training Policy as a way to integrate entrepreneurship and job development. A MSMEs development strategy has been developed by the Ethiopian government to foster growth and equity while creating long-term employment. This strategy places a strong emphasis on the importance of TVET and MSMEs development for economic growth. Here, emphasis is placed on the interconnectedness and oneness of TVET and MSMEs integration, which form the basis of any developing country's capacity to achieve sustainable economic development. The groups work together to further their respective missions and accomplish the Millennium Development Goals (Benti et al., 2014).

**Micro and small enterprises development in Ethiopia**

The following main objectives of Ethiopia's new micro and small business development strategy were developed in 2011. The main objectives are to expand employment possibilities and decrease poverty. Making the sector capable of industry development that supports economic expansion is the second objective. The third objective is to draw in development investors in order to accelerate the sector's development in urban regions. The medium- and long-term objectives of Ethiopia's MSMEs development strategy are to act as a source of investors, while the immediate goal is to assure quick development by preserving capital and so benefiting society. TVET systems, in the opinion of the Ethiopian government, should promote integration between education, training, and development. It is the only TVET system that offers vital support for the expansion of MSMEs. The TVET system is the best tool for promoting urban development (Arega, 2016).

The purpose of TVET institutions is to update and provide services to the market for the transmission of newly designated technologies. Another duty of TVET institutions is to effectively use their own resources and to deliver services that are in line with the payment being requested for such services. The money made from these interventions allows for the creation of more capacity, which raises the institutions' potential. Additionally, in order to increase productivity, improve the quality of their goods and services, and make it easier to start new businesses, the institutions are expected to appropriately transmit the technology to the micro and small enterprise

(MSMES) sector. To support MSMEs in urban and semi-urban areas, TVET program delivery and technology transfer services are used. (MoE, 2008)

### **The role of TVET to Strengthening MSMEs**

MSMEs are essential for reducing poverty in emerging countries like Ethiopia. More than 90% of non-agricultural employment is frequently held by MSMEs, which also generate significant domestic earnings and serve as a major employer. MSMEs, on the other hand, are constrained in how they may run and expand their enterprises because of their size. To remove the restriction and improve the effectiveness and productivity of MSME development, a cross-cutting approach on human development components is needed. Governments' capacity to implement sound macroeconomic policies by scaling back labor force support through training will define the sector's cross-cutting approach. The TVET and MSME sectors in Ethiopia recently worked together to achieve the aforementioned objective. As stated expressly in the TVET strategy, they are trying to serve as a source of human resources and a helping hand in the field of skills improvement for the MSMEs (Kibrom, 2014)

Achieving the objectives of Ethiopia's national TVET policy would promote self-employment and aid in job creation. Additionally, the TVET program offers pertinent, market-driven training that satisfies the demand for self-employment in the social and economic sectors. This alternative was clearly made possible by micro and small companies, which are thought to be the cornerstone of economic growth and the improvement of people's quality of life (Benti et al., 2014).

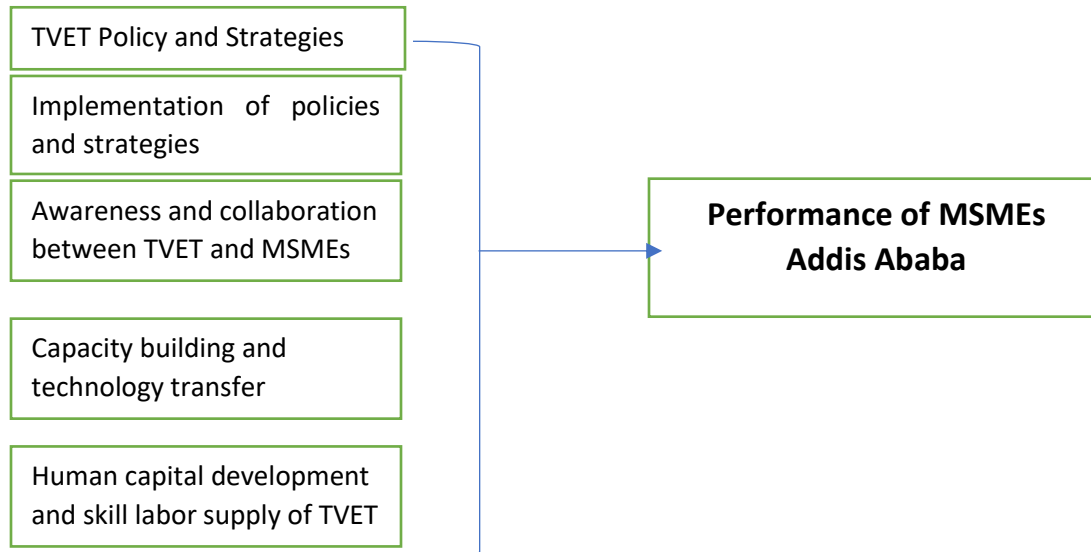
### **Role of MSMEs in the National Economy:**

Many nations around the world, including Malaysia, Japan, South Korea, Zambia, and India, have seen the catalytic effects of micro and cottage industries. They make a significant contribution to the Economy, export revenue, and employment prospects of these nations. MSMEs, or micro and small businesses, have long been recognized as the foundation for long-term economic growth. Along with increasing per capita income and output, it also boosts regional economic balance through industrial dispersal, creates job opportunities, encourages the growth of indigenous entrepreneurship, and generally encourages efficient resource utilization, all of which are

important for engineering economic development (Tolentino, 1996; Oboh, 2004; Odeh, 2005). Using a sample of 60 MSMEs, Nuwagaba and Nzewi (2013) used a descriptive research technique to examine the variables influencing MSMEs performance in Uganda and Nigeria. According to the report, environmental constraints include high taxes, restricted market access, expensive and unstable electrical supply, and a dearth of skilled and competent human resources hinder MSMEs performance. Another important factor for MSMEs to enhance their performance is access to the market. MSMEs managers may need to position their businesses by producing relatively high-quality products and utilizing cooperative marketing strategies in order to attain unique market niches.

Kombo, Justus, Murumba, and Makworo (2011) stated that "micro and small-scale entrepreneurs who include agriculture and rural companies have considerably contributed to the expansion of Kenyan economy" in the case of Kenya. The industry, which accounts for 12–14% of GDP, helps the nation achieve its goals of fostering entrepreneurship, generating money, and supplying a means of subsistence for the bulk of the nation's low-income households (Republic of Kenya, 1982, 1989, 1992, 1994).

Focusing on the growth of MSMEs, which create chances for income and employment, is one of the strategies that has been acknowledged as one way to eliminate poverty throughout the world (MUDC, 2013). It is a well-known fact that, regardless of a country's degree of development, the majority of all businesses are microenterprises. The majority of the working population is found in the micro enterprise sector in many nations around the world, especially those in Africa and Asia. Micro and small businesses play a variety of roles in a country's economic development, including strengthening the local production structure, generating employment opportunities, and achieving a more equitable distribution of the nation's resources, income, and power. They also support rural industrialization and the development of the export market (Mulugeta, 2008).

**Figure 1***Conceptual Framework*

Source: Compiled by the Author (2022)

## Methodology of the Study

### Research Design and Approach

Research in academia may be exploratory, descriptive, or explanatory in nature. Exploratory studies seek to understand the fundamentals of the issue. Exploratory investigations are a useful tool for learning more about what is going on, looking for fresh perspectives, posing questions, and viewing phenomena in new ways (Yin, 1994). Typically, exploratory research is conducted through surveys, focus groups, case studies, and literature reviews. Explanatory research is more concerned with predicting, regulating, and understanding correlations between variables than it is with identifying causes. When a problem is well-structured and there is no desire to investigate the relationships between causes and symptoms, descriptive research is adequate.

The study used a mixed methodology that combines quantitative and qualitative research. Measurements used in quantitative research that employs mathematical models establish a basic link between empirical observation and the mathematical articulation of quantitative relationships



between the dependent and independent variables. A problem is evaluated "subjectively" in qualitative research, which takes the shape of a viewpoint, perception, or attitude toward various things. As a result, both approaches to the research were used in this study.

### **Data Types, sources and Methods of Collection**

In order to gather information pertinent to the study objectives, this research included primary and secondary data, with the primary data coming directly from the respondents and the secondary data coming from a review of the existing data. Key Informant Interviews and questionnaires were used to collect primary data (KII). On the other hand, secondary sources were gathered from books, journals, reports, and printed materials.

### **Sampling Design**

There are 12,000 MSMEs, 8 Industrial/Manufacturing Colleges, and 6 Polytechnic Schools in Addis Ababa. In all TVET Institutions, there are 4500 Professional Staff members (instructors, deans), and 11,000 Students. In order to get representative samples of professional TVET personnel, students, and MSME managers acting on behalf of MSMEs, the study will disseminate questionnaires to these groups of people. Using the formula created by Yamane (1967), the researcher selects 387 participants from the 12,000 total target population.

### **Method of Data Analysis**

Using SPSS software version 25, descriptive and inferential statistics were used to examine survey data (Statistical Package for Social Science). The researcher was able to investigate the impact of TVET colleges and their function for the performance of Micro and Small Enterprises (MSMEs) and Medium-Level Industries (MLIs) in Addis Ababa thanks to the descriptive statistics (frequency distribution, percentile). The data gathered from primary sources was analyzed using SPSS. Descriptive statistics, specifically frequency distribution, percentile, mean, and standard deviation, were applied.

To investigate the impact of TVET colleges and their function in the performance of Micro and Small Businesses (MSMEs) in Addis Ababa, the study utilized a multilinear regression model. Regression and correlation were used to examine the relationship and significance between the independent and dependent variables.

Multiple linear regression can be thought of an extension of linear regression, where there are  $p$  explanatory variables, or simple linear regression can be thought of as a special case of multiple linear regression, where  $p=1$ . The term 'linear' is use because in multiple linear regressions we assume that  $y$  is directly related to a linear combination of the explanatory variables. A multiple linear regression analysis is carried out to predict the values of a dependent variable,  $Y$ , given a set of  $p$  explanatory variables  $(x_1, x_2, \dots, x_p)$ . Thus, in this study the multi- linear regression was conducted between independent variables and the dependent variable. The model of the regression analysis is presented as follows.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + E$$

Where  $Y$ =Performance of MSMEs and Middle level industries;  $X_1$ = Awareness and collaboration between TVET and MSMEs;  $X_2$ = Skilled Labor supply;  $X_3$ = Communication Strategy;  $X_4$ = Capacity building, innovation and technology transfer;  $X_5$ = MSMEs policy, strategy and Implementation;  $X_6$ =Training and  $E$  is the error term.

### **Data Presentation, Analysis and Interpretation**

#### **Descriptive Statistics for TVET College support and Performance of MSMEs**

A 5-point Likert scale is used to evaluate all variables, with 1 denoting "strongly disagreed" and 5 denoting "strongly agreed." The descriptive statistics of all variables are summarized. According to Zaidaton and Bagheri, the overall mean (M) score between 4.21 and 5.00 is regarded as the respondents strongly agreed (SA), while the scores between 3.4 and 4.20 indicate that the respondents agreed (A), the scores between 2.6 and 3.40 indicate that the respondents are neutral (N), the scores between 1.8 and 2.60 indicate that the respondents disagreed, and the scores between 1 and 1.80 indicate that the respondents strongly disagreed. As a result, the analysis's details are given as follows:

#### **TVET colleges support:**

Table 1 shows that 195 people (52%) agreed whereas 70 more people (19%) strongly agreed due to MSMEs receiving entrepreneurial training from TVET institutions. The average was 3.82,

which falls within the range of 3.41 to 4.20, indicating that most respondents agreed that TVET institutions have provided entrepreneurial training to MSMEs. The Standard deviation is 0.82 which is show as there is dispersion or variation of respondents' response. So, it can be deduced from the respondent's statement that MSMEs had received entrepreneurial training from TVET institutions. Similar results were observed by Kibrom (2014) from 101 respondents: 32.6% of trainers were trained in business development services, 31.7 % in skill upgradation, 7.9 % in entrepreneurship, and 27.7% in financial management.

**Table 1***Descriptive Statistics for Training Given by TVETS*

Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	SD
	F	%	F	%	F	%	F	%	F	%		
MSMESs have got entrepreneurship training from TVET institutes	0	0.00%	27	7%	84	22%	195	52%	70	19%	3.82	0.82
Training is provided by TVETs is based on needs assessment of MSMEs and it is focused, goals and outcomes oriented	0	0.00%	28	7%	153	41%	168	45%	27	7%	3.52	0.74
The training MSMEs are taking makes them successful to apply it practically on businesses	0	0.00%	55	15%	84	22%	196	52%	41	11%	3.59	0.87
The training given to the MSME operators is very useful for future strengthening of the operators	0	0.00%	55	15%	154	41%	126	34%	41	11%	3.41	0.87
The training provided for MSMEs operators contain adequate theoretical and practical lessons within the given schedule	0	0.00%	28	7%	237	63%	84	22%	27	7%	3.29	0.71
There is sufficient maintenance course and the manuals give operators a clear information	0	0.00%	84	22%	196	52%	69	18%	27	7%	3.1	0.83
There is Adequate educational facilities such as training equipment including manuals, workshops, machineries and others for both theoretical and practical demonstrations in TVET institutions to ensure the quality of training offered	14	3.70%	140	37%	194	52%	14	4%	14	4%	2.66	0.77
The curricula of TVETs include enterprise orientation, which will introduce trainees to the concept of how to develop and organize business activities aimed specially at growth and profit.	0	0.00%	69	18%	168	45%	98	26%	41	11%	3.3	0.89
Overall mean=3.34												

Source: Sample survey Analysis, 2022

**Awareness and collaboration between TVET and MSMEs:**

Table 2 Item 1 shows that 41 (11%) were agreed, and the other 14 (4% were strongly agreed, as they set a common agenda for decision-making on common issues to strengthen our relationship. The mean was 2.92, which is located in the range of 2.61–3.40, implying that the overall respondent was not sure that they set a common agenda for decisions on common issues to strengthen our relationship. The standard deviation is 0.81, which shows that there is dispersion or variation in the respondent's response. As table 4.5, item 2, shows, the mean was 3.37, which is located in the range of 2.61–3.40, implying that the overall respondent was not sure that there is a clear structure that links with TVET and MSMEs. The standard deviation is 0.73, which shows that there is dispersion or variation in the respondents' responses.

Table 2, Item 3, states the mean was 3.58, which is located in the range of 3.41–4.20, implying that the overall respondent agreed that TVET institutions develop and deliver technical skills, business management, and marketing training programs that are appropriate for different enterprise levels. The standard deviation is 0.74, indicating that there is dispersion or variation in the responses of the respondents. Thus, based on the respondents' responses, it can be deduced that TVET institutions develop and deliver technical skills, business management, and marketing training programs that are appropriate for different enterprise levels. The training provides the needed knowledge on enterprise management. Both groups of respondents agree with the perspective of 3.52 mean values for TVETs (Assayew, 2017). Based on Table 2 Item 4, the mean was 2.96, which is located in the range of 2.61–3.40, implying that the overall respondent was not sure that TVET institutions bridge the gap with enterprises through updated technologies. The standard deviation is 0.75, which shows that there is dispersion or variation in the respondents' responses. Table 2 Item 5 shows that the mean was 2.92, which is located in the range of 2.61–3.40, implying that the overall respondent was not sure that there were constant interactions and collaborations between MSMEs and TVEs. The standard deviation is 0.77, which shows that there is dispersion or variation in the respondents' responses. According to the Triki study, schools provide support to learners with diverse backgrounds. Most respondent students (62.1%) expressed their disagreement with the statement "Students' perceptions about school support for learners with diverse backgrounds (Triki, 2010)

**Table 2***Descriptive Statistics for Awareness and Collaboration Between TVET and MSMESS*

Statement	Strongly		Disagre		Neutral		Agree		Strongly		Mean	SD
	F	%	F	%	F	%	F	%	F	%		
We set a common agenda for decision on common issues to strength our relation	28	7.40%	42	11%	251	67%	41	11%	14	4%	2.92	0.81
There is clear structure that links with TVET/MSMESSs	14	3.70%	14	4%	168	45%	180	48%	0	0%	3.37	0.73
TVET institutions develop and deliver Technical skills, business management and marketing training programs that are appropriate for different enterprise levels.	0	0.00%	28	7%	138	37%	182	48%	28	7%	3.56	0.74
TVET institutions bridge the gap with enterprises by updated technologies	0	0.00%	98	26%	208	55%	56	15%	14	4%	2.96	0.75
There is constant interactions and collaborations between MSMESSs and TVEs	14	3.70%	70	19%	237	63%	41	11%	14	4%	2.92	0.77
I believe the TVET-MSMESS collaboration program can bridge the technological gap.	0	0.00%	56	15%	237	63%	56	15%	27	7%	3.14	0.75
TVET-MSMESSs collaborations are expected to enhance capabilities on both sides, improve productivity and increase commercialization potentials of products generated from the projects.	0	0.00%	14	4%	180	48%	140	37%	42	11%	3.56	0.74
Traineeship programs will be representing TVET-MSMESSs collaboration to introduce into the TVET system	0	0.00%	27	7%	224	60%	84	22%	41	11%	3.37	0.77
Aggregate mean=3.225												

Source: Sample survey Analysis, 2022

**Skilled Labor Supply:**

According to table 3 Item 1, 28(7%) of respondents disagreed that TVET College graduates are equipped with effective skill and knowledge of MSMEs machineries and tools, 68(18%) were unsure, and the remaining 280(74%) agreed that TVET College graduates are equipped with effective skill and knowledge of MSMEs machineries and tools. The mean was 3.67, which is located in the range of 3.41–4.20, implying that the overall respondent agreed that TVET College graduates are equipped with effective skills and knowledge of MSMEs machineries and tools. The standard deviation is 0.61, which shows that there is dispersion or variation in the respondent's response. Thus, based on the respondent's response, it can be deduced that TVET College graduates are equipped with effective skills and knowledge of MSMEs machineries and tools.

According to Table 3 Item 2, the mean was 3.52, which is located in the range of 3.41–4.20, implying that the overall respondent agreed that TVET college graduates have adequate know-how on new technologies. The standard deviation is 0.69, which shows that there is dispersion or variation in the respondents' responses. Thus, based on the responses, it can be concluded that TVET college graduates have adequate knowledge of new technologies.

As Table 3 Item 3 shows, the mean was 3.63, which is located in the range of 3.41 to 4.20, implying that the overall respondent agreed that TVET college graduates have adequate know-how on new technologies. The standard deviation is 0.62, which shows that there is dispersion or variation in the respondents' responses. Thus, based on the respondent's response, it can be inferred that TVET college graduates have adequate know-how on new technologies. Based on table 4.6, item 4, the mean was 3.10, which is located in the range of 2.61–3.40, implying that the overall respondent was not sure that TVET College graduates innovate new technologies that improve the productivities of MSMEs. The standard deviation is 0.62, indicating that there is dispersion or variation in the responses of the respondents.

**Table 3**

## Descriptive Statistics Skilled Labor Supply

Statement	Strongly disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	SD
	F	%	F	%	F	%	F	%	F	%		
TVET College graduates are equipped with effective skill and knowledge of MSMEs machineries and tools	0	0.0%	28	7%	68	18%	280	74%	0	0%	3.67	0.61
TVET college graduates have adequate know how on new technologies	0	0.0%	28	7%	139	37%	195	52%	14	4%	3.52	0.69
TVET college graduate improved efficiency of MSMEs.	0	0.0%	0	0%	167	44%	181	48%	28	7%	3.63	0.62
TVET College graduates innovate new technologies that improve productivities of MSMEs	0	0.0%	42	11%	266	71%	55	15%	13	3%	3.10	0.62
TVET college graduates implement projects that are vital for MSMEs	0	0.0%	28	7%	237	63%	98	26%	13	3%	3.26	0.64
In general, TVET college produce skilled youths and supply to MSMEs.	0	0.0%	0	0%	111	30%	196	52%	69	18%	3.89	0.68
Aggregate mean=3.5												

Source: Sample survey Analysis, 2022



Table 4 shows the comparison of the initial and final capitalization of MSMEs. Accordingly, the mean initial capital of enterprises was 44336.6223 and the mean final capital of enterprises was 924758.2205. When considering the time value of money and considering the average inflation rate of 9.4%, the mean initial capital of enterprises was 44336.6223 and the mean final capital of enterprises was 924758.2205. When considering the time value of money and considering the average inflation rate of 9.4%, the final capital of the firms has a value of \$5098.2, which is greater than its initial capital. This implies that the businesses of the enterprises were growing.

**Table 4**

Comparison Of Initial And Final Capital Of MSMESS

	Mini mum	Maximum	Mean	Std. Deviation		Value	Asymptotic Significance (2-sided)
Initial capital	3000	716,255	44336	133182.7	Pearson Chi-Square	3789.805 <sup>a</sup>	.000
Final Capital	3000	13,000,000	924758	2522270.0	Likelihood Ratio	1653.616	.000
Valid N (listwise)					Linear-by- Linear Association	19.650	.000

Source: Sample survey Analysis, 2022

### Correlation Analysis

Correlation analysis is used to investigate the relationship between independent and dependent variables. The Pearson Product-Moment Correlation Coefficient is a statistic that indicates the degree to which two variables are related to one another. The sign of a correlation coefficient (+ or -) indicates the direction of the relationship between -1.00 and +1.00. Variables may be positively or negatively correlated. A positive correlation indicates a direct positive relationship between two variables. A negative correlation, on the other hand, indicates an inverse, negative relationship between two variables (Ruud et al. 2012). Table 5 below clearly shows the relationship between two variables will be negligible, low, moderate, substantial, or very strong.

**Table 5***Correlation Analysis between Independent variables and Dependent Variable*

		Training	Awareness and	Skilled Labor	Capacity	Communication Strategy	MSEs policy, strategy	Trust	Education level and	Consultation	Saving and	Access to finance	Performance of MSEs
Training	Pearson Correlation	1	.636**	.707**	.734**	.587**	.373**	.575**	.737**	.616**	.671**	.540**	.761**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	376	376	376	376	376	376	376	376	376	376	376	376
Awareness and collaboration between TVET and MSEs	Pearson Correlation	.636**	1	.651**	.724**	.713**	.470**	.714**	.680**	.696**	.624**	.569**	.750**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	376	376	376	376	376	376	376	376	376	376	376	376
Skilled Labor supply	Pearson Correlation	.707**	.651**	1	.631**	.606**	.391**	.606**	.609**	.603**	.606**	.508**	.699**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	376	376	376	376	376	376	376	376	376	376	376	376
Capacity building, innovation and technology	Pearson Correlation	.734**	.724**	.631**	1	.792**	.489**	.689**	.770**	.731**	.726**	.565**	.810**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	376	376	376	376	376	376	376	376	376	376	376	376
MSEs policy, strategy and Implementation	Pearson Correlation	.373**	.470**	.391**	.489**	.524**	1	.592**	.785**	.390**	.576**	.477**	.634**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	376	376	376	376	376	376	376	376	376	376	376	376
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	376	376	376	376	376	376	376	376	376	376	376	376
Performance of MSMEs	Pearson Correlation	.761**	.750**	.699**	.810**	.784**	.634**	.784**	.838**	.756**	.785**	.683**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	376	376	376	376	376	376	376	376	376	376	376	376

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Source: Sample survey, 2022

From the above table, it can be seen that training ( $r = 0.7595$ ,  $p 0.01$ ) is positively correlated with the performance of MSMEs. This implies the existence of a statistically significant moderate relationship between MSMEs' training and performance. And changes in training have a corresponding effect on MSMEs' performance. It can be seen in the above table that awareness and collaboration between TVET and MSMEs are positively correlated with the performance of MSMEs ( $r = 0.75$ ,  $p 0.01$ ), which is a moderately positive relationship and statistically significant. This means an increase in awareness and collaboration between TVET and MSMEs will increase the performance of MSMEs. As indicated in the above table, the correlation coefficient result of skilled labor supply and performance of MSMEs and mid-level industries ( $r = 0.697$ ,  $p 0.01$ ) indicates that they are positively correlated. This implies the existence of a moderately positive, statistically significant relationship between skilled labor supply and MSME performance. From the above table, it can be seen that capacity building, innovation, and technology ( $r = 0.810$ ,  $p 0.01$ ) are positively correlated with the performance of MSMEs and mid-level industries. This implies the existence of a statistically significant moderate relationship between capacity building, innovation, and technology and the performance of MSMEs and mid-level industries. And, change in capacity building, innovation, and technology has a corresponding effect on the performance of MSMEs and mid-level industries.

### **Relative Importance Index Analysis**

In this section, RII is used to analyze the collected data. The summary of descriptive statistics of all variables that are evaluated based on a 5-point Likert scale ("1" being "strongly disagreed" to "5" being "strongly agreed"). According to Mbamali and Okotie (2012), RII 0.60 indicates that the item is of low significance, 0.6 RII 0.80 indicates that the item is of high significance, and RII 0.80 indicates that the item is of very high significance.

**Table 6***Relative Importance Index for Training*

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Total score	RII	Rank
	Count	Count	Count	Count	Count			
Training is provided by TVETs is based on needs assessment of MSEs and it is focused, goals and outcomes oriented	0	28	153	168	27	1322	0.7	2
The training MSEs are taking makes them successful to apply it practically on businesses	0	55	84	196	41	1351	0.72	1
The training given to the MSE operators is very useful for future strengthening of the operators	0	55	154	126	41	1281	0.68	3
The training provided for MSEs operators contain adequate theoretical and practical lessons within the given schedule	0	28	237	84	27	1238	0.66	5
There is sufficient maintenance course and the manuals give operators a clear information	0	84	196	69	27	1167	0.62	6
There is Adequate educational facilities such as training equipment including manuals, workshops, machineries and others for both theoretical and practical demonstrations in TVET institutions to ensure the quality of training offered	14	140	194	14	14	1002	0.53	7
The curricula of TVETs include enterprise orientation, which will introduce trainees to the concept of how to develop and organize business activities aimed specially at growth and profit.	0	69	168	98	41	1239	0.66	4

Source: Sample Survey, 2022

The table above presents information about the significance of level of training and has been ranked accordingly. The highest ranked factors with RII 0.80 values are considered to have very high significance because the relative important index (RII) is greater than 0.8, RII 0.60, item is considered to have low significance, 0.6 RII 0.80, item is considered to have high significance. As a result, the RII for the training MSEs receive makes them successful in applying it practically on businesses is 0.72, which has high significance for MSEs performance and is ranked first, the RII for training provided by TVETs is based on needs assessment of MSEs and is focused, goals and

outcomes oriented is 0.7, which has high significance and is ranked second, and the RII for training given to MSE operators is very useful for future strengthening of the operators is 0.68.

According to their RII value, it can be inferred that the training MSEs are taking makes them successful at applying it practically to businesses. The training provided by TVETs must be based on an assessment of MSE needs and must be focused, goal-oriented, and outcome-oriented; the training provided to MSE operators is very useful for future strengthening of the operators; TVET curricula must include enterprise orientation, which will introduce trainees to the concept of how to develop and organize business activities aimed specifically at growth and profit; and MSE training must be adequate.

### **Relative Importance Index for Awareness and collaboration between TVET and MSEs**

As the table below shows, RII for TVET institutions development of technical skills, business management, and marketing training programs that are appropriate for different enterprise levels is 0.71, which has high significance for MSEs performance and is ranked first; RII for TVET-MSE collaborations are expected to enhance capabilities on both sides, improve productivity, and increase the commercialization potential of products generated from the projects is 0.71, which has high significance and is ranked second; RII for traineeship programs that will be representing TVET-MSE collaboration to introduce into the TVET system is 0.67; RII for a clear structure that links with MSE is 0.67; RII for a clear structure that links with MSEs is 0.67; RII for the 0.67; RII for the 0.67; RII for the 0.67; RII for the 0.67; introducing into the TVET system is 0.67.

**Table 7***Relative Importance Index for Awareness*

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Total score	RII	Rank
	Count	Count	Count	Count	Count			
We set a common agenda for decision on common issues to strength our relation	28	42	251	41	14	1099	0.58	7
There is clear structure that links with TVET/MSEs	14	14	168	180	0	1266	0.67	4
TVET institutions develop and deliver Technical skills, business management and marketing training programs that are appropriate for different enterprise levels.	0	28	138	182	28	1338	0.71	1
TVET institutions bridge the gap with enterprises by updated technologies	0	98	208	56	14	1114	0.59	6
There is constant interactions and collaborations between MSEs and TVEs	14	70	237	41	14	1099	0.58	7
I believe the TVET-MSE collaboration program can bridge the technological gap.	0	56	237	56	27	1182	0.63	5
TVET-MSEs collaborations are expected to enhance capabilities on both sides, improve productivity and increase commercialization potentials of products generated from the projects.	0	14	180	140	42	1338	0.71	1
Traineeship programs will be representing TVET-MSEs collaboration to introduce into the TVET system	0	27	224	84	41	1267	0.67	3

Source: Sample Survey, 2022

### Relative Importance Index for Skilled Labor supply

Based on the table below, the RII for TVET college development of skilled youths and supply to MSEs is 0.78, indicating high significance for MSEs performance and ranking first. The RII for TVET College graduates who have effective skill and knowledge of MSE machineries and tools is 0.73, which is also highly significant and ranks second. RII for TVET college graduates' improved efficiency of MSEs is 0.73.

**Table 8**

#### *Relative Importance Index for Skilled Labour Supply*

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Total score	RII	Rank
	Count	Count	Count	Count	Count			
TVET College graduates are equipped with effective skill and knowledge of MSE machineries and tools	0	28	68	280	0	1380	0.73	2
TVET college graduates have adequate know how on new technologies	0	28	139	195	14	1323	0.7	3
TVET college graduate improved efficiency of MSEs.	0	0	167	181	28	1365	0.73	2
TVET College graduates innovate new technologies that improve productivities of MSEs	0	42	266	55	13	1167	0.62	6
TVET college graduates implement projects that are vital for MSEs	0	28	237	98	13	1224	0.65	5
In general, TVET college produce skilled youths and supply to MSEs.	0	0	111	196	69	1462	0.78	1

Source: Sample Survey, 2022

### Relative Importance Index for Capacity building, innovation and technology

As shown in the table below, the RII for machines and equipment in TVET workshops that are relevant and technologically updated to support MSEs is 0.76, which has a high significance for MSEs performance and ranks first; the RII for TVETs having skills to provide new technology for MSEs is 0.72, which has a high significance for MSEs performance and ranks second; and the RII for a TVET system that keeps pace with technological advancements and uses technology appropriate to technical education.

**Table 9**

*Relative Importance Index for Capacity building, innovation and technology*

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Total score	RII	Rank
	Count	Count	Count	Count	Count			
A TVET System keep pace with technological advancements and use technology appropriates in technical education and training to support MSEs.	14	14	209	111	28	1253	0.67	3
TVETs have skills to provide new technology for MSEs.	0	28	138	168	42	1352	0.72	2
TVETs help MSEs in selecting proper technology.	0	42	236	56	42	1226	0.65	5
MSEs have got the skills of utilizing modern technology application from TVET institutes	14	69	224	28	41	1141	0.61	6
Machines and equipment's in TVET workshops are relevant and technologically updated to support MSEs	0	28	69	238	41	1420	0.76	1
TVETs and MSEs work together to innovate new technologies and appropriately utilize it	0	28	237	70	41	1252	0.67	4

Source: Sample Survey, 2022

### Relative Importance Index for MSEs Policy, strategy and Implementation

The highest-ranked factors with values of RII 0.80 are regarded as factors with very high significance because the relative importance index (RII) is greater than 0.8; if RII 0.60, an item is assessed to have a low level of significance; if RII 0.80, an item is assessed to have a high level of significance. As a result, RII for MSEs maintaining and accelerating rapid economic growth is 0.8 has very high significance for MSEs performance, RII for MSEs export to play a critical role in



generating employment, serving as incubators of developmental investors, and the foundation for industrial development is 0.73 has high significance for MSEs performance.

**Table 10**

*Relative Importance Index for MSEs Policy, strategy and Implementation*

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Total respondent	Total score	RII	Rank
	Count	Count	Count	Count	Count				
MSEs are expected to play a critical role in generating employment, serve as incubators of developmental investors and the foundation for industrial development.	14	14	125	168	55	376	1364	0.73	2
MSEs providing the basis for large scale enterprises and promoting exports.	14	42	83	168	69	376	1364	0.73	2
The current policies help MSEs to get initial capital, raw materials & input	14	166	154	42	0	376	976	0.52	8
The current policies help MSEs to get market linkage	14	111	139	112	0	376	1101	0.59	6
The working environment in is conducive	14	97	223	14	28	376	1073	0.57	7
MSEs facilitating economic growth and bring about equitable development; creating long-term jobs	0	69	125	182	0	376	1241	0.66	5
MSEs are a major pool of developmental investors, allowing the country to start with limited capital and technology and gradually build up capital and technological advancement.	14	42	110	182	28	376	1296	0.69	4
MSEs are maintaining and accelerating rapid economic growth.	0	14	124	84	154	376	1506	0.8	1

Source: Sample Survey, 2022

### Conclusion and Recommendations

The study's findings demonstrated that the success of MSMEs is significantly influenced by TVET College support. Sadly, a number of factors are preventing TVETs in Addis Ababa from having the expected effect on MSMEs' performance. TVETs played a limited role in transferring technology, encouraging entrepreneurship, and providing skilled labor for MSMEs. The

relationship between TVET and MSME was fragile, policies and strategies were not implemented efficiently, and there was a lack of trust between the two groups.

Lack of suitable facilities, a shortage of trained personnel, a lack of knowledge regarding TVET strategy, a lack of adequate finance, and a lack of commitment from interested entities are some of the issues facing TVET colleges. It is also challenging for the institutions to apply the present TVET curriculum since they lack a technology transfer department. Therefore, no effective stakeholder cooperation training exists.

According to the report, training has a significant effect on businesses. TVET institutions should have the necessary instructional resources, including manuals, workshops, equipment, and other materials for both theoretical and practical demonstrations, to guarantee the quality of the training offered. Nevertheless, the given timetable for the training of MSMEs operators' operators did not include enough theoretical and practical lessons, there is not enough of a maintenance course, and the manuals do not give operators clear instructions. The knowledge of and collaboration between TVET and MSMEs have a big impact on performances. TVET institutions do not establish a common agenda for decision-making on common concerns to improve our partnership, and there is no clear framework linking TVET/MSMEs. Instead, they develop and deliver technical skills, business management, and marketing training programs that are appropriate for various enterprise levels. The ability of firms to prosper is significantly influenced by the availability of competent personnel. Considering the accessibility of skilled labor in the study area, TVET college graduates are knowledgeable about the equipment and tools used by MSME, have enough understanding of new technologies, and have raised the productivity of MSMEs. Graduates of TVET colleges did not, however, create new technologies that boost the productivity of MSMEs. Generally, TVET institutions produce MSMEs and train the next generation.

According to the report, capacity building, innovation, and technology have a big impact on MSMEs' performance. Regarding capacity development, innovation, and technology in Addis Ababa MSMEs, a TVET system did not keep up with technological advancements and use technology appropriately in technical education and training to support MSMEs, TVETs have the skills to provide new technology for MSMEs, TVETs did not help MSMEs in selecting the proper technology, MSMEs did not receive the skills of utilizing modern technology application from

TVET institutes, Modern and cutting-edge equipment is employed in TVET workshops to support collaboration between MSMEs, TVETs, and MSMES in the development and effective use of new technologies. Communication strategy has a huge impact on MSMEs' effectiveness.

The study discovered that MSMES' policy, strategy, and implementation have a substantial impact on the firm's performance. About MSMEs Policy, Strategy, and Implementation in the research domain, MSMEs are predicted to play a vital role in employment creation, function as incubators for developmental investors, and serve as the foundation for industrial expansion. MSMEs support exports and act as the building blocks of large corporations. The current guidelines did not help MSMEs secure initial funding, raw materials, and input, as well as market linkage, because the working environment was unfavorable. MSMEs don't encourage economic growth, encourage fair development, or create secure jobs. MSMEs are a significant source of developmental investors, enabling the nation to begin with modest resources and technology and progressively build up resources and technical improvement. MSMEs are also sustaining and accelerating the country's rapid economic growth.

The report makes the following recommendations in light of its findings. The study's findings show that the performance of MSMEs is significantly influenced by training, the availability of skilled labor, capacity building, innovation, and technology, as well as by awareness of and collaboration between TVET and MSMEs. The government, TVETs, MSMEs, and other stakeholders must work together to improve the performance of MSMEs. The training offered to MSMEs operators should include a proper maintenance course, and the manuals must give users clear instructions. To ensure the quality of the training, TVET institutions should also provide enough educational facilities, such as manuals, workshops, equipment, and other items for both theoretical and practical demonstrations. It is suggested that TVET and MSMEs develop a shared agenda for addressing shared issues. TVET institutions should use modern technologies to bridge the gap with businesses and should have a structured framework that links with TVET/MSMES. A TVET system needs to adapt to technological advancements in order to help MSMESs. MSMESs should receive assistance from TVETs in selecting the right technology. It is suggested that TVETs and MSMESs exchange any information required for their respective jobs. Moreover, TVETs must

frequently contact MSMEs on essential matters. The government is expected to make information about loan providers and other forms of finance for businesses available to MSMEs.

The collaborations between TVET, microfinance organizations, MSMEs development head office, and employment organizations are considered to be closely related. Investigating the quality of TVET college instructors and collaborating with the group to raise their competency through short-term training or summer in-service training would be preferable for the government agency in charge of TVET trainer professional development, such as the TVET Agency.

## References

- Admasu Abera (2012): *Factors Affecting the Performance of MSMEs in Arada and Lideta Sub city, AAU, Addis Ababa, Ethiopia*
- Arega Seyoum (2016): *Growth of Micro and Small Enterprises in Addis Ababa City Administration: A Study on Selected Micro and Small Enterprise in Bole Sub City.*
- Benti, G. T., Of, F., Requirements, T. H. E., The, F. O. R., Of, M., Degree, A., Management, I. N., & Vocational, O. F. (2014). *The Contribution Of Public Tvet Institutions To Strengthen Micro And Small Enterprises In Addis Ketema Sub- City.*
- Bereket, T. (2010). *The Role of Micro and Small Enterprises in Employment Creation and Income Generation A Survey Study of Mekelle City, Tigray Region, Ethiopia* A. 29(June), 415–434.
- Chemed, D. (2003). *Micro and Small Handicrafts Development Constraints, Export Potentials and Opportunities. Addis Ababa, Ethiopia.*
- Federal Micro and Small Enterprises development Agency (2012): *Competitive Business Formation Guideline [26] Federal Micro and Small Enterprises development Agency (2012), Facilitation Guideline FDRE ,(1998)*
- Hobson, G. E. (2015): *A Sheffield Hallam University thesis.*
- ILO. (2008): *Executive summary - World of Work Report 2008: Income inequalities in the age of financial globalization. In World of Work Report (Vol. 2008, Issue 1). <https://doi.org/10.1002/wow3.10>*
- Kibrom, A. M. (2014). *The Nexuses of Technical Vocational Education Training and Micro and Small Scale Enterprise on Training and Technology Transfer : The Case of Addis Ababa in Addis Ketema Sub City Technical Vocational Education Training and Micro and Small Scale Enterprise.*
- Micro and Small Enterprises Development Agency (2010), *The Impact of MSMEs in Addis Ababa; A Diagnostic Study, Addis Ababa City Administration*
- MoE (2008). *National Technical and Vocational Education and training (TVET) strategy. Addis Ababa: Ministry of Education.*
- UNESCO. (1990). *World Declaration on Education for All and Framework for Action. Unesco, March, 37.*
- Wahrenburg, M., & Weldi, M. (2007). *Return on investment in higher education – Evidence for different subjects, degrees and gender in Germany,*
- Wolday Amha, Gebrehiwot Ageba, (2006): *"Business development services (BDS) in Ethiopia:*