

## EFFECT OF TECHNICAL EDUCATION POLICIES ON TECHNOLOGY ADOPTION AMONGST MICRO AND SMALL ENTERPRISES IN KENYA

*P. P. Kithae<sup>1</sup>, K. Karanja<sup>2</sup> and J. Nyaga<sup>3</sup>*

*<sup>1</sup>Management University of Africa, Kenya*

*<sup>2</sup>Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya*

*<sup>3</sup>Karatina University, Nyeri, Kenya*

*E-mail pkithae2001@yahoo.com*

### **Abstract**

The Kenya's economic recovery strategy for wealth and employment creation recognizes the great role that Micro and Small Enterprise (MSE) sector play in wealth generation, employment creation and poverty reduction. Consequently, the government has put in place policies and promotional programmes aimed at improving the Kenyan economy through promotion of Micro and Small Enterprises. Among these, the government has invested a lot in enhancing technical capabilities amongst its youth who are expected to start MSEs for self employment after graduation. These capabilities come in form of information and skills- technical, managerial and institutional – that allow productive enterprises to utilize equipment and technology efficiently. The purpose of technology is to improve productivity of enterprises, and enhance the quality of goods produced by enterprises to help them with-stand local and international competition. However, despite all these efforts, the competitiveness and growth prospects of MSEs fall below the levels required to meet challenges of increasing and changing basis for competition. The objectives were to determine the effect of technical and entrepreneurial education and provision of youth development fund on technology adoption among MSEs in Kenya. A descriptive research design was used. Stratified random sampling technique was employed to select the sample. Data was analyzed using the Excel computer software. It was found that access to credit and inadequate institutional capacity to support adaptation and absorption of modern technologies still remain the main impediments to growth and sustainability of the MSEs. The recommendations were that MSEs need to be provided with adequate finances, tools and equipment coupled with field visits to industries and performing MSEs for benchmarking and to upgrade their business skills.

**Key words:** Micro and small enterprises (MSES), technology, tertiary graduate entrepreneurs

## **1 Introduction and Research Objectives**

The Kenya's economic recovery strategy for wealth and employment creation recognizes the great role that Micro and Small Enterprise (MSE) sector play in wealth generation, employment creation and poverty reduction (GOK, 2003). Consequently, the government has put in place policies and promotional programmes aimed at improving the Kenyan economy through promotion of Micro and Small Enterprises (GOK, 1992; GOK, 1997 and GOK, 1999). Among these, the government has invested a lot in enhancing technical capabilities amongst its youth who are expected to start MSEs for self employment after graduation. These capabilities come in form of information and skills-technical, managerial and institutional – that allow productive enterprises to utilize equipment and technology efficiently. The purpose of technology is to improve productivity of enterprises, and enhance the quality of goods produced by enterprises to help them with-stand local and international competition (ILO/UNDP, 2000). However, despite all these efforts, the competitiveness and growth prospects of MSEs fall below the levels required to meet challenges of increasing and changing basis for competition.

### **1.1 Statement of the Problem**

Despite the central role of MSEs in employment, industrial transformation and poverty reduction and the government's efforts of putting in place interventions geared towards improving the business environment through appropriate policy frameworks (GOK, 2007, GOK, 2009), it has been noted that the competitiveness and growth prospects of MSEs in Kenya fall below the levels required to meet challenges of increasing and changing basis for competition, shifting patterns of legislation and regulations, tumbling trade barriers and fragmentation of markets (Moyi and Njiraini, 2005). Specifically, the baseline survey of 1999 estimated that 80% of the MSEs fail within their first three years after start-up due to problems related to appropriate technology (GOK, 2001). This research study aimed at finding reasons for this so as to bridge the research gap.

### **1.2 Research Objectives**

The general objective was to find out how technical education policies are affecting technology adoption amongst micro and small enterprises in Kenya.

Specific objectives were as follows:

- (i) Determining how learning technical skills in technical education curriculum affect technology adoption amongst micro and small enterprises in Kenya
- (ii) Investigating how learning entrepreneurship skills in technical education curriculum affect technology adoption amongst small and micro enterprises in Kenya
- (iii) Finding out how provision of Youth Enterprise Development Fund to graduate entrepreneurs affect technology adoption amongst small and micro enterprises in Kenya

### **1.3 Significant of the Study**

**To donor agencies:** The findings will be of great assistance to donors as they will be able to engage suitable business development agencies (BDS) to help mses improve their technological capabilities, become innovative to improve quality of their products to survive.

**To the government:** The findings will give direction on prioritizing the expenditure of the donors and policy makers in consideration to areas where the strategies should be focused so as to effectively promote MSE development.

**To beneficiaries:** Information from this study will be useful to both potential and practicing entrepreneurs to realize their weaknesses/shortcomings and rectify them to maximize beneficial effects for their businesses.

#### **1.4 Assumptions of the Study**

The study assumed that tertiary institute graduates are not applying their learned skills effectively to bring much impact on their enterprise growth and that something need be done to improve their successes. It was further assumed that the respondents to the interview would provide sincere and honest information and views.

#### **1.5 Definition of Terms**

This section deals with operational definitions whose role is to indicate the specific manner in which a term or concept is to be applied. Their use may be different in another perspective. This study used the following concepts.

**Micro and Small Enterprises (MSEs)** A micro or small enterprise is an undertaking, which employs between 1 and 20 employees, with capital investment of not more than kshs 30 million. Operational and administrative management lies in the hands of one to three persons who usually make major decisions.

**Technology** According to Van Dijk (2001), Technology may be seen as a resource that can be useful if adapted by firms to improve their efficiency and factor productivity. This study used the same definition.

## **2 Theoretical Background and Informing Literature Review**

### **2.1 Introduction**

This chapter reviews literature relevant to the research problem. It is based on several research papers and contributions of various authors, National Development plans, Government sessional papers and other policy documents in the development of youths, entrepreneurs and small business enterprises. The review gives special consideration to the extent to which Tertiary institute graduates have utilized their technical and entrepreneurship skills learnt to improve quality of their products for their enterprise growth and sustainability. The paper conceptualized that the various ingredients of technical education policies have effect on performance of tertiary institute graduate owned MSEs.

### **2.2 Technical Education Policies in Kenya**

These policies may be pinned on the rationale for changing from the former 7-2-3 education system to the 8-4-4 system where; in introducing the system, the Ministry of Education, Science and Technology specifically gave rationale for the new system as the need for a more relevant practical oriented curriculum and an emphasis on technical and vocational education. It was hoped that this would ensure that graduates of every level have some scientific and practical knowledge for either self-employment, salaried employment, or further training. (GOK, 1984). In line with these policies, there has been introduction of subsidized youth polytechnic tuition in all public youth polytechnics in Kenya where the government disburses Kenya shillings 15,000/ per year for every registered learner while students in other technical institutions not able to raise their fees may access to bursaries from Constituency Development Funds (CDF), from Higher Education Loans Board as well as from other sources (eg., LATF, etc) to subsidize their tuition fee. There has also been introduction of modern learning machines and equipment in all technical institutions including youth polytechnics, introduction of computers, workshops and other physical facilities. Technical education curriculum has also been revamped to include entrepreneurship education, business planning, technical projects and industrial attachment among others. Likewise, trainers in these institutions have been given government sponsorship for further studies in Mombasa Polytechnic, Kenya Technical Teachers College and other learning institutions to ensure they impart to learners skills relevant for Kenya's industrial transformation and in order to achieve the Vision 2030.

For simplicity, the researcher used technical skills, entrepreneurship skills and access to Youth Enterprise Development Fund as resultants and thus ingredients of technical education policies. These variables form independent variables and their effect is expected to impact on performance of Technical Institute graduate owned MSEs as shown on Figure 1.

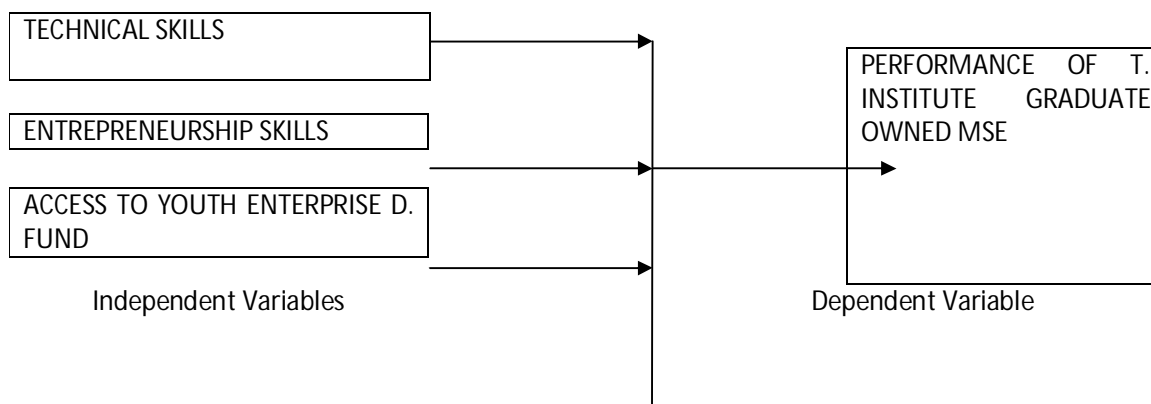


Figure 1: Conceptual frame work

The diagram above illustrates the relationship between ingredients of Technical Education Policies and performance of MSEs (the dependent variable). The study conceptualized that the policy ingredients would form independent variables and their effect was expected to impact positively on the performance of tertiary institution graduate owned MSEs. These are explained as follows.

### 2.2.1 Technical Skills

As enshrined in the policies, Technical education is expected to provide a whole range of skills for salaried as well as for self employment. Thus, after undergoing the technical learning process, a learner is expected to demonstrate knowledge, attitude, skills and habits (K.A.S.H.) very different from those without the education. The skills may be grouped into the following;

In an ever more complex, technology-driven society, it is imperative that one has the necessary skills to succeed in life. Technical skills refer to a whole range of skills, from the very specific technical skills required of life and one's work to the subtle, yet critical interpersonal and psychological skills demanded by life. The most fundamental type of skills that one must have to achieve in life are technical skills and include those required of life in general such as cleaning, cooking, grooming, organizing and planning among others. Technical skills building is an on-going, never-ending process and consist of the very basic technical skills required of your job specific. Research has shown that people who often succeed the greatest in their careers are people who have *unique* skills in a particular area, causing them to stand out among the crowd. As a skill gets performed over and over, it becomes almost second nature (it becomes a habit). As the skill becomes more integrated into your being, it moves from your conscious awareness of performing the act involved in the skill down into a subconscious level where it operates on an almost "automatic pilot" of execution. It is done without any great effort and is done with a sense of calm and joy. The government has been promoting acquisition of these skills through provision of instructional and training materials for project vote head of the subsidized tertiary institute education fund and while paying lecturers in the learning institutions.

### 2.2.2 Functional Skills

Functional skills help an individual to know his strengths. They are competencies that are transferable to many in different work settings. To students of TIVET institutions, these skills are imparted in classroom setting. The Kenyan government has enhanced acquisition of these skills

through provision of funds for textbooks and other learning materials in the subsidized tertiary education fund.

### **2.2.3 Design and Planning skills**

These skills help one to Imagine the future and develop a process for creating it, anticipate problems, plan, conceptualize, design, display, layout/format, design programs, anticipate consequences, brainstorm new ideas, think visually, improvise, compose, adapt and create images.

### **2.2.4 Research and Investigation skills**

These skills help candidates to search for specific knowledge, analyze ideas, analyze data, research, investigate, read for information, interview for information, gather data, evaluate, critical thinking, synthesize information, observe, outline, formulate hypothesis, develop theory and calculate/compare.

### **2.2.5 Human Service skills**

These skills help one to attend to physical, mental or social needs of people. They include interpersonal skills, group process, sensitivity to needs, empathize, counsel, advocate, use intuition, coach and provide care.

### **2.2.6 Physical skills**

These skills help one to use hands or tools to build, repair, and invent, build, construct, operate equipment, repair, restore and use physical coordination. Developing a list of functional skills that one has and mostly enjoy using can help one to focus on positions that would fit his talents and provide more satisfaction in his career path.

### **2.2.7 Behavioral Skills**

According to Dr. Arnold P. Goldstein, behavioral skills include answering a complaint, apologizing, arranging problems by importance, asking a question, asking for help and asking permission; avoiding trouble with others, being a good sport, concentrating on a task, convincing others, dealing with an accusation, dealing with being left out, dealing with contradictory messages, dealing with embarrassment, dealing with fear, dealing with group pressure, dealing with someone else's anger, deciding on something to do, deciding on your, abilities, deciding what caused a problem, expressing affection, expressing your feelings, following instructions, gathering information, getting ready for a difficult conversation, giving a compliment, giving instructions and having a conversation Other behavioral skills include helping others, introducing other people, introducing yourself and joining in, keeping out of fights, knowing your feelings, listening, making a complaint, making a decision, negotiating, responding to failure and responding to persuasion, responding to teasing, rewarding yourself, saying thank you, setting a goal, sharing something, standing up for a friend, standing up for your rights, starting a conversation, understanding the feelings of others and using self-control (Goldstein, 2012). Behavioral skills are best acquired in sports and games as well as in other social events that TIVET institute youth are exposed to. To promote these skills, the Kenyan government has provided a lot of resources in form of sports and games vote head of the subsidized tertiary institute education fund, and ministry of youth affairs and sports development fund among others (GOK, 2006)

### **2.2.8 Entrepreneurship Skills**

Entrepreneurship has been defined as the process of bringing together creative and innovative ideas and coupling these with management and organizational skills in order to combine people, money and resources to meet an identified need and thereby create wealth. (Kithae, 2011). In our study context, entrepreneurship skills will therefore also be referred to as innovative skills. These skills enhance learners capability to apply other skills in their business.

Under the technical education policy, all learners are expected to take up units in entrepreneurship education as a way of inculcating entrepreneurship culture to the learners. With this, it is expected that the learner will be able to use other (Technical) skills learnt to start own enterprises as a way of earning a living, creating an occupation for himself, for others, as well as promoting economic development in the country. Under entrepreneurship education, the learner acquires the following skills:

### **2.2.9Cognitive skills**

Cognition is a group of mental processes that includes attention, memory, producing and understanding language, solving problems, and making decisions (Goldstein, 2012). Cognition skills are studied in various disciplines such as psychology, philosophy, linguistics, science and computer science. The term's usage varies in different disciplines; in psychology and cognitive science for instance, cognition refers to an information processing view of an individual's psychological functions. It is also used in a branch of social psychology called social cognition to explain attitudes, attribution, and group dynamics. Cognition is a faculty for the processing of information, applying knowledge, and changing preferences. Cognition, or cognitive processes, can be natural or artificial, conscious or unconscious. Within psychology or philosophy, the concept of cognition is closely related to abstract concepts such as mind or intelligence. It encompasses the mental functions, mental processes (thoughts), and states of intelligent entities (humans, collaborative groups, human organizations, highly autonomous machines, and artificial intelligences).

In psychology, cognition apply to processes such as memory, association, concept formation, pattern recognition, language, attention, perception, action, problem solving and mental imagery. (<http://en.wikipedia.org/wiki/cognition>" note downloaded on 13<sup>th</sup> august 2012) Traditionally, emotion was not thought of as a cognitive process. This division is now regarded as largely artificial, and much research is currently being undertaken to examine the cognitive psychology of emotion. Cognition also includes one's awareness of one's own strategies and methods of cognition, called meta-cognition and includes meta-memory. Cognition skills are mainly learnt by tertiary institute candidates while designing technical projects for science congress or for final technical examinations. The government has been promoting acquisition of these skills through provision of instructional and training materials for project vote head of the subsidized tertiary institute education fund.

### **Communication skills**

These skills help one to exchange, convey, and express knowledge and ideas, write, edit, summarize, verbal communication, listen, facilitate discussion, consult, teach, train, sell, promote, use languages, interview, ask questions, make presentations, negotiate, think on one's feet, conversational ability, entertain, perform, host, deal with public, public speaking and teamwork.

### **Information Management skills**

These skills help one to arrange and retrieve data, knowledge and ideas, mathematics skills, organize information, manage information, keep records, attend to details, logical ability, develop systems, categorize, summarize and streamline system monitor.

### **Organization Management skills**

These skills direct and guide a group in completing tasks and attaining goals, solve problems, time management, make decisions, lead, meet deadlines, supervise, motivate, recruit, resolve conflicts, mediate, initiate projects, organize, coordinate, handle logistics, put theory into practice, delegate, give directions, assume responsibility, determine policy, interpret policy, apply policy, set priorities and strategize.

### **2.2.3 Youth Enterprise Development Fund**

For technology adoption to take place, Resources need to be availed at the right time, place and amount that they are needed. These resources are acquired through finances which is a major constraint amongst most tertiary institute graduates MSES.

Acquisition of financial services by MSES can be looked at under two main categories;

- a) Lack of tangible security which can be used as collateral. This is normally complicated by existence of inappropriate legal framework that does not recognize innovative strategies for lending to MSES.
- b) Limited access to formal finances due to unemployment, low GDP and insufficient capacity from the government to deliver financial services to tertiary institute graduates MSES; save for the Youth Enterprise Development Fund.

### **Youth Enterprise Development Fund**

The fund was conceived by the Government in June 2006 as a strategic move towards arresting unemployment which is virtually a youth problem (GOK, 2006). According to the Ministry of Youth Affairs circular (2007), the fund has the following objectives:

- a) To provide loans to existing Micro-finance Institutions (MFIs), registered non-governmental organizations (NGOs) involved in Micro-financing, and savings and credit co-operative organizations (SACCOS) for lending to youth enterprises.
- b) To attract and facilitate investment in micro-small and medium enterprises oriented commercial infrastructure such as business or industrial parks, markets or business incubators that will be beneficial to youth enterprises.
- c) Support youth oriented micro, small and medium enterprises to develop linkages with large enterprises.
- d) Facilitate marketing of products and services of youth enterprises in both domestic and international markets; and
- e) Facilitate employment of youth in the international labour market (GOK, 2006).

While allocating the youth fund, the government recognized the fact that skills acquisition is necessary but not sufficient to improve MSES' performance through technology adoption. Youth enterprise development fund has been in operation for two years and this research aims at discovering how effective it has been in improving performance of tertiary institute graduates enterprises.

## **3 Research Methodology**

The study focused on micro and small enterprises owned by technical institute graduates in Embu District of Kenya. A descriptive research design was used to carry out the study as Gall and Borg (1989) noted, "Descriptive studies by nature emphasis interpretation. Stratified random sampling technique was employed to select a sample of 45 respondents. This sampling technique gives all target population within a stratum an equal chance of being selected. It is objective and the results can be representative and generalized. The technique also makes it probable that the sample is approximately the same as the population on the variables to be studied (Borg & Gall, 1988 and Kothari, 1999). A focused group discussion was the main method applied for data collection. The study was expected to generate descriptive Information. Qualitative data was manually analyzed using the researcher's insight and research skills to bring out the main themes. The emerging themes were then operationalized for content analysis and to make meanings and importance of the study. Responses to quantitative questions were electronically analyzed using excel computer software to reveal relationship between the dependent and the independent variables. Table 3.1 below shows how the target population's trade area was stratified.

Table 3.1: sample sizes according to sub sectors

TRADE AREA	NO. OF REGISTERED BUSINESSES (N)	SAMPLE SIZE (n)
Wood work technology	87	25
Metal work technology	55	15
Automotive engineering	10	4
Masonry	3	1
Total	155	45

#### 4 Research Findings and Discussions

This chapter examined the research objectives formulated in relation to the findings obtained. Conclusions and recommendations were subsequently given being based on information generated from the analysis of the questionnaire.

##### 4.1 Skills prevalent amongst enterprises

The study revealed that 45% of all businesses applied technical skills, 28% applied behavioral, 17% had cognitive skills, 14% had functional while 1% had others. These findings tend to reflect situations on the ground where trainees' major essence of being in a technical institution is to acquire technical skills in form of Wood work technology Metal work technology, automotive engineering and masonry among others. Figure 4.1 below shows this relationship.

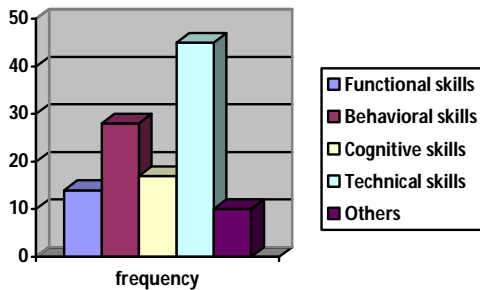


Figure 4.1: Respondent's views on skills prevalent amongst enterprises

##### 4.2 How Technical Education Serve Business Needs

When asked to state the extent to which use of technical education addresses their business performance, 42% indicated very much; 35% fairly well; 14.6% said not much and 8.7% stated not *at al*. These results corroborates with Biggs *et al.* (1995) as he states that high technology firms which have invested in research and development have higher productivity than firms which have not. He proceeds to say that investment in technology add about 25% to value added (Biggs, 1995). According to Gichira (1999), technology in form of human capital helps MSES achieve effectiveness of financial assistance and strengthens communication channels. Buainainn (2002) on the other hand states that appropriate technology help SMES to operate in low-skill spheres with local materials and resources. This implies that through innovative skills, MSES perceive that they are able to enhance their business performance. These findings are represented in Figure 2.



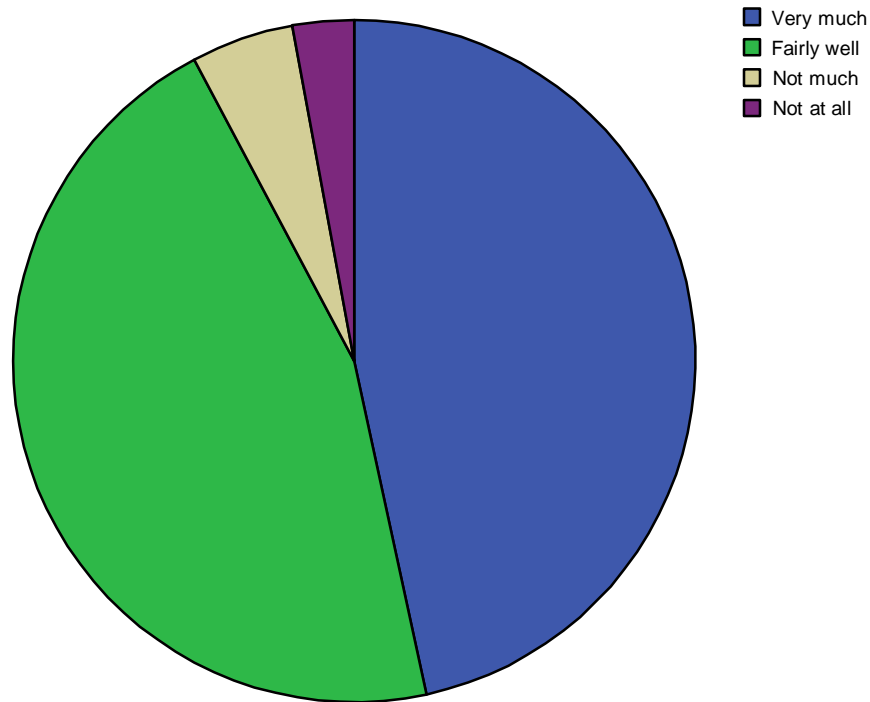


Figure 2: How Innovative Skills Help Respondents fulfill their enterprise needs

#### 4.3 Relationship between Entrepreneurship Education and Increased Output

When respondents' views on use of innovative skills which is mainly enhanced by entrepreneurship education are plotted on a scatter diagram against its effect on increased output, the results show a positive correlation between use of the skills and performance of MSE (increased output). However, this relationship is very weak. This concurs well with (UNIDO, 2004) that MSES lack capabilities to produce efficiently, meet deadlines, upgrade product quality and evolve new product design. This view is also shared by Tyler Biggs, Manju Shah and Pradeep Srivastava that where firms are purported to have lower technological capabilities, where training resources are of lower quality and where markets exhibit many more distortions, one might expect to observe much smaller returns to these investments than in more advanced countries (Tyler et al. 1995). This implies that MSES are not benefiting much from use of entrepreneurship education which promotes innovative skills; possibly due to lack of capabilities to use the skills.

#### 4.4 How provision of Youth Enterprise Development Fund to entrepreneurs affect technology adoption amongst small and micro enterprises in Kenya

Based on interviewees' responses, most entrepreneurs perceived that accessibility of financial resources would affect their MSE's performance fairly well. However, these funds are not forthcoming. Majority are not aware of how to access the youth fund, others after applying wait for too long before they get the funds. Even when they get the funds, the amount is too little to have much impact on their businesses (Kenya shillings fifty thousand to be distributed to 12

group members on average gives kshs 4,000/ per individual enterprise). When youths visit micro finance institutions where most of the youth fund component is being disbursed, they are told the institutions have already exhausted the youth fund component and can only disburse their normal loans at the commercial rate of about 18%. Thus youths are not benefitting much from youth enterprise fund

While credit and finance on their own do not create economic opportunities, they provide people and businesses with the capacity to exploit such opportunities whenever they occur. For MSEs, access to credit and finance can at times pose a great challenge especially at a critical moment when it is required to finance inventories or to raise working capital for the enterprise to deal with its immediate needs. Likewise, lack of access to credit is reported in many studies to account for excess capacities in MSEs (Enos, 1992; Awe and Tan, 1995). Evidence from MSEs' surveys in Kenya indicates that enterprises that have access to finances have survived longer and are also able to expand more than those without access (GOK, 1992; GOK, 1997 and GOK, 1999). Youth enterprise development fund has been in operation for four years now. However, very little seem to have been achieved in terms of curbing the high unemployment rate as schools, colleges and university fresh graduates far outdo the little achievements from the Youth Enterprise Development Fund and the Women Enterprise Development Funds in Kenya, save for the famous KKV which is only temporary. Similarly, no documentation is available regarding development of linkages to MSEs with large enterprises

#### **4.5 Challenges faced in Applying acquired skills to enhance performance of MSEs**

When asked the challenges they face in applying their learnt skills in their enterprises, 49% of the respondents said they have insufficient funds. Lack of government support was mentioned by 22.3%, and lack of market information was mentioned by 12%. 5% however said their major challenge in applying the skills was high cost of raw materials. These results concur well with Moyi (2005) who observes that Kenya's productive and investment capability is constrained by factors such as high cost of equipment and machine components; Gichira (2002) who concludes that widening gap between the technological capabilities employed by African firms and those employed by firms in other parts of the world are caused by inadequate funds; and Biggs, Shah and Srivastova (1995) who asserts that studies in African countries reveal that Africa exhibits much more inter firm technological heterogeneity than other developing regions (due to lack of funds); and Patel (1986), Chambers (1967) and Albu (1997) who conclude that entrepreneurs need skills, knowledge as well as financial resources to be able to assimilate change and create technology. These discussions imply that the most important challenge in using innovative skills is insufficient funds. These results are represented in Table 1 and Figure 3 below.

*Table 1: Respondents' views on challenges facing their enterprises*

<b>Skills prevalent amongst enterprises</b>	<b>frequency</b>
Access to credits	49
Lack of government support	22
High cost of raw materials	5
Lack of market information	12
Others	2

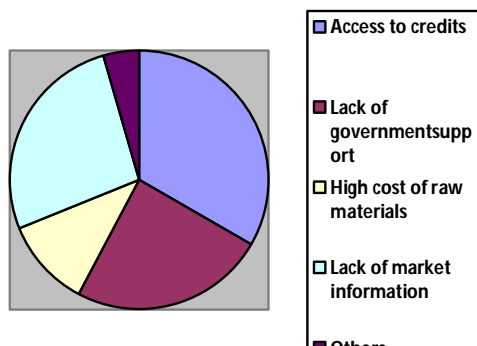


Figure 3: Respondents' views on challenges facing their enterprises

#### 4.6 Interventions Necessary to Boost use of Innovative Skills

When asked to suggest Interventions necessary to boost use of innovative skills, 52% of respondents felt that their MSEs need funding at cheap interest rate, 22% said they need authorities to reduce license fees, 16% stated their enterprises need to be exempted from paying license fee, 14% said they need to be given grants; 10% said they need to be trained while 2% talked of other suggestions. These findings correspond fairly well with the Ministry of Youth Affairs and Sports objective of increasing young entrepreneurs' access to cheap loans through the Youth Enterprise Development Fund (GOK, 2006). The results also fairly agree with the Government of Kenya (GOK, 1982) assertion that most MSEs lack capacity to adopt modern technologies because decisions relating to cost aspect rests with multinational corporations, Moyi (2005) who observes that Kenya's productive and investment capability is constrained by factors such as high cost of equipment and machine components; Gichira (2002) who says that widening gap between the technological capabilities employed by African firms and those employed by firms in other parts of the world are caused by inadequate funds; Biggs, Shah and Srivastova (1995) who asserts that studies in African countries reveal that Africa exhibits much more inter firm technological heterogeneity than other developing regions (due to lack of funds), Patel (1986), Chambers (1967) and Albu (1997) who conclude that entrepreneurs need skills, knowledge as well as financial resources to be able to assimilate change and create technology. Chambers (1967) also goes ahead to observe that the measure of survival and success-solvency, net income, growth in assets, employment creation and others are all measured in monetary terms and rests around the firm's financial management. (Chambers, 1967). Likewise, these findings augur well with Gichira et al. (2002) who argued that a suitable legal and regulatory framework should be in place to enable MSEs to respond appropriately while concurrently protecting local enterprises and consumers from unfair and unsafe practices. According to Gichira, the rules that need to be adapted are laws on removal paper-based obstacles (Gichira et al., 2002). Table 4.2 and figure 4.4 below represents respondents' views on Interventions needed.

Table 2: Interventions necessary to boost use of innovative skills

Interventions necessary to boost use of skills	Frequency (%)
Be funded at cheap interest rate	52
Be exempted from paying license fee	22
Be given government grants	14
Be trained	10
others	2

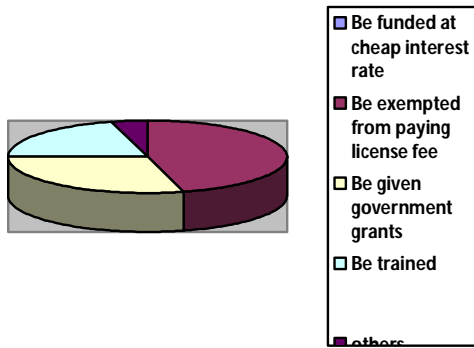


Figure 4: Interventions necessary to boost use of innovative skills

## 5 Conclusions and Recommendations

### 5.1 Conclusions

In conclusion, there is a general consensus that a lot of relevant skills are being imparted to the youth in tertiary institutions through the government's effort. It is also evident that all entrepreneurs are applying innovative skills in different ways to enhance performance of their enterprises. These skills have also impacted positively on MSES growth. However, despite all these efforts, access to credit, technical support, and access to technology and market information still remain the main impediments to growth and sustainability of Tertiary Graduate enterprises.

### 5.2 Recommendations

To make Tertiary institute graduate owned MSEs be able to benefit more from innovative skills with their owners, it is recommended that they be given all the necessary assistance to enhance their capability to produce efficiently, meet deadlines, upgrade product quality and bring out new product designs. To this end, it is recommended that these enterprises be provided with adequate finances, relevant tools and equipment and frequent field visits to performing enterprises for benchmarking and to upgrade their business skills.

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