

The Effect of Government Support in Enhancing the Productivity of Textile and Leather Micro and Small Enterprises: The Case of Gulele Sub City

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Abstract

The objective of this study was to assess the effects of government supports in enhancing the productivity of micro and small businesses in textile and leather sub sectors. To achieve the intended goal of the study descriptive survey research method was employed. The participants of the study were selected through systematic random sampling techniques. Data were collected through questionnaires and interviews. In the study, it was found out that training opportunities offered by the government in upgrading the skill of operators were not adequate to fill their skill gaps as the time allotted was short and there was problem of accessibility to many of micro and small enterprises /MSEs/. Moreover, the support services in technology transfer schemes were not adequate and the frequency of technology transfer was very much rare for the majority of MSEs. Contrary to the limited opportunities in technology transfer and skill improvement supports, beneficiaries were able to enhance their productivity with regard to offering quality products, minimizing wastage, introducing improved working methods and overall improvement in labor productivity. To eradicate the bottlenecks in technology transfer as well as delivering of all round micro enterprise development supports, the government needs to mobilize various stakeholders who have an interest on the area. Beyond the role of producing skilled human resource, higher educations' particularly technical and vocational colleges need to be oriented and strengthened to make technology transfer as part of their core duties. Orienting them to contribute in technology transfer and providing favorable infrastructure can be great resources to technology creation, adaptation and facilitation of its transfer.

Introduction

Micro and Small Scale Enterprises /MSEs/ have remained one of the most important sectors for nations that contribute significantly to the gross domestic product, create employment and earn foreign currency (Hailu 2010; Tshifhiwa 2009). However, SMEs in developing countries produce using outdated technologies which retard their productivity as well as their competitiveness in the market. This necessitates building on the skill of operators and assisting them in technology transfer and skill improvement areas through micro and small scale enterprises development programs.

Nowadays, one of the main factors that influence the success of MSEs is technology. In this regards (Patrick 2010; Romijn 2000) found that technology had a positive impact on general performance of MSEs in reducing cost of production, maintain consistency in quality, improve productivity and finally develop their competitiveness. However, there are a number of problems that hinder technology transfer and development in MSEs. A crucial issue often ignored by MSEs management is the lack of incentive systems for learning and assimilating new technologies (Bharati and Chaudhury 2006).

Romijn (2000) explained that the barriers encountered in the process of technology transfer were lack of business skills among entrepreneurs, lack of technological experts within the enterprises due to limited size of operations, lack of access to funds, limited resources for research and development in the enterprises and lack of formal links between academia and businesses to assist the sector upgrade their skills. According to Rashed (2003) it is essential for government authorities overseeing the import of technology to

ensure that the basic technology be supplied is appropriately defined, that adequate guarantees of its effectiveness are included, that access to technological advances and new technology is facilitated.

Background of the Study

Micro and small enterprises (MSEs) have become of increasing importance in the economic and social development of a country. MSEs remain as a tool for reducing unemployment and poverty if they are sustainably mobilized and supported by the government and other concerned stakeholders. Government supports include a wide range of services designed to help micro and small enterprises to enhance their competitiveness and overcome barriers of productivity (DFID, 2002). These services include training, consultancy and advisory services, marketing assistance, information, technology development and transfer, business linkages for marketing products, and linkages to financial sources (Hirity 2009).

Individual firms, of course, are responsible for their own success or failure, but the involvement of government and other service providers plays an important role in enhancing their productivity as well as their competitiveness. In line with this notion, the Federal Democratic and Republic of Ethiopia /FDRE/ launched MSE's development strategy to promote and facilitate all-round support which included both financial and non-financial supports (MOTI 1997).

A look on literatures on the situation of MSEs in Ethiopia, by (Gebrehiwot and Wolday 2006), MSEs operators mainly depend on their own resources and experiences from their families and friends with little or no business

experience and with little or no prior training. Similarly the traditional textile sector particularly, weavers got technical skill, informally from their ancestors and/ or informal employers. Similarly Hailu (2010) identified that weavers were also provided skill improvement trainings on design, color matching and weaving with the improved handloom sponsored and organized by different stakeholders. However, the positive initiatives taken in supporting MSEs through training, the intervention were very short to help them acquire the knowledge and skill they desire. As a result, the benefits from the training were very minimal. This shows the need of providing supports to MSEs in technology transfer and skill improvement schemes.

To improve the practices of government micro and small enterprise development supports, in terms of achieving increased productivity, assessing the outcomes through research is vital. Hence, effects of support interventions can be identified and documented to take as useful lesson for future service provisions to bring significant impact on productivity and sustainability of MSEs. Therefore, the aim of this study was to assess the effects of government support services particularly in skill improvement and technology transfer schemes in enhancing the productivity of micro and small enterprises in Gulele sub city on textile and leather goods producing enterprises.

Statement of the Problem

MSEs have been recognized as a priority sector for growth and development planning in many countries of the world. According to the Ministry of Trade and Industry, textile and leather sub-sectors are among the major six potential MSE sub-sectors identified by MSE development strategy as a

contributor of employment and income generation (MOTI 1997). Despite its potential for employment creation, among other things, these sub-sectors have constraints that reduce workers productivity mainly due to the use of backward production technology and lack of appropriate skills required to operate. The engagement of micro and small business operators having skill deficiency and backward technology retards their performance. This problem leads to loss of market as their products are of inferior quality.

According to McGrath (2005) workers skill deficiency can be handled through the provision of effective skill improvement training coupled with introduction of better production tools. A skilled micro business operator knows better how to gauge work, understands the impacts of variability, and knows to stop production for corrective actions when quality falls below specified limits. In line with the above notions, to address problems of productivity of micro and small textile and leather sub-sectors, the government has taken initiatives on capacity building and technology transfer schemes. These support schemes focus mainly in improving vocational skills through workplace-based training programs, and continuous improvement (Kaizen) packages which focuses on productivity of these MSEs (MOTI 1997).

Regardless of these support interventions Hibret (2009) found that the business development services had weaknesses in addressing entrepreneurship and business administration problems of weavers due to lack of preparation, technical knowledge required in existing situation of weavers' and providing less relevant services. Moreover, (Gebrehiwot and Wolday 2006), MSEs operators mainly depend on their own resources and

experiences from their families and friends with little or no business experience and with little or no prior training. In other thesis work, Philipos (2006) pointed out that the number of researches on issues of business development support programs is very few. Moreover, Hibret (2009) recommended that undertaking research is essential to address the problems of the textile sub-sectors through principal participation of operators themselves. Looking the gap from existing research works, this study therefore, examines the effect of government supports on technology transfer and skill improvement in enhancing the productivity of Micro and Small Enterprises engaged in producing textile and leather products.

Basic Research Questions

1. What are the contributions of skill improvement and technology transfer supports to MSEs in Textile and Leather sub-sectors in enhancing their productivity?
2. What are the main barriers of technology transfer and skill improvement to MSEs in textile and leather sub-sectors?
3. To what extent does the skill improvement and technology transfer support services are given sustainably in addressing problems of productivity in the sub-sectors?

Objectives of the Study

The general objective of this research was to assess the effects of government supports in skill improvement and technology transfer to textile and leather sub-sectors on the performance and competitiveness of micro and small businesses.

The specific objectives of this research were to:

- Asses the status of skill improvement and technology transfer supports in improving the productivity of textile and leather enterprises.
- Identify the barriers of technology transfer and skill improvement to micro and small scale enterprises in textile and leather sub-sectors.
- Overview the sustainability of skill improvement and technology transfer support provisions in addressing the problems of productivity in the sub-sectors.
- Identify the challenges of delivering sustainable business development services to MSEs in textile and leather sub-sectors.

Significance of the Study

This study would help policy makers, business development service facilitators, and other stakeholders to identify and understand how a business development services can be effectively delivered to MSEs. In addition to this, implementing agencies at federal, regional and local levels could benefit from this study as it helps them recognize operational gaps present in the current MSE development programs of the government. This research might also serve as a springboard for further research endeavors. It can also contribute for building theories on government supports to MSEs particularly in technology transfer and skill improvement schemes. Finally, there was no adequate research works on the impact of business development services in MSE sub-sectors. This study, therefore, attempts to address this knowledge gap by addressing business development services issues taking the case of Gullele textile and leather sub-sectors.

Scope of the study

Micro and small scale enterprise supports in Gulelie Sub city of Addis Ababa City Administration has six major sub-sectors. Textile and leather sub-sectors are one of the six sub-sectors. This thesis work therefore focuses on textile and leather enterprises primarily located in two major centers of Gundish Meda and Addisu Gebeya Clusters. The study focused on analyzing the activities of the government support on technology transfer and skill improvements and its effect on beneficiaries' performance based on study sample responses taken from MSEs and center heads in two clusters.

Definition of Terms

- Cluster: - is geographic concentration of interconnected micro and small enterprises in a particular field.
- Government Support:-is to mean micro and small enterprise development interventions on skill improvement and technology transfer schemes.
- Productivity: is to mean the improvement in MSE operators output, improved efficiency and reduced wastage. Measurement of productivity in this context is based on workers observation of own change in their weekly or daily output they made before they receive supports and after they receive supports.
- Technology transfer: - is transaction or a process through which technological knowhow ie, knowledge, skill, and new ways of operating is transferred between MSEs and government centers of technology.

Research Design and Methodology

Research Design

To achieve the intended purpose of this study, descriptive survey research method was employed. The main reason for using descriptive research was the method's fitness in portraying the productivity of micro and small scale enterprises following the technology transfer and skill improvement support schemes. Under descriptive research methods, quantitative data collection techniques were designed. Qualitative data were also used to support the quantitative data collection designs.

Study Population and Sampling Techniques

The study populations for this study were micro and small enterprises engaged in producing textile and leather goods in Gulele sub city located in Addisu Gebaya and Gundish Meda cluster centers. Most of the enterprises in these clusters were engaged in weaving /handloom/, tailoring, sweater making, dyeing, preparing traditional cloths, and leather good making.

The researcher used systematic random sampling technique to select participants for the study. The total number of textile MSE cooperatives, actively working in Gundish Meda and Adisu Gebaye cluster, were 231. Taking in to account the homogeneity of study population, the researcher selected 75 respondents for the study but only 66 of them were involved in this research as a source of data. Since the size of the population in the leather sub-sectors was small and manageable, all of the 32 cooperatives were incorporated in the study but only 27 of them involved in giving response properly.

The other respondents who participated in the research were center heads in Gundish Meda and Addisu Gebaya. These subjects were selected purposively technique based on their rich knowledge and experience on government support interventions.

Types of Data and Instruments of Data Collection

Questionnaires were developed based on the understanding of theoretical and empirical literatures reviewed. To improve the standard of the questionnaire, it was submitted for experts working on micro enterprise development programs in Gulelie Sub City. Moreover, the thesis advisor provided critical comments on the type of questions. Taking all these comments, the final questionnaire was prepared. Questions were of Likert scale type. Structured interview was also held with center heads in Gundish Meda and Addisu Gebaya.

Data Analysis

Following the collection of distributed questionnaires, responses were edited and codes were given for each questionnaire. Then each coded response was tallied, organized and presented in tables. The analysis of data was made by using frequencies, percentages and mean values.

Once the analyses of the questionnaire have been completed, the data obtained from the interview was transcribed, analyzed and interpreted along with the main themes of quantitative analysis.

Data Presentation, Analysis and Interpretation

This section deals with the presentation, analysis and interpretation of data obtained from respondents at Gundish Meda and Adissu Gebeya through

questionnaires and interviews. As described in the methodology part, the data were taken from cooperatives in textile and leather sub-sectors. Therefore, the presentation, analysis and interpretation of data were made based on the data obtained from the above sources.

Main Sources of Skill Development to MSEs

Table 1: Sources of Skill Development

What were the main sources of skill development for you and others working with you? /More than one responses were possible/	Textile and garment		Leather goods producers	
	No	%	No	%
On job training	18	27.3	3	11.1
Personal work experience	45	68.2	22	81.5
Government Training Centers	29	43.9	16	59.3
Experience from clusters	12	18.2	2	7.4
Technology transfer institutions	7	10.6	3	11.1
Pear to pear learning	32	48.5	8	29.6

As shown in table 1, the top three common forms of skill improvement for textile enterprises were personal work experience (68%), pear to pear learning (49%) and government training centers (44%). Similarly, the main sources of skill improvement in leather sub-sectors were the same except differences in percentage coverage. The responses indicate that the arrangement of working place for members of cooperatives had created a conducive environment to learn from each other. Similarly, based on the

interview with center head, it was stated that “working together in one floor improved the interaction among members to share knowledge and skill”.

Skill improvement Training Opportunities by the Government

According to the capacity building strategy of MSEs, the objectives of skill improvement training was to make micro and small scale operators use improved technology and increase their productivity. Based on this notion, questions were raised to participants of the study. Their response is presented in the following table.

Table 2: Access to Skill improvement Training Opportunities from Government

Items	Responses	Textile and garment		Leather goods producers	
		f	%	f	%
Did you receive technical skill improvement opportunities from the government?	Yes	46	69.7	16	59.3
	No	20	30.3	11	40.7
	Total	66	100.0	27	100.0
What is your overall assessment of the adequacy of skill improvement trainings in terms of addressing the skill gaps you faced?	Adequate	16	34.8	2	12.5
	Inadequate	20	43.5	13	81.3
	undecided	10	21.7	1	6.2
	Total	46	100	16	100.0

In order to assess the role of skill improvement training provided to MSEs, specific question was raised whether firms have got training opportunities from the government or not. Based on this as shown in table 2, 70% of responses from textile and 59% of responses from leather sub-sectors show; they were advantageous to the training opportunities. On the other hand, 30% of responses from textile and 41% of responses from leather sub-sectors

show; they did not get access to skill improvement opportunities from government training programs. These responses imply that still considerably significant numbers of firms were not able to get benefit from training service. This shows that the government business development interventions particularly in skill improvement were not easily available to micro and small scale enterprises. This skill improvement training gives operators in MSE necessary skills in absorbing and mastering the technology utilization and transfer process.

In line with the accessibility of skill improvement training programs from the government, a question was raised to estimate the adequacy of training in filling skill gaps of workers in both sub-sectors. Based on this question, 44% of respondents in textile sub-sectors and 81% of respondents from leather sub-sectors replied that the training was not adequate in filling the skill gap. These responses show that the deficiency was more emphasized in leather sub-sectors than textile sub-sectors.

In line with the discussion in table 2, respondents who replied that the skill improvement training was adequate in filling the skill gap, they were requested to respond to the benefit of the training in relation to product quality improvement, waste minimization, introduction of new methods of doing and improvements in labor productivity. Based on this, most of the respondents who got the skill improvement training acknowledged that the training had brought positive outcomes in terms enabling them improve product quality, minimizing waste, introducing new methods of doing and increase their productivity. The positive effect of skill improvement training

on the productivity of MSEs supports the findings of Malcolm (2000) studies which was made on impacts assessment of training.

Government Support on Technology Transfer

Technology transfer is considered as one of the ingredients for the development of technological capabilities of micro and small scale enterprises to make them more productive. In this section the effects of government support with regard to technology transfer and its relation with productivity of firms is discussed.

Table 3: Technology Transfer

Items	Responses	Textile and garment		Leather goods producers	
		No	%	No	%
Did you have linkage with technology transferring centers established by the government?	Yes	29	43.9	16	59.3
	No	37	56.1	11	40.7
	Total	66	100	27	100
How often has your firm (SME) been involved in technology transfer?	Not yet	37	56.1	10	37.0
	Once	25	37.9	16	59.3
	2-3 times	4	6.0	1	3.7
Does the new technology transferred to your firm positively impacted on your productivity?	Yes	25	86.2	15	93.7
	No	4	13.8	01	6.3
	Total	29	100	16	100

According to the above table, 44% of textile cooperatives and 59% of respondents from leather cooperatives mentioned that their cooperative have linkage with technology transferring institutions established by the government. On the other hand, the remaining 56% of textile respondents and 41% of respondents from leather cooperatives replied that they did not

have link with technology transfer centers established by the government. These responses imply that technology transfer centers were not working closely with MSEs. The responses on the frequency of firm's involvement in technology transfer strengthen the above argument further. Based on this, 56% of responses from textile cooperatives and 37% of responses from leather cooperatives show that firms did not engage in technology transfer activities. On the other hand, 38% of responses from textile cooperatives and 59% of the responses in leather cooperatives show that their firms engaged only in one time technology transfer activity. This response also support the argument that the government technology transfer centers were not in a position to realize the mission of transferring technologies to MSEs through frequent contacts support in various modalities.

In connection to technology transfer issues, those who have transferred technology to their cooperative were asked to indicate the impact of transferred technology to their firm in enhancing their productivity. Based on this, most of the respondents in both cooperatives acknowledged that the transferred technology has positively improved their productivity. Only 14% of textile and 6% of leather cooperative respondents did not bring improvement in their productivity from use of technologies offered by technology transfer centers. This response gives a green light for policy and decision makers at top level concerning technology transfer that if worked with due emphasis on technology transfer, a lot can be done to improve the productivity of MSE sub-sectors.

According to the responses in table 3, users of transferred technology to their firm found that the technology have impacted positively on many issues raised on the questionnaire. The responses confirm that the technology assisted their cooperative mainly in saving costs, improving product quality, increasing production volume and raising relatively on overall labor productivity. In line with the above responses, the interview data also confirm the same. The head of centers confirmed that “almost all operators believe that technology transfer adds value in their productivity if further financial supports are given to them for installation of modernize technology”. They further stated that some of the operators who got improved technology have increased the quality of their products. As the center head of Gundish Meda stated “because of using improved technology in weaving sub-sectors, the demand of their product has improved”. This implies that using improved appropriate technology in small-scale enterprises can produce a more valuable and competitive products.

In addition to the analysis of Own Survey secondary data was used for the study, accordingly the average capital of the enterprises taken for the study purpose were raised from 11,156.29 Birr to 20,742.38 Birr. The progress on capital size of these firms under the study shows that firms were making profits and portion of these profits were retained or efforts were made to raise additional capital. This finding conforms to the works of Mukherjee (2009). The use of technology appropriate to the need of micro and small enterprises plays an important role on the productivity of their operation. This is because use of technology is necessary for sharpening competitiveness and strengthens productive capacity. This signifies that the level of technology employed determines productivity level in the MSEs.

Barriers of Technology Transfer

Respondents selected for the study purpose from textile and leather goods producing enterprises were asked to indicate the challenges in technology transfer process. Based on this, 85% of respondents from textile sub-sectors 93% of respondents in leather sub-sectors indicated that high cost of technologies was their primary problem. The most crucial barrier for MSEs in choosing appropriate technology was the high cost of acquisition and installation of technology. The other obstacle according to 85% of responses in textile sub-sectors and 92% of responses in leather goods sub-sectors is the difficulty of raising finance for procuring the technology for their firms. The act of technology transfer is an area where lots of investment is needed because it requires adequate infrastructure. The above responses imply that difficulties in obtaining finance were more pronounced when it comes to obtaining financing for technology acquisition and transfer process.

Moreover, as the figures in table 4 indicate, low technical skill in utilizing the technology was also one of the factors that impede the technology transfer process. This analysis supports the research findings reviewed in the literature section on the works of Romijn (2000). Studies conducted in the other countries indicate similarly, lack of technically skill people to handle and maintain the technology transfer remains a challenge for micro and small scale enterprises. As the educational level was low and most of them joined the enterprises without any technical training, and whatever they learn was from the colleagues who work there in non formal approaches. The skill and knowledge of individuals plays a crucial role in the capability of firms to assimilate technologies at ease.

Table 4: Barriers of Technology Transfer

The main berries in the process of technology transfer were:		Strongly Agree		Agree		Somewhat agree		Disagree		Strongly disagree	
		f	%	f	%	f	%	f	%	f	%
Low technical skill in utilizing the technology	Textile	35	53.0	11	16.7	15	22.7	4	6.1	1	1.5
	Leather	10	37.0	7	25.9	9	33.3	1	3.7	0	0
High cost of technologies	Textile	43	65.2	14	21.2	3	11.1	4	6.1	2	3.0
	Leather	15	55.6	10	37.0	0	0.0	2	7.4	0	0.0
Lack of finance for acquiring technologies	textile	40	60.6	16	24.2	9	13.6	0	0	1	1.5
	leather	17	63.0	8	29.6	2	7.4	0	0	0	0
Difficulty of integration of new technology with existing one	textile	26	39.4	16	24.2	20	30.3	3	11.1	1	0
	leather	9	33.3	12	44.4	5	18.5	1	3.7	0	0
Lack of organizational support	textile	20	30.3	17	25.8	16	24.2	1	16.7	2	3.0
	leather	10	37.0	14	51.9	3	11.1	0	0	0	0

Lack of such dynamic capability becomes an obstacle for small firms to successfully exploit and create new opportunities through use of technology. Another barrier to technology transfer process was the difficulty of integrating the new technology with the existing one. This arises from the neglect to monitor the performance of the new technology and its synchronization with other technology interfaces. The technology design and development be it in textile or leather goods producing sub-sectors need to be scrutinized with great care to match with existing machineries or apparatuses before they can be transferred.

Sustainability of Business Development Services

BDS becomes sustainable if it is continuously available to MSEs till they achieve certain level of development where they can reach solving problems by their own. With regard to this notion, questions were raised to respondents and their responses were organized as follows in table.

Table 5: Linkage with Business Development Institutions

Items	Responses	Textile and garment		Leather goods producers	
		f	%	f	%
How frequently does the government support on skill improvement and technology transfer areas delivered to your firm?	Always	4	6.1	0	0
	Often	5	7.6	0	0
	occasionally	41	62.1	16	59.3
	Rarely	16	24.2	11	40.7
	Total	66	100	27	100
Do experts assigned by the government in areas of technology transfer and skill improvement make frequent contact and follow up to your firm?	Yes	19	28.8	5	18.5
	No	21	31.8	11	40.7
	I don't know	26	39.4	11	40.7
	Total	66	100		100

According to table 5, the respondents overall assessment of the frequency of support on the skill improvement and technology transfer areas was an occasional practice according to 62% responses in textile sub-sectors and 59% of responses in leather sub-sectors. These responses imply that the government support programs in skill improvement and technology support was on /off practice. Furthermore, 24% of textile responses and 41% responses in leather sub-sectors categorized the BDS support as a rarely

practice which means almost none. This situation might be an obstacle in delivering business development services particularly in mentoring, skill improvement training and technology transfer issues. Such kind of loose link with MSEs remains an obstacle for the government to realize its plan of transforming the sub-sectors to a competitive level.

Concerning the sustainability of business development services, questions were raised in the discussion with center heads. Based on this, the barriers to offer sustainable business development services were of various types. Accordingly the challenges of the government in offering a sustainable business development were lack of relevant trainers and training curriculum based on need gap of operators in each sub-sectors. Moreover, training institutes lack adequate infrastructures for tailor made training needs in the sub-sectors. Besides these, lack of adequate financial resources to implement all round enterprise supports particularly in subsidizing the technology transfer and adaption process. The absence of institutions supporting the skill improvement of micro and small scale enterprises retards the development of indigenous technologies from flourishing.

Summary, Conclusion and Recommendations

Summary of Findings

The study found that personal experience and peer-to-peer learning was the most frequently used sources of skill improvement for majority of the operators in the sub-sectors under the study. The arrangement of common

working place for member of cooperatives created an opportunity to learn each other.

The study highlighted that the training opportunities offered by the government in upgrading the skill of operators were not adequate to fill their skill gaps as the time allotted was short. Despite the limitations in terms of adequacy, the study found that the training had brought positive effects with regard to improving the quality of products, minimizing costs, and introducing better methods of doing and improved labor productivity of beneficiaries. This is for the fact that improved technical skills are of prime importance for enhancing the productivity of MSE sub-sectors activities as well as the quality of the goods and services they produce. The finding in this regards is congruent to diverse body of literatures that skill improvement training influences subsequent behavior and drive the adoption and diffusion of new practices. The study found that except leather sub-sectors, the majority of operators in textile MSEs were using locally upgraded technology. The situation of using locally upgraded technology in the handloom sub-sectors can be the basis for future technology development efforts. This can provide a lesson with regard to technology transfer processes in identifying bottlenecks in the process.

The finding of the study highlighted that considerably large numbers of MSEs were not engaged in transferring technologies from government owned technology transfer centers. 56% of the operators in textile sub-sectors and 41% of the operators in leather sub-sectors did not involve in any of the technology transfer activities. This shows that sufficient attention was

not given to creating a favorable environment for technology transfer in development of the technology as well as disseminating it for actual users. Despite the limited number of firms engaged in technology transfer, the majority of beneficiaries acknowledged that the technology transfer endeavors had positive effects on productivity improvement. Concerning this, technology brought changes in keeping the product quality with possibility of rising production volume and improvement on overall labor productivity.

The study highlighted that the high cost of technology was the most crucial barrier of both textile and leather enterprises in the process of transferring technology. The other crucial barrier was difficulty of raising finance for procuring the appropriate technologies. It was found that the cost of technology in several instances was a difficulty in technology transfer process. Next to these obstacles; low technical skill of MSEs to handle the new technology was the other obstacle in technology transfer process. Concerning the sustainability of business development service intervention, it was found that the follow up and support of experts in skill improvement and technology transfer was not available to the majority of the enterprises. Moreover, it was found that business development support interventions were an occasional and rarely practice.

The main challenges in offering sustainable micro and small business development services were lack of appropriate trainers and training curriculum based on need gap of operators in each sub-sectors, lack of basic infrastructure relevant for tailor made training purposes and lack of adequate financial budget for subsidizing the technology transfer process.

Conclusion

Based on the findings of the study the researcher had drawn the following conclusions. The low educational profile of the operators particularly in technical skill necessitates the intervention of the government and other stakeholders in skill upgrading. Unless the situation is changed through skill improvement training supports, the growth of MSEs remain depressed leaving them only a bread winner rather than working to bring remarkable changes on their size and capacity. Without addressing such problems, the growth and transformation of micro and small enterprises cannot happen by itself. This is because, the competitiveness of micro and small scale enterprises is dependent on the capabilities to choose and use appropriate technology.

Contrary to the limited opportunities in technology transfer and skill improvement training supports, beneficiaries were able to enhance their productivity with regard to offering quality products, minimizing wastage, introducing improved working methods and overall improvement in labor productivity. This implies that if the government works in a consistent manner collaborating with all stakeholders on enhancing productivity and capacity, there is a room for transforming the textile as well as the leather sub-sectors. The cluster formation in textile and leather sub-sectors through arrangement of common working places is found playing a significant role in stimulating mutual learning by members of cooperatives in the sub-sectors. The interaction between members of cooperatives working in one working place can also facilitate technology transfer and learning of internal processes. This necessitates the formation of more clusters which are close and collaborating among themselves to improve their capacity to produce quality outputs.

Recommendations

The limitation in knowledge and skills of operators due to low education profiles can be addressed through constant interaction with the operators and training institutions such as, technical and vocational training colleges through mandating them offer tailor made training opportunities. For this purpose, institutions need to offer specialized training /tailor made training/ in product design and process improvement to enhance the knowledge and skills of operators in the industry. Creating an efficient and flexible credit policies and procedures need to be installed for financing of micro and small scale enterprises. This is mainly because, the difficulties in obtaining finance were more pronounced when it comes to obtaining finance for technology transfer and expanding their operation.

Recognizing the importance of MSE particularly in textile and leather sub-sectors, the government needs to design and execute forward-looking support schemes in technology transfer and skill improvement to strengthen micro and small enterprises succeed in an increasingly competitive market economy. It becomes feasible if the governments extend accessibility of skill improvement training opportunities to MSEs in textile and leather sub-sectors and improve the quality of training and the time allotted for it to enable trainees enhance their skill for better competitiveness. The observed improvement on productivity of users of technology transfer in MSEs gives a green light for policy makers, decision makers and facilitators of technology transfer to scale up achievements with beneficiaries of the program to redress the problems of poor product quality and capacitate MSEs offer products in line with the needs of the market.

The follow up and attachments between the MSEs and facilitators of business development programs need to be strengthened and the relationship should be developmental, consistent and close. To solve some of the constraints and challenges of resource in micro and small enterprise support programs, the government needs to mobilize various stakeholders who have an interest on the area. This can curb the problem of resource wastage and can create conducive environment to work strategically on core problems of micro and small scale enterprises. Moreover, the support programs need to be based on the tangible progresses made as a result of supports given in the past and all the action need to be supplemented by behavioral change interventions to do away problems of dependency on government supports.

Beyond the role of producing skilled human resource, higher education institutions, primarily technical and vocational colleges need to be oriented and strengthened to generate technology as part of their core responsibilities. Orienting them to contribute in technology generation and transfer, and providing favorable infrastructure to vocational and technical colleges, could bridge the current challenge of accessing technical know-how of MSEs.

Limitations of the Study

Due to shortage of reference materials in the area of technology transfer in Ethiopian case particularly in micro and small scale sub-sectors, sources used in the review of literature were more of research findings in other countries. The study did not use actual production data obtained from measure of the productivity of operators before and after government supports on skill improvement training and technology transfer interventions. Data used for the study were the opinion of representatives/owners of MSEs

on the contribution of the government supports on their performance. This might have its own limitation on the quality of data used for the analysis purpose. Moreover, the findings of the study had become more relevant if experimental research method was applied to investigate the effects of government supports on enterprises productivity through measuring productivity of control and experimental group who got training and technology transfer opportunities.

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