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Assessment of the Challenges of Micro and Small Scale Enterprises to Contribute to Sustainable Development: the case of Manufacturing Enterprises in Addis Ababa, Ethiopia

By

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**ADDIS ABABA UNIVERSITY
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Table of Contents

Acknowledgements.....	i
List of Tables	v
List of Figures	vi
List of Acronyms.....	vii
Abstract.....	viii
Chapter 1: Introduction.....	1
1.1. Background of the Study.....	1
1.2. Statement of the Problem.....	2
1.3. Objectives of the Study	4
1.3.1 General Objective	4
1.3.2 Specific Objectives	5
1.4. Research Questions	5
1.5. Significance of the Study	5
1.6. Scope of the Study	6
1.7. Limitation of the Study	6
1.8. Organization of the Paper	7
Chapter 2: Literature Review.....	8
2.1 Micro and Small Enterprises.....	8
2.1.1 Definition of Micro and Small Enterprises	9
2.1.2 Features of Micro and Small Enterprises	12
2.2 The concept of Sustainable Development.....	15
2.3 Sustainable Business Practices.....	16
2.4 Micro and Small Enterprises and Sustainable Development	18
2.4.1 Three Dimensions of sustainability among MSEs	20
2.4.2 Drivers to sustainable practices of MSEs.....	25
2.4.3 Barriers to sustainable practices of MSEs.....	27
2.5 Sustainability Assessment Framework	29
2.6 Micro and Small Enterprise in Ethiopia.....	33
2.6.1 Industrialization in Ethiopia.....	33
2.6.2 Brief overview of Manufacturing sector policies in Ethiopia	34
2.6.3 The MSE Sector in Ethiopia	35

2.6.4	Definition of MSE in Ethiopia	37
2.6.5	Challenges of MSEs in Ethiopia	39
2.6.6	Environmental Sustainability and policy framework in Ethiopia	41
2.6.7	Overview of the Study Area.....	43
2.7	Summary	44
Chapter 3: Methodology		46
3.1	Research Design.....	46
3.2	Study Population.....	47
3.3	Sampling	47
3.4	Data Collection Techniques	50
3.5	Data Analysis	51
Chapter 4: Discussion of the Research Findings		52
4.1	Characteristics of Respondents	52
4.1.1	Characteristics of Entrepreneur Respondents	52
4.1.2	Characteristics of Employee Respondents	55
4.2	Economic Sustainability	57
4.2.1	Economic performance	57
4.2.2	Market presence	62
4.3	Social Sustainability.....	63
4.3.1	Employment and equal opportunity	64
4.3.2	Training and Education.....	66
4.3.3	Occupation Health and Safety.....	67
4.4	Environmental Sustainability.....	69
4.4.1	Energy	69
4.4.2	Water.....	71
4.4.3	Material and Waste	73
4.5	Drivers and Barriers for sustainable business practice	77
4.5.1	Drivers for sustainable business practices.....	77
4.5.2	Barriers to Sustainable Business Practices.....	80
Chapter 5: Conclusions and Recommendations.....		84
5.6	Conclusions	84
5.7	Recommendations	88

References.....	93
APPENDICES	100
Appendix – A: Questionnaire to be filled by Entrepreneurs.....	101
Appendix – B: Questionnaire to be filled by Employees.....	105
Appendix – C: Interview Checklist.....	108
DECLARATION	109

List of Tables

Table 1: Examples of small enterprises definitions by EC, WB and OECD	12
Table 2: The characteristics of small enterprises	14
Table 3: Sustainability reporting framework	32
Table 4: The Ethiopian industrial policy and development phases	35
Table 5: The 2011 definition of MSE in Ethiopia	39
Table 6: Sample distribution proportional to sub-sectors and employees number	49
Table 7: Characteristics of entrepreneurs	53
Table 8: Characteristics of employee respondents:	56
Table 9: Category of the enterprise employees.....	65
Table 10: Income and benefits of employees	65
Table 11: Drivers for sustainable business practices	77
Table 12: Barriers to sustainable business practices.....	81

List of Figures

Figure 1: Illustration of the Triple Bottom Line	17
Figure 2: Small enterprises share of total employment	18
Figure 3: Firm size and GDP	19
Figure 4: Approaches to Sustainable Development.....	21
Figure 5: Administrative map of Addis Ababa.....	43
Figure 6: Obligations the enterprise couldn't meet by percentage.....	58
Figure 7: Constraints that hinder firms' growth	59
Figure 8: The entrepreneurs and employees living location by percentage.....	62
Figure 9: Major source of raw materials by percentage	63
Figure 10: Emissions of manufacturing MSEs by sector.....	68
Figure 11: Energy efficient management practices by manufacturing enterprises.....	71
Figure 12: Efficient water usage by enterprises.....	72
Figure 13: Efficient material usage by enterprises	74
Figure 14: Treatment of solid material waste by enterprises	76

List of Acronyms

AAMSEDA	Addis Ababa Micro and Small Enterprise Development Agency
CSA	Central Statistical Agency
CSR	Corporate Social Responsibility
EC	European Commission
FeDRE	Federal Democratic Republic of Ethiopia
FeMSEDA	Federal Micro and Small Enterprise Development Agency
GDP	Gross Domestic Product
GRI	Global Reporting Initiative
MDGs	Millennium Development Goals
MoTI	Ministry of Trade and Industry
MFIs	Micro Finance Institutions
MSE	Micro and Small Enterprise
MSME	Micro, Small and Medium Enterprise
ReMSEDA	Regional Micro and Small Enterprise Development Agencies
SD	Sustainable Development
TBL	Triple Bottom Line
TVET	Technical and Vocational Education and Training
OECD	Organization for Economic Cooperation and Development
UN	United Nations
UNDP	United Nations Development Program
UNECA	United Nations Economic Commission for Africa
WB	World Bank

Abstract

The objective of this research is to assess the contribution of MSEs to sustainable development taking the case of manufacturing MSEs in Addis Ababa, Ethiopia. The main research question was to find the socio-economic and environmental impact of MSEs and the drivers and barriers for sustainable business practices. An exploratory research method was used to address the research questions. The research was based on review of relevant literatures and mixed method research methodology was employed where data was collected from entrepreneurs and employees of the enterprises and key informant interview was conducted with relevant officials. GRI sustainability reporting framework was used to provide the conceptual framework. This study reveals that the enterprises have created job opportunity for local dwellers and are playing considerable role in the interactions in the local markets through the use of local raw materials and serving the local customers needs. However the firms contribution to sustainable development are restrained by many factors including weak economic performance of firms, business constraints as marketing problems, input constraints and finance constraints, non effective human capital management, weak environment protection measures adopted by the MSEs and lack of relevant knowledge. Though the MSEs entrepreneurs have positive attitude on the benefits from sustainable business practices as cost reduction, profit maximization, attraction of employees and customers, reputation building and comply to legislation, the drivers are not highly influential for the enterprises due to the barriers that strongly hinder the enterprises to implement socially and environmentally responsible business practices.

Key terms: Sustainable Development; MSE; Manufacturing Enterprises; Triple Bottom Line; Natural Environment; Marketing; Ethiopia

Chapter 1: Introduction

1.1. Background of the Study

Nowadays, in international as well as national arenas, the pure development discourse has given way to the sustainable development (SD) discourse. Not surprisingly, sustainable development is a topic being well researched in a wide range of fields. Although the practices of sustainable development have been present in many communities for many centuries, its official formalization or conceptualization took place only in 1987 in the famous Brundtland Report. Sustainable development is defined in the Report as “a development that satisfies the needs of the present generation without compromising the satisfaction of needs for future generations.” The original emphasis of SD was the preservation or conservation of the environment. Since then, the focus has evolved to encompass economic, social and environmental or ecological considerations. These three objectives of SD are also known as the triple bottom line, which consists of economic progress or development, social justice/equity or social development and environmental preservation or protection (Nlandu Mamingi, 2011).

The environment and the economy can no longer be considered in isolation. Growing concerns about the environmental sustainability of past economic growth patterns and increased awareness of a potential future climate crisis have made it clear that the environment and the economy can no longer be considered in isolation. Without a global shift to a low-carbon, resource-efficient economy, the world is on track for increasing greenhouse gas (GHG) emissions by 70% by 2050, and temperature increases of 4-6 °C by the end of the century. To feed the expected world population in 2050, food production will need to be increased by 70% putting additional pressure on already over-used natural resources. A further 1 billion people are expected to live in severe water-stressed areas by 2030, raising a challenge in terms of the policies and financing needed to ensure access to clean water (OECD 2008, OECD 2010).

The crisis has created room for renewed growth on more sustainable grounds. These concerns point to the need for a substantial transformation of consumption behaviour, industry structures and technologies. The costs of inaction on these challenges to the economy, to human health and welfare and to the environment would be extremely high. The greatest environmental impacts will be felt by developing countries, which are less equipped to manage and adapt. However, the

economic and social costs of policy inaction or delaying action in these areas are significant and are already affecting economies (OECD, 2008).

Ensuring that Micro and Small Enterprises (MSEs) fully participate is key to the large scale uptake of sustainable practice. Sustainable development is highly demanding in particular on manufacturing firms, including MSEs, as they account for a large part of the world's consumption of resources and generation of waste. Worldwide, the energy consumption of manufacturing industries grew by 61% from 1971 to 2004 and accounts for nearly a third of the global energy usage. Likewise, manufacturing industries are responsible for 36 % of global carbon dioxide (CO₂) emissions (IEA, 2007).

In developing countries, the economic importance of MSEs is similarly higher. In Ethiopia, for example, as discovered by the CSA survey of 2003, MSEs account for the bulk of non-agricultural economic activities and nearly 95.6 % of total industrial employment. Despite the large number, the MSE sector in Ethiopia is exposed to a number of constraints related to policy, and structural and institutional problems that hinder sustained growth, development and long term planning (Ageba and Amha, 2003).

This study focuses on assessing the challenges of MSEs to contribute to sustainable development taking the case of manufacturing enterprises in Addis Ababa.

1.2. Statement of the Problem

The role of a typical or ideal business enterprise in SD should match the concerns of the three pillars of the triple bottom line. This proposition indicates that a business enterprise should be a contributor to economic growth through the pursuit of its own financial or economic sustainability, a contributor to social justice through the development and promotion of its own human resources, a contributor to environmental or natural resources preservation through its judicious uses of natural resources and energy, among others (Nlandu Mamingi, 2011).

Sustainable development has economic, social and environmental dimensions. It may be defined as a process for improving the range of opportunities that will enable individual human beings and communities to meet their needs, as well as to achieve their aspirations and full potential over a sustained period of time, while maintaining the resilience of economic, social and environmental systems (Munasinghe, 2004).

Each such system has its own distinct driving forces and objectives. The economy is geared towards improving human welfare, primarily through increases in the consumption of goods and services. The economic dimension covers the flow of capital amongst different stakeholders and the major economic impacts of the organization throughout society. The environmental domain focuses on protection of the integrity and resilience of ecological systems. It covers inputs (as materials, water and energy), outputs (as green house gas emissions, effluents and wastes) and their impact on the environment. The social domain emphasizes the enrichment of human relationships and achievement of individual and group aspirations. It includes protection of human rights as non-discrimination, decent work as occupational health and safety and product responsibility for customer health and safety (Munasinghe, 2004, GRI 2006).

The contribution of a business enterprise to SD largely depends on how it deals with challenges including threats and constraints. Micro, Small and Medium Enterprises (MSMEs) with their small size and their lack of economies of scale are to a great extent disadvantaged by globalization and trade liberalization. In addition, at the local level, they have to deal with challenges and constraints including unfavorable legislation and regulation, poor co-ordination and support, limited access to finance, inadequate training, deficient marketing and sales policy, poor networking, deficient infrastructure, and inappropriate technology. Climate change presents a challenge that all have to deal with. (Nlandu Mamingi, 2011).

The costs of ecological sustainability implementation in MSMEs are high, especially in the manufacturing sectors. The MSMEs find it difficult to produce low environmental impact products. Also, due to the competitive nature of the business environment, the cost of environmental initiatives could not be passed on to the customer by MSME because it is seen as a business cost. In other words, the firms have to make operational change which leads to reduced costs and progressive environmental performance, simultaneously. The motivating factor continues to be achieving cost efficiency rather than environmental responsibility (cited by Parisa, Jerry and Raveendranath 2013).

In Ethiopia, the private sector is substantially dominated by the Micro and Small Enterprises (MSEs). As per the 2011 FeDRE definition of MSEs includes all enterprises that operates with human power of not greater than 30 and with paid up capital of total asset not exceeding Birr 1.5 million. The MSEs Sector is the second largest employment generating sector following

agriculture. The sectors contributes 3.4% of GDP, 33% of the industrial sector's contribution and 52% of the manufacturing sector's contribution to the GDP of the year 2001(CSA 2005, cited by Selamawit, Aregawi and Negus, 2014).

As per the Government of the Federal Democratic Republic of Ethiopia revised strategy in 2011 constraints facing the MSE sectors are identified. This includes mismatch between credit demand and supply due to less capacity of most finance institutions to deliver services, failure in working for sustainable and quality capacity building, problems in cluster development to ensure market development and technological growth, lack of self reliance spirit and innovative culture for job creation with actors, failure in providing trainings on the basis of need/interest and result oriented, absence of readiness to accept and use new technology and readiness for change, non competency in production and service they supply and lack of work commitment.

Various studies have been conducted on MSE in Ethiopia. The major focuses of the study subject are on (1) nature and characteristics of MSEs and their operators (Assefa, Zerfu and Tekle, 2014; Gebreyesus, 2007; Gebreyesus, 2009; Saravanan, Mohideen and Seid, 2014); (2) the social and economic role of MSEs (Berhanu, 2014; Kidane et al 2015; Tasisa, 2014 and Worku, 2004); (3) the performance of MSEs (Hailu, 2010; FeDRE, 2013; Sherefa, 2012 and Abera, 2012) and (4) the efficiency of micro finance institutions and other relevant bodies (Deribie, Negussie and Mitiku, 2013 and World Bank Group, 2013).

While there is a rich study conducted on MSEs in Ethiopia there is paucity of studies linking these enterprises to sustainable development and there are studies mostly focus on the tourism sector (Mehiret, 2011; Asfaw 2014). The challenges of MSE to preservation of environment are totally missing in the existing studies. Thus this paper focus on the challenges of MSEs to contribute to long term economic stability, social development and protection of the environment (or to sustainable development) taking the case of manufacturing enterprises in Addis Ababa.

1.3. Objectives of the Study

1.3.1 General Objective

The aim of this study is to assess the challenges of MSEs to contribute to sustainable development by exploring the social, economic and environmental effects of manufacturing MSEs in Addis Ababa

1.3.2 Specific Objectives

The specific objectives are:

- to assess socio-economic and environmental impacts of manufacturing MSEs in view of sustainable development concept
- to assess the drivers to implement sustainable business practices by the manufacturing MSEs.
- to assess the barriers to implement sustainable business practices by the manufacturing MSEs.
- to come up with meaningful suggestions or solutions that can strengthen the contribution of MSE to Sustainable development.

1.4. Research Questions

This research focuses on the following research questions:

- What is the socio-economic and environmental impact of manufacturing MSEs in view of sustainable development?
- What are the enabling factors or drivers for manufacturing MSEs to contribute to sustainable development?
- What are the barriers that hinder manufacturing MSEs to contribute to sustainable development?
- How could MSEs potential be strengthened to achieve sustainable development?

1.5. Significance of the Study

Much has been reported about the significance of MSEs to the national economy. The literature on sustainable business practices and their barriers has naturally concentrated on the large, usually multi-national companies whose individual impacts are significant. Although MSEs have relatively minor importance individually, their collective impacts may be significant (Parisa, Jerry and Raveendranath 2013). Hence there is a need to fill this knowledge gap about the influence of MSEs to sustainable development.

The findings obtained from this study is expected to provide comprehensive overview for policy makers, government institutions and other concerned bodies about the challenges of

manufacturing MSEs to contribute to sustainable development in Addis Ababa. It is anticipated that, the results obtained would add to the wealth of information currently available on current practice and the challenges in implementing policy and strategy for effective sustainable MSE in Addis Ababa. This study will also be significant in terms of providing the necessary resource for future MSE intervention projects that might be proposed or even carried out.

This study will actually benefit the academicians as the problem under study is contemporary issue where both the government and academic institutions (including Addis Ababa University) are encouraging and giving greater emphasis to. In addition the finding of the study is expected to indicate practical solutions to current sustainable MSE problems in the city.

1.6. Scope of the Study

The scope of this study is limited to MSEs specifically to those manufacturing enterprises in Addis Ababa. The study area is chosen because as a capital city it is center of business activities especially it is an area where people from different part of the country migrate in search of employment opportunities and to start a business.

MSE definition varies at different times and between countries. The definitions could be based on employment size, capital asset and / or skill of labors and turnover levels. This study is based on the definition of manufacturing MSEs on the revised MSE strategy document by Government of Federal Democratic Republic of Ethiopia that is approved in the year 2011 G.C.

MSEs sectors comprise manufacturing, service, trade, urban agriculture and construction sectors in Addis Ababa. This study will focus on the manufacturing sector MSEs i.e. textile and garment, leather and leather products, metal works and engineering, wood works, food processing and beverage subsectors. This study dwell upon discussions about the manufacturing MSE challenges to contribute to SD taking cases of two sub cities in Addis Ababa i.e. Gulele and Addis Ketema sub-city.

1.7. Limitation of the Study

Ethiopia has the basic structures in place for MSEs. Several government agencies are involved in MSE development. MOTI is the key ministry for enterprise development. FeMSEDA was established by the council of ministers regulation number 33/1998 to **lead and stir** Ethiopia's MSE development.

Currently the MSEs that includes all enterprises that operates with human power of not greater than 30 and with paid up capital of total asset not exceeding Birr 1.5million as per the 2011FDRE definition are registered through two different streams i.e. through the Woreda and directly through the Ministry of Industry. Those MSEs who applied and registered through the Woreda are in need of support from the government to obtain employment opportunity, training, working premise and finance. And those MSEs with no expectation of such support register directly through Ministry of Industry.

Through the discussion held with FeMSEDA, AAMSEDA and Woreda MSE expert it is realized that the MSE government structure is now working solely with those enterprises that has been established with the Woreda support. Also the dataset of the agency includes only these enterprises. The agency leadership of MSE is limited to these enterprises. Thus, the researcher considers in the study only those enterprises that are being led by FeMSEDA since they are with different support structures as compared with the MSEs that don't register through the woreda.

It should therefore be noted that, since the study was purposive, findings from this study cannot be generalized to manufacturing MSE in Addis Ababa as per the 2011 FDRE definition as they can be generalized to manufacturing MSE being lead and supported practically by the FeMSEDA. Further research need to be conducted with particular emphasis on MSE that are not currently practically under the lead and support of FeMSEDA in order to answer key research questions relevant to them.

1.8. Organization of the Paper

The paper is organized in 5 chapters and the content of each chapter is:

- Chapter 1 - Introduces the content of the paper, general problem in the field of the study, identifies delimitation and limitations of the study, defines research questions and objectives,,
- Chapter 2- Review related literatures on general concept of MSEs, sustainable development, sustainable MSE manufacturing enterprises, and gives overview of MSE and sustainable development in Ethiopia,
- Chapter 3 –Highlights methodological design and methods of data processing and analysis.
- Chapter 4- Discusses research findings and analyses on the basis of the identified indicators.
- Chapter 5-Gives concluding remarks and recommendation based on the findings of the study.

Chapter 2: Literature Review

2.1 Micro and Small Enterprises

There is worldwide consensus that high rates of economic growth contribute to economic and social development and poverty reduction. At the same time, there is growing recognition that poverty reducing growth depends on the quality of growth: its composition, distribution and sustainability (OECD, 2004).

Private Small enterprises¹ typically account for more than 95% of all firms outside the primary agriculture sector, constitute a major source of employment and generate significant domestic and export earnings in the OECD, transition and developing countries. Improved small enterprises competitiveness could obviously contribute to economic and social development and poverty reduction (OECD, 2004).

The importance of the small enterprises sector is well recognized worldwide due to its significant contribution to gratifying various socio-economic objectives, such as higher growth of employment, output, promotion of exports and fostering entrepreneurship. Recent empirical studies show that small enterprises contribute to over 55% of GDP and over 65% of total employment in high-income countries. Small enterprises and informal enterprises, account for over 60% of GDP and over 70% of total employment in low-income countries, while they contribute over 95% of total employment and about 70% of GDP in middle-income countries. In the European Union countries, for example, there are some 25 million small businesses, constituting 99% of all businesses; they employ almost 95 million people, providing 55% of total jobs in the private sector (Hidayet et al. 2010).

Small enterprises are important to almost all economies in the world, but especially to those in developing countries. There is considerable interest in Small enterprises in developing countries. There are probably two main reasons for this. One is the belief that small enterprises development may prove to be an effective antipoverty programme. The second is the belief that small enterprises development is one of the building blocks of innovation and sustainable growth. These two reasons are of course linked because most of the international evidence says that growth and real poverty reduction go hand in hand. If small enterprises development helps

¹ For chapter 2 of this paper 'small enterprises' refers to micro, small and medium enterprises.

growth, more than likely it helps reduce poverty as well. In any country, the statistics show that even during the years of economic crisis and recession, the Small enterprises have ensured economic growth, productivity and employment (Hidayet et al. 2010).

Some experts explain that 'a significant section of Small enterprises in developing countries remains in traditional activities generally with low levels of productivity, poor quality products, serving small, localized markets. There is little or no technological dynamism in this group, and few 'graduate' into large size or modern technologies. In many poor countries, there is also a large underclass of (formal and informal) micro enterprises that ekes out a bare survival (Lukács, 2005).

To prosper, Small enterprises need a conducive business environment and regulations, adequate basic infrastructure services, access to short and long-term funding at reasonable rates, equity and venture capital, advisory assistance, and knowledge about market opportunities. They typically suffer from weak entrepreneurial skills as well as deficiencies in accounting, production management, and business planning. As Small enterprises grow, they increasingly need connectivity to export markets and the world economy. So far, the lessons of international experience show that very few government and donor initiatives have succeeded in implementing sustainable strategies for small enterprises development. To succeed, sustainable small enterprises development will require concerted efforts among the various parties concerned including commercial and rural banks, leasing companies and equity providers, consulting and training firms, internet providers, as well as local business associations (Lukács, 2005).

2.1.1 Definition of Micro and Small Enterprises

Small and medium-sized enterprises (Small enterprises) are a very heterogeneous group of businesses usually operating in the service, trade, agri-business, and manufacturing sectors. They include a wide variety of firms such as village handicraft makers, small machine shops, and computer software firms that possess a wide range of sophistication and skills. Some are dynamic, innovative, and growth-oriented while others are satisfied to remain small and perhaps family owned. Small enterprises usually operate in the formal sector of the economy and employ mainly wage-earning workers. Small enterprises are often classified by the number of employees and/or by the value of their assets. The size classification varies within regions and across

countries relative to the size of the economy and its endowments. It is important to note that there is a minimum as well as a maximum size for Small enterprises (Lukács, 2005).

Overall, Small enterprises could be defined and classified taking into consideration: quantitative, qualitative, and both quantitative and qualitative aspects. **Quantitative criteria** are more often used in defining Small enterprises, because these criteria allow a clear delimitation between different categories of Small enterprises, such as : micro entities, small and medium-sized entities. The most common used quantitative criteria according to which the small enterprises are classified into categories are: number of employees, turnover, total balance sheet or a combination of the last two. There are other criteria like: net assets, initial capital, return, invested capital, industrial classification combined with number of employees, total produced quantity and their value, added value etc., but there are seldom used (Buculescu, 2013).

Indeed, number of employees is the most frequent criterion used when classifying an entity as a small enterprise because, predominantly, number of employees is one of the criteria which enterprises disclose easily, and not at least is very easy to control it. Likewise, number of employees does not vary with consideration to inflation rate compared to other criteria like sales. Turnover and assets employed can also be measured but both are problematical. Relatively small firms (in employment terms) can have a large turnover as a result of buying in large quantities of components. There are also major problems in consistently monitoring asset values. One of the main arguments for this is considered to be the fact that despite that in the total assets is included: fixed assets, intangible assets and accrued expenses, not in all the economies all these components are taken into considerations. A more satisfactory measure would be that of added value but this is difficult to calculate (Buculescu, 2013, OECD, 2004).

Qualitative criterion embodies issues of ownership and (inter)dependence. Being a small entrepreneur fundamentally means coping with (and enjoying) high levels of autonomy: standing alone and having total responsibility for the full range of business activities. Within the firm, personal relationships and individual qualities are more important than formal hierarchies and promotion systems. Because the firm's own resources are limited, there is at the same time a high dependence on suppliers, banks, accountants, etc., and on appropriate, supportive legislation. Owner managers have to be close to their customers (if they don't sell they don't live). Business networks become social networks, and the entrepreneur's standing in the

community is highly dependent on success or failure. Other qualitative criteria such as the relative size of the enterprise compared to other enterprises or non-dominant market share are considered ineligible criteria because it is not considered the fact that many Small enterprises are specialized in certain market niches and often dominate their market segment or their specific unique industry (Buculescu, 2013, OECD, 2004).

The term small enterprises cover a wide range of definitions and measures, varying from country to country and varying between the sources reporting small enterprises definitions. Also, based on the economic activity sectors, the definitions are different (Parisa et al, 2013). Even inside one country could be more institutions and associations which differently define and classify Small enterprises like: statistical institutions, banks, governmental agencies and others. ,

Definitions for Small enterprises are statistical or administrative and are based on the number of employees, number of annual working hours, annual turnover, annual balance sheet or production volume and independence of the company. Countries are using one or several of these definitions. The number of employees and annual turnover seem to be the criteria applied in most countries. However, the definitions are different in relation to economic activity sectors. For instance, the physical production and the sales amounts often provide the basis for the agricultural sector, while the number of employees often is the basis for other sectors (Harjula, 2008).

The thresholds for Small enterprises, even with the similar definition, vary according to the economic activities, making cross-country comparisons difficult. For instance, the ceiling used for the number of employees is generally 250 in Europe and 500 in the USA and Canada. The thresholds may also vary between industrial sectors in one country (Harjula, 2008).

Nevertheless the existence of the definitions provided by European Commission, World Bank, OECD or other organizations, with the purpose to be adequate to more economies, sought to facilitate comparability and the internationalization in defining small enterprises, and moreover to create new opportunities like: access to the small enterprises to niche market, to technologies, know-how, access to capital, workforce, new market and products (see **Table 1**) (Buculescu, 2013).

Table 1: Examples of small enterprises definitions by EC, WB and OECD

	Micro-entities	Small enterprises	Medium-sized enterprises
European Commission	• Average number of employees < 10; • Annual turnover < 2 million Euros or • Total balance sheet < 2 million Euros;	• Average number of employees < 50; • Annual turnover < 10 million Euros; or • Total balance sheet < 10 million Euros;	• Average number of employees < 250; • Annual turnover < 50 million Euros or • Total balance sheet < 43 million Euros;
World Bank	• Less than 10 employees; • Annual turnover < 100.000 dollars • Total balance sheet < 100.000dollars	• Less than 50 employees; • Annual turnover < 3 million dollars • Total balance sheet < 3 million dollars	• Less than 300 employees; • Annual turnover < 15 million dollars • Total balance sheet < 15 million dollars
OECD	• Between 1 - 4 employees (small micro) • Between 5 - 19 employees (micro entities)	Between 20 – 99 employees	Between 100 – 500 employees

(Source: Definitions of small enterprises by EC, WB and OECD by Fitch 2006, cited by Buculescu 2013)

The existence of various definitions is a consequence of the fact that there are a multitude of criteria which could be considered to define small enterprises, like: turnover, number of employees, capital, ownership independence, profit, assets, total value of imports and exports etc. Nonetheless, as it could be observed from the above table, there are some criteria which were used more often and considerate to be more adequate, so they were used preponderantly in definition of small enterprises, such as: number of employees, turnover and total balance sheet. But in some economies are set upper limits of assigning value to Small enterprises compared to other economies, even if the classifying criteria are the same (Buculescu, 2013).

2.1.2 Features of Micro and Small Enterprises

The economy of the 20th and 21st century has a different set of rules than Smith's economy of the 19th century. The new ideology of neo-liberalism and globalization emphasizes the role of Small enterprises as promoters of a healthy business climate, economic efficiency and power for

economic development, especially in developing countries. Today, instead of large-scale industries, Small enterprises having gained importance in the developing economies, become advantageous being economic enterprises having the capability of quick adaptation, working with less capital but more intense labor and having low cost of management and thus having cheap production. Although Small enterprises have some weaknesses, they are less affected from economic crises due to its flexibility and abilities which keep up with changed conditions. Small enterprises are vital actors for enhancing innovation, competitiveness, entrepreneurship and the establishment of an effective innovation system for developing countries (Hidayet et al, 2010)

Small enterprises, observing the market closely, understanding the requirements of customers better and having intimate relations with its employee, have more elasticity than the large ones in terms of manufacturing, marketing and service. As this elasticity enables harmony with the changes in outside in time and on-site, Small enterprises pass over many troubles lightly with less damage (Hidayet et al., 2010). Small enterprises are characterized by factors such as company size or independence property (family or small group of people). The most popular features for Small enterprises are they generate job opportunities, are easy to set up and enter into business, are more flexible than the big enterprises and they have a closer relationship with the customers ((Iordache, 2014).

However, the Small enterprises are at risk of having business failure (survival depending on the owner's ability to manage success), there are little proactive innovation and technology are deficient in business management ideas and management skills, oppose resistance to investing in the training of management, market research and customer knowledge management, they lack an integrated approach to planning and business functionality (Iordache, 2014). These features can lead to disadvantages and advantages (see **Table 2**).

Table 2: The characteristics of small enterprises

Characteristics	Advantages	Disadvantages
The dependence on a limited number of people (often owners and managers are the same person)	• Looking forward, they need long-term thinking • Stability • No pressure for short-term success • Stable managerial culture • Greater commitment	• Static thinking , limited to the experience and knowledge of the owner (s) • Difficulties to adapt to corporate culture to new situations and challenges • Potential conflicts between company objectives and personal objectives of the owner
Strong relationships with customers and business partners	• Stable Base for business • The ability to cooperate successfully to achieve a mutual benefit • Ability and the desire to enter into partnerships	The risk of focusing too much on existing business
Simple structures	• The large flexibility and adaptability • Short reaction times • inter-functional communication and cooperation within the organization	• In many cases, they are not appropriate for complex planning and implementation of international activities • decreased desire to enter more complex structures
Small sized	The base of specialization, often successful with niche strategies	• The limited resources (in terms of finance and employment) • The limited funds for financing the investments and the initial operating losses to activate others new • The costs of research and market entry tend to take a much larger proportion of total expenditure in Small enterprises than larger companies • The limited number of staff in order to take some additional tasks • The lack of employees with international experience

(Source: *Dagmar Recklies Article Small and Medium-Sized Enterprises and Globalization, 2001, cited by Iordache, 2014*)

2.2 The concept of Sustainable Development

“We all aspire to reach better living conditions. Yet, this will not be possible by following the current growth model . . . We need a practical twenty-first century development model that connects the dots between the key issues of our time: poverty reduction; job generation; inequality; climate change; environmental stress; water, energy and food security.”

UN Secretary General Ban Ki-moon

The theoretical framework for sustainable development evolved between 1972 and 1992 through a series of international conferences and initiatives. The UN Conference on the Human Environment, held in Stockholm in 1972, was the first major international gathering to discuss sustainability at the global scale. The conference created considerable momentum, and a series of recommendations led to the establishment of the UN Environment Programme (UNEP) as well as the creation of numerous national environmental protection agencies at the national level. The recommendations from Stockholm were further elaborated in the 1980 World Conservation Strategy—a collaboration between the International Union for the Conservation of Nature, the World Wildlife Fund (WWF), and UNEP—which aimed to advance sustainable development by identifying priority conservation issues and key policy options (John and Deborah, 2010).

In 1983, the UN convened the World Commission on Environment and Development, chaired by Norwegian Prime Minister Gro Harlem Brundtland. Comprised of representatives from both developed and developing countries, the Commission was created to address growing concern over the “accelerating deterioration of the human environment and natural resources and the consequences of that deterioration for economic and social development.” Four years later, the group produced the landmark publication *Our Common Future* (or the Brundtland report) that provided a stark diagnosis of the state of the environment. The report popularized the most commonly used definition of sustainable development: “Development that meets the needs of current generations without compromising the ability of future generations to meet their own needs” (John and Deborah, 2010).

Development is not just about growth. Likewise, sustainability is not just about protecting the environment. Both development and sustainability are primarily about people living in peace with each other and in equilibrium with the planet. Their rights, opportunities, choices, dignity and values are (or should be) at the centre of everything (UNDP, 2012).

Attaining the Millennium Development Goals is the first step towards a sustainable future—even as the conversation on what the post-2015 development framework looks to begin in earnest. During 2010-2011, UNDP together with other UN agencies introduced the MDG acceleration framework to do just that. This framework has now been deployed in some 30 countries, and demand for its use is growing. The framework brings governments, development partners, and other stakeholders together to analyze why—often despite a range of strategies and plans—progress towards achieving specific MDGs is proceeding too slowly. Bottlenecks and constraints are identified, action plans to address them are designed and implemented, and the necessary resources are mobilized (UNDP 2012).

Progress already achieved toward meeting the Millennium Development Goals can be set back, if not reversed, by the shocks of disasters, macroeconomic instability, food shortages, or socio-political unrest. Once progress is reversed, the impacts are multiple and can span generations. If instability—and the social and economic unrest it can generate—has become an enduring, systematic characteristic of the global economy, then countries must be better prepared for the waves to come. They need to safeguard and sustain progress already made (UNDP 2012).

2.3 Sustainable Business Practices

Organizations are increasingly inclined to integrate society's expectations into their business strategies, not only to respond to rising pressure from consumers, employees and other stakeholders but also to explore opportunities for creating competitive advantage. To this end, management researchers are seeking to identify a set of factors with the potential for facilitating effective integration of sustainability into organizational practices (Petrini and Pozzebon, 2010).

The Triple Bottom Line (TBL) argues for businesses to measure their success according to three perspectives: people, planet and profits. Their performance in each category represents their perceived commitment to their stakeholders, the natural environment and their economic profits, respectively. It suggests that the relationship between the categories is not necessarily a trade-off where one must be conceded in order to achieve the other, but where a balance must be achieved in order to maximize the potential benefits in each category. As increased efficiency and innovation can lead to advantages that create a competitive edge and in turn leads to its own

profitability, without compromising the environment, a company's attention to social issues can earn their brand the respect of communities and loyalty of consumers (Dixon, 2014).

A firm that would like to apply sustainable business could communicate diverse performance of their practices to the public because interested parties want to know information about the firms' sustainable business practices. Voluntary reporting information about firms' environmental and social performance is becoming a powerful and popular tool to communicate with the public because interested parties can use such information to evaluate firms' activities and performance. (Bae and Smardon, 2011).

The TBL is an accounting framework aimed at moving beyond traditional profit measures or reporting corporate performance to incorporate social and environmental measures. This differs from traditional reporting frameworks as it includes ecological (or environmental) and social measures that can be difficult to assign appropriate means of measurement. The TBL dimensions are also commonly called the three Ps: people, planet and profits. We will refer to these as the **3Ps**. Since 1994 the use of the triple bottom line in academic literature that deals with sustainability issues has drastically increased – and so has the number of (graphical) interpretations of the model (see **Figure 1**).

Figure 1: Illustration of the Triple Bottom Line



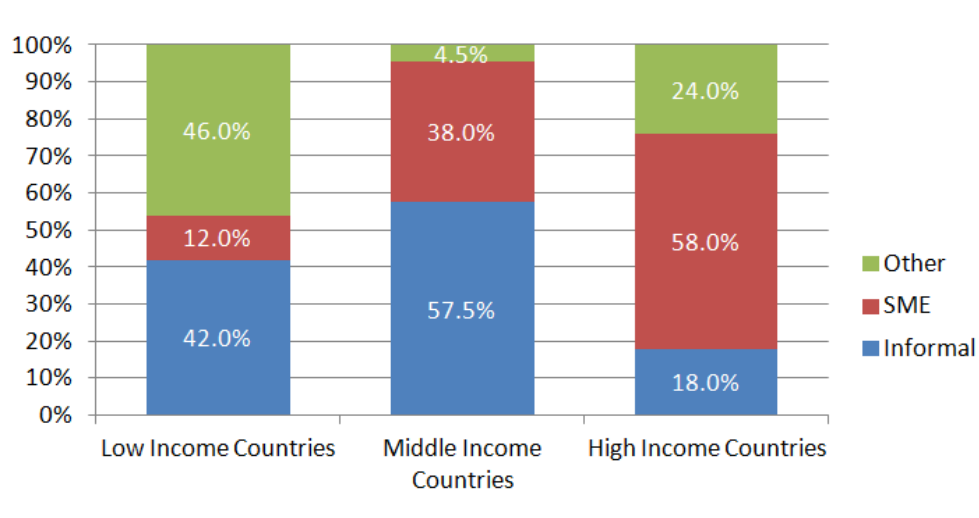
Source: Cecilia, Julia and Ashkan, (2010)

2.4 Micro and Small Enterprises and Sustainable Development

Since the rise in their popularity, Small enterprises have consistently grown and generated interest from a wide range of stakeholders including governments, researchers, donors and non-governmental organizations because they attempt to satisfactorily address the employment challenges, stimulate innovation and advancement and achieve sustainable development. As a result, both the developed and the developing countries are actively engaged in and continue to seek pragmatic ways of improving the activities of Small enterprises (Anane, Cobbinah and Manu, 2013).

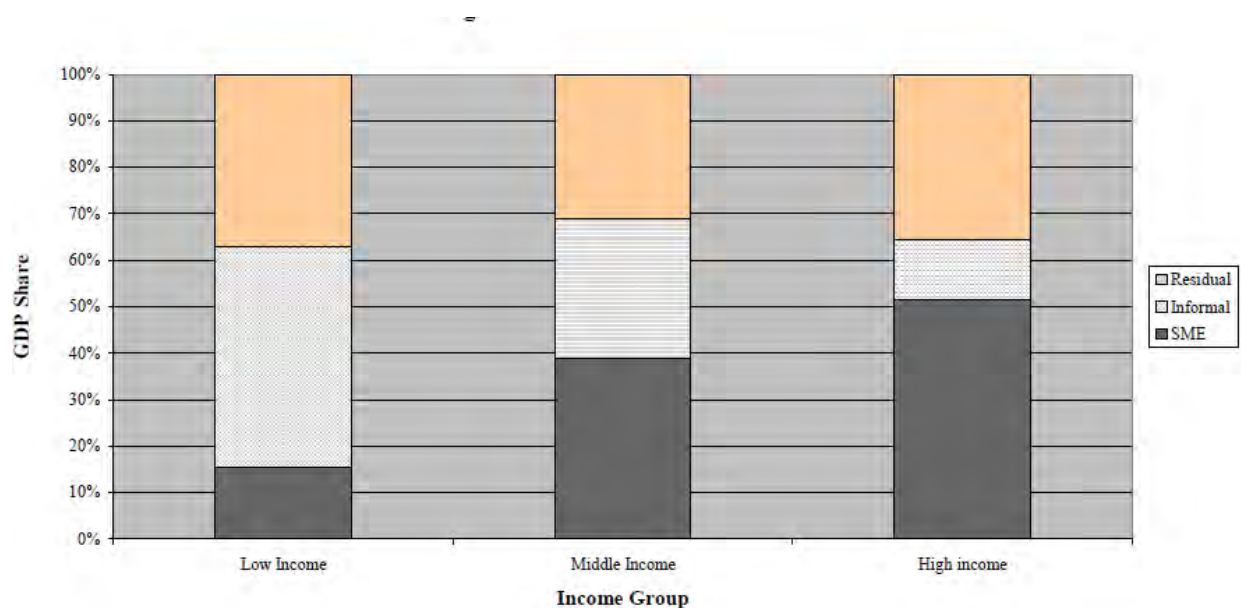
Underscoring their indispensability in economic development, Small enterprises create opportunities for income generation and distribution, capital accumulation, poverty reduction and empowerment of people especially women. Small enterprises advance the creation of a new class of small entrepreneurs leading to the expansion of the middle class and a wider distribution of income. At the rural level, Small enterprises have the potential to thrive owing to their location flexibility, low infrastructure and technology requirement, and the capacity to serve small markets. Experiences at the rural communities reveal that Small enterprises can contribute to increase household incomes, diversify household income sources, and reduce household poverty and vulnerability levels (Anane, Cobbinah and Manu, 2013).

Figure 2: Small enterprises share of total employment



Source: Ayyagari et al (2003)

Figure 3: Firm size and GDP



Source: Ayyagari et al (2003)

Sustainable development implies commitment of all relevant stakeholders in the public and private sectors, among consumers and in civil society. Given their economic and social significance, Small enterprises must play a leading role in sustainable development. On the one hand, they contribute substantially to the local production fabric, to wealth creation as well as to the creation and maintaining of jobs. On the other hand, they are flexible, responsive; provide access to traditional and current knowledge, specialization and innovation, proximity to consumers and local markets, and relations with major enterprises. They also offer great opportunities for rural development and integration into the global and regional integration (ECA, 2005).

Comparative studies on Small enterprises worldwide show that the significance of Small enterprises for wealth and job creation increases is commensurate with the levels of development (see **Figure 2** and **Figure 3**). There is a strong positive correlation between the contribution of Small enterprises to employment and GDP and per capita income of the country. The development of Small enterprises is thus an indicator of development (ECA 2005).

Small enterprises contribute to the sustainable development of countries by helping in their gradual transition from the informal to the formal sector. Even though the informal sector

accounts for almost one half of GDP in low-income countries, it is nearly 40 percent in medium-income countries, and under 15 percent in high-income countries. Considering that the jobs on offer in the informal sector are often not as decent as those of the formal sector, Small enterprises have a key role to play in sustainable development, especially as that the non-official sector pays less attention to the negative effects on the environment (ECA 2005).

In addition, in low income countries, there is a strong disconnect between the share of Small enterprises in GDP and employment. This is because demographics and the dynamism of Small enterprises are linked to the diversification of economies. In countries heavily dependent on a few commodities, as is the case in many African countries, Small enterprises can hardly thrive, as opposed to in the highly diversified OECD economies for instance. Proactive and targeted national economic diversification and export strategies will be key to the development of the countries of the sub-region. Because of the assets and advantages they offer, Small enterprises can be vectors of organized diversification, thereby strengthening their role as major players in sustainable development (ECA 2005).

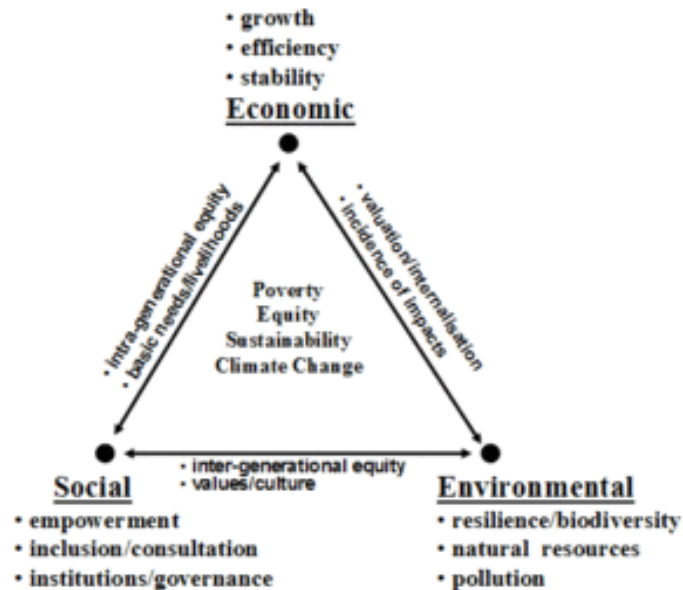
Much of the research on sustainability focuses on a small proportion of private sector organizations, that is, large multinational enterprises. While the individual impact of small and medium-sized enterprise activities is usually small, and they are by no means homogeneous, collectively they are critically important. As a sector, Small enterprises could contribute up to 70% of all industrial pollution. This has resulted in a n i ncreasing recognition of Small enterprises' social and environmental impact. There is a growing trend in the sustainability movement that increasingly focuses on Small enterprises and not just on multinational enterprises as part of the process of creating a more sustainable world. Most of the economic, environmental and social impacts of large enterprises occur through their supply chain and the Small enterprises in those chains (Spence, Agyemang and Rinaldi, 2012).

2.4.1 Three Dimensions of sustainability among MSEs

Rethinking the business in terms of its triple bottom line impact and performance (social, environmental, and economic) is critical in establishing the foundation for sustainable business (see **Figure 4**). This requires a shift away from thinking of a business only in terms of its

financial profit to shareholders. While financial profit is necessary for survival, the sustainable business applies a broader view of the business, its responsibilities, and its performance.

Figure 4: Approaches to Sustainable Development



Source: Munasinghe (2004)

2.4.1.1 Economic Dimension

With the aim of supporting economic growth and prosperity, the economic dimension of proactive CSR is the means by which firms attempt to preempt issues (e.g. customer satisfaction, product quality and safety, and supply chain management) that might arise in their interactions with customers, suppliers and stakeholders in the market place. The way a firm operates in the market is taken as an indicator of how it has integrated action on economic responsibility concerns into its core business activities and decision-making processes. The aim of such integration is seen as going beyond short-term profit maximizing issues to emphasize long-term economic performance issues, and the effective exploitation of market opportunities, as well as contribute to the improvement of the standard of living across the whole economy. Economic-related proactive CSR creates value through fostering the development of new and different products that are desired by consumers, lowering the costs of inputs, and improving production efficiencies. However, as this CSR dimension requires effective management of several types of economic capital, firms need to adopt a long-term perspective in management and decision-making, so that at any time they can guarantee “cash flow sufficient to ensure liquidity while

producing a persistent above average return to their shareholders” (Torugsa, O’Donohue and Hecker, 2012).

2.4.1.2 Social Dimension

Having the workplace and the community as two points of focus in creating social cohesion and equity, the social dimension of proactive CSR actively recognizes “the health, safety and general well-being of employees; motivate[s] the workforce by offering training and development opportunities; and enable firms to act as good citizens in the local community”. Such social-related proactive CSR also involves creating a formal social dialogue to consider social and ethical questions that recognizes the interests of all stakeholders in decision-making; in so doing, mutually acceptable outcomes can result for the firm and its stakeholders. Key social aspects are (Torugsa, O’Donohue and Hecker, 2012):

A. Responsibility towards Customers

The idea of treating customers with respect and attention is not new to business: often being responsible to customers has a direct positive effect on the company’s profits. There are, however, broader social responsibilities including providing good value for money. These responsibilities may include such issues as the safety and durability of products or services; standard or after sales service; prompt and courteous attention to queries and complaints; adequate supply of products or services; fair standards of advertising and trading; and full and unambiguous information to potential customers.

B. Responsibility towards Employees

Businesses are major contributors to the employment generation of the community. However, social responsibility to employees extends beyond terms and conditions of the formal contract of employment. Companies need to come up with wider expectations that today’s employees have for the quality of their working life. Such expectations include taking care of the personnel’s welfare and safety at work and upholding their skills and motivation for the work. Beyond these expectations, a socially responsible company secures a just treatment and equal opportunities for all its employees, regardless of gender, age, race, or religion.

C. Responsibility towards the Community

Companies depend on the health, stability, and prosperity of the communities in which they operate. Often majority of the company's employees and customers come from the surroundings area – especially so for small enterprises. The reputation of a company at its location, its image as an employer and producer, but also as an actor in the local scene, certainly influences its competitiveness. Many companies become involved in community causes, for example by providing additional vocational training places, recruiting socially excluded people, sponsoring local sports and cultural events, and through partnerships with communities or donations to charitable activities.

2.4.1.3 Environmental Dimension

The goal of environmental sustainability is envisaged as a long-term perspective that aims to ensure that economic activity can progress without damaging the environment. Specific examples of relevant technical areas include knowledge and understanding of the pollution of soil, water and the atmosphere; sustainable development and use of renewable natural resources; protection of biodiversity, including endangered species and sensitive ecosystems; safe use of dangerous substances; efficient production, delivery and use of energy; pollution prevention and waste minimization; pollution controls (liquid effluents and air emissions); and solid and chemical waste management (Spence, Aggemang and Rinaldi, 2012).

The environmental impact of a business's operations is viewed both internally and externally. The business that focuses exclusively on its environmental impact, rather than focusing on the triple bottom line emphasis of a sustainable business, is referred to as a green business (www.saylor.org/books). Internally, the environmental impact of a business often refers to practices related to use of natural resources, waste, toxicity, and pollution. For manufacturing companies, the environmental impact can be large and efforts are generally made to reduce waste, toxicity, and pollution within the manufacturing process. Recycling programs are often part of a sustainable business's efforts to reduce waste and toxicity. Sustainable companies consider both the purchase of recycled items for office supplies, furniture, and other needs, as well as recycling or donating its own unwanted items. While most companies or offices may already recycle paper, aluminum cans, and plastic bottles, there is little that cannot be recycled today

Externally, the sustainable business also considers the environmental impact of suppliers in terms of services and products as well as transportation of goods. A sustainable business will seek out suppliers of services and products that are environmentally friendly. This results in the purchase of products that produce less waste, are less toxic, and generate the least amount of pollution in manufacturing and transportation. Sustainable businesses opt for local suppliers, when possible, in order to reduce the environmental impact caused through the transportation of goods. Sustainable businesses create environmentally preferred purchasing policy, as an integral part of their operations to give preferential purchasing to products and services that are most environmentally friendly.

Sustainable business considers water efficiency and energy efficiency. When a sustainable business considers water usage—often referred to as a water footprint—it is seeking ways to become more efficient by reducing its use of fresh water or increasing its recycle rate for water. When a sustainable business considers energy usage (often referred to as a carbon footprint or energy audit), it is seeking ways to become more efficient and reduce its energy usage.

The environmental dimension focuses on maintaining healthy ecosystems. Small businesses have to provide their products and services in a manner that minimizes any negative impact to the ecosystem through effective environmental management programs. With the aim of minimizing a firm's ecological impact along the entire product life cycle, environmental-related proactive CSR is often characterized by adoption of internationally compliant environmental management systems (or a total quality management approach) to ensure the environmental impacts from a firm's activities are monitored and managed systematically, thereby helping build a firm's credibility with external stakeholders and ensure the embrace of the principle of environmental integrity and protection amongst internal stakeholders (Torugsa, O'Donohue and Hecker, 2012).

Reconciling these various concepts and operationalizing them is a major challenge, since all three pillars i.e. the economic, social and environment must be given balanced consideration. The interfaces between the three pillars are also important. The economic and social elements interact to give rise to issues such as intra-generational equity (income distribution) and targeted relief for the poor. The economic-environmental interface has yielded new ideas on valuation and internalization of environmental impacts. Finally, the social-environmental linkage has led to renewed interest in areas like inter-generational equity (rights of future generations) and popular

participation. However, tradeoffs will always be necessary depending on the complexity of issues being addressed, the circumstances and the current state of knowledge (ECA, 2005).

2.4.2 Drivers to sustainable practices of MSEs

The purpose of every business is to serve its customers through a process which converts resources and distinct knowledge into a contribution of economic value in the market place by adapting to the customer needs, wants and benefits, and providing solutions to problems. When customers evaluate a firm based on the sustainable practices, so the businesses are then challenged to incorporate sustainability concepts into the business performance in order to increase market value. In this respect, there are some factors which contribute to the adoption of sustainability practices within the business (Parisa, Jerry and Raveendranath, 2013).

Different scholars introduce various driving factors of sustainability. These can be broadly categorized into “opportunities” and “risk avoidance” benefits: (Young, 2010)

Opportunities include:

Increased market share/new markets; Increased profits/financial performance; Cost reductions/efficiency; Competitive advantage; Employee attraction; Reputation building

Risk avoidance benefits include:

Legislative compliance; Supply-chain pressures – e.g. maintaining access to existing markets/customer retention; Employee retention; Reputation protection

Increasing profitability and cost saving through eco-efficiency: A recurring theme throughout the literature is Small enterprises emphasis on financial and operational risks due, at least in part, to the largest perceived risk being “the failure to survive”. The result is a focus on day-to-day activities, short-term problem solving and “making ends meet.” As such, a demonstrated relationship financial performance and environmental/social considerations is very important for small enterprises adoption of CSR initiatives, including environmental improvements. Achieving greater profitability through energy efficiency and waste reduction measures is another frequently cited benefit (Young, 2010).

Reputation Protection: firms with a reputation for environmental-related proactive CSR build skill and knowledge resources by attracting and retaining highly qualified employees interested

in preventive environmental management. Small enterprises successful adoption of sustainable practices can be feasible if the establishment of positive and stable relationships with external stakeholders (e.g. public institutions, research centers, industrial unions and government agencies) provides small enterprises access to the high level skills, resources and information necessary for the introduction and management of complex environmental initiatives (Torugsa, O'Donohue and Hecker, 2012).

New market creation/Innovation: smaller firms may be more flexible, and thus able to exploit environmental niche opportunities.” Additionally smaller firms “founded and structured using a lens of sustainability can focus on new innovations without the distractions of having to “fix” existing operations.” (Young, 2010)

Leadership: Personal interest in an “inherent business responsibility” and the internal benefits of morale and increased employee motivation seem to be of high importance as drivers. Respecting the environment and giving something back to the local community is expected to result in a good business image or reputation. Personal fulfillment for those involved is also a key driver – and an added benefit. Environmental and social responsible activities are often driven by the personal values and frame of mind of the owner and the company's senior management (UNEP, 2003).

Legislation: self-interest is as a n insufficient to ol for p romoting s ustinability w ithin s mall firms. Government intervention is necessary for compelling businesses to engage in socially and environmentally r esponsible a ctions. P ublic, pr ivate a nd c ommunity environmental e ducation plays an important role in generating support and ideas which lead to the creation of sustainable business. T he a wareness i n t he c ommunity of s uustainable l ifestyles c an be de veloped b y education a nd i t c an i ncrease t he de mand f or e nvironmental pr oducts a nd s ervices (Torugsa, O'Donohue and Hecker, 2012).

Employee attraction and retention: The range of employee benefits from environmental and social r esponsible a ctivities range f rom i mproved m orale a nd company image, to greater motivation, qualification and awareness, to better working conditions (e.g. when less hazardous substances are handled).(UNEP, 2003).

Supply chain demands: Within in ternational supply chains, l arge c orporate c ustomers increasingly ask small enterprises to comply with health, safety and environmental practices. To

a lesser degree, this is also becoming more evident regarding Small enterprises' social or community commitments. There is clearly a role for large organizations in promoting and influencing Small enterprises (as opposed to enforcing), in combination with trusted service providers and intermediaries. Shifting markets, the need to align production towards changing consumer preferences, and internationalization of standards are another driver.

Suppliers are also drivers of activities in Small enterprises, as companies supply environmental information on existing and new substances or life-cycle assessment data to customers. Providing leadership and inspiring Small enterprises to take action seems beneficial to large companies through increased social and environmental responsibility, but also through enhanced customer relationships. However, very often little preventive cooperation exists between large companies and Small enterprises (UNEP, 2003).

2.4.3 Barriers to sustainable practices of MSEs

Given the low uptake of sustainability measures within Small enterprises, it is clear that the benefits outlined above are insufficient for many Small enterprises to overcome the barriers and challenges in implementing sustainable practices. Common barriers identified include (Young, 2010):

- Lack of internal expertise
- Lack of relevant (sector- and/or size-specific) informational resources and supporting services
- Time pressures and short planning horizons
- Ad-hoc or minimal systems, especially in relation to strategic decision making
- Low awareness of environmental impacts and risks
- Perception of higher costs and financial risk

Smallness helps enterprise leaders consider the value of the scarce resources more accurately and use the Earth's non-renewable resources as little as possible. However, Small enterprises have limited time and resources to dedicate to long-term concerns such as sustainability strategies because they are normally fully occupied and also they operate very much on a daily basis (Torugsa, O'Donohue and Hecker, 2012).

The low prices of many raw materials on international markets, which result in margins being too small to make resource efficiency strategies, for example, financially feasible is another

barrier. Intensive price competition and limited consumer/stakeholder pressure on Small enterprises are also barriers in this context. Support projects of larger suppliers are scarce, owing to the bureaucracy and inertia that tend to characterize large companies. In addition, many smaller companies that buy small amounts of raw materials are not in direct contact with the raw material producers since intermediate dealers supply Small enterprises. These dealers could also constitute potential information barriers in the product chain (UNEP, 2003).

In many cases Small enterprises' customers, and often Small enterprises themselves, are unwilling to change the product system, which might be necessary in the case of some product innovations in the chain. Stated reasons for this reluctance are the high cost of production changes and the low cost of most end-of-life management options (UNEP, 2003).

As Small enterprises usually do not build strategically strong relationships with their communities compared to larger firms, the managers of Small enterprises do not translate any sustainability attitudes into management practices even if they have positive attitudes towards environmental issues. Furthermore, they seem to feel little responsibility towards the environment and their 'ecological footprint'. Many managers of Small enterprises believe that the government should play the prominent role in environmental management rather than focusing on their own actions (Parisa, Jerry and Raveendranath (2013).

Since the Small enterprises are conditioned by their size and culture, and operate in different sectors, determining the obstacles of Small enterprises in adopting environmental management is very hard. Some of these barriers that Small enterprises face in addressing effectively environmental issues are (Young, 2010):

- Supply chain routes that are long and energy intensive
- Lack of awareness of existing environmental regulations
- Low level of understanding of the principles of the environment
- Being compliance-driven and reactive to environmental issues
- Lack of potential to save money and remain competitive

The costs of ecological sustainability implementation in Small enterprises are high, especially in the manufacturing and primary resource sectors. The Small enterprises find it difficult to produce low environmental impact products. Also, due to the competitive nature of the business

environment, the cost of environmental initiatives could not be passed on to the customer by Small enterprises because it is seen as a business cost. In other words, the firms have to make operational change which leads to reduced costs and progressive environmental performance, simultaneously. The motivating factor continues to be achieving cost efficiency rather than environmental responsibility.

2.5 Sustainability Assessment Framework

The idea of a “sustainability framework” was created in 1997-1998. The US-based Coalition for Environmentally Responsible Economies (CERES), earlier formed to promote environmentally - sound corporate behavior in the US, was in-charge of developing an internationally acceptable framework for environmental reporting known as “GRI”. The GRI began with a view to enhancing the quality, rigor, usefulness and consistency of TBL reporting. At that time, the GRI Steering Committee was formed as the governing body, which operated for four consecutive years. Subsequently, in 1999, the United Nations Environmental Programme (UNEP) joined GRI as a partner, securing the organization a global platform (Sawhny, 2008).

GRI's first Sustainability Reporting Guideline framework was released in 2000. In 2001, the CERES Board separated GRI as an independent institution, as per the GRI Steering Committee's recommendations. Subsequently, the second iteration of guidelines was issued in 2004, and the most recent G3 Framework in 2007. Internationally the most prominent, comprehensive and generally accepted guidance is that published by the GRI (Sawhny, 2008).

The framework proposed an attempt to contribute towards standardization of the indicators of sustainable development for industry. The standardized indicators would enable identification of more sustainable options through: (i) comparison of similar products made by different companies; (ii) comparison of different processes producing the same product; (iii) benchmarking of units within corporations; (iv) rating of a company against other companies in the (sub-)sector; and (v) assessing progress towards sustainable development of a (sub)sector (Sartori and Campos, 2014).

Guidelines, frameworks and toolkits have been developed with the purpose of achieving greater standardization and consistency in TBL reporting. However given the unique circumstances and

issues in different industry sectors, a uniform “one size fits all” approach across all industry sectors is neither practical nor appropriate (Group of 100 incorporated, 2003).

While the Guidelines provide a valuable framework for assisting companies with the development of TBL reporting, the GRI acknowledges that companies will choose an approach that best suits their specific circumstances as well as an incremental approach in applying the guidelines.

To meet the needs of beginners advanced reporters, and those somewhere in between, there are three levels in the system. They are titled C, C+, B, B+, and A, A+ The reporting criteria at each level reflect a measure of the extent of application or coverage of the GRI Reporting Framework. A “plus” (+) is available at each level if external assurance was utilized for the report. C being beginners report fully on a minimum of any 10 Performance Indicators, including at least one from each of: social, economic, and environment.

GRI focuses on economic, social and environmental considerations. **Table 3** (page 32) shows GRI’s Sustainability Reporting Framework. The framework includes the following components:

Economic aspects primarily relate to the revenues generated and costs incurred. Financial assistance received from governments, spending on locally-based suppliers, and development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind or pro bono engagement, are some key factors included under fiscal considerations.

Social aspects have moved beyond the scope of society/ community considerations to include Product Responsibility, Labor Practices & Work Factors, and Human Rights aspects. *Product Responsibility* pertains to life cycle changes of products/services; incidence of noncompliance/voluntary codes concerning health and safety, marketing communication, and labeling details; number of substantiated complaints regarding breach of customer privacy/losses of customer data, and practices related to measuring customer satisfaction through surveys/focus groups. *Labor Practices & Work Factors* include total workforce by employment type; benefits offered to full-time employees and commissions to contract / part time workers; rates of injury and occupational diseases; total number of work-related fatalities; education, training and counseling programs on health/welfare/safety offered to employees; percentage of employees receiving career development reviews, and composition of governance bodies and breakdown of

employees per category. Human rights considerations relates to the number of significant investment agreements that include human rights clauses; percentage of suppliers/ contractors who have undergone human rights screening; training on policies/procedures for employee and security personnel's; incidents of discrimination and law suits filed; and incidents of forced child labor/compulsory labor.

Environmental aspects cover inputs, outputs and impact on the environment. Inputs include materials (i.e. raw materials, associated process materials, semi-manufactured goods, materials for packing purposes, and recycled input material), energy (i.e. direct and indirect energy consumption), and water (i.e. total water withdrawn from sources, recycled and reused water). Furthermore, location and size of land owned/leased, and areas of high biodiversity value also require attention. All these components result in outputs of environmental significance like greenhouse gas emissions, effluents and wastes, which need to be reported and reduced.

This study is conducted taking indicators from 10 major aspects in the sustainability reporting framework as required in the C level reporting. The major aspects from the economic dimension are economic performance and market presence; environmental dimension are minerals, energy, water and emissions, effluents and wastes; and social dimension are employment, occupation health and safety, training and education and diversity and equal opportunity (see **Table 3**).

Table 3: Sustainability reporting framework

Indicator Type	Category	Aspect
Economic performance indicators	Direct economic impacts	Economic performance Market presence Indirect economic impacts
Environmental performance indicators	Environmental impacts	Materials Energy Water Biodiversity Emissions, effluents and waste Products and services Compliance Transport overall
Social performance indicators	Labour practices and decent work	Employment Labour / management relations Occupational health and safety Training and education Diversity and equal opportunity
	Human rights	Investment and procurement Non-discrimination Freedom of association and collective bargaining Child labour Forced and compulsory labour Security practices Indigenous rights
	Society	Community Corruption Public policy Anti-competitive behavior compliance
	Product responsibility	Customer health and safety Product and service labeling Marketing communications Customer privacy compliance

Source: Global Reporting Initiative, Sustainability Reporting G3 Guidelines,
www.globalreporting.org²

NOTE: For this research, the above GRI indicators will be used as a guide to develop data collection instrument and for analysis

² The full guideline on G3 GRI'S sustainability reporting framework could be accessed in the link
<https://www.globalreporting.org/resource/library/G3.1-Sustainability-Reporting-Guidelines.pdf>

2.6 Micro and Small Enterprise in Ethiopia

2.6.1 Industrialization in Ethiopia

Ethiopia officially known as the Federal Democratic Republic of Ethiopia is a country located in the Horn of Africa. It is bordered by Eritrea to the north and northeast, Djibouti and Somalia to the east, Sudan and South Sudan to the west, and Kenya to the south. With a population of 79.4 million, Ethiopia is the second most populous country in Sub-Saharan Africa, with 83% of people living in rural areas. Ethiopia's economy is highly dependent on rain-fed agriculture which constitutes 46% of GDP. Dependence on rainfall makes the country vulnerable to climate related shocks, which in turn threatens food security (UN, 2011; Altenburg, 2010).

Ethiopia's Growth and Transformation Plan seeks to transform the economy from a predominantly agrarian to a modern and industrialized economy. The current plan (GTP2010/11–2014/15) provides the medium-term strategic framework that guides the country's efforts towards accelerating GDP growth and employment creation. The GTP seeks to transform Ethiopia to an industrialized economy and increase the per capita income of its citizens to middle-income levels by 2025. Integral to the achievement of a vibrant and competitive industrial sector is a deliberate policy focused on the development of the manufacturing sector, for instance through the use of Industrial Parks (IP) to attract Foreign Direct Investment (FDI). To bundle efforts and facilitate this transformation the Government puts special focus on five sectors thought to maximize the country's endowment and comparative advantage in the manufacturing sector: textiles and garments; leather and leather products; sugar and related products; cement; and the metal and engineering industries (World Bank Group, 2015).

But the GTP has not been able to foster and accelerate structural transformation of the economy and the share of the manufacturing sector in GDP remained stable at a rather low level. In fact, Ethiopia's past high growth decade has been fueled by large services and agricultural sectors. Economic growth averaged 10.9 percent per year from 2003/04 to 2013/2014 compared to the regional SSA average of 5.4 percent (Figure 2.1.1). The two sectors of services and agriculture are the backbone of the economy, together accounting for almost 90 percent of GDP between 2003/04 and 2013/14. At the same time the manufacturing share in GDP is rather stable at or just above 4.1 percent of GDP. The manufacturing sector has grown at an average of 10.9 percent in

last decade—about the same rate of expansion as real GDP—thereby falling short of the targeted 22 percent in the GDP. In 2013/14 the three sectors shares in GDP were: 40.2 percent (agriculture), 45.5 percent (services), and 14.3 percent (industry). The low share of the manufacturing sector, a crucial sector in transforming an economy, is a concern for the Ethiopian Government (The African Development Bank Group, 2010; World Bank Group, 2015).

2.6.2 Brief overview of Manufacturing sector policies in Ethiopia

In Ethiopia, industry in the modern sense of the term emerged as an economic entity only at the turn of the 20th century. The establishment of a strong central government, expansion of cities associated with the installation of railways and the strengthening of foreign relations increased the demand for imported manufacturing commodities. This, in turn, encouraged the establishment of import-substituting factories domestically and as a result modern manufacturing enterprises began to emerge in the 1920s. After a brief disruption in the Second World War period, the manufacturing sector started to get momentum in the 1950s. During this period a number of new industries which significantly contributed to the development of the national economy were established. The 1950s are also marked by the start of a comprehensive plan to stimulate and guide the country's industrial and economic development in general (Gebreeyesus, 2013).

Ethiopia has seen three regimes over the last eight decades. Keeping with the political ideologies governing the economic principles of the time, these successive regimes adopted different policies for the development of industry in the country. The industrial policies have distinctive features when looking at the guiding vision (policy), ownership structure, and market orientation. Broadly, they can be characterized as the import substitution and private sector-led (from early 1950s to 1974, the Imperial regime); the import substitution and state-led (from 1974 to 1991, the Dergue regime), and the export-orientated and private sector-led (since 1991, the Ethiopian People's Revolutionary Democratic Front, (EPRDF)-led government). In what follows, the salient features of the industrial policies of these three periods will briefly be reviewed. **Table 4** summarizes these episodes (Gebreeyesus, 2013).

Table 4: The Ethiopian industrial policy and development phases

	Imperial period (pre-1974)	The Dergue regime (1975-91)	The EPRDF regime (post-1992)
Guiding policy/vision	Market-oriented	Command economy	Market-oriented
Public/private role	Private-led	State-led	Private-led but also strong state role
Ownership structure	Dominance of foreign-owned enterprises	Dominance of public-owned enterprise	Dominance of domestic private-owned enterprises
Target industries	Import-substituting and labour-intensive industries (e.g. textile, food, cement)	Import-substituting and labour-intensive industries but also basic industries	Export-oriented & labour-intensive industries (e.g. Textile, leather, agro-processing, cement)
Envisaged key player	Foreign investment	Public sector investment	Domestic private sector
Policy instruments	Protection of domestic market through high tariff and banning of certain imports Provision of economic incentives (tax holidays, remission of indirect tax on capital goods etc.) & preferential credit scheme	Protection of domestic market through high tariff and quantitative restrictions Financing, subsidizing, and ensuring monopoly power for the state-owned enterprises	Direct support for selected export sectors through capacity building and other means Provision of economic incentives (tax holidays, remission of indirect tax on capital goods etc.) & preferential credit scheme
Government role	Infrastructure & human resource development and ownership of selective industries	Mainly government ownership	Infrastructure & human resource development, ownership of selective industries, and capacity building of the private sector

Source: Gebreeyesus (2013)

2.6.3 The MSE Sector in Ethiopia

MSEs play a significant role in terms of their employment generation capacity, quick production response and their adaptation to weak infrastructure and use of local resources, and as a means of developing indigenous entrepreneurial and managerial skills for sustained industrialization. The Ethiopian government is now faced with two key policy problems, namely the creation of jobs or employment opportunities to alleviate the widespread poverty and the creation of a n

internationally competitive industrial structure. These two problems are closely linked, as job creation is often necessary to replace jobs lost due to structural change and international competition (Demeke, Guta and Ferede, 2006). The vision of the MSE sector is to see “created competitive and convenient base for industry development”. Major objectives of MSE development are: (FDRE, 2011)

- Through creating job opportunity, bringing equal development, improving income of the society and poverty reduction
- Enabling the sector competent, facilitate economic growth and lays foundation for industry development.
- Expanding the sector’s development in urban by creating developmental investors.

Ethiopia has launched various bold initiatives and development policies and plans to spur economic growth. Three major development plans have been executed so far, the last one being the ongoing Growth and Transformation Plan (GTP). The common and overarching objective of these development plans has been to ensure broad based economic growth. This is so because broad based economic growth is the main route to poverty reduction through employment generation. The role of Micro and Small Enterprises (MSEs) is indispensable in poverty reduction through employment generation. Cognizant of this, a national MSEs Development Strategy was formulated in 1997. Ethiopia’s MSE Policy envisages not only reducing poverty in urban areas but also nurturing entrepreneurship and laying the foundation for industrial development. The strategy was revised in 2010/11 with renewed interests and more ambitious targets on employment and number of entrepreneurs and transition to medium size level (Assefa, Zerfu and Tekle, 2014).

Ethiopia has the basic structures in place for supporting MSEs. Several government agencies are involved in MSE development. MoTI is the key ministry for enterprise development. Following the 1997 MSEs Development Strategy, the Federal Micro and Small Enterprises Development Agency (FeMSEDA) was established by the council of ministers regulation number 33/1998 to lead and steer Ethiopia’s MSE development. The agency has been established as an autonomous government institution under the supervision of the Ministry of Urban Development and Construction. The primary goal of the agency is to implement meticulously the strategies mentioned above. To implement the MSE policies and strategies, Regional Micro and Small

Enterprise Development Agencies (ReMSEDAs) have been established. Also, MSE policy implementation involves a lot of other government agencies including TVETs, MFIs, Ministry of Urban Development, Housing and Construction (MoUDHC) and other institutions. In addition to creating a conducive business environment for MSE growth, Ethiopia extends direct policy support to MSE operators. The direct policy support includes access to markets, access to finance, access to industrial extension, access to training and technological support (Assefa, Zerfu and Tekle., 2014; Solomon, 2010,).

2.6.4 Definition of MSE in Ethiopia

In Ethiopia two different definitions of MSE were being used till 2011 GC (FDRE, 2011). These are:

- The 1998 definition of MSE development strategy, and
- Definition given by CSA

The 1998 definition categorized an enterprise as micro if its paid up capital is less than or equal to 20,000 ETB. Similarly, an enterprise is considered small when its paid up capital is less than or equal to 500,000 ETB. The limitation of this definition is that it does not provide information on job creation, size and asset base. This is because employment and asset ownership are not part of the definition. Secondly, the definition does not differentiate between manufacturing (industry) and services. Thus, based on the above mentioned reasons the existing definitions of the sector should be reviewed on international experience and current process of the sector basis.

The CSA conducts survey on small scale industries. It has conducted surveys for the years 2001/2, 2005/6 and 2007/8. However, CSA adopts its own definition which is not well aligned with the MSE policy and the new definition. Hence, the data it collects is less useful in terms of analyzing the MSE policy. CSA's definition is based on the size of employment and extent of automation (Assefa, Zerfu and Tekle, 2014). Hence, according to CSA,

- Large and medium scale manufacturing enterprises have been classified as establishments with more than ten employees using automated machinery.
- Small and medium enterprises are establishments that engage less than 10 persons using power driven machinery.

- Cottage/handicrafts are household type enterprises located in households or workshops normally using own or family labour and mostly manual rather than automated/mechanical machinery

The limitations of the CSA definition are, it ignores the size of capital and the sectors outside manufacturing.

The 2011 improved definition of MSE in Ethiopia: Based on the gathered experience, by identifying the gaps of the existing definition of MSE, ignoring the size of employee and by taking total asset as criteria and by dividing it into industry and service sector; and considering the coming 5 years inflation and fluctuation/irregularity of currency the improved definition is presented as follows.

For micro enterprises:

- Under industry sector (manufacturing, construction and mining): An enterprise operates with 5 people including the owner and/or their total asset is not exceeding Birr 100,000 (one hundred thousand).
- Under service sector (retailer, transport, hotel and Tourism, ICT and maintenance service): It operates with 5 persons including the owner of the enterprise and/or the value of total asset is not exceeding Birr 50,000(fifty thousand).

For Small enterprises:

- Industrial sectors (manufacturing, construction and mining): It operates with 6-30 persons and/or with a paid up capital of total asset Birr 100,000(one hundred thousand) and not exceeding Birr 1.5 million.
- Service sector (retailer, transport, hotel and Tourism, ICT and maintenance service): It operates with 6-30 persons or/and total asset, or a paid up capital is with Birr 50,001 and not exceeding Birr 500,000.

When a ambiguity is encountered between manpower and total assets as explained above, total asset is taken as primary yardstick (see **Table 5**).

Table 5: The 2011 definition of MSE in Ethiopia

Level of the enterprise	Sector	Human power	Total asset
Micro enterprise	Industry	≤5	≤100000(\$6000 or E4500)
	Service	≤5	≤50,000(\$3000 or E2200)
Small enterprise	Industry	6-30	≤birr 1.5 million (\$9000 or E70000)
	Service	6-30	≤birr 500,000(\$30000 or E 23000)

Source: FDRE (2011)

2.6.5 Challenges of MSEs in Ethiopia

Despite the strong contribution of MSE in the Ethiopian economy, MSEs have been performing below capacity and their growth has been severely constrained by a number of factors (FDRE 2011 and Assefa, Zerfu and Tekle, 2014):

- 1. Challenges related to finance supply:** supply of credit is much smaller than demand. MFIs have only met about 50% of the demand for finance. Given that the prices of goods and services have been increasing, the real value of the loan is so small and does not provide MSEs much leverage. Ineffective and inefficient service in delivering and collecting loan due to capacity limitation of microfinance institutions in delivering and collecting credit /loan, Failure in creating awareness that help to identify competent clients before supplying credit and capacity limitation to provide training, produce business plan, and facilitate production and sales sites, Violating principles and systems of saving and credit that let factors of dependency, Failure in working for sustainable and quality capacity building
- 2. Production and sales cluster development:** Access to working and sales premises are also the other challenges to MSEs operating in the country. Constructing production and sales cluster development without master plan, absence of plan map, uniformity in design, unfulfilled infrastructure, and mismatch in size between enterprises and buildings. Even though the government pays due attention on the construction and expansion of working shades, the implementation has its own drawback. The working premises that are constructed to the manufacturing MSEs are located far from large and medium enterprises' industry zones. This has created problem to integrate or network MSEs with large and medium manufacturing enterprises. Moreover, the size and quality of the constructed

working premises are not suitable for production and technological advancement. Many MSEs meeting the graduation criteria do not graduate for the mere fact that once they graduated, they will be forced to leave their current working space leaving the MSEs with no option but to remain small all the time. Many MSEs use their workshops as sales outlets as well. However, some MSEs are involved in businesses that require them to go out to the market and sell their products. Many MSEs sell to retailers and wholesalers reducing their profit margins which they could have garnered if they were to sell their products

3. **Market linkages:** MSEs have failed to serve their debts timely; their products could not be sold or are sold at loss. Rent seeking behaviors observed on both the MSEs and the bureau officials have exacerbated the market linkage problems. Most of the government induced linkages which target holidays and festivities create only temporary jobs. Furthermore the lack of detailed support packages and their poor implementation coupled with poor access to market information are hampering the development of MSEs. Most market supply provisions are government dependent that does not enable MSE to be competent independently. Most MSE are not competent in production and service they supply
4. **Technological development and growth:** Failure of TVET to develop sensitizing on technology transfer and capacity/gap problem with experts in developing and disseminating technology, absence of readiness to accept and use new technology and readiness for change beside MSE.
5. **Licensing and registration challenges:** Some of the reasons attributed to the informality are high transaction costs during licensing, contraband, illegal under invoicing of imports. The bureau has no support scheme for informal firms till recently where informal firms are organized and being provided with working space and stringent government control of informal firms have forced some to go formal.
6. **Human Resource Development:** Lack of self reliance spirit and innovative culture for job creation with actors, absence of attitude towards job creation/innovation and initiation with TVET teachers, Lack of integrated work between MSE development agencies and TVET agencies, failure in providing trainings on the basis of need/interest and result oriented, and, weaknesses of TVET in observation efficiently

2.6.6 Environmental Sustainability and policy framework in Ethiopia

The most important environmental problems in Ethiopia include climate change, land degradation, overgrazing and deforestation, indoor air pollution and water pollution. Other, important environmental problems include loss of biodiversity and ecosystem services, spread of invasive alien species, urban outdoor air pollution (mainly in Addis Ababa), and toxic household wastes. Over the last two decades, the Ethiopian government has put in place a number of policies, strategies and laws that are designed to support sustainable development. The country has developed and implemented a wide range of legal, policy and institutional frameworks on environment, water, forests, climate change, and biodiversity (Cesar and Ekbom, 2013).

Ethiopia is one of the most environmentally degraded regions in the world and struggles with deforestation, soil erosion, loss of biodiversity, and declines in soil fertility and water quality. The Ethiopian government recognizes the vital link between environmental degradation and the livelihoods of its citizens. The 1997 Environmental Policy of Ethiopia stated “natural resources are the foundation of the economy”. With an economically beneficial solution to these environmental problems, collaborative management among stakeholders is possible. Given the state of the environment and Ethiopia’s economic goals, small, for-profit, environmental business may be an effective model for advancing environmental causes (Lee, 2012).

An Environmental Impact Assessment (EIA) is a tool used for an environmental assessment of individual projects (e.g. dam, mining facility etc.) to ensure that the environmental implications are taken into account before decisions are made. In Ethiopia, the EIA Proclamation of 2002 and the procedural guidelines developed by EPA sets the framework for EIA processes. Sufficient EIA capacity in the government and among external EIA experts (mostly consultants) is a constraint. In addition implementation and follow-up of EIAs is still weak. To meet the legal requirement of EIA capacity both in terms of institutional capacity, human skills, and financial measurements needs to be strengthened. Moreover, there is a lack of awareness and widespread misconceptions about EIA in Ethiopia; some even consider EIA as an obstacle to development activities. Moreover, public participation is included in the EIA proclamation but in reality public participation in EIA processes is weak mainly due to lack of clear guidelines and awareness people seldom receive enough information regarding the process (Cesar and Ekbom, 2013).

With regard to Goal 7 of the MDGs, environmental sustainability has become a particularly critical issue for Ethiopia, especially since the majority of the poor depend directly on the natural environment for their livelihoods. There exist three key elements under Goal 7 that are more relevant to the case of Ethiopia: (i) access to safe drinking water; (ii) reversing soil and forest degradation; and (iii) improving the conditions of urban slum-dwellers (MOFED, 2010).

The focus of the government, during the PASDEP period and beyond has been in regard to urban development, is on support to small and medium scale enterprises, the expansion of micro-financial institutions and community based urban works programs. Moreover, to improve the urban living environment and urban poverty, the government has introduced a number of interventions that include reducing urban unemployment, providing support for small and micro enterprises through various programs such as micro-finance institutions and micro-enterprises, pursuing improved urban land management, the implementation of solid waste disposal and water-borne sewage disposal systems, as well as improving rural-urban linkages (MOFED, 2010).

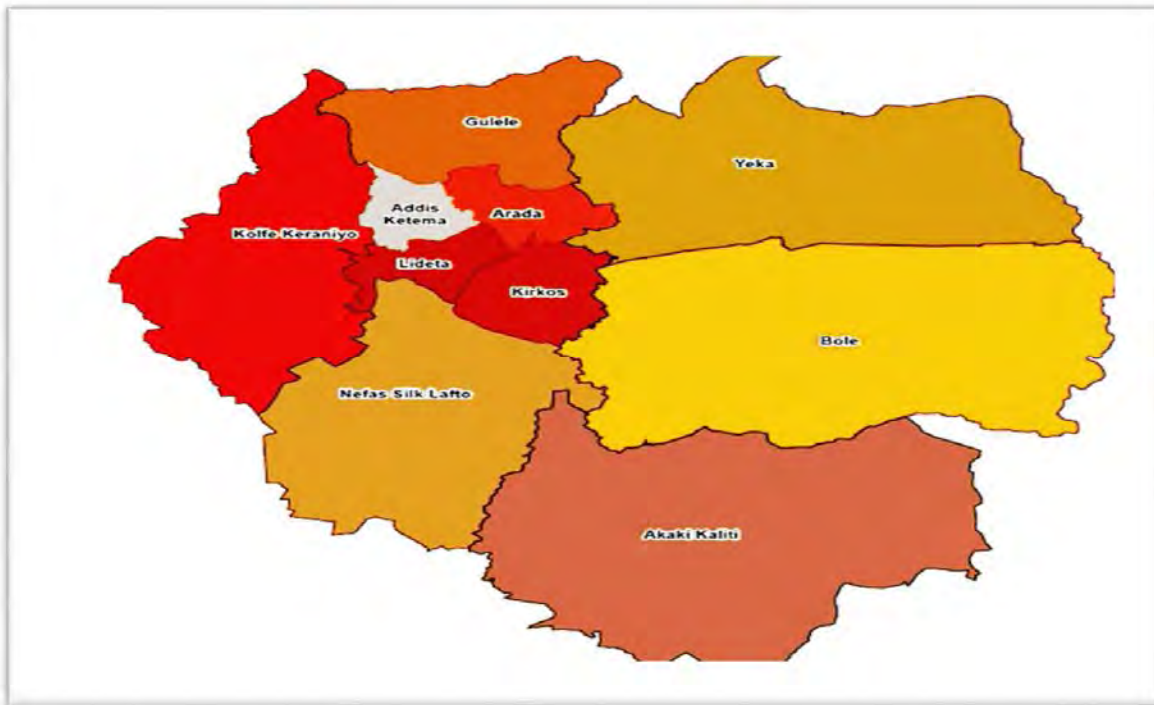
Ethiopia's high ambitions and efforts to promote sustainable development are also manifested by the establishment of the national strategy Climate Resilient Green Economy (CRGE). The strategy constitutes a particularly promising and important initiative to promote resource efficient, low-polluting alternatives to business-as-usual economic growth, which entails significant environmental risks such as continued reliance on, and use of, polluting sources of energy, erosive agriculture, non-sustainable forestry, and depletion of natural capital in sectors like mining and construction. However, Ethiopia faces many challenges in terms of lack of human and financial capacity, green technology know-how and proliferation. Environmental governance needs to be improved at all levels. Weak capacity in environmental management, and insufficient law enforcement and monitoring are key challenges that need to be addressed in order to meet MDG targets (in particular MDG 7 on environmental sustainability) and move towards a greener economy (Cesar and Ekbom, 2013).

2.6.7 Overview of the Study Area

Addis Ababa is the largest as well as the dominant political, economic, cultural and historical city of the country established in 1887 by emperor Menilik II. It has the status of both a city and a state. It is the capital of federal government and a chartered city. The total population of Addis Ababa was estimated to 3,048,631 of whom 1,595,968 were females and the rest 1,452,663 were males. This is 3.71 percent of Ethiopian population of 84.3 million and 22.42 percent of urban population (14 million). For administrative purpose currently the entire city is divided into 10 sub-city (see **Figure 5**). In those 10 sub-cities a total of 99 woredas are currently found. The 10 sub-cities found in city are Akaki Kaliti, Nefas Silik, Lafto, Kolfe Keraniyo, Gullele, Lideta, Kirkos, Arada, Addis Ketema, Yeka and Bole (BoFED, 2013).

With regard to population density of the sub-cities, it varies from sub-cities to sub-cities. The densest population of Addis Ababa City in the year 2004 E.C was Addis Ketema sub-City (31,646.21 people/km sq.) followed by Lideta and Arada 5,645.61 people per km sq. which is one of the densest populated areas in the country. For administrative purpose the sub-cities are divided into Woreda's and providing basic public services at local level

Figure 5: Administrative map of Addis Ababa



Source: BoFED (2013)

Addis Ababa is the highest city in terms of size, microenterprise concentration, and urban population in Ethiopia. The unemployment rate is expected 31.46%. Addis Ketema and Gullele sub-city with dense population are faced with socio-economic problems as unemployment, housing problem, inadequate market infrastructure, problem of waste disposal, shortage of recreational center for the youth and the inhabitants migrate to find job. Most of the populations of the sub cities fall in medium and lower living standards, and are engaged in low standard informal activities (Kidane et al, 2015, Gullele sub city Strategic plan, 2008, Addis Ketema sub city Strategic plan, 2008).

One of the urban poverty eradication strategy of the government of Ethiopia in urban areas is creating job opportunity by organizing unemployed youth and other unemployed members of society in MSEs. In Addis Ababa, Micro and Small Enterprise Programs started since year 1996. The current socio economic infrastructure facility does not comply with the increasing number of unemployed people, therefore, taking the fact into consideration the city administration has given due emphasis for the development of these sectors by providing training, improved technologies as well as giving them priority to get access to credit facilities and market (Kidane et al, 2015, BoFED, 2013).

2.7 Summary

This session provides the summary of the chapter based on the results from the review on MSEs and Sustainable development.

MSEs could be defined taking into consideration quantitative, qualitative and both quantitative and qualitative aspects. The most commonly used quantitative criteria are number of employees, turnover, total balance sheet or a combination of the last two while qualitative criteria embodies issues of leadership and inter dependence. This study is based on the 2011 definition for MSE in Ethiopia by the FeDRE which is based on number of employees and total asset.

Sustainable development is a development that satisfies the needs of the present generation without compromising the satisfaction of the needs of future generations. SD encompasses economic, social and environmental or ecological considerations. These three objectives of SD are also known as the Triple Bottom Line. The TBL consists of economic progress or development, social justice or equity and environmental preservation or protection. SD connects

the dots between the key issues of our time i.e. poverty reduction; job generation; inequality; climate change; environmental stress; water, energy and food security.

MSEs play a leading role in SD. They are important to almost all economies in the World especially to those in developing countries since these enterprises are an effective antipoverty programme and one of the building blocks of innovation and sustainable growth. SD is highly demanding on manufacturing firms, including MSEs, as they account for a large part of the world's consumption of resources and generation of waste). The MSE sector in Ethiopia is exposed to number of challenges related to financial supply, production development, market linkages, licensing of enterprises, technological development and human resource development. Services and agriculture sector are the backbone of the Ethiopian economy and the manufacturing share in GDP is rather very low. The low share of the manufacturing sector, a crucial sector in transforming an economy, is a concern for the Ethiopian Government.

GRI is a sustainability assessment framework that provides an internationally acceptable framework for reporting on economic, social and environmental considerations. There are three levels on the system to fit unique circumstances and issues in different industry sectors titled as C, B and A. In this study the indicators as per the beginner report level C are used. Thus major aspects considered from the economic dimension are economic performance and market presence; environmental dimension are minerals, energy, water and emissions, effluents and wastes; and social dimension are employment, occupation health and safety, training and education and diversity and equal opportunity are economic performance, market presence, material, energy, water, emissions, effluents and wastes.

There are factors which contribute to the adoption of sustainability practices with the business. This includes increased profitability through eco-efficiency, reputation protection, new market creation, leadership, legislation, employee attraction among others. Given the low uptake of sustainability measures within MSEs, it is clear that the benefits outlined above are insufficient for many MSEs to overcome the barriers in implementing sustainable business practices. The barriers include lack of internal expertise, lack of support, time pressure, perception of higher costs and low awareness of environmental impacts and risks. The extent to which these factors affect MSEs in the study area is assessed in this research.

Chapter 3: Methodology

The detailed description of the activities implemented to achieve the ends specified in the objectives is examined. The research design, study population, sampling procedures, case study selection, data collection techniques and data analysis will be discussed.

3.1 Research Design

Among different research design, both qualitative and quantitative exploratory and analytical research design is used for the purpose of this study which enable the researcher to interpret the finding adequately and accurately.

Exploratory research is used because of the lack of available empirical and statistical information about the challenges of MSEs to contribute to SD in Ethiopia. Creswell (2003) points out that exploratory research is conducted when there is a lack of sufficient information about the topic, and goes on to state that such exploratory studies may show if the topic is worthwhile or feasible or used to familiarize the researcher with the context and guide the selection of data elicitation method to be used. He states that the application of the exploratory method is conducted in two phases. The first is a qualitative stage followed by a quantitative phase. The aim of the first phase is to explore the phenomenon under study, develop and test the data collecting instrument, and use the result to develop the quantitative phase. This is a mixed method research approach.

Analytical research is used to assess characteristics of MSEs and their impacts to SD. Kothari (2004) indicated that analytical research aims at critical evaluation of the given phenomenon in fact, figures and narrative information i.e it looks beyond the facts and figures already collected and assumes that behind the accumulated data there is something more important and revealing than the facts and figures.

The study assesses manufacturing MSEs in Gulele and Addis Ketema sub-city of Addis Ababa to study the challenges they face in contributing to SD. Both qualitative and quantitative analysis is performed on the basis of the information gathered from primary and secondary source of data. .

3.2 Study Population

The population of the research is the 14,033 MSEs found in Addis Ababa and the enterprises provide job opportunities for 54,655 people as per the data gathered from the Addis Ababa Micro and Small Enterprise Development Agency (AAMSEDA). The MSEs are located in the 10 administrative sub-cities of Addis Ababa. The MSEs operate in the manufacturing, service, construction, urban agriculture and trade sectors.

3.3 Sampling

Due to time and financial constraints the whole population couldn't be considered in the study. The city is classified into 10 administrative sub-cities. The case study covers an assessment of manufacturing MSEs in Gulele and Addis Ketema sub-cities. The manufacturing sector is selected as manufacturing firms highly influence sustainable development as they account for a large part of the world's consumption of resources and generation of waste (IEA 2007). The two sub-cities are selected due to larger number of employees in the manufacturing MSE sector as compared to other sub-cities and the role of MSEs in job creation is one advantage often used to advocate the promotion of the MSEs sector as a means to achieve sustainable development (International Labour Office, 2007).

According to AAMSEDA data updated to year 2014, there are 702 registered manufacturing MSEs and employs 5986 people (64% male and 36% female). The manufacturing MSEs subsector engagement accounts: 34% in textile and garment, 16% in leather and leather products, 26% in food processing and beverage, 9% in metal works and engineering, 11% in wood works, 4% in wood and metal combined and 1% in agro processing. Wood and metal combined subsector and agro processing subsector percentage share are insignificant and thus is not considered in this study. This study considers the 5 sectors that accounts for 667 (95%) of manufacturing MSEs and employs 5882 people (64% male and 36% female).

As with most other research, a confidence level of 95% is assumed. For 95% confidence level (i.e. significance level of $\alpha = 0.05$), $z = 1.96$. Based on the need to find a balance between the level of precision, resources available and usefulness of the findings, margin of error to be tolerated (c) of $\pm 10\%$ is also assumed for this research. When determining the sample size for a

given level of accuracy, the worst case percentage picking a choice (p) should be assumed. This is given as 50% or 0.5 (C.R.Kothari 2004 and Creative Research System 2012).

$SS = Z^2 * p(1-p) / c^2$ where SS is sample size, Z is standardize variable, P is percentage picking a choice expressed as a decimal, C is margin of error to be tolerated expressed as a decimal.

Thus $SS = 1.96^2 * 0.5(1-0.5)/0.1^2$ and **SS = 96.04**

Thus the required minimum sample size is 96 manufacturing MSEs and 96 employees. However, the figure requires a further correction for finite populations:

The formula is: **new SS = SS/(1+(SS – 1/pop))** where pop is population

Thus new SS for MSEs are $96.04 / (1 + (96.04 - 1)/667)) = \mathbf{84.06}$

And, new SS for employees are $96.04 / (1 + (96.04 - 1)/5882)) = \mathbf{94.51}$

Thus, the allowable sample size is 84 micro and small manufacturing enterprises and 95 employees for a desired level of confidence and precision. The sample size of 120 is used for the enterprises and employee to collect data from the two sub-cities to compensate for no response rate. The enterprises and the employees are then proportionally stratified according to sub sectors and Woreda in the sub-cities. A random stratified sampling technique was applied in selection of the enterprises and employees in the Woredas of the two sub-cities.

The 120 sample sizes of both MSEs and for the employees were allocated equally i.e 60 in each case among the two sub-cities. Then proportionally to the sub-sector and number of employees the sample was taken. Of the 120 sample attempts from both respondent category, questionnaire is successfully collected from 106 entrepreneurs and 108 employees indicating in significant unresponsive rate of only 9%. This will not affect the study as the researcher distributed the questionnaire for more respondents than the calculated sample size and the response number is still above the calculated sample. Please refer to **Table 6³** for the proportional distribution of sample plan by sub-sector and respective employees.

³ The number of manufacturing MSE subsector in the two sub-cities is obtained from AAMSEDA database updated to year 2014G.C.

Table 6: Sample distribution proportional to sub-sectors and employees number

Manufacturing sectors	MSE	Sub	Total no.	Sample size	Employees			Sample Size
					Male	Female	Total	
Gulele sub-city								
Textile and garment			168	32	2122	341	2463	44
Leather and leather products.			21	4	70	35	105	2
Food processing and beverage			63	12	99	302	401	7
Metal works and engineering			22	4	68	31	99	2
Wood works including furniture and ornaments service			40	8	238	73	311	6
Sub total			314	60	2597	782	3379	60
Addis Ketema sub-city								
Textile and garment			69	12	522	309	831	20
Leather and leather products.			88	15	245	47	292	7
Food processing and beverage			118	20	76	914	990	24
Metal works and engineering			38	6	162	17	179	4
Wood works including furniture and ornaments service			40	7	177	34	211	5
Sub total			353	60	1182	1321	2503	60
TOTAL			667	120	3779	2103	5882	120

The two sub-cities, Gulele and Addis Ketema each have 10 administrative Woredas. Thus 12 samples from each Woreda in the sub-cities proportionally disaggregated by the sub-sectors for both MSEs and employees were taken randomly. It was planned to use the data list obtained from AAMSEDA in selecting the sample randomly from each Woreda. However, it was not practical as the MSEs are found scattered and it is difficult to obtain their locations with the limited time, human resource and financial constraints. The researcher has tried to include equal number of male and female respondents for the employee to obtain gender disaggregated data from the randomly selected enterprises.

3.4 Data Collection Techniques

In order to achieve the objectives of the study, both primary and secondary data was used. The secondary data is obtained from such sources as published and unpublished documents to be collected from pertinent institutions as A AMSEDA, Federal Micro and Small Enterprise Development Agency (FeMSEDA), Central Statistics Agency, different research papers and internet.

The primary data was collected using questionnaire, in depth interviews and observation methods. Combining both quantitative and qualitative research methods has proven to be more powerful than a single approach (Moffatt *et al.*, 2006). Triangulation is a process of using more than one form of research method (Brannen *et al.*, 1992). The main aim of using triangulation method is to improve the reliability and validity of the research outcomes.

i. Questionnaire survey

Data was collected using questionnaire from the owner of the MSEs and employees. Two questionnaires were designed to collect data from the owners and employees. For clarity the questionnaire for entrepreneur has been framed into seven categories that include characteristics of the entrepreneurs, characteristic of the respondents, economic impact, social impact, environmental impact, drivers and barriers of sustainable business practices. Mainly closed ended questions are used in both the questionnaires with very limited open ended question in the entrepreneur questionnaire.

In order to evaluate the clarity and comprehensiveness of the questionnaire, as well as the feasibility of the survey as a whole, a pilot survey was conducted. Pilot study was used to test the appropriateness of sustainability criteria or questions in the questionnaire and to get additional relevant information from the respondents. Thus modifications to contents of the questionnaire were made based on the pilot survey and the average time each questionnaire will take was also tested.

Three individuals, including the researcher have participated in data collection. Mostly based on preference of the respondent face to face interview was the method used in administering the questionnaire. This has allowed to higher response rate. Otherwise the questionnaire was left with the respondent and collected based on the appointment set by the respondent. A

questionnaire for the entrepreneur took on average 30 minutes to complete and for the employee it took 15 – 20 minutes.

ii. In-depth Interview

The qualitative information in this research was obtained through in-depth interviews. In-depth interview with semi-structured format was conducted with three higher level officials of FeMSEDA and AAMSEDA and six manufacturing MSEs Experts of AAMSEDA, Gulele and Addis Ketema sub-city to explore their view and perspectives with regard to MSEs contribution to sustainable development in the city. The discussions made has clarified, enriched and verified the data obtained through the questionnaire.

3.5 Data Analysis

The data obtained from primary and secondary sources was processed, classified and tabulated using computer software. Descriptive method was employed to analyze the data and interpret the results in quantitative and qualitative ways. Data was analyzed using different forms as tables, figures, indices and graphs. In dealing with the qualitative analysis based on the evidence collected from the different sources, an effort was made to carefully understand and interpret the information to use it together with the quantitative data. Case studies were documented and a photo camera was employed to keep record of observation to be integrated in the research.

Chapter 4: Discussion of the Research Findings

This chapter presents an analysis and interpretation of data and the major findings of the study obtained through questionnaire from entrepreneurs and employees of sample sub-cities. Data obtained from interview were carefully studied and presented, and were used to substantiate and crosscheck with the responses collected using the questionnaire. The analysis and interpretation of data is made in relation to basic research question and hence the discussion under this session includes characteristics of the respondents and enterprises, economic sustainability, social sustainability, environmental sustainability, drivers for sustainable business practices and barriers of sustainable business practices. Discussion of the findings is portrayed using graphs and tables.

4.1 Characteristics of Respondents

Based on sampling procedure that is described in the methodology of the study 106 questionnaires from entrepreneurs and 108 questionnaires from employees were gathered. 120 questionnaires were distributed in each case which is above the sample plan i.e. 100 to offset non-responses. The sample is proportionally taken from the five major sub-sectors of manufacturing i.e. textile and garment, leather and leather products, wood works including furniture and ornaments, food processing and beverage and metal works and engineering. The characteristics of respondents for both entrepreneurs and employees are discussed below:

4.1.1 Characteristics of Entrepreneur Respondents

Table 7 depicts the characteristics of entrepreneur respondents. The respondents include 53% of male respondents and 47% of female respondents. Though in aggregation almost equal numbers of male and female respondents are obtained, there is great difference by sub – sectors except the textile sector where the respondents are 47% male and 53% female. The female respondent in the metal, wood, leather and food processing sub-sectors are 0%, 27%, 38% and 80% respectively. Although the participation of female in the leather sub-sector is considerable, it is insignificant in the metal and wood sub-sector.

As per the interview with the Woreda Experts it is revealed that female have less awareness on metal and wood sub-sectors as compared to food sub-sector where they are more attracted. Also due to labour intensive work they usually drop out soon from the metal and wood sub-sectors.

Table 7: Characteristics of entrepreneurs

Category	Textile and garment		Leather and leather products		Wood works including furniture and ornaments service		Food processing and beverage		Metal works and engineering		total	
	NO	%	NO	%	NO	%	NO	%	NO	%	NO	%
1. Sex												
Male	16	48%	10	63%	8	73%	6	20%	16	100%	56	53%
Female	17	52%	6	38%	3	27%	24	80%	0	0%	50	47%
Total	33	100%	16	100%	11	100%	30	100%	16	100%	106	100%
2. Age of the Entrepreneur												
Below 25 years old	4	12%	4	25%	0	0%	8	27%	0	0%	16	15%
26 – 35 years old	10	30%	8	50%	7	64%	14	47%	8	50%	47	44%
36 – 45 years old	19	58%	4	25%	1	9%	6	20%	4	25%	34	32%
Above 46 years old	0	0%	0	0%	3	27%	2	7%	4	25%	9	8%
Total	33	100%	16	100%	11	100%	30	100%	16	100%	106	100%
3. Level of education												
No formal education	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Primary school 1-4	3	9%	0	0%	1	9%	4	13%	1	6%	9	8%
Primary school 5-8	3	9%	2	13%	0	0%	2	7%	1	6%	8	8%
Secondary school	16	50%	9	56%	4	36%	16	53%	2	13%	47	45%
Vocational school	8	25%	1	6%	2	18%	2	7%	10	63%	23	22%
University / college	2	6%	4	25%	4	36%	6	20%	2	13%	18	17%
Other	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
4. Form of ownership												
Sole proprietorship	4	13%	4	25%	3	27%	8	27%	8	50%	27	25%
Partnership	16	50%	3	19%	2	18%	8	27%	2	13%	31	30%
Cooperative	12	38%	9	56%	6	55%	14	47%	6	38%	47	45%
Other	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	32	100%	16	100%	11	100%	30	100%	16	100%	105	100%
5. Date of establishment												
Less than 2 years	6	18%	4	31%	3	27%	5	17%	2	13%	20	19%
2 – 5 years	12	36%	3	23%	3	27%	14	47%	6	38%	38	37%
6 – 10 years	6	18%	5	38%	4	36%	8	27%	4	25%	27	26%
Greater than 10 years	9	27%	1	8%	1	9%	3	10%	4	25%	18	17%
Total	31	100%	15	100%	11	100%	30	100%	16	100%	103	100%

Source: Field survey (2015)

On the contrary male are less attracted to the food sub-sector as compared to female due to the society trend where male are less engaged and experienced in cooking food in the house. The

entrepreneurs have gained primary relevant experience from government or organization training (26%), non-government organization training (6%), from previous experience as an employee (25%), from school (9%), inherited from family (23%) and through self effort through gathering information (11%).

A 38 year old female who is an entrepreneur in the wood sub-sector in Gulele sub-city said that “*I have been working here for five years. I enjoy my work and I am able to gain attractive profit. In my opinion I can’t see why female couldn’t be engaged in this business as long as she has the desire for it. Since the work is done by team work we could support each other in executing the job. It is very interesting and I advice female to start looking for it as it has high benefit.*”

In relation to age, the majority of entrepreneurs are in two age groups, 26 – 35 and 36 – 45, representing 44% and 32% of respondents respectively. The below 25 years age group is the third largest group accounting for 15%, whereas the above 46% accounted only for 8% of the respondents. This shows that 92% of the respondents are young entrepreneurs.

In many countries, the current level of basic education is so low that it severely hinders development options and plans for a sustainable future. A higher education level is necessary to create jobs and industries that are "greener" (i.e., those having lower environmental impacts) and more sustainable. Generally, research shows that basic education is key to a nation's ability to develop and achieve sustainability targets (UNESCO, 2006). According to the survey, all the entrepreneurs have followed formal education stream and 84% of them have completed secondary education and above while 16% have enrolled in primary level of education. Higher education level i.e vocational school and university / college level is attended and completed by 22% and 17% of respondents respectively.

The MSE in the sample areas has form of sole proprietorship, partnership and Cooperative. The term “Partnership” in Amharic (ሽርክና) is defined as “an enterprise established by more than one person with legal status. The responsibility/liability is equal for all the partners irrespective of their share and can consist of 2 or more people. Cooperative or (የህብረት ስራ ማህበር) is a society established by individuals on voluntary basis to collectively solve their economic and social problems. It is also an enterprise owned by a group of persons who take full part in the activity of the enterprise by coordinating their knowledge and assets. co-operative society can

contain 10 or more members. On the other hand, **sole proprietorship** is defined as the **sole trader** or simply a **proprietorship**, which is a type of business enterprise or entity that is owned and run by one individual. In **sole proprietorship** there is no legal distinction between the owner and the business. The owner receives all profits (subject to taxation specific to the business) and has unlimited responsibility for all losses and debts (FeDRE 2013). With regard to field survey result, 45% and 30% of the enterprises are cooperative and partnership respectively where as 25% of respondents are sole proprietorship enterprises. The government highly encourages the partnership or cooperative form of business to bring together the skills, knowledge and capital of individuals to enhance their business capacity.

The age of the most of the enterprises (83%) are below 10 years of age and the majority 37% and 26% of the respondents are in the range of 2 to 5 years and 6 to 10 years old respectively. This is because most enterprises have been established since 1999 G.C because of the attention given to the sector specifically after the 1997 MSE strategy and the recent development of the support like working premises and loan facilities by the MFIs. 17% of the enterprises have longer period of experiences and are greater than 10 years of age.

4.1.2 Characteristics of Employee Respondents

Table 8 shows the characteristics of employee respondents. The key objective of the MSE sector is to create job opportunity for unemployed people as an entrepreneur and employee of the enterprises. Data is collected from 47% male and 53% female employees of 108 respondents. Same as the entrepreneur, though the total figure show equal gender disaggregated data, there is great variety among the sub-sectors. There is lower number of female employees in metal and wood sector (18% and 22% respectively), higher number of female employees in food and leather sector (78% and 52%) and almost equal number of male and female respondents for textile sector.

The employees are much younger than the entrepreneurs where 84 % of the respondents are below 35 years of age and 14% are in a age range of 36 – 45 years old and only 2% of the respondents are above 46 years of age. Thus the MSE sector has created job opportunity for the young generation. The marital status of the majority of the respondents, 71% are single and 29% of the respondents are married.

The education profile of the employees is level below than the entrepreneurs. Though all employees have attended formal education, only 15% of the employees have completed higher education level as vocational school or university / college. The other 40% and 44% are in primary and secondary schools respectively. For this reason, the data collectors used to interview the questionnaire face-to-face especially for employees in primary education level to explain the questions and support them in filling the questionnaire.

Table 8: Characteristics of employee respondents:

Category	Manufacturing sector										Total	
	Textile and garment		Leather and leather products		Wood works service		Food processing and beverage		Metal works and engineering			
	NO	%	NO	%	NO	%	NO	%	NO	%	NO	%
1. Sex												
Male	27	48%	3	33%	7	78%	5	22%	9	82%	51	47%
Female	29	52%	6	67%	2	22%	18	78%	2	18%	57	53%
Total	56	100%	9	100%	9	100%	23	100%	11	100%	108	100%
2. Age												
Below 25 years old	13	23%	8	89%	7	78%	14	61%	5	45%	47	44%
26 – 35 years old	29	52%	0	0%	2	22%	7	30%	6	55%	44	41%
36 – 45 years old	14	25%	1	11%	0	0%	0	0%	0	0%	15	14%
Above 46 years old	0	0%	0	0%	0	0%	2	9%	0	0%	2	2%
Total	56	100%	9	100%	9	100%	23	100%	11	100%	108	100%
3. Marital status												
Single	39	70%	7	78%	5	56%	17	74%	9	82%	77	71%
Married	17	30%	2	22%	4	44%	6	26%	2	18%	31	29%
Widow	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Divorced	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	56	100%	9	100%	9	100%	23	100%	11	100%	108	100%
4. Level of education												
No formal education	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
primary school 1 - 4	12	21%	2	22%	2	22%	9	39%	0	0%	25	23%
Primary school 5 - 8	9	16%	1	11%	2	22%	5	22%	1	9%	18	17%
High School	27	48%	4	44%	3	33%	6	26%	8	73%	48	44%
Vocational school	0	0%	2	22%	1	11%	2	9%	2	18%	7	6%
University / college	8	14%	0	0%	1	11%	1	4%	0	0%	10	9%
Other specify	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Total	56	100%	9	100%	9	100%	23	100%	11	100%	108	100%

Source: Field survey (2015)

4.2 Economic Sustainability

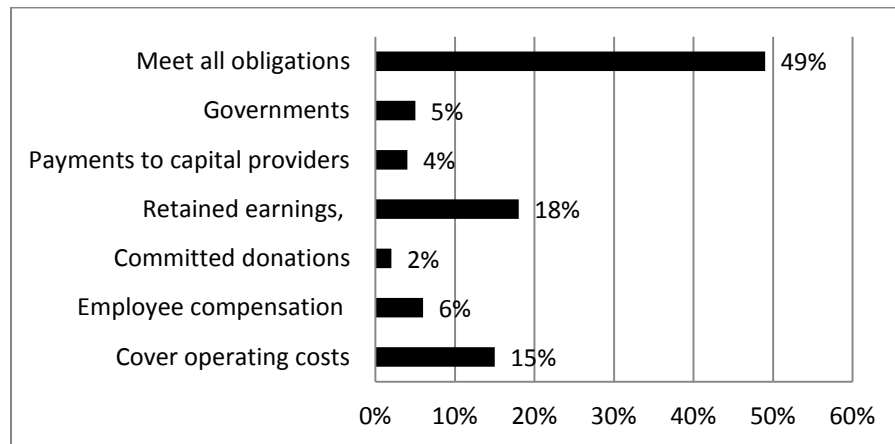
The economic dimension of sustainability concerns the organization's impacts on the economic conditions of its stakeholders and on economic systems at local, national, and global levels. The Economic Indicators illustrate flow of capital among different stakeholders; and main economic impacts of the organization throughout society (GRI, 2006). In this session the survey results are discussed based on the two major economic indicators: Economic Performance and market presences.

4.2.1 Economic performance

This category of Indicators addresses the direct economic impacts of the organization's activities and the economic value added by these activities. This includes direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments (GRI, 2006). This is relevant with the stakeholder theory of business firms i.e. recognizing the importance of wealth creation as well as the firm's relationships with its multiple constituent groups—shareholders, creditors, employees, customers, suppliers, regulators, and local communities—and impact on society at large.

From the survey result, as indicated in **Figure 6**, 51% of the enterprises couldn't meet one or more obligations in the previous fiscal year 2014/15 as planned while 49% of the enterprises have accomplished their obligations. The majority of the respondent 18% couldn't hold retained earnings as planned, 15% of the respondents couldn't cover the operating costs, 6% of the respondents couldn't pay employee compensation, 5% of the respondents was not having the capacity to pay government tax, 4% of the respondents couldn't pay for the shareholders and 2% of the respondent couldn't pay the committed donations. This shows that the firms' capacity is very low to generate and distribute value to its stakeholders.

Figure 6: Obligations the enterprise couldn't meet by percentage



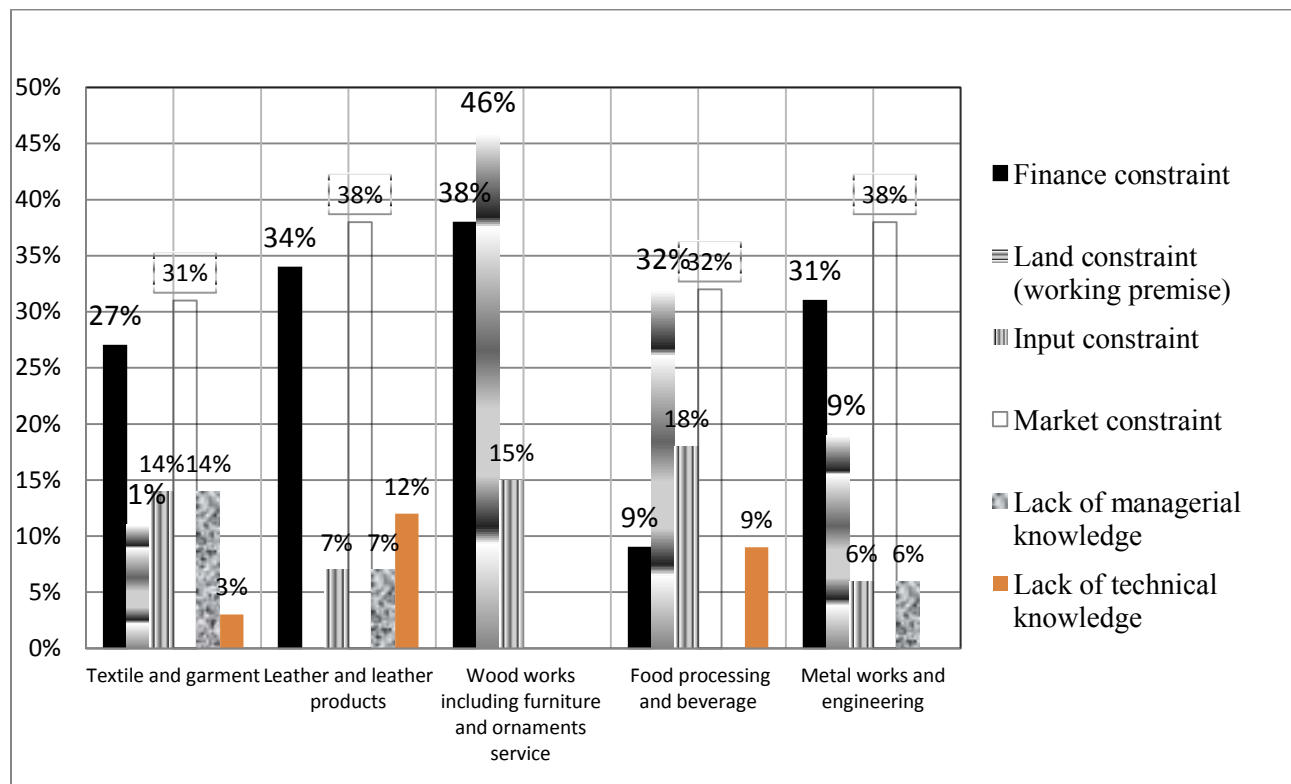
Source: Field survey (2015)

While the entry size of firms in Addis Ababa has increased over the last decade, the ability of these firms to absorb shock is limited. For example, the exit rate for firms established in early 2000s is higher than that of firms established in 1990s. For instance 60% of firms exit within the first three years of entry (World Bank, 2014).

Regarding the pattern of growth of the firm's 70% of firms indicate that they are growing while 16% and 14% of firms' growth are stagnating or declining respectively. Though the figure 30% firms are not growing is less than the World Bank exit figure 60%, still the figure is very significant and needs attention to solve their constraints.

The firms were asked about three major constraints that hinder their business growth. From the aggregated result the three major constraints of the firms are market constraint, finance constraint and land constraint that accounts for 31%, 25% and 18% of the respondents respectively. The fourth major constraint is input constraint and accounts for 13% of the respondents (see Figure7).

Figure 7: Constraints that hinder firms' growth



Source: Field Survey (2015)

The constraints to some extent vary between sectors. The major constraint for all sectors is market except for metal sector where they are mainly faced with land (working premise) constraint. Land is also equally major constraint for the food sector. Input constraint is one of the major three constraints for the food, textile and wood sector. For textile and leather sector, lack of managerial and technical skill is one of the major three constraints.

From the survey result, market is the major constraints that hinder the enterprises growth. Respondent were asked whether the sale of their product is as per their expectation. Only 53% and 6% of the enterprises are selling their products at expected level and above their expectation respectively while 40% and 3% of the enterprises sales are below expectation and no sale at all respectively. This shows the extent of market constraint the enterprises are facing.

The major marketing problems identified from the interview with the respective officials and the enterprise owners include:

- The working premises locations constructed by government are located far from main roads and it is not feasible to contact with potential buyers. The display facilities of the working premises are also not functional since potential buyers are not communicated and thus it is not being visited. As a woman, age 40, who is an employee of one of the display shops said *“The display shop is visited probably two times a year and the visitors are students who want to develop new skills. No potential buyers have yet visit the shop this year. Even the clothes which you see is displayed here for almost two to three years without any change”*.
- The entrepreneurs specifically in the textile sector though organized in cooperative or partnership form execute their business independently. They want to form the association since it is promoted by government and to get the working premise. The sole proprietors and these entrepreneurs are thus forced to engage in all business tasks as in manufacturing process and sell person which is inefficient. The entrepreneurs have low business skills in promoting themselves to the market.
- The focus for MSE is primarily to provide job opportunity for unemployed people. Then with short trainings the entrepreneurs will start their business. Thus, the entrepreneurs may not develop competitive skill in producing their products and compete with other manufacturers in the market including the private MSEs.
- The government prepares bazaars during festive i.e. three times a year in all sub-cities of Addis Ababa. The problem is that same face / people appear because the MSE entrepreneurs don't understand its benefit and will consider the bazaar only for sale purpose and not for promotion. Only those who have clearly understand the benefit of the bazaar will appear in the bazaar.
- The MSEs says that they are unable to compete with the informal sector that do not pay taxes (Value Added Tax or Turn over Tax) and can therefore sell similar goods at lower prices.
- The promotion of the MSE sector mainly focuses on job opportunity and poverty reduction than based on business perspective as quality of products. Thus, customers expect lower price of products as compared with the same products that is supplied in the market by the MSEs that are not under the support of FeMSEDA government structure.

Finance constraint is the second major constraint for the MSEs. The increase in raw materials and labour cost has left the entrepreneurs weak in running their business due to shortage of working capital. Access to credit from bank is not possible due to collateral requirements that are

above their capacity and high interest rate. To get loan MFIs has long and tight procedure to get finance when needed and with the required amount. Due to high market competition and price fluctuation the entrepreneurs has fear of the sales and profitability of the products.

Working premise (land) constraint is the third major constraint that hinders the growth of the enterprises. The working premises are both in the form of G+4 buildings especially for the textile and garment sector and in the form of sheds made from iron sheets for wood and metal work and food-processing sectors. The working premises for a specific sector can be found located close to each other or scattered here and there based on the availability of open space to construct them. The government considers the working premises that are found close to each other as clusters because enterprises that are operating in similar and closely related activities are operating in them. In Addis Ababa alone, where much of the cluster development initiative is implemented, a total of 2075 working premises were constructed from 2004 until 2011 with 23783 MSEs reported to have benefited (Ali, 2012). Though government has made efforts in solving working premise challenges of MSEs, the current problem is mainly the small space of the working premise allocated for each enterprise that limit the proper functioning and expansion of the enterprises as buying additional machines and limit the hiring of more employees.

Input constraint is the fourth major constraints that hinder growth of the enterprises. This is associated with the increase in the price of inputs. In the food sector, however, the inputs needed i.e sugar and oil are scarce in the market and purchase is made from local government office on limited basis. As a 38 year old woman in the food sector said *“lack of sugar and oil are main constraints for us. These inputs are only available in the Woredas where we purchase with fair price every two weeks. Sometimes it is not available and our option is only to quit our production. It is very difficult to get the inputs from private supplier and also the available products in the market are with unaffordable price.”*

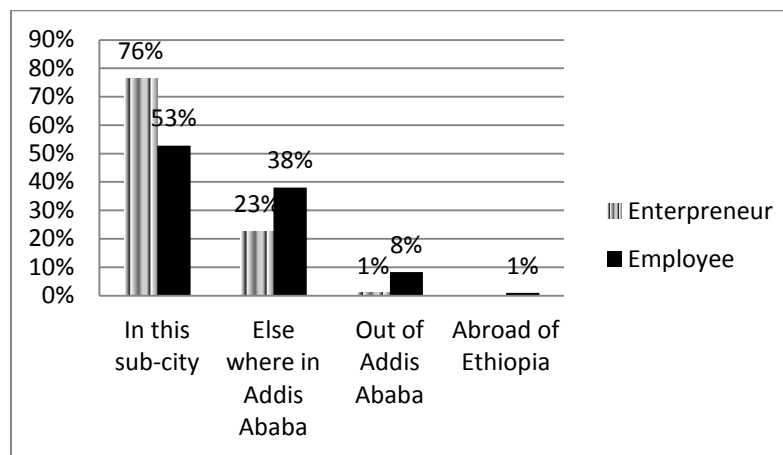
Lack of technical and managerial skills are one of the major constraints especially in the textile and leather sector. The enterprises are less competitive in technical and business related skill to have the potential to compete in the market with other private supplier and imported goods.

4.2.2 Market presence

These Indicators provide information about interactions in specific markets. These include Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation, and procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation (GRI, 2006).

The enterprises have benefited in providing jobs for local people. The sector has created job opportunity for those who lived in the sample sub-city. As shown in **Figure 8**, 76% of entrepreneur and 53% of employee respondents lived in the sample sub-city. The second major group of respondent, 23% entrepreneurs and 38% employees lived in other sub-city in the city.

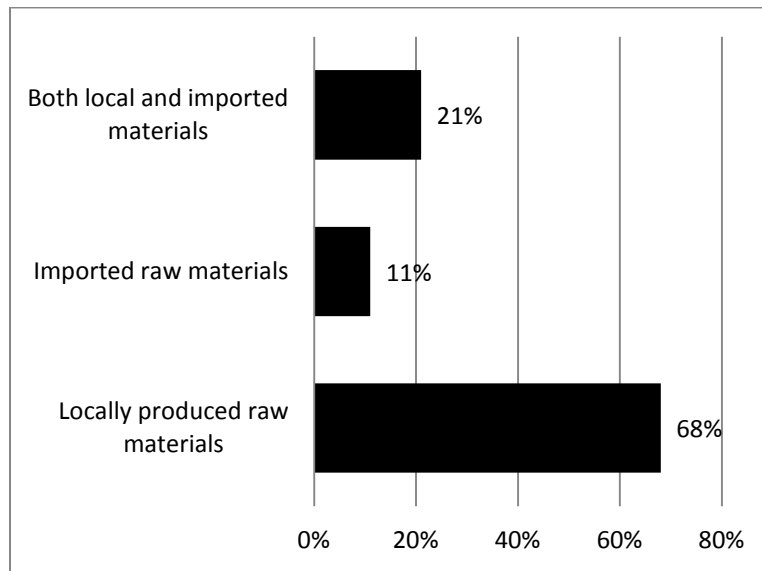
Figure 8: The entrepreneurs and employees living location by percentage



Source: Field Survey (2015)

As shown in Figure 9, the enterprises primarily are based on locally produced raw materials. 68% of enterprises use mainly locally produced materials and 21% of entrepreneurs use both local and imported materials while 11% use only imported materials. The competitive advantages of using local materials are higher quality (durability of the materials), lower price and high supply in the market as per 37%, 36% and 18% of the entrepreneurs.

Figure 9: Major source of raw materials by percentage



Source: Field survey (2015)

The entrepreneurs depend in imported materials since the imported materials have higher quality than the local materials, could easily be shaped and are more relevant for the final products and specific material are not available in the market.

The MSE sector final products also serve the need of the society where 49% and 46% of the enterprises sell their products in Addis Ababa only and in the national market including Addis Ababa respectively. This shows that the national market users are being served by locally manufactured products. The export trend of the MSE sector is very low where only 5% of entrepreneurs in the textile sector export their products. As per the interview with the government offices networking, technical skill development and quality enhancement should be done to enhance the manufacturers' capacity to compete in the export market.

4.3 Social Sustainability

The social dimension of sustainability concerns the impacts an organization has on the social systems within which it operates. The GRI Social Performance Indicators identify key Performance Aspects including surrounding labor practices. Labour practices and decent work performance indicators aspects include employment, diversity and equal opportunity, training and education and occupation health and safety (GRI, 2006).

4.3.1 Employment and equal opportunity

The MSE main objective is to create job opportunity for the unemployed citizens. It has created employment opportunity for the enterprise shareholders that are organized in the form of sole proprietorship, partnership and cooperative. These enterprises have provided job opportunity by hiring employees. From the sample survey, 58% of the enterprises have hired employees whereas 42% of the enterprises didn't hire employees. Majority of all sector enterprises have hired employees except textile where the owners themselves are fully engaged in the manufacturing process. As a 48 year old man who is an entrepreneur of a textile enterprises said *“It is very difficult to hire semi-skilled and skilled employees in the sector because the person could earn more by working here and there by assessing job availability than being hired and earn a salary or wage. And the unskilled employee could disrupt the job. Thus I usually hire people only on circumstance where I receive orders that are above my capacity”*.

The majority of the employees (87%) in the enterprises are paid workers whereas 11% are non-paid workers that include relatives and non-paid part time workers. The non-paid workers are still significant in number and they should be entitled to any kind of incentive payment and free labour use should be avoided in the enterprises. The remaining 3% of employees are apprentice and child labour is not reported (see **Table 9**)

The higher proportions of employees that are in the higher salary level in the enterprises are male workers except the food sector. Highly paid workers in 64% of the enterprises are male, in 31% of the enterprises are female workers and in 3% of the enterprises male and female are equally paid. This shows that female workers are not competitive as male workers in the enterprises to be entitled for higher positions and payments. The concerned stakeholders should involve in capacitating female workers for higher positions and the enterprise owners should get awareness in how to enhance gender equality in the enterprises.

Table 9: Category of the enterprise employees

Type of employees found in the enterprises		%	Gender proportion of employees in the enterprise who receive higher salary	No.	%
Paid workers	57	79	More are male workers	39	64
Not paid part time workers	5	7	More are female workers	19	31
Non paid workers as relatives	8	11	Equal number of male and female workers	2	5
Workers less than 18 year of age	0	0	Total	61	100%
Apprentice	2	3			
Total⁴	72	100%			

Source: Field Survey (2015)

Table 10: Income and benefits of employees

Salary or wage earning per month from the enterprise	No.	%	Did you earn additional benefit other than salary or wage?	No	%
Less than ETB 500	24	22	Yes	31	29
			No	77	71
			Total	108	100
ETB 500 to 1000	40	37	If yes to the above question, which benefits are you entitled?	No.	%
ETB 1001 to 2000	24	22	Health benefit	10	26
ETB 2001 to 3000	12	11	Pension benefit	5	13
Greater than ETB 3000	8	7	Provident fund	4	10
No salary	0	0	Part time payment	12	31
			Commission payment	8	21
Total⁵	108	100	Total	39	100

Source: Field Survey (2015)

⁴ The total number is from those enterprises that have hired employees' i.e 58% or 61 enterprises. The total 72 is greater because more than one answer is possible for the particular question

⁵ The total number of employee respondent is 108 and the greater number for benefit question is because more than one answer is possible

Before getting this job opportunity, 67% of employees were not having job and 33% of employees moved in from other job expecting better experience, better payment and since they were not satisfied with their previous job. This shows how the sector has contributed to reduce unemployment rate.

As shown in **Table 10**, the majority of the employees (82%) earn less than ETB 2000 where 37%, 22% and 22% earn within range of ETB 501 – 1000, 1001 – 2000 and less than ETB 500 respectively. Given the low earning of the employees, only 29% of employees are entitled to additional benefits where 31%, 26% and 21% of the respondents are entitled to part time payment, health benefit and commission payment respectively. Only 13% and 10% of employees are entitled to pension and provident fund respectively. This shows that the sector employees' benefits are not attractive and didn't even include social security benefit as pension payment which is now enforced in other sectors.

Since majority of the employees were unemployed before, the earning they received has helped them to enhance their saving capacity (35% of the respondents) and enhance their expenditure capacity (30% of respondents). This shows that 65% respondents living condition has changed to some extent though still the earning did not change the living condition for 25% of employees.

4.3.2 Training and Education

Employees should receive regular training program for skill management and lifelong learning that support the continued employability of employees and assist them in managing careers endings (GRI, 2006). From the survey result, only 53% of respondents has received job relevant trainings and the remaining 47% didn't receive trainings. Only 40% of the respondents of those who received trainings are receiving regular training while the majority of them 53% received trainings rarely.

Given the low education profile of the employees' government in collaboration with other bodies should strengthen on job capacity building trainings. From the discussions above the respondents should receive trainings on business skill development and technical skills.

A woman, age 40, in the textile sector said *“I and my partners in the enterprise received training only once when we start this job. We have limited technical knowhow to compete in the market.*

We were informed the Women and Youth Office in the Woreda will provide support to women entrepreneurs though we don't get any additional support till now".

4.3.3 Occupation Health and Safety

Injury during work is one of the most important but preventable and modifiable occupational safety and health issues. Throughout the world, there are 270 million occupational accidents each year, causing 1.1million work-related deaths annually as estimated by the International Labour Organization (Nakata et al, 2006).

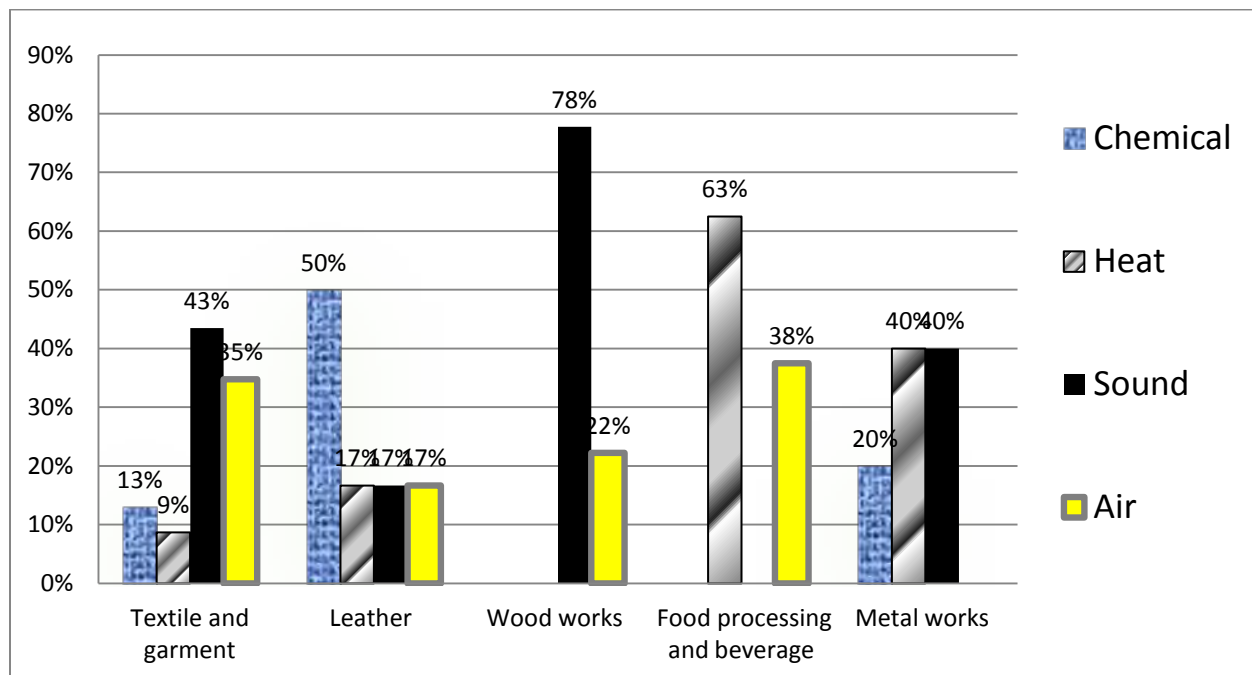
Due to less attention given to occupation health and safety small enterprise workplaces have a worse safety record than large ones. It seems that the rate of fatal and serious injuries in small workplaces (defined as those with fewer than 50 employees) is twice that in large workplaces (defined as those with more than 200 employees) (Alli, 2008).

Occupational health problems arise largely from hazardous factors in the working environment. Since most hazardous conditions at work are in principle preventable, efforts should be concentrated on primary prevention at the workplace, as this offers the most cost-effective strategy for their elimination and control. The planning and design of workplaces should be aimed at establishing working environments that are conducive to physical, psychological and social well-being. This means taking all reasonable precautions to avoid occupational diseases and injuries (Alli, 2008).

As shown in **Figure 10**, the employees in the survey have indicated that they are exposed to work related emissions. The respondents are exposed to chemical (16%), heat (27%), sound (33%) and air (24%) emissions. The exposure of employees vary by sector where sound and air emissions are major exposure in the textile sector, chemical emission in the leather sector, sound emission in the woods sector, heat and air emission in the food sector and heat and sound emission is major exposure for employees in the metal sector. Air pollution is mainly related to dust in the textile sector and smoke in the food sector.

A young man in the textile sector also said *"The dust has serious effect in my health. Before I started this job I was healthy but now I have respiratory problems. I am not sure whether there is protective equipment for the dust. What I do is I keep on cleaning the floor each day to decrease the dust on the air"*.

Figure 10: Emissions of manufacturing MSEs by sector



Source: Field survey (2015)

Workplace safety and health programmes should aim at eliminating the unsafe or unhealthy working conditions and dangerous acts which account for nearly all occupational accidents and diseases. This can be achieved in a number of ways: Tools, equipment, technology and engineering; Safe work methods, practices, organization, information and training; Hygiene and welfare; Personal protective equipment; Health/medical surveillance. The personal protective equipment includes Eye protection glasses, Footwear; Gloves; Hearing protection; Dust or chemical respirators; Disposable dust masks; Safety helmets; Wet/cold-weather clothing (ILO, 2013).

From the survey result, only 18% of the respondents indicate that personal protective equipment conditions are fully met. The remaining 26% and 56% indicate that the equipments are partially fulfilled and not fulfilled respectively. This shows that the enterprises have little concern for safety conditions in the sector. Regarding the injury in the workplace 45% of the respondents indicate that they face injury in the workplace while 55% reported they have faced no injury in the work place. Thus, significant numbers of employees are exposed to occupational accidents.

A young man in the metal sector said “ *As you see I am now working with my hands without wearing any protection glove. I know it is advisable to use but I don’t use till now even though it is available. I can see the chemical has deteriorated the soft skin of my hand and may also bring serious effect in the long run.*”

As a 25 year old boy in the textile sector said “*my work usually need for eye concentration and I sit in one position for long period of time. Due to my work style I started feeling back pain. Before I feel the pain very rarely but now I feel frequent pain though I keep on doing physical exercise by myself. I fear the work could bring problems on my eye in the long term*”

4.4 Environmental Sustainability

The systematic depletion of natural resources that underlies our most pressing environmental concerns, including climate change, necessitates new approaches that make possible economic growth and at the same time decrease negative environmental impacts that stem from the production of goods and services (UNIDO, 2010).

The environmental dimension of sustainability concerns an organization’s impacts on living and non-living natural systems, including ecosystems, land, air, and water. Environmental Indicators cover performance related to inputs (e.g., material, energy, water) and outputs (e.g., emissions, effluents, waste) (GRI, 2006).

4.4.1 Energy

Studies show that small enterprises can achieve a variety of benefits and create new possibilities and opportunities by saving energy including improved capacity for compliance with environmental demands and better marketing opportunities due to improved energy efficiency. The benefits of energy efficiency measures include reduced operative costs, reduced risks through decreased dependence on volatile and rising energy prices, improved reliability of equipment and manufacturing process, best positioning in production chains and improved image of a company’s management (Fresner et al, 2010).

The survey result show that enterprises use electricity as a major source of power that accounts for 60% of energy source and is used by all manufacturing sector. Other sources of energy are 15% of wood or charcoal energy used by food and metal sector, 9% of oil energy source used by

textile and metal sector, 7% of gas energy source used by metal sector, 7% solar energy source and 3% wind energy source used by food and metal sector respectively.

The amount and primary source of energy the reporting organization uses indirectly through the purchase of electricity, heat, or steam, can indicate efforts by the organization to manage environmental impacts and reduce its contribution to climate change. The particular effect indirect energy usage has on climate change depends on the type of primary energy used to generate intermediate energy (GRI, 2006).

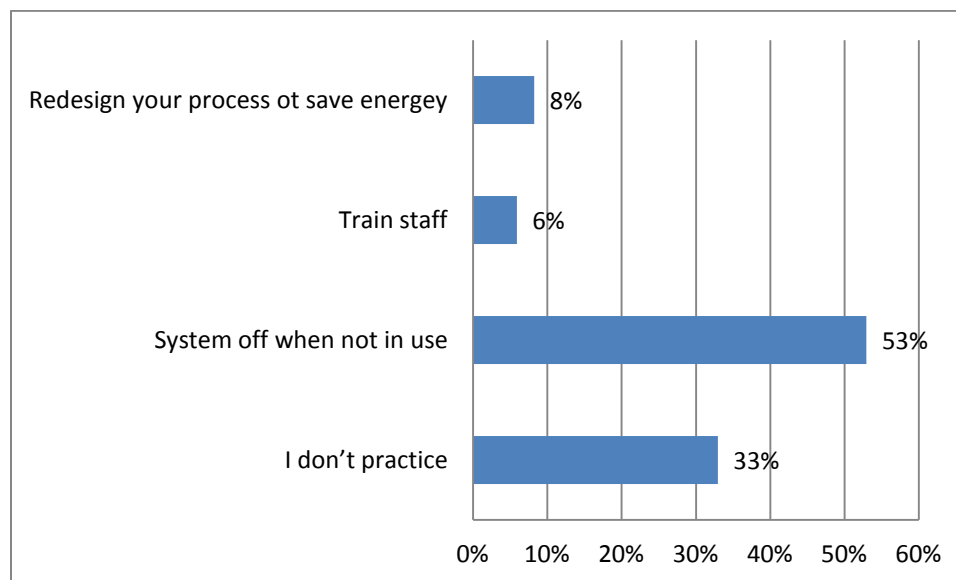
Measurement of energy consumption is relevant to greenhouse gas emissions and climate change. The burning of fossil fuels to generate energy creates emissions of carbon dioxide (a greenhouse gas). To reduce the risk of severe climate change, energy demand needs to be lowered. This can be achieved through more efficient energy use and replacing fossil fuel energy sources with renewable ones. In addition to lowering the direct consumption of energy, designing energy efficient product and services and reducing indirect energy consumption the selection of low energy-intensive raw materials or the use of services such as travel are important strategies (GRI, 2006).

A *rolling blackout*, also referred to as load shedding, is an intentionally engineered electrical power outage. Rolling blackouts are a last resort measure used by an electricity utility company in order to avoid a total blackout of the power system. They are usually in response to a situation where the demand for electricity exceeds the power supply capability of the network. In many African and South Asian countries rolling blackouts are a part of daily life. Sometimes, these blackouts are scheduled at fixed times of the day and week, allowing people to work around the known interruption times; however, in most cases, blackouts happen without any advanced notice, typically when the transmission frequency falls below the 'safe' limit (Fresner et al, 2010).

Energy efficient management is achieved by reducing usage by different mechanisms. As shown in **Figure 11**, 35% of enterprises don't practice any method in reducing energy usage. The majority 53% of enterprises put system off when it is not in use to reduce energy usage. Small proportion of enterprises 8% and 6% redesign their production process to save energy and train their staff in reducing energy usage respectively. This shows that employees are not aware of

energy efficient mechanism and large proportion of enterprises practice limited energy efficient method or not practices at all.

Figure 11: Energy efficient management practices by manufacturing enterprises



Source: Field Survey (2015)

A common finding of the studies reviewed was that small enterprises typically face greater obstacles to improving energy efficiency than larger firms (Sorrell, Mallett and Nye, 2011). The greater difficulties faced by small firms have a number includes lack of knowledge and expertise in the area of energy efficiency, lack of awareness about the benefits of energy efficiency, poor use of information, tools and training available, lack of financial and human resources, poor long-term planning and environmental behaviour is usually motivated by environmental legislation and public pressure (Fresner et al, 2010).

4.4.2 Water

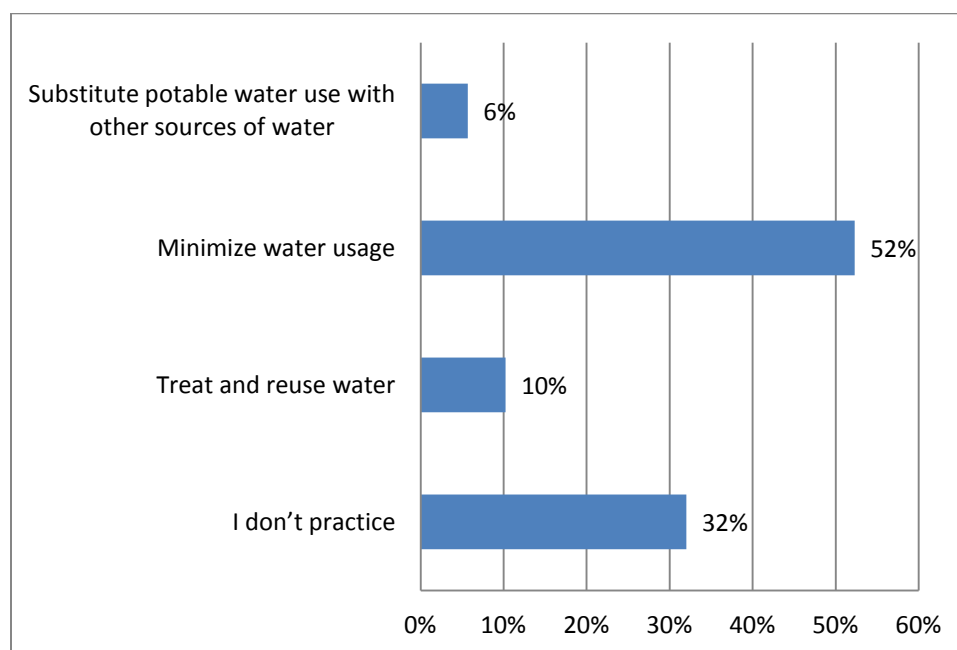
Water, in particular fresh water of potable quality, is a limited resource. Access to fresh water is central to the wellbeing of communities and ecosystems. Unnecessary water consumption means that there is less clean and safe water available for other purposes. Moreover, the provision of water to your premises gives rise to negative environmental impacts. Extraction may lower water tables; pumping requires energy; and treatment to suitable standards requires chemicals and energy. Water is often treated as an inexpensive and abundant resource, until all of a sudden it

becomes scarce, which may pose a constraint for production. Moreover, the more water is used, the more water needs to be handled, pumped, heated, cooled, evaporated, all of which require energy, and may occasion more leaks, spills and other losses. Decreasing water use, includes by recycling and reuse, saves costs and decreases pressure on a limited resource. It can also protect the company from risks resulting from disruptions in supply, decreased availability and increased costs (UNIDO, 2010).

Water saving benefits for small enterprises: (Fresner et al, 2010)

- Saving water will reduce the cost of water for the community at large by lowering demand and thereby the associated costs of extraction, transport by pumps, treatment and wastewater disposal either in a company owned facility or a publically owned treatment plant.
- Saving water can provide opportunities for developing efficiencies in other areas. For example, using less water may mean that pumping water around the site is reduced leading to savings in electricity costs and greenhouse emissions.
- Saving water can reduce the risk of environmental contamination or pollution, as water efficiency initiatives will lead to less wastewater.

Figure 12: Efficient water usage by enterprises



Source: Field Survey (2015)

Water management involves, decreasing water use directly in production purpose and water use for personnel and office facilities. Different mechanisms can be used to minimize water usage. As shown in **Figure 12**, 52% of respondents manage water by minimizing water usage, 10% manage water by treating and reusing water and 6% of respondent substitute potable water use with other source as rain. Efficient water use is not practiced by 31% of respondents.

Substitute potable water use is not practiced at all in the textile and wood sector, and treat and reuse water is not at all practiced in the wood sector. Minimize water usage is practiced by all sectors and large number of respondents (i.e. greater than 30%) in the textile, wood and metal sectors don't practice water efficiency methods. This shows the respondent don't use different mechanism to decrease water use.

4.4.3 Material and Waste

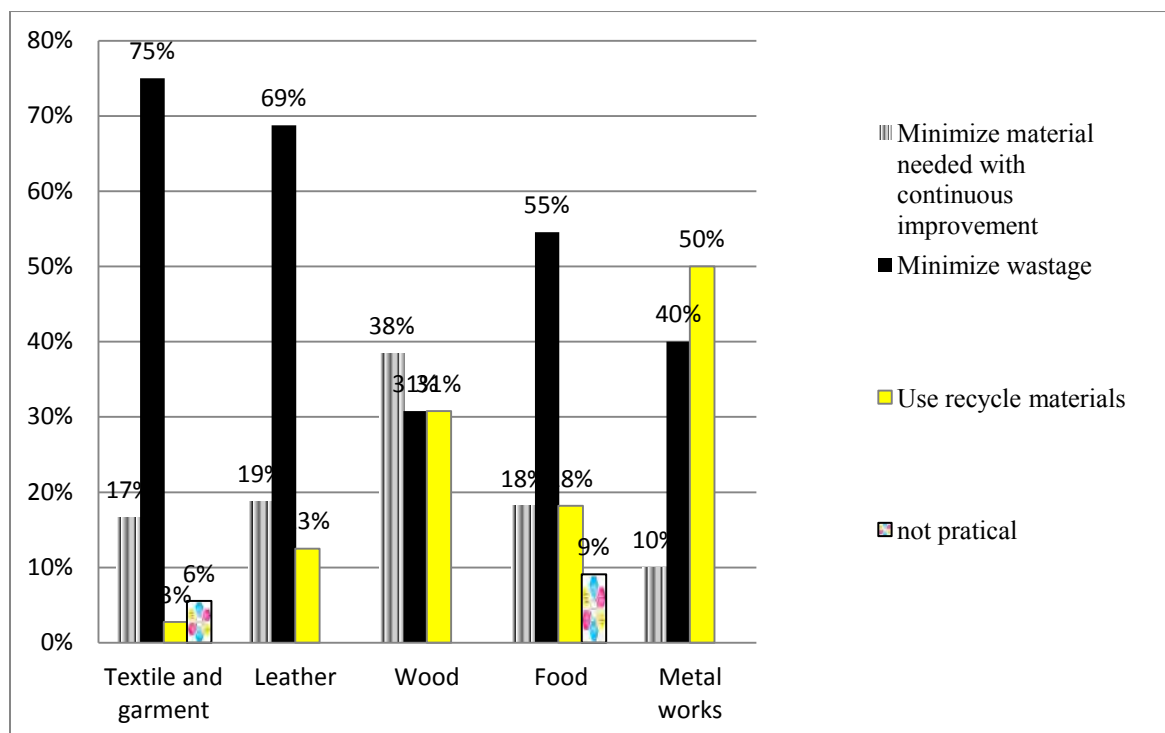
Materials used in production can be from non-renewable or renewable resources, recycled or reused. All use of materials involves significant environmental impacts stemming from the extraction, mining or cultivation and harvesting phases, and the transport, use, and disposal of the material. Materials consumption contributes to the depletion of natural resources, and the pollution of air, water and soil. It can be associated with deforestation and disruption of ecosystems. The transport of materials gives rise to air pollution and emissions that contribute to global warming. The severity of environmental impacts from the production and use of materials is dependent on many factors that are not related to weight, e.g., toxicity, flammability, renewable or non-renewable origin, etc. Nonetheless, it makes sense to consider the total volume of materials used in the production, as every ton of material has to be handled, and that requires energy and can give rise to emissions into the environment. Materials efficiency through decreased use, recycling, and reuse will decrease negative environmental impacts throughout the life cycle of products and will increase company's productivity (UNIDO, 2010).

The benefits of material saving by small enterprises are (Fresner et al, 2010):

- Natural resources are conserved, ensuring that the use of the most accessible and lowest-cost resources will be extended, reducing the cost of production, improving living standards and ensuring the resources will be available for future generations.

- Reducing the demand for raw materials will reduce the impacts of raw material extraction, including both environmental and social impacts.
- Energy will be conserved and greenhouse gas emissions reduced. The metals sector in particular is very energy intensive. Recycling of materials can save most of the energy required for refining and processing. Typical energy savings from recycling relative to raw material extraction are estimated at: aluminum 95%, iron and steel 74%, plastic 80%, paper 64% and glass about 10%.
- Increasing material efficiency will reduce the amount of waste material going to landfills or to be incinerated, reducing land use, water and air pollution and other negative impacts from waste handling.

Figure 13: Efficient material usage by enterprises



Source: Field Survey (2015)

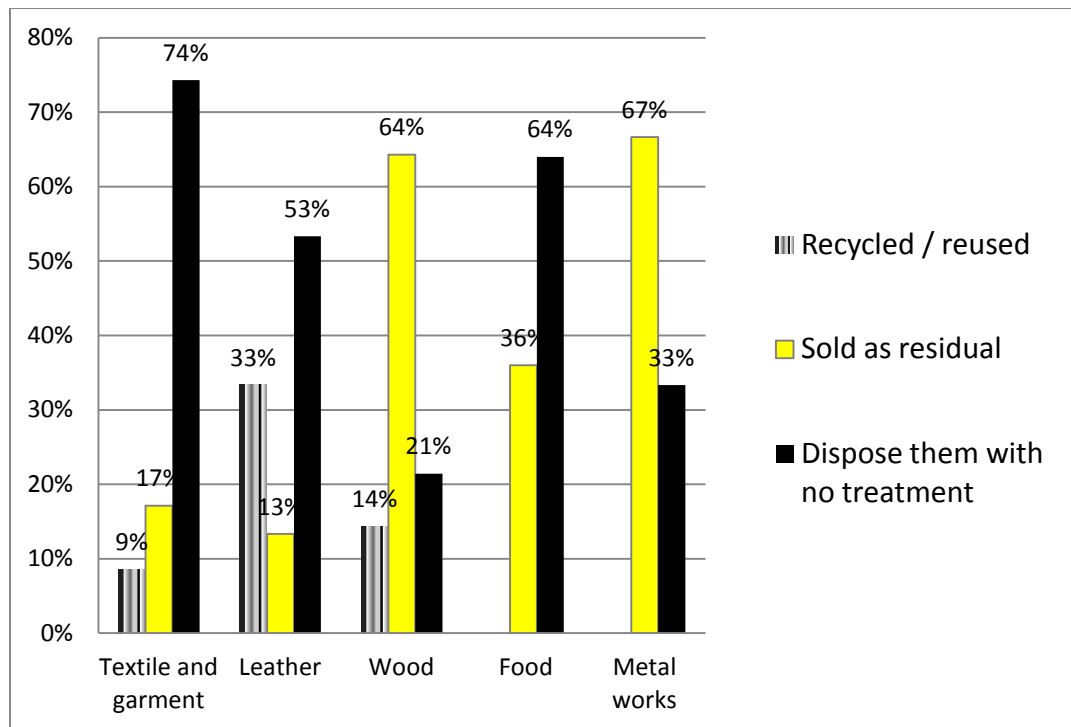
As shown in **Figure 13**, efficient material usage is being applied by the respondent. The measures the enterprise practices are minimize material requirement through product improvement (19%), minimize material wastage (58%) and use recycle materials (20%). Only 4% of respondent indicate that they are not using any material efficiency methods. The major

efficient material practices for textile, leather and food sector is minimization of wastes whereas for wood and metal sector is product improvement and use of recycled materials respectively. From discussion made with the Officials and with respondents, the main motive of material efficiency for the entrepreneurs is due to high inflation price of raw materials in the market and thus for cost reductions. The entrepreneurs should also be aware of relevant environmental motives for efficient use of materials.

Waste is the proportion of purchased materials that you have not been able to convert into a marketable product and that needs to be disposed of. Costs of waste include purchasing price or cultivation costs, labour hours, depreciation of machinery and operating materials. 55% of the enterprises throw the wastes to the garbage without any kind of treatment while 35% and 10% of the enterprises sold their wastes and recycled/reused⁶ respectively. Thus, more than half of the enterprises throw the wastes without any further treatment for reuse. By sector, sold of residual waste treatment is higher for wood and metal sector and recycle waste treatment is significant in the leather sector (see **Figure 14**).

⁶Recycling is recovery and reuse of materials from scrap or waste for the production of new goods and Reuse is the additional use of a component, part or product after it has been removed from a clearly defined service cycle. Reuse does not include a manufacturing process, however cleaning, repair or refurbishing may be done between uses

Figure 14: Treatment of solid material waste by enterprises



Source: Field Survey (2015)

As a 48 year old woman in the textile sector said *“I accumulate the textile scarps in a sack. When the sack is full, I sell it to people who make mattress with low price. The sack fills within three or four months. Sometime when the buyers don’t appear, I throw it to the garbage”*.

A 39 year old man in the wood sector said *“the saw dust or wood dust which results from cutting and grinding wood is sold as scarp and is used to manufacture chipboard / particle board. The remaining dust will also be sold to be used to make fire”*.

Reducing wastes through good operating practices is achieved by using maintenance and preventive maintenance to reduce incidents of machines and equipment breakdowns, inefficiency, or process fluid or chemical leakage. Regular maintenance of machines and equipments is important to reduce resource wastes including energy and material (Fresner et al, 2010). From the field survey, only 27% of enterprises service the machines regularly and 73% of the enterprises service their machinery equipment when it fails to function properly. This shows majority of the enterprises are not practicing preventive maintenance of their machines and equipments to reduce waste.

4.5 Drivers and Barriers for sustainable business practice

4.5.1 Drivers for sustainable business practices

There is a perception that large companies are more likely to undertake CSR initiatives because they have greater capacity, funding and resources. However, many of the characteristics of small enterprises mean that they are better placed to introduce CSR strategies. Small enterprises tend to be the result of an entrepreneurial mindset; individuals with the vision to start a company also have the vision to introduce new and innovative ideas. Small enterprises also tend to have shorter lines of communication, meaning that all staff can be included in any initiative. Another advantage is the flexibility enjoyed by small enterprises; business practices can be adapted to meet new norms and standards relatively easily (Davis and O'Halloran, 2013).

Respondents were asked about the perceived drivers for implementation of socially and environmental responsible business. The responses were scaled from 1 to 5 (1 – being not at all influential and 5 – being most influential). As shown in **Table 11** of the respondents who answered with a 5 and 4, the drivers that were the most important are cost reductions (72% of respondents), increased profits (61% of respondents), and employee retention (53% of respondents). In comparison with the listed drivers the less influential drivers are customer attraction (49% of respondents), reputation building (37% of respondents) and legislation compliance (33% of respondents).

Table 11: Drivers for sustainable business practices

	Respondents in number and percentage										
Drivers	Scale										Total
	5		4		3		2		1		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
a) Increased p rofits / financial performance	21	20	42	41	12	12	18	18	9	9	102
b) Cost r eductions / efficiency	46	43	31	29	14	13	10	9	5	6	106
c) Customer attraction	27	27	22	22	20	20	23	23	7	8	99
d) Employee attraction	29	29	25	24	17	17	22	22	8	8	101
e) Reputation building	10	11	26	26	21	21	30	31	10	11	97
f) Legislation compliance	13	14	18	19	23	25	30	32	9	10	93

Source: Field Survey (2015)

The highly influential driver indicated by the respondents is cost reduction. The respondents have explained that environmental measures as reduction in energy usage, raw material usage, waste management and reuse of materials have impact on cost reduction. Human resource management motivate workforce to be more productive and work with increased morale that leads to increased efficiency of the workforce. 28% of respondent rate cost reduction as less influential because minimization of usage results in insignificant cost reduction. They also explained that sustainability measures as motivating employees and community contribution increase cost of the enterprises.

The second highly influential driver indicated by 61% of respondents is increased profits. The competitive advantages they obtain through cost reduction, employee commitment, good relation with the community including customers increase their financial performance. The other 39% indicate that there is weak link between profit and social and environmental responsible business practice. The reasons they indicated are high cost for environmental and social responsible actions, the return on investing on sustainable practices is very small or they are not sure of the return and there are other investment priorities that are more promising and profitable to realize in the short run.

Employee attraction is rated as highly influential by 53% of respondents. The respondents have explained that improved work place conditions as improved health and safety conditions, improved employee and employer relationship and better incentives influence attraction of the employees to work with the enterprises. The remaining 47 % of respondents rate as low influential because with the limited capacity the enterprises has it is difficult to offer such privilege to be competitive and attract employee from the market. As a woman from the wood sector enterprise said “ *We currently employ people with low education status and skills since tasks are more of labor work. I believe people with more expertise will bring change to quality of products and are important for organization growth but we can’t afford attracting competitive employees due to our limited capacity*”.

Customer attraction is indicated as highly influential drivers by 49% of respondents. This is due to the increased productivity of employees resulting in good quality of products and the resulting good relationship with customers. 51% of respondents rate customer retention as low influencer because customers are more sensitive to price of the product than its contribution to the

environment. The entrepreneurs also explain that customer awareness of the enterprise influence on the environment is very low to make preferences while they purchase as there is no awareness created to the community at this level. They also explained that they have limited business skill as innovating new environmentally friendly product to attract new potential customers and limited linkage with relevant organizations that could enhance their business skills and potentials.

Reputation building is indicated as highly influential by 37% of respondents. They explained that since the enterprise employs from local people its responsible actions among its employees build good image in the community. Also the image its builds in the community creates networks and serves as a competitive advantage to compete in the highly competitive market. However 63% of respondents indicate as low influential due to limited promotion capacity of the enterprises in building reputation, perceived high cost of social and environmental responsible actions and absence of initiatives, collaboration and recognition of concerned parties including customers, government, business society and others to promote such actions.

Legislation compliance is the least factor that is indicated as highly influential only by 33% of respondents. They explained that in order to be promoted to medium enterprise level or industry level they have to comply with the regulations set by government as economic performance of the business should be promising, increase their business capital and employ more people.

However, 77% of respondents rate legislation compliance as low influential. Their current relation with government is limited to tax payment and in receiving support as working facilities and marketing out lays and trainings to enhance their business performance. Support from government for environmental action through legislation specific to MSE is not practical till now. Thus, legislation compliance is less influential as it is not relevant with the current comply situation. In discussion with government officials their intervention with regard to environment protection is to provide working premise to practitioner who has started their business in their house so that the emission from the sectors will not affect the nearby dwellers. The working premise is with drainage facilities and the solid waste from the premises is collected by private enterprises. The respondents also indicate reduction in energy, material and waste usage is also a personal ethical issue like doing the right thing and avoids misuse rather than compliance issues. *As a 39 years old woman from the food sector said: "If the food I baked became highly roasted*

and could no longer be used for sale or for human use since it is unethical for me to throw it away in the garbage, I will give it to animal feed or if possible to make local alcohol drink ‘tela’”.

Summarizing the findings cost reduction, increased profit and employee retention / attraction are the major three perceived drivers of social and environmental responsible business practices indicated by more than half of the respondents as highly influential driver. The reason given by respondents to rank the drivers as lesser influential includes:

- Perceived high cost of socially and environmentally actions by enterprises and the expected low return or unknown return of investment.
- Limited human resource and financial capacity of enterprises
- There is lack of collaboration among stakeholders’ that includes customers, business society and government and non-government bodies.
- Low awareness level and preferences of customer on sustainable product in making their purchase decisions
- Limited business skill of the entrepreneurs and employees for innovating environmental friendly products and other skill as networking
- There is lack of support from government through legislation for environmental action that is specific to MSEs.

Thus the findings shows that though enterprises have positive attitude in realizing the drivers in integrating socially and environmentally responsible actions in their business, there are significant number of enterprises who don’t perceive to realize the benefits at a higher scale due to drawbacks in the current internal and external environment of MSEs and barriers that hinder the enterprises to engage in sustainable businesses. Thus these constraints need to be tackled to enhance business motivation in engaging in sustainable business practices.

4.5.2 Barriers to Sustainable Business Practices

Similarly, respondents were asked about the perceived barriers for implementation of social and environmental responsible business. The responses were scaled from 1 to 5 (5 – being very strong barrier and 1- being not a barrier) as shown in Table 12. The common barriers included in

the study are lack of supporting services, low business priority, perception of high cost / financial risk, lack of relevant knowledge and time pressure.

Table 12: Barriers to sustainable business practices

	Respondents in number and percentage										
Barriers	Scale										Total
	5		4		3		2		1		
	No.	%	No.	%	No.	%	No.	%	No.	%	
a) Lack of relevant knowledge	22	21	42	40	20	19	16	16	4	4	104
b) Lack of supporting services	32	31	47	45	15	15	9	8	1	1	104
c) Time pressures / short planning horizons	8	8	30	29	28	28	31	31	4	4	101
d) Low business priority	25	26	42	44	11	11	18	18	1	1	97
e) Perception of higher costs / financial risk	24	25	40	40	11	11	22	22	2	2	99

Source: Field Survey (2015)

Lack of supporting services is rated as strong barrier by 76% of the respondents. They explained that there is no support from the government and non-government organizations on how to enhance their effort to environment protection. Awareness and promotional activities regarding environment relevant actions to be taken by the enterprises and its significance is not communicated. There is no financial and skill development support that is being received by the enterprises. The enterprises don't get opportunity for relevant experience exchange visits and other learning opportunities. Thus, the enterprises lack motivation, knowledge, skill and finance to engage in more environmental friendly business. As a man ((39 years old) from the leather sector said "*Climate change and environmental issues are critical agendas today that get focus in the World. I understand the MSE should also work towards this end by developing experiences from other countries. Experience exchange forums among the enterprises should be organized regularly to develop our skill and for promotion purpose*".

Low business priority is rated as strong barrier by 69% of respondents. The benefits from socially and environmental responsible actions is limited in enhancing business profit and increasing market share which is the main aim of the enterprise owners. The government, non-government organization and the business society including customer don't give attention and

thus the related business benefit is very low. Thus, the entrepreneurs prefer to spend their time and money in other options that brings direct business benefits.

Perception of higher costs / financial risk is rated as strong barrier by 65% of respondents. The entrepreneurs explain that replacement of machines that cause inefficiency, community contribution, and measures to enhance employee motivation has implementation costs and perceive that it may not result in financial gain sooner. And the MSEs are with financial problems to cover their current operating cost that are essential for them to bring revenue in the short term.

Lack of relevant knowledge is rated as strong barrier by 61% of respondents. The respondents explained that the main aim of their business is to make profit. Social and environmental responsible business practices are confusing and the entrepreneurs have very low or no knowledge of what it means clearly. They lack expertise to integrate sustainability along with the current business activities. They said that they are unfamiliar if the reduction in energy and resource usage result in environment protection. They are not sure how to decrease their environmental impacts.

Time pressures / short planning horizons is indicated as strong barrier by 37% of the entrepreneurs. The entrepreneurs have lot of responsibility for managing the day to day business and solving their market problems. Especially in the textile sector the entrepreneurs don't have the capacity to hire full time employees and the entrepreneur is engaged with all activities from production to sale of its products. Thus, they don't have time to engage in community actions or on environment actions.

To summarize the findings, lack of supporting services, low business priority, perception of higher cost and lack of relevant knowledge are the major obstacles indicated by more than half of the respondents while time pressure is indicated as a major barrier by lesser respondents. The barriers listed here are similar with the reasons that have hindered the MSEs to engage in sustainable practices.

Thus the barriers should at least be minimized for businesses to engage in sustainable business practices and to realize a positive impact that could vary to specific sectors, size and circumstances of enterprises. From the findings it is realized that even measures with low or no cost as reduction in energy usage, water usage and waste reduction, etc is not being implemented

by significant number of MSEs. Thus, easy measure with low or no cost could be adopted by the enterprises. Government and other organizations should collaborate in raising awareness of the society about sustainable products, developing MSE sustainable business practices related guidelines, enhancing the knowledge and skill of business community to minimize the hindrance the business are facing to engage in sustainable business practice.

Chapter 5: Conclusions and Recommendations

5.6 Conclusions

Sustainable development has economic, social and environmental dimensions. It is a process for improving the range of opportunities that will enable individual human beings and communities to meet their needs, as well as to achieve their aspirations and full potential over a sustained period of time, while maintaining the resilience of economic, social and environmental systems. It is the conversation on what the post-2015 development framework looks to begin in earnest.

Given their economic and social significance, MSEs play a leading role in sustainable development. MSEs are important to almost all economies in the world, but especially to those in developing countries since these enterprises are an effective antipoverty programme and one of the building blocks of innovation and sustainable growth. Standardization is a tool for propelling Corporate Social Responsibility and Triple Bottom Line practices of sustainable development in an organization. Numerous companies and international organizations have developed a set of indicators to measure progress of environmental performance and sustainable business including Global Reporting Initiative (GRI), Environmental Impact Assessment (EIA) and Life Cycle Assessment (LCA).

This chapter presents main findings and results of the study by providing brief answers to the proposed questions and by providing recommendations. Accordingly the study has identified the socio-economic and environmental impact of manufacturing MSEs in view of sustainable development, the enabling factors or drivers to sustainable development, the barriers that hinder manufacturing MSEs to contribute to sustainable development and how MSEs potential be strengthened to achieve sustainable development.

Socio – economic and environmental sustainability

The researcher has used the GRI guidelines indicators as the research framework as it provides an internationally acceptable framework for different companies to assess their performance taking into considerations economic, social and environmental aspects.

With regard to economic perspective, the study has focused on economic performance and market presence for firms in the study area. It is revealed that firm's capacity is very low to generate and distribute value to its stakeholders. Almost half of the enterprise doesn't have the

capacity to meet their obligations including operating costs, employee compensation, community contribution, retained earnings, and payments to capital providers and governments in the previous fiscal year 2014/2015. From this it is evident that majority of the enterprises are economically unstable to maintain their relationship with their constituent groups.

While the entry size of firms in Addis Ababa has increased over the last decade, the ability of these firms to absorb shock is limited. From the study it is revealed that 30% of the enterprises growth has stagnated or declined while 70% of the enterprises are growing. The enterprises are operating under several constraints that hinder their growth. The major constraints are market constraint, finance constraint, land constraint and input constraint. For textile and leather sector, lack of managerial and technical skill is one of the major constraints. The constraints prohibit the firms from sustainable economic performance and overall their contribution to sustainable development.

Market is the major constraint that highly hinders the firms' performance for all sectors in the manufacturing MSEs. About 43% of the enterprises sales performance is below their expectation level and in few cases there is no sale at all. This problem is attributed to lot of factors as the location of the working premise and the display facilities is away from the main road, burden of tasks in the entrepreneurs, lack of competitive business skill, lower price of product offered by the informal sector and promotion of the sector is focused more on its role in poverty reduction than its business role as quality products and thus the customers came with expectation of lower price than to get quality products with fair price in the market.

The study findings indicate that the MSEs has created job opportunity for local dwellers and is playing considerable role in the interactions in the local markets through the use of local raw materials and serving the local customers needs. However, the MSEs are not in a position to compete in the international market where only 5% of the enterprises in the textile sector are engaged in exporting their products. Thus, they have almost negligible influence in attracting foreign exchange. Also 32% of enterprises depend to some extent or fully on imported materials due to unavailability of materials in the local market and lower quality. This has cost implications including import costs as transportation cost, results in environmental impact of transportation and obstructs opportunities for local job creation from production of the raw materials.

With regard to social dimension, the study findings indicate that majority of the entrepreneurs and employees don't attain higher educational qualification. Only 9% of the entrepreneurs have gained their experience from formal education while others have gained through inheritance, short term trainings, former experience as an employee and by self effort. Almost half of the employees didn't receive on-job trainings. Given the low education profile and lack of skill development trainings, the knowledge and skill capacity of both entrepreneurs and employees' are limited to manage their jobs in a professional manner, to adapt to changing market situations and limits their creativity or innovation capacity.

Female are less engaged in the metal and wood sector while they are more attracted to the food sector. This is due to society influence as female responsibility of domestic tasks; the entrepreneurs mostly depend on inherited experience and the perceived lower potential of females for high labour required jobs. The higher proportions of employees that are in the higher salary level in the enterprises are male workers except the food sector. This shows that female are not empowered to engage equally in all sectors and that female workers are not competitive as male workers in the enterprises to be entitled for higher positions and payments

The study has revealed that MSEs have low capacity to offer job opportunities for additional employees, their benefit package is not attractive and don't include social security, some employees are denied from getting payments for their labour and the enterprises don't ensure effective safety measures. Though the sector has contributed to reduce unemployment rate by securing job for 67% of employees who were unemployed before, 42% of enterprises especially in the textile sector didn't hire employees. Majority of the employees earn unattractive salary package i.e. less than ETB 2000 and very few employees are entitled to additional benefits as commission payment, part time payment, pension and provident fund payments. Though, the employees in the sector are exposed to work related emissions as chemical, heat, sound and air emissions, work place safety personal protective equipments are not fully met for 82 % of employees. This will have a negative effect in the health of employees and commitment of employees and the enterprise contribution to sustainable development.

With regard to environmental dimension, the study findings indicate that the MSEs are not taking sufficient environment protection measures to reduce their negative influence on the environment. This is attributed by the use of limited methods or by taking no measures at all for

efficient use of energy, water and materials to comply with environmental demands and cost efficiency and enhance firms' productivity as well. On average 33% of enterprises are not taking any measures for efficient use of these resources and almost half of the enterprises are involved in reduction of usage particularly for cost reduction rather than environmental concern. Very few enterprises are engaged in diverse efficiency measures as training of employees, product redesign, reuse and recycle measures.

The solid waste produced by 55% of the enterprises are thrown with no further treatment where the wastes could be used for other production process through recycle and reuse and could be sold to be used for different purposes. As one mechanism, reduction of waste could be achieved by using maintenance and preventive maintenance of machines though 73% of the enterprises service their machinery only when it fails to function properly. This shows that the enterprises take limited measures in reduction of their effect on the environment.

Drivers for MSEs to contribute to SD

Overall the research shows the entrepreneurs have positive attitude towards realizing the perceived drivers through engaging in social and environmental responsible business practices that are indicated in different literatures including increased profit, cost reduction, customer attraction, employee attraction, reputation building and legislation compliance. The three major drivers indicated as highly influential by more than half of the respondents are cost reduction, increased profit and employee attraction. It is indicated that reduction in resource usage has impact in cost efficiency; improved benefits and working environment enhance productivity of workers and results in improved production and good relation with customers.

Barriers of MSEs to contribute to SD

Significant number of enterprises have rated the drivers as lesser influential mainly due to drawbacks in the current enterprise situation to realize the benefits fully and perceived barriers for implementation of sustainable business practices. It is indicated that due to perceived high cost, expected low return or unknown return of investment, limited human resource and financial capacity, limited business skill, lack of collaboration among stakeholders' in facilitating smooth environment for sustainable actions the perceived drivers can't be realized fully and thus are less influential.

There are substantial barriers to implement sustainable business practices. The barriers are lack of supporting services, low business priority, perception of high cost / financial risk, lack of relevant knowledge and time pressure. Exceptional to time pressure all other barriers are indicated as strong barrier by more than half of the enterprises. It is indicated that awareness on environment protection is not yet created and there is no skill development programs organized by any government and other organizations. Since there is no attention given to sustainable business practices by the business community, the enterprises prefer to spend their scarce financial and time resource on other options that could bring profit in short term. Thus, the barriers hinder the MSEs to implement sustainable business and to realize the perceived drivers.

5.7 Recommendations

The following recommendations are forwarded based on the results of the study to strengthen MSEs potential to contribute to sustainable development.

- The establishment of FeMSEDA as an umbrella organization to lead and stir the development of MSEs is very important. However, the agency should to some extent work with MSEs that are not under the support of FeMSEDA government structure and enhance networking with the government supported MSEs. This on one hand will solve the current delineation between the two categories especially among customers in offering lower price for government supported MSEs and empower the government supported MSEs from its business perspective.
- The manufacturing sector is crucial sector in transforming an economy. In Ethiopia its contribution to GDP is still very low and its growth has remained static for the past consecutive years (page 33 & 34). Thus, attention needs to be given to this sector. The problems that hinder the growth of the manufacturing MSEs should be solved to minimize the exit of the firms by providing support as access to finance, working premises and relevant business skill development.
- Getting access to market is major constraint being faced by the enterprises. The marketing management skill of the entrepreneurs should be developed through training provided by both government and other supporting institutions. The market outlet opportunity that is provided by government should benefit the MSEs equally based on the required criteria rather than serving limited enterprises. The display facilities of the working premises should

be kept functional and should be promoted through different medias to attract potential customer. The planned display and marketing center to be established in Addis Ababa by FeMSEDA is step forward to solve the marketing problems of these enterprises and thus action should be taken soon. The informal sector should also be encouraged to register and act legally.

- Access to finance and working premise constraint are critical problems that hinder the growth of enterprises. The limitation of working capital has hindered the enterprise growth. The MFIs and banks should improve their strategy in accessing finance to MSEs by considering the MSE potential on collateral requirement and lower interest rate. The long procedures should also be improved not to discourage the MSEs. Though government are providing working premise for the enterprises, the space provided for the enterprises are very small to run their business. Thus, government by assessing the problems should optimize the space to be provided for the enterprises.
- The enterprises with support from governmental and non-governmental organizations should work on continuous capacity development of employees by raising skill efficiency through trainings. The enterprises should also improve the health and safety conditions of employees.
- Skill development trainings should be given for MSEs to take environmental responsible action on efficient use of materials, energy and water and recycle / reuse of wastes and treatment of wastes. FeMSEDA should work in close collaboration with Environment Protection Authority and other organizations in adoption of technologies and best practices on environment protection measures by MSEs. Entrepreneurial skill development training should be provided by government agencies and other organizations as Entrepreneurship Development Center (EDC) that is supported by UNDP to enhance the innovative skill of entrepreneurs and at the same time for the enterprises to work on environmental friendly products.
- The barriers to implement sustainable business practices should be tackled and the internal and external firms' environment in favor of sustainable business practices should be encouraged. Environmental awareness should be created among business community including customers, producers, suppliers that are associated with the MSEs through workshops, meetings and other formal and informal gatherings to promote environmental impact of the business community and to value and practice environmental protection in their

daily business engagement. Legislation and requirements by governments regarding sustainable business practices should be enforced. This will enhance the business priority of firms to take social and environmental responsible actions and to devote their time and financial resource as well.

- The established working premises has bring the enterprises together and thus should be developed to cluster businesses to gain the associated advantage as nearby access to raw materials and collective treatment of wastes will open job opportunity for other segment of the society. The cluster could also be served as a center for further development through linkage with other research and development institutions and could also act to influence policy for their advantage.

Future Research Suggestions

- The research is more generalized as it takes all manufacturing MSE sectors together. Thus, the researcher suggests a more detailed research on each sector contribution to sustainable development by integrating best practices from other areas and including quantitative models (e.g. measuring the added value of firms and find its correlation with other socio-economic and environmental factors) which is not applied in this research.
- The researcher also suggests assessing the contribution of other sectors as service and construction MSE sectors to sustainable development to gain more in-depth insights as a future research agenda.

Photographs for selected manufacturing MSEs in the study area



Metal works and engineering sector MSEs



Leather and leather products sector MSEs



Textile and garment sector MSEs





Wood works including furniture and ornaments sector MSEs



Food processing and beverage sector MSEs



Working premise: G+4 building and Display facilities

References

- Abera, A. (2012) *Factors affecting the performance of micro and small enterprises in Arada and Lideta sub-cities Addis Ababa*, MBA thesis, Addis Ababa University
- Addis Ketema sub city Strategic plan (2008) Addis Ketema sub-city Administration Office, Addis Ababa
- Ageba, G. and Amha, W. (2003) *Policy impact and regulatory challenges of micro and small enterprises in Ethiopia*, Working Paper, Ethiopia Development Research Institute, Addis Ababa
- Akande et al. (2011) Performance analysis of the strategic effect of age, size and sources of funds on micro enterprises in Nigeria, *Journal of emerging trends in economics and management sciences* (ISSN: 2141 – 7024), Lakoke Akintola University of Technology, Nigeria.
- Ali, M. (2012) *Government's role in cluster development for MSEs: Lessons from Ethiopia*, Chr. Michelsen Institute of Research for Development and Justice, Ethiopia
- Alli, B.O. (2008) *Fundamental principles of occupational health and safety*, 2nd Edition, International Labour Office, Geneva, Switzerland
- Altenburg, T. (2010) *Industrial policy in Ethiopia*, Discussion Paper, ISSN 1860-0441, Bonn, Germany
- Anane, G.K. Cobbinah, P.B. and Manu, J.K. (2013) Sustainability of small and medium enterprises in rural Ghana: the role of microfinance institutions, *Asian economic and financial review*, Vol.3, No. 8, pp. 1003 - 1017
- Assefa, B., Zerfu, A. and Tekle, B. (2014) *Identifying key success factors and constraints in Ethiopia's MSE Development: an exploratory research*, Ethiopia Development Research Institute, Addis Ababa
- Asfaw, A. (2014) Ecotourism as a viable strategy for livelihood diversification and sustainable natural resource management in Ethiopia (from eco-development paradigm point of view), *Journal of environmental science and water resources*, Vol. 3, No. 2 Wollo University, Ethiopia
- Ayyagari, M., Beck, T. and Demirguc-kunt, A. (2003) small and medium enterprises across the globe: a new database, World Bank Policy Research Working Paper 3127
- Bae, H. and Smardon, R.S. (2011) Indicators of sustainable business practices in Broniewicz, E. (ed), *Environmental Management in practice*, Croatia, Intech
- Bekele, A. and Negatu, Z. (2005) *Company registration in Ethiopia*, Addis Ababa Chamber of Commerce and the Swedish Agency for International Development Cooperation, Sida, Addis Ababa, Ethiopia
- Belay File (2012) *Determinants of micro enterprise success in the urban informal sector of Addis Ababa: a multidimensional analysis*, PhD thesis, Erasmus University, the Netherlands

Berhanu, E. (2014) *The role of micro and small enterprises in local economic development, with a focus on the wood work MSE value chain*, PhD theses, University of South Africa

Berihu, A., Abebaw, Z. and Biruk, T. (2014) *Identifying key success factors and constraints in Ethiopia's MSE development: an exploratory research*, Ethiopian Development Research Institute, Addis Ababa

Brannen, J. (1992) *Mixing Methods: Qualitative and Quantitative Research*, Ashgate Publishing Company, England.

Brouwers, H. (2010). Corporate sustainability and innovation in Small and Medium Enterprises: evidence of themes and activities in practice. *Journal of Business Strategy and the Environment*, Vol. 19, No. 7

Buculescu, M. M. (2013) Harmonization process in defining small and medium – sized enterprises, arguments for a quantitative definition versus a qualitative one, *Theoretical and Applied Economics*, Vol. 20, No.9

Bureau of Finance and Economic Development (BoFED) (2013) Socio-Economic Profile of Addis Ababa for the Year 2004 E.C/2011/12 G.C, Policy Study and Analysis Sub Process, Addis Ababa, Ethiopia

Carroll, A. B. and Schwartz, M.S. (2003) “Corporate Social Responsibility: A Three- Domain Approach”. *Business Ethics Quarterly*, Vol. 13, No. 4

Cecilia, M.H., Julia, R. and Ashkan, P. (2010) A triple bottom line to ensure corporate responsibility, Berg, per (ed), In timeless cityland, available at: <http://www.cemus.uu.se/dokument/asc2011/Corporate%20perspectives%20on%20CR%20-with%20reference%202011+.pdf> (accessed April, 2015)

Central Statistical Authority (CSA). (2003). Report on small scale manufacturing industries survey. Ethiopia

Cesar, E. and Ekbom, A. (2013) Ethiopia environmental and climate change policy brief, *SIDA's Helpdesk for environment and climate change*, Swedish Embassy, Ethiopia

Creative Research Systems (2012) <http://www.surveysystem.com/sample-size-formula.htm> (accessed March 5, 2014)

Creswell, J. (2003), *Research design, qualitative, quantitative and mixed method*, 2nd edition, Thousand Oaks, CA: Sage

Davis, C. and O'Halloran, T. (2013) Needs of small enterprises to advance on the sustainability path, *Developing sustainable regions through responsible small enterprises project*, DESUR, Ireland

Demeke, M., Guta, F. and Ferede, T. (2006) Towards a more employment – intensive and pro-poor economic growth in Ethiopia: Issues and Policies, *Issues in Employment and poverty discussion paper*, Employment strategy department, International labour office, Geneva.

Deribie, E., Nigusse, G. and Mitiku, F. (2013), Filling the breach: microfinance, *journal of business and economics management*, Vol.1, No.11, Academia publishing, Jimma University, Ethiopia

Dixon, T. (2014) *Corporate social responsibility, the triple bottom line, standardization and brand management in Houston, Texas*, M.A thesis, Uppsala University, Department of Earth Sciences, USA.

Economic Commission for Africa (ECA) (2005) *Sustainable development report on Africa: Managing land based resources for sustainable development*.

Elkington, J. (2004). Enter the Triple Bottom Line. In A. Henriques & J. Richardson (Eds.), *The Triple Bottom Line: Does it All Add Up? Assessing the Sustainability of Business and CSR*, London: Earthscan Publications.

Federal Democratic Republic of Ethiopia (FeDRE), 2011, *Micro and Small Enterprise Development Strategy, provision framework and methods of Implementation*, Addis Ababa, Ethiopia

FeDRE (2013) *survey on micro and small enterprises in selected major cities of Ethiopia*, Ministry of urban development and construction, Ethiopia

Feseha, M. (2011) *Tourism certification as a tool for promoting sustainability in the Ethiopian tourism industry: the case of Addis Ababa*, M.A thesis, Addis Ababa University

Fresner, J. et al (2010) *Pre – SME - promoting resource efficiency in Small & Medium Sized Enterprises: Industrial training handbook*, Austria

Gebreeyesus, M. (2007) *Growth of micro – enterprises evidence from Ethiopia*, *Ethiopian Development Research institute*

Gebreeyesus, M. (2009) *Innovation and microenterprise growth in Ethiopia*, *UNU- MERIT working paper* ISSN 1871 – 9872

Gebreeyesus, M. (2013) *Industrial policy and development in Ethiopia: Evolution and present experimentation, learning to compete*, working paper no. 6

Global Reporting Initiative, GRI. (2006) *Sustainability reporting G3 guidelines* www.globalreporting.org, (accessed May, 2015).

Group of 100 incorporated (2003) *sustainability: a guide to triple bottom line reporting*, An association of Australia's senior finance executives from the nation's business enterprises, Australia.

Gullele sub city Strategic plan (2008), Gullele sub-city administration office, Addis Ababa

Hailu, H.K. (2012) *Success factors in MSEs cluster development: case of Gullele handloom clusters in Ethiopia*, MBA thesis, University of South Africa

Harjula, H. (2008) Scoping study on the inclusion of releases and transfers from small and medium sized enterprises in pollutant release and transfer registers (PRTRs), *OECD environment, health and safety*, publication series No. 10

Hidayet, K. et al.(2010) *The importance of SMEs in Developing Economies*, 2nd international symposium on sustainable development, Turkey

Hitchcock, D. and Willard, M. (2009), *The business guide to sustainability* – Practical strategies and tools for organizations, 2nd edition, London.

International Energy Agency (2007), *Tracking Industrial Energy Use and CO2 Emissions*, Head of communication and information office, Paris

International Labour Office (ILO) (2007) *The promotion of sustainable enterprises*, 1st edition, Geneva, Switzerland

ILO (2013) Training package on workplace risk assessment and management for small and medium sized enterprises, Geneva, Switzerland

Iordache, M.C. (2014) The role of SME in the context of a country's economy development, in Boldea, I. (ed.), *Communication, context, Interdisciplinarity*, Studies and Articles, 3rd edition, published by Petru Maior University Press, Romania

John, D. and Deborah, M.(2010)*Sustainable development from Brundtland to Rio 2012*, International Institute for sustainable development, United Nations Headquarters, New York, USA

Jonas, H. and Sabina, W. (2011) *Making business sustainable: closing the gap between doing good and making money*, M.A thesis, Lund University, Stockholm,

Kayanula, D. and Quartey, P. (2000) The policy environment for providing small and medium sized enterprises in Ghana and Malawi, *institute for development policy and management*, Working paper series, No. 15, University of Manchester

Kidane, M. et al, 2015, Microenterprises targeting youth group to socioeconomic development: The Case of Addis Ababa, Ethiopia, *International journal of business and economics research*, vol. 4, No. 3

Kothari, C.R.(2004) *Research Methodology: Methods and Techniques*, 2nd edition, published by New Age International, Delhi, India

Lee, K.(2012) The small, for – profit business model and environmentalism in Ethiopia, in Adam, P. (Eds.), *Environmental policy update 2012, Development strategies and environmental policy in East Africa*, Colby College, USA

Lukács, E. (2005), *The economic role of SMEs in world economy, especially in Europe*, Institute of Business Sciences, University of Miskolc, Hungary.

Mary, L.E. et al., (2007) France's mandatory "Triple Bottom Line" reporting: an informational regulation approach to sustainable development, *Bendick and Egan Economic Consultants, Inc.*, Washington DC, USA

MOFED (2010) *Country report on the implementation of the Brussels Program of Action* (BPOA), Ethiopia

Moffatt, S., White, M., Mackintosh, J. and Howel, D. (2006) Using quantitative and qualitative data in health services research – what happens when mixed method findings conflict? *BMC Health Services Research* 2006

Munasinghe, M.(2004)*Environmental Macroeconomics: Basic principles*, *International Society for Ecological Economics*, Munasinghe Institute for Development, Colombo, Sri Lanka, India

Nalband, N.A. and Al Kelabi, S.(2014) Redesigning Carroll's CSR pyramid model, *Journal of Advanced Management Science* Vol. 2, No. 3, King Saud University, Saudi Arabia

Nakata, A. et al (2006) The prevalence and correlated of occupational injuries in small scale manufacturing enterprises, *Journal of Occupational Health*, 48(5), Japan

Nlandu M amingi, (2011) Enterprise and Sustainable Development: Role, Challenges and Opportunities, *Journal of Economics and Sustainable Development*, Vol.2, No. 11 & 12

OECD (2004) promoting entrepreneurship and innovative SMEs in a global economy: towards a more responsible and inclusive globalization, second OECD conference ministries report, *OECD publications*, France

OECD (2008) *Environmental Outlook to 2030*, ISBN 978-92-64-04048-9, Paris

OECD (2010) *Interim Report of the Green Growth Strategy: Implementing our commitment for a sustainable future*, Meeting of the OECD Council at Ministerial Level, 27-28 May 2010, OECD, Paris

Parisa, S., Jerry, C. and Raveendranath, R. N. (2013). Sustainability in Small and Medium Sized Enterprises in Regional Australia: A Framework of Analysis, *University of Ballarat article*, Australia

Petrini, M. and Pozzebon, M. (2010) Integrating sustainability into business practices: Learning from Brazilian firms, *BAR Curitiba article*, Vol. 7, No. 4 available at <http://www.anpad.org.br/bar> (accessed March 2015)

Raderbauer, M. (2011) *The importance of sustainable business practices in the Viennese accommodation industry*, M.A thesis, University of Exeter, Vienna, Austria

Research Methodology: An Introduction
<http://www.limat.org/data/research/Research%20Methodology.pdf> (accessed April 2015)

Saravanan, D ., Mohideen, O .H. and Seid, M . (2014) Challenges and prospects of women entrepreneurs in Ethiopia, *Global journal for research analysis*, Vol. 3, Issue 8, ISSN No 2277-8160

Sartori, S. and Campos, M.S.(2014), *Analysis of corporate sustainability assessment tools and operations management*, Federal university of Santa Catarina, Brazil

Sawhny, V.(2008)*analyzing corporate social responsibility measurement parameters*, institute for public relation, Michigan state university, Australia

Saylor.org, A primer on sustainable business, <http://www.saylor.org/books>

Selamawit, N.K, Aregawi, G .T and Negus, A(2014) Determinants of Micro and Small Enterprises' Access to Finance, *Developing Country Studies*, www.iiste.org , Vol.4, No.21

Sherefa, M. (2012) *performance of micro and small enterprises and their role in enhancing local economic development: a case study in Gullele sub-city of Addis Ababa*, M.A thesis, Addis Ababa University, Ethiopia

Solomon, D. (2010)*Desk review of studies conducted on women entrepreneurs in Ethiopia*, Addis Ababa chamber of commerce and sectoral associations, Addis Ababa

Sorrell, S., Mallett, A. and Nye, S.(2011)*Barriers to industrial energy efficiency: a literature review*, Development policy, statistics and research branch, working paper 10/2011, Vienna

Spence, L.J. Agyemang, G. and Rinaldi, L. (2012)*Environmental aspects of sustainability: SMEs and the role of the Accountant*, the Association of Chartered Certified Accountants, report no, 128, London

Tasisa, A. (2014) *The contribution of MSEs in community development in Gullele sub-city, Addis Ababa*, MA thesis, Addis Ababa University

The African Development Bank Group (2010) Ethiopian Economic Growth Performance: Current situation and challenges, *Economic Brief*, Volume 1, Issue 5.

Torugsa, N., O'Donohue, W. & Hecker, R. (2012) Capabilities, Proactive CSR and Financial Performance in SMEs: Empirical Evidence from an Australian Manufacturing Industry Sector, *Journal of Business Ethics*, DOI 10.1007/s10551-011-1141-1.

UN (2015) Ethiopia United Nations Development Assistance Framework of 2012 to 2015

UNECA (2008) SMEs actors for sustainable development in North Africa, Office for North Africa, Saylor URL: <http://www.saylor.org/books>

UNEP (2003) Big challenge for small business: sustainability and SMEs, Industry and Environment, *A Publication of UNEP Division of Technology, Industry and Economics*, Volume 26, No.4.

UNDP (2012) Case studies of sustainable development in practice: triple wins for sustainable development, Design and production by Kimberly Koserowski, First Kiss Creative LLC

UNESCO (2006) Education for sustainable development toolkit, United Nations decade of education for sustainable development, *UNESCO education center*

UNIDO (2010) Enterprise-Level Indicators for Resource Productivity and Pollution Intensity: A Primer for Small and Medium-Sized Enterprises, Vienna

Wayne Visser (2005) *Revisiting Carroll's CSR pyramid: an African perspective*, Ph.D Fellow, the University of Nottingham, United Kingdom

Wikipedia, the free Encyclopedia, <http://en.wikipedia.org/wiki/Ethiopia> (accessed May 2015)

Worku, S. (2004) *Socio-economic determinants of growth of small manufacturing enterprises in Addis Ababa*, M.A thesis, Addis Ababa University

World Bank (2014) *Addis Ababa Spatial Determinants of Growth*, George Washington University Capstone report, Elliott School of International Affairs

World Bank (2015) SME finance in Ethiopia: addressing the missing middle challenge, Study team report

World Bank Group (2015) Overcoming constraints in the manufacturing sector, 4th Ethiopia economic update

Young, G. (2010) *Opportunities and challenges related to SME implementation of Environmental Management Systems*, Principal Consultant, Australia

APPENDICES

Appendix – A: Questionnaire to be filled by Entrepreneurs

Addis Ababa University
School of Graduate Studies
College of Business and Economics
Public Management and Policy Department

The purpose of this questionnaire is to gather primary data in order to assess the contribution of micro and small enterprises to sustainable development by considering the case of manufacturing enterprises in Addis Ababa. The researcher is grateful for your cooperation and assures you that all the information gathered will be kept confidential. You don't need to write your name on the questionnaire and since the data is processed and analyzed in aggregation your individual answer cannot be separately identified.

Your cooperation in giving genuine and frank answers in the questionnaire is highly crucial to obtain relevant and reliable information for the success of this study. Thank you for your cooperation.

Questionnaire Code: _____

Sub-city: a) Gulele sub-city b) Addis Ketema sub-city

Woreda : 1 2 3 4 5 6 7 8 9 10 11

No.	Questions	Please circle the most appropriate answer
Respondents' characteristics		
1.	Sex of the entrepreneur	a) Male b) Female
2.	Age of the Entrepreneur	a) Below 25 years old b) 26 – 35 years old c) 36 – 45 years old d) Above 46 years old
3.	Level of education	a) No formal education b) Primary school Grade 1 to 4 c) Primary school Grade 5 to 8 d) Secondary school e) Vocational school f) University / college g) Other specify _____
4.	Where were you living exactly before you start this enterprises	a) In this sub-city b) Elsewhere in Addis Ababa c) Out of Addis Ababa d) Abroad of Ethiopia
5.	How did you primarily obtain relevant experience of this enterprise	a) From government training centers as TVET b) From non-government training centers c) From my previous experience as an employee

		d) Inherited from family e) Gathering information f) School education g) Other, please specify _____
Enterprise characteristics		
6.	In which manufacturing sector is the enterprise engaged?	a) Textile and garment b) Leather and leather products c) Food processing and beverage d) Metal works and engineering e) Wood works including furniture and ornaments service
7.	What is the form of ownership	a) Sole proprietorship b) Partnership c) Cooperative d) Other _____
8.	When was the enterprise established	a) Less than 2 years b) 2 – 5 years c) 6 – 10 years d) Greater than 10 years
Economic sustainability		
9.	What is the initial capital of the enterprise?	ETB _____
10.	What is the current capital of the enterprise?	ETB _____
11.	Did the enterprise gain net profit last year	a) Yes b) No
12.	Which obligations the enterprise couldn't meet last year on time? (more than one answer is possible)	a) Cover operating costs b) employee compensation c) committed donations d) retained earnings, e) payments to capital providers f) governments g) meet all obligations h) other specify _____
13.	How is the pattern of growth of the enterprise	a) Growing b) Stagnating c) Declining d) Other specify _____
14.	What are the three major constraints that hinder your enterprise growth?	a) Finance constraint b) Land constraint (working premise) c) Input constraint d) Market constraint e) Lack of managerial knowledge f) Lack of technical knowledge g) Other specify _____
15.	Explain how the constraints hinder your business? _____	

16.	What is the major source of raw materials you use	a) Locally produced raw materials b) Imported raw materials c) Equal source of local and imported
17.	If your answer to question no. 16 is “b” or “c”, please explain why you prefer imported materials?	_____
18.	What is the competitive advantage of locally produced raw materials?	a) Lower price b) Higher quality c) High supply in the market d) They are not competitive e) Other specify _____
19.	The market for final products are:	a) In Addis Ababa only b) National market c) Export d) Other specify _____
20.	How is the market for your products as per your expectation	a) Higher sale b) Expectation level c) Lower sale d) No sale e) Other specify _____
Social sustainability		
21.	Are there recruited employees in your enterprise	a) Yes b) No
22.	What is the category of the employees (more than one answer is possible)	a) Paid workers b) Not paid part time workers c) Workers less than 18 years of age d) Non-paid workers as relatives e) Apprentice f) Other specify _____
23.	How is the proportion of workers in the higher paid categories or higher level?	a) More are male workers b) More are female workers c) Equal number of male and female workers d) Not applicable
Environmental sustainability		
24.	Which energy efficient management practices do you apply	a) Redesign your process to save energy b) Train staff c) System off when not in use d) I don't practice e) Others specify _____
25.	Which water efficient management practices did you use	a) Substitute potable water use with other sources of water b) Minimize water usage c) Treat and reuse water d) I don't practice e) Other specify _____
26.	What efficient material usage	a) Minimize material needed with continuous

	practices did you use	improvement b) Minimize wastage c) Use recycle materials d) Other specify
27.	How do you treat solid material waste of your enterprise	a) are recycled b) are sold as residual c) dispose them with no treatment d) others specify _____
28.	How often do you do maintenance of your machines and equipments	a) Regularly b) When it fails to work properly c) Other specify _____
29.	What is your opinion about the linkage between sustainability performance and financial performance	a) There is strong link b) There is weak link c) There is no link d) I don't know

Drivers for sustainable business practice

30. What are the perceived drivers for implementation of social and environmental responsible business practices as enhancing employee motivation, community contribution, reduction of energy, water, material usage, recycled material usage, treat wastes and / or others related business practices? *Tick only one box where 5 being most influential and 1 being not at all influential*

Drivers	Scale				
	5	4	3	2	1
a) Increased profits/financial performance					
b) Cost reductions/efficiency					
c) Customer attraction					
d) Employee attraction					
e) Reputation building					
f) Legislation compliance					

29a If you rate '5' or '4', please explain the reasons for rating as higher influential for each drivers

29b If you rate '3', '2' or '1', please explain the reasons for rating as lesser influential for each drivers.

Barriers for sustainable business practice

31. What are the perceived barriers for implementation of social and environmental responsible business practice? *Tick only one box where 5 being very strong barrier and 1 being not a barrier*

Barriers	Scale				
	5	4	3	2	1
a) Lack of relevant knowledge					
b) Lack of supporting services					
c) Time pressures / short planning horizons					
d) Low business priority					
e) Perception of higher costs / financial risk					

30 (a) If you rate '5' or '4', please explain the reasons for rating as higher barrier for each.

Appendix – B: Questionnaire to be filled by Employees

The purpose of this questionnaire is to gather primary data in order to assess the contribution of micro and small enterprises to sustainable development by considering the case of manufacturing enterprises in Addis Ababa. The researcher is grateful for your cooperation and assures you that all the information gathered will be kept confidential. You don't need to write your name on the questionnaire and since the data is processed and analyzed in aggregation your individual answer cannot be separately identified.

Your cooperation in giving genuine and frank answers in the questionnaire is highly crucial to obtain relevant and reliable information for the success of this study. Thank you for your cooperation.

Questionnaire Code: _____

Sub-city location: a) Gulele sub-city b) Addis Ketema sub-city

Woreda : 1 2 3 4 5 6 7 8 9 10 11

No.	Questions	Please circle the most appropriate answer
32.	Sex of the employee	a) Male b) Female
33.	Age	a) Below 25 years old b) 26 – 35 years old c) 36 – 45 years old d) Above 46 years old
34.	Marital status	a) Single b) Married c) Widow d) Divorced
35.	Level of education	a) No formal education b) Primary school Grade 1 to 4 c) Primary school Grade 5 to 8 d) High School e) Vocational school f) University / college g) Other specify _____
36.	In which manufacturing sector is the enterprise engaged?	a) Textile and garment b) Leather and leather products c) Food processing and beverage d) Metal works and engineering e) Wood works including furniture and ornaments service
37.	Where were you living exactly before you start this enterprises	a) In this sub-city b) Elsewhere in Addis Ababa

		c) Out of Addis Ababa d) Abroad of Ethiopia
38.	Did you have job before this	a) Yes b) No
39.	If yes , w hy you c hange your j ob (more than one answer is possible)	a) To get better experience b) To get better salary c) I was not satisfied with the previous job d) Other specify
40.	How much is your monthly net salary / wage on average?	a) Less than ETB 500 b) ETB 501 to 1000 c) ETB 1001 to 2000 d) ETB 2001 to 3000 e) Greater than ETB 3000 f) No payment
41.	Did y ou e arn additional benefits other than salary or wage payment?	a) Yes b) No
42.	What ki nd be nefits di d you r eceive from this enterprise (more than one answer is possible)	a) Health benefit b) Pension benefit c) Part time payment d) Commission payment e) Education cost coverage f) Other specify
43.	How di d t he pa yments you obt ain supported you (more than one answer is possible)	a) Enhance my expenditure capacity b) Enhance my saving capacity c) Could afford to buy assets for my house d) My living condition doesn't change e) Other specify
44.	To w hat ki nd of w ork pl ace emissions are you exposed?	a) Chemical b) Heat c) Sound d) Air e) No emission f) Other specify
45.	Are all the safety conditions fulfilled for your work	a) Yes, fully b) Partly fulfilled c) Not fulfilled d) Other specify
46.	How f requently di d you f ace w ork place injury	a) Frequently b) Sometime c) Rarely d) No injury
47.	Do you obt ain relevant t raining on your job	a) Yes b) No If Yes, How often?

		a) Regularly b) Sometime c) Rarely
48.	Do you receive training regarding environmental impact of the enterprises	a) Yes b) No

Appendix – C: Interview Checklist

1. Are there social and environmental standards set for MSE to meet?
2. To what extent did they meet the standard?
3. How do you assess the performance of MSE?
4. What contributing factors exist for their contribution to SD?
5. What constraints did they face?
6. How could MSE be strengthened to enhance their role?
7. What is the future plan

DECLARATION

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in any other University, and that all sources of material used for the thesis have been duly acknowledged.

Name: Yodit Gebreyohannes

Signature:

Date: 26.11.2015