A Survey of Ethiopian Manufacturing Sector
MANUFACTURING SURVEY
ANALYSIS 2014

DAB Development Research and Training PLC (DAB DRT)
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EXECUTIVE SUMMARY

Ethiopia’s manufacturing sector is among the key productive sectors of the economy identified under GTP (2010-2015) which can spur economic growth and development because of its immense potential for wealth creation, employment generation and poverty alleviation.

The manufacturing sector makes an important contribution to the Ethiopian economy and employs about 173 thousand people in 2012/2013.

The sector comprises about 2,610 manufacturing establishments and for this study purpose divided into eight broad subsectors namely food and beverage products, textile and apparel products, leather and leather products, wood and pulp products, chemical and chemical products, rubber and plastic products, other non-metallic minerals products and metal and engineering products industries.

The top two manufacturing subsector; food and beverage and metal and engineering industries account for 51% of the sector’s GDP and the food and beverage sector alone accounts 38% of the employment in the sector.

The sector contribution to the GDP in 2012/2013 is 4.8%. The performance of the sector has been affected by low productivity of workers and use of obsolete technologies which is attributed to the poor state of physical infrastructure, limited access to finance, limited research and development, poor institutional framework, and inadequate managerial technical skills.

Production and Value addition

Gross value of production by manufacturing sector worth about 113 billion birr in 2012/2013. Value added generated is estimated to reach 32 billion birr in the same year, which is about 4% of the value addition to the entire economy. The largest value addition is come from the metal and engineering industries which was around 10 billion birr in 2012/2013.
Sources of Finance

Total value of fixed capital assets in Ethiopian manufacturing sector estimated to reach 40 billion birr in 2012/2013 and the new investment in fixed capital for the 2012/2013 fiscal year worth around 3.7 billion and investment in food and beverage industries was the biggest (1.6 billion birr). Annual wage and salary expenditure reached around 10 billion Birr in the same year. Domestic banks were major sources of finance for most projects in Ethiopian manufacturing industries. The survey result has revealed that of the total 270 manufacturers interviewed for this study purpose, about 62% of them reported that domestic banks are their main financier followed by own saving (16.8%), foreign investment/partners (9.5%) and domestic capital market (5.7% each).

Market Structure and Export Trade Destinations

Most products produced by the manufacturing subsectors consumed by domestic users. Almost half of the repliers reported that they do not have any export destinations for their products. African countries are the major export destinations, which got about 26% of the interviewed industries reply followed by North America (11.2%), Western Europe (10.7%) and Asia (8%) while other areas had very insignificant share.

Leather, textile and apparel and agro-processing products accounts the major export item of the country.

Government Incentives and Free Trade Market Opportunities

About 30% of the enterprises rated investment and export trade incentives offered by the government as “good” while most firms (about 40%) in the manufacturing sector are unclear about the practicality of exporting using free trade agreements or preferential market opportunities.

Material Inputs Availability

Raw material and intermediate inputs utilization various depending on the nature of the manufacture industry. Sectors like food and beverage, textile and leather industries
predominantly utilize domestic raw material and manpower resources. On the other hand sectors like metal and engineering, chemical and plastic industries potentially imported material inputs for their production. The survey result indicated that about 49% of the interviewed enterprises obtained material inputs “half from domestic and half from foreign”. About 33% of the manufacturers primarily used imported goods while the remaining 18% dependent on domestic supply of raw material.

The availability of skilled manpower in the country is viewed as “satisfactory” by more than 50% of the respondent while a significant proportion (30%) of the industries indicated there is huge shortage of supply of managerial and technical expertise in the labor market.

**Plant and Technology Capacity Utilization**

Plant and technology utilization rated as “enough” by about 56% of interviewed samples while 87% the respondents in the sample reported that they are not producing in full capacity at current moment. Topmost respondents’ reasons mentioned for underutilization of plant capacity are presence of shortage of imported inputs, low labor productivity, oldness of plants, poor maintenances and low plant productivity and the existence of insufficient demand both in domestic and foreign market.

**Critical Issues for Advocacy and Advisory Services by AACCSCA**

- Support manufacturing industries through different business development services to increase industrial production and productivity by fully utilizing the existing capacity of industries, by providing relevant training, by organizing trade fairs to promote market linkage with foreign counterparts for partnership etc…
- Strengthen the advocate activities towards favorable business environment for manufacturing sector on issues of access to finance, land availability, trade logistics, taxation and access to raw material.
- Work jointly with relatable governmental and non-governmental organizations to support and strengthen companies engaged in the subsector, such as capacity building, creating network among actors in value chain of a given product, and creating platform for solving specific firm’s problem and challenges.
I. INTRODUCTION

1.1. Background

The Addis Ababa Chamber of Commerce and Sectoral Associations (AACCSA) is a membership based organization, has been established by the General Notice Number 90/147 as an autonomous, nongovernmental, and non-political, and non-profit organization to act on behalf of its members. It has been promoting and protecting the causes, interests, rights and benefits of the business community for about 67 years now. It is the oldest and largest Chamber in Ethiopia around 10,000 registered members at present and represents 60% to 70% of businesses in Addis Ababa. Apart from safeguarding the interests of the business community, AACCSA has also been playing a considerable role in prompting trade and investment in the country. AACCSA has been in the forefront in helping businesses grow and prosper through the provision of Business Development Services (BDSs), business advocacy, Corporate Social Responsibility (CSR), and engage in arbitration in times of dispute among the business community.

According to the terms of reference, AACCSA developed variety of services in house and in collaboration with different development partners. The partnership signed with the Confederation of Danish Industry is one of project to develop manufacturing services launched in February 2014 to occur for the coming three years entitled “Strengthening the Private Sector in Ethiopia” with special emphasis on the development of manufacturing sectors. To start with AACCSA wishes to carry out Manufacturing Sector survey to provide current information at sector levels for the advisory and advocacy services. Accordingly, DAB-Development Research & Training PLC has produced this report on analysis of Ethiopian manufacturing survey.

Manufacturing is critical and is probably the most important engine of long-term growth and development. As countries transform from primary agricultural-based economies to manufacturing based ones, more sustainable revenue for growth is obtained. Manufacturing industry in Ethiopia started in 1920s with a simple processing technology that produces agriculture-based products; but still the sector is infant – even by African standards, dominantly focusing on semi-processing. Several mutually reinforcing factors have
conspired to prevent the emergence of a stronger manufacturing base in the country. However, Ethiopia has the means to change those factors that are coming together at the same time, such as cheap labor force and well-educated, trainable and inexpensive labour and supplies of utilities. Similarly, the policy framework is conducive to manufacturing development as it proposes to drive manufacturing growth through vertical and horizontal links to the rich resource base of agricultural and mineral, both of which have solid growth prospects in their own right.

1.2. Objectives of the Survey

The main objectives of the survey is to analyze and determine the status of each manufacturing sectors to determine its current performance and constraints, review recent developments of the sectors, examine its potential and develop manufacturing sector status report for the purpose of advisory and policy advocacy service.

1.3. Scope of the Survey

The scope of this assignment entails compiling the status of each manufacturing sectors to determine its current performance and constraints, review recent developments of the sectors, examine its potential and develop manufacturing sector status report for the purpose of advisory and policy advocacy service. The scope of this report specifically covers the following:

i. Reviewing existing literatures and secondary data on status of Ethiopian manufacturing industries.

ii. Compiling the feedbacks collected from the selected manufacturing sectors and triangulate the findings with data from secondary sources and key informant interviews.

iii. Analyze the performance of each manufacturing sectors and develop sectors status in terms of

- Contribution to the Economy,
- Employment generation, access to productive labor force / skilled and unskilled labor,
✓ Production capacity,
✓ Availability of material inputs
✓ Technology utilization
✓ Capacity utilization
✓ Core issues needed to be advocated by the Addis chamber

Sectors which are incorporated on the survey are:

1. Food and Beverage Products Industries
2. Textiles and Apparel Products Industry
3. Leather and Leather Products Industry
5. Chemical and Chemical Products Industries
6. Rubber and Plastic Products Industry
7. Other Non-Metallic Mineral Products Industry
8. Metal and Engineering Products Industries

1.4. Methodology

The quantitative data collection from selected manufacturing companies is already accomplished by AACCSA. As a result, this report collected qualitative data from pertinent sources and stakeholders by means of key informant interview with governmental organizations and associations (Interviewed institutes/Associations are: Food, Beverage and Pharmaceutical Development Institute, Ethiopian Leather Industries Association, Chemical and Construction Input Development institute and Metal and Engineering Development Institute) and reviewed secondary data from different sources for triangulation purpose. As such the methods employed for compiling the report include:

- Key stakeholders interview
- In-depth review of pertinent existing literatures on the manufacturing sector from documentations from CSA, Growth and Transformation Plan (GTP) and Ministry of Industry, including papers available in AACCSA on the subject matter
- Analyzing data: both quantitative and qualitative data
• Validation workshop with key stakeholders

After the data are collected, the verification, coding, developing database on SPSS are completed and the final analysis of both quantitative and qualitative data is done using the help of SPSS. Counting percentage frequencies, cross-tabulations, average and percentages, is used to analyze the quantitative data with the assistance of SPSS. The analyzed data summarized and presented by using pi-charts, bar graphs, and tables. At each stage of discussions secondary information obtained from different sources are added to make the survey analysis all manufactures industries in the country inclusive.

The survey employed interpretive analysis technique in order to analyze qualitative data. The interpretation of qualitative data limited to descriptive narratives in order to complement the quantitative data. Thus, non-quantifiable data obtained from different sources analyzed qualitatively in this way and it will be used mainly to triangulate the quantitative data.

1.5. **Organization of the Report**

The rest of the report is organized as follows. Section two reviews status of Ethiopian manufacturing industries in terms of productive capacity, capacity utilization, access to raw materials, technology utilization, investment incentives, firm scale and employment. Section three presents the survey results, secondary data analysis and key stakeholders interview discussion in detail. Conclusions and recommendations based on the findings of the survey and secondary data review presented in section four. Section five presented opportunities and challenges of the Ethiopian manufacturing sector. Finally, appendices for tabular summary of the survey results, sample of key informant interview checklist for manufacturing survey analysis are presented.
II. OVERVIEW OF THE MANUFACTURING SECTOR IN ETHIOPIA

2.1. Ethiopian Manufacturing Sector Status

The Ethiopian government has initiated a new push towards creating framework to ensure economic and social development. The International Monetary Fund (IMF) ranks Ethiopia as among the five fastest growing economies in the world. After a decade of continuous expansion (during which real GDP growth averaged 10.8% per annum), in 2013/14 the economy grew for its 11th consecutive year posting 10.3% growth. Ethiopia’s economy is based on agriculture, which accounts 40.2% of GDP, 60% of the export earning, and 80% of total employment. The industrial sector accounts 14.3% of GDP, 9.5% of total employment, and 21.2% of export earnings. While the service sector accounts for 46.2% of GDP.

Ethiopian manufacturing sector contribute for export, employment and national output. The sector accounts for 70% of the industrial sector. Within the manufacturing sector, the agro-processing subsector (food and beverage subsector hereinafter) is the largest subsector, accounting for 36% of the total gross value of production (GVP) and 38% of the value added at basic price (VAMP) of large and medium scale manufacturing industry (CSA, 2014). The number of manufacture which was 408 in 1980/81 increased to 2,610 in 2012/13. Declining growth between 1980 and 1991 (408 to 283), lower growth between 1991 and 2001 (283 to 909), modest growth between 2001 and 2013 (909 to 2610).

Among the large and medium manufacturing processors, which total 2,610 manufacturers, 670 establishments are in the food and beverage subsector and employed more than 67,000 people, followed by non-metallic mineral products, metal and engineering products, wood and paper products, rubber and plastic products, chemical and chemical products, leather and leather products and textile products industries with 544, 433, 196, 154, 143, 141 and 104 total establishments for each and 17,230, 13,238, 14,064, 10,984, 9,801, 14,019 and 19,233 total jobs created again by each categories for the year 2012/2013 (2005 E.C.) according to CSA report.

Manufacturing is a wealth-creating sector of an economy, and closely connected with engineering and industrial design and provides important material support for national
infrastructure. It involves the mechanical or chemical transformation of materials or substances into new products. It makes products from raw materials by the use of manual labour or machines and is usually carried out systematically with a division of labour. In a more limited sense, manufacturing is the fabrication or assembly of components into finished products on a fairly large scale (CSA, 2012).

The government of Ethiopia liberalized the economy since 1991. The government has designed and adopted Agricultural Development Led Industrialization (ADLI) strategy to eradicate poverty. The Industry Development Strategy of the country has put in place the principles that primarily focus on the promotion of agricultural-led industrialization, export led development, and expansion of labour intensive industries. As clearly stated in the country’s industrial development strategy, value adding private sector is considered the engine of the sectors’ growth. In five three year Growth and Transformation Plan (GTP) implementation of the country, the industry sector received utmost emphasis by way of encouraging export based and import substituting industries. Vertical and horizontal linkages between agriculture and industrial sector have been promoted. This also stress the commercialization and agro-industrialization of the agriculture sector and value chain approach.

Despite the tremendous efforts made and the economic growth achieved, the Ethiopian economy remains beleaguered by structural problems. The manufacturing sector in Ethiopia is still at its infancy. In comparison with the agriculture and service sectors, the manufacturing sector, for example, has a limited share in terms of production, employment, and exports. Thus, the Ethiopian economy needs a more dynamic growth so that it can reduce its dependence on the fragile, rainfall dependent, and climate change vulnerable agricultural sector.

2.2. **Productive Capacity and Capacity Utilization of the Manufacturing Sector**

The industry sector constitutes mining and quarrying, manufacturing, construction, electricity, and water. In Ethiopia the low productivity and hence the competitiveness of the manufacturing industry has been largely attributed to a variety reasons, the major ones being
the sector’s use of obsolete machinery, lack of skilled man power and application of backward production technology. In order to enhance its productivity, the sector has to address its critical obstacles. From the industry sub-sector, the manufacturing firms in Ethiopia were utilizing only 54.3 percent of their production capacity. In other words, 45.7 percent of the total capacity remained unexploited. Average capacity utilization of the textile, leather, agro-processing and pharmaceutical industries in 2009/10 was at 40pc, 10pc, 60pc and 30pc, respectively. According to CSA’s quarterly manufacturing business survey, a relatively high degree of capacity utilization was observed in manufacture of wood and wood products and cork (99.8 percent) while a low level of capacity utilization was recorded in manufacture of furniture (26.93 percent).

The main reasons for the observed under capacity utilization rate differ from time to time. Nevertheless, shortage of raw materials, lack of demand /market/, increased entry and hence sharing of existing market, interruption of power and water supply are seem to be the main and more persistent reasons for under capacity utilization. Close to 62 percent of manufacturing establishments reported lack of market demand as a major cause for not operating at their full capacity, while problem with electricity and water was quoted as a reason by 13.9 percent of the manufacturing firms. Despite the problem of idle capacity, new firms joined the food and beverage, textile, chemical and other non-metal sub-sectors. This amounts to misallocation of scarce resources, which could have been used in other potential areas. In order to avoid misallocation of scarce resources, government has to provide the full information that an investor has to have before deciding to invest.

2.3. Access to Raw Materials for Manufacturing Sector and Technology Utilization

High dependency on imported raw materials and intermediate goods has remained the distinguishing feature of the Ethiopian manufacturing sector. The main reasons for high dependency on imported raw materials were unavailability of raw materials in the local market and lack of sufficient local supply. Inadequate and poor quality imported raw materials and technologies, along with low level of technical skills, top the lists of the
problems facing the sector. Series of surveys conducted by the Central Statistical Agency (CSA) on the manufacturing sector consistently reported that more than 50pc of firms claim that their first major reason for their low capacity utilization is inadequate and poor quality raw materials. This calls for a concerted effort both by government and other stakeholders to seek ways and means of enhancing domestic production of manufacturing raw materials thus reducing the outflow of the scarce foreign currency.

Technological change occurs through the process of innovation, invention, and diffusion that leads to the transformation of ideas and knowledge into tangible products that have highly utility to human needs. As technology advances, the systems of production become capital intensive and labor saving. In a labor abundant country, labor intensive industrialization strategy is suggested. Given its endowment, Ethiopia pursues this strategy. The recent development, however, shows increased capital intensity of the manufacturing industry. The traditional labor-intensive sub-sectors like textile and leather have started moving towards capital-intensity, which entails lower employment opportunities for the growing population, university graduates and rural-urban migrants. The problem emanates from inappropriate technology choice. Since the country does not produce capital goods, investors just pick available machinery without bothering its appropriateness to the endowment structure.

2.4. Investment Incentives

Despite due focus given to the large, medium, and small scale manufacturing industries in government development plan, the performance registered so far is unsatisfactory suggesting that the dire need for examining the sector’s growth constraining factors that hamper it from playing a leading role. Towards this end, the government has provided attractive incentives packages for investment in the manufacturing sector. Investment Proclamation number 768/2012 has listed duty draw-back, voucher, bonded export factory, manufacturing warehouse and bonded input supply schemes as important tools to promote manufacturing and export. The Ethiopian tax law allows for a duty free importation of raw materials and machinery, equipment for manufacturers. However, a significant size of investment has not been flowing into the sector as expected mainly due to the existence of
other highly and rapidly rewarding businesses against longer payback periods of investment in industry.

2.5. Firm Scale and Employment

The scale of manufacturing industries varies by ownership structure. Public owned manufacturing industries are mainly large scale while privately owned are mostly medium scale. Employment generation is a key factor in the promotion of the manufacturing industry. Transformation towards industrialization entails increased share of employment, value added, and export earnings of the manufacturing sector in the economy. However employment in the large and medium scale manufacturing industries is not satisfactory.
III. ANALYSIS AND FINDINGS OF THE MANUFACTURING SUB SECTORS

3.1. FOOD AND BEVERAGE PRODUCTS INDUSTRY

Introduction

The food and beverages sector is one of the main components of Ethiopia’s manufacturing sector. The first round GTP (2010-2015) ranked agro processing industries among top priority industries. Based on official industrial statistics\(^1\), the number of establishment under this subcategory are 670 and of this those under private ownership accounts about 96% of the ownership title.

The subsector includes a wide variety of activities, mostly linked to the transformation of domestically produced agricultural products. The subsector comprises the following production industries: vegetables, animal oils and fats, dairy products, grain mill products, prepared animals feeds, bakery products, sugar and sugar confectionery, macaroni and spaghetti, wines, malt liquors and malt, soft drinks and production of mineral water.

Production and Value addition

Gross value of production in this subsector is almost 38 billion Birr\(^2\) while value added generated amounts of Birr 4.3 billion, equivalent to little less than 1% of the entire GDP and about 6% of the total manufacturing industries.

Sources of Finance

CSA’s report for the year 2014 also indicated that the value of total fixed capital assets in this subcategory was more than 11 billion Birr and the new investment in fixed capital for the 2012/2013 fiscal year worth around 1.6 billion Birr. Annual wage and salary expenditure worth 1.9 billion Birr. Funds to finance all these establishment costs comes from different sources. According to the primary survey conducted by AACCSCA, this sub-sector relies

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\(^1\) CSA (2014): Abstract report of manufacturing survey

\(^2\) Note that this figure excludes the tobacco industry sector
highly on domestic banks to meet its financial resource demand. The survey result indicates that 60.7% of the companies use domestic banks as the main source of finance. Own saving (18%) is the second main source of finance followed by foreign investment/partner (9.8%), domestic capital market (4.9%) and other unmentioned sources (6.6%). Figure (1) below illustrate the source of finance for the surveyed food and beverages industries (62 in number).

Figure (1): Source of Finance

![Source of Finance](image)

Source: Manufacturing Survey 2014

**Employment**

National level manufacturing survey conducted by CSA (2014) shows that the total number of employees under this subsector can be estimated at some 67,000, which accounts almost about 21% of the labor force absorbed by the manufacturing industries found in all parts of the country.

Based on result obtained from the survey analysis, the mean percentage distribution of managers, technicians, skilled production workers, unskilled production workers and non-production workers in the subsector were 7.10%, 11.09%, 24.6%, 30.74% and 16.28%, respectively.

**Market Structure and Export Trade Destinations**

Food and beverage industries in Ethiopia comprises less export-oriented firms compared to other manufacturing sectors. Annual progress report for the first three years implementation
of Growth and Transformation Plan (GTP)\(^3\) indicated that total foreign exchange earnings from food and beverage industries was only USD 173 million, despite relatively large number of manufacturer of this subsector were in operation nationwide. This might be attributed to high competiveness requirement to penetrate in the world of food and beverage market complemented with high cost of plan establishment, lack of skilled manpower, inconsistent supply of raw materials in domestic market, interruption in supply of utilities like electricity and water and problems related to custom clearance, as explained by institute\(^4\) working with these industries in the key informant interview.

The result obtained from the survey also matches with the above mentioned point. Almost half of the companies had no any export destination. Africa (29.6%), Middle East (14.8%), Northern America (11.1%) and Western Europe (7.4%) are major export destinations reported by interviewed companies, respectively. The figure (2) demonstrate subsector’s major export destinations.

As far as market structure of the subsector is concerned, it is evident from the survey result that for majority of the companies (67.3%) in the food and beverage industry subsector, the mass market is the primary target market followed by middle class (34.6%) and upper-end (7.7%).

Figure (2): Export Market Destinations

![Export Market Destinations](source: Manufacturing Survey 2014)

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\(^3\) Growth and Transformation Plan (GTP) annual progress report (2014)

\(^4\) Food, Beverage and Pharmaceutical Development institute
Government Incentives and Free Trade Market Opportunities

Government of Ethiopia has offered different form of incentives to industries to promote export trade as well as to encourage import substitution. Food and beverage product producers sampled for this survey rated the incentives currently provided by government of Ethiopia to be Excellent (7.5%), Very Good (17%), Good (28.3%), Average (20.8%) and Poor (11.3%). Information obtained through in-depth key informant interview with producers’ representative also revealed that even though the government had offered the above listed incentives and duty free importation schemes, in practice they were ineffective, due to the long-bureaucratic processes it takes to undertake the measures. Export augmenting incentive was key recommendation requested by interviewed producers’ representative.

The government of Ethiopia is also working hard to make export trade attractive to investors through establishing bilateral/multilateral free trade agreements with other nations, regional duty free market agreements and preferential market opportunities like COMESA, AGOA, EU-EBA etc. Based on the information used in this study, about 43% of companies were unaware of the practicality of these opportunities, 22% of them did not know about it at all, 17.6% of them never considered it as an opportunity and only 9.8% of the firms were well informed about it and utilized to market products overseas.

Material Inputs Availability

Most raw materials used in the subsector are available domestically. Above 60 of the sampled companies reported that they had accessed inputs from domestic market. However, this subsector is to a large extent dependent on rain-fed production of raw materials, such as raw milk, oil crops, fruits and vegetables, grain/cereals, sugar cane, unprocessed tea/coffee, malt etc. The production of processed products therefore to a large extent depends on the seasonality of weather, which largely determines the quality of the materials available. The situation is true for most food and beverage agro-processed products. Volatility of production size due to inconsistent supply of inputs, which is again as a result of the weather-dependent nature of most raw material for this subsector, was one potential difficulty raised during key informant interview undertaken with producers’ representative.
Availability of skilled manpower is another determinant factor that determine the wellbeing this subsector. As discussed above, the food and beverage subsector currently absorbed a relatively large quantity of both skilled and unskilled workers available for the entire manufacturing industries of the country. In conformity with this national level status, data collected through company level survey revealed that availability of skilled manpower is not an issue at current condition.

The majority of interviewed companies (62.5%) in the food and beverage subsector rated the availability of skilled manpower in the country and that could work in this subsector as “highly satisfactory” while only 7.8% of the respondent replied availability as “significantly poor”. However, a contrary information was obtained through the key informant interview conducted with the industries’ representative, particularly regarding availability of technical expertise.

**Plant and Technology Capacity Utilization**

Companies are asked to rate efficient utilization of plants and technologies under their management. About 57.6% of the sample respondents’ rating was “enough” for their plant utilization while “not enough” and “significantly poor” were responses by 33.9% and 6.8% of the samples, respectively. Only 1.7% of them said that plant and available technologies utilization under their control is “above enough”.

Samples are also required to give information on whether they are currently producing with their full capacity or not. To get information, the following question was raised. “Are you producing in full capacity?” Thus, the finding has revealed that almost 90% of the sample companies had “no” answer for this question.

For those who replied “no” to the above case, additional question was presented: “what is the reason for underutilization of capacity?” as figure (3) below portrays, breakdown of power, shortage of domestic inputs, and low working capital and high credit costs are the most significant and frequently mentioned reasons reported by 70.9%, 50.9% and 41.8% of
sample respondent, respectively. The following figure summarizes the result of the survey in detail.

Figure: (3) Reasons for Underutilizations of Capacity

![Bar chart showing reasons for underutilizations of capacity](chart.png)

Source: Manufacturing Survey 2014

**Domestic and Foreign Market Challenges Facing the Subsector**

The survey has also tried to identify major challenges food and beverage products producer faces while selling products in the domestic and foreign markets. Top on the list are high cost of production compared to imported goods, low tariff protection, Insurgent of illegal goods and lack of access to market as major domestic market challenges. In similar fashion high cost of production compared to other competitor, lack of knowledge about foreign market trends, low capacity to produce in bulk and inability to keep product standards were most frequently mentioned foreign market challenges by respondent companies.

**Key Issues for the Subsector and Areas of Interventions**

During the survey, food and beverage product producers were asked both through industry level survey and through key informant interviews with most concerned institutions/personals associated with industries under this subsector category to mention key challenges related to production, finance, infrastructure, regulations, accessing market, inputs, technology, raw material and incentives. Thus, sample companies in this subsector and interviewed institute belonged to this subsector identified list of constraints and most
significantly affecting production performance of the food and beverage subsector. Top mentioned constraints at industry level survey are issues related to but not limited to:

- Accessing to finance
- taxes
- Availability of production utilities
- Advice and information on business network and development
- Bureaucratic red tape and
- Incentive for export and domestic market and

And investigation undertaken through key informant interview with food, beverage and pharmaceutical institute identified the following constraints:

- Inconsistent supply of raw material
- Adulteration and corruption
- Water, electricity interruption
- Tough completion from producers of market destination countries and
- Illegal marketing system

On the basis of these mentioned constraints and those recommendations forwarded by the industries, the following key areas of intervention are selected:

**Areas of intervention by government:**

- **Addressing availability of raw material and skilled manpower:** the government should work more on improving the technology utilization of the agriculture subsector as of most raw materials for this subsector comes from the agriculture subsector. In addition, the government should consult with industries to identify the key skilled manpower required for this subsector and then by to encourage training skilled individual through its high institutions.

- **Enhancing access to finance:** The government should alleviate the problem of shortage of finance to fund capital goods, raw material purchase and capacity
enhancement tasks in the food and beverage subsector through using both its own financial institutions and encouraging private financial sectors.

- **Improve infrastructure and utilities:** the government should invest more on infrastructure building and maintenance such as road, rail and electricity supply.

- **Avoiding the bureaucratic red tape and corruptions:** the government should try to resolve bureaucratic procedures required to accomplish any investment and incentives related activities and rent seeking behaviour of some civil servants in major service providing public institutions.

- **Encourage use of export market opportunities:** government should encourage producers in the subsector to wisely utilize its duty free import policies and free trade arrangement made with different countries and blocks.

**Areas of intervention by AACCSA:**

- **Advice and information on business networking:** AACCSA should continue its effort on preparing seminars, conferences, network meeting and publication regarding food and beverage subsector to improve their business environment.

- **Consultancy activities:** advise firms in the subsector to improve business environment through consulting on issues of access to finance, land availability, trade logistics, taxation and access to raw material.
3.2. TEXTILES AND APPAREL PRODUCTS INDUSTRY

Introduction

Textile and cloth has been one of Ethiopia’s traditional domestic business mainly relied on traditional based and home grown old age spinning drop wheel and handloom up to the modern textile and garment integrated mill was established in 1939 in Dire-Dawa by the name of Dire-Dawa Textile Factory, which marked the beginning of textile industrialization by foreign capital. Currently, Ethiopian textiles and apparel industry encompasses spinning, weaving, finishing of textiles, manufacture of cordage, rope, twine, netting, knitting mills, and manufacturing of wearing apparel. The firms in the industry produce products such as cotton and woolen fabrics, nylon fabrics, acrylic and cotton yarn, blanket, bed sheet, shirts, carpets, gunny bags, wearing apparels, and sewing thread. Ethiopia has slightly over a hundred textile and apparel units of medium and large size scale; within which there are sixteen textile processing units (the majority of which are integrated down or up the value chain) that can process natural and synthetic textile materials of different forms using machineries ranging from state of the art technology to semi-automated ones. According to CSA survey of the Ethiopian manufacturing sector in 2012/13, there were 109 firms engaged in manufacturing of textile and apparel, most of them are owned by private, which is 104 and the rest five firms are under state ownership.

Production and Value Addition

Value addition in textiles is the key to success for transforming the sector’s GDP share of the nation. As a result of integrated efforts by the Government and the Private Sector, Ethiopian and foreign investors are recently moving aggressively in the direction of higher value addition through investing in the balancing, modernization, establishing and upgradation of the textile manufacturing industry by acquiring new technologies and knowhow.

The gross value of production of textiles and apparel industry in 2012/13 was around 9.1 billion birr out of these firms owned by the private produce 8.2 billion birr and the
government firms produce 8.8 million birr. The value added of the industry in 2012/13 is 515 million birr.

**Sources of Finance**

Total value of fixed capital assets of textiles products and wearing apparel industry was around 5 billion Birr and the new investment in fixed capital for the 2012/2013 fiscal year worth around 148 million Birr. In the same year, annual wage and salary expenditure reached around 2.8 billion Birr. Formal local financial institutions, foreign investment and savings are the major sources of finance for the industry.

**Employment**

The textile and apparel industry in 2012/13 employed a total of 19,233 workers; of which the private firms employed 15,885 workers, whereas the government firms employed 3,337. Out of the above workers around 1,819 are direct employees (operators) and 161 are staff personnel.

The survey has shown that the mean percentage distribution managers, technicians, unskilled production workers and non-production workers in the surveyed textile and apparel industries (23 in number) were 4.38%, 8.77%, 20.29% and 16.28%, respectively.

**Market Structure and Export Trade Destinations**

During the first three year of GTP implementation, a total of 4.9 billion Birr foreign exchange earnings were obtained from the textile and apparel industry. This export earning is obtained by accessing market destinations in different continent of the world.

The survey result indicates that about 33% the sample textile industries supply products to the domestic market. Northern America is the potential export destination to textile products, followed by Middle East and Western Europe (14.3% each), Asia and Africa (9.5% each), Central and Latin America and Australia and Newzeland (4.8% each), according to their contribution to the total export. Market destination countries and continents for textile and apparel products of Ethiopia based on sample survey is indicated in figure (4) below.
Government Incentives and Free Trade Market Opportunities

The government has provided attractive incentives packages for investment in the textile and apparel subsector. Investment Proclamation number 768/2012 has listed duty draw-back, voucher, bonded export factory, manufacturing warehouse and bonded input supply schemes as important tools to promote manufacturing and export. The Ethiopian tax law allows for a duty free importation of raw materials and machinery, equipment for manufacturers.

In recent years, the global market has become increasingly accessible to countries such as Ethiopia. New export opportunities were created through initiatives such as AGOA (the African Growth and Opportunity Act), COMESA (the Common Market of Eastern and Southern Africa) and the many bilateral trade agreements concluded with Western countries, including the Netherlands, Belgium and Luxembourg. Ethiopia is also part of the “Everything But Arms” program that has been set up to provide access to the E.U. market for Lesser Developed Beneficiary Countries, free of duty and without quota restrictions, for all export products except arms.

All these incentives and market advantages are rated by sample respondent manufacturer in the subsector. With regard to government incentives those who views it as “good” accounts about 45% of samples' response. However, only (4.5% each) of them rated it as “excellent” and “poor” simultaneously.
When we look at respondents’ view about trading with free trade agreements and preferential market opportunities, about 43% of industries in this subsector replied that they are well-informed about it and utilized these advantages to sell product overseas while about 24% of those interviewed said they are unclear about its practicality.

**Material Inputs Availability**

Ethiopia’s textiles and clothing industry is undergoing major development, aided by the presence of a cheap, skilled and highly-motivated workforce. This surge has been helped by the country’s impressive economic growth over the past years. Ethiopia’s enormous export potential is made possible by the wide availability of raw cotton and other natural fibers and Ethiopia’s access to domestic, regional and international markets.

Dyes and chemicals form the most important part of the supply side of textile finishing industry. Ethiopian textile processing units consumed about 14,250,406 kg of various types of dyes and chemicals in 2011 with their current production capacity. The majority of the dyes and chemicals are imports from foreign countries such as Japan, China, India, Pakistan, Switzerland, Turkey, Germany and Korea.

In line with the above reviewed secondary data and documentations, sampled textile companies survey in this study responded that they had purchased about 55% of their material inputs from “half domestic and half foreign market” source and about 41% of it from “only foreign market” while only 4.5% it was from “only domestic market”.

The survey result also indicate that about 43% of the sampled respondent rated skilled manpower availability in Ethiopia as “satisfactory”, 34.8% of them as “not satisfactory” while only 8.7% of the samples as “significantly poor”.

**Plant and Technology Capacity Utilization**

As the size and complexity of today’s most modern textile and cloth manufacturing technologies increasing, new techniques must be developed to effectively learn, select and adopt appropriate ones. The government policy on textile industry is to strengthen efforts that would improve traditional cloth marketing technology, promote competence to improve
production process, products diversification, product quality, pattern development, design and dyeing techniques, and undertake research and development on textile technology.

Plant and technology utilization rated as “enough” by about 52% of interviewed samples while the reaming 48% viewed it as “not very good”.

The result has also shown that about 73% of the textile industries surveyed were operating below their full capacity. Among reasons mentioned by respondents for their underutilization of capacity breakdown of power, shortage of inputs both from domestic and foreign markets, low labor productivity and low working capital and high cost of credit are the top as presented using the following figure (5).

Figure: (5) Reasons for Underutilizations of Capacity

Source: Manufacturing Survey 2014

Domestic and Foreign Market Challenges Facing the Subsector

The major market challenges the textiles and apparel industry facing both for domestic and foreign market are limited linkage and competitiveness.

Key Issues of the Industry and Areas of Interventions

Top most frequently mentioned constraints and challenges identified through manufacture level survey are the following:

- Limited fund supply to finance projects in textile and apparel both from the domestic and foreign sources
- An attractive tax rate and administration procedures;
✓ Transport and logistic problems;
✓ Bureaucracy red tape

**Areas of intervention by government:**

✓ **Improving the Quantity and Quality of Raw Materials:** under capacity utilization of the firms arises from shortage of raw materials, thus, the government of Ethiopia should increase raw materials availability with the required quality by means of strengthening raw materials producers capacity and by creating market linkage with foreign suppliers.

✓ **Enhance Access to Finance:** shortage of foreign currency to import raw material and intermediary goods is one of the main problems facing the industry, thus, the government should alleviate this problem by increasing foreign currency availability.

✓ **Upgrading the Skill and Technology of the Firms:** shortage of skilled personnel at management and operational levels is one of the major problems of the firms in the industry, the government should strengthen existing training institutes, Textile Industry Development Institute.

✓ **Establishing Industrial Zones:** Ethiopian needs an area zoned and planned for the purpose of textiles industry development. Furthermore, industrial zones would enable Ethiopia to attract more export oriented foreign direct investment in the industry.

✓ **Improve Infrastructure and Utilities:** the government should invest more on infrastructure building and maintenance such as road, rail and electricity supply.

**AACCSA Intervention Areas**

✓ Support textiles and apparel industry thought different business development services to increase industrial production and productivity by fully utilizing the existing capacity of firms, by providing relevant training, by organizing trade fairs to promote market linkage with foreign counterparts for partnership etc…
✓ Strengthen the advocate activities towards favorable business environment for textiles and apparel industry on issues of access to finance, land availability, trade logistics, taxation and access to raw material.
3.3. LEATHER AND LEATHER PRODUCTS INDUSTRY

Introduction

Ethiopia’s leather and footwear industry has significant international comparative advantages owing to its abundant and available raw materials, highly disciplined workforce and cheap prices. The country boasts the largest livestock production in Africa, and the 10th largest in the world. Ethiopian leather and leather products industry encompasses tanning and dressing of leather, manufacture of luggage and hand bags, and manufacture of footwear’s. The firms in the industry produce products such as leather shoes and boots, canvas and rubber shoes, plastic footwear’s, leather upper and lining, leather sole, semi processed skins, leather garment, plastic sole and crust hides, and wet blue hides.

According to CSA survey of the Ethiopian manufacturing sector in 2012/13, there are 141 firms engaged in manufacturing of leather and leather products, except one firm which is owned by the government, the rest are private firms.

Production and Value Addition

Ethiopia annually produces 2.7 million hides, 8.1 million sheepskins and 7.5 million goatskins. This comparative advantage is further underlined by the fact that the costs of raw hides and skins constitute on average 55-60% of the production of semi processed leather. The gross value of production of leather and leather products industry in 2012/13 was around 9 billion birr out of these firms owned by the private produce 8 billion birr and the government firms produce 1 billion birr. The value added of the industry in 2012/13 was 2.2 billion birr.

Sources of Finance

Total value of fixed capital assets of leather and footwear industry was around 1.8 billion Birr and the new investment in fixed capital for the 2012/2013 fiscal year worth around 260 million Birr. In the same year, annual wage and salary expenditure reached around 1.5 billion
Birr. Formal local financial institutions, foreign investment and savings are the major sources of finance for the industry.

Based on primary data collected for this study purpose, almost half the subsectors’ financial sources, according to respondents reply (they are 24 in number), as can be seen from figure (6) below comes from domestic banks. Detailed of the remaining sources can be read from figure below

**Figure: (6) Source of Finance**

- Domestic bank: 50.0%
- Domestic capital market: 20.8%
- Foreign investor/partner: 16.7%
- Foreign investment/partner: 4.2%
- Savings: 4.2%
- Other source: 4.2%

Source: Manufacturing Survey 2014

**Employment**

The leather and leather products industry employed a total of 14,019 workers, those firms owned by the private employed 13,450 workers while those under state ownership employed 569 workers.

According to the survey result, the mean percentage distribution of managers, technicians, skilled production workers, unskilled production workers and non-production workers in the subsector were 4.79%, 5.25%, 45.94%, 24.99% and 18.49%, respectively.

**Market Structure and Export Trade Destinations**

Ethiopian leather products have been exported to markets in Europe (especially Italy and the UK), America, Canada, China, Japan and other Far Eastern countries and the Middle East. Leather is also exported to other African countries including Nigeria and Uganda.
Information obtained from those interviewed leather and leather product producers indicated that for about 52% of sample respondent, Western Europe was the major market designation followed by Asia (47%) and North America and Africa (31.1% each) as demonstrated in figure (7) below.

Figure (7): Export Market Destinations

Source: Manufacturing Survey 2014

Government Incentives and Free Trade Market Opportunities

The government of Ethiopia also considered the leather industry a priority sector for growth. Like in other priority sector all form of investment and export incentives are applicable to the leather and leather product industry. According to information obtained from this survey, 37.5% of the Leather and leather product producers in the study rated incentives given by the government as “good”, 8.3% of them rated it as “poor”

Regarding market related incentives and opportunities, about 43% of industries in this subsector replied that they are well-informed about exporting under free trade agreements or preferential opportunities while 24% of them were unclear about its practicality.

Material Inputs Availability

The survey result has established the source of material inputs for this subsector. As depicted in figure (8) below, about 79% of respondent reported that material inputs to their leather and leather product production come half from domestic and half from foreign markets.
The major input bottlenecks facing the leather and footwear industry are availability and access to quality raw hides and skins and appropriate technology.

Information obtained by interviewing the Ethiopian Leather Industries Association has identified the following key issues related to inputs availability:

- The raw material availability is in general inadequate
- There is imbalance between demand and supply of raw material. Demand is high and supply is short. This is due to number of tanneries are on rise.
- There is quality problem due to skin diseases of animals
- There are manmade problems regards to handling of raw hides and skins

The survey result has also shown that about 67% of the sample respondent in the leather and leather product subsector rated the manpower availability as “not satisfactory” and the reaming 33% as “satisfactory”

**Plant and Technology Capacity Utilization**

The government policy on leather industry include undertaking research on the improvement of traditional handling and tanning techniques and production of chemicals inputs from local available natural products, improving and promoting technical competency of handling, preparing and use of skins and hides, and undertake research to improve the production process of hides, and skins, and promoting the recycling methods of by-products and refuses.
The survey result has revealed that about 66%, 29.3% and 4% of the sample respondents’ rating their plant and available technologies utilization as “enough”, “not very good” and “significantly poor”, respectively.

Besides, survey result has shown that all the sample respondents in the leather and leather products subsector reported that they are not currently operating with their full potential at all. Reasons are given by respondents for not operating at full capacity. Top on the list are breakdown of power, shortage of inputs both from domestic and foreign markets, and low working capital and high cost of credit.

**Domestic and Foreign Market Challenges Facing the Subsector**

The major market challenges the leather and footwear industry facing are limited competitiveness in providing the required amount and quality and style by keeping the deliver time.

**Key Issues for the Subsector and Areas of Interventions**

Top most frequently mentioned constraints and challenges identified through manufacture level survey and using key informant interview with Ethiopian Leather Industries Association and reviewing literatures are listed below:

Key challenges identified through structured questionnaire survey are:

- Limited incentives to supply fished products both for domestic and foreign markets.
- Cost of utilities such as electricity and water is high
- Lack of advices and information regarding creating a business network among producer and consumers in and outside the country.

Constraints raised by Ethiopian Leather Industry Association are:

- Availability of raw material (hide and skin) is inadequate and lacks quality due to animals’ diseases and mishandling of raw hides and skins at origin.
- High cost of imported inputs
- Inadequate supply of man power in the labor market
✓ Poor infrastructure development like inadequate supply of electric power
✓ Shortage of finance and finance sources

And collected by reviewing secondary sources are:

✓ Market problems: most industries in the subsector have no clear strategy of marketing that includes market demography, market structure, market segmentation, market trends, opportunities and threats, trade channels for market entry, etc.

✓ Institutional support: Although there is little support by the supporting institutions like Ministry of Trade, Ministry of Industry, Ethiopian Leather Industries Association etc, there are a lot of things left for improvement.

✓ The finished leather supplied by the tanneries take long time due to long time of product development, dependence on small tannery groups, high reject rate, price variation and other commitment of tanneries

✓ Price Problem: High Price fluctuation better price for export of crust and finished leather than local price, sudden price change after negotiation due to long delivery time.

✓ Accessory and component: Non Availability of local manufacturers for important accessories (sole, Insole, toe puffs, last, counter, etc.)

✓ Logistic and information (right source, reliable customer, and good price) related problems.

On the basis of the above listed challenges and some remedial measures forwarded by interviewed institute, the following intervention proposals are identified to be addressed by a government and AACCSCA.

**Areas of intervention by government:**

✓ **Improving the Quantity and Quality of Raw Materials:** under capacity utilization of the firms arises from shortage of raw materials, thus, the government of Ethiopia should provide support to increase raw hides and skins with the required quality
by means of strengthening raw materials supply and by creating market linkage with foreign suppliers. In order to solve quality related problems, regulating hide and skin and finished Leather market by applying new policy/trade law is advisable.

✓ **Resolve constraints on international market penetration and competitiveness:** Poor image for Ethiopian products at international market (this is because international market consider Ethiopia is still raw material supplier), poor logistic trading, poor quality of hide and skin in domestic market, limited supply of complementary inputs, limited participation in international trade fair to promote Ethiopian products and other factors put huge cost on the competitiveness of the Ethiopian leather industry in the international market.

✓ Resolving these constraints demands producers-sectors-associations coordination. To this end collaborative work of ministries like MoA, MoT, MoI, MoFE and Ethiopian Revenue and Custom Authority with producers in the area and together with institutions/associations like Ethiopian Leather Industries Association is mandatory as long as the ultimate goal is to penetrate in the international leather market.

✓ **Enhance Access to Finance:** shortage of foreign currency to industrial machines and intermediary goods is one of the main problems of the firms in the industry, thus, the government should alleviate this problem increasing foreign currency availability.

✓ **Capacity building and trainings:** shortage of skilled personnel at management and operational levels is one of the major problems of the firms in the industry. It is therefore, the government should strengthen higher institution found within the country that train labor to the subsector. In addition, the government should also create a framework on which Ethiopians could get trainings specific to the subsector aboard. Furthermore, the government should strengthening supporting Institutions and associations in the area through various mechanisms of capability building programs.
The government should also encourage modern husbandry management of animals since the primary inputs for the subsector is obtain from animal production.

The government also needs to work hard to increase the efficiency of its service provider institutions.

**AACCSA Intervention Areas:**

- Support firms in leather and footwear industry thought different business development services to boost firm’s production and productivity by fully utilizing the existing capacity of firms, by providing relevant training, by organizing trade fairs to promote market linkage with foreign counterparts for partnership etc.
- Strengthen the advocate activities towards favorable business environment for leather and footwear industry on issues of quality and quantity of raw material, access to finance, land availability, trade logistics, and taxation.
3.4. WOOD, PAPER AND PULP PRODUCTS INDUSTRY

Introduction

For this particular survey purpose only we summed up the wood, paper and paper product industries under one group. Based on CSA’s classification of medium and large manufacturing industries in Ethiopia, wood and wood products are under one subcategory and paper and pulp products in different category. According to the CSA data which is conducted in 2014, the number of establishment under this subsector reached 208 in the year 2012/2013 of which 83 are in wood and products of wood and corks (excluding household furniture made from wood) and 125 are in paper and pulp product industries. Furthermore, 21 and 62 establishment of wood and product of wood industries are owned by government and private firms, respectively; while 12 and 113 paper and pulp product producers administered by government and private ownerships, respectively. Note that the paper and pulp product subcategory has two streams; paper and paper products and printing and printing related services.

Production and Value addition

The gross value of production of wood, paper and paper products industries in 2012/13 was around 2.4 billion Birr. The value added of all industries in 2012/13 is around 920 million birr.

Sources of finance

Domestic banks are still major financier to this subsector though own saving and domestic capital market had a significance roles. Surveyed sample companies in this group (36 in number) responded the same. The following figure portrays producers’ responses regarding source of finance for investment and other expenditure in this subsector.
According to the data from CSA (2014), the number of employment engaged in the paper and paper products sub sector reached 14,064; of which those under paper and pulp industries are 10,171. In 2012/13 the sub sector has invested 314.36 million birr for wage and salary which is almost double compared to the year 2008/09.

According to the survey, the mean percentage distribution of managers, technicians, skilled production workers, unskilled production workers and non-production workers in the subsector were 6.19%, 15.21%, 30.59%, 21.17% and 12.17%, respectively.

**Market Structure and Export Trade Destinations**

The wood and product of wood and cork has no any export experience. The paper and pulp products exported to foreign markets but very insignificant in amount. During the fiscal year of 2012/2013 the amount of production of paper, pulp and printing reached 151,738 tons, which worth of 3.3 billion birr. But from this total only 55.97 million birr worth of products shared the exported quantity.

The data obtained from the surveyed industries in this subcategory shows that for the majority of sample industries (79%), there was no any export destinations mentioned though there were fragmented proportion of export to North America, Africa, Middle East and Western Europe. See figure (10) below demonstrate this finding.
Government Incentives and Free Trade Market Opportunities

As part of the Government’s commitment to insure efficient service delivery and create an enabling investment environment; the government has been applying different types of incentives. But as of the sample respondent from this sub sector government incentives was rated as “very good” by 30.4% of respondents, “Excellent” by 26.1% of the respondent, “good” and “don’t know the incentives” by 17.4% of the respondents, each.

Material Inputs Availability

According to the survey, 51.4% of respondent form this sub sector replied that they uses half imported and half domestically generated raw material. And 34.3% of the respondents replied that they primarily use imported raw materials. The remaining 14.3% of the respondent said that they only use the domestic raw materials.

The survey result has shown that about 52% of the sample respondent in the wood, paper and paper product industries rated manpower availability in Ethiopia as “satisfactory” and another big proportion of sample (30.6%) rated as “not satisfactory” as shown in the following figure.
Plant and Technology Capacity Utilization

The survey result has revealed that about 54.3%, 40% and 5.7% of sample wood, paper and paper products producers rating of their plant and available technologies utilization were “enough”, “not very good” and “significantly poor”, respectively.

The Samples are also required to provide answer for the question “are you producing in full capacity?” Result has indicated that about 86% of the samples said “no” to this question. Among reasons mentioned by respondents, low working capital and high cost of credit, breakdown of power and shortage of imported inputs from foreign markets contributed highest proportion for their underutilization of capacity.

Domestic and Foreign Market Challenges Facing the Sub Sector

Though the subsector produce goods for domestic market the following were raised by interviewed enterprises in this group as a major constraints that hindered their marketing expansion both within domestic and abroad market.

With regard to domestic market about 62.9% of the samples mentioned “High cost of production compared to imported goods” as their primary domestic market challenge to products. Another two major challenged resided by the sample respondents with respect to domestic market are lack of access to market (22.9%) and low tariff protections (20%).

Similarly top challenges mentioned to sell products in foreign market were low capacity to produce in bulk(33.3%), lack of knowledge about foreign market trends and inability to keep quality standards (both 28.6%) and uncompetitive global market (23.8%).

Key Issues for the Subsector and Areas of Interventions

Producers in wood and paper related manufacturing industries interviewed for this survey purpose have identified key production constraints and areas of intervention for government and advisory and advocacy issue for AACCSA. Here below are some of them most frequently addressed by respondents but not limited to:

- Shortage of finance
Lack of advices and information regarding creating a business network among producer and consumers in and outside the country.
- Dumping imported similar products in domestic market
- High transport and logistic cost

On the basis of these listed constraints, the following interventions areas are identified.

**Areas of intervention by government:**

- There is need for a focused effort to improve accessibility of finance sources by firms in these industries, aimed at improving the investment environment in the area. In addition it is advisable making competitive the subsector both in domestic and foreign market through for example encouraging firms through various incentive policies and protecting the domestic industries from foreign markets by imposing a higher custom duty on import goods.
- The government should also work more on easing cost related to logistic and transporting of finished products within the country and exporting abroad as well as raw materials importation.

**AACCSA’s areas of interventions**

AACCSA could stress on the following areas for the future if it to address the challenges of wood, paper and paper products industries:

- Provide advisory and advocacy service on issue of access to finance
- Support industries through different business development services to increase industrial production and productivity by fully utilizing the existing capacity of industries, by providing relevant training, by organizing trade fairs to promote market linkage with foreign counterparts for partnership etc.
3.5. CHEMICAL AND CHEMICAL PRODUCTS INDUSTRY

Introduction

This subsector involve the manufacturing of basic chemicals based on local raw materials, including PVC granules from ethyl alcohol, formaldehyde from methanol, manufacture of caustic soda and chlorine-based chemicals, carbon black; activated carbon; precipitated calcium carbonate, ball-point ink, manufacturing of pharmaceutical, medicinal, chemical and botanical products in the form of tablets, capsules, syrups and injectable.

There are 153 total chemical and chemical related product producers with the country according to CSA’s raw data for the year 2014. This industries share 5.7% of the total manufacturing industries in Ethiopia and most industries are concentrated around Addis Ababa (81 establishments) and Oromia (60 establishments).

Although the sub sector has experienced a downfall on growth in the year 2010/11 (from 99 establishment to 75), it has registered a tremendous growth until 2012/13.

Production and Value addition

The chemical industry provides essential input for economic and social growth in the agricultural and health sectors. For example, fertilizer is an output of the chemical industry that is used as an input in the agricultural sector to increase the output of the farmer. Similarly, the health sector and other economic sectors of the country benefit from the outputs of the chemical industries.

Estimate show that the subsector worth some 9.7 billion Birr in 2012/2013, which it makes the subsector fourth largest sector in terms of total income generation compared to other manufacturing sectors. The value added of this subsector worth 2.8 billion Birr in 2012/13. The lion’s share of this subsector production is held by fertilizer and pharmaceutical products

Sources of Finance

Total value of fixed capital assets for this subsector worth 1.9 billion Birr and the new investment in fixed capital for the 2012/2013 fiscal year worth around 253 million Birr. Annual wage and salary expenditure reaches around 434 million Birr. About 67%
manufactures (44 in number) interviewed for this study purpose indicated that domestic banks are their major fancier followed by own saving (14.3%), foreign investment/partner (7.1%) while the others played insignificant role as shown in figure (11) below.

Figure (11): Source of Finance

![Source of Finance Pie Chart]

Source: Manufacturing Survey 2014

**Employment**

Employment in chemical and chemical product industries recorded 11,028 persons in 2011/2012, dropping significantly to 9,801 persons in 2012/2013 based on CSA’s raw data for the year 2014. During 2012/2013 the subsector paid more than 434 million Birr for employees as wage and salary as show discussed above.

Interviewed industries reported that the mean percentage distribution of their managers, technicians, skilled production workers, unskilled production workers and non-production workers in the subsector were 4.91%, 8.73%, 17.64%, 35.27% and 16.26%, respectively.

**Market Structure and Export Trade Destinations**

The chemical and chemical products markets of the country are served with the output of the local industries and a substantial volume of imports. Exports from the local industries to the rest of the world are negligible.

As the data indicates from CSA (2014), from the total amount of production (9.7 billion) only 68 million Birr worth (only 0.7%) production was exported for foreign market implying that almost all production output from this subsector consumed by domestic industries and residents.
However, result obtained from the study survey revealed a bit different outcome. For example, about 35% the respondent says Africa is their second market destination despite almost 59% of the responded yet said domestic market is their primary market destination.

**Government Incentives and Free Trade Market Opportunities**

The government of Ethiopia has offered the same incentives (exemption of customs duty and income tax, loss carry forward, export incentives and remittance of capital) applicable to all other manufacturing industries to those investors engaged in eligible new enterprises or expansion projects in chemical and allied products industries. However, only 6.3% of those interviewed manufacturers in this subsector rated governments’ incentive mechanisms as “excellent” while significant proportion (34% respondents regarded it as “good”.

Furthermore, about 54% of those interviewed producers were unclear about the practicality of exporting under free trade agreements or preferential opportunities while only 14% of them were well informed about it and used to enhance their export performance.

**Material Inputs Availability**

Information obtained through key stakeholder interview with Chemical and Construction Inputs Development Institute indicated that there is chronic shortage of raw material for chemical and allied industries. The reasons for this inadequate supply of raw material according to the institute are limited working capital, absence of raw material suppliers located in Ethiopia, shortage of foreign currency and inefficient custom clearing process.

According to the survey the majority of the sample respondent (59%) material inputs are obtained from half from domestic and half from foreign markets. A significant proportion of respondents’ (37.2%) inputs are imported from foreign market while very insignificant proportion (4.7%) from domestic market.

Majority of those interviewed companies (62.8%) rated skilled manpower availability as “satisfactory” while only 9.3% of the respondent companies in this subsector had found skilled manpower availability as “significantly poor”

**Plant and Technology Capacity Utilization**
Chemical and Construction Inputs Development Institute has reported the subsector is currently operating below 50% of its capacity due to the problem related to inadequate supply of raw materials and lack of adequate foreign currency supply.

When we look at the responses gathered through companies survey, the majority of them (64.3%) reported that their plant and technology utilization status was “enough” while it was “not very good” for the 23.8% of the respondents.

Samples respondents’ response for the question “are you producing in full capacity” was “no” for the majority of respondents (76.7%). Among reasons forwarded by respondents for their “no” answerer, breakdown of power, shortage of imported inputs from foreign markets, low working capital and high cost of credit and insufficient domestic demand, according to their magnitude, accounts for their underutilization of capacity.

**Key issues for the subsector and areas of Interventions**

Production performance of chemical and chemical allied industries affected by different constraints. This study has tried to identify these constraints through industry level survey and by undertaking key informant interview with Chemical and Construction Inputs Development Institute. Here below are some of most frequently mentioned by both respondent industries and the institute.

Those indicated by respondent industries are the following but not limited to:

- Shortage of finance
- Lack of advices and information regarding creating a business network among producer and consumers in and outside the country.
- Lack of policy framework that protect the domestic industries from foreign market aggression.
- Poor electricity infrastructure

Those gathered through key stakeholder interview are:

- Inadequate supply of raw material and absence of raw material supplier
- Shortage of foreign currency
- Inefficient custom clearing process
- Use of outdated technologies
- High logistic cost
- Poor labor productivity and shortage of skilled manpower
- Absence of research and development and inadequate technology transfer in the area
- Chronic electricity supply shortage

**Areas of intervention by government:**

- **Addressing availability of raw material and skilled manpower:** The lack of raw materials base calls for exploitation of the available raw materials domestically in addition to creating favorable environment on which raw materials imported with minimum cost, time and administrative procedures. To this end, inter-ministerial-industrial-institutes coordination (MoI, MoT, MoE etc.) is crucial in alleviating problems of raw material supply the associated challenges.

- Furthermore, It is extremely important give due attention for the selected skilled manpower in providing some kinds of trainings in government’s higher institutions or using affiliated institute like Chemical and Construction Inputs Development institute as to achieve sustainable supply of skillful manpower to the subsector. This enable factories to boost their laborer productivity and then by the quality and total amount of production.

- In order to increase productivity and efficiency, the government should invest more on research and development These can done through direct support industries and higher academic research institutions by the government or some other sponsors in terms of finance and professions.

- **Enhancing access to finance and foreign currency:** The government should alleviate the problem of shortage of finance in order to fund capital goods and availability of foreign currencies in order to ease raw material purchase by firms in the subsector.

- **Improve infrastructure and utilities:** the government should alleviate problem of power supply and interruption by investing more on project areas.
✓ Protecting domestic industries from foreign market competitors: the government should protect infant new domestic industries from foreign markets competition by imposing a higher custom duty on imported goods.

AACC SA’s areas of interventions:

AACC SA should focus on the following issues for its advisory and advocacy services:

✓ Providing advisory and advocacy service on issues of access to finance, marketing expansion, custom clearance procedures etc.
✓ Support industries through different business development services to increase industrial production and productivity by fully utilizing the existing capacity of industries, by providing relevant training, by organizing trade fairs to promote market linkage with foreign counterparts for partnership etc.
3.6. RUBBER AND PLASTIC PRODUCTS INDUSTRY

Introduction

The rubber and plastic product industries were among the major targeted manufacturing industries for first round GTP. The government of Ethiopia planned to enhance the capacity of the subsector to substitute imported goods of plastics and rubber products. In the production of plastic, the GTP put to increase total production of plastic produced domestically to reach 37000 tons per year to meet about 30% of the domestic demand. And for the rubber industries, through expansion of cultivated land available for commercial rubber tree, GTP envisaged to produce 6700 tons of rubber annually (GTP policy matrix, 2010, Volume II).

The number of establishment under this subcategory according to the data obtained from CSA (2014) indicated that there are 154 establishments under this subcategory and only 7 of them are under the management of the public. Tires, inner tubes, plastic dishes, plastic crates etc. are the major products produced in the manufacturing of rubber and plastic subsector.

Production and Value Addition

The gross value of production of rubber and plastic industries estimated at Birr 7 billion, while value added generated amounts 1.5 billion Birr and its contribution for the entire GDP is very insignificant.

Sources of Finance

The total fixed capital assets of the subsector worth about 1.5 billion Birr (CSA, 2014). According to the information obtained from interviewed companies operating in the subsector (total 36 in number), domestic banks are main source of finance for the majority of the respondents (63.9%). Saving by the industries themselves and foreign investment/partner had a sizable finance contribution to these industries.
Employment

CSA’s 2014 medium and large scale manufacturing survey estimated the total number of workers employed by this subsector are 10,984.

Furthermore, the mean percentage distribution of managers, technicians, skilled production workers, unskilled production workers and non-production workers in the subsector according to the survey result were 6.94%, 10.49%, 27.16%, 31.37% and 15.45%, respectively.

Market Structure and Export Trade Destinations

Rubber and plastic products are supplied solely for the domestic market. The survey result has indicated that about 60% of the sampled industries to supply products to the domestic market. In fact, for the 21% of the respondents Africa was the main market destination. Total foreign exchange earning obtained from industries in this subcategory amounts only USD 2 for the year 2005/2006 E.C. (CSA, 2014). Many of the buyer of products produced by this subsector are the mass market.

Government Incentives and Free Trade Market Opportunities

The government incentives of customs duty exemption (applicable to foreign investor), income tax holiday, loss carry forward, remittance of profit and dividends, principals and interest payments on external loans, provision of land at competitive lease price are all applicable to the rubber and plastic industries too.

Rating of all these government incentive plans by sample respondents from the rubber and plastic firms indicated almost a quarter of them did not know the existence of incentives while the same percentage of respondents who had the knowhow about these incentives rated the provisions as “good”.

Regarding firms’ awareness about exporting under free trade agreements and market opportunities, more than half of the respondent replied that they had no awareness about it while only 14% of them were well informed about it and reported that they had used the opportunities appropriately.
Material Inputs Availability

The material used in the plastic industry includes polyvinylchloride granules nylon, polytetra, flonoroethylen granules, polyurethane granules, dyes, antioxidants, fillers, polypropylene granules while rubber tree plantation is the main raw material source for rubber industries. The rubber and plastic products manufacturing establishments largely depend on imported raw materials. According to the survey, about 74% of the material inputs for this subsector was obtained from foreign market through importation.

Skilled manpower availability for this subsector was rated as “satisfactory” and “not satisfactory” by 44.1% and 31.2% of the interviewed industries.

Plant and Technology Capacity Utilization

About 58% of those interviewed manufactures in this subsector rated their plant and technology utilization “not very good” while about 34% of the samples reported it as “enough”

About 92% of the sample industries in this subsector offered a “no” answer for the question “are you producing in full capacity?” Top reasons mentioned according to respondents were: breakdown of power, shortage of imported inputs from foreign markets, low working capital and high cost of credit and low labour productivity accounts for their underutilization of capacity.

Domestic and Foreign Market Challenges Facing the Subsector

Thus, large proportion of industries (60.6%) mentioned “high cost of production compared to imported goods” as their main challenge to sell product domestically. Figure (12) below demonstrates the domestic market challenges raised by sample rubber, plastic and plastic product producers in the survey.
Similarly about 56% of those interviewed companies under this subcategory mentioned “uncompetitive global market” as their major challenge to address the foreign market followed “low capacity to produce in bulk” (44%). Figure (13) below demonstrate challenges frequently mentioned by these companies.

**Key Issues for the Subsector and Areas of Interventions**

Top issues from the survey are access to finance, advice and information on business networking, consultancy in custom procedure and taxation, availability of utilities and foreign exchange rate non-loan bank charges.
Areas of intervention by government:

- **Enhancing access to finance and credit services:** to financing new projects and for expanding the existing plant sizes by firms in this subsector necessitate a well-developed bank credit services. Thus, government’s finance and credit policies should be tuned in way that address the demands of investors in the rubber and plastic industry.

- **Marketing, taxation and foreign exchange facility support:** Manufacturer of this subsector should be supported to promote marketing among each other. In addition to ensure that supply of goods deliver on time to their customers in and abroad; measures have to taken in order to strengthened the coordination among the different actors of banking, customs, air and sea cargo transport services, maritime transit services and inland transport.

- **Improve infrastructure and utilities:** the government should invest more on infrastructure building and maintenance such as road, rail and electricity supply. Road expansion in area of rubber plant farms, for example through the existing URRAP projects would help businesses to be attractive in investing in rubber related industries.

- **Closing policy gaps:** There is no clear policy focus on the development of rubber and plastic subsector like it done for textile, leather and agro-processing subsectors, which make it unattractive to investors, particularly to foreign ones. A clear strategy for development of the subsector, therefore needs to be formulated, specially aimed at making short the time taken for new investor to set up, make applicable import duty exemption for capital goods importation and give more emphasis for expansion of large rubber tree plantation as it is stipulated in GTP.

Areas of intervention by AACCSA:

AACCSA could play an active role in the following areas:

- Facilitating government-industries dialogue to address the subsector’s major questions related to capacity development, input supply shortage, access to credit services, tax and customs duty implementations.
✓ Supporting subsector’s related research and development works would help to build innovative capacity of industries in the subsector for increased efficiency and productivity. Therefore AACCSA could develop a framework for supporting research works in the area and encourage the adoption and utilization for the research findings.

✓ Provide consultancy advices in areas of market expansion, export and investment incentives, and custom and taxation procedures.
3.7. OTHER NON-METALLIC MINERAL PRODUCT INDUSTRY

Introduction

Most products under non-metallic mineral product group are highly demanded in the domestic market. Production of glass and glass products, structural clay products, cement, lime and plaster, articles of concrete, cement and plaster other non-metallic mineral products are major outputs from this section of the Ethiopian manufacturing. Ethiopia’s fast growing construction sector demands sufficient supply from this subsector especially from cement industries.

Industrial statistical report of CSA for the year 2014 indicates that the total number of establishments found all over the country are 409 and most of them are producers of articles of concrete, cement and plaster. Regarding ownership, 389 of them are under private investors and the remaining 20 are under the control of the government. Only 8 manufacturers of this subsector where interviewed for the purpose of this survey and of this about 70% of them are under private ownership.

Production and Value Addition

Gross value of production for this subsector based on CSA’s report (2014) is near 11 billion Birr, which is the third largest sector next to food and beverage and metal and electrical subsector. Value added generated by this subindustry is around 4.3 Billion Birr for the 2012/2013 fiscal year, which is again the third largest manufacturing subsector in terms of its GDP share.

Sources of Finance

Total value of fixed capital assets in this subcategory worth some 9.6 billion Birr and the new investment in fixed capital for the 2012/2013 fiscal year worth around 624 million Birr. Annual wage and salary expenditure reaches around 590 million Birr. Like in most manufacturing industries survey in this study, half of funding sources for non-metallic mineral related industries in are domestic bank although domestic capital market, foreign
investment/partner and own savings were equally (12.5% responses for each) good fanciers for this subsector.

**Employment**

In terms of employment engagement capacity, this subsector is the third next to food and beverage and metal and electrical subsector with some 17230 workers are already employed and worked according to the report by CSA for the fiscal year 2012/2013.

The survey result revealed that the mean percentage distribution of managers, technicians, skilled production workers, unskilled production workers and non-production workers in the sampled subsector were 5.14%, 10.80%, 19.97%, 32.10% and 16.71%, respectively.

**Market Structure and Export Trade Destinations**

Export earning obtained from this subsector for fiscal year 2013/2014 worth only 23.6 million Birr indicating that much of produced output from these industries supplied in domestic market. Result obtained from sample survey of industries in this subsector supported this finding. About 80% the responding manufacturers replied that they produced to the domestic market. According to the result African countries shared the remaining 20% of the product produced by these industries.

**Government Incentives and Free Trade Market Opportunities**

Investment in non-metallic mineral industries particularly in cement, glass and ceramic industries require huge capital goods importation. Government’s 100% exemption of payments of customs duty on imported capital goods and construction materials would help enriching the investment environment of this subsector. In addition, other form of incentives by the government like income tax holiday, loss carry forward, remittance of profit and dividends, principals and interest payments on external loans, provision of land at competitive lease price are all very great opportunities to invest in this subsector. The 8 industries interviewed in this survey rated incentive types provided by the government of Ethiopia. Thus, half of them considered the provisions as “good” while 12.5% of them reported that they had no clue about incentives programs given by government.
Special custom tariff advantages applicable within COMESA (Common Market for Eastern and Southern African) member counties could be a best market opportunity for this subsector. For one hand these member countries are relatively neighboring to Ethiopia and has cost advantage in terms of transportation and on the other much of the product types produced by these industries are bulk in nature so that products could be transported through road and railway transports means. There are other bilateral and multilateral agreements that could enhance this sector export performance. However, according to the survey result, more than 57% of the sample respondents had no awareness about exporting under this type of free trade agreements or preferential opportunities.

**Material Inputs Availability**

Most raw materials used in the subsector are available domestically. The survey result indicated that about 63% of the material inputs for this subsector was purchased from domestic market even though significant proportion of inputs were imported from foreign markets (25%) as described in the following figure.

![Figure (14): Source Material Inputs](image)

Source: Manufacturing Survey 2014

Non-metallic mineral subsector demands highly qualified and killed manpower like mechanical engineers especially for cement factories. Ethiopian higher institutions are currently producing educated individuals that could enrich the subsector in the near future. However at current condition it is believed that skilled labor availability not only for this subsector but to all manufacturing sectors is sufficient. Skilled manpower availability, based on survey result, was rated as “satisfactory” by majority of those interviewed companies (62.5%) while “not satisfactory” was said by 25% of the respondents.
Plant and Technology Capacity Utilization

Rating of plant and technology utilization in this subsector according to half of respondents’ view was “enough” but “significantly poor” was reported by 12.5% of the samples. Interviewed manufacturer in this subsector said “no” for the question “are you producing in full capacity?” They also offered reasons for their underutilization of capacity. Top on their reasons are lack of inputs from domestic market, breakdown of power, old plants, poor maintenance and low plant productivity, low working capital and high cost of credit.

Domestic and Foreign Market Challenges Facing the Subsector

Ethiopian booming construction subsector is consuming a large proportion of the products produced by this subsector. However, surveyed sample manufacturers from this subsector reported that they have problems to reach out the domestic market due to challenges such as oldness of machineries, high cost of production compared to imported similar products lack of low tariff protection. Similarly lack of logistic to deliver products on time was major challenge reported by these manufactures to address the foreign (neighboring) market demand as can be seen from the following figure.

Figure (15): Foreign Market Challenges

Source: Manufacturing Survey 2014

Key Issues for the Subsector and Areas of Interventions

Top most frequently mentioned challenges related to production, export, regulation etc. by firm in this subsectors on which both responsible governmental institutions and the
AACCSA should base their intervention directions includes the following issues but not limited to:

- Tax settlement and tax refunds claims related problems
- High rate of tax to the production process
- Weak infrastructural development around investments area
- Lack of advices and information regarding creating a business network among producer and consumers in and outside the country.
- Shortage of funds to finance projects both from the domestic and foreign sources
- Bureaucratic red tape at different level of service delivery system.

On the basis of these listed constraints, the following interventions areas are identified.

**Areas of intervention by government:**

- **Addressing production constraints:** The problems that hinder entry into the subsector, including numerous and duplicated laws and regulations, bureaucratic red tape, poor access to credit, slow services to tax settlement and refund claims and poor information on new and appropriate technologies, need to be addressed so as to encourage new investment into the subsector.

- **Improving infrastructural developments:** Poor electricity services and power interruption in cement and other industries of the subsector would results in under functioning of machineries which limit total production that could be supplied to the booming construction economy. Poor roads in and the way to industries also would increases the prices that charged to the final products sold in the market. The government therefore needs to invest more in roads and electricity connections to alleviate challenges related to lack of adequate infrastructural facilities.

**Areas of intervention by AACCSA:**

AACCSA areas of advisory and advocacy services for non-metallic mineral products industries could be the same suggestions given to other subsectors because many of the issues raised by firms in this industries and the other industries discussed before are more or less similar.
3.8. METAL AND ENGINEERING PRODUCTS INDUSTRY

Introduction

Metal and engineering industries are identified as one of the five priorities for existing industry investment to build capacity and upgrade performance in terms of utilization of capacity. The Ethiopian metal industry sector is classified into two categories: basic metal and engineering industries. Basic metal industries deal with production of metal from ore, scrap and conversion of billet, slabs etc. into primary metal products such as hot rolled ribbed and plain reinforcement bars, wire rod, angles, cold rolled tubes of various profiles, cold rolled sheets, galvanized sheets and tubes whereas engineering industries convert primary metal products into secondary products such as metallic structures, tanks, pressure vessels, machine parts, components, machineries, transport equipment, electrical and electronic equipment, measuring and control instruments and others.

The primary metal products produced by basic metal industries are subsequently raw materials (inputs) for the downstream engineering industries. Downstream engineering opportunities exist in a diverse range of engineering products: farm implements and threshers, small scale agro-processing machinery, structures, pressure vessels, storage tanks and bins, silos, heat exchangers, conveyors, cranes, local assembled motor vehicles and automobiles, gas/oil pipelines, electrical and electronic equipment, spare parts, components and other similar products.\(^5\)

Industrial statistical report of CSA for the year 2014 indicates that the total number of establishments under these groups estimated around 433 and of these 390 of them are under private manufacturers while the remaining 43 are under Ethiopian government preferably under METEC (F.D.R.E Metal and Engineering Corporation) management. Though state-owned establishments are few in number, the size of their capacity would put them in a leading position in one way or another.

\(^5\) Adopted from a TOR prepared to study development of sustainable and inclusive basic metal and engineering industry in Ethiopia by Ministry of Industry on August 2015.
Of these 433 industries 35 of them are interviewed for the purpose of collection of a primary data for this study.

**Production and Value Addition**

Based on CSA’s report on medium and large scale manufacturing and electricity industries (2014), the existing metal and engineering industries total production for the year 2012/2013 fiscal year worth around 30.3 billion birr while based on information obtained from Ministry of Industry, this subsector account for around 0.8 percent of GDP in Ethiopia, equivalent to 10 billion Birr of value added.

**Sources of Finance**

Total value of fixed capital assets in this subcategory worth some 4.8 billion Birr and the new investment in fixed capital for the 2012/2013 fiscal year worth around 304 million Birr. Annual wage and salary expenditure reaches around 757 million Birr. Domestic banks are major resource of finance for projects in the metal and engineering sub-industries. Result obtained from survey result also confirms that about 64% of those interviewed manufacturers in this subsector claimed that domestic banks are major financier followed by industries’ own saving (15.2%), domestic capital market and foreign partners (9.1% each) and from other sources (3%) as shown in the following figure.

**Figure (16): Source of Finances**

![Source of Finances](source.png)

Source: Manufacturing Survey 2014
Employment

Recorded employment in the subsector estimated to be more than 13,000 workers\(^6\), which its share is not as such satisfactory compared to its large employment holding capacity.

The survey result revealed that the mean percentage distribution of managers, technicians, skilled production workers, unskilled production workers and non-production workers in the subsector were 6.24\%, 18.30\%, 31.48\%, 19.95\% and 12.73\%, respectively.

Market Structure and Export Trade Destinations

During 2013/2014, total export earnings amounted 1.5 billion Birr which is an increase of 1.45 billion Birr (118 percent) compared to 2010/2011. Despite its current export performance is inadequate, the accelerated growth over 25 percent/year, on average, in these industries is expected to raise the export earnings performance of the country in the near future. This result also implies that most production outputs from this subsector are primarily supplied to the domestic market.

Results from primary data analysis also supported the above statement showing that about 54\% of the interviewed companies had no export market destination but Africa was the most mentioned export destination (37.5\%) followed by Middle East (12.5\%) and Asia (4.2\%) as demonstrated by the following figure.

Figure (17): Export Market Destinations

![Source: Manufacturing Survey 2014](image)

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\(^6\) CSA (2014)
Government Incentives and Free Trade Market Opportunities

Key informant based interview carried out with Metal and Engineering Institute revealed that there are many types of incentives and supports from the government side to the manufacturers. However, the institute also indicated that there is still other incentive and supports to be provided to the manufactures in this subsector because the existing ones are not adequate and effective.

Manufactory level survey also shows that existing incentive tools by the government of Ethiopia were considered as “Very good” by about 31% of the respondent while those who rated the incentives as “poor” accounts 22% of the sample producers.

With regarded to industries’ utilization of preferential market opportunities, about 42% of those interviewed manufacturers replied that they are unclear about the practicality of exporting using free trade agreements or preferential opportunities while about 23% of industries were able to utilized these market advantages.

Material Inputs Availability

Country’s rapidly growing construction subsector, investments in mega projects like the renaissance dam and country wide railway developments and booming housing and condominium constructions requires huge tons of steel production. Besides newly emerging industries like motor vehicle assembly, agricultural tools and the expansion of electricity networking subsector requires huge amount of iron ore and other basic minerals. However, the sector is heavily dependent on imported raw materials, since limited local sources have been developed yet.

Information gathered though key informant interview with Metal and Industry Development Institute also supports this finding. According to this interviewed institute the metal and engineering is mostly dependent on imported raw materials and its quantity is not sufficient in terms of capacity and consistency.

The survey analysis showed that about 55% of the respondents reported the material inputs for this subsector was bought from “half domestic market and half imported” and about 41%
of them said the inputs were come from “only domestic market” sources. Only 3% of inputs for production was used from “only domestic market” source.

Figure (18): Source of Material Inputs

![Source of Material Inputs](image)

Skillful employees are demanded by metal and engineering industries because technologies and machineries used in these industries are fairly modern and complex. Regarding skilled manpower availability, discussion with Metal and Engineering Development Institute identified the manpower shortage, specifically that for technical and managerial positons.

**Plant and Technology Capacity Utilization**

Plant and technology utilization rated as “enough” by about 56% of interviewed samples, not very good, significantly poor and more than enough by about 27%, 3% and 15% of respondent in this subsector, respectively.

85.3% of the sampled companies in this subsector said “no” for the question “are you producing in full capacity?” Topmost respondents’ reasons for the underutilization of capacity are breakdown of power, shortage of imported inputs, low working capital and high cost of credit, insufficient domestic demands.

**Domestic and Foreign Market Challenges Facing the Subsector**

Major domestic market challenges raised by interviewed companies are the following: high cost of production compared to imported goods, lack of access to market and in surge of illegal goods while top challenge mentioned to address foreign market are high cost of
production compared to other competitor, low capacity to produce in bulk and lack of knowledge about foreign market trends.

“Very good” rate was given to government’s incentives by 31.3% of the respondents while “poor” was given by 21.9% of them.

About 42% of those interviewed industries were unclear about the practicality of exporting under free trade agreements or preferential opportunities while about 23% of industries well practiced this trade opportunity. Figure () below better explain this respondents’ view about exporting under free trade agreements.

Key Issues for the Subsector and Areas of Interventions

Top most frequently mentioned constraints and challenges identified through manufacture level survey and using key informant interview with Metal and Engineering Institute and by reviewing literatures are listed below:

Collected through survey analysis

- Shortage of funds to finance projects both from the domestic and foreign sources
- Lack of advices and information regarding creating a business network among producer and consumers in and outside the country.
- High rate of tax to the production process and corruption

Collected through key informant interview

- Availability of inputs (the types and quality of steel necessary for many metal products are not available and the cost of imported inputs is high due to expensive transport)
- Overhands cost (due to obsolesce of technology, material cost and labor costs) transportation and other logistic costs and taxations system are major determinants of cost build up factors
- Weak infrastructural development including transport and electricity
- High price competition in the regional market

And collected from secondary sources
✓ Skill shortages
✓ Lack of investment and adoption of new technology
✓ Undeveloped linkages between the upstream and downstream activities
✓ Lack of product and market diversification and development
✓ Inadequately developed institutional support and enterprise cultivation
✓ Weak and/or absence of service rendering support institutions including design and development centers, testing centers, project engineering and management services and specialized training institutions
✓ Weak University-Industry linkage
✓ Low labor productivity and gaps in product quality
✓ Low level of technological capability leading to production of low-value added products

On the basis of the above listed challenges and some remedial measures forwarded by interviewed institute, the following intervention proposals are identified to be addressed by a government and AACCSD.

Areas of intervention by government:

✓ The government should develop a long-term strategy to address the production constraints, which have resulted in low capacity utilizations and productivity of the subsector. The most constraining mentioned include weak access to finance sources, shortage of raw material, and lack of trainings to capacitate personnel in the subsector, tax administration and corruption.

✓ In order to increase productivity and efficiency, the government should develop a mechanism with which researches and developments for this high-tech sector is developed and findings from these works could be adopted and utilized. In addition manufacturer themselves or with the support/direction from the government have to give pre-employment technical skill training for the school leavers and job training on workplaces using actual work machines and equipment to directly enhance relevant skills in improving volume and quality of products. These can done through direct support industries by the government in terms of finance and professions.
✓ To avoid problem of power interruptions there should be an alternative source of energies.
✓ Government should create mechanism with which industries would efficiently and effectively utilize the available resource inducing existing manpower to coup up with the supply side challenges
✓ Raw materials such as iron ore exploration should be encourage by the government to alleviate the acute raw material shortage in metal industry.
✓ The incentive and taxation systems and the working of the banking system should give priority to this subsector and some policies should be revised based on the needs of the subsectors demand
✓ The university-industry linkage process has to hasten so as to enhance the technology knowhow for those who are in training in different parts of the country

Areas of intervention by AACCSA:

✓ Support these industries through different business development services to increase industrial production and productivity by fully utilizing the existing capacity of industries, by providing relevant training, by organizing trade fairs to promote market linkage with foreign counterparts for partnership etc…
✓ Strengthen the advocate activities towards favorable business environment for metal and engineering sectors on issues of access to finance, land availability, trade logistics, taxation and access to raw material.
✓ Work jointly with relatable governmental and non-governmental organizations to support and strengthen companies engaged in the subsector, such as capacity building, creating network among actors in value chain of a given product, and creating platform for solving specific firm’s problem and challenges.
IV. OPPORTUNITIES AND CHALLENGES OF THE ETHIOPIAN MANUFACTURING SECTOR

4.1. Challenges Facing the Manufacturing Sector

- Limited access to finance to fund projects in manufacturing sector
- Shortage of foreign currency to import raw materials and capital goods
- Low productivity of laborers working in manufacturing industries
- Low productivity of plants and machineries
- Low capacity utilization
- Quality problem in finished products
- Shortage of supply of skilled manpower in the labor market
- High cost of importing raw materials from foreign market
- Limited supply of raw material in domestic market
- High logistics and transportations costs
- Poor tariff protections laws to encourage investment domestically
- Power shortage and frequent interruptions
- Poor infrastructure of electricity, road, water and telecommunication and internet
- Bureaucratic red tape, corruptions and lengthy process to execute new investments
- Length bureaucratic procedures in customs clearance
- Limited promotional activities with regard to incentives plans, market opportunities, information on new regulations and legislations etc.
- Lack of R&D for most manufacturing industries
- Weak industry-university linkages
- Limited inter-industry and industrial-sectorial-institutes level linkages
- Limited capacity building activities and trainings both at firm level and by other concerned bodies.
4.2. Opportunities to Invest in Manufacturing Industries in Ethiopia

- Political and social stability
- Macroeconomic stability and rapidly growing economy
- Excellent climate, fertile soils and abundant mineral resources
- Private sector friendly government
- Conductive tax environment
- Strong investment guarantees
- Cheap labor force and rapidly increasing number of trained peoples
- Cheap electricity supply compared to any African country and growing size of electricity production
- Competitive incentive packages
  - Custom duty exemption (100% exemption from payment of custom duty imported capital good and 15% on imported spare parts)
  - Exemption from income tax (for new investment and those investors establish in regional areas like Gambella, Benishangul/Gumuz, Afar etc)
  - Export incentives and
  - Loss carry forward
- Access to wide market:
  - Large domestic market
  - COMESA (Common Market for Eastern and Southern Africa)
  - AGOA (African Growth and Opportunities Act) and GSP (Generalized System of Preference) of the United States governments initiatives
  - EBA (Everything But Arms) agreement of the European Union etc.
V. RECOMMENDATIONS FROM THE SUBSECTOR ANALYSIS

Enhance Access to Finance: Limited access to finance to fund manufacturing projects and shortage of foreign currency to import raw material and intermediary goods are the main problems of the manufacturing firms in Ethiopia. Thus, the government should alleviate this problem by coordinately working with financial service providers found both within Ethiopia and abroad in order to make available funds for new investment in manufacturing sector in addition to giving due attention to reserve foreign currency that useful for importing raw materials and capital goods. AACCSA may teach or provide information for manufacturers on how they could can access finances from different sources.

Improving Availability of Material Inputs: Although the country's major natural resource base is its rich agricultural potential, it has not been utilized for the development of the industrial sector. As a result, manufacturing industries which hugely consuming agricultural inputs such as agro-processing, textile and leather industries faced chronic raw material supply shortage.

Ethiopia is also known to possess a wide variety of mineral resources. However, their utilization is yet to be realized, mineral exploration and exploitation still being at its infancy. This thwarted the expansion of industries based on mineral resources.

Furthermore the manufacturing sector itself has continued to be import dependent for machinery and equipment, spare parts and other inputs with no possibilities for self-sustained development.

Thus, the government of Ethiopia should consider these as major challenge facing the sector and do the right to increase raw materials availability with the required quality by means of strengthening raw materials producers’ capacity and by creating market linkage with foreign suppliers. AACCSA could play a role to this part by organizing trade fairs to promote market linkage with foreign counterparts for partnership.
Upgrading Technological Capability of the Firms: Developing technological capability requires adequate and continuous investment not only on equipment, machinery and related assets, but also on information, labor educations and technological know-how. AACCSA, governmental ministries, higher academic institutions and sectorial associations/institutions should work together and develop strategy plan on which manufacturers’ overall capability in terms of technology usage and manpower skill could be enhanced and improved.

Promoting Investment in The Manufacturing Sector: Encourage investment in manufacturing industries, especially, attracting foreign investors to invest, because they do not only invest their capital but also new technology. As new technology comes to the country or expanded by domestic investors, it is easy to transfer from one firm to another so that possible way of expansion of new technology, without incurring high costs. This technological level is developed either by carried out of R&D by firms or research institutions in addition by providing on-the-job learning and trainings to works. AACCSA, differential ministerial sectors (MoT, MoI etc.) and higher institutions needs to come together and develop a strategy to facilitate investment in manufacturing sector.

Promoting Market Opportunities through Advisory and Advocacy Services: AACCSA, Ministry of Foreign Affairs, MoT, MoI, MoFED, MOARD, Ethiopian Custom and Revenue Authority and sectorial institutes/associations could work collaboratively on promoting issues that determine marketing performance of manufacturers’ such as industry policy of the country, investment and export incentives offered, market opportunities due to regional and international trade agreements, obligations and rights on issues such as tax, customs and existing enabling environment to invest in the country so as to enhance the development of the manufacturing sector in Ethiopia.

Improve Infrastructural Facilities: The inadequacy of infrastructure has been one of the major constraints for the manufacturing sector development. This study has identified that roads, energy, water supply, and other facilities are not well-developed to support the development of the manufacturing sectors in Ethiopia. The scarcity of these services means that slower manufacturing growth which in inurns lags the country’s goal to become middle-
income-industrialized nation by 2015. So, in order to mitigate this kind of problem, infrastructural investment has to be given priority. Thus, to achieve sustainable development in the manufacturing sectors in today’s context, manufactures requires government’s effort supplying infrastructural facilities, particularly electrifying project areas as most manufacturers described shortage of supply and interruption of power hindered the performance of their production processes.
ANNEXES

Annex 1: List of References


## Annex 2: Tabular Result of the Survey

### Table 1: Ownership, Finance Source and Total Revenue

<table>
<thead>
<tr>
<th>Sector of the Industry</th>
<th>Food and Beverage</th>
<th>Textiles and Apparel Products</th>
<th>Leather and Leather Products</th>
<th>Wood, Paper and Paper Products</th>
<th>Chemical and Chemical Products</th>
<th>Rubber and Plastics Products</th>
<th>Other Non-Metallic Mineral Products</th>
<th>Total</th>
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</thead>
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<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
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<tr>
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<td>0.0%</td>
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</tr>
<tr>
<td>Private/state venture</td>
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<td>4.8%</td>
<td>1</td>
<td>4.3%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>2.8%</td>
</tr>
<tr>
<td>Joint venture</td>
<td>2</td>
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<td>2</td>
<td>8.7%</td>
<td>3</td>
<td>12.5%</td>
<td>2</td>
<td>5.6%</td>
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<tr>
<td>Joint venture</td>
<td>4</td>
<td>6.5%</td>
<td>1</td>
<td>4.3%</td>
<td>0</td>
<td>0.0%</td>
<td>4</td>
<td>11.1%</td>
</tr>
<tr>
<td>Cooperative</td>
<td>2</td>
<td>3.2%</td>
<td>1</td>
<td>4.3%</td>
<td>1</td>
<td>4.2%</td>
<td>0</td>
<td>0.0%</td>
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<tr>
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<td>23</td>
<td>100%</td>
<td>24</td>
<td>100%</td>
<td>36</td>
<td>100%</td>
</tr>
</tbody>
</table>

| Finance Sources        | No                | %                             | No                            | %                             | No                            | %                             | No                                | No    |
| Domestic bank          | 37                | 60.7%                         | 15                            | 65.2%                         | 12                            | 50.0%                         | 23                                | 65.7% |
| Domes. capital market  | 3                 | 4.9%                          | 2                             | 8.7%                          | 1                             | 4.2%                          | 3                                 | 8.6%  |
| Foreign investor/partner | 0              | 0.0%                          | 0                             | 0.0%                          | 1                             | 4.2%                          | 1                                 | 2.9%  |
| Foreign investment/partner | 6            | 9.8%                          | 4                             | 17.4%                         | 4                             | 16.7%                         | 1                                 | 2.9%  |
| Savings                | 33                | 18.0%                         | 14                            | 82.0%                         | 3                             | 100%                          | 8                                 | 100%  |
| Other source           | 4                 | 6.6%                          | 0                             | 0.0%                          | 1                             | 4.2%                          | 2                                 | 4.8%  |
| Total                  | 61                | 100%                          | 23                            | 100%                          | 24                            | 100%                          | 35                                | 100%  |

| Total Revenue          | No                | %                             | No                            | %                             | No                            | %                             | No                                | No    |
| Less than Birr 25 million | 20              | 34.5%                         | 13                            | 61.9%                         | 11                            | 45.8%                         | 15                                | 44.1% |
| Birr 25-50 Mil.        | 8                 | 13.8%                         | 0                             | 0.0%                          | 0                             | 0.0%                          | 5                                 | 14.7% |
| Birr 50-100 Mil.       | 5                 | 8.6%                          | 2                             | 9.5%                          | 2                             | 8.3%                          | 3                                 | 8.8%  |
| Birr 101-500 Mil.      | 13                | 22.4%                         | 3                             | 14.3%                         | 5                             | 20.8%                         | 3                                 | 8.8%  |
| Birr 501-1,000 Mil.    | 3                 | 5.2%                          | 0                             | 0.0%                          | 0                             | 0.0%                          | 2                                 | 5.9%  |
| Birr 1,001-10,000 Mil. | 2                 | 3.4%                          | 1                             | 4.8%                          | 0                             | 0.0%                          | 4                                 | 11.8% |
| More than Birr 10,000 Mil. | 5             | 8.6%                          | 0                             | 0.0%                          | 1                             | 4.2%                          | 1                                 | 2.9%  |
| Do not know/ prefer not to state | 2        | 3.4%                          | 2                             | 9.5%                          | 5                             | 20.8%                         | 1                                 | 2.9%  |
| Total                  | 58                | 100%                          | 21                            | 100%                          | 24                            | 100%                          | 34                                | 100%  |
## Table 2: Employees Status

### Sector of the Industry

<table>
<thead>
<tr>
<th>Range of Number of Employees</th>
<th>Food and Beverage</th>
<th>Textiles and Apparel Products</th>
<th>Leather and Leather Products</th>
<th>Wood, Paper and Paper Products</th>
<th>Chemical and Chemical Products</th>
<th>Rubber and Plastics Products</th>
<th>Other None-Metallic Mineral Products</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
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<tr>
<td>1-20 employees</td>
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<td>16.7%</td>
<td>0</td>
<td>12.5%</td>
</tr>
<tr>
<td>21-50 employees</td>
<td>11</td>
<td>18.0%</td>
<td>2</td>
<td>8.7%</td>
<td>3</td>
<td>12.5%</td>
<td>7</td>
<td>19.4%</td>
</tr>
<tr>
<td>51-100 employees</td>
<td>16</td>
<td>26.2%</td>
<td>5</td>
<td>21.7%</td>
<td>5</td>
<td>20.8%</td>
<td>12</td>
<td>33.3%</td>
</tr>
<tr>
<td>101-250 employees</td>
<td>11</td>
<td>18.0%</td>
<td>4</td>
<td>17.4%</td>
<td>4</td>
<td>16.7%</td>
<td>8</td>
<td>22.2%</td>
</tr>
<tr>
<td>251-500 employees</td>
<td>3</td>
<td>4.9%</td>
<td>4</td>
<td>17.4%</td>
<td>2</td>
<td>8.3%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than 500 employees</td>
<td>11</td>
<td>18.0%</td>
<td>5</td>
<td>21.7%</td>
<td>7</td>
<td>29.2%</td>
<td>3</td>
<td>8.3%</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
<td>100%</td>
<td>23</td>
<td>100%</td>
<td>24</td>
<td>100%</td>
<td>36</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Sector of the Industry

<table>
<thead>
<tr>
<th>Percentage of Employee</th>
<th>Food and Beverage</th>
<th>Textiles and Apparel Products</th>
<th>Leather and Leather Products</th>
<th>Wood, Paper and Paper Products</th>
<th>Chemical and Chemical Products</th>
<th>Rubber and Plastics Products</th>
<th>Other None-Metallic Mineral Products</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager</td>
<td>Mean</td>
<td>Max</td>
<td>Mean</td>
<td>Max</td>
<td>Mean</td>
<td>Max</td>
<td>Mean</td>
<td>Max</td>
</tr>
<tr>
<td>7.10</td>
<td>60.0</td>
<td>4.38</td>
<td>20.0</td>
<td>4.79</td>
<td>30.0</td>
<td>6.19</td>
<td>20.0</td>
<td>4.91</td>
</tr>
<tr>
<td>11.09</td>
<td>64.5</td>
<td>8.77</td>
<td>40.0</td>
<td>5.25</td>
<td>33.0</td>
<td>15.21</td>
<td>44.40</td>
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<td>3.40</td>
<td>93.2</td>
<td>45.94</td>
<td>76.34</td>
<td>30.59</td>
<td>80.00</td>
<td>17.64</td>
<td>43.0</td>
</tr>
<tr>
<td>30.74</td>
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<td>22.96</td>
<td>66.0</td>
<td>24.99</td>
<td>70.00</td>
<td>21.17</td>
<td>66.00</td>
<td>35.27</td>
</tr>
<tr>
<td>Non-productive workers</td>
<td>16.28</td>
<td>62.50</td>
<td>52.63</td>
<td>12.17</td>
<td>35.00</td>
<td>16.26</td>
<td>50.00</td>
<td>15.45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean</th>
<th>Max</th>
<th>Mean</th>
<th>Max</th>
<th>Mean</th>
<th>Max</th>
<th>Mean</th>
<th>Max</th>
<th>Mean</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.91</td>
<td>62.50</td>
<td>52.63</td>
<td>12.17</td>
<td>35.00</td>
<td>16.26</td>
<td>50.00</td>
<td>15.45</td>
<td>52.17</td>
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<tr>
<td>16.71</td>
<td>59.00</td>
<td>12.73</td>
<td>50.00</td>
<td>15.52</td>
<td>62.50</td>
<td>14.49</td>
<td>35.00</td>
<td>15.45</td>
<td>62.50</td>
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</table>
Table 3: Export Experience, Target Market, Export Destinations, Domestic Market Share

<table>
<thead>
<tr>
<th>Sector of the Industry</th>
<th>Food and Beverage</th>
<th>Textiles and Apparel Products</th>
<th>Leather and Leather Products</th>
<th>Wood, Paper and Paper Products</th>
<th>Chemical and Plastics Products</th>
<th>Rubber and Plastics Products</th>
<th>Other Non-Metallic Mineral Products</th>
<th>Metal and Engineering Products</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Experience</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>0-2 years</td>
<td>2</td>
<td>11.1%</td>
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<td>0.0%</td>
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</tr>
<tr>
<td>3-4 years</td>
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<td>5</td>
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<td>23.1%</td>
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<td>0</td>
</tr>
<tr>
<td>&gt;5 years</td>
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<td>8</td>
<td>61.5%</td>
<td>10</td>
<td>55.6%</td>
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<td>0.0%</td>
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<td>100%</td>
<td>18</td>
<td>100%</td>
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<td>4</td>
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<td>1</td>
<td>4.2%</td>
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<td>1</td>
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<tr>
<td>Middle class</td>
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<td>34.6%</td>
<td>7</td>
<td>30.4%</td>
<td>17</td>
<td>70.8%</td>
<td>14</td>
<td>46.7%</td>
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<td>Mass market</td>
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<td>25.0%</td>
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<td>43.3%</td>
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<td>Total</td>
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<td>30</td>
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<td>3</td>
<td>14.3%</td>
<td>12</td>
<td>52.2%</td>
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<td>0.0%</td>
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<td>1</td>
<td>5.3%</td>
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<tr>
<td>Northern America</td>
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<td>11.1%</td>
<td>5</td>
<td>23.8%</td>
<td>9</td>
<td>39.1%</td>
<td>1</td>
<td>5.3%</td>
<td>0</td>
</tr>
<tr>
<td>Central and Latin America</td>
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<td>4.8%</td>
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<td>0.0%</td>
<td>0</td>
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</tr>
<tr>
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<td>14.3%</td>
<td>3</td>
<td>13.0%</td>
<td>1</td>
<td>5.3%</td>
<td>1</td>
</tr>
<tr>
<td>Africa</td>
<td>16</td>
<td>29.6%</td>
<td>2</td>
<td>9.5%</td>
<td>9</td>
<td>39.1%</td>
<td>1</td>
<td>5.3%</td>
<td>9</td>
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<tr>
<td>Asia</td>
<td>2</td>
<td>3.7%</td>
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<td>0.0%</td>
<td>11</td>
<td>47.8%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
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<tr>
<td>Australia and New Zealand</td>
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<td>1.9%</td>
<td>1</td>
<td>4.8%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
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<td>9.5%</td>
<td>1</td>
<td>4.3%</td>
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<td>10.5%</td>
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</tr>
<tr>
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<td>23</td>
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<td>19</td>
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<td>26</td>
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<td>82.1%</td>
<td>24</td>
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<tr>
<td>25-50%</td>
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<td>23.8%</td>
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<td>20.0%</td>
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<td>17.9%</td>
<td>9</td>
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<tr>
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<td>21</td>
<td>100%</td>
<td>20</td>
<td>100%</td>
<td>28</td>
<td>100%</td>
<td>41</td>
</tr>
</tbody>
</table>
Table 4: Companies Rating of Incentives by Government, Awareness and Utilizations of Free Trade Agreements

<table>
<thead>
<tr>
<th>Sector of the Industry</th>
<th>Food and Beverage</th>
<th>Textiles and Apparel Products</th>
<th>Leather and Leather Products</th>
<th>Wood, Paper and Paper Products</th>
<th>Chemical and Chemical Products</th>
<th>Rubber and Plastics Products</th>
<th>Other Non-Metallic Mineral Products</th>
<th>Metal and Engineering Products</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating incentives produced by the government</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>Excellent</td>
<td>4</td>
<td>7.5%</td>
<td>1</td>
<td>4.5%</td>
<td>4</td>
<td>16.7%</td>
<td>1</td>
<td>4.3%</td>
<td>2</td>
</tr>
<tr>
<td>V. Good</td>
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<td>17.0%</td>
<td>4</td>
<td>18.2%</td>
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<td>20.8%</td>
<td>7</td>
<td>30.4%</td>
<td>5</td>
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<tr>
<td>Good</td>
<td>15</td>
<td>28.3%</td>
<td>10</td>
<td>45.5%</td>
<td>9</td>
<td>37.5%</td>
<td>4</td>
<td>17.4%</td>
<td>12</td>
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<td>Average</td>
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<td>20.8%</td>
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<td>27.3%</td>
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<td>12.5%</td>
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<td>4.3%</td>
<td>5</td>
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<tr>
<td>Poor</td>
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<td>11.3%</td>
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<td>4.5%</td>
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<td>6</td>
<td>26.1%</td>
<td>6</td>
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<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>4.2%</td>
<td>4</td>
<td>17.4%</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>100%</td>
<td>22</td>
<td>100%</td>
<td>24</td>
<td>100%</td>
<td>23</td>
<td>100%</td>
<td>32</td>
</tr>
</tbody>
</table>

| Company’s level of awareness to export under free trade agreement or preferential market opportunities | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % |
| Well informed | 5 | 9.8% | 9 | 42.9% | 7 | 29.2% | 2 | 9.5% | 3 | 13.6% | 3 | 14.3% | 1 | 14.3% | 7 | 22.6% | 37 | 18.7% |
| Unclear about its practically | 22 | 43.1% | 5 | 23.8% | 10 | 41.7% | 11 | 52.4% | 12 | 54.5% | 3 | 14.3% | 2 | 28.6% | 13 | 41.9% | 78 | 39.4% |
| Never consider as an opportunity | 9 | 17.6% | 4 | 19.0% | 2 | 8.3% | 4 | 19.0% | 5 | 22.7% | 4 | 19.0% | 0 | 0.0% | 3 | 9.7% | 31 | 15.7% |
| No awareness about it | 15 | 29.4% | 3 | 14.3% | 5 | 20.8% | 4 | 19.0% | 2 | 9.1% | 11 | 52.4% | 4 | 57.1% | 8 | 25.8% | 52 | 26.3% |
| Total | 51 | 100% | 21 | 100% | 24 | 100% | 21 | 100% | 22 | 100% | 21 | 100% | 7 | 100% | 31 | 100% | 198 | 100% |

| Company level of competence to utilize free trade agreement and overseas duty-free market access | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % |
| Excellent | 6 | 11.5% | 2 | 9.1% | 5 | 22.7% | 1 | 4.0% | 2 | 7.7% | 1 | 4.5% | 1 | 20.0% | 3 | 10.7% | 21 | 10.4% |
| Very Good | 5 | 9.6% | 5 | 22.7% | 6 | 27.3% | 2 | 8.0% | 4 | 15.4% | 2 | 9.1% | 0 | 0.0% | 10 | 35.7% | 34 | 16.8% |
| Good | 13 | 25.0% | 4 | 18.2% | 6 | 27.3% | 7 | 28.0% | 6 | 23.1% | 7 | 31.8% | 2 | 40.0% | 8 | 28.6% | 53 | 26.2% |
| Poor | 13 | 25.0% | 5 | 22.7% | 4 | 18.2% | 8 | 32.0% | 10 | 38.5% | 3 | 13.6% | 0 | 0.0% | 4 | 14.3% | 47 | 23.3% |
| Don’t know | 15 | 28.8% | 6 | 27.3% | 1 | 4.5% | 7 | 28.0% | 4 | 15.4% | 9 | 40.9% | 2 | 40.0% | 3 | 10.7% | 47 | 23.3% |
| Total | 52 | 100% | 22 | 100% | 22 | 100% | 25 | 100% | 26 | 100% | 22 | 100% | 5 | 100% | 28 | 100% | 202 | 100% |
### Table 5: Domestic and Foreign Market Challenges

<table>
<thead>
<tr>
<th>Sector of the Industry</th>
<th>Food and Beverage</th>
<th>Textiles and Apparel Products</th>
<th>Leather and Leather Products</th>
<th>Wood, Paper and Paper Products</th>
<th>Chemical and Plastics Products</th>
<th>Rubber and Other Non-Metallic Mineral Products</th>
<th>Metal and Engineering Products</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Lack of access to market</td>
<td>10</td>
<td>18.2%</td>
<td>5</td>
<td>21.7%</td>
<td>6</td>
<td>30.0%</td>
<td>8</td>
<td>22.9%</td>
</tr>
<tr>
<td>High cost of production compared to imported goods</td>
<td>21</td>
<td>38.2%</td>
<td>12</td>
<td>52.2%</td>
<td>10</td>
<td>50.0%</td>
<td>22</td>
<td>62.9%</td>
</tr>
<tr>
<td>In surge of illegal goods</td>
<td>10</td>
<td>18.2%</td>
<td>8</td>
<td>34.8%</td>
<td>4</td>
<td>20.0%</td>
<td>3</td>
<td>8.6%</td>
</tr>
<tr>
<td>Low tariff protection</td>
<td>11</td>
<td>20.0%</td>
<td>5</td>
<td>21.7%</td>
<td>4</td>
<td>20.0%</td>
<td>7</td>
<td>20.0%</td>
</tr>
<tr>
<td>No challenges</td>
<td>7</td>
<td>12.7%</td>
<td>4</td>
<td>17.4%</td>
<td>4</td>
<td>20.0%</td>
<td>1</td>
<td>2.9%</td>
</tr>
<tr>
<td>Lack of awareness</td>
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<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>2.9%</td>
</tr>
<tr>
<td>Shortage of raw materials</td>
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<td>0.0%</td>
<td>1</td>
<td>2.9%</td>
</tr>
<tr>
<td>Old machine, power failure</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Lack of implementing government policy</td>
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<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>2.9%</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100%</td>
<td>23</td>
<td>100%</td>
<td>20</td>
<td>100%</td>
<td>35</td>
<td>100%</td>
</tr>
</tbody>
</table>

| Foreign market challenges | Inability to keep quality standard | 12 | 26.7% | 6 | 31.6% | 6 | 26.1% | 6 | 28.6% | 4 | 14.8% | 1 | 5.6% | 1 | 20.0% | 1 | 4.0% | 37 | 20.2% |
|                          | uncompetitive global market        | 18 | 40.0% | 6 | 31.6% | 10 | 43.5% | 5 | 23.8% | 13 | 48.1% | 10 | 55.6% | 1 | 20.0% | 10 | 40.0% | 73 | 39.0% |
|                          | Lack of knowledge about foreign market trends | 12 | 26.7% | 6 | 31.6% | 5 | 21.7% | 6 | 28.6% | 6 | 22.2% | 4 | 22.2% | 0 | 0.0% | 8 | 32.0% | 47 | 25.7% |
|                          | Low capacity to produce in bulk    | 12 | 26.7% | 9 | 47.4% | 13 | 56.5% | 7 | 33.3% | 8 | 29.6% | 8 | 44.4% | 1 | 20.0% | 9 | 36.0% | 67 | 36.6% |
|                          | Lack of logistic to deliver on time | 8 | 17.8% | 4 | 21.1% | 5 | 21.7% | 3 | 14.3% | 2 | 7.4% | 0 | 0.0% | 0 | 0.0% | 6 | 24.0% | 30 | 16.4% |
|                          | No challenges                      | 1 | 2.2% | 0 | 0.0% | 2 | 8.7% | 0 | 0.0% | 1 | 3.7% | 0 | 0.0% | 1 | 20.0% | 2 | 8.0% | 7 | 3.8% |
|                          | Shortage of finance                | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 3.7% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 0.5% |
|                          | High transportation cost           | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 3.7% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 0.5% |
| Total                   | 45                              | 100%                          | 19                          | 100%                          | 23                           | 100%                          | 21                           | 100%  | 27   | 100% | 18 | 100% | 5 | 100% | 25 | 100% | 183 | 100% |
Table 4: Companies Success Rate

<table>
<thead>
<tr>
<th>Sector of the Industry</th>
<th>Food and Beverage</th>
<th>Textiles and Apparel Products</th>
<th>Leather and Leather Products</th>
<th>Wood, Paper and Paper Products</th>
<th>Chemical and Chemical Products</th>
<th>Rubber and Plastics Products</th>
<th>Other None-Metallic Mineral Products</th>
<th>Metal and Engineering Products</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Profitable above expectation</td>
<td>5</td>
<td>10.0%</td>
<td>1</td>
<td>5.0%</td>
<td>0</td>
<td>0.0%</td>
<td>4</td>
<td>12.1%</td>
<td>2</td>
</tr>
<tr>
<td>Profitable within expectation</td>
<td>14</td>
<td>28.0%</td>
<td>15</td>
<td>75.0%</td>
<td>9</td>
<td>37.5%</td>
<td>7</td>
<td>31.8%</td>
<td>17</td>
</tr>
<tr>
<td>Profitable below expectation</td>
<td>15</td>
<td>30.0%</td>
<td>2</td>
<td>10.0%</td>
<td>7</td>
<td>29.2%</td>
<td>5</td>
<td>22.7%</td>
<td>6</td>
</tr>
<tr>
<td>Break-even above expectation</td>
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<td>0.0%</td>
<td>0</td>
<td>0.0%</td>
<td>1</td>
<td>4.2%</td>
<td>1</td>
<td>4.5%</td>
<td>0</td>
</tr>
<tr>
<td>Break-even within expectation</td>
<td>2</td>
<td>4.0%</td>
<td>1</td>
<td>5.0%</td>
<td>4</td>
<td>16.7%</td>
<td>5</td>
<td>22.7%</td>
<td>1</td>
</tr>
<tr>
<td>Break-even below expectation</td>
<td>9</td>
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<td>5.0%</td>
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<td>0.0%</td>
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<td>9.1%</td>
<td>1</td>
</tr>
<tr>
<td>Bearable</td>
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<td>0.0%</td>
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<tr>
<td>Unbearable</td>
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<td>4.2%</td>
<td>1</td>
<td>4.5%</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
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<td>20</td>
<td>100%</td>
<td>24</td>
<td>100%</td>
<td>22</td>
<td>100%</td>
<td>33</td>
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</tbody>
</table>
## Table 7: Material Inputs Availability, Labor Productivity, Plant Capacity and Technology Utilization

<table>
<thead>
<tr>
<th>Sector of the Industry</th>
<th>Food and Beverage</th>
<th>Textiles and Apparel Products</th>
<th>Leather and Leather Products</th>
<th>Wood, Paper and Paper Products</th>
<th>Chemical and Chemical Products</th>
<th>Rubber and Plastics Products</th>
<th>Other None-Metallic Mineral Products</th>
<th>Metal and Engineering Products</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Primary/only from domestic market</td>
<td>26 43.3%</td>
<td>1 4.5%</td>
<td>5 20.8%</td>
<td>5 14.3%</td>
<td>2 4.7%</td>
<td>1 2.9%</td>
<td>5 62.5%</td>
<td>1 3.2%</td>
<td>46 17.9%</td>
</tr>
<tr>
<td>Primary/only from imported source</td>
<td>8 13.3%</td>
<td>9 40.9%</td>
<td>0 0.0%</td>
<td>12 34.3%</td>
<td>16 37.2%</td>
<td>25 73.5%</td>
<td>2 25.0%</td>
<td>13 41.9%</td>
<td>85 33.1%</td>
</tr>
<tr>
<td>Half domestic and half imported</td>
<td>26 43.3%</td>
<td>12 54.5%</td>
<td>19 79.2%</td>
<td>18 51.4%</td>
<td>25 58.1%</td>
<td>8 23.5%</td>
<td>1 12.5%</td>
<td>17 54.8%</td>
<td>126 49.0%</td>
</tr>
<tr>
<td>Total</td>
<td>60 100%</td>
<td>22 100%</td>
<td>24 100%</td>
<td>35 100%</td>
<td>43 100%</td>
<td>34 100%</td>
<td>8 100%</td>
<td>31 100%</td>
<td>257 100%</td>
</tr>
</tbody>
</table>

### Source material inputs

#### Rating skilled manpower availability in Ethiopia

| Highly satisfactory | 6 9.4% | 2 8.7% | 0 0.0% | 2 5.6% | 2 4.7% | 2 5.9% | 0 0.0% | 3 8.8% | 17 6.4% |
| Satisfactory        | 40 62.5% | 10 43.5% | 8 33.3% | 19 52.8% | 27 62.8% | 15 44.1% | 5 62.5% | 18 52.9% | 142 53.4% |
| Not satisfactory    | 11 17.2% | 8 34.8% | 16 66.7% | 11 30.6% | 10 23.3% | 11 32.4% | 2 25.0% | 11 32.4% | 80 30.1% |
| Significantly poor  | 5 7.8% | 3 13.0% | 0 0.0% | 4 11.1% | 4 9.3% | 3 8.8% | 1 12.5% | 2 5.9% | 22 8.3% |
| Do not know         | 2 3.1% | 0 0.0% | 0 0.0% | 0 0.0% | 0 0.0% | 3 8.8% | 0 0.0% | 0 0.0% | 5 1.9% |
| Total               | 64 100% | 23 100% | 24 100% | 36 100% | 43 100% | 34 100% | 8 100% | 34 100% | 266 100% |

### Rating skilled manpower productivity in Ethiopia

<p>| Highly satisfactory | 5 8.2% | 2 8.7% | 1 4.2% | 1 2.9% | 1 2.3% | 0 0.0% | 1 12.5% | 3 8.8% | 14 5.4% |
| Satisfactory        | 25 41.0% | 8 34.8% | 4 16.7% | 16 47.1% | 25 58.1% | 7 22.6% | 1 12.5% | 12 35.3% | 98 38.0% |
| Not satisfactory    | 22 36.1% | 8 34.8% | 14 58.3% | 9 26.5% | 13 30.2% | 18 58.1% | 3 37.5% | 15 44.1% | 102 39.5% |
| Significantly poor  | 8 13.1% | 5 21.7% | 5 20.8% | 8 23.5% | 4 9.3% | 3 9.7% | 3 37.5% | 4 11.8% | 40 15.5% |
| Do not know         | 1 1.6% | 0 0.0% | 0 0.0% | 0 0.0% | 0 0.0% | 3 9.7% | 0 0.0% | 0 0.0% | 4 1.6% |
| Total               | 61 100% | 23 100% | 24 100% | 34 100% | 43 100% | 31 100% | 8 100% | 34 100% | 258 100% |</p>
<table>
<thead>
<tr>
<th>Rating plant and other technology utilization</th>
<th>More than enough</th>
<th>Enough</th>
<th>Not very good</th>
<th>Significantly poor</th>
<th>Total</th>
</tr>
</thead>
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<td>57.6%</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Reason for underutilization of capacity</th>
<th>Insufficient domestic demand</th>
<th>Shortage of imported inputs</th>
<th>Uncompetitive exports</th>
<th>Limited export market</th>
<th>Old plant, poor maintenance and low plant productivity</th>
<th>Low labour productivity</th>
<th>Shortage of domestic inputs</th>
<th>Breakdown of power</th>
<th>Low working capital and high credit cost</th>
<th>Total</th>
</tr>
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<td>23.6%</td>
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<td>70.9%</td>
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<td>5</td>
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<td>18.8%</td>
<td>6.3%</td>
<td>31.3%</td>
<td>50.0%</td>
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<td>81.3%</td>
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<td>78.3%</td>
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<td>4.3%</td>
<td>34.8%</td>
<td>31.0%</td>
<td>27.6%</td>
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<td>100%</td>
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<td>3.0%</td>
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<td>30.3%</td>
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<td>84.8%</td>
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<td>100%</td>
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<th>Are you producing in full capacity?</th>
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<tr>
<td>Insufficient domestic demand</td>
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<td>6</td>
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<td>Shortage of imported inputs</td>
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<td>Limited export market</td>
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<td>Old plant, poor maintenance and low plant productivity</td>
<td>33</td>
<td>4</td>
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<td>Low labour productivity</td>
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<td>Shortage of domestic inputs</td>
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<td>Breakdown of power</td>
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<td>Low working capital and high credit cost</td>
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<td>Total</td>
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Table 8: Constraints Affecting Production Performance

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<th>Constraints of the Industry</th>
<th>Sector of the Industry</th>
<th>No</th>
<th>%</th>
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<th>%</th>
<th>No</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>No</th>
<th>%</th>
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<th>%</th>
<th>No</th>
<th>%</th>
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<tbody>
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<td>Cost of utilities</td>
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<td>9.4%</td>
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<td>12.1%</td>
<td>30</td>
<td>11.8%</td>
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<td></td>
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<tr>
<td></td>
<td>Textiles and Apparel Products</td>
<td>28</td>
<td>45.2%</td>
<td>11</td>
<td>47.8%</td>
<td>11</td>
<td>47.8%</td>
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<td>24.2%</td>
<td>12</td>
<td>37.5%</td>
<td>2</td>
<td>5.0%</td>
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<td>36.4%</td>
<td>102</td>
<td>40.2%</td>
<td></td>
<td></td>
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<tr>
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<td>Leather and Leather Products</td>
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<td>47.8%</td>
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<td>65.2%</td>
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<td>63.6%</td>
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<tr>
<td></td>
<td>Wood, Paper and Paper Products</td>
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<td>Rock and Chemical Products</td>
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<td>Other Non-Metallic Mineral Products</td>
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<td>43.5%</td>
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<td>5</td>
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<tr>
<td></td>
<td>Metal and Engineering Products</td>
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<td>34.8%</td>
<td>11</td>
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<tr>
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<td>Total</td>
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<td>23</td>
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<td>254</td>
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</tbody>
</table>

Note: The table above shows the constraints affecting production performance across different sectors of the industry. The percentages represent the proportion of respondents who identified each constraint as a significant issue.
Annex 2: Key Informant Interview Checklist

Addis Ababa Chamber of Commerce and Sectoral Association has selected DAB – DRT to conduct a Manufacturing Survey Analysis. The general purpose of this interview is to gather data and information about the current status, opportunities, problems, challenges and possible solutions for manufacturing industries in Ethiopia. The interview is composed of four major sections; these are Supply side issues, Infrastructure, Market opportunities and challenges, and Government rules and regulations.

The discussion will take about one hour. All the information we obtain will remain strictly confidential and your answers will never be shared with anyone other than our project team.

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<thead>
<tr>
<th>Identification particulars</th>
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<tr>
<td><strong>Places</strong></td>
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</tr>
<tr>
<td>Address</td>
</tr>
<tr>
<td>Interviewer name</td>
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</table>

A. Section One: Supply side issues

1. Does the supply of raw materials adequately available for producers in the manufacturing sector/sub-sector and meet their production capacity? And any problems related to supply and quality of raw materials such as supplier’s capacity and consistency, handling, government rules and regulations, marketing etc…?

2. What are the factors that inflate and determine cost of production? For example cost and availability of imported raw material or chemicals or semi processed and finished intermediate goods, and outdated technology, and issues related to trade logistics such as transportation, customs, port and shipment

3. Is there adequate man power for technical and managerial positions in the manufacturing sector/sub-sector?

4. What are the remedial measures as far as supply side constraints and capacity utilization are concerned?
B. **Section Two: Infrastructure**

5. Is there any adequate and consistent supply of utilities such as water, electricity, and telecommunication as per the firm’s
droduction capacity?

6. What remedial measures shall be taken by the federal and regional government as far as infrastructure
constraints and issues are concerned?

C. **Section Three: Market Opportunities and Challenges**

7. What are the market opportunities and challenges in the sector/sub-sector?

8. Do firms in the sector/ sub-sector output competitive in international market? What are the challenges to penetrate and
stay in international market?

9. What are the issues as far domestic market is concerned and solutions is there are any problems for enterprise production
goods?

D. **Section Four : Government rules and regulations**

10. Is there any government rules, regulations and policies that hinder the firm’s in sector/sub-sector to operate in full capacity
or for further expansion?

11. What government rules and regulations shall be reformed or in placed to boost firm’s competitiveness in the sector/sub-
sector locally and globally?

12. Does the government investment incentives and support for firms in the manufacturing sector/ sub-sector effective and
adequate? If not, what are the reasons and solutions?

E. **Section FIVE : Issues to be advocated by AACCSA**

13. Would you mentioned the first six constraints that affect the performance of the subsector that AACCSA should focus for
further advisory and advocacy services?

   i. 

   ii. 

   iii. 

   iv. 

   v. 

   vi.

*Thank You for Your Cooperation!!*