
**ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS SCHOOL OF COMMERCE**

# CHALLENEGES AND PROSPECTS OF INDUSTRIAL PROJECTS IN ETHIOPIA, THE CASE OF SELECTED CHEMICAL AND CONSTRUCTION INPUT MANUFACTURING INDUSTRIES

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**June 2022**

**Addis Ababa, Ethiopia**

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**By: Simret Girma Arfaso**

**A Research Submitted to Addis Ababa University School of Commerce in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Arts in Project Management**

**Advisor: Solomon Markos(PhD)**

**June 2022**

**Addis Ababa, Ethiopia**

## Declaration

I, the undersigned, declare that the research project on the topic titled "Challenges and Prospects of Industrial Projects in Ethiopia, The Case Of Selected Chemical And Construction Input Manufacturing Industries" is my original work, and that it has not been submitted for any award at Addis Ababa University or any other institution. When other sources of information were used, they were properly acknowledged.

Declared by:

Name: Simret Girma

Signature: _____

Date: _____

## Certification

This is to certify that Simret Girma Arfaso has carried out his research work on the topic entitled "Challenges and Prospects of Industrial Projects in Ethiopia, The Case of Selected Chemical and Construction Input Manufacturing Industries ". This work is original in nature, and it is sufficient for submission as the partial fulfillment for the award of MA degree in Project Management.

Advisor: Solomon Markos(PhD)

Signature: _____

Date: _____

## Approval sheet

This research paper entitled ‘’Challenges and Prospects of Industrial Projects in Ethiopia, The Case Of Selected Chemical And Construction Input Manufacturing Industries” prepared and submitted by Simret Girma Arfaso in partial fulfillment of the requirement of award of MA degree in Project Management has been examined and recommended for approval and acceptance.

**Approved by Boards of Examiners:**

| | | |
|---|---|---|
| **Solomon Markos (PhD)** | _____ | _____ |
| **Advisor** | **Signature** | **Date** |
| _____ | _____ | _____ |
| **Internal Examiner** | **Signature** | **Date** |
| _____ | _____ | _____ |
| **External Examiner** | **Signature** | **Date** |

**Acknowledgment**

The task of carrying out a research is highly demanding in terms of both time and material resources. I am grateful for the help the following accorded me in successfully completing this study.

First, and for most I want to thank God who gave me a this chance to do my second masters. Having a lot of responsibilities of work and raising children, it was unthinkable to do it, but by the help of Almighty God it is possible.

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God bless you!

## Dedication

This paper is dedicated to my beloved mother, W/ro Abebech Matte, whom I lost recently. She was a brave hearted woman who paid a lot to bring her children this far. I am who I am today because of her love and care. I wish she could be here today. Rest in eternal peace Enate, you will always be in my heart.

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**List of acronym/abbreviation**

FDI….foreign direct investment

FGD .....focus group discussion

GTP…….growth and transformation plan

GDP…….gross national product

Ginni coefficient…an economic indicator showing income inequality

IDSP……Industrial Development Strategic Plan

TVET .....technical and vocational education training

UNDP……. united nation development program

PVC ……Polyvinyl chloride

## ABSTRACT

*In Ethiopia, industry in the modern sense of the term emerged as an economic entity only at the turn of the 20th century. Ethiopia's manufacturing sector, according to the IDSP, is among the most productive sectors of the economy, which can stimulate economic growth and development because of its immense potential for wealth creation, employment generation and poverty alleviation. Over the past 15 years, the Ethiopian economy registered a remarkable double-digit real GDP growth and over a six-fold increase in per capita GDP. Manufacturing is a crucial sector and is probably the most important engine of long-term growth and development. As a country's economy transforms from a primary agricultural based economy to one of manufacturing, job creation and more sustainable revenue for growth is secured. Though the manufacturing sector is a way out for sustainable economic development its growth is not without challenges. To analyze challenges and prospects of industrial projects, mixed approach, both qualitative and quantitative is used. Among challenges faced by industrial projects, lack of access to foreign exchange, shortage of power supply and absence of peace/ stability ranks the first. Problems related foreign exchange regulation, weak coordination among stakeholders, absence of industrial park for chemical sector, problems related with transport and logistics, absence of comprehensive policy for the sector are challenges that hinder the sector from growing as it is intended to grow. Availability of ample natural resource and cheap labor, Presence of foreign investment policy and incentives for manufacturing industries (fiscal and other incentives), Availability of land and future plan to develop chemical parks, Growth in infrastructure (airway, standard roads train, hydroelectric dams), Increased collaboration between government and the private sector are among important factors that contributes for the prospects of industrial projects.*



*Key words,* ***challenges, chemical and construction input industries, manufacturing industry, prospects***

## Chapter one

## 1. Introduction

Industrialization is the process by which an economy is transformed from a primarily agricultural one to one based on the manufacturing of goods. Individual manual labor is often replaced by mechanized mass production, and craftsmen are replaced by assembly lines. This process began in Britain in the 18th century and from there spread to other parts of the world. The Industrial Revolution began when agricultural societies became more industrialized and urban. The transcontinental railroad, the cotton gin, electricity and other inventions permanently changed society. Industrialization has been instrumental in the economic development of the world. The process has improved productivity and allowed for mass production, which has increased standards of living (Grubler, 1995).

The first stage of industrialization began in Sub-Saharan Africa in 20$^{th}$ century. The beginning of industrialization was made possible only because countries such as the Belgian Congo (present name Brazzaville Congo), South Rhodesia (now Zimbabwe), and Kenya - which were less controlled by the metropolis - began to produce, domestically and on a small scale, products which contained a considerable amount of local raw material, such as textiles, bottles, soap, and cigarettes (Coulson, 1982; Forrest, 1982). Interest and the need for import substitution were expressed by colonial people who had more political power than immigrating businessmen. other Arabs and people from India - and the autochthon artisan population. From that period on, these colonial people sought local Government's adherence and support, both formal and informal, and managed to obtain tariffs to protect the local market, thus paving the way for a long, slow process to promote the development of manufacturing (Ana Paula, 1995).

In general, industrialization has been instrumental in the economic development of the world. The process has improved productivity and allowed for mass production, which has increased standards of living.

### 1.1 Background

In Ethiopia, industry in the modern sense of the term emerged as an economic entity only at the turn of the 20th century. The establishment of a strong central government, expansion of cities associated with the installation of railways and the strengthening of foreign relations increased the demand for imported manufacturing commodities. This, in turn, encouraged the establishment of import-substituting factories domestically and as a result modern manufacturing enterprises began to emerge in the 1920s. After a brief disruption in the Second World War period, the manufacturing sector started to get momentum in the 1950s. During this period a number of new industries which significantly contributed to the development of the national economy were established. The 1950s are also marked by the start of a comprehensive plan to stimulate and guide the country's industrial and economic development in general (Mulu gebreyesus, 2017).

Ethiopia has become a fast-growing, non-oil-dependent African economy since 2007. It has experienced more than a decade of high economic growth with an average growth rate of 8.1 per cent in GDP per capita, and an average economic growth rate of 11 per cent over the last decade, repositioning the country in the top five countries in the world in terms of GDP growth rate. Driven by global competitiveness, the Government of Ethiopia prepared an Industrial Development Strategic Plan (IDSP) (2013-2025). The IDSP's overall goal is to accelerate the country's economic transformation by advancing industrialization. It aims to achieve structural change in the economy by increasing the industrial sector share as a percentage of GDP from currently 13 per cent to 27 per cent by 2025, as well as increasing the manufacturing sector's share from currently 4 per cent to 17 per cent by 2025. The Plan became the source for developing a national manufacturing strategy intended to increase the share of industrial output from currently 33 per cent to 63 per cent, transforming Ethiopia into a middle-income country by 2025(UNIDO, 2018).

Over the past 15 years, the Ethiopian economy registered a remarkable double-digit real GDP growth and over a six-fold increase in per capita GDP to about US $ 865 in 2018. This has been accompanied with a significant poverty reduction from 44.2 percent in 2000 to 23.5 percent in 2015, and improvements in access to education, health, and infrastructure (National planning commission, 2018).

Furthermore, the efforts to finance ambitious public investment programs through directing domestic financial resources and significant external borrowing, coupled with poor project execution, resulted in serious macro-economic imbalances— foreign exchange shortages, increased risk of external debt distress, growing financial sector vulnerabilities, limited access to finance for the private sector, high inflation, and potential misallocation of resources. These macro-economic imbalances, if not corrected immediately, jeopardize the journey to a middle-income economy by 2025.

On this backdrop, the Government of Ethiopia has launched a comprehensive and well-coordinated home grown economic reform agenda with the goal to safeguard macro-financial stability and rebalance and sustain economic growth. The reform agenda builds on the achievements of the past decade in infrastructure and human capital developments. The primary objective of the agenda is to sustain the economic growth through creating an economic environment supportive of higher private investment and structural transformation. It encompasses three key pillars at the macro-financial, structural, and sectorial levels (FDRE planning commission, 2020)

The reform agenda will be implemented through a structured and coordinated whole-of government approach. At the completion of the reform measures, we envision a stable macro economy that can sustain a rapid and inclusive economic growth setting the country on a path to prosperity. The reform measures will set the foundation for a robust, resilient, and diversified middle income-level economy through the formation of a dynamic private sector and modern policy and institutional frameworks.

### 1.2 Background of Manufacturing Industry Sector

Economy is characterized by a number of serious structural problems. Ethiopia has the lowest level of income inequality in Africa (and in fact, one of the lowest in the world), with a Gini-coefficient comparable to that of Scandinavian countries. Yet despite the progress that has been made towards eliminating extreme poverty, Ethiopia remains one of the poorest countries in the world, due both to rapid population growth and a low starting base. Changes in rainfall associated with worldwide weather patterns resulted in the worst drought in 30 years in 2015/16, creating food insecurity for millions of Ethiopians (UNIDO, 2018)

Ethiopia's manufacturing sector, according to the IDSP, is among the most productive sectors of the economy, which can stimulate 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 economy in terms of value creation, and employed around 173,000 persons in 2012/2013. In that same year, the manufacturing sector consisted of approximately 3000 manufacturing firms mainly operating in eight broad industries: food and beverages, textile and apparel, leather and leather products, wood and pulp products, chemical and chemical products, rubber and plastic products, other non-metallic minerals and metals and engineering products**.** The top two manufacturing industries, food and beverages and metals and engineering products accounted for 51 per cent of the manufacturing sector's GDP. Food and beverages alone accounted for 38 per cent of employment in the manufacturing sector in 2012/2013. Its total contribution to GDP was around 4.8 per cent. The performance of the manufacturing sector has, however, been adversely affected by low worker productivity and the use of obsolete technologies, which is further compounded by poor infrastructure, limited access to finance, limited research and development, poor institutional framework, and inadequate managerial and technical skills(UNIDO, 2018).

Therefore research based problem identification is necessary to identify the problems and propose possible solutions. Previous researches show that the sector is full of challenges but sector specific knowledge based problem identification is needed

## 1.3 Statement of the Problem

Manufacturing is a crucial sector and is probably the most important engine of long-term growth and development. As a country's economy transforms from a primary agricultural based economy to one of manufacturing, job creation and more sustainable revenue for growth is secured. The manufacturing sector developed in the 1920s in Ethiopia with a simple processing technology that produced agriculture-based goods. This sector remains at infancy level, however, even by African standards. Several reinforcing elements have conspired to prevent the emergence of a stronger manufacturing base in the country (UNIDO, 2018).

The expansion of the manufacturing sector within industry is critical for the development of national technological capacity and industrial capabilities, as well as the creation of broad-based

job opportunities and increased revenue. Furthermore, the growth of the manufacturing industry contributes to the whole economy's total factor productivity and competitiveness, as well as its trickle-down effect up and down the supply chain. The government of Ethiopia provides several incentives for the growth of the manufacturing industry due to the country's comparative advantages and to increase its competitiveness.

Though the manufacturing sector is a way out for sustainable economic development its growth is not without challenges. The major ones include unskilled labor forces with limited experience; limited infrastructure; external pressure from global market, shallow industrial research and development activities, underdeveloped market information system, problems related to trade logistics and limited promotion made on the resources and other opportunities ( Tekeba Eshete , 2018).

According to Tekeba Eshete (2018), the Ethiopian manufacturing industrial projects are facing many challenges, The main ones are High logistics and transportation cost, Limited study and action on export incentives, Low labor productivities, High cost of imported raw materials for the manufacturing, Limited compliance to the international requirements and market, Limited research on manufacturing industries including ,end market study, Underdeveloped rural infrastructure which limits the ,expansion of manufacturing industries to the potential areas, Weak supply chain integration, Low level of technology, Weak market institutions and information system.

Therefore, this study aims to develop recommendations based on the analysis of challenges and prospects of chemical and construction inputs industrial projects. The study seeks to propose some intervention measures so as to alleviate these challenges.

## 1.4 Research Questions

1.4.1 Main research question

The main research question of this research paper will be **"what are the challenges and prospects of industrial projects in Ethiopia"**

1.4.2 Sub research questions

Some of the sub questions are

1) What does the manufacturing industry sector look like in general?
2) What does chemical and construction inputs industries look like
3) What are the main challenges industrial projects faces?
4) What are the prospects of the sector?
5) How can we overcome problems faced by industrial projects?

## 1.5 Objectives of the study

### 1.5.1 General Objective of the study

The general objective of this research is to identify the challenges and prospects of industrial projects, the case of chemical and construction inputs manufacturing industries.

### 1.5.2 Specific objectives of the study

Some of the specific objectives of the study will be,

- To identify the prospects of industrial projects in selected sectors that is chemical and construction inputs industrial sector
- To identify the main challenges industrial projects face in this specific sector?
- To propose possible solutions for challenges industrial projects faced

## 1.6 Definition of Terms

### 1.6.1 Conceptual definition

**Industrial project**:- An industrial project is the proposal for an investment to create, expand and/or development certain facility in order to increase the production of goods and/or service in a community during a certain period of time.

## 1.7 Significance of the study

This paper is believed to show what Ethiopian industrial sector in general look like and that of industrial projects from the inception phase on wards in particular by providing information and data based analysis with regard to challenges and prospects of the sector, therefore its believed that this research be very significant by giving knowledge based information for those who want to invest in the sector, for different government and non-governmental bodies, for policy makers and for those who want do further research.

## 1.8 Delimitation/scope of the study

The scope of this research is limited to chemical and construction input industrial manufacturing industries. Particularly selected chemical, plastic, wood and glass manufacturing industries will be covered by this study.

## 1.9 Limitation of the Study

Due to time Limitation, this research did not cover all sub sectors from chemical and construction inputs sector. Only four sub- sectors namely chemical, plastic, and wood and glass are covered. Another limitation is that focus group discussion is done only in one industry, the rest four industries were covered by questionnaire survey.

## 1.10 Organization of the paper

The Paper will have five chapters namely chapter one introduction which includes, Background of the study, Back ground of manufacturing industry, Statement of the problem, Research Questions Objectives of the study, Definition of Terms , Significance of the study, Delimitation/scope of the study. Chapter two literature review including, Theoretical Review, Empirical Review, Conceptual framework. Chapter three methodologies and research design including Research approach Research design/type, Sampling design, Sources of Data, Data Collection methodology Data collection instrument Data analysis methods. Chapter four contains data analysis and discussion, Chapter five, conclusions and recommendations.

# Chapter Two

## 2 Literature Review

This chapter provides a brief summary of related literature. It starts with a brief review of theory, followed by empirical literature, and ends with the overview of the literature.

### 2.1 Theoretical Review

Despite disagreement, the term "industrialization" is widely associated with the growth experience of "the Global North of Western Europe and North America." Political historians such as Professor Ali Mazrui have noted that "Industrialization" is not limited to Western societies; other societies such as the Old Chinese Empire, Egyptian Kingdoms, and Persian Kingdoms have engaged in various activities and attempts to modernize their societies and economies using various technologies of the time (Fesseha Mulu and Bizuayehu Daba, 2020).

Some late nineteenth- and early twentieth-century literature defines industrialization solely in economic terms as the presence of manufacturing plants that transform raw materials into finished/semi -finished products. The number of industries in a country was used to determine its level of industrialization in this case. Later definitions, on the other hand, go beyond the physical/number of industries to define the term.

According to the Business Dictionary, manufacturing is defined as "The process by which traditionally non-industrial sectors of an economy (such as agriculture, education, and health) become increasingly similar to the manufacturing sector of the economy," Furthermore, industrialization is described as the transformation of an agrarian economy into a manufacturing-led economy. Industrialization, according to this notion, is a long process. This isn't a one-day occurrence. Furthermore, Manufacturing is at the heart of industrialization. IBID

Industrialization is the cornerstone to economic development, according to history. Traditional to modern industrial sector structural transition increases productivity, stimulates creativity, and facilitates technology diffusion and other positive spillover effects. Classic theories of growth emphasize the importance of savings and investment, as well as technological advancement, but offer few policy recommendations.

In social theory, industrialization has a central, albeit unclear, function. On the one hand, industrialization is frequently regarded as the primary factor in the development of modern society: "The industrial revolution is regarded as the most enjoyable period in history.

Industrialization is sometimes misunderstood as just one component of a larger series of changes, such as urbanization. Both urbanization and rationalization are part of a larger evolutionary process (Walton, J, 1997).

According to Arkebe Okobay (2018), throughout the twentieth century, Ethiopian manufacturing was primarily focused on the consumer market and directed by an import-substitution industrialization (ISI) strategy. Ethiopian Industrialization Processes has been undergoing major structural reforms to move the country closer to a market economy since the 1990s (Mulu Gebre eyesus, 2017). This initial stage was taken by implementing a structural adjustment program guided by foreign financial institutions, primarily the World Bank and the International Monetary Fund. Agricultural Development Led Industrialization was also the government's development vision in the mid-1990s (Arkebe Oqubay, 2018).

Ethiopia has strong potential in numerous light manufacturing subsectors, according to mulu gebreyesus (2017): clothes, leather products, agribusiness, wood products, and metal products. Ethiopia's export potential might be multiplied by orders of magnitude with policy improvements that have previously been proven in other countries. Ethiopia's advantages are a combination of natural resources that serve as inputs for light manufacturing industries (for example, cattle for the leather industry, forests for the furniture industry, cotton for the garment industry, and a large agricultural base or agro-processing industry), abundant low-cost labor, which gives it a comparative advantage in less-skilled, labor-intensive light manufacturing, and cheap hydroelectric power. The expansion of the manufacturing sector within industry is critical for the development of national technological capacity, industrial capability, and economic development (Mulu Gebre eyesus, 2017).

The growth of the manufacturing sector within industry is essential to build national technological capacity, industrial capability and create broad based job opportunity and improve income. In addition to this, the development of the manufacturing industry helps to improve the total factor productivity and competitiveness of the overall economy and its trickledown effect to up and down the supply chain. Because of existence of a number of comparative advantages in the country and to strengthen its competitiveness the Government of Ethiopia offered multiple incentives for the growth of the manufacturing sector (Tekeba Eshete, 2018).

## 2.2 **Empirical Review**

Ethiopia's industrial sector accounted for 17 per cent of GDP. This growth can primarily be attributed to the country's construction boom. Manufacturing has also been crucial. This sector grew at 11 per cent annually and manufacturing exports increased more than eleven-fold. This was largely due to the increasing export earnings of the footwear and apparel industries. One reason for this increase is the strong linkages of these industries with the agricultural sector as they use inputs from livestock and cotton sectors. As both the footwear and apparel industries are labor intensive, they have absorbed labor from the agricultural sector. They have significant export potential and low entry barriers (Carol Newman, J. R. ,2019).

Ethiopia's industrial sector nonetheless ranks below the African average in terms of diversification, export competitiveness, productivity and technological upgrading. According to African Economic out Look (2016) Ethiopia has experienced double-digit economic growth, averaging 10.8% since 2005. This makes it the second fastest economic growth in Africa which is the result of year's investment, economic and social reforms and relative political stability in the country (African economic outlook, 2016).

When we look at chemical sector, Ethiopia's chemical industry is still at a nascent stage. There is strong demand to develop the chemical industry to meet the requirements of the rapidly growing Ethiopian economy. Currently, imports fulfill domestic demand for chemicals. As mentioned earlier, chemicals are inputs to a wide variety of products like detergents, soaps, plastics, etc., which touch every aspect of human life.

The chemical industry is a basic industry that converts natural, agricultural, and mineral resources in to chemical products that are raw materials for broad range of industries and other sectors. The chemical industry involves the use of chemical processes such as chemical reactions and refining methods to produce a wide variety of solid, liquid, and gaseous materials. fragrances and flavors ; pharmaceuticals and other closely related industries like petroleum, glass, paint, ink, sealants, and adhesive(IDSP, 2013).

The chemical industries in Ethiopia are established by both government and individual investors with of different size, technology, political period, production and market strategies. These industries include basic chemicals, pharmaceuticals and medical equipment, paint and varnish,

plastic and rubber, paper, pulp and printing, soap and detergent, cosmetics, glass, cement and non-metal construction materials.

The chemical industry in Ethiopia produces basic chemicals based on local raw materials, including PVC granules from ethyl alcohol, formaldehyde from methanol, the production of caustic soda and chlorine-based chemicals, carbon black, activated carbon, precipitated calcium carbonate, ball-point ink, the manufacturing of pharmaceuticals, and medicinal, chemical and botanical products in the form of tablets, capsules, syrups and injectable. There are a total of 153 chemical and chemical-related product manufacturers according to CSA's raw data for the year 2014. These industries account for 5.7 per cent of total manufacturing industries in Ethiopia, most of which are concentrated around Addis Ababa (81 establishments) and Oromia (60 establishments). Although the number of firms in the chemical industry dropped in 2010/11 (from 99 firms to 75), it has grown tremendously since 2012/13. The domestic chemical industry provides essential inputs for economic and social growth in the agricultural and health sectors. For example, fertilizers are an output of the chemical industry used as inputs in the agricultural sector to increase farmers' outputs. Similarly, the health sector as well as other economic sectors benefit from the chemical industry's outputs. Estimates show that Ethiopia's chemical industry was worth around ETB 9.7 billion in 2012/2013, which makes it the fourth largest industry in terms of total income generation compared to others. The industry's value added amounted to ETB 2.8 billion in 2012/13. The major share of production is used by the fertilizer and pharmaceutical industries (UNIDO, 2018).

The vision of the industrial development strategy is "building an industrial sector with the highest manufacturing capability in Africa which is diversified, globally competitive, environmentally-friendly, and capable of significantly improving the living standards of the Ethiopian people by the year 2025. The overall goal of the industrial development strategy is to achieve structural change in the economy through industrial development. Specifically, it aims at increasing the share of the industry by a percentage of GDP from currently 13 per cent to 27 per cent by 2025, and increases the manufacturing sector's share as a percentage of GDP from currently 4 per cent to 17 per cent by 2025 (UNIDO, 2018).

However, the sector is not free of challenges, according to study made by UNIDO(2018), the macroeconomic factors that are considered to be major constraints to harnessing Ethiopia's

potential to achieve the stated objectives and the implementation of key strategies are: Inadequately developed business enabling environment , Poor human resource development system and shortage of highly qualified human Resources, Insufficient industrial inputs and infrastructure development, Lack of well-established investment and technological development, Inadequate market diversification and development.

When we look at construction input sector - specific issues, These industry have the potential of providing a high degree of economic growth and drive subsequent industries with locally available raw material inputs, coal being a strategic energy source that drives all other industries (World bank report, 2019)

These industries have not been receiving support on the same scale as other industries in the mining of raw and bulk mineral products. There has been little legislative policy and the capital financing for the development of traders and processors to start or develop business. Unreliable data on production yield levels, potential areas for increased production and feasibility studies on establishing new value chain players or factories exacerbates the situation. Lack of a clear government strategy or guidelines in the past have not helped the industry attain a critical mass. There is a lack of information among producers and traders about prices and potential markets, which creates uncertainty with regard to margin and profitability. IBID

All of the research results underline The Ethiopian manufacturing sector is still far from being an engine of growth and economic transformation. It plays a marginal role in employment creation, exports, and output, and is short of stimulating domestic linkages. The sector is dominated by small firms and resource-based industries, low-value and low-technology products, and weak inter-sectorial and intra-sectorial linkages. Even though there are a number of researches done on challenges and prospects of industrial projects, but there is a gap in identifying sector specific problems. Therefore this research paper is believed to focus on manufacturing sector in general and on chemical and construction inputs manufacturing industries in particular.

# Chapter three
# 3. Research Methodology

## 3.1. Introduction

The study is conducted with a purpose to investigate the challenges and prospects of industrial projects in Ethiopia with qualitative and Quantitative study. Therefore, it will contain sampling, data collection instrument, and data collection and data analysis procedures.

## 3.2. Research approach

The research approach is mixed approach, both qualitative and quantitative. Because some data will be analyzed in quantitative way where as some data like people's opinions will be analyzed qualitatively

## 3.3. Sources of Data

### 3.3.1. Primary source

Primary sources are as a main data sources, this includes survey, interview, and focus group discussion and so on.

### 3.3.2. Secondary source

Secondary sources are different books related to the topic, previous researches, journals, internet, and different official documents.

## 3.4. Research design

### 3.4.1. Target Population

The target population is 65 experts (mainly from marketing and production department) of the five selected chemical and construction input manufacturing industries.

### 3.4. 2 **sampling design**

The sampling design method used in the study is census survey. Census survey is defined as" A complete enumeration of all items in the 'population' and it can be presumed that in such a survey, when all items are covered, no element of chance is left and highest accuracy is obtained." from selected industries the number of respondents from target department (marketing and production) are not much in number, therefore, the researcher preferred to do census sampling.

### 3.4.3. Sampling technique

The sampling technique which is used for this research is purposive sampling. In order to get required information, specific departments are selected purposely.

### 3.4.4. Sample size

Since the total population is known and not very large in number the census survey is preferred to cover all respondents (65 respondents) from marketing and production department of the selected 5 chemical and construction inputs manufacturing industries. And for the personal interview the 5 managers/CEOs are conducted.

**Table 1 Summary of the sample**

| Name of the industry | Number of respondents For questioner | Number of respondents for interview |
|---|---|---|
| Alemayehu Nigusse pp bag manufacturer | 15 | 1 |
| Sica Abyssinia construction chemicals | 13 | 1 |
| TY MDF manufacturer | 12 | 1 |
| CZA wood manufacturing | 15 | 1 |
| Guniper glass manufacturing | 10 | 1 |
| Sub Total | 65 | 5 |

### 3.5 Data Collection

The data collection methodologies used here is questioner survey, interview and focus group discussion.

### 3.6 Data collection instrument

The data collection instrument which is used here is self- developed questionnaires.

### 3.7 Data analysis methods

The data analysis method which is used here is both qualitative and quantitative. After collecting the questionnaires from the participants the relevant data is sorted, coded and analyzed using Statistical Package for Social Sciences Version 20 (SPSS 20). Results are discussed using descriptive statistics such as frequencies, percentages, mean and standard deviations are used.

### 3.10 Research Ethics

The questionnaires which are used for this research purposes are prepared by the researcher and. In addition, the information which is provided in the questionnaire will be kept confidential and only be used for the analysis desired in this study and will not be forwarded to other party without the consent of the participants. Moreover, the scholarly views and thoughts will be cited in appropriate way.

## Chapter Four

## Data Analysis and Discussion

The data obtained from questioner survey, interview and focus group discussion is analyzed in descriptive methods. Statistical Package for Social Sciences Version 20 (SPSS 20) is used to analyze the data. Results are discussed using tables, bar graphs, pie graphs, means and standard deviation.

### 4.1 characteristics of respondents

80 questionnaires were distributed for respondents from selected industries, 65(81%) were collected back. Their responses are analyzed and interpreted as follows

Table 2, characteristics of respondents

| Factor | Range | Frequency | per cent |
|---|---|---|---|
| Age | 21-30 | 9 | 13.8 |
| | 31-40 | 31 | 47.7 |
| | 41-50 | 25 | 38.5 |
| | Total | 65 | 100 |
| Education background | BA | 21 | 32.3 |
| | MA | 44 | 67.7 |
| | Total | 65 | 100 |
| Position | Managerial position | 17 | 26 |
| | Technical department | 27 | 41.5 |
| | Research department | 9 | 13.8 |
| | Other | 12 | 18.5 |
| | Total | 65 | 100 |

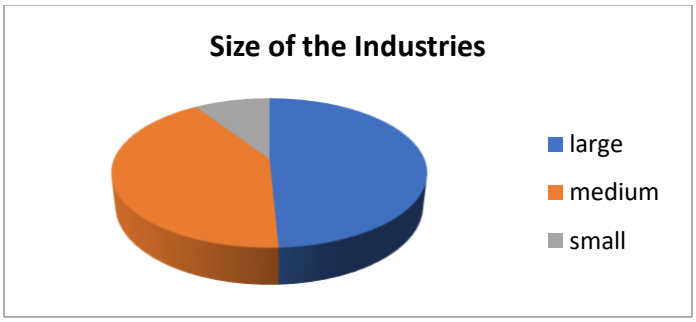
When we look at the age category, of 65 respondents, 9(13.6 %) are between the age of 21- 30, 31(47.7%) are between 31-40 and the remaining 25(38%) are between the age of 41-50.

With regard to the educational back ground of the respondents, out of 65 respondents, 21(32.3%) have first degree and the remaining 44(67.7%) respondents have MA/MSC.

Regarding the position, of 65 respondents, 17(26.2) are from managerial positions 27(41.5 %) are from technical departments (mostly marketing and production) 9(13.8%) are from research department the remaining 12(18.5%) are from other departments.

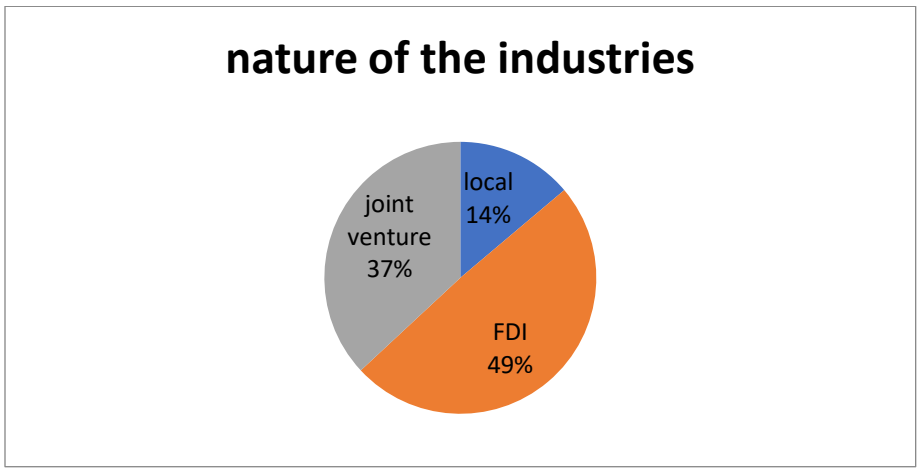
### 4.2 **Size, Nature, Capital, Job Creation and Product Type of the Industries**

Figure 1, size of industries




When we look at the category of the industries 32(49.5%) of the industries are large, 27 (41.5%) are medium and 6(9.2%) are small industries.

Figure 2 Nature of industries



From the industries covered by the survey, 14% are locally owned industries, 37% of them are joint ventures and the rest 49% are foreign direct investments.

Table 3 total capital of industries

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| | Small (100,001-500,000) | 1 | 1.5 | 1.5 | 1.5 |
| | Medium (500,001-1, 500,000) | 22 | 33.8 | 33.8 | 35.4 |
| | above 20 million | 42 | 64.6 | 64.6 | 100.0 |
| | Total | 65 | 100.0 | 100.0 | |

With regard to the total capital of the industries, 42(64.6%) industries have a capital which is above 20 million birr, 22(33.8%) industries have a capital which is between 5,000,00 -1,500,000 birr whereas only one industry is categorized under 500000 birr.

**Table 4 job creation**

**Job creation**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| | medium 20-100 | 25 | 38.5 | 38.5 | 38.5 |
| | large above 100 | 40 | 61.5 | 61.5 | 100.0 |
| | Total | 65 | 100.0 | 100.0 | |

From the above table we can understand that each of 25(38.5%) industries created job opportunities for 20-100 people where as each of 40(61.5%) industries created job opportunity for more than 100 people.

**Product type**

From the selected industries 37(57%) respondents are from chemical subsector and 28(43%) are from construction subsector. From these specific product types are presented in the following table,

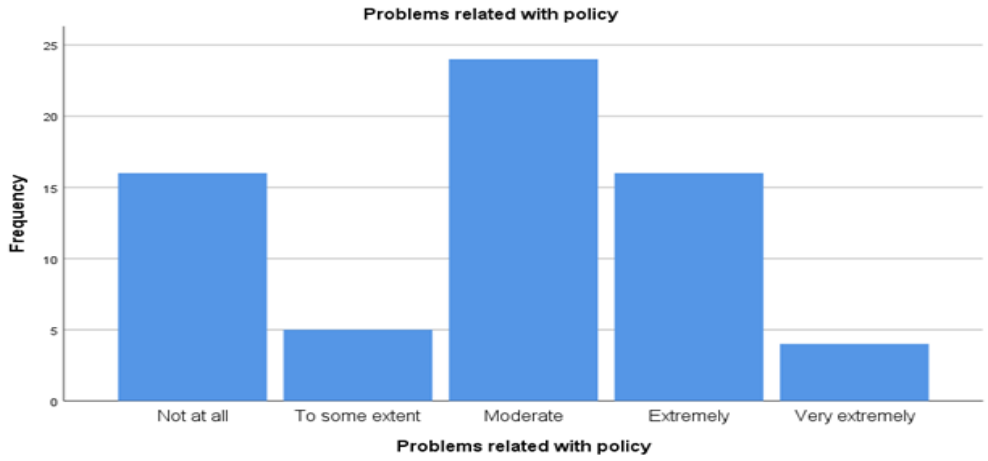
Table 5 product type

| Sub sector | Product type | Frequency | Percentage % |
|---|---|---|---|
| Chemical | Plastic/pp bag | 15 | 23 |
| | Basic chemicals | 13 | 20 |
| | Sub total | 28 | 43 |
| Construction inputs | Wood and related | 27 | 41.5 |
| | Glass and related | 10 | 15.5 |
| | Sub Total | 37 | 57 |
| Total | | 65 | |

From the above table we can understand that **27(41.5%)** respondents are from wood manufacturing industries. **15(23%)** industries are from plastic industries 13(20%) are from basic chemical manufacturing industries and **10(15.5%)** industries are from glass and related industries.

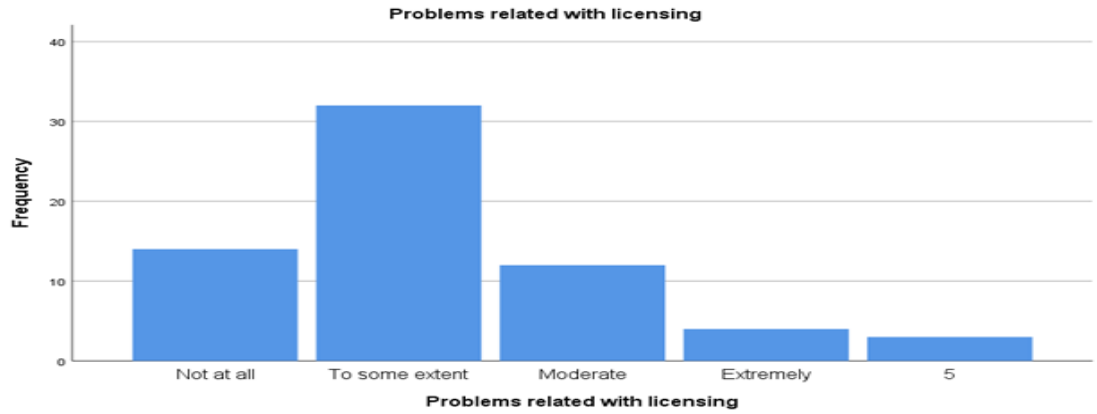
## 3.3 Challenges of The Industrial projects

Figure 3 Problems related with policy




From the above bar graph we can understand that 21(32%) of respondents said that policy related problems doesn't exist at all and exists to some extent whereas, 24(37%) of respondents said the problem is moderate. when we see the number of respondents who said policy related problems are extremely found it is 16(25%). In general, majority 69% of respondents agree that the policy related problems are moderate. From this we can conclude that the problem of industrial projects is not much related with policy framework.

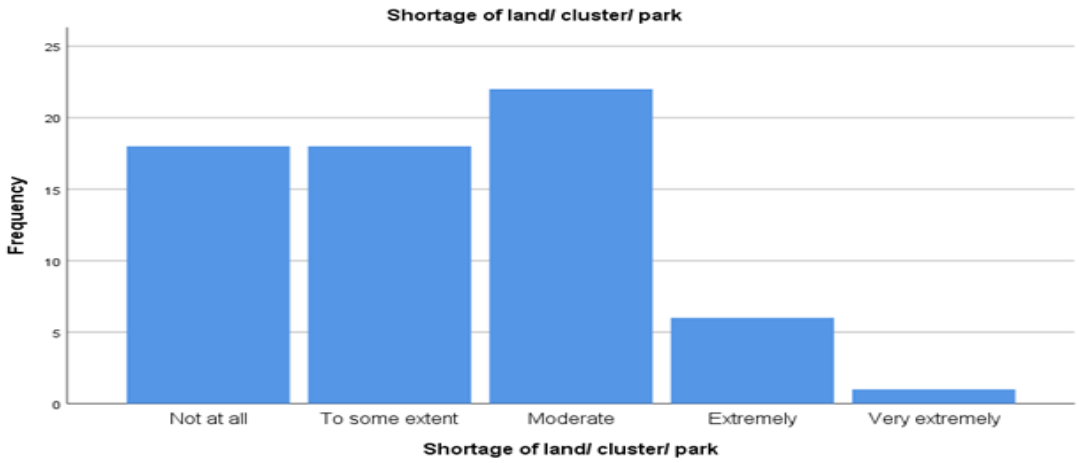
Figure 4 Problems related with licensing




When we look at challenges related with getting license to operate, most of the respondents 58(89%) of respondents said the problems related with licensing exists only to some extent very few respondents said the problems are moderate. The number of respondents who said that the

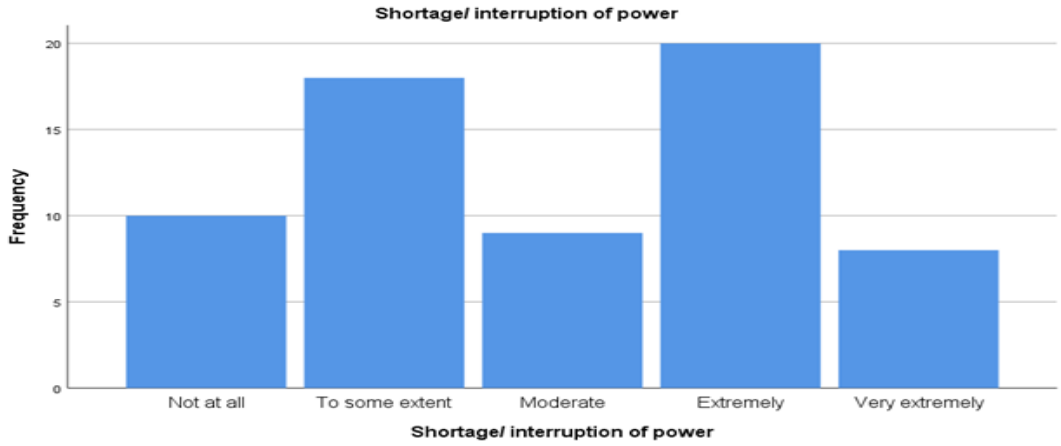
problem exists is very few compared to others. Therefore, we can conclude that getting license is not a big challenge in industrial projects.

Figure 5 Problems related with land




When we look at the situation of getting land or working place for manufacturing most of the respondents 58(89%) said that this problem related with land is moderate(doesn't exist at all or it exists to some extent). Only few respondents (11%) said the problem exists. So here also we can conclude getting land or working place for manufacturing is not a serious challenge.

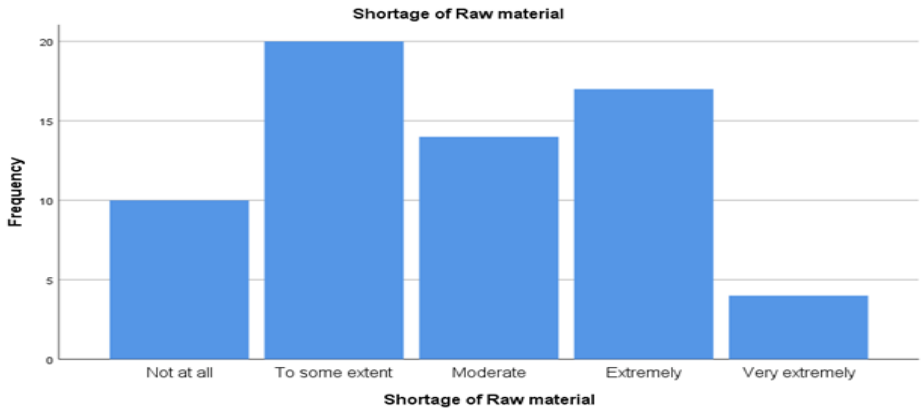
Figure 6 Problems related with power




Concerning power interruption 57% respondents said that problems related with power supply are moderate but 43% respondents said they faced power related problems extremely. From this we can understand that a significant number of respondents agree on a problem of power

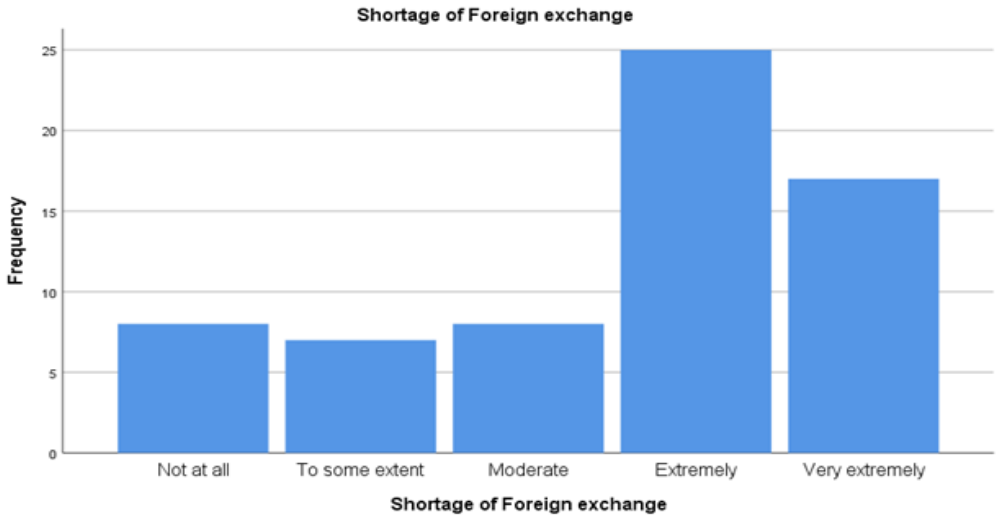
shortage /interruption so we can conclude that power interruption is one of the serious challenges in industrial projects.

Figure 7 Issues related with raw materials




Regarding raw material supply 44(67.7%) respondents agree that problems related with raw material supply are moderate whereas the remaining 32.7%) respondents faced the problem extremely. This shows that getting access to raw material is not a big challenge.

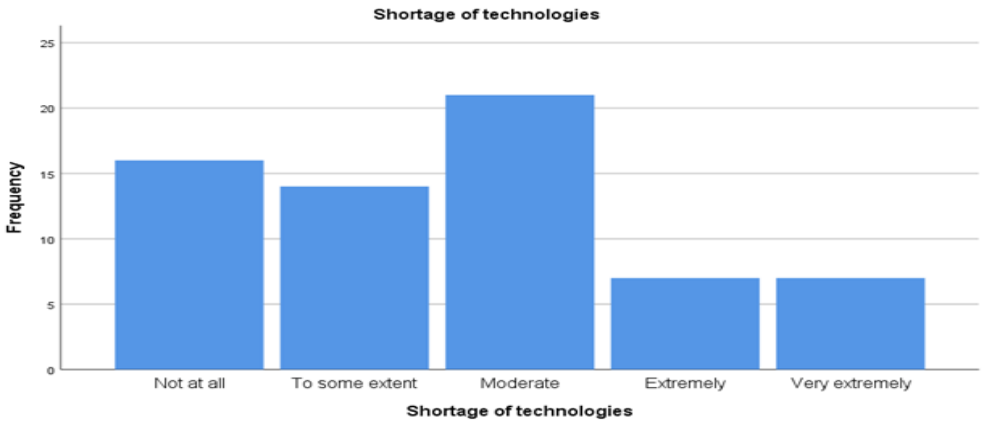
Figure 8 Issues related with foreign exchange




When we look at the challenges related with getting access to foreign exchange, 42(65%) of respondents said the problem is very extreme whereas only 23(35%) respondents said that the

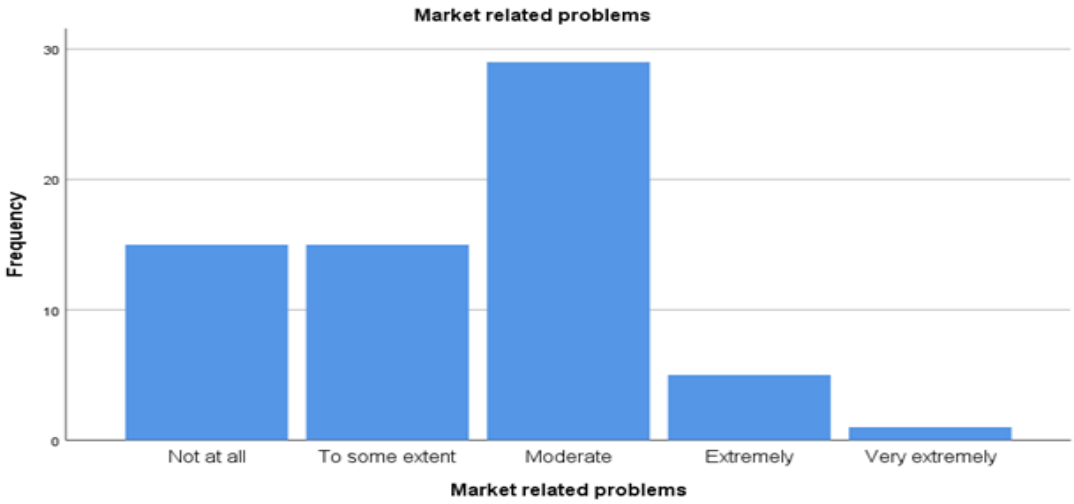
problem is moderate. Therefore we can say that a significant number of respondents agree that shortage of foreign exchange is a big challenge in industrial projects.

Figure 9 Issues related with technology



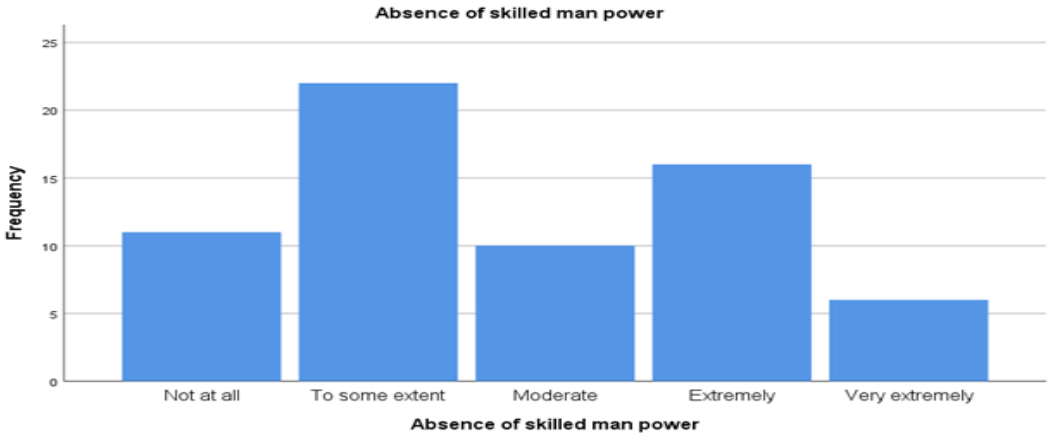

When we look at on getting access to new technologies most of the respondents 51(78.5 %) agree that the challenge is in moderate level where as 14(21.5%) of respondents agree that they faced the problem extremely. So from this we can conclude that getting access to technologies is not as such a challenge in industrial projects

Figure 10 market related problems



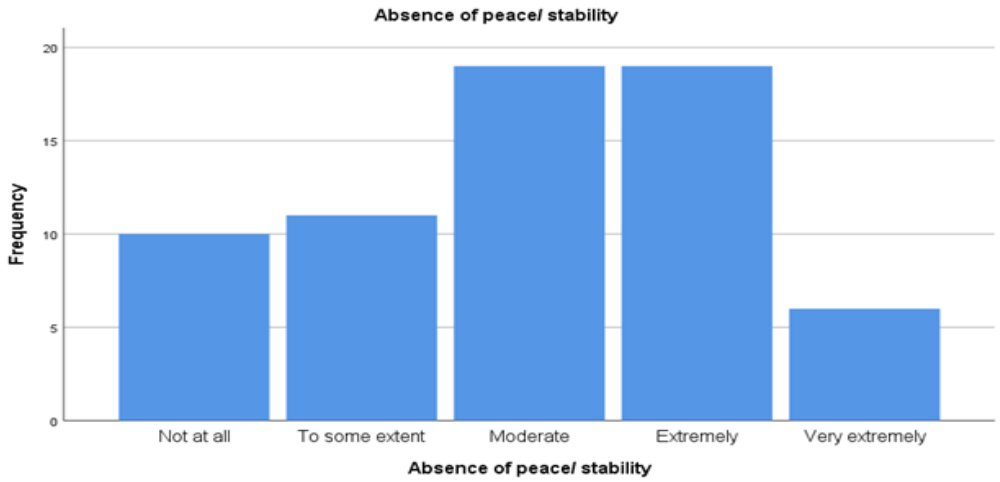
When we look at market related challenges most of the respondents 59(90%) agree that getting market for their products is either not a problem or it is a moderate challenge. Only 10% of respondents said they faced market related challenges. Therefore here also we can conclude that getting market access is not a big challenge in industrial projects.

Figure 11 Issues related with skilled man power




Regarding with skilled man power, 43(66%) respondents said this problem exists to some extent whereas 22(34%) of respondents agree that getting skilled man power is extremely a challenge. Therefore we can say that even though it's not major challenge but there are a significant number of industries which have a challenge in getting skilled man power.

Figure 12 issues related with stability



When we look at the situation of stability, 40(61%) respondents said challenges related with stability are moderate whereas 25(39%) of respondents said absence of peace/ stability is a serious challenge in industrial projects. Therefore we can conclude that even though is not a common problem for all but there are industries which are extremely affected by the absence of peace/stability.

From the above analysis we can summaries that the major challenges of industrial projects are access to foreign exchange, power supply and stability which contributes. Whereas shortage of skilled man power access to raw material, getting license and issues related with policy frame work are moderate problems in industrial projects. Issues such as getting access to technology, getting land for manufacturing and market related problems are not major challenges in the.

### 3.3 prospects of industrial projects

Table 6 summary of prospects

**Statistics**

| | | Policy | incentives | service delivery | accountability | Raw material | Market | skilled man power | Infrastructure | Finance | Stability |
|---|---|---|---|---|---|---|---|---|---|---|---|
| N | Valid | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 |
| | Missing | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | | 2.98 | 2.57 | 2.42 | 2.49 | 2.83 | 3.40 | 3.08 | 2.83 | 2.63 | 2.66 |
| Median | | 3.00 | 2.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 2.00 |
| Std. Deviation | | .696 | 1.237 | 1.158 | 1.106 | 1.341 | .997 | .989 | 1.376 | 1.024 | 1.108 |
| Variance | | .484 | 1.530 | 1.340 | 1.223 | 1.799 | .994 | .978 | 1.893 | 1.049 | 1.227 |

As we can see from above table, the mean value of Existence of conducive policy framework is 2.98 with standard Deviation of 0.69, which indicates that by 2.29 deviated (spread out) from the mean value of, Availability of incentives for the sector also have 2.57 mean value and 1.24 Standard Deviation also shows that 1.33 more deviated from the mean value of the response. The Transparent Efficient and effective service delivery (easy of doing business) has 2.42 mean values and 1.16 Standard Deviation; here we can assure that 1.32 deviated from the mean value (less dispersed value). Responsibility and accountability of government bodies has 2.49 mean values and 1.1 Standard Deviation, the answer given to these issues by the respondents is by 1.1 more scattered around the mean value. In the case of raw materials' availability in local, 2.83 is

the mean value and 1.34 is given as the Standard Deviation; so, there is around 1.49 more deviated around the mean value of the reaction given by the respondents. The availability of skilled man power and technology has 3.08 mean and 0.99 Standard deviation, and we can say that 2.09 scattered around the mean value of the respondents. Availability of infrastructure (road power, waterline sewerage) has 2.83 mean values and 1.37 Standard Deviation and 1.46 more deviated from the mean. Finally, the Presence of stable (peaceful) situation has 2.66 mean and 1.10 Standard Deviation, with 1.56 much scattered around the mean value. Generally, we can conclude that among the factors that we see from the deviate value of the factors Availability of infrastructure(road power, waterline sewerage), Availability of Raw material locally and Availability of incentives for the sector have more scattered around the mean which means these are more valuable factors according to their sequences.

### 4.3 Results Obtained From Interview And Focus Group Discussion.

The CEOs of the five industries were interviewed and selected experts from the industries participated in the focus group discussion. The results obtained from both means are analysed as follows.

#### 4.3.1 Major challenges faced by industrial projects.

The CEOs strongly indicated that the industrial sector is full of challenges, even though the country has immense potential for industrial development but government failed to create favorable environment for manufacturing industries therefore many industries are suffering from a number of challenges. Some of the challenges they mentioned,

1/ **Shortage of Foreign Exchange and Problems Related Foreign Exchange Regulation**

Most of the raw materials are supplied locally, but there are chemical inputs which are imported from abroad. To import these chemicals foreign exchange is needed but it is rarely available, they said sometimes waiting for letter of credit (LC) takes even years due to this there are times they were forced to shut down their factories. One of the CEO said even currently his factory is out of operation due to a shortage of chemical. Another important point they mentioned is that, even if there is no way they can buy chemicals by their own dollars (Franco valuta) because the policy of national bank regulation doesn't allow import of chemicals by Franco Valuta.

With regard to Foreign Exchange Regulation, the problem is that, exporters have a right to use a foreign exchange they generated from their exported goods. Most of the time, it is 70/30 ratio. That means National Bank owns 70% of the foreign exchange generated and the exporters use 30% of it. The problem here is that the national bank regulation considers all exporters in the same way, that means exporters of other commodities and that of manufacturers are considered equally. According to them this created unfairness among them. Because exporting manufacturing products is not as simple as exporting agricultural products. But both of them are treated equally. Therefore, according to them, special incentive mechanism should be in place for manufacturers. Another problem they mentioned is that the ratio of utilization is not constant it changes from time to time and this created burden on them. There is also restriction of usage. Only raw material import is allowed by the retention account others commodities such as machinery (components) import is not allowed by retention account.

2/ **Absence of comprehensive policy and incentives mechanism for the sector**,

According to them even though there is industrial development strategy that was developed back in 1994 but there is no known policy for manufacturing industrial sector this created poor performance of the sector. The incentive mechanism is not comprehensive by itself. There is no major law which governs the sector due to this different regulations enacted by different actors impact manufacturing sector negatively. Even though it is always said that manufacturing is a priority sector, but in practice this is not working. According to them this is due to absence of well-developed policy.

3/ **Problem related with customs/ tax.**

According to CEOs, experts in custom office lack technical knowledge about industrial products due to this, they just impose over invoice price on imported materials. They also lack information in international market, due to this they just refer to the previous prices list they have and do not take international market price in to consideration. As an example, during Covid time, international price of petroleum base chemicals dropped out, but due to previously recorded price in the customs office they were charged higher prices. Other problem they mentioned which related with tax office is that, national laws are sometimes violate by regional states, for example a tax grace period is officially stated on investment proclamation but some regions tend to violate that and try to collect tax during grace periods. In addition to this, the salary of expat

rates is fixed based on the agreement of the employer and the expat, in the contrary to this, some regions put a minimum threshold for the salary of expat rates. These all created burden on manufacturers.

4/ **power interruption**

Shortage and interruption of power is one of the major challenge industries faces. There is power interruption almost every day for unknown reasons this leads them to huge loss and sometimes for damage of machineries, one of the CEOs said that in his factory, sudden shut down due to power interruption during operation time damaged very expensive machinery and it took them long time to fix the problem and restart production.

**5/Problems Related With Transport and Logistics**

They mentioned that another area of challenge is logistics. Generally the cost of transportation is very high compared to other countries and there is no transportation incentive for chemical and construction input manufactures as is for food manufacturers. Due to their nature, some chemical products and construction inputs are not transported by air cargo; due to this they use inland transportation. However Shortage of suitable tracks and the nature of most roads which connects to the boarder are big a challenges related with transport and logistics. One of the CEO mentioned they faced a problem in getting suitable track to transport glass to Kenya. According to him, the road from Addis Ababa to Kenya is too old and the level of damage is high.

6/ **Absence of Industrial Park for Chemical and Construction Input Manufacturer**

Another problem they mentioned is that there is no industrial park for chemical and construction inputs sector. Other sectors such as textile, leather, agro- processing sectors have specialized and well developed industrial parks throughout the country. According to them chemical and construction subsector is neglected sector from this point of view. Chemical producers said, by its very nature, chemical factories needs special production site, but the situation is different most of them are scattered and the issue of environmental protection is not seriously taken in to account. Wood manufacturers also mentioned that chemicals they use to manufacture wood products are very huge in amount but there is a shortage of land to accumulate the chemicals.

7/ **Market related problems**

According to them problems related with market are not much compared to others, because most of their products are consumed locally and they focusing on import substitution, but the problem here is that the same products which are manufactured by them locally are being imported. Government itself imports furniture and plastic bags from abroad for huge amount of foreign exchange. One of the CEO mentioned that their factory produces and exports quality PP bag locally. But most cement factories including government itself imports from abroad. He said instead of importing locally produced goods it is better to supply the foreign exchange for local industries which manufactures same products. There is no policy which protects local producers. Due to this the markets are now dumping places for substandard imported goods.

With regard to export markets, it is not an easy task to be capable enough to produce a quality product which is competitive in price quality and volume, but with all its challenges industries which export their products suffers a lot. Long processes to get standard certification, long process to get letter of credit (LC), bureaucracy in customs office and shipping lines are the major challenges they face.

8/ **Absence of Peace/Stability**

According to CEOs and experts participated in FGD, absence of peace from time to time created challenge on manufacturing industries. One of the CEOs mentioned that one of their factories which is found in kombolcha was fully damaged due to recent war in the country. Also quarry-sites and forests which supply wood for industries are now under control of informal youth groups. Some of the quarry sites are now closed for a long time due to instability and the youth increase the price as much as they want. Other youths who are engaged in loading and unloading work also asks non-reasonable amount of money. These all created burden on industrial projects.

**9/ weak coordination among stakeholders**

Another challenge they mentioned is absence of strong coordination among stakeholders. Coordination among stakeholders is very important for industrial projects to operate smoothly. But institutions which have direct influence on industrial projects are not coordinated well. For example directions given by ministry of industry, which is the major government sector in

charge of supporting industrial projects, are, not properly implemented by other sectors such as national bank, customs office, railway enterprise, investment commission, and regional tax beau rues. This is because of weak responsibility and accountability of government bodies. According to them inefficient service delivery in government offices created inadequately developed business enabling environment in the country.

### 4.3.2 Prospects of Industrial Projects

According to the CEOs and experts, Even though the sector is full of challenges but still the prospects of industrial projects is high these is due to immense potential the country has, the following are major factors which contributes positively towards for the prospects of industrial projects.

**1/ Availability of Ample Natural Resource**

Ethiopia is known for immense natural resources such as minerals and forests which are base for chemical and construction input manufacturing industries according to experts. Minerals such as silicate, calcium carbonate, sulphate, Marble. Granite, etc. are found in enormous mount. This helps industries to easily get raw material they need for production of basic chemical products, cement, glass, ceramic, granite and marble. There are also a number of trees which can be used as raw materials for the production of medium density fibber (MDF), high density fibber (HDF), and veneer and so on. Therefore, availability of natural resources is one of important factors which plays great role for industrial development

**2/ Presence of Cheap Labour**

In Ethiopia high number of youth's graduates from universities and poly technic colleges every year, industries use this work force by giving them a minimum capacity building training. According to CEOs of FDI companies, the presence of cheap and trainable labour force is one of the factors which attracted them to invest in the countries. Their capacity to easily capture the skill also helped them be employees in industries. not only in industries but youths who work in quarry sites plays a greater role in providing mineral raw materials for industries. Youths from areas who have forests also engaged in supplying wood for industries. According to them, sometimes instability in different areas of the countries highly affects supply of raw materials by

creating conflicts in quarry sites. So if these issues are properly manages the labour force plays important role in industrial development of the country.

3/ **Presence of Incentives for Manufacturing Industries**

According to them, The Government of Ethiopia has now adopted the free market system to boost its manufacturing sector by inviting foreign investments and allowing the private sector to become the driver of economic growth. To encourage the inflow of the latest technological knowledge, of capital resources and advanced managerial skills, the Government has adopted a proactive foreign investment policy and announced fiscal incentives to attract private investments. These include:

- Incentives for Foreign Investments: A foreign investor can make investments either as sole proprietors or jointly with domestic investors.
- There is no capital requirement for investors who reinvest their profits or dividends generated from an existing enterprise.
- Repatriation and remittances are granted to foreign investors to be transferred into convertible foreign currency at the prevailing exchange rate on the date of remittance.
- The Constitution of Ethiopia and the Investment Proclamation and the legal system protect private property.

**Fiscal Incentives**

- Customs duties incentives - 100 per cent exemption from payment of import customs duties and other taxes levied on imports on all investment capital goods, such as plant machinery and equipment, construction materials as well as spare parts up to 15 per cent of the value of capital goods imported.
- Income tax incentives - Exemptions announced for the chemical and chemical products industry:
- The period of exemption for income tax shall commence from the date of production or the provision of service by the investor.
- An investor who has incurred loss within the period of income tax exemption shall be allowed to carry forward such loss for half of the income tax exemption period after the expiry of that period.

**4/ Growth In infrastructure (Airway, Standard Roads Train E.T.C**

According to them, Infrastructure development is increasing from time to time Ethiopian airline is of the top three airlines, making the country hub of Africa. Rail way construction from Addis Ababa to Djibouti creates greater opportunity for industries, express way construction, increased telecom and internet coverage, construction of hydroelectric dams all these contributes for the prospects of industrial development. They indicated that, development undertaking now creates a better tomorrow for industrialists.

**5/ Availability of land/ future plan to develop chemical parks**

In Ethiopia getting land for manufacturing is not such problem because Land is leased out by the government. Especially in the regions the situation is even better, the problem lies at getting adequate infrastructure such as waterline, road, telecom, power. For these now chemical manufacturing association is working closely with Government to construct a chemical manufacturing industrial park. According to them this creates great opportunity for those who want to join the sector.

6/ **Increased collaboration between government and the private sector.**

According to them, recently after the reform agenda is launched, collaboration between governments showing up hope for industrialists, previously there was of a problem labelling industrialists as 'rent –seeking' and 'developmental', this created rough relationship between them. But now there are initiative by government to closely work with private sector and efforts to equally treat all manufactures. There are also initiatives of public private partnerships. The level of participation of private sector in different development activities has increased. These factors together shows, if coordinated effort is taken to improve the business environment, the country has untapped resource which lay a base for manufacturing industries. Especially those industries which use most of raw materials locally such as chemical and construction input manufacturing those have a great potential of development.

# CHAPTER FIVE
# 5. SUMMARY, CONCLUSION AND RECOMMENDATION

## 5.1 **Summary and Conclusion**

Based on the analysis of data obtained through questionnaire survey and opinion of selected CEOs and experts who participated in focus group discussion, the following concluding points are drawn;

Summary and conclusion of challenges faced by industrial projects

- Among challenges faced by industrial projects, lack of access to foreign exchange, shortage of power supply and absence of peace/ stability ranks the first. Whereas shortage of skilled man power, access to raw material, getting licence and issues related with policy are moderate problems in industrial projects.
- Issues such as getting access to technology, getting land for manufacturing and market related problems are not major challenges in the sector.
- Other challenges mentioned by the factory heads includes problems related foreign exchange regulation, weak coordination among stakeholders , absence of industrial park for chemical sector, problems related with transport and logistics, absence of comprehensive incentives for the sector are challenges that hinder the sector from growing as it is intended to grow.

Summary of prospects of industrial projects

- Availability of ample natural resource and cheap labour
- Presence of foreign investment policy and incentives for manufacturing industries (fiscal and other incentives) plays a great role in development of industrial project
- Availability of land future plan to develop chemical parks has a great impact for the prospects of industrial projects
- Growth in infrastructure (airway, standard roads train, hydroelectric dams) is also important factor enhance the growth of the sector.
- Increased collaboration between government and the private sector. Increased involvement of private sector in different development activities contributes for the development of the sector.

## 5.2 Recommendations

Based on the above summary and conclusions the following points of recommendation are forwarded.

- Comprehensive and participatory policy should be formulated in order to enhance the development of industrial sector.
- Regulations which are developed by different actors should take manufacturing sector in to account for example, National Bank regulation should be revised in a way they support the manufacturing sector
- A policy measure should be taken to increase access to foreign exchange, and there should be supportive system for those who can use their own foreign exchange. Here the experience of other countries should be reviewed.
- Financial institutions such as Banks, Micro Finance Institutions and lease Companies should review their service in a way that encourages manufacturing sector.
- Infrastructure development road map should take manufacturing sector in to account that means roads which connect industries to cities and to borders should be improved so as to facilitate the movement of goods. Power supply plan should also give priority too manufacturing sector.
- Integrated industrial parks should be developed for chemical sectors as well.
- There should be improvement towards effective, efficient and responsive service delivery
- There should be protection mechanism for locally produced goods, and government itself should play an exemplary role by using locally manufactured goods such as furniture, chemical products
- There should be responsibility and accountability of different actors during the implementation of different regulations.
- Universities and TVETs should work closely with industries to produce a skilled manpower
- Serous measures should be taken by the government to ensure the security and bring about stable working environment.
- Government should strive to minimize the challenges and create conducive environment for manufacturing industries.

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Annex 1

## Questionnaire survey for: challenges and prospects of industrial projects: the case of some selected chemical and construction inputs manufacturing industries.

## Dear respondents,

This questionnaire is meant to collect data for a study I am working on, as a requirement for MA in project management. The subject of the study is challenges and prospects of industrial projects, the case of some selected chemical and construction input manufacturing industries. I thank you for giving me your precious time as a respondent in a survey which is very valuable to me. The identity of either yours or your company will be kept confidential. I assure you that the data from this survey will be used only for academic purposes.

I highly appreciate your quick response besides; it would be my pleasure to share with you the research report at the completion of the study.

For any inquiry you can contact me by the following address

**Simret Girma**

Post graduate student at Addis Ababa University School of Commerce

Tel 251911289542

Email:- simretgirma@yahoo.com

**Questioner survey for: challenges and prospects of industrial projects: the case of some selected chemical and construction inputs manufacturing industries.**

## Respondent's profile

**Name_____(optional)**

**Age**

**Below 20** ☐ **21-30** ☐ **31-40** ☐ **41-50** ☐ **above 50** ☐

**Education**

**Diploma** ☐ **first degree** ☐ **MA/MSC** ☐ **PHD** ☐ **Other** ☐

**Position**

**Support** ☐ **Managerial** ☐ **technical expert** ☐ **researcher** ☐ **other** ☐

## Company profile

**The category of the company**

**Large** ☐ **medium** ☐ **small** ☐

## Nature of the company

**Local investment** ☐ **foreign direct investment** ☐ **joint venture** ☐
**government enterprise** ☐ **other** ☐

## Total Capital (in birr)

Small (100,001- 500,000) ☐ Medium (500,001-1, 500,000) ☐ Large (1,500,001 – 20 million ☐
above 20 million ☐ (considered as a very large industries and not classified here)

## Job creation

**Small 5-20 people** ☐ **medium 20-100** ☐ **large above 100** ☐

Note: This classification is taken from federal small and medium manufacturing industries development authority. Enterprises/ Industries whose capital is below 100, 000 birr and which created job below 5 people are not considered as enterprises. They are categorised under job creation and food security agency.

**Questioner survey for: challenges and prospects of industrial projects: the case of some selected chemical and construction inputs manufacturing industries.**

**1/ which chemical products are produced in your industry?**

**Basic chemicals ▭ plastics/ pp bag ▭ soup and detergent ▭ pulp and paper ▭ petrochemicals ▭ others ▭**

**2/ which construction inputs are produced in your industry?**

**Cement and related ▭ glass and related ▭ wood and related ▭ ceramics and related ▭**

**3/ what are the major challenges faced by the sector (please put your answers on the table by ranking from 1to 5 based on the following parameters.**

**1= Not at all (The problem doesn't exist at all)**

**2 = to some extent (The problem exists to some extent)**

**3= Moderate (The problem exists to moderate level)**

**4= extremely (The problem exists extremely)**

**5= Very extremely (The problem exists very extreme)**

| No | Challenges faced by industries | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1. | Problems related with policy | | | | | |
| 2. | Problems related with licensing | | | | | |
| 3. | Shortage of land/ cluster/ park | | | | | |
| 4. | Shortage/ interruption of power | | | | | |
| 5. | Shortage of Raw material | | | | | |
| 6. | Shortage of Foreign exchange | | | | | |
| 7. | Shortage of technologies | | | | | |
| 8. | Market related problems | | | | | |
| 9. | Absence of skilled man power | | | | | |
| 10. | Absence of peace/ stability | | | | | |

- **Please mention if your answer is different_____**

**4. How do you evaluate the prospects of the sector in general? (Please put your answers by putting rank from 1 to 5 based on the following parameters.)**

1= Very low (the prospect is very low)

2= Low (the prospect is low)

3= Moderate (the prospect is moderate

4= High (the prospect is high)

5= Very high the prospects (the prospect is very high)

| | Prospects of the sector | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | Existence of conducive policy frame work | | | | | |
| 2 | Availability of incentives for the sector | | | | | |
| 3 | Transparent Efficient and effective service delivery( ease of doing business) | | | | | |
| 4 | Responsibility and accountability of government bodies | | | | | |
| 5 | Availability of Raw material locally | | | | | |
| 6 | Market availability local and abroad | | | | | |
| 7 | Availability of skilled man power and technology | | | | | |
| 8 | Availability of infrastructure(road power, waterline sewerage) | | | | | |
| 9 | Availability of financial resource( loan, lease finance, foreign exchange) | | | | | |
| 10 | Presence of stable (peaceful) situation. | | | | | |

**5. What is your recommendation for the challenges listed above?**

_____
_____
_____
_____
_____
_____
_____
_____

**Thank you for taking time to fill my questioners!**