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**ST. MARY’S UNIVERSITY  
SCHOOL OF GRADUATE STUDIES**

**PROSPECTS AND CHALLENGES OF INDUSTRIAL PARK DEVELOPMENT IN ETHIOPIA: THE CASE OF BOLE LEMI INDUSTRIAL PARK, ADDIS ABABA**

**ABREHAM MENGISTU**

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**PROSPECTS AND CHALLENGES OF INDUSTRIAL PARK DEVELOPMENT IN ETHIOPIA: THE CASE OF BOLE LEMI INDUSTRIAL PARK**

**BY**

**ABREHAM MEGISTU**

**Thesis Submitted To St. Mary’s University, School of Graduate Students For Partial Fulfillment of Requirement For The Degree of Masters of Art In Development Economics**

**ADVISER: POULOS ASRAT (PHD)**

**December, 2022**

**Addis Ababa, Ethiopia**

**APPROVED BY BOARD OF EXAMINERS**

As members of the board of examining of the final MA thesis open defense, we certify that we have read and evaluated the Thesis prepared by Abreham Mengistu under the title " prospects and challenges of industry park development in Ethiopia the case of Bole Lemi industry park" we recommend that this Thesis be accepted as satisfying the thesis requirement for the Degree of Master of Science in Development Economics.

Chairperson Department of Graduate Committee signature Date

**………………… ………… ………**

**Getamesay B. (PhD) signature …………**

**External Examiner**

**Sisay Debebe (PhD) Signature** 

**Internal Examiner**

**Paulos Asrat (PhD) Signature** 

**Advisor**

**DECLARATION**

I, the under signed, declare that this thesis is my original work, prepared under the guidance of Paulos Asrat (PhD). All sources of materials used for the thesis have been properly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher-learning institution to earn any degree.

Name: Abreham Mengistu Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: December, 2020

Place: St. Mary’s University, Addis Ababa

**ENDORSEMENT**

This thesis has been submitted to St. Mary’s University, School of Graduate Studies for examination with my approval as a university advisor.

Paulos Asrat (PHD) 

Advisor Name Signature

St. Mary’s University, Addis Ababa 13 January, 2023

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TABLE OF CONTENTS

[ACKNOWLEDGEMENT iv](#_Toc128650234)

[LIST OF TABLE ix](#_Toc128650235)

[LIST OF FIGURES x](#_Toc128650236)

[LIST OF ABBREVIATIONS AND ACRONYMS xi](#_Toc128650237)

[ABSTRACT xiii](#_Toc128650238)

[CHAPTER ONE 1](#_Toc128650239)

[1. INTRODUCTION 1](#_Toc128650240)

[1.1. Background of the Study 1](#_Toc128650241)

[1.2. Back Ground of the Organization 5](#_Toc128650242)

[1.3. Statement of Problem 6](#_Toc128650243)

[1.4. Objectives of Study 8](#_Toc128650244)

[1.3.1. General Objective 8](#_Toc128650245)

[1.3.2. Specific Objectives 8](#_Toc128650246)

[1.5. Research Questions 8](#_Toc128650247)

[1.6. Significance of the Study 8](#_Toc128650248)

[1.7. Scope and Limitation of the Study 9](#_Toc128650249)

[1.8. Definition of Terms 9](#_Toc128650250)

[1.9. Organization of the Thesis 10](#_Toc128650251)

[CHAPTER TWO 10](#_Toc128650252)

[2. REVIEW OF RELATED LITERATURE 10](#_Toc128650253)

[2.1. Definitions and Concepts of Industrial Park 10](#_Toc128650254)

[2.2. History of Industrial Parks/Special Economic Zones 15](#_Toc128650255)

[2.2.1. Evolution of Europe Industrial Park Development: 15](#_Toc128650257)

[2.2.2. Evolution of Americas Industrial Park Development 16](#_Toc128650258)

[2.2.3. Evolution of Asia Industrial Park Development 17](#_Toc128650259)

[2.2.4. Evolution of Africa Industrial Park Development 18](#_Toc128650260)

[2.2.5. Industrial Park Development in Ethiopia 20](#_Toc128650261)

[2.3. Benefits of industrial parks 21](#_Toc128650262)

[2.4. Contributions of Industrial Parks to Host Country Economy 23](#_Toc128650263)

[2.4.1. Stimulating Investment and Creating Employment 23](#_Toc128650264)

[2.4.2. In Foreign Direct Investment Attraction 23](#_Toc128650265)

[2.4.3. Diversification of Export Base 24](#_Toc128650266)

[2.4.4. Transfer of Technology and Skills 25](#_Toc128650267)

[2.4.5. Potential Foreign Exchange Earnings 26](#_Toc128650268)

[2.4.6. Making Connections to the Global Value Chain 26](#_Toc128650269)

[2.5. Operational performance of the Industrial Park 27](#_Toc128650270)

[2.6. Regulation and Policy System of the Parks 28](#_Toc128650271)

[2.6.1. Legal Framework of a Park 28](#_Toc128650272)

[2.6.2. The Park's Policy System 29](#_Toc128650273)

[2.7. Determinant Factors of Industrial Park Performance 31](#_Toc128650275)

[2.7.1. Marketing and Investment Promotion 31](#_Toc128650276)

[2.7.2. Management and Administration of Zones are Inefficient. 32](#_Toc128650277)

[2.7.3. Lack of Vision, Consensus, and Continuity 32](#_Toc128650278)

[2.7.4. Location of the Parks 33](#_Toc128650279)

[2.7.5. Comparative Disadvantage in Labor 34](#_Toc128650280)

[2.7.6. Inadequate Knowledge 34](#_Toc128650281)

[2.7.7. Registration, Licensing, and Administrative Procedures 34](#_Toc128650282)

[2.7.8. Inadequate Infrastructure 35](#_Toc128650283)

[2.7.9. Customs, Trade Facilitation, and Transport 35](#_Toc128650284)

[2.7.10. Promoting Linkages with the Local Economy 35](#_Toc128650285)

[2.8. Bole Lemi Industrial Park and its Current Status 36](#_Toc128650286)

[2.9. Empirical Literature Review 38](#_Toc128650287)

[2.10. Conceptual Framework 42](#_Toc128650288)

[2.11. Research Gap 43](#_Toc128650296)

[CHAPTER THREE 43](#_Toc128650297)

[3. RESEARCH METHODOLOGY 43](#_Toc128650298)

[3.1. Research Design 43](#_Toc128650299)

[3.2. Types and sources of Data 45](#_Toc128650300)

[3.3. Sampling design, 45](#_Toc128650301)

[3.3.1. Population 45](#_Toc128650302)

[3.3.2. Sample Frame 46](#_Toc128650303)

[3.3.3. Sample Unit 46](#_Toc128650304)

[3.3.4. Sampling Technique 46](#_Toc128650305)

[3.3.5. Sampling Procedure 47](#_Toc128650306)

[3.3.6. Sample Size determination for the quantitative data 47](#_Toc128650307)

[3.4. Methods of data collection, 49](#_Toc128650308)

[3.4.1. Questionnaire: 50](#_Toc128650309)

[3.4.2. Interview: 50](#_Toc128650310)

[3.4.3. Document Review: 51](#_Toc128650311)

[3.5. Method of Data Analysis 51](#_Toc128650312)

[3.5.1. Descriptive analysis 52](#_Toc128650313)

[3.5.2. Inferential Analysis 52](#_Toc128650314)

[3.6. Reliability and Validity 53](#_Toc128650315)

[3.6.1. Reliability Instrument 53](#_Toc128650316)

[3.6.2. Validity of the Instrument 54](#_Toc128650317)

[3.7 Ethical Consideration 54](#_Toc128650318)

[CHAPTER FOUR 55](#_Toc128650319)

[4. RESULTS AND DISCUSSIONS 55](#_Toc128650320)

[4.1. Introduction 55](#_Toc128650321)

[4.1.1. Questionnaire Response Rate 55](#_Toc128650322)

[4.2. Descriptive Statistics 55](#_Toc128650323)

[4.2.1. Background Information of the Respondents 55](#_Toc128650324)

[4.2.2. Descriptive Statistics of the Respondents on Bole Lemi Industry Park 58](#_Toc128650325)

[4.3. Descriptive Statistics of the Respondents on Prospects of industry park development in Ethiopia, BLIP 59](#_Toc128650326)

[4.3.1. Dependent Variable: Park Prospects 60](#_Toc128650327)

[4.4. Examining the Benefits of Industry Parks for the local economy 61](#_Toc128650328)

[4.5. Challenges of Industrial Park Development in Ethiopia 65](#_Toc128650329)

[4.5.1. Challenges of access to the market in Industry Park 66](#_Toc128650330)

[4.5.2. Government policy challenges to Industry Park 69](#_Toc128650334)

[4.5.3. Technological challenges in Industry Park 72](#_Toc128650337)

[4.6. Factors affecting employment creation potential of BLIP 74](#_Toc128650341)

[4.6.1. Inferential Statistics 74](#_Toc128650342)

[4.6.2. Analysis of Variance (ANOVA) 80](#_Toc128650345)

[4.6.3. Regression Analysis Results 80](#_Toc128650346)

[4.6.4. Interpretation of R-square and Adjusted R-square 84](#_Toc128650347)

[4.7. Determinants of Park Performance Based on the Qualitative Data 84](#_Toc128650348)

[4.8. Responses of the Managers from Structured Interview 85](#_Toc128650349)

[CHAPTER FIVE 88](#_Toc128650350)

[5. SUMMARY OF FINDINGS, CONCLUSION, and RECOMMENDATION 88](#_Toc128650351)

[5.1. SUMMARY OF THE FINDINGS OF THE STUDY 88](#_Toc128650352)

[5.2. CONCLUSION 90](#_Toc128650353)

[5.3. RECOMMENDATIONS 92](#_Toc128650354)

[5.4. For Further Researchers 94](#_Toc128650355)

[BIBLIOGRAPHY 95](#_Toc128650356)

[Appendix 1](#_Toc128650357)

# LIST OF TABLE

[Table 1, Sample Units of the Study 46](#_Toc128653705)

[Table 2 Proportionate Sampling Determination 48](#_Toc128653706)

[Table 3, Actual participants were involved in primary data collection. 50](#_Toc128653707)

[Table 4, Reliability Statistics 53](#_Toc128653708)

[Table 5, Statistics of Respondent' Demographic 55](#_Toc128653709)

[Table 6, Gender of Respondents 56](#_Toc128653710)

[Table 7, Age Category of the Respondents 56](#_Toc128653711)

[Table 8, Level of Educational Qualification, 57](#_Toc128653712)

[Table 9,Work Experience of the Respondents 57](#_Toc128653713)

[Table 10, Descriptive Statistics of prospect and challenges 58](#_Toc128653714)

[Table 11, Park Prospects Mean and Standard Deviation of Dependent variable, 61](#_Toc128653715)

[Table 12,Descriptive Statistics of Independent variable 1 64](#_Toc128653716)

[Table 13, Descriptive Statistics of Independent variable 2 68](#_Toc128653717)

[Table 14, Descriptive Statistics of Independent variable 3 71](#_Toc128653718)

[Table 15,Descriptive Statistics of Independent variable 4 73](#_Toc128653719)

[Table 16,Comparison of challenges 73](#_Toc128653720)

[Table 17,The Relationship Between the Independent Variables and Park Prospects; 75](#_Toc128653721)

[Table 18, Auto Correlation 77](#_Toc128653722)

[Table 119,VIF and Tolerance Statics for Multicollinearity 78](#_Toc128653723)

[Table 20, Analysis of Variance (ANOVA) 80](#_Toc128653724)

[Table 21, Regression Coefficient of the Variable 81](#_Toc128653725)

[Table 22, Model Summary 84](#_Toc128653726)

# LIST OF FIGURES

[Figure 1 Conceptual framew 42](#_Toc128653626)

[Figure 2 Bole Lemi Industry Park 44](#_Toc128653627)

[Figure 3; respondent gender in BLIP, 56](#_Toc128653628)

[Figure 4,Shints ETP Garment Plc. Employees in Bole Lemi Industrial Park 65](#_Toc128653629)

[Figure 5, Hetroscedasticity Test 77](#_Toc128653630)

[Figure 6 History 79](#_Toc128653631)

# LIST OF ABBREVIATIONS AND ACRONYMS

AFCTA…………………………. African Free Continental Trade Agreement

AGOA -------------------------------African Growth and Opportunity Act

AUC-----------------------------------African Union Commission

BLIP----------------------------------Bole Lemi Industry Park

ECA----------------------------------European Court of Auditors

EDRI---------------------------------Ethiopian Development Research Institute

EDZs-------------------------------- Economic Development Zones,

EIC -------------------------------- -Ethiopian Investment Commission

EIP------------------------------------Eco-Industrial Parks,

EIPDC…………………………. Ethiopian Industrial Parks Development Corporation

EPZ ----------------------------------Export Processing Zones,

EPZs----------------------------------Export Processing Zones

FDI -----------------------------------Foreign Direct Investment

FDRE--------------------------------Federal Democratic Republic of Ethiopia

FGD-------------------------------- Focus Group Discussions

FTZ--------------------------------- Free Trade Zones

GDP------------------------------ --Gross Domestic Product

GoE ---------------------------------Government of Ethiopia

GTP ---------------------------------Growth and Transformation Plan

IC -----------------------------------Industry Clusters,

ID---------------------------------- Innovation Districts,

IE -----------------------------------Industrial Estates

IP ---------------------------------Industry Park

IPDC -----------------------------Industry Park Development Corporation

IZ-------------------------------- Industrial zone,

KII------------------------------ Key Informant Individuals

MOI ---------------------------- -Minister of Industry

MVA--------------------------- Manufacturing Value Added

OECD -------------------------Organization for Economic and Development

OSS ……………..………..One Stop Service

QDA……………….……. Qualitative data analysis

SEZ----------------------------- Special Economic Zone

SEZ------------------------------Special Economic Zones,

SME ---------------------------Small and Medium Enterprises

SPSS ------------------------- Statistical Package for Social Science

**SSA ……………….………**Sub-Saharan Africa

TVET ………………..… Technical And Vocational Education And Training

TP-----------------------------Technology Parks,

UNDP ------------------------United Nations Development Program

UNIDO --------------------- United Nation Industrial Development Organization

USD--------------------------United States Dollar

SMEs…………………... Small And Medium Enterprises

CJC………………….… Competitiveness and Job Creation

CIIP…………………… Competitiveness Industries and Innovation Program

# ABSTRACT

*The topic prospects and challenges of industrial park development in Ethiopia: the case of Bole Lemi Industrial Park have been not widely explored as an area of study. Some studies have tried to identify the challenges of industrial park development in Bole Lemi. However, with industrial park prospects, there have been many divergent findings due to different variables exhibiting different behaviors and models that attempt to assess factors that affect the employment creation potential of Bole Lemi Industrial parks. The objective of this study was to assess the prospects and challenges of industrial park development with specific reference to, the Bole Lemi industry park. A quantitative research design and explanatory research approaches were used. Primary data was collected using a five-point Likert scale and open-ended questions also structured interviews with managers and experienced experts. The study had a 97.96% response rate. Statistical Package for the Social Sciences (SPSS) version 23 was employed to analyze the data.*

*And it was found that the overall mean score of, challenges of access to the market in Industry Park, challenges of government policy in Industry Park, challenges of technology in Industry Park, an obstacle to job creation in Industry Park, and infrastructure in Industry Park ranges between 4.35 and 2.93 which show the higher level of agreement of respondents. The correlation result indicates a high level of association between the independent and dependent variables. The R2 value of the dependent variable park performance and independent variables were found 0.766 and 0.757. The result suggested availability and quality of labor force, infrastructure and service, park location, and government policies and strategies are a direct effect on park performance and determine the performance of Bole Lemi industrial park. Based on the finding from the study to improve the performance of Bole Lemi industrial park working on this independent variable may maintain its productivity and effectiveness.*

**Keywords: *Park Performance, Benefit of Industry Park, challenges of access to market, challenges of Government Policies, challenges of technoloji, factors that affects job opportunity and factors that affects Infrastructure.***

*~~.~~*

# CHAPTER ONE

# 1. INTRODUCTION

## 1.1. Background of the Study

In the context of overall development, industrial parks contribute a big role in increasing native competitiveness through what it provides, institutional framework, fashionable services in administration, and act as a policy tool for governments to more efficiently influence firm derives of competitiveness. Industrial parks will have a positive influence on the revitalization of business settings, transfer of recent technologies, increase the potency of urban land use, cut back rural-urban migration, making backward and forward linkage for industries found in industrial parks, the concentration of corporations will give result effects each within and outdoors the park, specialization, and division of labor among enterprise, any industrial parks represent a chance for associate degree flow of foreign direct investment and decrease of unemployment by means that of creation of new jobs and alternative advantages of industrial development of the economy. (Noufal, 2016).

Many countries are initiating or have developed industrial parks (IPs) as a means of expanding the industrial sector. EPZs were a key industrialization technique used by the Asian Tigers (Taiwan, South Korea, Hong Kong, and Singapore) and Tiger Cubs (Indonesia, Malaysia, Thailand, and the Philippines) (Alarakhia, 2012). Because of the success of the Asian Tigers and the broad acceptance in the 1980s of a neoliberal approach to the development in many developing nations such as s ub-Saharan Africa (SSA), the EPZs are being pushed as an economic policy template for accelerating industrialization Farole, (2010). A market-led economy, according to a neoliberal conception of development, is fundamentally more conducive to economic growth and development than a government- led economy. This neoliberal viewpoint advocates deregulation and market expansion through a variety of market-friendly policies (Walton, 1998). The fundamental neoliberal characteristics may be found in the liberalization of trade and investment, which includes, among other things, lowering import tariffs, subsidizing export-led production, recruiting foreign investors, and exempting foreign firms from taxes and labor rules, (Walton 1998).

While EPZs were previously employed in Asia in the 1970s and 1980s, they have become increasingly popular in Sub-Saharan Africa in recent decades as a result of the increased embrace of neoliberal economic policy reforms backed by the IMF and the World Bank(Peter Gibbon et al., 2008, Vastveit, 2013,). Although more recent complete data has not been gathered, this figure has undoubtedly climbed greatly since then(Alarakhia, 2012). EPZs long-term rationale is that the FDI they seek to facilitate has the potential to promote backward linkages and technology and skill transfer. As a result, they are preferred in the long run due to FDI's ability to facilitate much-needed skill and technology transfers, as well as local spin-offs, increased knowledge of how to enter the global market, and improved access to international distribution channels. These prospective benefits are frequently invoked to explain the large sums of many and tax breaks required to create and promote EPZs (Vastveit, 2013).

The Industrial Park Development Corporation is becoming increasingly vital for advancing manufacturing industries, attracting local and foreign investment, and stimulating economic change. There are 12 state-owned and constructed government industrial parks in Ethiopia. Among them, ten of them are under operational and, the other two are ready for rent. Government bodies formed to create and operate zones are also to blame for the poor performance of most EPZ programs in Sub Sahara Africa. Area governments are inadequately empowered and autonomous in several nations and are poorly funded or operating. African countries have had problems in expressing a clear vision, building a consensus around it, moving to concerted action, and providing continuity in incentives, infrastructure, and services. Successful EPZs in African countries are related to failure in articulating a vision of the country's development, building national consensus, and taking action. There is also a concern that a lack of concerted effort to provide continuity in incentives, infrastructure, and services, and the business environment constrains most African EPZs from attracting substantial FDI (Vastveit, 2013).

According to Aggarwal in his competitive analysis, Industrial parks or Special economic zones (SEZ) can be an important way to promote industrialization if implemented properly, as shown in some developing countries, particularly those in South East Asia countries like China, Singapore, Sri Lanka, Malaysia, and others. Know many countries have begun to implement industrial parks for their industrialization process, especially as a way of attracting foreign direct investment (FDI) mostly in the manufacturing sector, for unemployment reduction, exports, foreign exchange generation, and revenue and tax collection, etc.

Apart from Mauritius, Tunisia, and Egypt, the performance of the IPs program in Africa has been inadequate. Senegal, Nigeria, Togo, and Cameroon were among the first countries in Africa to establish export processing zones (EPZs) but their performance was so poor that they were abandoned for some time (Chabari N, 2000). Problems ranging from infrastructural inadequacy to opposition by trade unions in African countries such as Malawi, Mozambique, Namibia, and South Africa deterred the operationalization of the concept. Poor planning, unstable development strategies, and inconsistent policies have had their toll on the IPD programs in Liberia and the Republic of Congo (Chabari N, 2000).

According to Council of Ministers Regulation N0 326/2014, Ethiopia established the Industrial Parks Development Corporation (IPDC) to build and operate industrial parks. The Industrial Park's proclamation of Ethiopia (Industrial parks proclamation 886/2015) puts the subsequent objectives of industrial parks establishment contributing towards creating ample job opportunities, increasing FDI, transferring development of technological, and achieving sustainable economic development (IP Proclamation 886/2015).

Industrial parks are one of the most important factors supporting positive economic development with high economic turnover and high employment by attracting investment in the manufacturing sector (Farole, 2011). The federal government of Ethiopia has taken industrial park development as a strategy to attract investment in the manufacturing sector and accelerate its growth and development of the manufacturing sector. The growth and development of the manufacturing sector are expected to propel economic growth resulting from the creation of more job opportunities, and the generation of foreign currency through export diversification, which is currently dependent on agriculture (Arkebe, 2018). Thus, industrial park development is adopted as a strategy in Ethiopia to realize the ambitious development plan of industrialization in the manufacturing and agro-processing industries, and thereby accelerate economic transformation by attracting domestic and foreign direct investment (Alebel et al., 2017). In Ethiopia, two types of industrial parks are under development: large, medium, and light-scale industrial parks1 on the one hand and integrated agro-industrial parks2 on the other hand (UNIDO, 2017).

These include the Hawassa Industrial Park, the largest in sub-Sahara Africa, which opened in mid-2016 and centered on the export of textiles and garments. Bole Lemi industry park opened in 2014 and centered on the export of Leather, textiles, and garments. There are also the Kombolacha and Mekelle industrial parks, which opened in early 2017 and were built at an estimated cost of USD 250 million. In January 2017, the government issued contracts worth USD 650 million to Chinese contractors to build three more industrial parks. These heavy investments in industrial parks demonstrate not only the government‘s ambition to reorient the economy but also its inclination to developmental approaches and central dirigisme – resulting in a level of economic growth hardly imaginable a decade or two ago (Lie & Berouk, 2018). In general, according to EIC, Ethiopia has planned to increase the number of its industrial parks to 15 on June 2018 as part of its effort to boost manufacturing and export. Ethiopia‘s aim in building more industrial parks is to contribute 20 percent of Ethiopia‘s GDP and 50 percent of the export volume by 2025 (Zelalem, 2018). Given, the current plan of expanding industrial parks in Ethiopia and many other African countries, it is believed that IPs would help revamp and sustain the manufacturing sector. This, therefore, necessitated an examination of whether the industrial parks in Ethiopia possess their attainable objectives.

It is critical to investigate the operational success of the country's first state-owned and controlled and operated Industrial Parks to determine factors influencing the prospects of industrial parks in Ethiopia. And analyzing their impact on its operational performance can play a key role in focusing on the most essential elements influencing the prospects of industrial parks, as well as providing feedback to scholars working on enhancing the performance of prospective parks. And this may enable the policymakers and researchers to work on the issues affecting the performance of the country‟s industrial parks.

## 1.2. Back Ground of the Organization

The Ethiopian government is investing heavily in the phenomena of industrial parks, and over 20 industrial parks are being built along key economic corridors, each with distinct specialties in key fields of manufacturing, especially in the field of apparel and apparel products and leather products. These industrial parks will be created and financed in a variety of ways, ensuring a long-term and inclusive collaboration between the government and private industrial park developers. Furthermore, investors thinking about entering industrial parks are extensively vetted to ensure cohesive and amicable relations among them, all with the same goal of ensuring enhanced productivity and competitiveness in the park. The Bole Lemi industrial park, for example, has been operational since 2014 widely occupied by foreign companies engaged on apparel and leather products. Bole Lemi is IPDC's first industrial park in Ethiopia, with an emphasis on exports. Bole Lemi Phase І (156 hectares) began operations in 2014, with all pre-erected factories already rented to more than 12 different businesses, including investors from Taiwan, China, India, and South Korea, in industries such as textile, garment, and shoe production. According to the agreement with the investors, around 95 percent of the items are sold to the foreign market, thereby increasing the country's cash-earning capabilities. Moreover, the enterprises use around 95 percent of foreign raw materials and the remaining were local raw materials such as skin and hides as input for their products. Bole Lemi Phase 2 (186 hectares) is now being constructed in conjunction with the World Bank Group. The Bole Lemi Industrial Park is a large and sophisticated industrial park in Addis Ababa, Ethiopia's capital. The company exports Apparel related companies and other aspects of business activity established in several foreign nations. The area normally covers two major areas with 156 hectares of the first and

185 hectares of the second phase. The site is being built under the supervision and administration of Ethiopia's Industrial Parks Development Corporation (IPDC). The industrial park has high opportunities for employment since the park created more than 16,000 jobs and exports finished goods with a value of 240,961,599.93 USD (IPDC, 2022, 6-month report). This huge amount of foreign currency is a big impact on the country‟s economy.

## 1.3. Statement of Problem

The Industrial Parks Development Corporation (IPDC) was established in 2014 by the Council of Ministers (Regulation 326/2014), with a mandate to develop, operate and administer a wide range of industrial parks within the country through lease, transfer, and sale of land and constructions. The IPDC is designated to prepare a detailed national industrial parks master plan based on the national master plan of the Regional States or the two City Administrations (Addis Ababa and Dire Dawa). The Corporation is also authorized to function industrial land bank per the agreement all over with the Regional States and also the City Administrations (IPDC, 2014).

The central point of this study is to assess and identify the prospects and challenges of the industrial park and their effect on the performance of the Bole Lemi Industrial Park. Aggarwal (2007) identified the performance determinants of Special Economic Zones in South East Asia by examining governance quality, incentive packages, and infrastructure facilities. In addition, according to Newman and Page (2017), the performance of industrial parks in Africa is determined by incentives, a lack of skilled labor infrastructure, and the location of the park's various infrastructure and resources. Farole, n.d., found that criteria linked to company licenses and regulations in the zone were less important in determining the park's performance in the other study. Industrial parks in Ethiopia are a recent phenomenon, nearly no more than ten years of age. Parks are critical for economic growth, and they have extraordinary benefits. Static and dynamic objective results are the goals that are used to measure the success of most industrial parks. The static results are (increasing exports, attracting external direct investment, and creating employment) and dynamic outcomes such as technology absorption, development skills, industrial rehabilitation, and economic diversification (Farole, 2011) compared to performance and learning from global economic zones in Africa for his study (Farole, 2011). (Farole, 2011)

Ethiopia's industrial parks have identified performance determinants due to the significant delays in clarifying the institution and regulatory scheme (Newman & Page 2017). Extremely different and various goals and incentives which have failed to work together toward a shared aim are vulnerable. According to (Mulu & Daba 2019), factors such as a lack of trained and qualified workers, a lack of local, semi-finished supplies of park materials, a shortage of rental accommodation for park employees, an inadequate trade, financial and banking system, inefficient activity in parks and costly shipping services and the lack of operational capabilities are being investigated and identified. And Asfaw and Lemi (2019) identified the determinants of park performance as being related to the industrial park, the national business environment, and, more specifically, the high level of labor and the absence of an adequately skilled labor force (Mulu & Daba 2019).

Ethiopia has joined its African counterparts very recently in IPDs with the same objectives. The country is pushing the program forward and has even begun generating substantial benefits from its few zones in operation, especially in terms of creating employment opportunities, FDI attraction, export promotion, etc. The prime functions of the development of industrial parks are to generate FDI, increase value-added exporting, and gain hard currency. As a developing country, Ethiopia, the planned objectives of IPs are very crucial. But, these objectives do not give much emphasis to encourage the larger local markets and domestic investors (Zeng, 2015). The prospects and challenges of an industrial zone in Ethiopia show that industrial park programs in Ethiopia are mainly inspired by preferential trade regimes like AGOA and EBA. This makes their sustainability uncertain after their expiration, though the country did not generate many benefits from these initiatives relative to other African countries like Kenya (Bayisa, 2016).

Regardless of whether or not the Bole Lemi industrial park establishment is good, it has an impact on industrial performance and will result in decreased organizational productivity as well as in the industrial park's and industrial park's performance. At this time, the industrial park performs below the expectations that emerged due to different factors playing a role in performance, like logistic supply and management, economic inflation, Market instability, and Limitation of raw materials in local markets as a preliminary survey approved before main research conducted. As a result, government policy, the political-economic impact of the recent global incidents including the AGOA dismemberment, the war between Russia and Ukraine, the COVID-19 Pandemic, and the war between the regional and federal governments of Ethiopia were no study has been conducted in the Bole Lemi industrial park previously. Therefore, the researchers seek to fill this gap by investigating determinant factors that affect industrial park performance and to know what effects those factors have on the performance of the Bole Lemi industrial parks.

## 1.4. Objectives of Study

### 1.3.1. General Objective

The general objective of this study was; to assess the prospects and challenges of industrial park development with specific reference to, Bole Lemi Industry Park.

### 1.3.2. Specific Objectives

Specifically, the study intends to address the following objectives:

* To assess prospects of industrial park development in Bole Lemi.
* To examine the benefits of industrial parks for the local economy.
* To identify the challenges of industrial park development in Bole Lemi.
* To assess factors that affect the employment creation potential of Bole Lemi Industry Park

## 1.5. Research Questions

This research endeavor attempts to answer the following key questions:

1. What are the prospects for Bole Lemi Industry Park development?
2. What are the benefits of Industry Parks to the local economy?
3. What are the challenges in Bole Lemi Industry Park development?
4. What are the factors that affect employment creation in Bole Lemi Industry Park?

## 1.6. Significance of the Study

The study is significant in revealing previous problems that have occurred on the ground that are related to the prospects and challenges of industrial parks. The study is expected to give in-depth information regarding the determinants of an industrial park that affect the employment creation of BLIP. Since industrial parks are growing throughout the country there are different factors affecting industrial park employment creation. So to get effective industrial parks in the country, the researcher provides the information needed for the industrial park developers and also for the investors who are participating in the field. It also highlights the gap between policymakers using the study as input to revise policy and, finally, those researchers in need of deep research can use it as a blueprint.

## 1.7. Scope and Limitation of the Study

The research was conducted on the Bole Lemi Industrial Park only because it was the first industrial park in Ethiopia. As a result, the researchers believe that a representative sample from this target population can be drawn. The study encompasses five selected park employment creation determining factors that are used as study variables: Challenges of access to the market in Industry Park, Government policy challenges to Industry Park, Technological challenges in IP, Obstacles to job creation in the IP, and infrastructure & service. The study includes administrative employees of the companies, operational employees of the companies, government office employees and other stakeholders inside the park. This mainly includes; policy, laws, regulations, and institutional arrangements that facilitate the Overall governance of the industrial parks; leadership and management system of the industrial parks; its positive and adverse effects on the displaced people; its impact on technology and knowledge transfer; its contribution on import-export; employment created and its administration situation; and overall prospects of BLIP. Finally, the study is geographically limited to the Bole Lemi Industrial Park.

## 1.8. Definition of Terms

**Industrial Parks**: are geographically or judicially bounded areas in which free trade, including free trade import of intermediate goods, is permitted provided that all goods produced within the parks are exported (Lettice, 2003).

**Manufacturing Enterprises**: these are manufacturing firms located in industrial parks and provided different forms of incentives by the government (Zeng, 2015).

**Prospect**, anticipation, and foretaste mean an advanced realization of something to come. Prospect implies an expectation of a particular event, condition, **success, profit**, etc. the outlook for the future: or development of definite interest or concern. The presence of industrial parks

**Challenges**: these reference effects Vs challenges on different impacts in IP.

**Development:** is a **process that creates growth, progress, positive change** , or the addition of physical, economic, environmental, social, and demographic components.

## 1.9. Organization of the Thesis

The thesis is organized into five chapters. Chapter one deals with the introductory part which includes a background of the study, problem statement, objectives, scope, and significance of the study. Chapter two is devoted to the presentation of the historical background of industrial park development at the global and national levels and the conceptual frameworks of the study. An overview of the research methodology used to address the research problem is presented in chapter three. This chapter covers the research design, source of data, data collection procedure, and methods of data analysis. Chapter four is devoted to presenting the findings and analysis of the study. The last chapter presents the summary of findings, conclusion, and recommendations based on the findings of the study.

# CHAPTER TWO

# 2. REVIEW OF RELATED LITERATURE

This section covers important theoretical literature reviews related to the economic contribution of industrial parks which include employment opportunities, export revenue, and attraction of FDI for this country.

### 2.1. Definitions and Concepts of Industrial Park

Industrial parks are broad concepts and have different definitions to reflect the variety within them. The common terms used to define industrial parks, which were built by the United Nations Industrial Development Organization (UNIDO), have a broad definition. UNIDO defines industrial parks or special economic zones as "a tract of land developed and subdivided into plots according to a comprehensive plan with the provision of roads, transportation, and public utilities, sometimes also with common facilities, for use by a group of manufacturers" (UNIDO, 2019, p10).In addition to this, the terminology used to substitute for the concept of an industrial park is a special economic zone, defined by the World Bank in 2009.

"Special economic zone is a generic term that covers recent variants of the traditional commercial zones. There are several unique features of the basic definition of a special economic zone: (a) it is a geographically delimited region, typically physically secured; (b) it has a single management or administration; (c) it provides advantages based on its physical position within the zone; and (d) it has a separate customs area (duty- free benefits) and streamlined procedures (Zeng, 2010, P2). And Farole states in his book Special Economic Zones:

"... Zones are usually provided with a physical infrastructure supporting the activities of the firms and economic agents operating within them. Real estate, highways, power, water, and telecommunications are usually included in this infrastructure. Typically, the infrastructure consists of industrial or mixed-use operation parks and the main transport infrastructure, linking the zone to its origins, markets, and economic hinterland. Unless areas are legal spaces in countries, businesses are usually placed in industrial or mixed-use parks "(Farole, n.d. 2011).

An industrial estate is a specific area (tract of land) that is separated from urban and densely populated areas and zoned specifically for the location of industrial facilities. Industrial Park is a portion of a city that is zoned for industrial use (as opposed to residential or commercial use). Industrial parks may contain different industries, ports, warehouses, distribution centers, chemical plants, plastics manufacturers, airports, food and beverage processors, and steel manufacturers, to name just a few examples (Henriksen, 1982). Industrial estates have to support proper infrastructure such as roads, power, water supply, and other utility services to all facilities located within the well-defined parameters of the estate. The term industrial park implies careful planning and brings to mind extensive low-rise buildings located in a landscaped setting of wide lawns, and interconnected by broad boulevards.

The idea of industrial park development was based on several principles which most of all included the allocation of specialized infrastructure in selected areas to decrease costs connected to building infrastructure, and the capability of a country to attract new investors, which would eliminate social and ecological impacts caused by industrial production. The term industrial park is very similar to the name of the industrial district, production zone, or production cluster. Nonetheless, English economic literature uses terms such as industrial estate, trading estate, factory estate, or employment areas (Keppl, 2002).

In addition to hard infrastructure, industrial parks often grant preferential policy and have different institutional arrangements from the rest of the country – such as tax and tariff reductions, looser labor regulations, different sets of laws, and many other practices that provide convenience and lower the costs of doing business. While the policy instruments that governments could use to lure investment are well-known, there are a few strategies they could follow to increase the chances of success: targeting international firms, targeting group businesses, incentivizing first movers, and adopting a step-by-step approach (Zeng, 2017).

To address this confusion, scholars in the area are attempting to introduce their generic name which is taught to represent all kinds of parks or SEZs. Accordingly, Wang (2013) uses ‗economic development zones‘; Farole (2011) adapts ‗special economic zones‘; Guangwen, (2003) uses ‗free trade zones‘; OECD (2010) prefers ‗economic zones‘; World Bank, (WB,2015) uses ‗industrial parks‘; Amirahmadi and Wu (1995) and UNCTAD (2015) adapt ‗export processing zones‘. Yet, there is no consensus reached among scholars on the generic term itself, though the name ‗special economic zones‘ and ‗industrial parks‘ are repeatedly used in the literature. Despite their confusing nomenclature and definitional crisis, industrial parks typically possess the following structural features to be an industrial park across time and space (Wang, 2013; Zeng, 2015; Falore, 2011): Parks/zones are formally delimited portions of the national territory defined by specific regulatory regimes (operating rules) that are more liberal and administratively efficient than those prevailing in the rest of the national territory; parks/zones have a single management or administration. The administration of the regime usually requires a dedicated governance structure, centralized or decentralized, to ensure the benefit of investors through efficient management of the regimes; parks/zones have a separate customs area (duty-free benefits) and streamlined procedures. They are usually provided with special incentives (land, roads, electricity, water, telecommunications, transportation, etc.) to attract investment and facilitate the activities of firms operating within the park/zone; most parks/zones aim to attract FDI and to increase exports, and enhance competitiveness; zones offer primary benefits for investors physically within the park/zone, though local small and medium enterprises are expected to benefit from linkage spillovers.

The variation in their nomenclature, for instance, Guangwen (2003) has identified about 66 different terminologies, reflects the linguistic preferences of developing and implementing authorities as much as functional differences between different kinds of parks/zones pertinent to their establishing objectives, geographical location, and country‘s politics, among others (Pakdeenurit et al., 2014; Falore, 2011). However, the multiplicity of terminologies is highly confusing and created difficulty in defining, classifying, and understanding the concept (OECD, 2010; Guangwen, 2003).

On the other hand, according to Scheepers (2012), the term ―Industrial Park or Special Economic Zone‖ is used generically to describe different forms of parks/zones (including Industrial Zones, Special Economic Zones, Free Trade Zones, and Export Processing Zones, etc.) that vary in size and scope and operate under different incentive regimes. What follows will be an outline of the different types of SEZ and their functions.

The first one is Free Trade Zones (FTZ). They are the most commonly used SEZ, and are generally characterized as being the geographically fenced-in, tax-free area that provides warehousing, storage, and distribution facilities for trade, shipping, and import/export operations in a reduced regulatory environment, meaning they generally have less stringent customs controls and sometimes fewer labor and environmental controls. These zones generally focus on the tangible operations of international trade. Because many SEZs attract labor-intensive manufacturing such as assembly-oriented production of apparel, textiles, and electrical goods, FTZs are a very popular type of SEZ or IP.

The next one is Export Processing Zones (EPZ). They are similar to FTZs in that they encompass land estates that focus on foreign exports, but they differ in that they do not provide the same degree of tax benefits or regulatory leniency. Instead, they provide a functional advantage to investors seeking to capitalize on the economies of scale that a geographic concentration of production and manufacturing can bring to a trade region. If they are successful, these zones are beneficial to a host country because the host country does not have to provide reduced tariffs or regulations but it still benefits from increased trade to the region.

What follows next are Enterprise Zones. They are so unique in that, apart from providing manufacturing or production benefits like other SEZs, they also provide the benefits of local, centralized development efforts. They are generally created by national or local governments to revitalize or gentrify a distressed urban area. These zones use greater economic incentives than EPZs, like tax incentives and financial assistance, to revitalize an area by bringing trade into the zone that will spur organic, localized development and improve local inhabitants‘ quality of life. The implementation of enterprise zones follows the philosophy that the improvement of a region‘s industry and trade begins at the individual neighborhood level.

The fourth types of SEZ are Single Factories. It is a special type of SEZ that are not geographically delineated, meaning they do not have to locate within a designated zone to receive trade incentives. This type of SEZ focuses on the development of a particular type of factory or enterprise, regardless of location. When a country decides to establish a single factory as a type of SEZ, it intends to create a specialization in a specific industry. A country that desires to create an export concentration in a specific industry would use a single-factory model to promote trade and growth in just that industry, giving each factory specializing in that trade economic incentives.

The fifth categories are Free ports and they are also typically expansive zones that encompass many different goods and service-related trade activities such as travel, tourism, and retail sales. Because of the variation of products and services available to a Freeport, they are generally regarded as being more integrated with the host country‘s economy. Movements of these imported goods from the Freeport to a non-free trade area in the country are subject to import duties.

Specialized Zones come in sixth place and they have been established to promote highly technical products and services unique to an industry. Many of these zones focus on the production and promotion of science and technology parks, petrochemical zones, highly technical logistics, and warehousing sites, and airport-based economies.

Industrial Parks are facilities (buildings) that are set aside for production and business services to attract new businesses by providing an integrated infrastructure in one location and localized environmental controls that are specific to the needs of an industrial area.

Spatial development corridors connect two or more economic nodes employing transportation networks and accommodate various economic activities along the corridors. The final one is an industrial development zone that is used to build an industrial estate linked to an airport or seaport that leverages domestic and foreign fixed direct investments in value-added and export-oriented manufacturing industries and services.

According to the Ethiopian industrial park proclamation, the term "industrial park" is defined as “an area with a distinct boundary designated by the appropriate organ to develop comprehensive, integrated, multiple or selected functions of industries, based on a planned fulfillment of infrastructure and various services such as road, electric power, and water, one-stop-shop and have special incentive schemes, with a broad view to achieving planned and systematic, development of industries, mitigation of impacts of pollution on the environment and human being and development of the urban center, and includes special economic zones, technology parks, export processing zones, agro-processing zone, free trade zones and the like designated by the Investment Board” (Industry Park Proclamatio no886/2015).

## 2.2. History of Industrial Parks/Special Economic Zones

### These first parks were designed to encourage external trade through the implementation of free ports, a region that was free of local prohibitions, taxation, tariffs, and excises on transport (imports, exports, and exchanges) (Farole, 2011). It was built in early 1704 in Gibraltar, in 1819 in Singapore, and in 1848 in Hong Kong, and the use of industrial parks for economic purposes. (Zhang, Hao, 2014) In 1937, the United States of America established the first modern industrial park design in Brooklyn, New York's Navy Yard. Following World War II, the concept was expanded. Zone development in Latin America began in the 1960s in Colombia, Porto Rocco, and the Dominican Republic. In the Asia zone, development started in South Korea, the Philippines, and Lanka.

### 2.2.1. Evolution of Europe Industrial Park Development:

In Turkey, Free zones were created and still function based on Act on Free Zones No. 3218 promulgated yet in 1985 and effective as of 1987. At the time, there emerged two pioneer special economic zones in the country: Mercina and Antalya. In 1999, they were joined by the Aegean free economic zone in Izmir and a free entrepreneurship zone in Istanbul, which is located in the precincts of the Ataturk International Airport. The Turkish zones are encouraged to take maximum advantage of the country‘s geographic position, and its proximity both to the Middle East and Eastern and Western European markets (Prihodko S. *et al*. 2007).

In the national economic zones, it is allowed to carry out business activities of any kind, including storing, production, packaging, and banking. The zones boast necessary infrastructure, office, production, and warehouse facilities, which can be rented at privileged rates. The currently existing 21 zones have become home to 3,401 corporations, including 652 foreign ones. In 2003, the volume of export and import operations via the zones grew at 49.6% and reached USD 16,608.66 million, or equivalent to 14% of the nation‘s foreign trade turnover. Practically all the zones reported growth in this regard, with the trade turnover in 6 of them being over USD 1 billion (Prihodko S. *et al.* 2007).

The basis for creating SEZs in Poland is the Act of 20 October 1994 on Special Economic Zone which indicates the rules and manner of establishing and managing economic zones as well as conducting business activity on the territory of the special economic zone. Fourteen Special Economic Zones have been created in Poland, EURO-PARK Mielec, Suwalki, Kotowice, Legnica, Lodz, Walbrzych, Kamienna Gora, Kostrzyn-sluice, Slupsk, Starachowice, Tarnobrzeg, Pomernian, Warmi-Mazury, and the Krakow Technology Park. One may only hope that the long-turn undertaking, which was the introduction of Special Economic Zones, will encourage new investors to locate their activity in the special economic zones. Poland enacted an SEZ law in 1995 for creating SEZs. The main objectives of developing the zones were creating employment, protecting the environment, applying new technology, managing natural resources, and taking advantage of unused assets and infrastructure. To attract investors, preferential tax treatment applies to SEZs. An important aspect of the policy is to provide incentives based on the type of investment, quantum of investment, and the number of local people employed and trained. Some of the prominent industries established in the zones are automotive and automobile parts, aircraft manufacturing, metalworking, food processing, and beverages. At present, there are 17 special zones in Poland covering an area of around 6338.92 hectares. The zones currently employ more than 14,000 people. Euro Park Mielec, spread over 575 hectares, is one of the successfully operating SEZs in Poland (Olga, 2010).

### 2.2.2. Evolution of Americas Industrial Park Development

The US continues to be a great source of manufacturing investment for economic zones. Foreign Trade Zones have played a pivotal role in establishing the US as a hub for manufacturing, though globalization, current dynamics, and changed comparative advantage have resulted in large-scale outsourcing of low-value manufacturing processes to China and other South East Asian economies. The FTZs in the US have designated sites where special customs procedures apply and the FTZ Board, established in 1934, provides licenses and regulates FTZs. These zones have helped in creating a level playing field in terms of the business costs associated with imports and customs clearance. The FTZs have also assisted state and local officials to develop their economies by attracting foreign commerce. Further, by helping US companies improve their international competitiveness, FTZs have helped these companies to retain local businesses and encourage the development of additional jobs (Prihodko *et al.*, 2007).

Columbia was the first to have the concept of SEZs in Latin America and it came in 1964. There are twelve Free Zones in Colombia, Bogotá, Quindío, Arauca, Cucuta, Palmaseca, Buenaventura, Rionegro, Malambo, Santa Marta, Barranquilla, Cartagena, and La Candelaria (Valle).Tax incentives include customs duties and VAT exemptions on goods and services brought into the zones. Foreign exchange benefits refer to the right to exchange, hold or negotiate foreign currency; the right to open domestic or foreign bank accounts in a foreign currency and several procedural facilities. Colombia has nearly five million square meters of modern facilities designated as free zones. Four currently depressed border cities (Buenaventura, Valledupar, Ipiales, and Cucuta) have been granted special status to encourage further exports and export-oriented investment. Other incentives include a special labor regime and/or investment in disaster areas ("Paez Law", in much of Cauca and Huila and the "Quimbaya Law" in the coffee-growing region that was struck by the 1999 earthquake) (Prihodko *et al.*, 2007).

### 2.2.3. Evolution of Asia Industrial Park Development

China has undoubtedly been one of the most successful users of SEZs. The first China zones were established in 1978 to experiment with the introduction of controlled capitalism to a centrally planned economy and particularly, to introduce a liberal trade and investment regime into an economy that had been largely closed to the outside world since 1949. Initially, four zones were established in the country‘s coastal areas (three in Guangdong Provence and one in Fujian), but the number of zones increased during the 1980s and 1990s to include a large number of towns and regions, some located in the interior of the country. China‘s SEZ strategy proved very successful as the country became the world‘s largest exporter of manufactured items and the leading destination for FDI in the developing world. Today, the country has over 200 zones of various types, sizes, and industrial focus. In addition, the country has started expanding its model to other parts of the globe with investments in economic cooperation zones‘ in countries in Africa and other parts of the developing world (Baissac, 2011).In Pakistan, every district headquarters of Pakistan has an industrial estate or area having infrastructures and offers incentives of various natures: Punjab has 26 industrial estates, whilst Sindh, Baluchistan, and KP, have 30, 7, and 12 industrial states, respectively. Some of these are successful whilst others are unsuccessful because they are established in remote areas lacking the necessary skilled workforce or basic amenities for workers. Some big cities also have industrial clusters based on their strength in a skilled workforce, raw materials, supporting institutions, and deep historical links with local and global supply chains. These clusters include sports and surgical clusters in the city of Sialkot, textiles cluster in Faisalabad, fan cluster in Gujrat, and engineering cluster in Gujranwala to name the major ones. Existing SEZs in Pakistan include (i) Karachi Export Processing Zone (Karachi); (ii) Risalpur Export Processing Zone (Risalpur); (iii) Sialkot Export Processing Zone (Sialkot); (iv) Gujranwala Export Processing Zone, Gujranwala; (v) Khairpur Special Economic Zone, Khairpur; (vi) Rashkai Economic Zone (Rashakai-Mardan, M1); (vii) Gadoon Economic Zone (Gadoon Amazai Swabi); and (viii) Hathar Economic Zone (Hathar-Haripur).In addition, there are some Industrial Parks in Pakistan: Rachna Industrial Park (Lahore), Marble City (Lahore), and Textile City (Port Qasim). Some of the newly established industrial estates are Value Addition City (Sheikhupura-Faisalabad Expressway), M3 Industrial City (Faisalabad), and Quaid-e-Azam Apparel Park (M-2 Lahore) (Mohmood, 2018).

Malaysia‘s first zone opened near Penang Island in 1972. It rapidly became attractive to American firms in particular, which set up manufacturing operations in labor-intensive electronics assembly. Malaysia‘s EPZs grew by 13.3 percent a year in the 1970s. By 1995, more than 400 firms were operating in the zones. By 2003, the zones employed nearly a million workers, a third of them in increasingly high-tech segments of the electrical and electronics industries. Malaysia‘s electronics industry, created virtually from nothing within the zones, now produces about 10 percent of the world‘s semiconductors (Farole, 2011).

### 2.2.4. Evolution of Africa Industrial Park Development

The Middle East and North Africa initially chose to develop FTZs, whose numbers also expanded in the 1960s and 1970s, notably in Egypt, Israel, Jordan, and Syria. Tunisia chose the EPZ route. In the 1990s, manufacturing activities took root, notably through the Qualified Industrial Zone program. Although most countries in Sub-Saharan Africa did not develop zone programs until the 1990s, several launched earlier initiatives, including Liberia (1970), Mauritius (1971), and Senegal (1974). By the mid-1980s, EPZs were a fixture of trade and industrial policy in all regions of the world (Farole, 2011).

There is generally an increasing trend in the development of Free Economic Zones (FEZs) in the MENA region. In the MENA OECD Stock-taking report (2005), there were 48 functioning zones in the MENA region as a whole; with three MENA countries having no FEZs at that time namely Oman, Qatar, and Saudi Arabia. According to the 2008 update, there were about 73 FEZs. The numbers have almost doubled from 48 in 2005 to around 89 FEZs in 2009 (OECD, 2009). Moreover, the three countries that did not have FEZs had set up concrete plans for their development. Saudi Arabia had set ambitious goals for creating six ―special economic cities‖ to create 1.3 million employment opportunities by 2020. The King Abdullah Economic City is slated to be built first and will be divided into six areas: the seaport, industrial zone, central business district, resort district, education zone, and residential zone. Oman has developed a specialized zone called the Knowledge Oasis Muscat focusing on technology development. Qatar plans to construct a development called Energy City Qatar to attract leaders in oil and gas production, to be opened in 2010 (MENA-OECD, 2009).

In Africa, SEZs are important to consider. Most countries are latecomers in implementing modern industrial zones, and most of them are still in the early stages. Except for Mauritius, almost all Sub–Saharan African countries' industrial parks are said to have made significant progress in harnessing the dynamic potential of economic zones as an instrumental part of the process of long–term structural transformation. Following the adoption of a resolution by the United Nations Economic and Social Council (ECOSOC) recommending the improvement of port, customs, and trade zone facilities in developing countries, Industrial park areas vary based on their cause of the formation and can be developed into industrial parks. Based on the source of resources and type of operation, industrial parks can be categorized into endogenous resource parks exogenous parks, or mixed resource parks (Aynalem, 2019).

In line with the rest of the world, the emerging trend in the FEZ development approach in MENA is a movement away from the classical development of ―free trade zone‖ and ―export processing zones‖ towards ―special economic zones‖ and ―specialized zones.‖ In 2005, the stock of export processing zones (EPZs), special economic zones (SEZs), and specialized zones (SEZs) in MENA4 numbered 38, 2, and 8 respectively; in 2009 the numbers are as follows: 37 FZs, 10 SEZs and 37 SZs (MENA-OECD, 2009).

### 2.2.5. Industrial Park Development in Ethiopia

Among SSA countries, Ethiopia‘s recent economic growth is impressive and its GDP grew on average by 11% between 2004 and 2014 (WB, 2015). To sustain the growth momentum and further induce industrialization, the government of Ethiopia has introduced the ambitious Growth and Transformation Plan (GTP1 and 2) since 2010/11, in which the private sector has been considered an engine of economic growth and transformation that primarily intends in reducing poverty and bringing structural transformation through building an economy with modern and productive agricultural and industrial sectors that would ultimately take the country to a middle-income status by 2025 (Zeng, 2015; MoI, 2015). The GTP aims at addressing a range of developmental indicators, while also providing a framework for industrialization for SEZs through a policy matrix (GTP/PM) targeting specific sectors. The GTP is complimented by Ethiopian Investment Policy, which is supported by accompanying legislation the Investment Proclamation No.769/2012, which among other things ensures the protection of private property rights and the repatriation of capital and profit (COMCEC, 2017).

Industrial Parks were also identified as how to address two of the most frequently mentioned grievances by investors in Ethiopia, namely access to land and government being seen as an impediment to investment (in terms of red tape and policy and regulation). The industrial park program was therefore seen as a tool to address these impediments to further investment by liberalizing business conditions in a limited geographical area.

1. **IP Legislations and Regulations**

The Industrial Park program is governed by the Industrial Parks Proclamation No. 886/2015, as well as the Investment Proclamation No.769/2012. Industrial Parks Proclamation aims to: attract private sector participation in manufacturing; enhance the competitiveness of the economy; create jobs and achieve sustainable economic development.

The Act also lays out the rights and obligations of the developer, including developing the industrial park land; operating the industrial park; providing services to investors in the industrial park as the operator; sub-lease the land; rent or selling immovable assets to investors; make space available for the one-stop-shop facility; take advantage of incentives offered; aim to link local businesses into the supply chain; replace expatriates with Ethiopians by training local employees; and can sub-lease development or operation of the site (EFDR Proclamation No. 886/2015). The regulations lay out in more detail the timeframes of these obligations. A number of the new regulations are currently being gazetted and await finalization (given the Industrial Park program is fairly new in Ethiopia). Some of the regulations have however been signed off. Industrial Park Proclamation No. 886/2015 states issues related to land, and incentives (both fiscal and non-fiscal) to manufacturers and developers (FDRE Proclamation No., 886/2015).

1. **Organizational and Administrative Profile**

Ethiopian Industrial Parks Development Corporation (IPDC) was established in 2014, as a public enterprise. One of its primary mandates is to develop and administer Ethiopia‘s industrial parks, including leasing developed land as well as leasing and transferring, through sale, of buildings on the industrial park land. The IPDC works with the Ethiopian Investment Commission and the Ethiopian Revenue and Customs Authority to provide a one-stop-shop service for investors investing in designated industrial parks.

## 2.3. Benefits of industrial parks

The objectives of most industrial parks/EZS programs are dynamic and static outcomes. Dynamic outcomes are long-term outcomes, such as technology absorption, skill development, industrial upgrading, and economic diversification. The static outcomes are the export potential, employment generation capacity, and foreign direct investment capacity of the parks. Nallathiga, (2007), Farole (2011), UNDIDO (2019)), and FIAS (2008) in their studies that the first importance of industrial parks or special economic zones is the employment of a large number of young, especially females, intensive labor attraction fields of manufacturing and service industry sectors. The second importance of industrial parks or special economic zones is to increase economic diversification and exports that can facilitate IPs/SEZs by attracting foreign direct investment (FDI). Third, the benefit of IPs/SEZs is the ability to earn foreign exchange by exporting goods to other countries, particularly those with the best balance of import and export. Another benefit of IPs/SEZs is helping the country with knowledge sharing through on-job training or training in the long run. Also, local companies benefit from employing skilled and trained employees from these international companies.

In general, the success of industrial parks is measured by two main categories of benefits, "static and dynamic" economic benefits. Static economic benefits are short-term economic benefits such as employment benefits, growth of exports, increased government revenue, and the earning of foreign exchange. Dynamic economic benefits or long-term benefits are benefits such as skill upgrading and innovation, the transfer of technology from international companies to domestic companies, diversification of export products, and the improvement of the productivity of local firms.

With the formation of the First Five-Year Plan from 1958 to 1962, and two further five-year plans from 1963-1973, Ethiopia started industrial development in the middle of 1950. It draws international investment and boosts Ethiopia's manufacturing economy (World Bank, 1985). Following the military government's takeover of power in 1974, all medium and large-scale manufacturing sectors were nationalized and declared socialist. Nationalization has continued to protect major economic activities' ownership. In 1991, extensive economic changes were undertaken to manage the economy, led by the Ethiopian Revolutionary Democratic Party (EPRDF). In the three stages from 1992 to 1999, restructuring industries with deregulation, trade liberalization, and privatization were the core aspects of the program that were implemented in the economic measures of the Structural Adjustment Program (SAP). In 1998, an export promotion plan was implemented by the Ethiopian government to influence export progress in the region, leading up to the creation of an export promotion agency. The strategy aimed at encouraging high-value exports of agriculture was developed in 2002/03 with the result that manufactured products such as clothes, textiles, leather, and leather items were labored. The government's large growth vision, Agricultural Development Led Industrialization, (ADLI) is the cornerstone of the Economic Development Strategy (IDS). According to Gebryesus, his studies in 2013 covered the following principles: a) Strong links between industry and agriculture; b) Export-oriented sectors to guide industrial development and favoritism. iii) Labor-intensive industries tend to maximize employment by capitalizing on comparative advantages; iv) Public-private partnerships. To transform Ethiopia into a middle-income country by 2025, the Sustainable Development and Poverty Reduction Program (2002-2010), the plan for Accelerated and Sustained Development to End Poverty (2005-2010), and thus the expansion and Transformation Plans I and II (GTPI 2010–2015, and GTPII 2015–2020) were developed. Several East Asian economies, such as South Korea, Malaysia, and China, have set an example (MoFED, 2010).

## 2.4. Contributions of Industrial Parks to Host Country Economy

### 2.4.1. Stimulating Investment and Creating Employment

One of the main goals and the most essential contribution of any EPZ to the host economy is to reduce unemployment, in particular where urban unemployment or informal activities are considerable (P Gibbon et al., 2008). These EPZs aim at providing large-scale jobs in nations with labor surpluses (Coupet & Mayer, 2007). Thus, the EPZs are anticipated to produce a significant number of jobs, supply those employed with income (wages and salaries), get some cash through employment income taxes from the government, and allow workers to develop their industrial skills. Most activities performed by local employees in EPZs are low-tech and do not require any soft skills relevant to the development of the industrial sector. Most of the jobs in the EPZs are held by female employees. Although EPZs have created jobs and absorbed surplus labor in some host countries, employment in EPZs constitutes only a small fraction of the labor force in these countries (Coupet & Mayer, 2007).

The establishment of industrial parks in Ethiopia helps the country to attract foreign companies and FDI inflows attracted to zones are sustainable. For example, in 2019, in eleven state-owned industrial zones, 3.5 billion USD of investment inflows and more than 60 thousand employees in the industrial parks owned and operated (IPDC 2013, 6-month report). A positive impact on employment is that foreign companies employ local workers, except in management positions.

### 2.4.2. In Foreign Direct Investment Attraction

EPZs help developing countries attract foreign investment and create jobs. The long-term logic of EPZs is that they can facilitate much-needed talent and technology transfers, as well as local spin-offs and increased knowledge of how to reach the global market. FDI entails money flow as well as the transfer of experience and technology that would otherwise be unavailable in the host economy. Neoliberal proponents claim that because developing countries typically have limited access to capital, technology, and skills, FDI plays a vital role in providing capital for economic development. According to a report by the International Monetary Fund and the World Economic Forum, the probability of long-term gains materializing is low because they take a long time to materialize. In low-income countries lacking industrial capability, like those found in Sub-Saharan Africa, FDI is expected to initiate export-led industrialization by accumulating knowledge for the country. It is anticipated that attracting FDI (through multinational corporations) to the host countries will provide domestic firms with access to global marketing and distribution channels. The proponents of neoliberalism argue that, as developing countries usually have limited access to capital, technology, and skills, an important function of FDI is to provide capital for the economic development of these countries (Vastveit, 2013).

EPZs attract mostly short-term, 'footloose' FDI that can easily relocate if better investment conditions appear elsewhere. The possibility of long-term benefits is low as it requires a substantial length of time for them to occur. This is a major challenge for introducing FDI- focused EPZs as countries are forced to continually compete with each other.

The focus is on the production sectors: textiles and garments, leather goods and leather goods, agricultural processing, and pharmaceutical and chemical products. Ethiopia favors FDI in certain areas. There is a significant belief in attracting FDI within the country through infrastructure development and thus the development of economic parks, which has been initiated by the government. Industrial parks have been built throughout the country, with some already operational, such as those in Bole Lemi, Mekelle, and Hawassa. Industrial parks like Kombolcha have commenced, partially. Other parks are under construction, such as (Jimma, Debrebirhan, Bahir Dar, Bole Lemi II, Kilinto, and Adama II). FDI majority from 1992-2017 Ethiopia received $2.2 billion (24 percent) in FDI from China, $1.5 billion (17 percent) from Saudi Arabia, $992 million (10 percent) from Turkey, $724 million (8 percent) from India and $689 million from the Netherlands, France, Ire land, Germany and the UK (7,6%) (Cohen & Kaczorowski, 2005).

### 2.4.3. Diversification of Export Base

Another essential issue when constructing the EPZs in terms of mitigating risk is export development and diversification, particularly concerning a reduction in dependence on primary commodities prone to substantial global price volatility (P Gibbon et al., 2008). Textiles and electronics have historically been the dominant sectors within EPZs. Some countries depend on exploiting specific foreign market opportunities accessed through donor programs. The introduction of the EPZ is expected to shift us away from an agricultural product-based economy and toward an industrialized economy. By introducing EPZs, governments anticipate moving from an economic economy based on non-processed agricultural products to an economy that relies on manufactured goods with higher and stable global market pricing and is less prone to militarism (Vastveit, 2013). Experience has shown, however, that EPZs are often dominated by only a few industries. Historically, textiles and electronics have dominated the EPZ (Santhappar & Alam, 2005) sector, but this trend is absent in almost every African EPZ (Farole, 2010). The agricultural processing and 'other manufacturing sectors dominate African EPZs. Some EPZs also make the country very likely to shift access to the market and preferences to a single market (ILO, 1998). Moreover, certain EPZs, especially in the SSA, rely on the exploitation of unique external market opportunities through donor programs such as the AGOA and the phased-out Multi-Fiber Act Multi-Fiber Agreement (MFA) (Vastveit, 2013).

### 2.4.4. Transfer of Technology and Skills

FDI in EPZs is expected to result in the transfer of technology to domestic firms and the upgrading of local workers' skills of technology from EPZ firms to the local economy can be embodied in physical assets such as machinery or intangible assets, namely patent rights. Multinational FDI is likely to improve the local labor market through training.is considered effective if it affects all levels (from lower to management levels) and, most important when the labor movement (labor turnover) is high. This high level of knowledge would only be transferred through human capital if skills acquisition and transfer occurred.

However, this has not been an across-the-board phenomenon due to factors such as low turnover and a lack of skilled labor in the EPZs. The chances of technology transfers occurring are generally high when on-the-job training takes a general focus rather than being specific. Training in management and technical skills tends to only happen on a small scale, with little effect on skill levels. Research and development (R&D) activities are likely to be retained in the home countries of foreign companies. Foreign investors in the EPZs often prefer to use their nationals in managerial and technical positions. Research and development activities are likely to be retained within foreign companies‟ home countries when FDI is located in countries with a low cost of labor. The transfer of knowledge has also had a significant impact on domestic textile companies. FDI in EPZs is supposed to result in the transfer of technology to domestic enterprises and the upgrading of local workers' skills. Research and development (R & D) activities are more likely to be kept in low-cost home countries. Other than the Asian Tigers, certain EPZ operational countries have profited from the spread of know-how and skill transfer (Vastveit, 2013). Developing governments should therefore try to expand their domestic business opportunities and capabilities to learn from the EPZs (Warr, 1989; Stoever, 2008). The productivity of FDI also depends on the extent, longevity, and quality of the connections between foreign investors and the national economy (Vastveit, 2013). FDI in EPZs is expected to result in the transfer of technology to domestic firms and the upgrading of local workers' skills. However, although skill transfer has occurred, it has not been an across-the-board phenomenon. This may be due to factors such as low labor turnover and lack of access to advanced technology.

### 2.4.5. Potential Foreign Exchange Earnings

One of the key advantages of the EPZ is the ability to earn foreign currency. Developing countries are having a difficult time attracting FDI as the primary source of investment in EPZs. Most developing countries make little or no contribution to the balance of payments. Theoretical challenges to the export-led growth plan have highlighted this tendency as well. In EPZs, a heavy reliance on foreign investors is unlikely to optimize the potential for foreign exchange returns. According to J. Kumaran, a balance between domestic and foreign investors should be advised to keep foreign currency revenues created by domestic enterprises (Jayanthayan, 2003). Foreign exchange earnings represent one of the main benefits expected from an EPZ. Even though EPZs have a lot of potential to earn foreign exchange for the balance of payment, this experience has not been widespread in most developing countries. This is because the neoliberal approach to export-led growth and the EPZ strategy requires no control over the repatriation of earnings and profits out of the host country. Most EPZ firms are international manufacturing firms that tend to buy a few local goods, instead of importing most of their raw materials and then exporting the finished goods (Jayanthakumaran, 2003).

### 2.4.6. Making Connections to the Global Value Chain

Under AGOA, Ethiopia is trying, due to the involvement of China and other foreign investors in such industries, to build a name for itself among the world's mass apparel and garment producers. But, Ethiopia‟s involvement in AGOA to export leather shoes and light manufacturing industries to international markets has failed to achieve the target 15-fold increase in apparel and livestock exports to US $1.5 Billion in the first GTP.

The role of the domestic market plays an important role not only for local firms but also for foreign-owned firms. Infrastructure may play an important role in stimulating the industrial market. Ethiopia has started to build a new electric dam and the construction of a railway that connects Addis Ababa to Djibouti is a game-changer, facilitating the transportation of goods to and from the port and cutting costs accordingly. Ethiopia is clarifying its position on the development of green economic growth. To establish a connection between industrial parks and the country's green economy, it is necessary to encourage sustainable growth and social equality. Industrial parks have had a significant impact on green development. Factories engaged in the manufacturing sector will not pollute the environment. The mix of industrial transformation and connections to industrial areas will contribute to the development of urban development. Combined with urban development plans, urbanization may be developed with the mobilization of vast quantities of human resources and capital (Morris et al., 2016).

2.5. Operational performance of the Industrial Park**.**

Performance represents the level of performance of the job mission of an individual. Treacy and Wiersema, cited in Zack et al (Al-Tit, 2017), suggested three operational performance-related capabilities that provide a baseline for competitive advantage customer intimacy, product leadership, and operational excellence. Product leadership refers to competition based on product and service innovation. According to Selvam, (2016), customer intimacy relates to competition in terms of the strength of customer satisfaction retention. On the other hand, operational excellence relates to competition under the efficacy of the internal process. The word "business performance" refers to a category of organizational effectiveness that encompasses both operational and financial outcomes (Selvam et al, 2016). Operational success can be thought of as a precursor to financial performance, mediating the effects of capital. Operational performance is related to capabilities that provide a baseline for competitive advantage, customer intimacy, product leadership, and operational excellence. In the Supply Chain Management domain, Arif- Kahan et al suggested there are three forms of operational efficiency in Supply Chain Management: flexibility production, resource performance, and resource performance. According to these authors, performance versatility relates to the responsiveness of an organization, production performance relates to the ability of an organization to provide a higher level of customer support, and resource performance concerns the ability of an organization to achieve productivity. (2017, Al-Tit) Because of their numerous contributions to economic growth, job creation, and innovation, the performance of small and medium-sized businesses has been regarded as one of the most important critical factors underlying the economic success of both developed and developing countries(Farole n.d.) SEZs provide tax incentives, subsidies and usually some free trading schemes together with export, investment, job creation, and productivity spillover conditions on businesses in the export area (Newman & Page, 2017)

The performance of industrial parks or Special Economic Zones is a performance that considers three types of outcomes. (1), Static economic results are derived in the short term as a medium of trading and investment, export and employment through the deployment of economic zones. (2) Dynamic economic outcomes, including technology transfer, and structural change. This includes diversification, upgradings, increased openness, and (3) socioeconomic outcomes, such as the quality of jobs created and gender differences (Warr & Menon, 2015). Also, UNIDO key performance indicators (KPIs) can be defined for an entire industrial park, an individual facility, or various processes at the park or an individual facility. In line with the core, inclusive and sustainable industrial development‟ (ISID) principles, these guidelines set forth three indicator categories. Industrial park performance indicators include economic performance indicators, social performance indicators, and environmental performance indicators (UNIDO, 2019).

## 2.6. Regulation and Policy System of the Parks

### 2.6.1. Legal Framework of a Park

Park legislation is the basic condition for its establishment and to ensure its normal operation. It provides the management body, the enterprise, and the stakeholders with common codes of conduct, and provides mandatory, authoritative written offers for all sides once disputes occur. The basic issue in park legislation is that, no matter what the socio-economic system the hosting country implements, the legislation of the park law should follow the current international codes for economic operation. Based on their hierarchy, the legislation of the park can be divided into three levels, Federal level, local (regional) level, and park level. The federal-level legislation is the supreme park law and reflects the most sensible ideas in the country. This is the Industrial Park Proclamation 886/2015 in Ethiopia. Other prior laws, such as (foreign) investment laws, etc., are also legal guarantees of the park if they exist.

Local legislation can take one of two forms, depending on the country's governance system.

, if the country is a decentralized system in which local states have a constitutional right to make laws, and then the park can be legislated for by the local state. The second form is that if the country is just opening up its economy to foreign countries and uses the park for experiments, the country can grant the local state the authority to legislate for the park even if the country lacks unified legislation for the park. It should be noted that special instructions and authorizations should be marked in the articles of the law if the local regulations are special and conflict with the country‟s higher-level laws.

At the park level, it is the management's main body that is responsible for the administrative issues of the park. And the highest management body is needed to make the law. However, if the upper-level law is not completed (which is a common situation) because the laws cannot list all the rules and procedures in practical operation, then the park‟s administrative body can formulate implementing rules or temporary provisions for law-related affairs to ensure the smooth operation of the park. However, these rules cannot be referred to in the judicial process since they are only normative documents and have inadequate legal effect.

The legal system of a park has at least four basic components. These include park regulations, enterprise registration regulations, parkland management laws, and park labor-management laws, article 23. Each of these regulations requires a detailed investigation of the contents and forms to identify issues specific to Ethiopia, and address them for the effective operation of the park. The following are the most important issues that must be addressed in the park regulations. Formulation of park law according to the constitution of the country provides approval for park establishment, the total land areas the parks established, and its four boundaries. Functions of the park, the first issue that should be specified in the park‟s regulations are the „functions of the park‟. These include the park‟s allowance and encouragement for foreign enterprises to invest and operate in the park. ways of investment and cooperation which can be either wholly foreign-owned, joint ventures, or collaboration with domestic enterprises the industry categories in which foreign capital is allowed and encouraged to invest, and the industries not allowed to operate in the park; Land ownership, land ownership, the means of acquiring land, and who is permitted to own land and under what conditions, Park administrative agency, and its functions, Preferential treatment of the park This may include benefits related to land, tax, and terms of benefits (No.886/2015, 2015).

### 2.6.2. The Park's Policy System

A park's policy system is used to promote the park's development. In designing the policy system, it is critical to consider certain key issues that are critical to achieving the goal. The policy's purpose, direction, and instrumental functions should all be clearly defined. Improving labor-force living conditions is a critical component of human development and poverty reduction. Firms likely take measures that are directly targeted at improving the living conditions of labor to reinforce their productivity. The main areas of firm intervention are transportation, housing, and the health and education of laborers' children. SEZ Jobs and Skill Formation: In the beginning, labor-intensive industries such as clothing, footwear, and electronic part assembly dominated the SEZs. Such sectors use basic, low-cost technologies and need a low-skilled workforce. Workers are thus trapped in low-skill jobs. It's, however, argued that SEZs still help in creating a skill base by introducing workers to the rigors of economic discipline, punctuality, control, and meeting deadlines (Zhang et al., n.d.2018).

Aggarwal cited Matthews and Kaplinsky (2001) but argued that a primary criterion for hiring labor within the zones is taken into consideration as 'prior experience' and thus zones benefit from the experience of the labor. It isn't labor that gets such benefits from zones. A complete assessment of the impact of EPZs should take into account both direct and indirect employment creation by zones. Unfortunately, comparable data on the indirect employment effects of EPZs isn't widely available. Limited available evidence indicates that the indirect employment effects of zones could be more pronounced than the direct effects (Aggarwal, 2007).

### The ratio of indirect/direct jobs created was as high as 1.4 in Madagascar (Razafindrakoto and Roubaud 1997) and a few in the 1980s in Mexico, and 2.7 in Puerto Rico. Cling and Letilly (2001) argued, while analyzing the impact of Masan SEZ in Korea, that the success of Masan SEZ (Korea) in direct employment contribution is moderate, but its impact on indirect employment is expected to have increased significantly. This is because subcontracting to local enterprises in this zone has grown considerably. Demand for complementary services and goods may also generate employment opportunities in several sectors of the economy. The construction, transportation, and financial sectors have all been greatly stimulated as a result of zone operations in Mauritius. In Sri Lanka, local producers of packing materials grew significantly and began to play an important role in supplying these materials to SEZ firms (Zhang, Hao; Ilhéu, 2014).

## 2.7. Determinant Factors of Industrial Park Performance

### 2.7.1. Marketing and Investment Promotion

Most SEZ authorities lack the scale and specialization to be effective in investment promotion. Therefore, close cooperation with national investment promotion agencies is often critical. This is usually best achieved through formal institutional links. Closely related to the issue of coordination is that of defining clear roles and responsibilities for the various parties involved in the investment promotion efforts, to avoid duplication and eliminate the risk of important activities falling through the cracks between two organizations. Such a definition is important not only between the investment promotion agencies and the SEZ authority but also between the SEZ authority and private developers (assuming that the program includes private developers). The role of the zone authority is a general one (promoting the overall program), while developers play a more tactical role, promoting individual projects. The timing of promotional efforts is important because many zone programs promise too much too soon.

One of the difficulties in marketing a zone program is determining when to begin promoting it. Once the concept of an SEZ program has been approved, there is a natural desire to begin marketing immediately (Selvam et al., 2016).

Incentive structures within SEZ authorities often result in favoring the number of investors over quality, which leads to the poor realization of stated investment intentions. One of the problems identified in most of the zone programs under study, but particularly in the African and Asian programs, was a poor conversion rate between promised and actual investment.

In many cases, licenses are given to firms that are not capable of realizing investments or that simply hope to extract some rent from holding the license. This situation stems, in part, from the incentive structures that the zone's authorities face. Their performance and, in many cases, their revenue stream are often judged on the number of licenses they issue. The problem is also linked to the often-misplaced desire to fill up the space in the zone as quickly as possible. But forgoing quality for quantity has several negative implications (Zhang, Hao; Ilhéu, 2014).

Investors may pay an initial license fee but never follow through and operationalize their investment (or they may start but go out of business quickly), often because they are unable to obtain sufficient funding or they are not financially stable. This has been a major problem in Nigeria, Senegal, and Bangladesh. Space in the zone may be filled up with investors who are unlikely to meet the program‟s objectives in terms of employment and exports or are unlikely to deliver sufficient revenue (e.g., through service fees) to the operator to cover operating costs. A disparate set of companies and industries may be set up in the zones, limiting the potential for establishing clusters and linking with local suppliers. Finally, low standards send the wrong signal to important foreign and domestic investors about the quality of the zone. High-profile investors are unlikely to want to participate in a zone full of unknown companies or companies of questionable quality. Targeted marketing and anchor investor strategies have proved highly effective in many zones (Farole, n.d.2011).

### 2.7.2. Management and Administration of Zones are Inefficient.

EPZs have a considerably greater chance of success if the design, creation, and operations of the EPZ are solidly managed (Watson, 2001). Weak government bodies formed to create and operate zones, as well as to control zone operations, are also to blame for the poor performance of most EPZ programs in Sub-Saharan Africa. Area governments are under-empowered and un-autonomous in several countries, and they are underfunded. Others lack budget control and have restrictive constraints on pay and terms and conditions of work (FIAS, 2008).

While it is obvious that the administration of EPZs must meet the demands of the entrepreneurs who set up enterprises in EPZs, literature (e.g., Watson, 2001) suggests that EPZs have been conceived and operated too many times in Africa by bureaucrats who lack experience of running a business. According to the literature, EPZs are over-designed, and cost increases and government subsidies are necessary. There are frequent delays that contribute to corporate losses. Service levels reflect those outside of EPZs, which again leads to obstacles and losses for companies (Watson, 2001).

The Sub-Saharan Africa region has consistently remained the least in terms of business-friendly regulations. According to Page (2012), the cost of doing business in Africa is, on average, 20-40% above that of other developing countries.

### 2.7.3. Lack of Vision, Consensus, and Continuity

African countries have had problems with expressing a clear vision, building a consensus around it, moving to concerted action, and providing continuity in incentives, infrastructure, and services. Successful EPZ programs in Sub-Saharan Africa have failed to deliver expected outcomes because of a failure to act concerning certain elements of the program. Some African governments make too-frequent policy shifts, reducing investors' confidence that favorable EPZ policies will persist, and that continuity is needed. There is also a concern that a lack of concerted effort to provide continuity in incentives, infrastructure, and services, and the business environment constrains most African EPZs from attracting substantial FDI. EPZs in African countries are related to failure in articulating a vision of the country's development, building national consensus, and taking action (Watson, 2001).

### 2.7.4. Location of the Parks

The competitive position of EPZs within countries also depends on the competitiveness of the EPZ program. According to the literature, one of the primary reasons for the failure of zone initiatives is poor site selection (Vastveit, 2013).In Africa, political rather than commercial or economic reasons are too often influenced by the location of EPZs (Farole, 2011). In this context, EPZs are also utilized to create investment and jobs in remote places indicative of a low economic level of activity, despite longstanding evidence that this is not the case (Farole & Moberg, 2014). As a result, the emphasis and the financial resources of several EPZs throughout a country are fragmented and most are never decommissioned (Farole & Moberg, 2014, 2017). According to Farole (2011), most African countries have at least one EPD located in a lagging or remote area, but only a few have done enough to address issues of infrastructure, work skills, and access to such remote locations. Previous studies demonstrate that it has frequently not been beneficial to use EPZs as a regional development tool to create investment and jobs, as building an EPZ in a remote place requires a comparable expenditure on infrastructure (Engman et al., 2007). If no existing infrastructure is available in remote areas, the expense of creating the necessary infrastructure is significantly more than that of a well-developed area. Easy access to skilled work is typically restricted in underdeveloped communities (Kusago & Tzannatos, 1998, Jayantha Kumaran, 2003). These findings provide an important lesson for latecomers: when choosing a location for an EPZ, EPZ planners should keep in mind that the economic benefits will be most readily available if it is located adjacent to well-developed locations, typically urban centers, where required infrastructure, utilities, support services, and port facilities are frequently available, or if it is economically feasible to constitute. Engman et al. (2007) stress the importance of this if the country has less expertise in EPZ development and management. This is particularly crucial. Governments often take on large obligations, create expectations, and risk distorting markets by undertaking large-scale demarcations of land for eventual zone development. By acquiring large tracts of land for the future development of SEZs, governments effectively incur an obligation to potential private investors as well as local communities to deliver on this infrastructure. Land acquisition, compensation, and displacement issues are still receiving insufficient attention in many zone programs (J. Bobonis and J. Shat, 2007).

### 2.7.5. Comparative Disadvantage in Labor

EPZs were designed to draw investment by allowing countries to better leverage a key source of low-cost labor comparative advantage. It is well established that African EPZs are not globally competitive as platforms for processing activities due to the comparative disadvantage of labor. The workforce is unskilled, which is connected to low productivity. The skills gap poses a major constraint to industrial development in Africa. Most investment in EPZ programs is primarily for efficiency (Farole, 2010).

### 2.7.6. Inadequate Knowledge

Inefficient zone administration and management is in part due to a lack of sufficient knowledge relevant to running EPZs. A serious knowledge gap is expressed in the design and implementation of tax incentive schemes. The EPZ policymakers cannot determine the real costs and benefits of the EPZ initiative. SSA is possibly the only place where tax breaks (holidays) get easily renewed, and where firms are allowed to shut down and reopen under another name to continue enjoying tax breaks (Farole & Moberg, 2014). The government often refers to previous successful EPZ cases and assumes that models that worked in one country are replicable elsewhere. The expense of tax expenditures appears to be underestimated in comparison to the direct benefits in terms of investment and jobs. SSA is possibly the only place where tax breaks (holidays) are easily renewed (Farole & Moberg, 2014).

### 2.7.7. Registration, Licensing, and Administrative Procedures

Having a one-stop shop is the objective of virtually all zone programs, but although many countries have made significant progress (for example, in shortening the time between application and license provision), truly effective administrative delivery remains hampered by weak institutional authority and coordination in most zones. Zone operators play an important bridging role between investors and the government. This can be a valuable source of differentiation for operators.

### 2.7.8. Inadequate Infrastructure

Inadequate infrastructure is well-documented as a major factor that discourages investment. Such challenges can appear to be caused by limited finance and/or poor governance competence. There is a gap of at least 20 percentage points between Sub-Saharan Africa and the rest of the low-income countries on almost all major infrastructure measures. There are widespread concerns that large-scale acquisition of land for EPZ development may not be desirable. This would result in agricultural land grabs on account of the huge land requirements for such projects. It is also noted that the designation of land tends to raise its value substantially, worsening already limited financial resources (Farole & Moberg, 2015).

### 2.7.9. Customs, Trade Facilitation, and Transport

In successful zones, customs operations are identified as critical sources of competitive advantage and are given the authority and capacity to deliver an efficient clearance service. The institutional arrangement through which the customs service is delivered in the zone appears to be critical to its success. This is true for two reasons. Customs regimes are a significant source of corruption in some countries, and because government tax revenues are at stake, customs processes are often a source of cross-institutional conflict. Customs' effectiveness goes well beyond the gates of the zones; it depends critically on the facilities and operations at ports and airports.

### 2.7.10. Promoting Linkages with the Local Economy

Achieving linkages between zone-based firms and the domestic economy has long been a major challenge in zone programs, particularly those in low-skill, labor-intensive, footloose sectors such as garments. Moving beyond these sectors may create additional opportunities for improved links. This has significant implications for the potential of these zone programs to contribute to dynamic benefits to the economy, particularly in terms of facilitating industrial upgrading through knowledge and technology spillovers from zone-based FDI. One of the most important sources of spillovers from FDI is through forward and backward supply linkages. To facilitate spillovers, zones must remove policy and administrative barriers to local market integration. Effective training programs and vibrant local labor markets are critical to facilitating knowledge spillover. Besides supply relationships, the main channels for spillovers from FDI are likely to be through the movement of skilled labor across firms. Low worker skills, limited vocational training, and rigid labor markets are major barriers to integration (Coupet & Mayer, 2007).

## 2.8. Bole Lemi Industrial Park and its Current Status

As part of the two consecutive five years Growth and Transformation Plans, the Ethiopian Government has been, emphasizing Industrial Parks in its efforts for faster and sustained economic development.

The Bole Lemi Industrial Park is located in the Addis Ababa Metropolitan region. It is Ethiopia's first industrial park, developed by the Ethiopian Industrial Parks Development Corporation (EIPDC). The first phase of Bole Lemi started operations in 2014. It is focused on the clothing, textiles, and apparel sector and aims to export the vast majority of the products from the industrial park. The first phase of Bole Lemi covers an area of 156 hectares, within the Addis Ababa Metropolitan. Bole-Lemi Industry Zone Development Project is located in the southeastern part of Addis Ababa City administration in Woreda 11 of Lemi Kura Sub-city, 9 kilometers east of the Addis Ababa Bole Airport. It is bounded by two rivers (Lemi and Weji) which drain to Big Akaki River locally known as *Tiliku Akaki River*. It is connected to the road network but does not have direct access to the Addis Ababa-Djibouti Highway. The distance to the nearest seaport, which is the Port of Djibouti is more than 500 kilometers. However, the park is located relatively close to the Mojo Dry Port with a distance of approximately 50 kilometers. Phase 2 of Bole Lemi Industrial Park is under construction, covering approximately 186 hectares of land, adjacent to the first phase of the park. On-site infrastructure is provided by the developers of the park. In the case of Bole Lemi, it is, therefore, the responsibility of the Ethiopian Industrial Parks Development Corporation. Off-site transport infrastructure is the responsibility of the national government. Within the IP 22 modern industrial sheds are having two types of sizes 5,777m² and 11,217 m² with their common facility and parking area provided for manufacturing enterprises. With regards to specific on-site infrastructure: the power supply in the industrial park is provided by a temporary mobile power substation; water and waste treatment services are still under development; and the site has dedicated fire prevention and protection, as well as park security. In terms of administrative infrastructure, aiming to assist investors, there is a one-stop shop service center and there is a custom clearance service for imported raw materials and exported products.

According to the Industrial Zone Development Project (IZDP), a joint initiative of the Government, the International Development Association (IDA) of the World Bank, the establishment of Industrial Parks in potentially suitable towns and cities of the country has been found as the best option to promote industrial development in the country. The Government has therefore identified five IZDP sites in the cities of Addis Ababa, Awassa, Kombolcha, and Dire Dawa. Bole Lemi Industrial Development project is one among the identified sites in the city of

Addis Ababa.

The development objective of the proposed IZDP is to contribute to job creation by attracting investments and improving enterprise competitiveness in the targeted industrial zones (IZs). This will be achieved by:

(i) Strengthening institutional and regulatory framework for Industrial Zone development and capacity building;

(ii) Supporting industrial infrastructure development of Industrial Zones; and

(iii) Enhancing Industrial Zone linkages to small and medium enterprises (SMEs) through targeted interventions. Bole Lemi Industrial Park (BLIP), the first public Industrial Park in Ethiopia, is located in the southwestern part of Addis Ababa City administration in Woreda 11 of Lemi Kura Sub-city on the way from Goro roundabout to Summit Area. BLIP is bounded by two rivers (Lemi and Weji) which drain to the Big Akaki River.

BLIP is a public investment constructed by the Industrial Park Development Corporation (IPDC), a government organization in charge of Industrial Parks in Ethiopia. It has two parts, phases one and two; the first phase went operational in the year 2014 after being constructed on a total land size of 177 Ha. And the Second phase is under construction on a land size of 176 Ha.

Bole Lemi Industry Park: Located in the South Eastern part of Addis Ababa. It is Established in 2014, It has two phases: Phase I is 167 hectares and fully operational while phase II which is 186 hectares is under construction. Industrial Park area: Total area of 3.27 million m2 (327 hectares), Phase one: 1.56 million m2 (156 hectares), Phase two: 1.71 million m2 (171 hectares), it has around 23 sheds, and around 15 investors are on the function. The industrial positioning focuses mainly on textiles, leather, and garment.

Kilinto and Bole Lemi-II completed construction activities in the summer of 2019, which included providing quality industrial infrastructure for manufacturing in strategic sectors such as garments, textiles, and pharmaceuticals. With technical assistance support from CJC and CIIP, the government is also in the process of awarding contracts to foreign investors, and the full operationalization of the parks is expected in 2020. The two new IPs have already attracted $55 million of private investment. In November 2019, one of the new tenants in the Bole Lemi II IP – Soufflet Malt Ethiopia, a subsidiary of French company Groupe Soufflet –secured a $20 million investment from IFC.

When these two IPs become operational, activities linked to them are expected to create an additional 46,000 jobs, of which 64% will be for women, and the total sale of goods and services linked to the two parks is targeted at $100 million before the CJC project closes in June 2021. Through funding-related activities 16,588 jobs were created in project-related IPs, of which, 89% or 14,730 went to women.  The program also provided basic technical and soft skills training to over 2,700 recruits, primarily hired by the factories operating in Bole Lemi-I IP, of which 80% were female, and trained over 100 trainers.

## 2.9. Empirical Literature Review

As Yeoh et al (2005) (Singapore) investigated that the sector of industrial parks is a major source of urban employment in most Asian and Latin American countries. Among individual countries for which statistics are available: are India, Pakistan, Indonesia, Malaysia, and in the case of Latin American countries, Paraguay, Bolivia, Brazil, and Argentina.

Kiselakova et al. (2014) (Slovakia) investigated to identify and analyze the key macroeconomic factors affecting the establishment and entrepreneurship in industrial parks with positive effects on sustainable regional development in Slovakia. The relationship of dependence between factors of regional growth, investments, and investment costs for setting up industrial parks and effects on regional development was surveyed by identifying the main localization factors relevant to the management of support and establishment of industrial parks in Slovakia are the status of foreign direct investments, employment of persons, governmental financial support – investment incentives, marketing strategy to attract investors, overall readiness and availability of the industrial area with a focus on the positive effects of regional development, using regional GDP per capita, in particular, to reduce the regional unemployment rate.

According to Mulu Gebremariam & Daba Feyisa, in the review of assessing the performance of industrial parks in Ethiopia, their case study focused on the Eastern Industry Zone, Hawassa Industrial Park, and Bole Lemi Industrial Park, interviewed eight key informants and non-participants for field observation and consulted various reported policy documents and research related to the study. According to their findings, these parks are performing well in bringing hard currency to the country and earning about 114 million USD per annum (Mulu Gebremariam & Daba Feyisa, 2019).

They found that the performance problem of the park is linked to a lack of supply of well-trained and skilled staff, lack of supply of local raw/semi-finished materials to the parks, lack of supply of rental houses for employees across the parks, inefficient trade, finance, and banking system, inefficient operation of the park and expensive shipping services, lack of administrator capabilities.

Bayisa (2016) studied on opportunities and challenges of industrial zones for industrial transformation in Ethiopia have a similar recommendation. Bayisa argues effective implementation of an industrial zone development program could spur industrialization by attracting FDI, stimulating export trade, creating immense jobs, addressing capital shortage through generating foreign earnings, and creating a long-term dynamic effect on the local economy (Bayisa, 2016).

According to the paper, by Bezawit & Kenenisa, 2019, in their study Determinants of Industrial Park performance in Ethiopia, emphasizing Bole Lemi Industrial Park, the objective of the study is to examine the determinants of industrial park short-term operational performance and also to identify determinants of short-term and long-term factors that affect industrial park performance in the Ethiopian context. The research method they used was a cross-sectional study that used both quantitative and qualitative methods from eleven industrial units and all three government institutions in the park. The study had a 70% respondent rate thanks to a non-probabilistic purposive sampling of 36 participants. According to their study, the determinants of short-term operational performance in Bole Lemi Industrial Park are related to the industrial park, the national business environment, and, more specifically, the high level of labor turnover and the absence of an adequately skilled labor force (Bezawit & Kenenisa, 2019).

Country-specific factors, such as the development of the country, the availability of cheap labor and raw materials, and the overall policy regime, also confer locational advantages on producing firms. Efficiency-seeking or export-oriented investments may be influenced by the availability of cheap labor also.

Farole's n.d., another study, compared the performance and learning experiences of the world in its investigation of the thematic special economic zones in Africa. The aim of his study focused on addressing some of these questions and delivering an analysis that was both data-driven and policy-focused. His study was conducted across ten countries, focusing on six African countries: Ghana, Kenya, Nigeria, Lesotho, Tanzania, Senegal, and four established zone programs in other regions: Bangladesh, Honduras, the Dominican Republic, and Vietnam (Farole, n.d.2011).

In this case, he employs a method based on secondary research and interviews with various stockholders. The researchers found a strong correlation between infrastructure quality and the level of investment, exports, and employment in the zones. Trade facilitation demonstrates a good, positive interaction with performance. There are less important factors related to business licenses and regulations in the district. There is no finding that low wages, trade efficiency, and fiscal incentives are associated with SEZ results.

As Selam (2017) examined the major opportunities and constraints in Eastern Industrial Zone, Ethiopia has gained various advantages from industrial park development. This particular industrial zone is contributing to the national economy in terms of employment generation, income tax, capital investment and import and export substitution, technology transfer, and cultural interaction. However, the researcher indicated industrial development is challenged by a shortage of raw materials, delays in the logistic service, shortage of foreign exchange, and problems related to government rules and procedures as the constraints faced by the companies (Selam, 2017).

According to Aggarwal, the study focused on the EPZ in Southeast Asia and covers India, Sri Lanka, and Bangladesh. It examines the factors that are crucial for the success of the zones in Southeast Asian countries. The study begins with exploring different perspectives on the economics of zones and describes the evaluation of the Special Economic Zones policy in those countries and examines the quality of governance, incentives packages, and infrastructure facilities offered by the zones across the three countries in a comparative analysis framework. Also, they analyzed the Foreign Direct Investment inflows and export performance of zones using available information. They conclude the management operation of the zone was affected by the overall policy regime. Wide-ranging measures were initiated by the government (Aggarwal, 2005).

His primary survey and econometric analysis found those countries wishing to take advantage of the opportunities provided by zones will have to put together a coordinated package of incentive infrastructure and good governance and their primary survey suggested that some aspects of location, facilities, and incentives are more important than others. That is the presence of social infrastructure within the zone is considered less important than the physical infrastructure. Tax breaks are preferred over subsidies, relaxation of labor laws is deemed more important than the relaxation of other laws, locating zones near larger cities/ports is deemed more important than locating zones near airports or railway stations, and the availability of educated and disciplined labor is deemed more important than lower-wage or skilled labor.

Hollander, R. (2009) studied the role of import substitution on sustainable development because of industrial parks in Leipzig, Germany. From the angle of constraints, theoretically, different constraints which hinder the operation of industrial parks may exist. However, in this subsection, we are going to see the real constraints/challenges that hinder the operation of industrial parks in different countries. Even though industrial parks have a vital contribution to a country's economy, it is not operating without problems. Different challenges impede or hinder the operation of industrial parks, especially in developing countries. As identified by various studies, the major challenges that hinder the operation of the sector are mostly associated with the following areas: market, bureaucracy, language, and cultural differences, infrastructure, technology, information access, etc.

Farole's n.d., another study, compared the performance and learning experiences of the world in its investigation of the thematic special economic zones in Africa. The aim of his study focused on addressing some of these questions and delivering an analysis that was both data-driven and policy-focused. His study was conducted across ten countries, focusing on six African countries: Ghana, Kenya, Nigeria, Lesotho, Tanzania, Senegal, and four established zone programs in other regions: Bangladesh, Honduras, the Dominican Republic, and Vietnam (Farole, n.d.2011).

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## 2.10. Conceptual Framework

Several researchers have reached an agreement. Industrial park prospects and challenges can be measured in terms of the Prospect of the industry park, Benefits of the industry park, Challenges of access to the market in the Industry Park, government policy challenges to the Industry Park, the technological challenge in IP, an obstacle to job creation in the IP and Infrastructure in IP. The good practices of the mentioned points will result in good performance of the industrial park and will be enhanced to bring about growth in world trade, success, high operational performance of the park, and a boom in the economy. The concepts are illustrated diagrammatically according to the following. The researcher used the following conceptual framework to show the prospects and challenges of Bole Lemi Industry Park.

***Independent variable***

Benefit of Industry Park

Challenges of access to market in Industry Park

# 

# Park prospects

# (Employment, export and FDI/Technology )

# 

Government policy challenges to Industry Park

Technological challenge in IP

# Dependent variable

Obstacle to job creation in the IP

Figure 1 Conceptual framew

Infrastructure in IP

Source: Developed from theoretical and Empirical Liter

## 2.11. Research Gap

Most of the research mentioned in the literature review section focused on theoretical and empirical findings to measure the factors of industrial parks and their effect on the parks' prospects and challenges on overall export capacity from the park, employment generation capacity, and FDI/technology attraction. In the case of the Bole Lemi industrial parks, several types of research have been conducted on the factors of park prospects at the Ethiopian level. However, the study focused on the following variables: challenges of the market, challenges of policy, technology challenges, an obstacle to job creation, and infrastructure variables on the effect of park prospects, but there is no similar research done on factors of industrial parks' prospects and challenges in the Bole Lemi phase -I that are involved in the garment and apparel industry, whose products are made for the international market. Hence, the current study is intended to fill in this gap. In most of the studies reviewed the current and contemporary issues on the industrial zone were not addressed. And yet the challenges remain alarming to the economic market. Among the gaps, is the unprecedented war that erupted between Ukraine and Russia, the suction of AGOA, the war between TPLF and federal government, the global Covid-19 pandemic, and the rising of the global economic crises were not addressed well.

# CHAPTER THREE

# 3. RESEARCH METHODOLOGY

## 3.1. Research Design

As Industrial park development projects are new concepts in Ethiopia, the study has adopted both descriptive and econometrics case studies of research design by using both qualitative and quantitative methods to observe the prospect and challenges of Bole Lemi Industry Parks in Ethiopia. Since employing a single approach has its strength and drawbacks (Creswell, 2003) mixed approach is better for drawing positive sides and minimizing the drawbacks of any single approach. Moreover, the study is a case study type as a result it needs to employ both qualitative and quantitative approaches. Hence, to keep the validity and reliability of the study mixed approach is employed. In the course of analyzing prospects and challenges, both primary and secondary data collection procedures were employed. To achieve these goals questionnaires, interviews and document reviews were going to be the main tools.

According to available data obtained from IPDC, currently, different Industrial are comprising more than 12 different manufacturing companies established and started operations in the BLIP. The nature of the companies and the challenges encountered by the companies are not similar. There are also concerns from the government at different levels and local communities concerning different issues related to the IP. There are also complaints and questions from the developer side concerning factors affecting the effectiveness of the IP. Hence, given the nature of the study, a random sampling technique has been deployed. The target populations for this study include purposefully selected personnel (top leaders, and high experts) from the IP companies; purposefully selected employees from IP; Key relevant government sectors Authorities were from IPDC, BLIP, and the Ministry of Industry. The study has been based on primary, and secondary data, data collection techniques of interviews, questionnaires (semi-structured and unstructured), and observation research methods in general. And the assessment was carried out using these methodologies that mainly comprise qualitative and quantitative surveys applying instruments aimed at examining and describing the current status of the Industrial Park. Because of the limitation of data availability (as needed) concerning IP, the analysis was not fundamentally dependent on numerical measurements. Qualitative data collection methods are used and summarized in a report form. It also includes respondents' perceptions on the issue. Finally, a discussion of basic findings has been made to draw conclusions and recommendations.

Figure 2 Bole Lemi Industry Park





Source; Image was taken on 7/06/2022 by the researchers from BLIP, 2022.

## 3.2. Types and sources of Data

To gather the data from relevant sources, both primary and secondary data collection instruments were used. The primary data conducted in the form of personal interviews with managers, employees, investors and surrounding area people are taken as the main tools. The target populations of the study are managers (the management body of Bole Lemi I IP and some company managers inside each industry park), employees in each company, local surrounding area people, and investors. In addition, the data from the Federal Minister of Industry (MOI) and IPDC officers’ interviews were considered. On the part of secondary data, written documents on industrial park development projects, different reference books, journal articles, Internet websites, policies, procedures, proclamations, regulations, and reports from MOI, IPDC, and BLIP branch offices were referred. The assessment has been carried out using these methodologies that mainly comprise qualitative and quantitative survey type applying instruments aimed at examining and describing the current status of the industrial park. In this study, both descriptive and econometrics research methods were used. The information that was obtained by using both instruments was integrated during the data presentation and analysis phase.

## Sampling design,

### Population

Population refers to the group about whom the researcher wants to know more and from whom a sample will be drawn. Hence, the population of the study constitutes 392 all key personnel and management of IPDC, companies’ personnel and management, and employees in Bole Lemi Industry Park. This population consists of employees with different academic backgrounds and experiences in the study area.

### Sample Frame

The sample frame for this study is key personnel and management of the Ministry of Industry, IPDC, BLIP, companies’ personnel and management, and employees in the different factories of Bole Lemi Industry Park.

### Sample Unit

The sample unit that was considered under the study described were the main key personnel and management of IPDC, BLIP branch office and MOI, companies’ personnel and management in each manufacturing IP and employees in different manufacturing industry parks.

Table 1, Sample Units of the Study

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Sample unit | Sampling technique | Total population | Sample size(n) | Methodology |
| 1 | key personnel and management of IPDC, BLIP branch office, and MOI | Purposive  sampling | 10 | 7 | Interview |
| 2 | companies’ personnel, experts, and management | Purposive  sampling | 77 | 32 | Interview |
| 3 | Employees | Simple random  sampling | 20680 | 392 | Questionnaires’ |
|  | Total |  | 20767 | 392 |  |

Table Source: Researchers construction 2022

### Sampling Technique

The study used probability sampling approaches to ensure that the target population had an equal opportunity to participate in the study. Kothari (2004) states that "The 'random sample' or 'opportunity sampling' of probability sampling is also recognized. In this sampling design, every object in the universe has the same chance of entering the sample. "To determine the actual sample, the researchers used a random sampling technique. It is, so to speak, a lottery system in which the whole group picks up specific units not intentionally but mechanically. The researcher applied a simple random sample after receiving the representative sample size of each facility. As described above, the researchers used a simple random sampling selection technique for employees to give them an equal chance. But the leader will purposively be identified and interviewed to get the available information.

### Sampling Procedure

To take the predetermined sample, the researcher used purposive and simple random sampling techniques. Since data were collected using non-interviews respondents were purposively selected. For this purpose, the researcher purposively selected all key personnel and management of IPDC, MOI, BLIP branch office, companies’ personnel and management, and employees in the Bole Lemi industry park because they provided relevant information concerning the prospect and challenges of BLIP.

To determine the sample size for the questionnaire survey, the factory workers in different departments were randomly selected. To do this, lists of the entire factory workers were primarily obtained from the factory administration. Then, since the strata had different numbers of respondents, representative samples were taken out from each stratum in a proportioned manner. Finally, from each stratum, respondents were selected by using simple random sampling techniques.

### Sample Size determination for the quantitative data

Different authors use different formulas to determine the sample size of the study; however, the formula set by Yemane (1967) was used by considering the level of acceptable margins of error (e) 5%. Hence, from the target population size in 2022 (N= 20767) a total number of 392 samples were required to be drawn assuming a 95% of confidence level and 5% margin of error.

Based on this the researcher decided to take the upper population size limit to get a more valid sample size. If the population size (N) of a given study is known and its sampling error (e) is fixed by the researcher, then the total sample size (n) can be calculated by using the following formula.

n = the sample size

N= the size of the population

e = the margin of error or the maximum error and for this study is 5% with a confidence level of 95%)

By using this formula the sample of the study is:-

**n=392**

Table 2 Proportionate Sampling Determination

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No | Company Name | Total No of workers | 100th of a total of 20767 divided into each company | 100th of the total Sample (392) divided into each company % result |
| 1 | Jay Jay Garment PLC | 8953 | 8953x100/20767 = 43% | 392x43%/100 = 168 |
| 2 | Shints ETP Garments PLC | 5043 | 5043x100/20767 = 24% | 392x24%/100 = 94 |
| 3 | Ashton Apparel Manufacturing PLC | 2090 | 2090x100/20767 = 10% | 392x10%/100 = 39 |
| 4 | Shangtex Eth Textile Plc | 1210 | 1210x100/20767 = 6% | 392x6%/100 = 23 |
| 5 | Top New ETHIOPIA | 912 | 912x100/20767 = 4% | 392x4%/100 =16 |
| 6 | Evertop Sports Wear Plc. | 845 | 845x100/20767 = 4% | 392x4%/100 = 16 |
| 7 | Arvind Lifestyle Apparel Manufacturing PLC | 820 | 820x100/20767 = 4% | 392x4/100 = 16 |
| 8 | Lyu Shoutato Factory PLC. | 428 | 428x100/20767 = 2% | 392x2%/100 = 8 |
| 9 | Vestis Garment production PLC | 333 | 333x100/20767 = 2% | 392x2%/100 = 7 |
| 10 | Souflet | 83 | 83x100/20767= 0.40% | 392x0.40%/100 = 3 |
| 11 | BGI | 33 | 33x100/20767 = 0.16% | 392x0.16%/100 = 1 |
| 12 | Amalega Enginering | 17 | 17x100/767 = 0.08% | 392x0.08%/100 = 1 |
|  | Total | 20767 | 99.64% | 392x99.64%/100 = 392 |

Table Source: Researchers construction 2022

## Methods of data collection,

The relevant data and information were collected with the help of both structured and semi-structured data-collecting instruments which are briefly reviewed. Three types of data collection instruments were deployed to gather information. Accordingly, Interviews, questionnaires, observation, and document reviews. Checklists were prepared in hard and soft copy and administered during the study. Face-to-face interviews with key informants of the target population were managed to have insight and better knowledge about the current situation, challenges, and prospects of the industrial parks.

* The interview has been held with selected 7 key personnel and management of MOI, IPDC, BLIP branch office, and selected 32 companies of Bole Lemi Industrial Park,
* Questionnaires have been distributed to 7 key personnel and management of MOI, IPDC, BLIP branch office, 77 companies’ personnel, and management, as well as to 308 employees in different companies of Bole Lemi Industry Park; in total, it accounts for 392. Among distributed questionnaires, 7 were from managers of the Governmental office, 77 were from the company’s key personnel and managers, and 300 were from employees in total 384 (97.96%) questionnaires have been returned.
* Furthermore, for the assess prospects of industry parks development in Ethiopia, examining the benefits of industrial parks for the local economy, identifying the challenges of industrial park development in Ethiopia, and assessing factors that affect the employment creation potential of Bole Lemi Industry Park were used additional sources of observation and secondary document; projects, different reference books of investments, journal articles, Internet web sites, policies of industrial parks, procedures, Industrial Park Proclamation No 886/2015, Investment proclamation No 1180/2012, industrial park’s Council of ministers regulation No 417/2017, investment incentives areas reserved for domestic investment council of Minister amendment regulation 312/2006, and reports review have been performed.

Table 3, Actual participants were involved in primary data collection.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Survey participants | Participants in interview | | | Participants during questionnaire | | |
| M | F | Total | M | F | Total |
| 1 | key personnel and management of MOI, IPDC, BLIP branch office | 3 | 4 | 7 | 3 | 4 | 7 |
| 2 | Selected companies’ personnel, experts, and management | 9 | 23 | 32 | 21 | 56 | 77 |
| 3 | employees in the different industry park |  |  |  | 22 | 278 | 300 |
|  | Total | 12 | 27 | 39 | 46 | 338 | 384 |

Table Source: Researchers construction 2022

### Questionnaire:

It was the most important approach by which primary data has been collected. Structured and semi-structured questions were designed for the sake of collecting both qualitative and quantitative data. A questionnaire that consists of three main sections was used to collect data from employees. The first part of the questionnaire deals with the demographic characteristics of the participants. On the other hand, the remaining two parts dealt with issues such as Prospects of the Industry Park, Benefits of the Industry Park, Challenges of access to the market in the Industry Park, Government policy challenges to the Industry Park, and technological challenges in BLIP were prepared using a Likert scale by adapting from a variety of sources and the literature review which are so many to acknowledge them in here. In other ways, questionnaires mentioned in the Factors that affect job creation in the industrial park and Factors that affect Infrastructure in the industrial park were prepared using regression analysis.

The questionnaire items were also checked for their validity, Moreover, the questionnaire has been translated into Amharic as well, to address the possible language barrier for employees of the park. As a result, after developing the final edited version of the questionnaire, it was put through a pilot test with randomly selected employees from all branches’ found in the industrial park. Concerning this, some modifications were made by rewriting some of the items to make them clearer. Consequently, the reliability test was done using statistical analysis software.

### Interview:

Semi-structured interview instrument was prepared to collect data from IPDC, BLIP, and MOI managers and company managers in Industry Park. In this case, some five items were developed and used to initiate the discussion with the respondents and data has been collected by making use of a field notebook at times. The key informant interviews were used to gain access to the available information. To make it work, key indicators were developed to make interviews with key persons. Accordingly, the researcher conducted interviews with government officials, experts in the area, enterprises in the IPs, and employees. The respondents were selected from the Minister of Industry (MOI), Industry Park Development Corporation (IPDC), Bole Lemi Industry Park branch office (BLIP) management’s representatives or managers of factories in the IPs, and nineteen employees who work in the park enterprises. The number of interviewees was limited when the responses reach their theoretical saturation point. The interviews conducted during the site visit were semi-structured informal interviews. The interviews were conducted with two IPDC, two MOI, and three BLIP branch office representatives of customer ‘service experts and vice-CEO respectively, thirteen company managers and nineteen employees of the Bole Lemi Industry Park from May to August 2022.

### Document Review:

Documents related to the concepts of IPD and previous scientific literature on selected countries ‘experiences with IPD were reviewed extensively. Relevant empirical pieces of evidence related to government legal policy and strategy documents, projects, different reference books of investments, journal articles, Internet websites, policies of industrial parks, procedures, Industrial Park Proclamation No 886/2007, Investment proclamation No 1180/2012, industrial pars Council of ministers regulation No 417/2009, investment incentives areas reserved for domestic investment council of Minister amendment regulation 312/2006, and reports, etc. regarding IPD were included as a document source. The review of the experiences of African countries includes the specific context of countries at their early stage of IP development, historical patterns of IPs, policies and institutional aspects of IPs, Prospects, and challenges faced during implementations in the respective countries. Available documents were extensively referred so that to meet the attained objective. These materials include books, journals, reports from government offices, international organizations ‘reports, newspapers and magazines, seminar and workshop papers, official websites, economic surveys, development plans, annual reports, regulations, procedures, and other research publications were used.

## Method of Data Analysis

The data collected is organized, analyzed, interpreted, and discussed according to the objective of assessing prospects of industry parks development, examining the benefits of industrial parks for the local economy, identifying the challenges of industrial park development, and assessing factors that affect employment creation potential of Bole Lemi Industry Park in the research. Specific objectives one, two, and three were used all quantitative data were collected and analyzed using descriptive statistics like frequency and percentage.

After collecting the information obtained by using both primary and secondary data collection methods, a qualitative data analysis technic was used. Qualitative data analysis (QDA) is the range of processes and procedures whereby we move from the qualitative data that have been collected, into some form of explanation, understanding, or interpretation of the people and situations we are investigating (Christopher, 2018). The reason to select QDA is that all the data that were collected for this study are qualitative so QDA is often used in such specific objectives or cases.

Whereas econometrics model statistics (multiple linear regression), was used to observe the relationship between the independent variable and the dependent variable. Specific objective four used multiple linear regressions are also applied to show the effects of an independent variable on a dependent variable.

### Descriptive analysis

To understand a variable that addresses the respondent's background and demographic data, questioners, independent park prospects and challenges and variable settings have been used for descriptive analysis. The results are presented in tabular and charts distributions of frequency and percentages. Data obtained for the variables was calculated using procedures and standards.

### Inferential Analysis

Inferential statistics have shown the relationship between the variables and an investigation of the effect of independent variables on the prospect of dependent variable parks. "Karl Pearson's correlation coefficient among related actions is one of the metrics most frequently used in the statistics of variables," Kothari (1990) says. (Field, 2012) argues that the output correlation matrix can be the coefficient of the correlation between +1 and -1, but +1 reveals a perfectly positive relationship and the coefficient of the correlation of -1 indicates a negative relation. Therefore, the link between independent variables and park prospects was discovered through the Pearson correlation. Multiple regression analyses relate to the analysis of the relationship between dependent and independent variables; (Kothari, 1990).

Using this methodology, the effect of separate park performance indicators was examined in this study. Using this methodology, the effect of separate park performance indicators was examined in this study. **SPSS version 23** is used for the analysis of quantitative data, and both descriptive statistics and regression statistics were used.

## 3.6. Reliability and Validity

### 3.6.1. Reliability Instrument

According to Kothari (2004), a measuring instrument is reliable if it provides consistent results. Cronbach‟s alpha is a coefficient of reliability. For testing the reliability of the data instrument, is calculated from Cronbach's Alpha. It is usually used for a sample of examined individuals to measure the inner consistency or reliability test. The measure between 0.8 and 0.95 are considered to have very good quality, scales with coefficient alpha between 0.7 and 0.8 are considered to have good reliability**,** coefficient alpha between 0.6 and 0.7 indicates fair and coefficient alpha below 0.6 was insufficient reliability Kothari (2004). The findings of the test reveal the alpha coefficient is above 0.5 and therefore all the statements were reliable since the reliability threshold is 0.828 Prospects of Industry Park, 0.631 Benefit of Industry Park, 0.680 Challenges of access to the market in Industry Park, 0.569 Government policy challenges to Industry Park, 0.618 Technological challenge in IP, 0.940 Factors affecting job creation in the IP and .943 Factors affecting Infrastructure in IP. The alpha results and their alpha values for the elements of the questionnaire have been very good (i.e. >0.888). Therefore the internal consistency reliability of the measure was excellent. This indicates that the data was reliable since an alpha coefficient higher than 0.70 signifies that the collected data has comparatively high internal reliability and can be assumed to mirror the respondent,s views on the study problem.

Table 4, Reliability Statistics

|  |  |  |
| --- | --- | --- |
| **Items** | Cronbach's Alpha | **Comment** |
| Prospects of Industry Park | .828 | Accepted |
| Benefits of Industry Park | .631 | Accepted |
| Challenges of access to the market in Industry Park | .680 | Accepted |
| Government policy challenges to Industry Park | .569 | Not Accepted |
| The technological challenge in IP | .618 | Accepted |
| Factors affecting job creation in the IP | .940 | Accepted |
| Factors affecting Infrastructure in IP | .943 | Accepted |

**Source, Own Survey(2022)**

**Reliability Statistics cumulative**

|  |  |
| --- | --- |
| Cronbach's Alpha | N of Items |
| .888 | 24 |

### 3.6.2. Validity of the Instrument

An assessment of what a questionnaire purports to capture can be established through a validity test (Newing, 2011). It encapsulates the discrepancies or congruence‟s between reality and explanations. The content validity was established by seeking the opinions of experts who are aware of the park's performance. The experts gave their thoughts on whether the questionnaire was suitable for measuring what it was supposed to capture. They gauge meaningfulness, clarity, ambiguity, and offense. The opinions were established and adjusted to the questionnaire before using it in the main survey to improve content validity. The performance of IP was discussed with 39 managers and experts drawn from both IPDC and IP, who were **selected randomly** and thus helped to validate the instrument. During the pilot study, the researchers were involved in administering the research instruments and in clarifying all the unclear issues emerging from the research instruments. Before printing the final questionnaire, all the issues raised during the pilot study were addressed to retain the original intention of the research instrument.

## 3.7 Ethical Consideration

The researchers will emphasize ethical issues in all aspects of this study that require it. The respondents will be selected based on their consent. Moreover, when the questionnaires are distributed to the respondents, they will be informed and guaranteed that the information they provide will be confidential and used solely for academic purposes. Moreover, a statement conforms to the prohibition of disclosing identity details or personal references in the questionnaire. This assisted in avoiding any biased responses or unauthentic data provided by respondents, as well as making participants feel comfortable filling out the questionnaire.

# CHAPTER FOUR

# 4. RESULTS AND DISCUSSIONS

## 4.1. Introduction

In this chapter, a detailed analysis of the descriptive statistics and regression results has been made. The first section presented the descriptive analysis of variables. The second section also, analysis determinant factors based on qualitative data collected with open questions. The employee demographic characteristics such as gender, age, education level, and previous job status were presented.

### 4.1.1. Questionnaire Response Rate

The questionnaire was distributed to 391 respondents and an additional one by the researcher. A total of 392 questionnaires distributed to MOI, IPDC, Bole Lemi industry park branch employees, and seven company administrative staff of the industrial park (Jay Jay, Shentis, Top New, Shangtex, Lyu Shout, Ashton Apparel, and Evertop) were distributed. Of which 384 questionnaires had been properly returned. The rate of that return high questionnaires was 97.96% and 2.04% of questioners not returned.

## 4.2. Descriptive Statistics

### Background Information of the Respondents

The respondents' population characteristics, such as gender, age, work experience, and educational background, are presented. This element of the study covers the personal data of the respondents. Thus, it was required for analysis of the demographic profile of the respondents to the variability of the study data.

Table 5, Statistics of Respondent' Demographic

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Respondents Gender | employees age group | Educational background | previous working conditions |
| Valid | 384 | 384 | 384 | 384 |
| Mean |  | 1.3568 | 2.1641 | 3.3906 |
| Median |  | 1.2961a | 1.8974a | 3.5433a |
| Mode |  | 1.00 | 1.00 | 4.00 |
| Std. Deviation |  | .64659 | 1.26477 | .89880 |

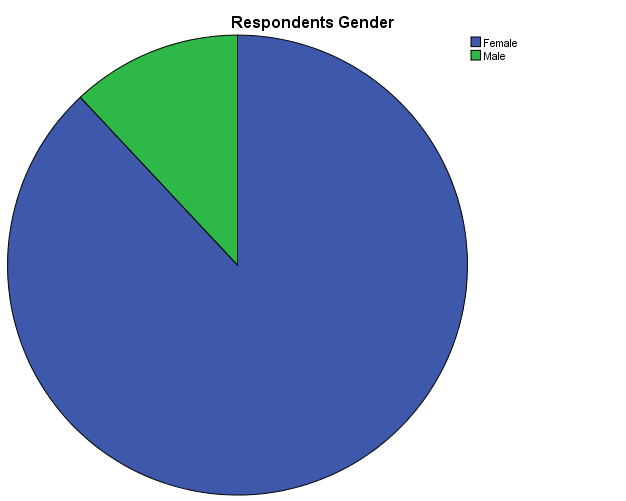
Source; Own Survey (2022)

Table 6, Gender of Respondents

|  |  |  |  |
| --- | --- | --- | --- |
|  | Gender | Frequency | Percent |
| Female | 338 | 88.0 |
| Male | 46 | 12.0 |
| Total | 384 | 100.0 |

Source; Own Survey (2022)

Figure 3; respondent gender in BLIP,



Source; Own survey, (2022)

As illustrated in Table 5 above, the gender proportion of female respondents was 338 (88%), while 46 (12%) of the respondents were male. This result shows that the number of females greater than males in the industrial park.

Table 7, Age Category of the Respondents

|  |  |  |
| --- | --- | --- |
| Age Range | Frequency | Percent |
| from 18-30 | 278 | 72.4 |
| from 31-40 | 80 | 20.8 |
| from 41-50 | 21 | 5.5 |
| above 50 | 5 | 1.3 |
| Total | 384 | 100.0 |

Source; Own Survey (2022)

Table 6; Shows the age ranges of the respondents who took part in this study. The data shows that 72.4% of the respondents were below 30 years, 20.8% were between 31-40 years, 5.5% were between 41-50 years and 1.3% were above 50 years. According to this information, the majority of the employees at the Bole Lemi industrial park were young.

**Table 8, Level of Educational Qualification,**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  | | --- | | Level of Education | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Grade 8-12 | 174 | 45.3 | 45.3 | 45.3 |
| Diploma | 82 | 21.4 | 21.4 | 66.7 |
| Certificate | 60 | 15.6 | 15.6 | 82.3 |
| Degree | 49 | 12.8 | 12.8 | 95.1 |
| Masters | 19 | 4.9 | 4.9 | 100.0 |
| Total | 384 | 100.0 | 100.0 |  |

Source; Own Survey (2022)

Concerning the educational composition of the respondents, 45.3% of respondents indicated that had below 12 completes, 21.4% they were graduated with a diploma, 15.6% respondents they were certificate, 12.8 respondents they were graduated with a Degree, and 4.9% of respondents university graduates in Masters. These findings show that the respondents had attained different levels of education. Based on the data presented, we can conclude that employees of the Bole Lemi industry were not completed a high-level education status. The majority had below certificate education results. But they have production knowledge; if the park uses this workforce properly it will increase the park's productivity.

Table 9,Work Experience of the Respondents

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Work experience | Frequency | Percent | Valid Percent | Cumulative Percent |
| Unemployed | 252 | 65.6 | 65.6 | 65.6 |
| Private organization | 88 | 22.9 | 22.9 | 88.5 |
| Self-Employment | 37 | 9.6 | 9.6 | 98.2 |
| Governmental | 7 | 1.8 | 1.8 | 100.0 |
| Total | 384 | 100.0 | 100.0 |  |

Source; Own Survey (2022)

The research respondents were asked to indicate their work experience in the industrial park. According to the data, 65.6% of respondents were Unemployed, 22.9% of workers responded that they were private organizations employed, 9.6% of respondents were self-employers and 1.8% of respondents were governmentally employed. These findings show that the respondents had responded workers that who worked in bole Lemi Industry Park formerly they haven’t worked or they were unemployed person. So we can conclude that the BLIP created new job opportunities for the citizens.

### Descriptive Statistics of the Respondents on Bole Lemi Industry Park

This section of the study provided a descriptive presentation of the **dependent variable** (Prospects of IP) and independent variables (Benefit of Industry Park, Challenges of access to the market in the Industry Park, Government policy challenges to the Industry Park, Technological challenges in IP, factors that affecting job creation in the IP and factors that affecting Infrastructure in IP) variables included in the questionnaires. It discussed the mean standard deviation of all variables for those surveyed.

Table 10, Descriptive Statistics of prospect and challenges

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | N | Minimum | Maximum | Mean | Std. Deviation |
| Prospects of Industry Park | 384 | 1.71 | 4.28 | 3.6354 | .97125 |
| Benefits of Industry Park | 384 | 1.25 | 4.75 | 4.1302 | 0.54194 |
| Challenges of access to the market in Industry Park | 384 | 2.00 | 5.00 | 4.2539 | 0.56206 |
| challenges of Government policy Industry Park | 384 | 2.67 | 5.00 | 3.0547 | 0.36715 |
| the challenge of Technology in IP | 384 | 2.00 | 5.00 | 2.9401 | 0.61756 |
| Factors affecting job creation in the IP | 384 | 2.25 | 5.00 | 4.3542 | 0.50412 |
| Factors affecting Infrastructure in IP | 384 | 2.40 | 4.80 | 3.5557 | 0.76231 |
| Average |  |  |  |  |  |

**Source, Own Survey(2022)**

The total arithmetic mean and standard deviation of the research variables' dependent and independent variables are presented as the respondents reacted in table 6 above and are the determining factors of industrial park prospects. The study found that the majority of the industrial park staff responded to identify the benefits, challenges, and factors with a mean value of 4.1302 and standard deviation of 0.54194 Benefit of Industry Park, a mean value of 4.2539 and standard deviation of 0.56206 Challenges of access to the market in Industry Park, a mean value of 3.0547 and standard deviation of 0.36715 Government policy challenges to Industry Park, a mean value of 2.9401 and standard deviation of 0.61756 Technological challenge in IP, a mean value of 4.3542 and standard deviation of 0.50412 Factors affecting job creation in the IP and a mean value of 3.5557 and standard deviation of 0.76231 Factors affecting Infrastructure in IP. This result indicates that Bole Lemi industrial park prospect determinant challenges and factors are Challenges of access to the market in Industry Park, challenges of Government policy in Industry Park, the challenge of Technology in IP, Factors affecting job creation in the IP and Factors affecting Infrastructure in IP are major factors and challenges. So the park administration should work on these factors and challenges to maintain its performance.

## Descriptive Statistics of the Respondents on Prospects of industry park development in Ethiopia, BLIP

This part of the study provided a descriptive presentation of the prospects of the industrial park development program in Bole Lemi, Ethiopia. The prospect of industrial park development rests on strengthening, maximizing, and finally leveraging its comparative and competitive opportunities as compared to its regional peers, such opportunities include: private sector friendly government, relatively cheap electricity charge in comparison to other African countries, macroeconomic stability and rapidly growing economy, relatively young labor force and rapidly increasing number of trained employees, access to a wide market, competitive incentive packages which include export incentives development of common infrastructure, the country has gotten strong global attention due to its remarkable economic growth and credit worthiness and companies can enjoy regional trade preferences in COMESA, AGOA,and the European Union market.

(Creation of job opportunities for citizens, transfer of knowledge, skill, and technology, the potential to increase export, a better supply of inputs, sufficient Availability of human resources, Increase Supply of goods and services to the country, and Increase Import Substitution and Export Promotion.) It discussed the frequency and percentage.

The development of industrial parks in a given country is mainly related to creating employment opportunities. In other words, the primary goal of industrial park establishment is employment generation. In most developing countries including Ethiopia, industrial parks are recognized as potential sectors to minimize unemployment problems. The development of industrial parks in a given locality has multiplier effects. Firstly, those employed people in Industry Park earn an income and spend it within the locality. Directly or indirectly, this investment in the locality gives benefits to other business entities and residents in the locality.

Secondly, those employed people in industry parks may save and start their businesses with the skill they get from the factories and employ extra labor forces. This chain of action helps society to get improved facilities like food, schooling, health facilities, etc.

Concerning the non-economic role of manufacturing industry parks, the study has tried to see the effect of technology and skill transfer and different culture integration in the process of working together. Foreign-based companies play a great role in knowledge transfer between countries. Since these factories are established by investors who have different educational, cultural, and occupational backgrounds, they will have a tremendous role in widening opportunities for the transfer of knowledge. Knowledge transfer makes individual workers capable to do their job effectively within the factories and outside the factories in the future. In this regard, especially for countries like Ethiopia, in which the technology of factory production is undeveloped, it is a good opportunity to learn different countries' skills and experiences from the working environment.

Companies that function under Bole Lemi Industry Park those companies except companies whose products are garment, textile, and leather products are currently selling 95% of their products in foreign markets. By doing so, a country can put its hard–currency (hard-earning) money to work within its boundaries.

Companies whose business fields are garment, textile, leather, and shoe products are expected to export their products to a foreign market. In the year 2018, it generated 71,294,346.94 USD from the export of its products but in the year 2020/2021 the total amount of foreign export arrived at **107,182,414.34** USD (only from Bole Lemi IP) has been generated from the export market); others are failed to export or are under construction. The following tables show the performance of Bole Lemi Industry Park's increase in import substitute & Export Promotion.

### Dependent Variable: Park Prospects

The goal of this study is to measure park Prospect variables, and participants were asked to rate the points on the five Likert scales based on how well their industrial parks performed. The result of the dependent variable of park prospect was presented in means and standard deviation or frequency and percent. Finally, the aggregate or total means of the items were presented.

The dependent variables of the study, as stated earlier in the methodology unit, are park prospect, which has been measured by summing the three short-term prospects indicators, namely employment generation capacity, export generation capacity, and Technology transfer.

Table 11, Park Prospects Mean and Standard Deviation of Dependent variable,

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Item | Mean | Std. Deviation | scales | frequency | percent |
| 1 | Park’s creation of job opportunities for citizens. | **4.5911** | **.52809** | Strongly disagree | **0** | **0** |
| Disagree | **0** | **0** |
| Undecided | **7** | **1.8** |
| Agree | **143** | **37.2** |
| Strongly agree | **234** | **60.9** |
| 2 | Parks transfer of knowledge, skill and technology. | **4.2734** | **.83069** | Strongly disagree | **0** | **0** |
| Disagree | **17** | **4.4** |
| Undecided | **43** | **11.2** |
| Agree | **142** | **37.0** |
| Strongly agree | **182** | **47.4** |
| 3 | Parks potential to increase export. | 3.8438 | 1.12022 | Strongly disagree | 14 | 3.6 |
| Disagree | 37 | 9.6 |
| Undecided | 80 | 20.8 |
| Agree | 117 | 30.5 |
| Strongly agree | 136 | 35.4 |
|  | Average | 3.6354 | .97125 |  |  |  |

Source; Own Survey (2022

According to the findings, the park's employment generation capacity produced a high result, with respondents agreeing that the park met its goal with a mean of 4.59. Whereas the park's transfer of knowledge, skill, and technology capacity received a mean score of 4.27 from participants, and the park's export generation capacity received a mean score of 3.84, the park's prospects on export generation and transfer of knowledge, skill, and technology goals were deemed successful. This means the industrial park achievement in employment creates 60.9% of the respondents, export generation 35.4% of the respondents, and transfer of knowledge, skill, and technology 47.4% of the respondents strongly agree the goal of the park is achieved. It can be understood from this that the industrial park is a company that creates job opportunities at a high level among the private institutions that are creating job opportunities for citizens in Addis Ababa.

# Examining the Benefits of Industry Parks for the local economy

Business is the approach that contributes to sustainable development by delivering economic, social, and environmental benefits for all. The reality is that a company in the manufacturing IP that develops actions on social responsibility tends to be more competitive, strengthens its sales, due to its good image, and builds customer loyalty. However, sometimes its impact cannot be expressed by real facts and it does not become apparent in the short term. Below are summarized some of the benefits a company can get:

**External benefits of BLIP** improve the confidence of potential investors, Attracting and retaining talented people, Positioning and differentiating the brand, Attracting new customers, Building customer loyalty, Improving corporate image, and improving the relationship with the environment,

**Internal benefits of IP are** Motivating the employees, Improving the work climate, resulting in the improvement of productivity and quality in service supply, Improving internal communication, Getting loyalty and staff commitment, and Creating a culture in the organization, through the promotion of shared values in the company.

According to Industrial Park Proclamation, No 886/2015 article 4 Industry Park focuses on the benefits of regulating the designation, development, and operation of Industrial Parks; contributing towards the development of the country's technological and industrial infrastructure; encouraging private sector participation m manufacturing industries and related investments; enhancing the competitiveness of the country's economic development; and creating ample job opportunities, and achieve sustainable economic development.(IP Proclamation No 886/2015)

**Benefits can be organized into three categories:**

* Benefits that provide efficiency in the management. Improves the climate of the organization, improves competitiveness, higher productivity, more profit, and management improvements, Reduces costs, Retains the best teams that will be proud to work for the company, resulting in productivity and quality of products/ services offered by the company besides having a good working environment creates a positive influence on the reputation of the company, which in turn is transmitted to the customers.
* Benefits granted to the brand and company image, Reputation, and loyalty, nourishing the relationship between them and their customer’s community has a positive impact on sales. Being good citizens provides strong guarantees to financial institutions and insurance companies.
* Benefits that accrue to the company’s values and environment. Greater acceptance and credibility in society. Contribution to sustainable development and peace by feeling responsible.

In the context of manufacturing Industry Parks, I looked at Bole Lemi's provision of economic and social benefits to the surrounding area people /i.e. to the Bole Sub City and Lemi Kura Sub City people, in the areas of infrastructure and basic necessity fulfillment. Accordingly, the manufacturing industry parks is providing potable/filtered/ clean water for the nearby households and supported the people by delivering transport service. The Industry parks also supported the city municipality by delivering machinery and raw materials for the construction of infrastructure in the town.

The development of industrial parks in a given locality has multiplier effects. Firstly, those employed people in Industry Park earn an income and spend it within the locality. Directly or indirectly, this investment in the locality gives benefits to other business entities and residents in the locality. Secondly, those employed people in industry parks may save and start their businesses with the skill they get from the factories and employ extra labor forces. This chain of action helps society to get improved facilities like food, schooling, health facilities, etc. The cumulative effect of this ultimately widens the economic base of the locality, which is one of the principal objectives of local economic development. It is understood that the creation of jobs is one of the contributions of industrial developments for a large number of populations; Concerning the role of industrial parks on employment generation, the information shows the number of permanent employees employed in different factories in the manufacturing industry parks like Bole Lemi currently more than 20767, (Female=18,561, Male 2,206), permanent job opportunities have been created, of them, 20,419 are local employees and 348 are foreign employees. In addition to the permanent employment opportunities, 1000 to 2500 additional jobs are available as temporary or daily labor arrangements at different times.

Table 12,Descriptive Statistics of Independent variable 1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Independent variable | Item | Mean | Std. Deviation | scales | frequency | percent |
| Benefits of IP | It has created a wide range of jobs. | 4.5286 | .64973 | Strongly disagree | 0 | 0 |
| Disagree | 6 | 1.6 |
| Undecided | 15 | 3.9 |
| Agree | 133 | 34.6 |
| Strongly agree | 230 | 59.9 |
| It is a transition to new technology | 4.1354 | .69867 | Strongly disagree | 0 | 0 |
| Disagree | 5 | 1.3 |
| Undecided | 56 | 14.6 |
| Agree | 205 | 53.4 |
| Strongly agree | 118 | 30.7 |
| It has become a suitable place for investors | 4.1979 | .71346 | Strongly disagree | 0 | 0 |
| Disagree | 6 | 1.6 |
| Undecided | 49 | 12.8 |
| Agree | 192 | 50.0 |
| Strongly agree | 137 | 35.7 |
| It created an opportunity for local updates. | 3.7474 | .79898 | Strongly disagree | 0 | 0 |
| Disagree | 23 | 6.0 |
| Undecided | 114 | 29.7 |
| Agree | 184 | 47.9 |
| Strongly agree | 63 | 16.4 |
|  | Average | 4.1523 | .71521 |  |  |  |

Table source: Researcher construction 2022

According to the findings, the park's created a wide range of jobs capacity a high result, with respondents agreeing that the park met its goal with a mean of 4.52. Whereas the park's become a suitable place for investors a mean score of 4.19 from participants, the park's transition to new technology a mean score of 4.13, created a wide range of job goals and was deemed successful.

Figure 4,Shints ETP Garment Plc. Employees in Bole Lemi Industrial Park





The image was taken on 7/06/2022 by the researchers from BLIP, 2022.

# Challenges of Industrial Park Development in Ethiopia

Industrial parks are controversial as they are popular. At their best, they align infrastructure provision and agglomeration economy to join industrial growth. At their worst, they fail to generate the required skill and investment; sit empty or simply do not get built; erode the tax base; increase land speculation and loss of agricultural land; deliver hand-outs to favored firms; funneling spending to favored districts; cause environmental degradations, etc. (Saleman and Jordan, 2013; Zeng, 2015). For this study, some of the challenges associated with park programs are discussed under three headings: access to the market in Industry Park, government policy challenges to Industry Park and Technological challenges in industrial park developments in Ethiopia. It specifically covers the main challenges faced during the operational performance of Bole Lemi public industrial parks.

### Challenges of access to the market in Industry Park

Market Linkage refers to the forward linkages (i.e. the use of the company’s products in the BLIP as inputs into other sectors and the sale of the finished products and services of the companies to the local and foreign markets. About the inside Bole Lemi IP companies products, representatives of each IP company were interviewed during data collection time whether the product of the companies has a market linkage with the local and foreign markets.

Raw Material Linkage refers to the backward linkages (i.e. the supply of raw materials from the foreign markets to companies inside the industry park) that the sectors have created with other economic activities. In this case, the linkages of the companies could be explained in terms of the sources for their raw material inputs. In terms of inputs, companies get a major part of their raw material inputs from foreign markets and import some inputs from the local markets. This implies that there is a positive contribution to local economic development by generating employment and income-earning opportunities in other sectors within the nation. In other words, raw materials suppliers within the surrounding areas as well as outside the surrounding areas are benefited from the park which in turn creates job opportunities for other individuals. So, the existence of such integration among different local and non-local suppliers (i.e. between the producers and input suppliers), has a multiplier effect on local activities.

According to the interview respondent, raw material is another constraint for enterprises in IPs. Tough enterprises are accessing plenty of their manufacturing inputs by importing from abroad, but the high price of materials and logistics are still becoming constraints. Besides, according to the interview response from a leather product manufacturer finance manager, the country is rich in livestock resources, however, the backward way of collecting hide and skin caused the quality decline. Shortage of raw materials is also faced by apparel manufacturers and Lack of local input supply, which forces them to import with inflated cost. This has resulted of limited raw material inputs sourced from the local market like zippers, buttons, sewing trade, fabrics, and packaging bags that are used by garment manufacturers.

Constant inflation is one of the challenges related to the market in the industrial park. In Ethiopia and internationally, the economic crisis has reached a high level, the price of food grains and fruits as well as factory products are increasing, the price of utility materials is constantly increasing, and the price of various natural and factory products that are used as inputs for factories is continuously increasing every day. One of the challenges is understandably persistent inflation. In the interview, it was confirmed that the people who have started work in Bole Limi Industrial Park and those who have not started work have international experience and experience, they have better capacity in terms of the capital they operate and they have no problem competing with the same giant companies and this will not be a challenge related to the market in the industrial park.

Efficiency is about making the best possible use of resources. The term inefficiency generally refers to an absence of efficiency. Efficient firms maximize outputs from given inputs, and so minimize their costs. By improving efficiency a business can reduce its costs and improve its competitiveness. Productive efficiency is a situation in which the economy could not produce any more of one good without sacrificing the production of another good. In other words, productive efficiency occurs when a good or service is produced at the lowest possible cost. Productive efficiency requires that all firms operate using best-practice technological and managerial processes. By improving these processes, an economy or business can extend its production possibility frontier outward, so that efficient production yields more output than previously. In the final quantitative data the limitation of raw materials in the country, increasing raw material cost, the problem of constant inflation, and unable to compete with similar companies were explained in bellow table and interpreted.

The inability to replace the supply of raw materials with local products was another challenge. It can conclude limitation of raw materials in the country was the main problem affecting the Industry park's performance. the constant increase in the price of raw materials is one of the challenges related to the market in the industrial park. As the raw materials widely used by the industrial park are widely imported, it can be concluded that due to the international and local political and economic instability, the constant increase in the price of raw materials is a challenge related to the market in the industrial park, making work difficult.

In Ethiopia and internationally, the economic crisis has reached a high level, the price of food grains and fruits as well as factory products are increasing, the price of utility materials is constantly increasing, and the price of various natural and factory products that are used as inputs for factories is continuously increasing every day. One of the challenges is understandably persistent inflation. It can conclude constant inflation was the main affecting problem of Bole Lemi industry park performance.

Table 13, Descriptive Statistics of Independent variable 2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Independent variable | Item | Mean | Std. Deviation | L.scales | frequency | percent |
| **Challenges of access to the market in Industry Park** | limitation of raw materials in the country | 4.3542 | .78470 | Strongly disagree | 0 | 0 |
| Disagree | 18 | 4.7 |
| Undecided | 20 | 5.2 |
| Agree | 154 | 40.1 |
| Strongly agree | 192 | 50.0 |
| increasing raw material cost | 4.3151 | .80610 | Strongly disagree | 0 | 0 |
| Disagree | 25 | 6.5 |
| Undecided | 8 | 2.1 |
| Agree | 172 | 44.8 |
| Strongly agree | 179 | 46.6 |
| The problem of constant inflation | 4.4089 | .67171 | Strongly disagree | 0 | 0 |
| Disagree | 11 | 2.9 |
| Undecided | 7 | 1.8 |
| Agree | 180 | 46.9 |
| Strongly agree | 186 | 48.4 |
| Unable to compete with large similar companies. | 3.9375 | .87091 | Strongly disagree | 0 | 0 |
| Disagree | 10 | 2.6 |
| Undecided | 128 | 33.3 |
| Agree | 122 | 31.8 |
| Strongly agree | 124 | 32.3 |
|  | Average | 4.25 | .78 |  |  |  |

source: Researcher construction 2022

According to the findings, The problem of constant inflation in IP was the high result a mean of 4.40, and the limitation of raw materials in the IP was a mean of 4.35. increasing raw material cost in IP with a mean of 4.31 and participants unable to compete with large similar companies with a mean of 3.93 were Challenges of access to markets in Industry Park.

### Government policy challenges to Industry Park

When factories request support from the government offices at the federal and Addis Ababa City Administration levels, the level of bureaucracy and unnecessary reasons lead them to high costs; especially in the visa, work permit, and temporary residence ID request processes. Parks cause government revenue losses through incentives. The various tax incentives provided for firms in the parks can erode the revenue base of the government. Tax breaks and tax holidays do not necessarily result in economic growth because they may attract firms that would not be competitive without the given incentives. In addition, parks might not be profitable if land and its leasing are subsidized, especially in cases where utilities such as water and power are also subsidized. According to Reporter Newspaper, (Feb. 23, 2016), Ethiopia loses more than 90 billion birrs per annum to tax incentives.

**Foreign exchange Shortage**

Ethiopia’s foreign currency supply available for importers is increasingly facing chronic shortages; each manufacturing IP company mentioned three basic factors that the bankers gave them: global economic slowdown, Ethiopia’s mega projects consuming huge loads of hard currency, and the country’s widening trade balance, as the genesis of the shortage. Generally, Companies mention the inefficiency of workers as the main problem for production. Efficiency is about making the best possible use of resources. Efficient firms maximize outputs from given inputs, and so minimize their costs. By improving efficiency a business can reduce its costs and improve its competitiveness. Companies inside each IP complain about the local employees’ operation skills in production. The inefficient labor force is leading them to poor-quality products. The employees operating skills in production are low even after several months of training both in quality and quantity, which makes export difficult since export needs superior quality to be competent in the international market.

The poor performance of the export sector together with the higher demand for foreign currency by the government is keeping the private sector out of access to hard currency needed for the purchase of machinery and equipment as well as raw materials and inputs. At present, manufacturing industries have to wait for an average of 6-8 months after opening LCs to get approval for their foreign exchange application. Thus they are exposed to various problems including repeated L/C expiry, high cost of L/C renewing and bank charges, low productivity, and capacity utilization. This situation is also expected to continue soon. This together with the relative depreciation of Birr to US currency tends to inflate the production cost of the manufacturing enterprises which in turn hamper competitiveness.

**Poor logistics and lack of local input supply,**

The investors in these parks complain about the poor logistics and lack of local input supply, which forces them to import at inflated costs. So, they say the cheap labor advantage the country offers is outbalanced by these challenges. Logistics is one because Ethiopia is a landlocked country. We rely on Djibouti Port for now. The transport business has been costly until recently and is closed to foreigners. There is no efficiency in our logistic sector and we import fuel, which escalates costs further.

**Shortage of full fledge infrastructure**

The much-expected industrial parks are facing different problems from the start and addressing them will take several years. Bole-Lemi is the only operating industrial park in the country, which is the case in point. The service sector in Addis Ababa is growing at a much higher speed than manufacturing. Hence, it pays labor higher than many of the manufacturing enterprises operating in the industrial parks and zones which in turn hinders labor flow into manufacturing. Second, the factories operating in the park repeatedly express their dissatisfaction with the repeated power cuts, erratic water supply, housing for workers, Poor customs procedures Long visa/ work permit procedures, etc. In the final quantitative data the limitation of legislation to regulate investment coordination, the limitation of immediate investment enforcement law, and the bureaucracy of investment licensing were explained in bellow table and interpreted.

the data analyzed from the questionnaire that was collected from the participants of the study shows that the lack of a law that implements a coordinated system that is convenient for investment is a challenge related to the government policy in the industrial park. Although it shows that their transparency is limited. According to the interview conducted to obtain additional information, although the government has many laws related to investment, including Proclamation No. 1180/2012, it can be seen that there are various challenges in terms of translating the laws into work and making them perform better.

As it can be seen that the Ethiopian government has enacted several laws related to investment and the laws are in effect, as the participants of the study stated, it is difficult to challenge the lack of quick investment law for this study. In addition to the fact that the service delivery system of the Ethiopian government does not use modern technology and is working based on backward procedures, the investment licensing system of the complex is fast, efficient, uses modern technology, and is in one center, in terms of attracting many rich people with international potential and energy in industrial parks built at high cost in the country. It has been seen as a major challenge in connection with the fact that it will not be completed.

Table 14, Descriptive Statistics of Independent variable 3

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Independent variable | Item | Mean | Std. Deviation | L.scales | frequency | percent |
| Government policy challenges to Industry Park | limitation of legislation to regulate investment coordination | 3.0312 | .83592 | Strongly disagree | 0 | 0 |
| Disagree | 124 | 32.3 |
| Undecided | 131 | 34.1 |
| Agree | 125 | 32.6 |
| Strongly agree | 4 | 1.0 |
| limitation of immediate investment enforcement law | 3.0365 | .85425 | Strongly disagree | 0 | 0 |
| Disagree | 125 | 32.6 |
| Undecided | 128 | 33.3 |
| Agree | 123 | 32.0 |
| Strongly agree | 8 | 2.1 |
| the bureaucracy of investment licensing | 3.0964 | .88420 | Strongly disagree | 0 | 0 |
| Disagree | 120 | 31.3 |
| Undecided | 120 | 31.3 |
| Agree | 131 | 34.1 |
| Strongly agree | 13 | 3.4 |
|  | Average | 3.05 | .85 |  |  |  |

source: Researcher construction 2022

### According to the findings, the bureaucracy of investment licensing in IP was a high result with a mean of 3.09, the limitation of immediate investment enforcement law in the IP with a mean of 3.03, and the limitation of legislation to regulate investment coordination in IP a mean of 3.03 from participants were Challenges of Government policy in Industry Park.

### Technological challenges in Industry Park

Concerning Park enterprises, some of the risks are worth noting. They are mainly related to the risk of price transfer, irrational behavior in tax, importing outdated machines or technology, lack of motivation in transferring technology and management skill, etc. One of the key issues in importing outdated technology is that enterprises may import obsolete machines but attach higher value as new brands to either minimize their profit tax (over-invoicing) or increase their asset value for a bank loan. There is also reduced invoicing in export outputs or under-reporting outputs. The other important issue is the industrial relationship between employees and employers. These and other related issues require innovative institutional arrangements to effectively implement Industrial Park development in Ethiopia.In the final quantitative data the lack of appropriate machinery & equipment, limited capacity of government regulatory bodies to control new technologies, and lack of funding for new technology were explained in bellow table and interpreted.

the contrary, support and agree with the idea that there is a lack of technology-supported and modern machines and equipment. It was understood in the interview that the machines and tools used by the investors who have started working in the industrial park are modern and technologically advanced tools that can increase their international competitiveness and if they do not use them, they may not be competitive and they would not have offered their products in quality and quantity in the international market. the study stated that they would have difficulty commenting on the idea that the government regulatory body has limited capacity to control the technology. Following the extensive construction of industrial parks in Ethiopia, to speed up the investment, it has been seen that there is a need to work in terms of empowering skilled human resources who are adapted to modern technology and understand the constantly changing nature of technology. they support and agree with the idea that investors should have a financial balance. It can be seen that as they are rich international institutions that have started working in the industrial park, they will not have any problem with the financial capacity to use the technology and they have a lot of experience in the field, so they are competing in the world and offering their products.

Table 15,Descriptive Statistics of Independent variable 4

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Independent variable | Item | Mean | Std. Deviation | scales | frequency | percent |
| **Challenges of T**echnology in Industry Park | lack of appropriate machinery & equipment | 2.7552 | .83805 | Strongly disagree | 0 | 0 |
| Disagree | 184 | 184 |
| Undecided | 119 | 119 |
| Agree | 72 | 72 |
| Strongly agree | 9 | 9 |
| the limited capacity of government regulatory bodies to control new technologies | 3.1432 | .90707 | Strongly disagree | 0 | 0 |
| Disagree | 116 | 30.2 |
| Undecided | 115 | 29.9 |
| Agree | 135 | 35.2 |
| Strongly agree | 18 | 4.7 |
| lack of funding for new technology | 2.9219 | .86965 | Strongly disagree | 7 | 1.8 |
| Disagree | 134 | 34.9 |
| Undecided | 136 | 35.4 |
| Agree | 98 | 25.5 |
| Strongly agree | 9 | 2.3 |
|  | Average | 2.93 | 0.87 |  |  |  |

Source: Researcher construction 2022

According to the findings, The limited capacity of government regulatory bodies to control new technologies in IP was the high result a mean of 3.14, the lack of funding for new technology in the IP a mean of 2.92, and the lack of appropriate machinery & equipment in IP a mean of 2.75 from participants were Challenges of Technology in Industry Park.

Table 16,Comparison of challenges

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | challenges | Grand mean | Grand standard deviation | Rank of severity |
| 1 | Marketing and related | 4.25 | 0.78 |  |
| 2 | Political-legal and related | 3.05 | 0.85 |  |
| 3 | Technological and related | 2.93 | 0.87 |  |

Table source: Researcher construction 2022

It can now be seen that marketing challenges have the biggest potential to contribute to the performance, followed by politico-legal and technological challenges were working premises factors. In another word, the result shows that political-legal challenges are the two topmost factors that affect the performance of Bole Lemi Industry Park. Therefore, it can be concluded that marketing, politico-legal, and technology were challenges that the growth and performance of Bole Lemi Industry Parks. However, according to the comparison results of industry park challenges the Challenges of access to the market in Industry Park was the main problem in industry park performance.

According to the researcher's findings, it was confirmed in the interview that the foreign investors who entered the Bole Lemi Industrial Park as a manufacturer and apart from the challenges of the economic fluctuations and crisis that occurred at the international and national level, the investors do not have a problem with their finances or being competitive in the international market in terms of product quality and quantity.

# Factors affecting employment creation potential of BLIP

This analysis part assessed the factors that affect the employment creation potential of Bole Lemi Industry parks. Factors that the researcher focus on affecting **job creation in Industry Park** was assessed by the following four main description phrases Lack of national peace and stability, Global and national economic instability, Lack of national peace and stability, the Emergency war in northern Ethiopia, US Tax-Free Trade, African Growth and Opportunity Act (AGOA) Sanctions and factors that affect BLIP Infrastructure was assessed by the main five description phrases were Poor or interrupted internet service, shortage of adequate electricity service in the area, Insufficient and interrupted water supply, Lack of sufficient and quick transportation service and Lack of appropriate dry waste and sewerage system were analyzing with the central tendencies measurement of construct in this part was to illustrate the value of mean and standard deviation in social science econometrics software

### Inferential Statistics

The results of inferential statistics used in this study were based on the person‟s correlation coefficient and multiple regression results of the SPSS version 23 outputs.

#### Correlation Analysis

Correlation describes the strength of the association between the variables. The value of the correlation coefficient ranges from -1 to +1. According to Mac Daniel and Gates (2006), a correlation coefficient between 0.1 and 0.29 indicates a poor relationship between the items. A correlation coefficient ranging from 0.3 to 0.49 implies there is a moderate relationship among variables. A correlation coefficient greater than 0.5 indicates a strong relationship between the two variables. A person‟s correlation, also known as a bi-variant correlation coefficient, was used to determine the relationship between park prospects and independent variables.

Table 17,The Relationship Between the Independent Variables and Park Prospects;

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | Prospects | Benefit | CHAMP | CHGPIP | CHIP | FAJOCIP | FAINIP |
| Prospects Correlation | 1 |  |  |  |  |  |  |
| Benefit Correlation | .776 | 1 |  |  |  |  |  |
| Challenges of access to market Correlation | .726 | .708 | 1 |  |  |  |  |
| challenges of Government policy Correlation | -.259 | -.426 | -.036 | 1 |  |  |  |
| the challenge of Technology Correlation | -.777 | -.471 | -.757 | -.012 | 1 |  |  |
| Factors affecting job creation Correlation | .765 | .859 | .829 | -.252 | -.610 | 1 |  |
| Factors affecting Infrastructure Correlation | .270 | .040 | .490 | .309 | -.619 | .170 | 1 |

Source; Own Survey (2022)

In the preceding table, 17 shows that the correlation between park prospects and the Benefit of Industry Park is significantly correlated, with a correlation coefficient of 0.776 and a significant 2-tailed value of 0.000. At the 5% level, this variable correlation result shows that there is a strong and statistically significant relationship between park prospects and the Benefit of Industry Park. The correlation coefficient between park prospects and Challenges of technology in Industry Park is -0.777, significant, and two-tailed 0.000, indicating a strong negative and statistically significant relationship at the 5% level. The correlation coefficient between park prospects and Challenges of access to the market in Industry Park is 0.726, significant, and two-tailed 0.000, indicating a strong positive and statistically significant relationship at the 5% level. The correlation coefficient between park prospects and Factors affecting job creation is 0.765, significant, and two-tailed 0.000, indicating a strong positive and statistically significant relationship at the 5% level. Factors affecting Infrastructure have a weak positive relation to park prospect with the person's correlation coefficient of 0.270 and the significance at 2-tailed is 0.000, which is a weak and statistically significant relationship at the 5% level. On the other hand, the correlation between government policies and strategies with park prospects is -0.259 and a significant 2-tailed 0.000. This indicates a weak negative association and is statistically significant at the 5% level.

According to Brooks (2008), if y and x are dependent and independent variables are correlated, it means that y and x are related in a completely symmetrical way. As a result, changes in x cause changes in y, or changes in y cause changes in x. It is simply that there is evidence for a linear relationship between the two variables and that movement in the two is on average related to an extent given by the correlation coefficient.

#### Testing Assumptions of Classical Linear Regression Model (CLRM)

In the multiple linear regression models, the OLS method is used to estimate the parameters. To have a correlated estimator value, the six assumptions should be satisfied. When the assumptions are violated, the OLS estimator produces biased, inconsistent, and efficient results, which are no longer valid, since the standard errors are wrong. The researchers, therefore, ran a diagnostic test to defend against the likelihood of false regression and its interpretation. The following tests are performed to ensure that the model is impartial, consistent, efficient, and valid.

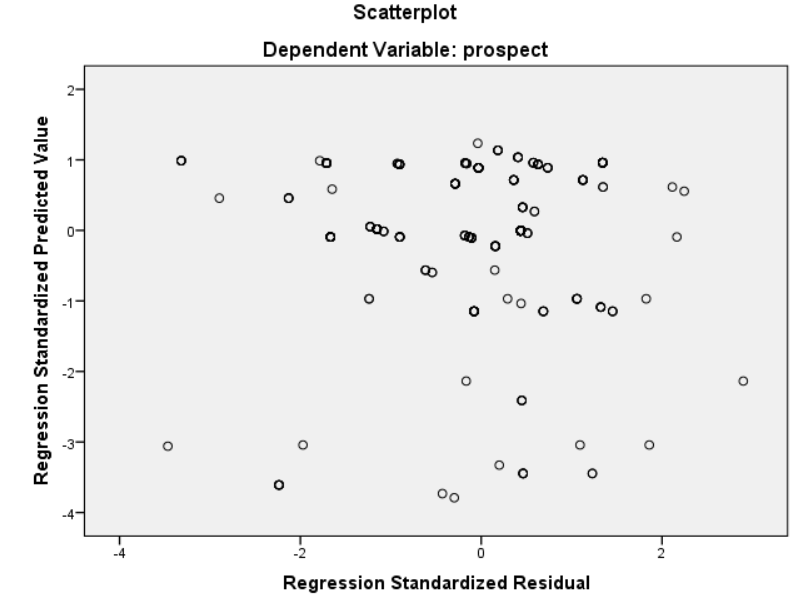
1. **Test for the Residual Has Zero Mean**

The linear regression assumption is that the error is zero, conditional on the covariates. In this study, the researchers included the constant term in the regression equation. The error term is therefore assumed to be zero average value and the rule is not to be violated.

1. **Test for Heteroskedastisity**

The classical linear regression model assumes the variance of the error term is constant. This is known as homoscedasticity. The researcher employs a scatter plot technique to determine whether the assumption of hysteresis is violated. A scatter plot is a map of a bivariate distribution. This means that the map is about two variables (X and Y) that are paired with each other. The results of the study in figure 4.1 showed the standardized residual against the standardized predicted value. So, the homoscedasticity assumptions are not being violated.

Figure 5, Hetroscedasticity Test



**Source; Own Survey (2022)**

1. **Test for Autocorrelation**

This is the first series of the year to be released by the company. It shows the difference between a time series and a lagged version of itself over successive time intervals, mathematically known as autocorrelation. The Durbian-Watson test, which is the most commonly used technique for detecting autocorrelation, was mostly used by researchers. If the DW test is positive, 1 is a perfect positive correlation, while an autocorrelation of -1 represents a perfect negative correlation. The DW test of the research comes within an acceptable range, which means the absence of a serial correlation between mistakes, as shown in Table 18 below.

Table 18, Auto Correlation

|  |  |
| --- | --- |
| **Model** | **Durbian Watson** |
| **1** | **0.210** |

**Source; Own Survey (2021)**

1. **Test for Multicollinearity**

If the predictor variables are significantly associated with each other, you get multicollinearity. Your regression model will be unable to correctly link the variance in your result variable to the appropriate predictor variable. This is an issue, as your correlation coefficients may be too small or too high for you to see them at all. If this happens, you need to use a correlation matrix. If the predictors are multicollinearity, they will be strongly correlated. This means the VIF value is below 10. As shown in table 19, the VIF value is less than 10 and it implies that the explanatory variable is multi-linear.

Table 119,VIF and Tolerance Statics for Multicollinearity

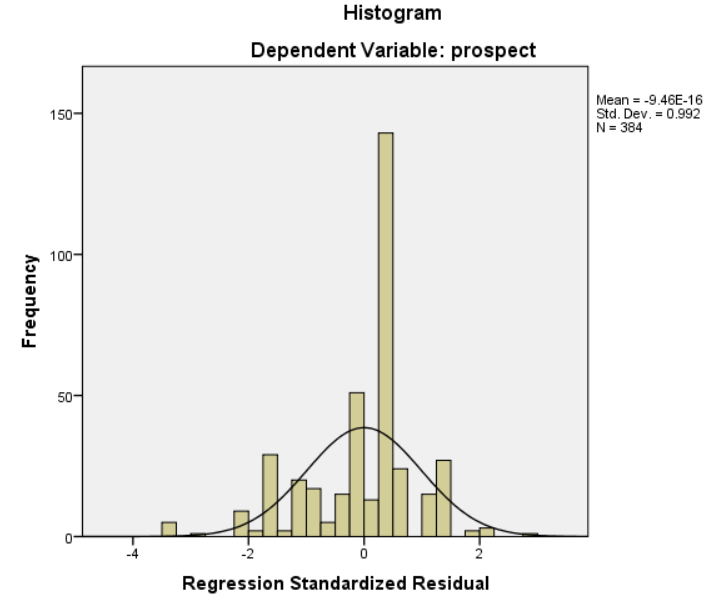
|  |  |  |  |
| --- | --- | --- | --- |
| Model | Independent Variables | Collinearity Statistics | |
| Tolerance (1/VIF) | VIF (%) |
| 1 | Benefit | .778 | 1.285 |
| **2** | CHAMIP | .427 | 2.344 |
| 3 | CHGPIP | 1.000 | 1.000 |
| 4 | FAJOCIP | .628 | 1.594 |
| 5 | FAINIP | .617 | 1.620 |
| 6 | CHTIP | .343 | 2.918 |

Source; Own Survey (2022)

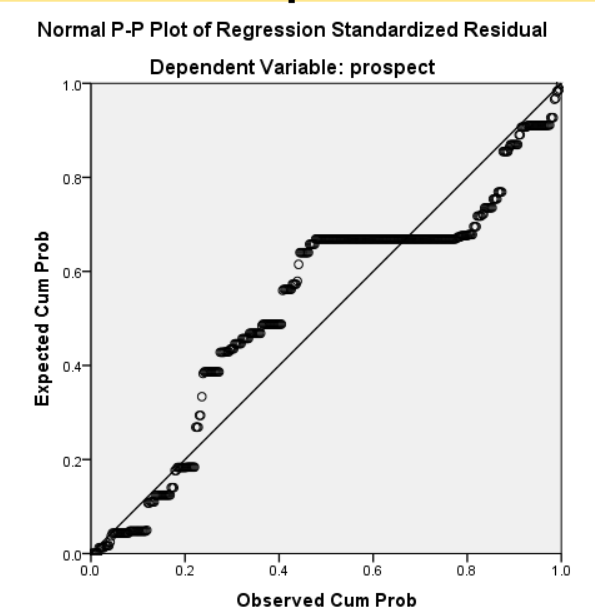
## Test of Normality

## The Classical Linear Regression Model assumes that the term distribution is usually normally distributed. All variables in a linear regression study must be multivariate normal. To determine normality, a goodness of fit test, such as the Kolmogorov-Smirnov test, can be performed. When the data is not normally distributed, a non-linear transformation may be used to solve the problem. Thus, the result in figure 6, shows that the residual mean is zero and that its variance is around 1, which means that the error distribution is normally distributed.

Figure 6 History



Source; Own Survey (2022)



Source; Own Survey (2022)

### Analysis of Variance (ANOVA)

The ANOVA test allows a comparison of more than two groups at the same time to determine whether a relationship exists between them. If no real difference exists between the tested groups, which is called the null hypothesis, the result of the ANOVA F-ratio statistically will be close to 1. As shown below in table 4.12, a significant P-value of 0.000 and an F-value of 84.4 were presented for the 95 percent confidence level. It implies that the regression model is an appropriate prediction to explain the impact of independent variables (availability and quality of labor, tax and incentives, infrastructure and services, park location, and government policies and strategies) on park performance at Bole Lemi industrial park.

Table 20, Analysis of Variance (ANOVA)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variables | Model | Sum of squares | df | Mean square | F | Sig. |
| 1 | Regression | 3259.466 | 6 | 543.244 | 317.282 | .000b |
| Residual | 645.493 | 377 | 1.712 |  |  |
| Total | 3904.958 | 383 |  |  |  |

Source; Own Survey (2022)

### Regression Analysis Results

The model has fulfilled the six diagnostic tests by the classical linear regression model. One or more of the assumptions may not be met when analysis of data is made. This isn't the first time a model has been proven to be incorrect. Even when the data contradicts certain assumptions, there is usually a solution. The results of the regression model, which examines the effect of explanatory variables on the prospects of parks, are shown in the following table.

Therefore, variable park prospects are explained, whereas the Benefit, Challenges of market access, challenges of Government policy, the challenge of Technology, Factors affecting job creation, and Factors affecting Infrastructure strategies were all found to be satisfactory variables in explaining the Bole Lemi industrial park prospects. The R-value represents a simple correlation and is .914, which indicates a high degree of correlation. The R2-value indicates how much of the total variation in the dependent variable (park prospects) can be explained by the independent variables (Benefit, Challenges of market access, challenges of Government policy, challenge of Technology, Factors affecting job creation, and Factors affecting Infrastructure). In this case, 83.5%, is very high. The results of ANOVA indicate that the overall model was statistically significant. Further, the results imply that the independent variables are good predictors of determining the prospects of the Bole Lemi IP. This was supported by an **F** statistic of 317.282 and the reported p-value (0.000), which was less than the conventional probability value of 0.05 significance level.

Table 21, Regression Coefficient of the Variable

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Model | Unstandardized  Coefficient | | Standardized  Coefficient | t | Sig. | 95%Confidence  Interval for B | |
| B | Std. Error | Beta | Lower  Bound | Upper  Bound |
| (Constant) | 27.441 | 1.633 |  | 16.808 | .000 | 24.231 | 30.651 |
| Benefit IP | .798 | .069 | .542 | 11.640 | .000 | .663 | .933 |
| Challenges of access to market | -.165 | .074 | -.116 | -2.236 | .026 | -.310 | -.020 |
| Challenges of Government policy | -.018 | .075 | -.006 | -.246 | .806 | -.165 | .129 |
| Challenge of Technology | -1.178 | .063 | -.683 | -18.683 | .000 | -1.301 | -1.054 |
| Factors affecting job creation | -.006 | .086 | -.004 | -.073 | .942 | -.174 | .162 |
| Factors affecting Infrastructure | -.096 | .027 | -.115 | -3.563 | .000 | -.149 | -.043 |
| a. Dependent Variable: PP (park prospects) | | | | | | | |

Source; Own Survey (2022)

In the study, the assess factors that affect the employment creation potential of industrial parks in the Bole Lemi Industrial Park were identified. That the factors were analyzed using a linear regression model taking used park prospects as the dependent variable and Benefits, Challenges of access to the market, challenges of Government policy, the challenge of Technology, Factors affecting job creation, and Factors affecting Infrastructure and strategies as explanatory variables. The rejection criterion is that if the “p” value of the interacting term is less than 0.05 (p value<0.05), do not reject. Thus, the optimal model is explained by:

PP=β0+β1(PE)+β2(R)+β3(BE)+β4(CHAMIP)+β5(CHGPIP)+β6(CHTIP)+β7(FAJOCIP)+ β8(FAINIP)+μ

Where; PP=Park Prospects (Dependent Variable)

β = Coefficient of estimate

BE= Benefit

CHAM= Challenges of access to market

CHGP= Challenges of Government policy

CHT = Challenge of Technology

FAJOC= Factors affecting job creation

FAIN= Factors affecting Infrastructure

μ+ error term

PP= 27.441+.798BE -.165CHAM -0.018CHGP -1.178CHT -.006FAJOC -096FAIN +μ

From the above table, results show the Benefit, Challenges of access to the market, challenges of Government policy, challenges of Technology, Factors affecting job creation, and Factors affecting Infrastructure and strategies statically significant. The p-value of 0.000 was found to be statistically significant at a 5% level of significance and positively associated with the park's Prospects.

**Benefit IP**

The results of the regression model adopted revealed that the benefit of the industry park had a positive and significant (B= 0.798, p=0.000) relationship with the prospect of the IP. The finding implies that the prospects of IP would increase by 0.798 units if the benefit of the industry park was increased by one unit. Human capital, new technology, and convenience for investors are one of the main factors which can increase the productivity of industries. Human capacity measures the skill composition of the labor force. Skilled labor can achieve better productivity performance. This also implies that if the benefit were to be reduced, the park prospect of Bole Lemi would suffer.

**Challenges of access to market**

The results of the regression model adopted exposed that at a 5% significance level challenges of access to the market had a negative bound and positive significant (B= -0.165, p= 0.026) relationship with prospects of IP. Similarly, at the same confidence interval, the relationship between challenges was significantly and negatively related to jobs created by IP. These findings imply that a one-unit challenge are decrease the quality of results in a -0.165, unit decrease in park prospect.

**Challenges of Government policy**

Finally, the results of regression analysis exposed that at a 5% significance level government objectives and strategies had a negative bound and positive significant relationship with park prospects (-0.018, 0.806). The results of regression analysis further revealed that at a 5% significance level challenges of government policies and strategies had a negative performance by the problem of limitation of regulating investment and bureaucracy of that giving investment licensing in Bole Lemi industrial park. Nevertheless, we can see that challenges of government policies and strategies have a significant effect on the park's prospects and it decreases only -0.018 units when government objectives and strategies decrease by a unit.

**Challenge of Technology**

Regression results revealed that at the 5% significance level, the challenges of technology had a negative bound and positive significant relationship with the park's prospect (B= -1.178, p=0.000). The implication of these findings is that park performance was decreased by a lack of appropriate machinery and equipment, limited capacity of the regulatory body and lack of funds were challenges of technology that decreased results of park perspective by -1.178 of the Bole Lemi industrial park.

**Factors affecting job creation**

The results of the regression model adopted revealed that a 5% significance level affecting job creation had a negative bound and positive significant (B= -0.006, p=0.942) relationship with the prospect of IP. Similarly, at the same confidence interval, the relationship between affecting job creation was significantly positive, but it was negatively related to jobs created with the problem of economic inflation, peace and stability, the war in Ethiopia, and suspension from the AGOA market. These findings imply that a one-unit decrease in job creation quality results in a -0.006 -unit decrease in park prospect.

**Factors affecting Infrastructure**

The results of the regression model adopted revealed that at a 5% significance level that Infrastructure and Service had a negative bound and positive significant (B= -0.096, p=0.000) relationship with the prospect of IP. Similarly, at the same confidence interval, the relationship between affecting infrastructure was significantly positive, but it was negatively related to the problem of electricity service, internet service, water service, and mass transportation. These findings imply that a one-unit decrease in job creation quality, technology transfer, and foreign exchanges results in a -0.096 -unit decrease in park prospect.

Table 22, Model Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | R | R square | Adjusted R square | Std. The error in the Estimate |
| 1 | .914 | .835 | .832 | 1.30850 |

a)Predictors: (Constant), BE, CHAM, CHGP, CHT, FAJOC, FAIN,

Source, our survey (2022)

### Interpretation of R-square and Adjusted R-square

R-square is a statistical measure that shows the independent or variable variance ratio of a dependent variable in a regression model. R2 also illustrates how well one variable's variance explains the variation of another. R-square is a number between 0 and 1 that represents a percentage between 0% and 100%. A square of 100 percent R indicates that the independent model adequately describes the dependent variable. The model does not account for 0% of the response data on average. The R-value is 0.914, which indicates a high degree of correlation coefficient. The R2-value indicates how much of the total variation in the dependent variable (park Prospect) can be explained by the independent variables (Benefits, Challenges of access to the market, challenges of Government policy, the challenge of Technology, Factors affecting job creation, and Factors affecting Infrastructure) in this case, 83.2%, this is very high.

## 4.7. Determinants of Park Performance Based on the Qualitative Data

In this section, the data is collected from employees, supervisors, and line managers through the open-ended items included in the questionnaire. This data is narrated thematically below, making use of the research questions developed at the beginning of this study. Consequently, respondents have added the following issues as additional determinants of industrial parks and the effects of these determinants on the prospects of Bole Lemi industrial parks.

It is primarily due to employees lacking adequate quality and quantity. It is so, said the majority of respondents in this regard. This will affect the performance of both export earnings and foreign direct investment. Concerning this, some of the respondents have also admitted the salary payable at the firm is the least as compared to other similar firms outside the park.

The other important issue forwarded concerning the causes of park prospect emanates from turnover. Some of the respondents who responded to this question revealed that the job was tedious and the same kind of routine, which somehow made them feel bored. Problems with the management of domestic workers, especially in the internal management of employees, affect the prospect of the park as they do not create stable employees in the companies. It also incurs additional recruitment and training costs, as well as time waste. As far as the implication of turnover on organizational performance is concerned, the respondents have stated the following issues:

Because the company must train new employees for three months before they begin work, the remaining employees are expected to carry the entire burden to meet job orders. Even so, the company mostly failed to satisfy customers‟ expectations in terms of meeting deadlines and quality as well.

Even after three months of pre-service training, most newly hired employees cause numerous defects in the production of garments in a variety of ways, affecting the dedication and effort exerted by all other employees as the production begins, passes through, and ends, involving various departments and a large number of employees. In such a stepwise production process, a defect created at some point of the production process in some way manifests in all other steps as well. Therefore, the increasing number of turnover challenges results in delays in the company's delivery time, which consequently loss of valuable and long-term customers as explained by some of the respondents.

Most respondents also mentioned issues such as the availability of infrastructure such as roads, electricity, hotels, cafeterias, water, clinics, shops, and bank service. Improving factory performance reduces costs, time spent on material dalliance, and access to utilities. The proximity of the park and the well-being of the infrastructure make it difficult for workers to arrive on time and for work due to transportation issues. The other thing mentioned by respondents is that inconsistencies in government policy on paper and in practice have affected the park's effectiveness.

## 4.8. Responses of the Managers from Structured Interview

In this section, the data collected from seven managers and experienced middle-level experts through a semi-structured interview by the researcher is presented and interpreted. In this regard, the section is organized in the sense that it can best answer the research questions framed for the study.

When it comes to the existence of turnover, almost all of the 39 managers admitted that turnover is prevalent at Bole Lemi industrial park. The underlying reason for the observed high employee‟ turnover in the park is mainly due to low salary and benefits packages as well as misunderstandings with foreign employers, which are common grievances among workers.

One of the key informants has been in charge of Bole Lemi Industrial Park employees for the last three years. According to the respondent, the number of sheds in the park is 22, of which 20 are leased to investors. The two were recently released by companies that have built their sheds. Because of this, two sheds are free for the time being. Others are fully occupied by the incumbent.

The industrial park was established by law and put into operation; it created job opportunities for 20767 Addis Ababa residents and generated 107,182,414.34 dollars for Ethiopia by supplying the products produced by the industrial park to the foreign market. Staffing issues in the park are often affected by layoffs, a lack of requisite expertise and skills, and insufficient staffing. Low salaries for a company’s operational workers, as well as misunderstandings with foreign employers, are common grievances among workers. This will affect both export and foreign direct investment goals being achieved.

The industrial park is located in a convenient location for investors, so there are not many complaints about the port, the airport, and other parking facilities. He said the infrastructure is being completed, but it is not enough. For example, workers' housing, roads, and other supporting infrastructure are not fully developed. Another problem is the occasional misunderstanding among workers regarding the political situation in the country. This problem has hampered the industrial park's ability to function at all. For example, the lack of skilled and skilled labor is an ultimate barrier to investors, according to other key sources, including BLIP, IPDC, MOI OSS Expert, and the Ethiopian Investment Commission. The companies who come to invest in the park first inform the park that they need to work in different manufacturing fields, which we refer to as calling them. Some people have applied, yet they are still unable to work in the park. There is no machining knowledge even among those with BA/BSC degrees from numerous national universities, including engineering graduates. Other industrial park sources claim that technology spillover is ineffective. It is necessary to produce trained TVET

The industrial park was built near the Bole International Airport at the expense of a large amount of money; it was intended to attract investors with international experience and to avoid problems in the transportation of products to the international market. However, the local and international political instability and economic disorder have made it impossible to supply raw materials for the industrial park that was intended to be produced locally, the constant increase in the price of raw materials in the world, the continuous increase in prices, and the creation of price increases, the procedures in the government office being prolonged and inefficient, the investment laws Implementation gap, lack of foreign currency in Ethiopia,

Employees and higher education to close the gap between work supply and demand in the park. He also told me that IPDC officials regularly monitor the entire infrastructure, but that precautions are taken to ensure that it is not completed. The high turnover of manpower affected by the size and capacity of companies has a significant effect on performance. Infrastructure, such as power outages and telephone network inaccessibility, can also be a problem in production. As a result, the country could not achieve the required number of exports and the expected amount of foreign exchange.

In an interview with a prominent expert, he revealed that one of the main issues is a lack of workers' services, such as rent, to which workers from all over the country are traveling. Employing particularly operational workers; turnover in the park is so high that companies must recruit and train new employees for at least two months. This is too expensive for the parks and has a significant impact on the industrial park's performance. Thus, it can be understated that this problem will have an impact on efficient and sustainable workforce exploitation as well as on the number of goods produced in the park by companies so that it does not earn a significant amount of hard currency from park products exported.

# CHAPTER FIVE

# SUMMARY OF FINDINGS, CONCLUSION, and RECOMMENDATION

## SUMMARY OF THE FINDINGS OF THE STUDY

In this study, an attempt was made to look into the prospects, contributions/benefits, challenges, and factors of industrial parks in Ethiopia. The findings were summarized as follows:

In the Bole Lemi Industrial Park study, the researchers targeted the general objective of this study was; to assess the prospects and challenges of industrial park development with specific reference to, Bole Lemi Industry Park. The study investigated the relationship that exists between independent variables (Prospects of Industry Park, Benefits of Industry Park, Challenges of access to the market in Industry Park, Government policy challenges to Industry Park, Technological challenges in Industry Park, factors of job creation in the industrial park and factors of Infrastructure in) BLIP. To achieve the objective of the study, data was collected from the BLIP branch office, IPDC, MOI, and from seven companies' delegated persons, managers, and employees in the park. The study used self-administered questionnaires to survey the target population of 20,767 administrative staff and employees of IP companies with 384 of the 392 sample size respondents correctly responding and returning. The findings are also analyzed using SPSS 2023 statistical package for social science. Descriptive statistics, regression analysis, and a qualitative approach were used for analysis.

The demographic profile of the study is a very critical input for the researcher in understanding the aim of the study and responding to the questionnaire. The descriptive statistical results show that 72.4% of the respondents are from the age group of 18 to 30, 20.8% of the respondents are from the age group of 31 to 40, 5.5% of respondents are from the age group of 41 to 50 and 1.3% are above the age group of 51. According to the questionnaire response, 174 (45.3%) of the respondents are below their grade 12 completed, 82 (21.4%) are Diploma, 60 (15.6%) are Certificate level, 49(12.8) are first degree and 19(4.9) second degree. The work experience in the IPs: 65.6% said they hadn’t a job, 22.9% they worked in a private organization, 9.6% were self-employed and 1.8% respondents were a worker in governmental Organizations.

From the descriptive statistics, the result shows that most of the employees agreed with Factors affecting job creation with a cumulative mean value of 4.354 and 0.504 standard deviation, Challenges of access to the market with a cumulative mean value of 4.253 and 0.562 standard deviations, Benefit of Industry Park with a cumulative mean value of 4.130 and 0.541 standard deviations, created a wide range of jobs the most important factors determining the prospect of the park respectively.

As the objective of assessing prospects of industrial park development in BL was assessed the result shows that most of the respondents agreed with IP; creation of job opportunities for citizens cumulative mean value of 4.59 and .528 Std. Deviation transfers knowledge, skill & technology for local employees with cumulative mean values of 4.273 and .830 Std. Deviation, Potential to increase the export cumulative mean value of mean 3.84 and 1.120 Std. Deviation. The prospect of the park results revealed that the set goals and objectives in terms of employment to be generated, transfer of knowledge, skill and technology and exports to be made were considered to be unachievable respectively by 60.9%, 47.4% and 35.4% of the respondents. all dependent variables cumulative results were mean 3.63 and 0.971 std. deviation positive result.

The personal correlation analysis of the findings indicates that there is a significant and positive relationship between all six independent variables. Significant confidence level at 95% (Sign=0.00). The regression analysis of the finding indicates that the Benefits of Industry Park, Challenges of market access, challenges of Government policy, the challenge of Technology, Factors affecting job creation, and Factors affecting Infrastructure have a positive effect on park performance at the Bole Lemi industrial park and are also statically significant.

As well as the objective of examining the benefit of Industry Park for the local economies responded by the respondents was measured by descriptive statics. It is understood that the creation of jobs is one of the contributions of industrial development currently permanent employees are more than 20767, (Female=18,561, Male 2,206), and 20,419 are local employees the remaining 348 are foreign employees. In addition 1000 to 2500 additional jobs are available as temporary or daily labor arrangements at different times. it exported its products to a foreign market and generated around **107,182,414.34** USD hard–currency.

The model summary of multiple regression revealed that six factors in the study accounted for 83.2 percent of the variation in the park's prospect. Other factors not included in the study model account for the remaining 16.8 percent. The ANOVA table also demonstrated that even at the 1% significant level, the created model is statistically significant. Benefits have a substantial impact on park prospects, with a beta value of (.798), followed by Factors affecting job creation (-0.006), Challenges of Government policy (-0.018), Factors affecting Infrastructure (-0.096), Challenges of market access (-0.165) and Challenge of Technology (-1.178) prospect. According to the study's findings, the coefficient table shows that benefits have a positive and significant impact on park prospects, whereas Factors affecting job creation, Challenges of Government policy, Factors affecting Infrastructure, Challenges of access to the market, and Challenges of Technology have a negative and insignificant impact on park performance.

Finally, in some ways, managers' perceptions of the determinants of park prospects are similar to the findings of the Likert scale questionnaires. They agreed with Staffing issues in the park are often affected by layoffs, lack of requisite expertise and skills, and insufficient staffing. Low salaries, as well as misunderstandings with foreign employers, are common grievances among workers. This will affect both export and foreign direct investment results. Because most of the people who seek to work in the park are new, the park and the companies are forced to look for new workers and provide them with training. But they told me the research infrastructure is being closely monitored by the authorities in the IPDC, but efforts are being made to ensure that it is not fully completed.

## CONCLUSION

The objective of this study is to assess the prospects and challenges of industrial park development with specific reference to, Bole Lemi Industry Park. Independent variables were, Benefit of the industry park, Challenges of access to the market in the industry park, challenges of government policy industry park, challenges of technology in IP, Factors affecting job creation, and Factors affecting Infrastructure in IP are measured using the dimensions. The prospects of the park were used as a dependent variable. The conceptual framework could be developed to measure independent variables of park prospects. The data was presented and analyzed by using descriptive statistics, correlation analysis, and regression analysis through SPSS 23 statistical software to examine the factors affecting park prospects in Bole Lemi, which is measured by employment generation, export generation capacity, and technology transfer/FDI attraction. Before performing the tests for multicollinearity, heteroskedasticity, autocorrelation, and normality were performed.

The first objective of the study is to assess Prospects of Industry Parks Development In BLIP.as regression result show, the benefit Of Ip was significant in determining the prospect of the Bole Lemi industrial park, and other independent variables were negative and significant in determining the prospect of the Bole Lemi industrial park. This implies that the park considers these variables to be very important when deciding how to improve its performance.

The second objective is to examine the benefits of industrial parks for the local economy regarding this external benefit of BLIP improve the confidence of potential investors, Attract and retain talented people, Position and differentiate the brand, Attract new customers, Build customer loyalty, Improve corporate image, and improve the relationship with the environment. Internal benefits of IP are Motivating the employees, Improving the work climate, resulting in the improvement of productivity and quality in service supply, Improving internal communication, Getting loyalty and staff commitment, and Creating a culture in the organization, through the promotion of shared values in the company.

The third objective is to identify the challenges of industrial park development In Ethiopia, this objective can be interpreted as Industrial parks are controversial as they are popular. At their best, they align infrastructure provision and agglomeration economics to join industrial growth. At their worst, they fail to generate the required skill and investment. Challenges to access to the market, government policy challenges to Industry, and Technological challenges in industrial park developments in BL. It specifically covers the main challenges faced during the operational performance of Bole Lemi public industrial parks.

From the four specific objectives, the assessed factors that affect the employment creation potential of Bole Lemi Industry Park found that the effect of the very high turnover within the park, the shortage of an adequately skilled workforce, the numerous distances between the industrial parks and the port and the absence of raw materials for production in the proximity of the park, and one-stop services are not fully functional to offer all the promised services, economic instability, Lack of national peace and stability, suspension from (AGOA) market, the war in Ethiopia, the war in Ukraine and Rusiya are highly significant and most determining factors when we compare with others. As a result of these factors mentioned in the study and other several factors, the industrial park was not performing based on the perception of the respondents.

The prospect of the park results revealed that the set goals and objectives in terms of attracting FDI/technology, employment to be generated and exports to be made were considered to be unachievable respectively by 60.9%, 47.4%, and 35.4% of the respondents.

## RECOMMENDATIONS

The following recommendations have been forwarded to the park developers and management of the industrial park based on the above summary of the study's findings and conclusions.

Ethiopia Ministry of Industry, Industry Park Development Commotion, and Bole Lemi Industry park Branch offices should sustain their commitment to industrial park development as it in generating foreign currency, creates jobs, and realizes technological transfer. Its policies and laws have so far been effective as they attracted many foreign investors across the world. But it should also continue upgrading its policies and laws along with international business competition. Based on the finding the researcher recommends the revision of labor law as it posed a problem in the industrial working environment.

the Ethiopian government works to solve the problem of local economic instability; thy works to fix the political, economic, and social environment; If it is possible to solve the unemployment problem of the citizens by quickly solving their problems by having extensive discussions, consultations, and negotiations with the investors who have entered the industrial park and started work.

To avoid significant labor turnover, it is proposed that industrial units provide salaries that take into consideration the present conditions of abandonment and salaries provided by other similar industries. Providing other facilities related to housing and recreational services.

The factories in Bole Limi Industrial Park and the factories in the industrial parks across the country should identify the raw material resources they need and create a link to produce and supply the raw materials on a large scale, the vast land left undeveloped in Ethiopia can be developed. At the same proses should be producing raw material inputs on a large scale and provide them to the factories, the factories can use them for other development, avoiding the high foreign currency that the factories used to spend to import the raw materials.

The administration of employees at the industry parks' respective companies should be under the labor and should formally be documented in policy and procedures manuals. This will help to maintain and attract well-qualified, experienced, and competent employees from the labor market proclamation of the country's origin. In addition to this improved salary scale and benefits, packages must be well established with clear criteria for entry and advancement, and the system, and also could minimize turnover of the labor force.

IP has contributed a lot in the areas of employment opportunity creation, tax generation, capital investment, and export and import substitution areas, thus by taking the manufacturing IP should perform better for the national economic and social developments Even if a shortage of hard currency is the country‘s major problem that affects the overall manufacturing enterprises at the national level. There should be a relaxed approach in providing hard currency to companies that started operations at the industrial parks because it enables the government to maximize hard currency via export from the parks.

Companies should make organizational structural arrangements since high proportions of distinguished professional positions in the factory are possessed by foreign workers thus depriving local employment to acquire expertise and high administrative posts. Furthermore, the suppliers of raw materials to the industry zone should manage to supply on time with good quality which I believe will increase the production scale and quality of output. Last but not least, the challenges in the process of getting a visa, work permit, and temporary residence Id for foreign employees should be minimized by appointing experienced government officers for the positions.

The location of a park plays a crucial role in the success of the IPD. Industrial parks need to be easily accessible to infrastructure such as ports. The size of the plot for an industrial park and its cost must also be following business and market needs and expectations. Besides, labor availability, a large supply of human resources at a reasonable cost, and facilities for quality of life and personal/cultural services should also be considered in selecting the park's location.

The government of Ethiopia should resolve the breach of peace within the country quickly through a peaceful alternative and to soften the confrontation with the United States of America through dialogue, the tax-free AGOA market opportunity that the United States has given to African countries, and it should do global diplomatic work to bring Ethiopia back into the AGOA market. Also, when it is confirmed that we are benefiting from the free market, industrial parks in Ethiopia, including Bole Lemi, should work hard to double their export capacity and earn more foreign exchange.

## 5.4. For Further Researchers

This study paper does some groundwork to explore the prospect and challenges of Bole Lemi industrial park development by using the benefit of industry park, challenges of accese to market, challenges of government policies, challenges of technology, factors that affecting job opportunity and factorsa that affecting infresturactur of Bole Lemi industrial park. This study focuses only on these variables and does not indicate exact factors. Future researchers in this field will research the same topic, including variables that were not included in this study. And also increasing the sample size area by including other parks in the study is advantageous to identify other factors that determine park prospect.

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Appendix **A:**

**St. Mary’s University School of Graduate Studies MA in Development Economics**

**Research Questionnaires**

Dear Respondents:

I am a Masters's student from St. Marry University College of Development Economics. The main objective of this study is to assess the Prospects and Challenges of Bole Lemi Industrial Park development and your participation and cooperation are very relevant to the success of this study. Please provide answers to all questions with honesty and integrity. Rest assured that all information you would fill in herein shall be kept confidential and no need for your name.

If you have any questions or comments about this survey, you may contact me anytime with the below-preferred means of communication.

Thank you for your support and cooperation

you are faithfully

Abraham Mengistu

Phone no. 09 11 35 98 52

Email; [abrehammegistu19@gmail.com](mailto:abrehammegistu19@gmail.com)

**General Direction:**

* No need of writing your name on any page of the questionnaire
* Respond to all closed-ended questions by putting”√” marks in the box

**Part I: Respondent’s Background Information**

1. Gender Male Female

2. What is your age group? A, 18 -30 B, 31-40 C, 41-50 D, >50

3. Educational Background; A, Grade 8-12 B, Certificate C, Diploma D, Degree E, MA/MSC/MBA F, PHD

4. What was your previous job? A. Unemployed B, Government office C. Private Organization D. Self-employment

**Part II: - The prospects industrial park's**

**Note**: After reading the following sections of the Industrial Park's future prospects and its benefits, challenges, and factors affecting the park, evaluate the industrial park in terms of its economic potential for our country and check; put a tick mark (√) under the choices below.

5 = strongly agree, 4 = Agree, 3 = Difficult to decide, 2 = Disagree 1 = strongly disagree.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | 1. **Prospects of Industry Park** | Strongly agree 5 | Agree 4 | undecided 3 | Disagree 2 | Strongly Disagree 1 |
| 1 | BL industry parks creation of job opportunities for citizens. |  |  |  |  |  |
| 2 | BL industry parks transfer of knowledge, skill and technology. |  |  |  |  |  |
| 3 | The industry parks potential to increase export. |  |  |  |  |  |
| 4 | The industrial park has a better supply of inputs. |  |  |  |  |  |
| 5 | There is sufficient Availability of human resource necessary for an industrial. |  |  |  |  |  |
| 6 | To Increase Supply of goods and services to the country, |  |  |  |  |  |
| 7 | To Increase Import Substitution and Export Promotion |  |  |  |  |  |
|  | 1. **Benefits of Industry Park** |  |  |  |  |  |
| 1 | It has created a wide range of jobs |  |  |  |  |  |
| 2 | It is a transition to new technology |  |  |  |  |  |
| 3 | It has become a convenient place for investors |  |  |  |  |  |
| 4 | It created an opportunity for local updates |  |  |  |  |  |
| **No** | **A, Challenges of in IP** |  |  |  |  |  |
|  | **Challenges of access to market in Industry Park** |  |  |  |  |  |
| 1 | Limitation of raw materials in the country, |  |  |  |  |  |
| 2 | Increasing raw material cost by day to day |  |  |  |  |  |
| 3 | the problem of constant inflation |  |  |  |  |  |
| 4 | Unable to compete with large similar companies |  |  |  |  |  |
|  | **Government policy challenges** to **Industry Park** |  |  |  |  |  |
| 1 | Limitation of legislation to regulate investment coordination |  |  |  |  |  |
| 2 | Limitation of immediate investment enforcement law |  |  |  |  |  |
| 3 | The bureaucracy on investment licensing |  |  |  |  |  |
|  | **Technological challenges in Industry Park** |  |  |  |  |  |
| 1 | Lack of appropriate machinery and equipment, |  |  |  |  |  |
| 2 | Limited capacity of government regulatory body to control new technologies |  |  |  |  |  |
| 3 | Lack of funding for new technology |  |  |  |  |  |
|  | **Factors that affects Industry Park** |  |  |  |  |  |
|  | Obstacles to job creation in the industrial park |  |  |  |  |  |
| 1 | Global and national economic instability |  |  |  |  |  |
| 2 | Lack of national peace and stability |  |  |  |  |  |
| 3 | Emergency war in northern Ethiopia |  |  |  |  |  |
| 4 | US Tax Free Trade, African Growth and Opportunity Act (AGOA) Suspentions |  |  |  |  |  |
|  | **Infrastructure** in IP |  |  |  |  |  |
| 1 | Shortage of adequate electricity service in the area, |  |  |  |  |  |
| 2 | Poor or interrupted Internet service |  |  |  |  |  |
| 3 | Insufficient and interrupted water supply, |  |  |  |  |  |
| 4 | Lack of sufficient and quick transportation service, |  |  |  |  |  |
| 5 | Lack of appropriate dry waste and sewerage system |  |  |  |  |  |

If you have any questions, please feel free to contact us ………………………………………………………

**Appendixes C**

**Interview Questions to MOI, IPDC, BLIP, and Managers**

1. What are the prospects of Bole Lemi Industrial Park to grow the country's economy?
2. What are the challenges to the day-to-day operation of the industrial park?
3. What is Bole Lemi Industrial Park contributing to the country's economy development?
4. What are the factors that affect the ability of companies in Bole Lemi Industrial Park to create jobs?
5. What is Bole Lemi Industrial Park's potential for job creation?

Thank you!