Do Cluster Based Industrial Park Catalyse Developmental Spillovers? Evidence from Ethiopia's experience

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January 15, 2022

Submitted to University of Milan, Department of Social and Political Sciences, In partial fulfillment of the requirements for the degree of Doctor of Philosophy in Economic Sociology and Labour Studies

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Abstract

Cluster based industrialization programme where specialized resident firms share specific location known for its contribution increasing productivity through integrated services address organizational red tape. This programme is well known in most industrial economies of which industrial district is of the successful modalities in Europe including (Italy, Germany, Britain) and other OECD countries. Based on such successful experiences of industrial economies in the nineteenth century, with specialized adjustments including ad hoc policies; cluster-based industrialization programme or special economic zones implemented in most South-east Asian countries starting from 21st century. This thesis aims to investigate developmental impact of industrial park programme, barriers coexisting and how it affects outcomes of the initiative in low-income country, using Ethiopia as a case study. The study offers empirical findings based on mixed methods employed (comparative case study & survey), utilized both primary and secondary data sources including; interviews, questionnaire, observation and secondary sources (document analysis). Over the past five or six decades there is an increasing importance of industrial park development as strategic instrument for local economic development especially in the context of many developing countries and massive proliferation experienced across the world. Industrial park is considered as a policy instrument alleviate structural constraints pertaining to institutional deficiencies, social barriers, political problems, poor economic and technological environment and other binding constraints of industrialization sector. Being a development strategy to foster local economic development it often implemented by low income countries or those with low comparative advantage with the presumption they are precursors of technology and innovation center. In the condition of well management and effective implementation, economic zones in general and industrial park in particular would serve as instrument spur local industrialization agenda, catalyse developmental spillovers on the local economy. Yet virtually little is known about development trajectory of Ethiopia's industrial park development and its practical impact in the context of latecomer to the initiative. This paper aims to address this gap in the literature based on compelling data from different dimensions including IP program issues, IP characteristics, contextual or mediating factors at both national and regional/local level. Ethiopia aspires to be manufacturing hub of Africa and desires to attract large number of FDI. Although it is daunting to put clear picture of industrial park impact in the long run because the initiative is more of process. The present study stipulated that the program created significant number of direct employments in the local labour market which is amongst the major of its many connections with local economic development, it falls short of meeting desired goals. The paper finds that the program has shown positive take-off contributed more in creating significant number of jobs and nothing more could be said about their impact on the country's industrialization agenda provided that the program is in nascent stage of development. Apparently, as in the case of other Sub-Saharan African countries (SSA) engagement of resident firms in country's industrial parks delimited their main tasks to simple assembly/processing operations given the economic zones tend to adopt more of traditional export processing zones. In such modality of operation, the likelihood of skill and technology transfer seldom happen but mostly non-existent. The initiative failed to form integration with local economy as it has been pronounced in the policy framework. Along with enclave model Ethiopia's industrial park program mainly inspired by preferential trade regimes like AGOA and EBA, which makes the initiative myopic and hard to ensure sustainability. This makes the initiative less reliable due to the fact that success factors of industrial park subjected to capacity to invest and capitalize comparative advantage of local economy in time as well as in space than fancy policy or mere physical

presence of parks. The finding revealed that similar to other zones in most developing countries, Ethiopia perhaps presents a serious practical challenge to both public IPs and private zone alike. This warranty strategic intervention in order to resolve binding constraints for local manufacturing sectors. Indicative of loss of focus in the private industrial park should be well incorporated in the body of documents designed for supervision and regulatory system in the upcoming private zones in Ethiopia. The results regarding labour conditions including; wage, standards, rights of workers, health & safety, unionization, hours worked showed that there is variation across industrial park as well as sectors of production. In Ethiopia, unlike most zone developing countries, the same labour law proclamation elsewhere in the national economy apply to industrial parks. Although the laws to control non-conducive working conditions and legal breaches maintained, authorities turn blind eyes mainly in fear of losing investors by improving labour standards. The labour composition is dominated by young, less educated, unskilled female workers at low pay of up to 650 ETB/month which is less than 1US$ per day. This situation exacerbated by non-existing trade unions, lack of resources and staff for the inspectorate department and government's lack of will in reinforcing the labour law. To put further on this, poor working conditions in the industrial parks attributed to incapable and failures in domestic labour institutions. However, major limitation of this study is it lacks detail synthesis on industrial parks labour conditions and same economic activities in the outside environment in comparative perspective without which it is difficult to make generalization. The study concludes that although there exist progressions along identified performance indicators in Ethiopia's industrial parks, the prospect largely depend on improvement of; policy environment, shortfalls in the areas of implementation, shift from myopic to long term objectives and strong political commitment as experienced by most successful countries in programme operation.

Key words . Industrial Parks . Place based policy . Local economy . Low income country . Knowledge . Backward linkages . Africa

1 Chapter One

1.1 General Introduction

1.2 Introduction

Different countries across the world spends huge amount of capital to ensure development endevours by way of productivity improvement and employment generation through agglomeration economies, of which industrial park development is major modality. Industrial park is a worldwide phenomenon and it is common policy instrument to achieve industrialization in the context of both developed and emerging economies of the world. This development policy instrument is proliferated across the world and mainly focus on export led economic growth program. The concept of "clustering" traced back to noble work of classical scholar Alfred Marshal who demonstrated the role actors at different level for effective industrialization program. This idea further popularized by Becattini (1989), (Porter, 1990) who postulated the merits of industrial agglomeration to just mention few big names. Cluster of firms, industrial districts, network of companies are all manifestation of supra-firm organizations which according to Marshall (1920) emerged during English industrial revolution.

The theory of industrial park is seductive and interest in designated spatial growth following resurgence came from diverse disciplines. To mention distinguished frameworks, the neoclassical school or the orthodox views the interest co-location issues as policy arisen from protectionist trade approach supported large business society which further causes institutional imbalance (Kreuger, 1974 as cited in (Aggarwal, 2017). In light of business management literature, the programme framed as bridging factor to establish relationship between actors at different levels including firms, customers and its suppliers (Porter, 1990). The other discipline at the core of clustering of firms is geography and spatial planning. Most of the analysis along perspective aligned to this discipline indicate clusterization programme as instrument to resurge public interest in local economic development (Castells, 2014). Looking deep inside in wide range of literature, accepted notion of tradition starting from Porter's definition of cluster is that geography is vital, and firms equally benefit from the presence of external economies and opportunities. Contrast to this generalized assumption, recent studies contested this belief. Some economic geographers argue that spatial proximity per se is not enough to establish learning, unless cognitive, organizational, social, institutional proximity are there to realize knowledge transfer and innovation to occur (Capello and Faggian, 2005). When it comes to sociological perspectives vantage point of view, the issue of industrial clusterization program discussed in light of relationship between individuals environment and 'embedded' networks of interaction and subsequent influences (Granovetter, 1985) and the argument goes beyond boundaries of industry or resident firm. Although the concept of industrial cluster of firms and the models employed vary significantly across countries, they share commonalities including reducing transaction cost of; production, overcoming distance, spatial communications to ensure collective efficiency. However, apparently the structure or model of co-localization program varies because of varying degree of embedded social networks between different actors or extent to which collective action prevails between the units.

Cluster based industrialization program which in this regard comprehend all related models, describe some intuitive ideas. First, spatial proximity between firms assumed to be major source of unique advantage for tenants. Second, concentration of firms in a designated geographical area is a major means of operating collective actions between the units. The aforementioned features and designated territory-oriented policy for industrial development makes clusterization or co-localization of firms special economic zone and this subsequently pave way for the residents to benefit from various advantages. The other justification that makes cluster of firms special territory is engagement of different actors from both public and private entities (Mathews, 2012). Accordingly, place-based policy intervention including special economic zones or industrial park development can be a category of policy driven cluster of firms and can be understood in light of same perspective.

The implicit idea behind industrial park development represents strong spatial component where different layers of governments (national and local) play lions share and discharge the responsibility in providing public goods, particularly infrastructure, for industrial firms to be competitive; co-located firms generate agglomeration economies; and so, the public goods should be concentrated on areas of colocation. If the firms are not there yet, the provision of infrastructure will somehow induce them to be. If the area is demarcated, and the general economic environment is difficult, exemptions can be made that will further entice firms and create competitiveness (in this case making the parks what is most generally termed "Special Economic Zones", or SEZs) (Saleman and Jordan, 2014).

Industrial parks, customarily defined as 'special economic zones', are characterized as a clustering of industries designed to meet compatible demands of different organizations within one location. According to Noufal and Ramachandran (2016), industrial parks represent the ultimate integration of economic, ecological, and social dimensions of sustainable industrial development. As self-designing systems, they exhibit immense possibility and if they are seeded with sufficient diversity, they can design solutions for their problems. Generally, by principle it is designed with the intention to allocate specialized infrastructure in selected areas with the aim of reducing costs of building infrastructure and social, ecological impacts caused by industrial production. According to UNIDO (1997), the concept refers to "A tract of land developed and subdivided into plots according to a comprehensive plan with or without built-up (advance) factories, sometimes with common facilities and sometimes without them, for the use of a group of industrialists". In this particular comprehensive definition two points need amplification (Turk, 2006). The comprehensive plan refers not only to the physical planning of the park, but also to its immediate social and economic environment, and the role assigned to it in the regional or urban development plan. This definition used to scrutinize the current study for two major reasons. First, this definition by UNIDO is the common and widely used in this research frontier since it represents the program in its most general and comprehensive sense i.e., intervention in demarcated spatial fulfilling standardized infrastructures for a group of firms operate under special regulatory frameworks. Second, since the term" industrial parks" represents wide range of concepts or used interchangeably with other concepts including free trade zones, special economic zones, free trade zones etc. Zeng (2016) it is more comprehensive one to incorporate industrial parks with different characteristics but operate under a similar special development policy in the context of Ethiopia. In the case of Ethiopia, according to FDRE (2015) industrial parks proclamation No. 886/2015 the term industrial park program comprhends zones of different size, types and models and grant them equal rights, duties

and incentive packages.

When it comes to the rationale behind establishment of industrial parks, it has become increasingly essential instrument of social and economic policy in large number of emerging economy countries. There are wide range of objectives associated with this policy direction of which generating foreign exchange, stimulating exports, create employment opportunities for the local work force and catalyse local economic development. Moreover, industrial park development is with the objective of luring foreign direct investment assorted with knowledge and technology transfer to domestic economy through linkage effects. In cluster effect theory complementary resources shared and inter-organizational link of firms in the parks is beneficial of managing risks and uncertainties. According to Kalnins and Chung (2004) there is a win-win discourse among players in the policy driven industrial parks because firms co-locate with other with better potential to spill over and they join to access complementary resources due to resource dependence. Myles S and Flyer (2000), also portrayed as industrial park is believed to help grow of cooperation at the level of large territorial units and among individual production activities and other functional units of urban structures. It also contributes to industrialization more broadly, influence revitalization of business environment, transfer of modern technologies, creation of working places, competitiveness of producers, and research & innovation.

Looking at the experiences of different special economic zone developer countries, there exist variation in terms of attaching roles/goals to such establishments where in some it is driven by inward economic development policy whilst in others by outward economic development policy. In some countries where foreign direct investment is low, host countries supposed to provide huge incentives compared neighbouring countries to locate firms. Summary of rationales from distinguished literatures of this research frontier (Johansson and Nilsson, 1997; Warr, 1990; Farole and Akinci, 2011; FIAS, 2008) indicated the following objectives of special economic zones, and it included; job creation, export promotion to address shortage foreign exchange earnings, FDI attraction, to revitalize wider economic reform, and ensure industrialization agenda of the host countries.

Along the various perspectives of special economic zones, there are state of debates in the literature due to mixed outcome from industrial park development. Experiences of countries where industrial park development used as a policy tool for industrialization showed both success and failure stories / mixed evidence of records. Evidence presented by Warr (1990) portrayed that, the program's effect is less significant compared to establishment cost incurred. Moreover, in terms of backward linkages it demonstrates little importance due to low production capability of local firms, presentation of low commitment and quality standards required by the tenants. On the other hand, emperical researches by (Madani, 1999; Johansson and Nilsson, 1997; Farole, 2011; FIAS, 2008; World.Bank, 2011) showed success stories of industrial park development as a policy tool for industrialization especially in terms of job creation, export contribution though the positive outcomes found marginal. Willmore (1995); Balasubramanyam (1988) however, are examples of state of debate declaring of industrial park development could play catalytic roles as a way to announce and prepare for liberalization under certain circumstances, provided prerequisites have been fulfilled.

Although the goals behind establishment of industrial parks vary across different host countries, main features describe successful and unsuccessful special economic zones pertain to common objectives illustrated in the preceding paragraphs. According to Johansson and Nilsson (1997) while the program theoretically ambitioned to form relationship between global and local producers fail-

ure to ensure such integration between these actors of industrial development programme is one of the main challenges. To put more on this, host countries usually employ special policy and various incentive packages in spatial based industrial development to attract foreign investors as a way to maintain national industrial development programme where by local producers not benefit from similar supporting systems. Integration of local and global producers demands strong absorptive capacity of local producers whilst the policy only stands in favour global producers in such a way penalize domestic firms and this can be described as absence of equal footing policy. According to (Zeng, 2016, 2015; Farole, 2011) different reasons have been stipulated in describing reasons for the performance variation in cross country and regional evaluation. Some correlate major performance obstacles and impediments of successful operation to investment climate particularly quality of infrastructure into and inside the parks, institutional/administrative reasons, location and timing. In fact, evaluation of such guiding policy for industrial development and its implementation should be in line with country's special economic zone goals and objectives.

When it comes to specific context of African industrial zones, their implementation failure associated to environment in which they operate Farole (2011) increased regional competition on same type activities, low competitiveness of local firms, poor materialization of planned activities and low experience in meticulously managing zones (Farole, 2010; Engman et al., 2007; Zeng, 2015, 2016). Some studies describe as it is mystery to successfully achieve anticipated goals due to basic obstacles pertaining to; low culture of entrepreneurism, insufficient volume of tenants that allows to materialize intra-park synergies and lack of common vision among major stakeholders (Kharabsheh, R. and Magableh, I, K. and Arabiyat, T, S., 2011). Empirical study by Rodriguez-Pose and Hardy (2014) advanced as combination of factors makes industrial park development less suitable approach to engender anticipated wide range local economic development. Major impediments associated to fragile domestic business, poor socio-economic conditions, institutional tenuousness and absence of world class universities that allows synchronization of zones to local business environment. The study also revealed that industrial park development program in emerging economy provide little competitive advantage and tenants merits less likely transcend generous incentive packages and cheap labour. If industrial parks competition reduced to the level of such auxiliary support mechanisms only, it intensifies regional competition on same standards which is of major obstacle by itself and ultimately makes the program less worth for fostering development aspiration by the host countries.

To put more on this, major obstacles that most African economic zones face in materializing industrial park development is inability to attract sufficient volume of FDI from very inception stage, absence of domestic enterprises as tenant in the parks from the onset, aggressive expansionary in park establishment and sectorial wise as well (Farole, 2010). Based on a life-cycle perspective by (Omar and Stoever, 2008), expected trend in industrial park development life cycle is a shift from one step to the other in a period of five to ten years. According to Farole (2010) Sub-Saharan countries industrial parks failed to graduate to expected level of maturity height or literally the trajectory experienced is failure to reach second life cycle due to limited development or stagnation. Generally, there is consensus across reviewed literature advancing industrial parks have become successful in Asia and Latin American countries. On the other hand, the benefits of industrial park development program on strengthening country's endeavours of achieving industrialization goal found less significant. This variation poses questions how successful countries realize or why others fail to realize the benefits of IPD? It requires understanding how countries "set realistic

goals and design feasible pathways" to effectively achieve its goal.

According to Saleman and Jordan (2014), there are some cases where the practice has approached the theory of industrial parks. The parks in East Asia most commonly cited as an example where the practice approach the theory. However, the actual cost-benefit of such parks is still facing critical questions with somehow weak counterfactual. It has been indicated as the practice is far enough from the theory for subtle arguments to be moot, especially in the context of developing countries. As part of the debate in the literature Warr (1990); Madani (1999); Aggarwal (2017); Johansson and Nilsson (1997, to mention major) in which the first two authors were against the programme whilst the remaining two described as there is nothing that makes the programme second or third option. Even though lots of efforts been in place, the synergy between incentives for firms which seek access to support and entrepreneurial context on one hand and externalities through cooperation under the umbrella of cluster effect remained puzzle. Today, over twenty African countries (see Farole, 2011), have played host to various policy driven industrial clusters but for reasons that echo much of the situation in the special economic zones in general and industrial parks in particular yielding largely uninspiring results, an assessment of the Ethiopia's industrial park is highly relevant.

Evidences in the literature have established that the role played by such parks in bringing local or regional developments. It is believed that the parks provided a way to balance endogenous development and inward investment through collaboration between domestic and internationally owned firms by embedding it in regional economies using clusterization program. The other presumption in the development and implementation of industrial parks is diffusion or knowledge transmission between resident firms, innovation networks, value chain, market linkage in a best-case scenario and ultimately local spin-offs could be created. This summarized overview indicates such parks are in the interest of policy makers, economic sociologists, economists and economic geographers. To that extent, the issue remained in the center of debate for various reasons.

The arrangement of firms based on close distance in industrial parks plus government driven deliberate policy to encourage cooperation in innovation evidenced with remarkable positive results in some researches Van Dierdonck, R. and Debackere, K. and Rappa, M, A. (1991) whilst there are strong arguments announcing worries pertaining to limitation in transmission of industrial parks concept in developing countries. Literature on this side depicted as there are limitations that apply to using industrial park as a policy instrument to foster industrial development (Zhang, 2016). Although findings in the prior studies majorly focused on the success dimension of industrial park, there exists mixed evidences in the literature which further puts the issue in state of debate. Despite proliferation of this initiative across the world, the controversy of the phenomenon in terms of generating additional effect remained unclear due to little evidence on the issue.

Moreover, prior studies documented incredible role of cluster including spill overs such as knowledge diffusion among firms in the cluster (Audretsch, D. B. and Feldman, M, P., 1996; Huang, K, F. and Yu C, M, J. and Seetoo, D. H., 2012). However, imbalance in diffusion of information and increasing competition among units in the parks may impede such positive roles of policy intervention due risks related to knowledge transmission. In the literature little evidence has been found on how firms of different size locating in policy driven industrial parks enjoy the cluster effect and this study will have importance in uncovering this and other pertaining issues. The research questions the positive impacts expected and the co-existing negative impacts in the implementation of industrial park policy.

Even though industrial park development will have immense role in industrial transformation and development of the country, the challenges of locating in industrial park expected to be intense for the reason the concept of industrial park by itself, effective & feasible policies and institutional arrangements are new to Ethiopia's regulatory processes. Due to this, it is imperative to assess the different success factors and co-existing with challenges, that impede well-functioning of industrial parks warranty research. Hence, there is a need to assess the theoretical foundation to explain implementation of this policy and therefore, the current study targeted to address the conceptual realm of industrial park development and its operation in Ethiopia.

1.2.1 Problem discussion & significance of the study

Industrial park is a place based policy intervention that become increasingly regarded as instrument to ensure local industrialization, generate employment and economic growth and serve as a antecedent of technology and innovation where it is effectively implemented. In the development and set-up of industrial parks - resident firms (usually foreign experienced firms) benefits from variety of intervention modalities including tax exemptions, regulatory exemptions and provision of global standard infrastructure incentives. However, the program remains controversial as they're popular. Academics have been concerned with territorial production complexes such as clusters for decades. Libraries of research on variously termed agglomerations, industrial districts, regional innovation systems, learning regions and clusters, amongst others, emerged as academics sought to explain how regionally embedded networks of firms operated.

In Africa, it is evident that currently there is renewed interest and reintroduction of industrial policy in various developing countries, of which Ethiopia is an example. In Ethiopia, the government took challenge of establishing the industrial parks and working to become industrial hub in the continent. In developing economy of Ethiopia, government took initiative to transform the economy from agriculture to industry based through agricultural development- led industrialization policy.

As in the rest of the world, the federal government of Ethiopia in collaboration with its international development partners has also recently implemented specific cluster policies to foster the development of its manufacturing sector (GTP-I, 2011). The country also achieved remarkable economic growth (11% per year) in the past 12 years. Ethiopia is using IPD (Industrial Park Development) as a policy instrument for structural transformation; mainly to address binding constraints for industrialization, binding constraints for manufacturing sector, urbanization and ultimately enhance economic transformation.

Over the past five or six decades there is an increasing importance of industrial park development as strategic instrument for local economic development and massive proliferation experienced across the world especially in many developing countries. Industrial park is considered as a policy instrument alleviate structural barriers and institutional deficiencies as well as social, political, economic and poor technological environment constraints of industrialization sector. Being a development strategy to foster local economic development it often implemented by low income countries or those with low comparative advantage with the presumption they are precursors of technology and innovation center and panacea for development. Yet virtually little is known about development trajectory of Ethiopia's industrial park program and its practical impact in the wider economy. The other justification is related to strong debate in the literature due to mixed outputs (failure

and success of industrial parks). Industrial Parks are popular as they are controversial in different parts of the world. There is potential possibility to stem both positive spillovers & pitfalls and even failed in most countries of emerging economies in due course of production processes.

In the case of Ethiopia, as a late joiner of IPD model, the country would have opportunity not to replicate same mistakes committed by African zone developer countries. Therefore, it is convincing to assess whether this model in Ethiopia is a better lesson withstanding theoretical benefits of industrial park development (emulating experiences of South-east Asian countries) or failed and problems co-existing, underlying reasons behind using comprehensive framework approach which previous studies lack. Moreover, it is also evident that from the very onset of special economy zone development in developing countries, apprehensions have been raised regarding employment (with respect to gender, wage levels and benefits, workers' rights and labour conditions), the environment, and related social factors remained unclear in the literature due to scanty coverage in the context of developing countries (FIAS, 2008). To summarize the idea, the hypothesis that industrial parks have been experienced success and failure stories cannot be approved or disapproved without strong argument coming from empirical investigation based on compelling evidences. The overall effect of such policy direction on the knowledge economy of local production system needs evaluation through researches and it is becoming highly important in the literature of this research frontier.

As described earlier, like many Sub-Saharan African countries, Ethiopia has set out to experience rapid transformation from agriculture-based economy to manufacturing sector and export led development. Basically, the Ethiopian industrialization program has its base in Growth & Transformation Policy II (GTP-II), a development policy of the country which is currently under implementation in its extended form. The policy envisioned and pursued growth through export driven industrialization strategy with particular focus on labour- and capital-intensive manufacturing and export-oriented industries. Based on this presumption, industrial park development program hoped not only to achieve aforementioned aspirations, to also achieve major knowledge and technology transfer through strong location of foreign tenants in the local context (GTP-II, 2016). Though, the trajectory in Ethiopian industrial park development and operation has shown some positive developments, the ambitions to emulate experiences of successful countries has not been achieved to date. Contrary to central arguments in the theoretical base of industrial park development program, knowledge diffusion and technology over-spills are not occurred. See detail analysis on performances to date in chapter five of this thesis. Apart from benefits of "secondary importance" as articulated in many literatures those primary targets such as export contribution vs stimulated investment, jobs created vs stimulated investment have not emerged to anticipated level from the programme under operation.

Evaluated against experienced Asian countries where zone program been able to spin-off multi-faceted benefits, similar to other SSA countries, empirical analysis under different sessions of this thesis revealed that it is difficult for the program to render anticipated benefits despite strong effort and high aspirations from the government. For instance, in its national plan particularly (GTP-II), the country envisioned to realize structural transformation through industrialization and join middle income economy by 2025 for which the country has revised its investment policy four times in favour of investors. Despite the efforts in place & although industrial parks in case point of this study are at early life cycle of development, the anticipated benefits have not emerged.

This study considers plausibility of explanation on success factors or failure of industrial park development linking the underlying reasons to combination of factors. Industrial park development

program is context sensitive and there may be different political, socio-cultural, economic, technological and environmental factors that may prove suitability or incompatibility of zones either similar to or diverging from what has been identified in previous studies. Different reasons for failure or success of industrial parks have been evidenced in most empirical studies and this implies condition catalyse or stagnate the program also varies across time and places. A good example is studies conducted on impact of industrial park using same model showed different results which still questions what matters for the success of IPD. Concomitant to this, evaluated against desired goals and experiences of successful countries, the question why trajectory of Ethiopian industrial park development failed to vigorously perform remained unexplored. Apart from context variation of the program, previous studies and available literature doesn't fully address impact of industrial parks using comprehensive framework. In most literature there are strong arguments announcing worries pertaining to limitation in deliverance of IPs concept in developing countries. This study is part of an effort to establish appropriate contexts for IPs in low income-countries (SSA). With the desire to find an answer for this and other gaps in the literature this study comprehensively look at whether Ethiopian industrial parks are as per desired goals or not.

Concomitant to the aforementioned rationalizations, this study contributes; in identification and analysis of issues, benefits, challenges and state of debate pertaining to industrial park development policy. This will have great importance for the upcoming similar expansionary activities because, the implementation of this policy is only at its infant stage provided it is a new experience for the country. The findings of this study also shade light on how social issues entertained in the areas where technology elements given priority. Considering experiences of emerging economy countries', most of the industrial parks are like industrial districts and this study is important in making clear how industrial parks in Ethiopia must be understood and implemented. This type of empirical investigation is appropriate to identify whether the country is utilizing the dynamic potential benefits of special economic zone and contribute to literature produced to make clear confusion pertaining to whether the operation is relevant strategic direction or simply pipe dream. Is that the framework not appropriate or how it is designed and implemented that matters for the failure of IPs. Generally, it will serve as important input for policy makers and to amplify socioeconomic contributions for the nation that outweighs the costs associated to its development.

To sum up the argument this is an assessment of the role of industrial parks development in the context of low-income countries like Ethiopia. It is systemic analysis of adequacy of industrial parks of the country for industrialization process. Major findings of this study presented under different sections in light of global and African countries special economic zone developers using both primary and secondary sources. The analysis further substantiated with alternative theoretical perspectives. The analysis substantiated information gained through primary data with secondary sources taking into account global experiences and attempt has been made to position it in existing theoretical perspectives. Therefore, the study covered wide range of issues including the extent to which the country exploited impact of industrial park development on employment generation, technology and skill transfer, social issues such as working conditions, human capital development, and development induced displacement (land acquisition).

1.3 Theoretical perspectives to economic zones

It has been revealed in reviewed literature that there is growing interest and proliferation of industrial park development which also contributed to increased number of researches in the area. However, there is no single body of literature seek to explain importance, development outcomes and rationale of special economic zones using comprehensive framework and positioning research in the areas of special economic zones in existing domains of literature is challenging task. Combination of different theoretical approaches explain the rationale and socio-economic importance of such spatial based intervention than a single approach.

In this study, for a better understanding of comprehensive socio-economic effect, integration of different theoretical strands used as an alternative approach to envisage the potential outcome of such policy-based instrument designed to bring about wider industrial development. According to (Kepl (2001) as cited in (Vidov'a, 2010) the initiative is theoretically rooted in philosophy of consolidating services which are a bit different and this includes basic production function, relaxation and education) into a geography designated for manufacturing activities and services generate significant economic turnover and employment opportunities.

Theoretical building block of industrial parks relied on the philosophy of integration of relatively different functions into an industrial area and as such it constitutes the idea of united conception. In this seductive theory, competitiveness of the resident firms subjected to provided public goods particularly infrastructure and incentive packages by the governments. The co-located firms generate agglomeration economies and so the public goods should be concentrated on areas of co-location. The provision of infrastructure will somehow induce the firms, and exemptions can be made to further entice them and create better competitiveness.

The rationale for industrial parks has traditionally been viewed in two ways: First, the initiative lessens the challenge to provide functional infrastructure given its plan and operation is limited to specific geography or space, to deliver binding constraints of industrialization and manufacturing including government based institutional inefficiency (Marshall, 1920). Second, the concentration of firms in a limited space support substantial spillover effect in both intra park and park-local economy – by way of information spillovers, knowledge diffusion and technology transfer; increase specialization and division of labour among enterprises provide intermediate goods; develop necessary skills in the local labour markets; and support market based linkage around the parks (Sonobe and Otsuka, 2006). Theoretical support justifies the importance of industrial park development arises from diverse arguments and varied strands of traditional frameworks. Collection of arguments conceptually emerged from varied frameworks portrayed as industrial parks can be justified as crucial development instrument in the condition of effective implementation. According to (Dinh et al., 2012) although the benefits of economic zones subjected to certain conditions, theoretically special economic zones in general and industrial park development in particular encourage development of domestic manufacturing sector through supply-demand linkages. This realized when backward linkages between tenant firms and local manufacturers realized when the condition allows domestic economy to produce intermediate goods utilized in mass by the resident firms. This further expected to cause positive spillovers on wider national economy and welfare of the society.

In this part of the thesis, attempt has been made to examine five distinct theoretical approaches on rationale and benefits of agglomeration economics in general and industrial clustering in particular. Five distinct theoretical frameworks of special economic zones, approaches most cited in researches

of this theme including; the orthodox (neo-classical), the neo-Marxist, the heterodox, the life cycle and the integrated approach considered relevant approaches to scrutiny comprehensive evaluation of special economic zones. The theoretical approaches are discussed as given below.

1.3.1 The orthodox (neo-classical) perspective

This theory adopts trade centered approach and view special economic zones as initiative deliberately separated from local environment of where they established. The program operates under flexible system like open and free trade policy, promote global value chain and resolve basic binding obstacles of the sector ranging from addressing institutional inefficiencies and provision of incentives. The mainstream neoclassical school views special economic zones in terms of their static macroeconomic parameters which comprises; employment generation, FDI inflows, economic value addition and foreign exchange earnings. Hamada (1974), conducted pioneer study on the impact of special economic zones, particularly welfare analysis with employment and income effects. The school theorizes as special economic zones attract tenants majorly for their cost competitiveness. This initiative generates desired development outcome based on; cheap labour supply, relaxed labour laws, cheap utilities and services including locational advantage of zones. The spin–off of this program for the host country is comparative advantage, mainly direct employment generation given the policy allows MNCs to relocate their companies in cheap and labour surplus countries. Most previously conducted studies using this approach revealed that it reduces; welfare and harms resource allocation process of a country. The program also criticized for applying technologies which are less relevant in the context of less developed countries. The trade centered approach is criticized for delimited analysis of special economic zone's impact to static economic benefits or direct short term effects of zones, with employment and welfare being the main concerns. Although this theory has less relevance in the current context, its major contribution is that, it provided macroeconomic parameters as a proxy for evaluating impact of special economic zones.

The other framework roots in the neoclassical approach is a seminal work proposed by Warr (1990), who used cost benefit framework to measure the impact of special economic zones. Warr (1990); Madani (1999) also showed that based on cost-benefit analysis approach, the program's effect is less significant compared to establishment cost incurred. Moreover, in terms of backward linkages it demonstrates little importance due to low production capability of local firms, presentation of low commitment and quality standards required by the tenants. Unlike the trade theoretic approach, this framework assumes that, special economic zones generate backward linkages with the local economy of the host country. The cost benefit analysis framework theorizes that, if the excess of actual payments at the market price over the opportunity cost of the resources (shadow price) exceeds the costs of setting up and maintaining zones, then their contribution to the economy is considered to be positive. However, Johansson (1994) and other critics maintained that such cost benefit approach failed to consider the importance of special economic zones backward and forward linkages.

Political economy perspective which has its roots in neo-classical approach emerged in 1960s criticized motive to establish special economic zone unless interested by the bureaucrats to encourage business society with the intention to generate return through rent seeking method. The proponents in this regard literally demolish the initiative for it serves as "tax shelter" and enforce

diversion of public resources to limited space in the interest of business community without significant investment and economic benefit to the host country (Kreuger, 1974 as cited in (Aggarwal, 2017). This theory posed a powerful argument that further premises of neoclassical school and that is the question of additionality. Do SEZs result in additional investment and additional jobs that would not otherwise be delivered?

In summary, the neo-classical school views to SEZs are more pessimistic and states as it's challenging to rule-out desired potential benefits of this policy direction. I t is a rather pessimistic view because, it assumes as underdevelopment resulted from poor efficiency of resource allocation at the national level. Protectionist trade supported by large financial and institutional support encouraged by the program causes institutional imbalance and causes distorted resource allocation which subsequently worsen the already distorted economy and welfare of the society. Thus, it theorizes, rather than investing in protectionist trade government should aggressively work on way to liberalize the economy which is best way out to transform economy of a country.

1.3.2 The neo-Marxists perspective

The conception in this theory is that major privileges provided for tenants is surplus cheap labour than other incentive packages including exemption from tax. Thus, special economic zones built on the rationale of providing cheap labour and low labour regulatory standard with the intention to increase global value chains. Accordingly, importance and impact of the initiative is exploitation of labour man power and labour-based institutions, diversion of labour to a specific location or the designated space which may cause shortage of labour in the outside economy and over reliance on foreign capital infusion. The basic presumption in this theory is that the policy targets a system of production augment benefits by trans national corporations through exploitation of cost related differences across locations particularly labour cost advantages rooted in capitalist mode of industrial production. According to this school special economic zones are characterized by industrial activities where negligible wage paid for workers, activities mainly focused on simple assembly operations and this production presents low line technology got little importance to spin-off positive externalities to labour institutions and local business. The idea is that industrial activities planted as a branch company in emerging economies or less developed countries resulted in substantial labour cost differences or "new international division of labour" across space between developed economy and less developed ones (Frobel et al., 1978 as cited in (Aggarwal, 2017). The authors further highlighted that the division of labour is between the two divisions designed in such a way that skill demanding jobs including research and development, management of production centers controlled by developed countries whilst those simple assembly operations reserved for host countries or developing economies.

In summary the school views as the initiative are instrument to foster integration between resident firms and their already existing network in foreign countries than the desired linkage with the host country's business environment. Beyond this the core benefit of such program goes to developed economy at the expense of host countries where satellite branch of big companies operates generating comparative advantage from labour exploitation. However, the relevance of this theory in the era of heightened globalization and context of most zone developing countries loose relevance. Aggarwal (2006) highlighted that "Neo Marxist perspective seems to have been a little outdated for most countries". This theory roots in pessimistic view of special economic zones and theorizes

as the programme do not offer sustainable growth model; rather deepen dependency on foreign capital and present social costs as a result labour exploitation. In contrast to the neo-Marxists argument, evidences showed that evolvement of zones experienced in different countries. According to Meng (2005); Haywood (2000), in respect to labour intensive old special economic zones, the new generation is dynamic, technology and investment intensive. Despite basic limitations, this theory contributed new perspective deserve attention and i.e., social impact of special economic zones.

1.3.3 Heterodox perspective

Contrary to the orthodox approach which demonstrate zones as venture initiative heterodox theory views special economic zones as a crucial instrument support export-oriented manufacturing in particular and fostering development in general. The premise in this theory relies on optimistic view of special economic zone effect in which it theorizes as the initiative attract foreign experienced firms to the zone and would automatically generate spin-offs. This approach focuses on dynamic impact of special economic zones on the economy particularly relying on the assumption of endogenous growth theory, interaction with foreign international firms expected to bring about sustainable development by way of improving human capital development, technological development and institutional reforms. Johansson and Nilsson (1997) describe this expectation as controversial provided that the program would also face bottleneck to the level of becoming enclave deliberately separated from local economy along any of the basic parameter. The approach is based on export oriented FDI which come into existence following fragmentation of transnational corporation's activities and locate in developing economy with the aim of benefiting from lower costs of production (UNCTAD, 1998), whilst Aggarwal (2012) in a new international division of labour perspective argued that special economic zones play the role of promoting division of labour between firms locate in foreign countries as part of contract manufacturing which is becoming popular strategy used by multi-national companies. (Milberg and Amengual, 2008; Baissac, 2004; Aggarwal, 2010) are main authors considered phenomenon under the assumption of heterodox approach.

Aggarwal (2012) highlighted the view of this approach as special economic zones encourage domestic firms' participation in outward investment beyond the primary goal of attraction of foreign direct investment. Such engagement of domestic firms in outward oriented investment lessens domestic firms challenge to enter global value chain, exposure to new knowledge, skills, capital, markets and other positive externalities resulted from knowledge transfer including increased production capability.

Countering the orthodox and neo-Marxist frameworks, the heterodox approach theorizes that special economic zones contribute to entrepreunership and competitiveness through spillovers of foreign owned resident firms. With the attempt to address limitations in other theoretical frameworks, the heterodox perspective contributed better explanation to the performance of special economic zones. However, it doesn't fully comprehend the benefits of special economic zones and it heavily focuses on foreign direct investment as an instrument to ensure benefits of such spatial based policy.

1.3.4 The Life cycle approach

Focusing on the heterodox approach, the life cycle approach focuses on the dynamic outcomes of special economic zones and how zones evolves over periods of time along with the increased liberalization and modernization of the host country's economy to the stage of technology - based - export oriented economy. Life cycle approach theorizes that special economic zones development evolve from one stage to the next stage life cycle which subsequently result in improved economic benefit of the programme. Basile and Germidis (1984) proposed four phases of special economic zones development life cycle:

- provision of basic infrastructure and facilities, prompting an inflow of FDI
- Exports expand strongly, even while the rate of FDI inflow begins to slow down
- Slower growth in exports and the replacement of small marginal businesses
- Divestment by foreign enterprises

Aggarwal (2012) maintained that three different types of special economic zones emerge in process of industrial programme development and sometimes coexist together. The first generation of SEZs heavily focused on employment generation to address unemployment problem and foreign exchange generation while second-generation zones characterized by zone's spillovers particularly human capital development formation in the local labour force and export diversification. In the third-generation, SEZs supposed to evolve to the stage of contributing to knowledge and technology transfer. Overall, benefits of special economic zones depend on their stage of development and overall progressions.

1.3.5 The New Growth Theory

A new growth theory, focus on the importance of knowledge creation in the development process. The new growth theory maintained that increasing returns to knowledge causes economic growth. Johansson (1994) one of the main authors of new growth theory depicted transitory nature of export processing zones and the role FDI spillovers into the local economy. The author identified three interrelated ways through which EPZs can cause positive influence to the industrial development agenda of less developed countries: "First, domestic firms lack needed technical, marketing and managerial know-how, and FDI within the zones fills this gap. Second, domestic firms seldom have access to international distribution channels and need support from international or joint venture companies. Finally, entry channels into international markets would be difficult without access to established foreign firms with wide international business dealings".

Baissac (2004) further elaborated the account of the approach and depicted the key role of social and political institutions which affirmed by new growth and neo-institutionalism theories. These approaches theorized that economies are not magic bullet that created or destroyed wealth, rather it's socially constructed and informed by knowledge. This implies that the active role of government in the areas of easing ways for technological learning to take place to bring about desired development is of the decisive actions. However, the new growth theory criticized for too much rely on the impact of EPZs in generating backward linkages which seldomly exists in exceptions

or where none might exist. (Madani, 1999; Engman et al., 2007; Farole, 2011) argued that the failure to develop backward linkages was a result of the assembly-line operation nature of special economic zones whereby resident – firms import components for assembly and make few or no purchases from local suppliers. Moreover, the relatively low levels of technology used in typical EPZ operations, such as garment and shoe production, left little scope for technology transfer.

To sum up the case, theoretical strands on special economic zones either in support of or criticizing the initiative emerged from combination of different premises rooted in several theoretical basis derived or focus on different contexts. The building blocks conceptualized from; economic geography, spanning economics, regional science, innovation studies, industrial organization are major ones to explain the rationale, development outcomes of park and its linkage with local economic development. The various frameworks discussed in this section of the thesis indicated that special economic zones are key instrument of industrial development strategy under the condition of effective implementation. The programme lessens potential difficulties in doing business as theorized by heterodox approach; tax incentives as demonstrated by the orthodox approach; exploitation cheap labour by the resident firms as a way to generate comparative advantage as demonstrated by the dependency theory; the program preferred as a policy tool to ensure local spinoff, technology transfer, and catalyze local development as stressed by cluster and new growth theories. When viewed in light of successful countries experience the positive outcomes in the areas of productivity improvement and trade gains were consistent. As stressed by life cycle approach the special economic zones initially dominated by cheap labour and gradually develop in to the stage attracting firms engage in complex economic activity which also generate multifaceted positive outcomes for the host country. However, not all countries achieved intended positive results, it is affected by the type of activity or sectorial orientation and stage of development as accounted by life cycle approach. Apart from various direct and indirect positive results from the operation of special economic zones, the programme also generates significant costs. These includes; such state driven spatial based industrial policy associated with land acquisition followed by mass displacement of farmers and state loses from revenue offset the benefit (political economy approach); huge government expenditures for the costs of the project (cost-benefit approach); dominated by unskilled labour and poor environmental compliance (Neo-Marxist approach). Generally, it serves as an important input for policy makers and amplify socioeconomic contribution in condition whereby the positive outcomes outweigh the costs for its development.

A basic missing element in theorization of industrial park development is that the theories are not able to accommodate rationale, development outcomes, challenges and success factors all in one place than specific context-based explanation. Thus, further exploration and explanation on how industrial parks operate, progress and get developed over periods of time to comprehensively measure importance of such initiative and support evolution of the theory considering context specific situations. Therefore, in order to capture the comprehensive impact of industrial park development programme in Ethiopia, accounts from different theoretical strands; supporting the rationales, relevance behind and their impacts envisaged against the above discussed theorizations. Thus, the current study is part of an attempt to contribute for developing integrated theoretical building block by way of uncovering the following research questions ranging from major development outcomes such as employment impacts, foreign exchange earnings, backward linkages and interface between zone and society/major social issues such as; land acquisition, skills development and social up-gradations and co-existing subsequent social problems. This can be done by

extracting various arguments from different theoretical frameworks and this project rely on ideas extracted from the broad approaches adopted in empirical literature analyzing benefits of special economic zones.

The study targeted to provide holistic broader understanding and framework for the research frontier in the areas of special economic zone in general and industrial park development programme in particular. Moreover, it is to evaluate the actual and potential socioeconomic benefits and costs of industrial parks operation in Ethiopia. By selecting few cases in Ethiopia, attempt has been made to uncover the country's experience in light successful countries experience. Analysis of industrial park development as an instrument to ensure industrial development strategy deserves attention in perspective of conducting comprehensive assessment in the context of changing social, political and economic conditions of contemporary world. The analysis starts with the structure of organograms/systems of industrial parks operation, relationships between different actors involved and institutional establishments to ensure spinoffs of the policy intervention.

Research Questions

1. How far institutional set-up matter as a contextual factor for the successful operation of the program?
2. How IPs of the country evolved to present and do the policy innovation deliver in the context of low-income country like Ethiopia?
3. What are the contextual factors affects benefits of such spatial based policy intervention to ensure industrial development? (i.e., opportunities for and barriers co-existing with the benefit of industrial park development)
4. What are the evidences of interface between society and economic zones set to operation? (Potential costs, impacts on local skills development & social upgrading)

1.4 Design & Methodology

This session presents methodological approach employed to collect and analyze data. It comprehends activities performed starting from data collection period; the processes and the challenges encountered in line with remedies taken to solve those. In the literature of special economic zones, assessing performances under broad concept of economic and social benefits of zones often categorized under two major outcomes: a) "Static" or immediate/direct benefits such as volume of investment, employment created, export contribution, government revenues and foreign exchange earnings. b) "Dynamic" economic outcomes of SEZs in the course of successful implementation includes; diffusion of knowledge, technology transfer, skills upgrading in the local labor market, economic diversification and improve production capability of local business environment.

Methodologically speaking, the current study assessed the aforementioned outcomes of industrial park operation in Ethiopia through comparative analysis of selected case studies identified for the assessment. Based on the identified proxies to measure performances, analysis carried out to assess

extent to which the programme helped the country to ensure industrialization agenda. Clear analysis of prevailing conditions derived from information gathered based on factors presented by (Zeng, 2012) and (Aggarwal, 2010). Accordingly, summarized list of factors by which data collection instruments guided comprehend the following conditions as adopted from the authors: "Static" benefits [foreign exchange earnings, foreign direct investment, employment generation, government revenue and export growth]. "Dynamic" benefits [skills upgrading, technology transfer, demonstration effect, export diversification, enhancement of trade efficiency of domestic firms, formation of industry cluster, integration into global value chain, and testing field for wider economic reform].

In the literature of economic zones both qualitative (case study) and quantitative approaches used to understand operation of zones posing different questions. Comparatively quantitative data can capture performance of zones using indicators such as investment inflow and its corresponding values, jobs created & its quality and export value of the initiative. However, relying on quantitative approach per se also presents challenges to reveal very well impacts of secondary importance such as linkages between resident tenants and domestic producers/local economy and knowledge & technology diffusion across spatial. In current study a mixed method approach used, because, measuring impact of industrial parks through quantitative method is challenging without comprehensive data. when viewed in light of research questions enlisted in the paper, the first three questions approached using mix of data sources from document analysis of various policy documents, annual and periodical reports and secondary data collected by country's economic zones regulatory departments. The fourth or the last research question approached using survey, interview and document analysis.

There is no well-organized data on the various performance indicators except few secondary data on dynamic economic benefits operational of industrial parks. To put further on this, using quantitative approach demands potential comparison or control group which operates without provision of different service packages under which special economic zones operate, see also (Zeng, 2016). Without comprehensive and well-organized data on the performance of industrial park operation, it is difficult to capture development outcomes of the initiative using quantitative method since it presents serious statistical challenges. In order to address this problem, secondary data collected from major front-line institutions responsible for the operation of IPs used and primary data collected through interview supplemented the analysis throughout the empirical chapters which literally indicates, mixed methods used to answer the research questions posed in the current study. Additionally, survey data collected from workers of three selected industrial parks to capture working conditions (wage, labour management, employment relations, occupational safety and health, training provided for skills development, occupational mobility etc.) and this part similarly supplemented by available secondary data where it permits to support the analysis. As for the survey method employed in this research descriptive analysis used to process the collected data. In fact, descriptive approach is of the most adopted approaches in the literature of special economic zones (Omar and Stoever, 2008; Farole, 2011; Aggarwal, 2005, 2010; Willmore, 1995, , among many others)

Our analysis is based on both primary and secondary data sources collected through different techniques with the intention to generate more detailed knowledge about the selected cases and context in which they operate. While survey data found stronger to capture employment impacts and measuring dynamic benefits of industrial park development policy, qualitative case study through semi-structured interview found more fit to capture the policy decisions, evolution in the

implementation procedures, positive results and basic obstacles to the successful operation or failure of industrial parks. Moreover, qualitative information collected through semi-structured interview at different levels from different actors involved in industrial park policy operation, lengthened into in-depth comparative case studies of four operational industrial parks in Ethiopia to view experience of this country in the context of global economic zones implementation.

1.4.1 Approach

This part of the research talks about methodological issues applied for achieving the objective of this empirical investigation. It orient readers with approach employed to collect all the relevant and pertinent data and analytical strategy executed in processing the data from the field. Beyond this, attention has also been paid to methodological issues pertaining to ethical protocols during the fieldwork. This research followed cross-sectional research approach in which the data collected ones in a time. Scientific inquiry requires the use of rationally grounded procedures guided by solid philosophical foundations (Creswell, 2014). Among competing worldviews in the contemporary social science research, pragmatism used as a research philosophy as it promotes methodological appropriateness by enhancing researchers' methodological flexibility and adaptability (Cameron, 2011). In line with the pragmatist paradigm, the mixed-methods approach applied because it provides a comprehensive understanding of the complex interaction between different actors Creswell (2014).

In methodological question, it is imperative to choose the appropriate method or methods to address the enlisted specific research questions in this study. This assists the possibility to address questions as expected than sticking to specific research questions and it is important to choose beyond specific epistemological stance (Ormston. et al., 2013). In expression whether it is named pragmatic or something else as argued by Barnard (2012) as cited by Ormston. et al. (2013) combination of different research methods is often preferable in answering research questions raised. Therefore, for this research, data gained from both primary and secondary sources to scrutinize the research questions.

The use of multi methods not only provides a more in-depth data set but also allows the researcher to validate findings and thus increase the reliability of the findings Yin (2003). Also, the use of multi methods may be necessary to answer the questions that initiated the research idea. According to Ritchie (1994) within applied policy research qualitative methods can answer the variety of questions and have broken these down into four categories: contextual, diagnostic, evaluative and strategic.

As part of basic research approaches the study was informed by mixed methods with the chronological arrangement to meet respective desired objectives enlisted in this paper. Qualitative one and quantitative aspects do have their own identified rationality for utilization in conducting any kind of research. Since it assumed to contribute for the methodological reliability, how the mixing of the two should be performed is critical issue need clarification.

In the literature of research methods, there have been different ways in which the quantitative and qualitative one possibly combined. The complication in classification of studies with mixed design is high because there are many ways through which quantitative and qualitative approaches can be mixed. Elements of different phases of the inquiry is essential for any classification in the literature, especially methodological books. According to Edwards (2010), three different ways can be applied in combining these two methods.

The 'multi-staged method' involves procedure wherein qualitative method is a first stage that informs the quantitative method one or vice versa is also true. The other option available for the technical inquiry is mixing of quantitative and qualitative methods only at the level of performing data analysis. The third approach involves mixing the two methods both during data collection stage and in performing analysis. This classification oriented with the objective of embeddedness in which the two approaches supposed to integrate very well (Edwards, 2010). Even though, some scholars argue triangulation loses it is literal meaning in most of the time when applied enclosed with mixed method, this is what it is called 'triangulation' (Lievrouw et al., 1987). Triangulation is conceptualized as mixing of data or methods so that it gives an opportunity for diverse viewpoints to emerge on a given issue (Olsen, 2004).

The prime objective of triangulation is to achieve convergence of varied perspectives executed in a research to reach on confirmation of findings from different aspects. This entails us as it is mixing of data or methods so that diverse viewpoints can emerge through synthesis on that particular issue. A sounder form of triangulation is situation in which survey data mixed with interviews. Combination of different methods, data generated through each of the elements provides room to overcome limitations from utilizing single method (Olsen, 2004). The mixing of survey data with interviews is a more sound form of triangulation.in this study, triangulation technique applied in which the data from qualitative interviews complemented the quantitative one with more detail range from modification of measurement items to analysis stage. In the current research, triangulation method adopted to ensure validity of data, for it allows a greater understanding of the peculiarities potentially exist in these progressions recorded on the development of Ethiopia's industrial parks as a development instrument. This approach firmly believed will have great importance in ensuring expected methodological reliability in conducting a research.

1.4.2 Comparative Case Study

As accounted by Yin (2003), case is defined as "an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when boundaries between phenomenon and context are not clearly evidenced and in which multiple sources of evidences are used". According to Yin (2003), the term case study can be defined as "an empirical inquiry that investigates a particular phenomenon within its real-life context and produce contextually rich and meaningful interpretation" (p.13). This design is selected for its merit to answer the 'how' research questions listed in the study and its predominant advantage of describing the existing situation from different cases perspective to provide an in-depth understanding of the issue. Case study is also preferred strategy when "why" questions are raised, when the investigator has little control over events and when focus on a contemporary phenomenon in real life (Yin, 2003). A case study is therefore contextualized, "a detailed investigation, often with data collected over a period of time of one or more organizations, or groups within organizations, with a view to providing an analysis of the context and processes involved in the phenomena under study" (Hartley, J. F., 1994).

Comparative case studies cover two or more cases in such a way that it assists knowledge production generated from causal questions particularly why industrial park program worked in some context and failed in other countries which literally answers why and how questions. In the context of the current study comparative case study found relevant because it found imperative to view how set of contextual factors impact successful operation of industrial park program over periods of time. One of the major objectives of this study is to comparatively view how intervention of similar

policy under different scheme of park development program results in differential outcomes so that it makes possible suggestion of how similar policy should be implemented to achieve desired goals/objectives. In Ethiopia, the scheme through which industrial park development program takes place can be through massive public fund, private and public-private joint arrangement. Provided that all these schemes share similar goals as well as operate under uniform intervention, comparative case study found useful for the analysis of similarities, differences across the two schemes (public and private) or selected cases as well as patterns within case. Methodologically comparative case study allows utilization of both qualitative and quantitative data to cover different parameters of performance indicators.

Literature on methodologies also suggests as comparative case studies are relevant tool to overcome limitations pertaining causal attributions especially where there is no control group to judge functionality of a policy against desired goals (Kaarbo, J., and Beasley, R. K., 1999). As tried to be stipulated in Omar and Stoever (2008) it is difficult to capture linkage related issues through quantitative approach without strong database rather qualitative methods well capture major dynamic benefits or things of secondary effects make its appearance as a result of implementing special economic zones programme. This implies comprehensive study on special economic zones in general and industrial park development in particular demands combination of different methodological inquiries. Relying on the 'multi-staged method', the case study comes first before the 'quan' for the reason the scenario is less known and not explored in the context of Ethiopia. The quantitative part of the mixed method was executed after the in-depth analysis of the situation through case study. The research design was informed by a qualitative case study approach is due to the relevancy of basic assumptions and approaches behind case study for the proposed study subject. According to Yin (2003), case studies comprehend different data collection techniques including document review, interviews and triangulation as a technique to establish validity of data. Data triangulation demands "using multiple sources of evidence". Hartley, J. F. (1994) also argued that in employing case studies, different methods can be applied at the stage of data collection period as well as analysis. These methods can be either qualitative, quantitative or combination of both. The author furthered that the terms case study method and case study strategy most often used interchangeably. Using this approach, attempt has been made to cover synergy between various contextual factors and the policy intervention and subsequent outcomes in terms of success or basic obstacles in the way to achieve the ambitioned objectives.

Moreover, the employed empirical strategy found proper to answer the research problems and the selection was not based on recognition of contemporary characteristics of industrial park development program and controversial scenarios associated with the outcome of this policy instrument. As highlighted in Yin, Robert K. (1994), compared to other study approaches case study is proper for "examination of a contemporary phenomenon within its real-life context". Selection of multiple cases and simultaneously performing analysis was found useful technique to portray performance variation of the program across different spatial, to navigate across different comparable schemes as classified in terms of public and private for there is no single representative case at national level.

According to Gerring (2006), "case connotes a spatially delimited phenomenon observed at a single point in time or over some period" (p. 19). Since not much has been written about industrial parks and its cluster effects from different dimensions, and as previous researchers have not yet discovered holistic experiences in the implementation of this policy driven clusterization program to improve

local production system and bring about intended structural transformation and ultimately achieve development agenda basis of IPD, a case study research design provides a way to gain an in-depth understanding of the situation. According to Kreuger and Neuman (2006), a case can be a group, community, school, family, organization, individuals, geographic unit or an event. In the current study a case refers to industrial parks, and selected units of actors identified for detailed analysis of the enlisted objectives. In the context of the current study under scrutiny, case is industrial park under operation in Ethiopia.

1.4.3 Data and characteristics of Sample

The analysis in the current study is based on variety of data sources, including both primary and secondary data. Primary data obtained through face-to-face interview based on semi structured guideline and survey questionnaire (survey focusing on general working conditions). These instruments help researchers to better understand the complex set of questions designed with intention to achieve empirical results. The former method (the case study) informed by semi-structured interviews with selected resident firms, selected workers as a way to feed the survey, industrial park authorities at different levels selected from the four industrial parks to scrutinize the current study. Whilst the survey based on structured questionnaires for the workers of three industrial parks: Bole Lemmi IP, Hawassa IP and Eastern industry zone to capture employment impacts of operational zones. The number of cases selected limited to four as well as units of data covered during data collection for the primary sources limited in order to generate deep knowledge sourced from intensively carried out data collection process. Moreover, limited sample size preferred because larger sample size implies less in-depth analysis of patterns across the selected units of analysis. Groups of interest affect or affected by the policy intervention at different layers to capture what worked in the implementation process and how and why it shortfall to meet the expected outcome addressed in the current study.

Stakeholders description	Institutional structures	Period	Sample	Mode
Zone developers or Industrial park development corporation (head office)	Deputy CEO, operation management & after care service director, Linkage office	December 2018	Four individuals from the three different offices	Semi-structured interview
Zone regulators or Ethiopian investment commission (EIC)	Investment office, integrated service & operation office, OSS coordinators	December 2018	Two investment experts, one integrated service manager & two OSS coordinators	Semi-structured interview
MOLSA (labour department)	Structures at both park & national level	January 2019	Four officers from three IPs	Semi-structured interview
Confederation of Ethiopian workers association	A union outside the zones	January 2019	Key personnel	Semi-structured interview
Ethiopian textile industry development industry	Structure at park level	January 2019	Two delegates at two IPs	Semi-structured interview
Ethiopian cotton gianiries, producer association		January 2019	Key personnel	Semi-structured interview
Industrial park development corporation (park level)	Park managers	February - May 2019	Three park managers	Semi-structured interview
Unstructured interview covered with units from four selected industrial parks to capture issues from investors side	Five units from BLIP - (Shintis, Ashton, Lyu, Arvend, Evertop); Six units from HIP - (Isabella, Best, Hirdiramani, Sumbiri, Indochine, TAL); three units from KIP - (Saytex, Trybus, Pungkook); and Eight units from EIZ - (Huajian, Dong fang, East steel, Linde, Kaipu, Lonto, Di yuan, Zongshun)	February - May 2019	22 relatively better performing resident units as proposed by zone administration	Semi-structured interview
Industry park Workers (from the four case studies)	Two workers (production line supervisors) from each IP	February - May 2019	Purposively selected	Semi-structured interview
Industrial park workers of three selected zones	Selected units from BLIP & HIP (five from each) and six units from EIZ	June – August 2019	Stratified random sample of 381 workers	Survey based on structured questionnaire

Table 1: Summary information on description of sampled industry parks, stakeholders covered and survey of workers

Data for this study generated from original field research, using combination of techniques i.e. (Qual-quan) during the stated data collection period. The data for the case studies generated from combination of methods to execute deep analysis as a way to gain better understanding of the cases in comparative perspective. The field research data sets for both approaches gained from selected industrial park resident firms, from four identified sectors of production including textile and garment, leather and leather products, industrial material and construction. Data gained through survey of working conditions and interview at different levels supplemented by observation of daily and routine activities at production floor level. Additionally, key informant interview with selected key actors and stakeholders such as; regulatory bodies (Ethiopian investment commission), park developers & operators (industrial park development corporation)], representatives of local labour market, Ethiopian chamber of commerce, resident tenants also included in the sample of key informant interview. As presented by Stake (1995), utilization of multiple sources of evidence in general and in case studies in particular allows an investigator to capture broader range of issues pertaining to the research problem under investigation. Of the merits of using multiple sources of evidence is the development of converging lines of inquiry, a way to get triangulated information as tried to be indicated in the aforementioned section.

The key informant interview covered a wide range of issues on management practice, innovation activities, networks and capabilities of firms, challenges related to effectiveness of preferred policy, governance structure, model of development and operation. In this part of the study set of

questions designed as a proxy to measure inter-organizational synergy to look at overall social and organizational networks. Resident firms in the industrial parks asked to identify the institutional arrangements for administration and issues related to management of the industrial park, existing associations, formal networks and working groups within the boundaries of the industrial parks.

Beyond these, as a proxy to measure social embeddedness of industrial ecology, the frequency and forums of interaction among resident firms within the park, extent which managers know what is going around (production and activities of their neighbours) considered in this part of the study. As for the employment related issues, synergy between employment opportunity in the parks, skills and how might this then facilitate better quality of life in the local people captured in this part of the study. Emerging challenges co-existing with employment opportunity & labour market division (development trajectories of IPs) also paid attention in the survey part of this study.

1.4.4 Sample Size

In the present study, selected sectors in the industrial parks and workers for representative units selected randomly and 381 workers selected for opinion survey on working conditions focusing on impact of the initiative in creating skills and knowledge in local labour force, skill transfer received, association between skill received and desire to earn better jobs addressed from perspective of local workers. sample size for the case study part determined by the data saturation. According to Yin (2003), the evidence from more than one case is often considered to be stronger than evidences from a single case. Among the different types of case studies, in this study, more than single cases studied in order to have comprehensive and better understanding of the industrial parks' effect on local development through backward linkages.

To have a more compelling and robust outcome in the proposed study, selected resident firms including potential stakeholders as enlisted in section (1.3.3) for the detailed semi-structured interview in line with the purpose of the research. It is not preferable to pre-set the upper limit of sample size given the fact exact size of the sample highly relies on reaching the stage of data saturation. Sample size for qualitative part determined in the process of data collection depend on depth of information demanded to address research questions. Accordingly, 22 face-to-face semi-structured interviews conducted with enterprises across the selected industrial parks. Tashakkori, Abbas and Teddlie, Charles and Teddlie., Charles B. (1998) stated that interviews acknowledged as a powerful method for its merit of capturing broad range of issues in depth because it gives an opportunity to inquire clarification to address vagueness.

Mostly qualitative studies focus on an in-depth and highly contextualized understanding of specific phenomena, and such emphasis is compatible to small sample sizes. Of the main reason behind such preference is because interviews usually require a flexible and pragmatic approach (DonYei, 2007). After initial interviews and records made the responses were tentatively analyzed as mostly done in ground theory research approach, and then further analysis made after additional participants included. This 'iterative process waited on until the interview data reach a level of 'saturation' (DonYei, 2007; Arthur, 2012). Due to this, qualitative researchers are well justified in using criteria of data saturation or redundancy during data collection than employing statistical criteria to decide on sample size. Generally, large sample sizes in qualitative research not recommended since it is difficult to extract thick and rich data. Similarly, too small sample is not advisable since it is difficult to achieve data saturation (Flick, 1998; Morse, 1995; as cited in (Onwuegbuzie and Leech, 2007).

As for the description of industrial parks incorporated in the sample to execute objectives of this study, Ethiopia's operational industrial parks targeted and selected for this research. This is mainly due to the fact that those at planning stage or development stage wouldn't comply with the research questions since extent to which the initiative impacting local development goals of the country is of major one. Accordingly, Bole lemi-1 (BLIP), Hawasa industrial park (HIP), Eastern industry zone (EIZ) and Kombolcha industrial park (KIP) were included in the sample based on aforementioned justifications. Moreover, theoretical frameworks as well as empirical evidences depicted that there exists performance variation of the program across countries and across zones within a country. In-order to evaluate which park is well inside the country's local development goals as well as to see the difference between public scheme and private scheme industrial parks comparative case study particularly more than a single case study preferred to show robust picture about the study under scrutiny. From the sampled cases, the first three parks namely Bole lemi-1, Hawasa industrial park and Kombolcha industrial parks are public owned whilst the fourth one (Eastern industry zone) is private industrial park of the country. Of all the commonalities among the industrial parks, their characteristics of being export oriented economic zone is worth mentioning. Resident firms engaged in different production streams including; leather and leather products, textile & apparel, industrial materials and construction materials used among firms of different blocks considered for further synthesis.

1.4.5 Data and Data Collection Tools

In conducting research, selection of appropriate tools is by far critical as methodological selection to ultimately realize methodological reliability expected in rigorous scientific writings. Even some scholars value tools more than methodological choice. According to Ormston. et al. (2013), quality research practice has more to do with choosing the right research tools than methods that are confirmed to specific traditions. Pertinent information to address the posed research questions of this study collected from in-depth case study and survey of working conditions in selected industrial parks of the country. The case studies relied on multiple sources of information and multi-disciplinary approach and the data structure is cross-sectional.

As stated by Dilley (2004), interviewing helps to know the context of study subjects' behavior and thus provides a way for a researcher to realize the meaning of that behavior. The qualitative data, established from a semi-structured interview guide containing selected general items with the intention to address objectives of the study. The interview guide consisted of various topics and designed at different levels in such a way address perspectives of different actors at different levels and this includes (workers, firms, regulatory, developers/operators). Evolvement of the park's operation, institutional arrangement of industrial park development, perceived performance, innovation and technology up-gradation issues, industrial relations, nature formal and informal relations between tenants in the park, main challenges, overview of employment conditions and clusterization effect of IPD in the country are major among the many.

Semi structured interviews were conducted with the actors at different levels including IPDC officials, park managers, main institutional actors including labour department, production managers & human resource management department of resident firms and selected workers. Moreover, key informant interview conducted with the selected relocatee or displaced people for the establishment of IPs. Mostly the interviews conducted lasted average of one hour each. Generally, data for the case study approach came from semi-structured of in-depth interviews conducted at different

stages.

The industrial park tenancies interviewed belonged to three public industrial parks namely Bole-Lemi IP, Hawassa IP & Kombolcha IP and one private industrial park called Eastern industry zone. Relevant information about organizations, progressions, information from labour department (BOLSA) gained from top management reached; directors of different levels all conducted in Amharic (federal working language) and subsequently examined and transcribed into English language. In-order to address research questions of the current study, four types of interview questions were employed for five different groups of respondents. These includes IPDC administrators, resident firms, employees, and the displaced local community for the establishment of industrial parks.

1.4.6 Secondary Sources

The advantage of relying on document review is to corroborate and augment evidences from other resources for further substantiation (Yin, 2003). Stake (1995), also evidenced that collecting data by reviewing documents follows the same line of thinking as observing or interviewing. From the different tiers of Ethiopia's industrial park management, Ethiopian investment commission is directly accountable to the prime minister and has the mandate to regulate industrial park developers, operators and enterprises. Unlike IPDC which deals with too technical activities, Ethiopian investment commission is responsible to handle the day-to-day administration, review and approve investment proposals and administer various regulatory provisions (FDRE, 2015). The commission is also responsible for collecting and organizing data on performances of industrial parks including jobs created, located investors and their profile, foreign exchanges generated and linkages created (if any). The commission and other institutional structures established recently long after the first private industrial park became operational and the compiled information are available since the last couple of years. All the available information on the performances of the parks collected from the commission to analyze major outcomes against broader goals of the country's industrial parks.

Data on the performances of industrial parks also organized based on information collected from internet sources (websites of the different management tiers) and newspaper articles. Secondary sources released by CSA official statistics, data from Ethiopian investment commission, ministry of labour and social affairs, periodical reports by Ethiopian industrial park development corporation used as a major source of secondary data. In this category; issue analysis, desktop study (review of working papers, industrial policy statements, national development strategy documents, and proclamations, legal frameworks or the country, conventions on labour laws and result of different researches utilized to supplement primary data. Secondary data from published and unpublished works used to review the country's experiences, existing international and national frameworks on industrialization in general and the socio-institutional settings influence the context also analyzed.

Using secondary information collected through different mechanisms a desk-based analysis of documents conducted; on performance analysis of industrial park development models, institutional review, industrial park development and its importance, its influence on employment, labour market related challenges in the country, number of jobs created, and gross net wage paid to employees. Review of secondary materials also included, detail synthesis of stages of development of industrial parks, countries' experiences in the implementation of this development policy and its progression.

In the review of documents (Farole, 2011; Jauch, 2002; Madani, 1999) used as a bench mark to develop argument on challenges, status and benefits or evaluation of good progress analysis of industrial park development in the context poorest of the world trying to deal with massive industrialization processes i.e., Ethiopia. This simply serve as room to dissect similarities and differences relying on synthesis from empirical results. Regarding the nature of ideas/evidences in secondary sources, attempt has been made to synthesize both theoretical and empirical literature on this issue. Generally, relying on methodological flexibility devised to approach the study under scrutiny, both first-hand information from field including in-depth case studies and survey of working conditions utilized.

1.4.7 Data Recording and Analysis

Although extensive analysis and synthesis in the current study focus on comparative analysis of the policy intervention across selected case studies, the framework in which the comparisons of patterns took place transcends similarities and differences across cases. It rather extended the analysis to the level of evaluating why the initiative failed to hit desired targets and how it successfully achieves the ambitioned goals. This literally implies the target in the analysis beyond simple comparison of multiple cases on common goals against which the comparisons can be made and it furthers the argument to the level of examining whether the intervention met the desired goals for their establishment. Analytical strategy for both within and across cases in comparative view based on ambitioned outcomes of the initiative considering all the dimensions for evaluations.

Regarding the case study one, Yin (2003) encouraged researchers to make every effort to produce an analysis of the highest quality. In order to accomplish this, four principles that should attract the researcher's attention identified and these are: (a) show that the analysis relied on all the relevant evidence, (b) include all major rival interpretations in the analysis, (c) address the most significant aspect of the case study, (d) use the researcher's prior, expert knowledge to further the analysis.

There are various approaches to analyze data in qualitative research. Content analysis in which both the content and context of data are analyzed is one approach. In this approach themes will be identified, with the researcher focusing on the way the theme is presented (Ormston. et al., 2013). Accordingly, in order to manage and analyze the data properly and to form a coherent flow of ideas, interview with respondents tape-recorded based on the consent of the participants. Each interview transcribed at the end of the recording and the transcribed data sorted by these categories; identifying similar phrases, patterns, relationships, and commonalities or disparities.

The sorted information from the interview coded according to the categories and a common theme selected, each interview assessed and classified with the selected theme. Identified patterns were considered in light of previous studies and theories (Berg and Lune, 2007). Sorted materials examined to isolate meaningful patterns and processes. Accordingly, after the data broken down into categories, interrelated as well as discrepant points conceptualized and discussed in parallel to the literature review and the stated objectives of the study; so that whether the findings are consistent or not with those literature seen. The information summarized by using related categories according to the main thematic headings. Detailed cases were interpreted to get answers to the stated research questions in the execution of the research under scrutiny. Critical cases selected for more detailed analysis. Data brought together by a triangulation process and organized in themes according to the given coding categories with the intention to identify and rule out way to strength

developed arguments. Moreover, triangulation techniques used to establish compelling evidences and to approach causal attributions on why the program short fail to meet expected outcomes of the policy in which attempt has also been made to cover potential relationship between various factors allows the problem to make its appearances. Direct quotes, common and atypical responses from the interviews were also presented. Overall, research questions of current study developed out of extensive review literature and analysis of information and data followed deductive approach relying on current theoretical background.

1.5 The Field Work

The fieldwork was conducted from December 2018- August 2019. Protocols of data collection or field research preliminaries fulfilled soon before the actual field work. A letter of permission was requested from Ethiopian industry park corporation for collecting data using in-depth-interview for the case study part and questionnaires for the survey on working conditions. As counterpart of this procedure, letter of cooperation was requested from University of Milan, ESLS program, upon approval from PhD supervisors. Letter of cooperation announcing the objective, importance of the study was requested from Ethiopian industrial park development corporation to easily visit the parks and get legibility to collect data from the park tenants and other stakeholders selected for data collection.

Such preliminaries regarding research clearance assisted the researcher to minimize challenges that might have occurred during the data collection process. Feedback requested from local professors soon after arrival in Ethiopia to develop strong data collection tools. The data collection instruments; the interview guideline and questionnaires translated from English to local language.

During the data collection, data collection task was made with the support of two data collectors and one masters student from Addis Ababa University who collaborated with me since he also engaged in similar theme of research for qualification. The researcher decided to recruit data collectors after having identified difficulty of administering the activity single handedly. In addition to this, the author also collaborated with CIFA Italia (see annex B), to uncover some overlapping with the organization's project i.e., local economic development of South Wollo zone in Ethiopia, in which they were also interested to know the role of industrial park policy and industrial park program. Accordingly, I have worked with a team of data collectors while visit has been made at Kombolcha industrial parks. To this end, information shared with the team not represent the entire selected case studies and only delimited to KIP only.

In order to increase reliability of the measurement, some of the interview guide items and questionnaire items for the survey adopted from related prior studies since these items have already been tested and it reduces tensions over reliability and validity of batteries utilized. Adopting questionnaire and interview guide items and testing the reliability of the items is important to check and improve the quality of the measures (Creswell, 2014; DonYei, 2007). The best strategy to proactively overcome such potential challenge regarding measurement items is conducting a pilot-test. This strategy is panacea to test the applicability and clarity of the data collection tools and to learn the time it takes to complete the interview and survey in the local setting (Berg and Lune, 2007). Generally, pretest of both interview guide and survey questionnaire items conducted for the purpose of refinement and improving to attain the objective of high-quality responses.

One's translation of the instrument of data collection made, pilot test administered by the researcher in which it was learnt how long it takes it takes to complete data collection with single

individual and applicability of the tools to capture the objectives of the research in the local setting. Moreover, the pilot test conducted before the actual data collection enhanced the researcher to identify shortcomings in the instrument of data collection and to modify the content along with the discovered problems. This measure also helped the researcher to gain practical experiences immediately shared with the data collectors since it enhanced to realize feeling and reaction of respondents. Considering synergy between initially prepared measurement items and objectives of the study, the interview guideline was corrected, and the necessary adjustments made, the main interview carried out with selected informants. Generally, pre-test of instruments carried out before the actual data collection created an opportunity to explore how effective the instruments designed work in capturing what have been identified in the major research questions of the study. While interviewing, attempt has also been made to make sure that the locations of the interview are places where informants feel comfortable.

Regarding ethical procedures fulfilled during the field work all the relevant approaches warranty attention has been considered for the betterment of expected outputs during execution of actual field work activities. The interview was conducted in the appropriate time and place for the informants. What is apparent in most field work guideline is assurance of willingness from the participants. Prior to beginning the interview process, informants were asked their willingness for participation and audio-recording of their responses and hence all the interviews were audio-recorded based on consent. Each interview on average took up to forty minutes. Prior to the detailed data collection activities, attempt has been made in order to have better understanding about research problem under scrutiny and this made using semi-structured interview with people who good knowledge about the program in general and working conditions in the industrial parks in particular.

The process of data collection was not free of problems. Of the major challenges was limited experience in undertaking in-depth interview and in-order to address this limitation preparatory exercise was made, particularly role play exercise with experienced colleagues with better skills. The other major challenge faced during the fieldwork was busy schedule in the premises and low interest demonstrated by the company managers to participate in the interview sessions. For this letter of support from the higher institutional layer govern industrial parks helped us to solve the problems and essential amendments made on the interview schedule to manage potential dropouts and to maintain the expected homogeneity of interviewee across industrial parks or sectors. As for the employees, due to demanding work environment and busy work schedule, the working conditions survey was conducted during break, inter-shifts and in some conditions after work in the late afternoon. There were also moments in which the company rejected the request to enter for data collection due to busy activities in the production line work. In such condition, discussion was made with the management staffs and they accepted the proposal to limit the number of survey participants to few individuals, maximum up to five participants. There were also conditions in which workers frustrated and yet suspicious to respond to the questions assuming that their responses will reach the company managers and cause adverse outcomes. To solve this problem, efforts made by the data collection team to let them know objective of the study and presented letter of cooperation from the industrial park development corporation and the University of Milan. At times when the targeted sample of respondents failed to be accomplished during the first and second round appointments, the felt uncomfortable to have additional appointments. Overall, despite all the constraints the researcher committed to present all the best and the data collection

went well in capturing want have targeted at the initial stage.

Thesis structure

CHAPTER 1	General Introduction	Introduction
		General background Theoretical perspectives Research aim Research questions Thesis structure
CHAPTER 2	Literature review	Systematic literature study on industrial park development [evolution of zones, global experiences, African experiences, Trends of industrial park development in Ethiopia]
CHAPTER 3	Explorative study of industrial park development in Ethiopia	Governance of industrial parks Variation in the zone performance Cross-sectional comparative analysis: case studies in BLIP, HIP, EIZ and KIP Qualitative and quantitative methods combined
CHAPTER 4	Analysis of performance of industrial zones against broader objectives	Nexus between stimulated investment and contributions of IPs in Ethiopia • Economic and social contributions • Backward linkages • Facilitating export growth • Increasing competitiveness • Eliciting knowledge • Fundamental Challenges faced (internal & external dynamics) co-existing with the benefit of IPs Document analysis and in depth interview based on semi-structured instrument used to capture the themes
CHAPTER 5	Discussions on performance of Industrial parks broad goals of their establishments	
Chapter 6	Industrial parks Vs employment effects and working conditions	• interface between zone and society

2 Chapter Two

2.1 Literature Review

2.2 Conceptualization of special economic zones and industrial park

Cluster based industrial development policies are key and widely used development policy instrument to ensure development planning objectives at both local and regional level. As a major insrtument of industrialization, industrial clusters i.e., geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions in a particular field that compete but also cooperate. As compared to special economic zones which are mainly policy driven, implication of cluster for government policy is different. Industrial policy rests on a view of international (or, more generally, locational) competition in which some industries offer greater wealth-creating prospects than others. Desirable industries (e.g., high tech, growing) should be "targeted" for support. Industrial policy sees competitive advantage as heavily determined by increasing returns to scale. Industrial policy tends to rely more on national based or centralized intervention whereas cluster perspective appreciates the role of state or local intervention (Porter, 1990).

Clusters of firms, network of companies, industrial districts and network of companies are all manifestation of such place-based industrialization process and share common idea i.e., higher degree of efficiency can be reached through exploitation of economies. Despite differences in terms of social embedding of different actors involved and other own peculiarities, they all share common feature i.e., they deal with reducing transaction cost of production. Spatial proximity which is of major distinguishing feature of such organization of firms allows firms to benefit from Marshallian externalities which comprehends; constant market for skills, local suppliers of specialized goods and services, access to knowledge and other supports from external economy. These are of the major rationalities behind support rendered to agglomeration of specialized firms in designated geography through various development policies (see e.g. Becattini, 1989; Porter, 1990; Marshall, 1920).

The role of cluster based special economic zones which is becoming striking feature of virtually many developing countries insights about the role of location in competitive advantage. The term special economic zones used interchangeably to represent different types of zones mainly characterized by geographically defined area that benefit firms locate there from various incentives packages. Such place based development policy operate under liberal and flexible policies in order to locate experienced firms (FDI), promote non-traditional exports and generate foreign exchange earnings, employment, income, and spillover benefits, including knowledge and technology transfer to locally owned firms (see e.g., Aggarwal, 2012; FIAS, 2008; World.Bank, 2011)

Industrialization is the driving force for socioeconomic transformation of countries. Presumably industrialization is favoured for altering unemployment problem, creating competitive advantage, and catalyse economic development by way of generating dynamism. A glance at the success history of the developed world portrayed the significant role of industrialization for rapid development of countries economy, improvement of production and productivity, preferred route towards structural transformation and it has successfully transformed the social composition of the population (Sonobe and Otsuka, 2006; Omar and Stoever, 2008; Farole, 2011). Industrial parks as major component

of economic zones program has shown rapid expansion due to its increased importance though remained controversial, at least, for yielding different results (both success factors & failure). As part of expanding and/or improving previous low level of industrialization, industrial park development is proliferating across the globe of which most developing economy of the world using it as a major policy instrument. Literature evidenced that this massive expansion of economic zones shown widespread increase since the second world war following the success of South-East Asian countries in the development, in which successful operation of special economic zones played a major role. According to working document produced by UNIDO (2015), there is estimated 15,000 industrial parks across the globe of which majority of newly established industrial parks are in Asia and Africa.

Economic zones in general and industrial parks in particular have wide increase importance for various reasons. The programs are increasingly regarded as a policy panacea, which many developing countries of the world highly relying on to solve multifaceted social and economic predicaments. Policies designed to encourage establishment of industrial parks programme presumed as the ideal instrument to alleviate institutional, political, economic, social, and ultimately, technological weaknesses or solution to an assortment of problems pertaining to aforementioned limitations and often form the principal ornament of innovation and development strategies (Rodriguez-Pose and Hardy, 2014). According to Barr (1983) as highlighted in Rodriguez-Pose and Hardy (2014), industrial park is an early embracement of the technology park. Industrial parks conceptualize, a tract of land built with the grand initiatives used to create an ideal environment for both local and international resident tenants. It is not without preconditions industrial park become operational and assure settlement of enterprises in the park rather this requires provision of basic enabling infrastructures, fiscal and non-fiscal incentives including favourable system of governance or regulatory regimes which allows operation of business in more liberal context. Literature depicted that it is difficult to make private sectors main driving force of industrialization program without ensuring reliable investment climate and such spatial based policy intervention create favourable condition in formulating conducive investment climate (Farole, 2010; Farole and Akinci, 2011).

Industrial parks as the precursors of modern science and technology parks dated back to 19th century in the United Kingdom, with underlying logic of creating ideal environment for the resident enterprises, originally in textile sector (Barr 1983 as cited in (Rodriguez-Pose and Hardy, 2014). Industrial parks provide an optimal environment specialized in manufacturing for the resident firms through special measures including; provision of basic facilities to tenant firms, standardized infrastructure, an integrated local transport network, conducive regulatory frameworks as well as fiscal and non-fiscal incentive packages (Aggarwal, 2006, 2010; Zeng, 2015; UNIDO, 1997). To add more, the provisions of packages of basic facilities to industrial tenants mainly targeted to address structural barriers to ensure expectations in the theorem of new economic growth. The theory describes economic zones as a conduit that encourages industrialization to bring about local economic development.

(Farole, 2011) also advanced that the primary rationale behind establishment and operation of industrial park as major development instrument is to alleviate institutional barriers, deficiencies pertaining to infrastructure including political obstacles that impede smooth operation of development agenda. Technology parks, by contrast, tend to offer more sophisticated bundles of specialist infrastructure and support packages to cater for the complex needs of high-tech industry.

The other substantive element that shades differences between industrial park and other models

such as technology park is that the former is more manufacturing oriented occupied by nascent enterprises and limited focus on innovation and R&D (FIAS, 2008). Compared to technology parks industrial park likely catalyse innovation agenda through its indirect role and tend to adapt existing technologies in which the magnitude of such experience is high in poor locations or areas in terms of technological advancement compared to competitor regions. However, there exists at least a relative exploitation of innovation. Thus, considering the potential impact of existing technologies in the industrialized world particularly, in causing adaptation to the technology era, to promote local economic development, or increase of regional stock of knowledge countries tend to locate multinational companies. The basic premise of this argument is that resident multinational corporations in the industrial park will have higher propensity to invest in the planting technological systems that are new to the host region, and diffuse knowledge through human capital formation in the local labour market (Rodriguez-Pose and Hardy, 2014).

2.3 Terminology

As advanced in vast body of literature (Aggarwal, 2012; Farole, 2011; FIAS, 2008; ILO, 1998; Johansson, 1994; UNIDO, 2015; World.Bank, 2011; Zeng, 2016, to mention major), industrial parks are development policy tool that governments' use for attracting FDI, increase share of export contribution, generating employment and others. Provided these are benefits of primary importance, the initiative is also important to establish linkages between foreign experienced firms and domestic companies which presumed to improve socioeconomic conditions of the host country and address regional inequality when the program targeted disadvantaged regions. The term industrial park used interchangeably to define different forms of initiatives. In some literature it is also known as 'industrial estate' which is an area separated from densely urban centers and specific location designated for industrial facilities. In the context of global standard, industrial parks are home to different manufacturers, it contains ports, warehouses, distribution centers, institutional setups established to render services for tenants and more. In some cases, (see e.g., FIAS, 2008) it is used to define 'industrial estate' and this commercial free zone are essentially fenced-in, business operation accompanied by duty free from taxation, offer warehousing, storage, and distribution facilities to mention some. The term also used as alternative definition of "export processing zones", whilst this model of economic zone represents tract of land established with primary purpose of attracting export-oriented manufacturers without any access to local market of the host country. As described in UNIDO (2015), as compared to others estates industrial parks are the simplest form of economic zone primarily designed to foster local economic development. There exists variation across industrial parks in the context of developing countries particularly in terms of their sophistication in provision of different form of services. According to King Sturge, 2002 as cited in (UNIDO, 2015), the variation also prevails across developed and emerging economies whereby in the former the core function of industrial park dominated by warehouses and distribution facilities whilst in the latter the estates dominated by firms engaged in manufacturing activities.

The term IP also used to refer 'special economic zones', which refers geographically separated-fenced specific locations and treated with special legislation mostly in customs, tax and other regulatory incentive for residents of the designated area, single administrative arrangement, streamlined procedures, access to both domestic and international markets etc., to mention some (Zeng, 2016). Similarly, the initiative also used to refer 'specialized investment zones', which as the

term implies focused economic activities targeted specific sectors like science or technology parks, petrochemical zones, logistics parks, and airport-based zones, etc. Such model of economic zones adopts feature makes them potentially different which is specific sectorial orientation or identified priority sectors with tailored auxiliary supports meeting demands of the designated sector and no more beyond. A more comprehensive definition of an industrial park is a "tract of land developed and subdivided into plots according to a comprehensive plan with or without built-up factories, sometimes with common facilities for the use of a group of industries" (UNIDO, 1997). In this particular comprehensive definition two points need amplification (Turk, 2006). The comprehensive plan refers not only to the physical planning of the park, but also to its immediate social and economic environment, and the role assigned to it in the regional or urban development plan. Noufal and Ramachandran (2016) also highlighted industrial parks as ultimate integration of economic, ecological, and social dimensions of sustainable industrial development. Sustainability is of major instrument to roll out successful operation of industrial parks. In addition to the aforementioned sustainability dimensions, economic zones to be sustainable especially in the context of emerging economy countries; strong commitment should be demonstrated in realizing knowledge and technology transfer into local economy. The long-term benefits to the local economy will be magnificent when integration between economic zones and local economy realized. According to Economist.com. (2015) the idea of making big projects like industrial parks enclave without any connection with the local economy, end up in short term operation only and difficult to make it sustainable. Successful industrial parks are the ones that, with time, will over-spill to the national economy to make the whole country a special economic zone. In this regard countries implemented special economic zones policy and achieved good records like those in Asia including South Korea and Indonesia successfully integrated the zones with main local economy. Apart from economic sustainability, environmental sustainability which is of major issue in African economic zones should be taken into account. Economic zones should comply with the environmental standards in order to reduce negative environmental impacts of the programme. According to Zeng (2016), sustainable economic zones have been successful in establishing synergy between regulatory frameworks and policies of special economic zones into wider domestic economy of the host country. As self-designing systems, they exhibit immense possibility and if they are seeded with sufficient diversity, they can design solutions for their problems. Generally, by principle it is designed to allocate specialized infrastructure in selected areas with the aim of reducing costs of building infrastructure, social and ecological impacts caused by industrial production.

As advanced in Saleman and Jordan (2014), "the theory of industrial parks is seductive". According to the theory, governments play substantive role and discharge the responsibility in creating conducive investment climate; particularly infrastructure, subsidies and cheap labor for tenants to improve competitiveness and subsequently co-located firms generate agglomeration economies; and so, the public goods should be concentrated on areas of collocation. If the firms are not there yet, the provision of infrastructure will somehow induce them to be. If the area is demarcated, and the general economic environment is difficult, exemptions can be made that will further entice firms and create competitiveness (in this case making the parks what is most generally termed "Special Economic Zones", or SEZs). Industrial parks, customarily defined as 'special economic zones', are characterized as a clustering of industries designed to meet compatible demands of different organizations within one location.

As highlighted in Farole (2011), the variation in terminology across vast body of literature in an attempt to express this initiative attributed to several factors, including; (a) the importance to make differentiation among types of parks that demonstrate substantial differences in both form and function; (b) variation in economic terminology across countries; (c) desire to create a boundary by zone promoters to differentiate their product from other competitors; and (d) multiple translations associated with the term also caused potential variation. Definitions vary across countries and institutions, and evolve continuously as new types of parks or zones are developed and older types disappear or are adapted. Any attempt at a comprehensive definition of industry parks must be comprehensive and should encompass the bewildering array of past, present, and future parks, and yet sufficiently precise to exclude those that do not display the essential structural features that make a zone or park.

2.4 Stages of development and generations of industrial parks

Industrial park as a tool for development policy widely used in Asia in 1970s and 1980s. Following packages of driving development agendas under structural adjustment program through extensive policy under auspices of IMF and World banks group and acceptance of neoliberal ideology, industrial park development program with its multifaceted purposes proliferated in Sub-Saharan African countries since the past few decades (Engman et al., 2007; Stein, 2012). In fact, in Sub-Saharan African region, though the programme didn't operationalize till 1990s & 2000s several countries launched industrial park development program in the 1970s (Liberia 1970, Mauritius 1971 and Senegal 1974) (Farole, 2011).

Appropriateness of economic zones as a policy instrument of industrialization depends on stage of development of a country and its competitiveness. Compared to other economic zones industrial parks and special economic zones are convenient for technological catch-up as well as easy solutions for less developed countries in forging rapid economic growth. Looking along stage of country's competitive development, there has to be transition from industrial park program to innovation districts i.e., the one rely on innovation driven development. As advanced by (UNIDO, 2015), "industrial parks are the simplest form of planned estates and will appeal to countries that are at a low stage of economic development". Accordingly, while most developed countries such as USA, Switzerland, Singapore etc., have eco-industrial parks, technology parks and innovation districts; low-income countries such as Ethiopia, Kenya, Cambodia etc., have only industrial parks or special economic zones. The following picture further elaborates association between country's stage competitiveness development and economic zones fit a program of economic growth.

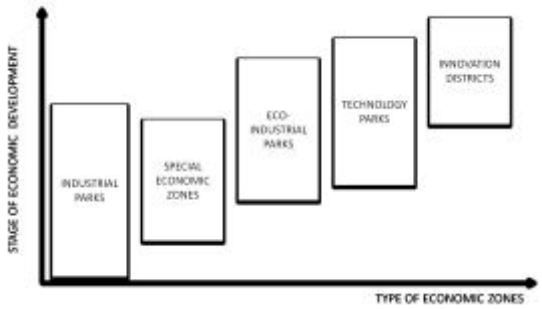

Figure 1: Economic zones and stage of economic development (adopted from UNIDO, 2015)

As anticipated by Bonde-Henriksen (1982a); Keppl (2002), typically, at the global level, the first generation of industrial parks, which were built in the 1970s, characterized by some exceptional features which distinguished this generation from the others. Park activities in this phase dominated by assembly in halls and storage and a simplistic architecture. In this category the initiative designed as component of larger public sector driven development and operation in which government subsidies for facilities and services majorly took place at the time. With strong market pull desire, government took charge of developing, operating and regulating industrial parks.

Second-generation industrial park presented more challenges compared to the prior category and also characterized by more complicated architecture. Industrial parks classified in this generation established with prior attention to meet requirements of science, business and technology or simply desired to catalyze benefits of science and technology. Since the second half of the 1980s, the third-generation industrial park was built; these were typical by elastic use of the area and a wide portfolio of services, as well as by an increase in the number of administrative staff and furthermore, more space was offered to offices focusing on IT. Administrative buildings and wide portfolio of services were characteristics for fourth generation industrial parks which begun to arise from the mid-1990s. Companies located in the parks used high-end technologies, storage houses were usually located outside the park itself and there was an increase in the importance of recreational areas connected to the park that were used by people working in them. Since the second half of the 1990s, industrial parks have been a part of an international network of cooperating parks. In summary, industrial parks in this generation shifted to operation warranty more flexibility in space & building utilization, created attractive places and provide wide range of supports for tenants. It is also characterized by gradual shift to a system appreciate coordinated public-private partnership (Bonde-Henriksen, 1982b; Keppl, 2002).

Industrial parks established in the early 1970s were driven by public sector development and operated with government subsidies for services and facilities. They were basic compared to modern standards, with simplistic architecture offering halls and space for storage. Over the decades the scope of services provided by industrial parks has become more sophisticated and comprehensive. In the late 1970s and 1980s, the new generation of industrial parks was built with greater attention given to the requirements of science, technology and business. During the 1990s, industrial parks emerged with greater flexibility in the use of buildings and space, and a wider range of support services supplied to firms. There was a gradual shift from ad-hoc private sector licensing to plan and coordinated public-private partnerships. Memedovic (2012) showed that private sector involvement led to improved services, greater product differentiation and non-price competition. The most

recent wave of industrial parks constructed since the late 1990s are designed to promote new innovative industries and technologies, as well as to create attractive environments for employees with facilities such as housing, medical services, shopping and educational establishments. The private sector develops, owns and operates the park on a cost-recovery basis. The authority only regulates activities within the confines of the park and outsources core functions to the private sector.

2.5 Review of the impact of industrial park operation and practices

Potential benefits of industrial park operation

Industrial park is a policy instrument for many countries to foster local economic development. As highlighted in most literature, analysis focusing on the benefits of industrial park or/and special economic zones consider main policy objectives of the program including; a) attraction of foreign direct investment & promotion of rapid industrialization, b) large scale employment creation at both national and local level, c) support nationwide economic transformation, d) a program to experiment new policy driven program, e) to achieve more balanced employment & development across regions, f) promote development of domestic industries (Madani, 1999; FIAS, 2008; UNIDO, 1997). Impact analysis along these major policy objectives is quite heterogeneous across world and thus, there is no standardized global framework to measure benefits of industrial parks. Despite the differences in outcome the aforementioned policy objectives or direct and indirect benefits of zones are yardsticks of successful operation or failure story (FIAS, 2008).

In a condition of successful implementation, zones generate two types of benefits as per policy goals of such establishments. The benefits often categorized as "static" or immediate/direct benefits such as employment creation, export contribution, government revenues and foreign exchange earnings. Similarly, successful implementation of the program also generates "dynamic" or indirect/benefits of secondary importance such as diffusion of knowledge, technology transfer, skills upgrading in the local labor market, economic diversification and improve production capability of local business environment (Farole, 2010; Zeng, 2015; Milberg and Amengual, 2008). This entails that implementation of industrial park development policy embedded into local context and positively affect the local economy through over-spills which remark efficiency of the operation in causing dynamic benefits (Milberg and Amengual, 2008). Special economic zone's dynamic contribution or spillovers appear in the form of enhanced economic productivity, new technological practices and welfare effects on the host country's population (FIAS, 2008).

2.6 Direct and indirect benefits of zones

As in the case of technology parks and other models of industrial park, the potential and magnitude of park benefit vary across the different schemes. As it has been highlighted in in the first section of this chapter and (Rodriguez-Pose and Hardy, 2014), despite the fact that different concepts used interchangeably to explain industrial park there exists fundamental differences among the various schemes. As anticipated in (FIAS, 2008), the major premise of industrial park and its primary emphasis as a development instrument remains consistent. Their targets are employment creation, attraction of both foreign and domestic private firms, stimulate knowledge and technology transfer through integration with local industry, alleviate deficiencies of foreign currencies, and experimental laboratory for development policy to bring about wide range local development.

Parks create a favourable environment composed of various incentive packages, subsidized services, and tailored regulatory concessions with the aim to address market, political and institutional constraints hinder normal production processes and active participation of local firms (FIAS, 2008; Madani, 1999). Though it is challenging to ensure innovation from the scratch through industrial park policy, the influence on particular regional innovative system is not simple and the program play leading role for regional innovation if selection of the park model considered local context for synchronization. Successful concentration and attraction of firms to the zone likely pave way for territorial innovation through ('learning by doing', 'learning by using', learning by communicative interaction based on proximity, improve competitiveness of local enterprises through supply chain relationships, and ultimately instinct industrial production skills in their workers and the region (Rodriguez-Pose and Hardy, 2014).

Drawing on agglomeration economic theory hypothesis, industrial park offers the most sustainable route towards economic prosperity and local industrial development (Aggarwal, 2012; Falcke, 1999). As highlighted in Zeng (2012), industrial park is a policy tool to stimulate economic transformation and speedup the catch-up process in which it also believed to enhance rapid development of industrialization as well as urbanization. As theorized in the literature, the benefits of industrial park can be categorized as short-term/primary potential benefits - mainly direct and includes; investment attraction, improve export, foreign exchange earnings, employment generation or safety valve to reduce employment and poverty. These set of benefits depend on attraction of investment which is literally beyond infusion of capital. Industrial park also generates long-term benefits which are mainly indirect and subjected to successful operation. The long-term/secondary benefits of IPs include; up-gradation of production scale/promotion of non-traditional economic activities, promotion of both soft and hard software technology learning, cluster facilitation, testing field for wider economy/demonstration effect, construct supportive environment for local industries, invoke change in local business climate and adoption of modern management practice. According to Rodriguez-Pose and Hardy (2014), industrial parks compared to other models such as technology parks focused more on manufacturing and production activities than triggering synergy between research and industry. This entails spin-offs pertaining to knowledge and technology transfer result from integration between research and industry received secondary importance in relative view. However, experiences of developed economy showed that technology up-gradation contributed vital role for the sustainability of the program and in amplifying local development objectives.

Theoretically an implicit association between innovation and technology diffusion and local economic development is of basic rationale of industrial park development though this premise fell short of reaching desired level in an actual sense in most countries. The initiative similarly operated in different corner of the world linked to perceived role of industrial parks such as the creation of supporting environment for technology inflows, knowledge diffusion, forge local development by way improving technological capacity of domestic manufacturing. Moreover, this policy development often utilized to serve as a pipeline in a condition where developers intended to locate multinational companies (MNCs) for better development outcomes.

To summarize the idea, based on international experiences, successful industrial parks generate comprehensive conducive environment for medium to high technology-based manufacturing activities. The best characteristics of standardized industrial parks adopts features such as; global standard infrastructures, packages of subsidiary services, programme enhance technology transfer, programme catalyse local development through various work-force training schemes and strategies

forge backward and forward linkage with the host country's manufacturing sector (Rodriguez-Pose and Hardy, 2014). Inotai (2013); Rodriguez-Pose and Hardy (2014) revealed that the very success of export-led industrialization strategy subjected to competitiveness of the host country or industrial park developers. The increased competition among developing countries to become manufacturing hub of the continent by way of attracting FDI to industrial parks is also driving force behind less performance of the zones. Empirical findings showed that zone host developing countries are boxed in "unnecessary competition" to locate foreign international firms in the industrial park/special economic zone, of which generous tax exemptive packages and poor regulations of working conditions ("race to the bottom") are worth mentioning. Indeed, the workability of SEZs in general sense and related analysis demands not only scenarios in host country but also global development perspective (Palley, 2003). Similarly, evidences in study conducted by (Kaplinsky, 1993 as cited in (Johansson and Nilsson, 1997) portrayed that "since cheap, unskilled labor is the major attraction for foreign investors in EPZs, competitive devaluation may cause EPZs to be beneficial when established by a few countries but result in a drop in real wages and deteriorating terms of trade when established simultaneously by a large number of developing countries". As portrayed in Rodriguez-Pose and Hardy (2014) as a consequential factor of increased competition on a similar base at a global level in general and territorial competition (mainly SSA), causing pressure on escalate of incentive packages, relaxed regulation, labour and environmental compliance which altogether distanced the program from all satisfactory functions of contributing to national economy. Similarly, as in the case of technology park many countries particularly, Asian tigers managed pitfalls and enjoyed success stories in the operation of industrial parks. In general, as claimed in the theoretical base of industrial park development in particular and special economic zones in general the following are detailed discussion on potential benefits of zones.

2.6.1 Foreign direct investment (FDI)

Attraction of foreign direct investment is one of the fundamental strategic objectives of industrial park development. Similarly, of the major FDI goals is to boost productivity of local business through linkages with local entrepreneurs. Thus, sufficient inward movement of multinational companies expected to support local small and medium enterprises and forge development of manufacturing industry sector. In the context of emerging economy countries, particularly in SSA zone development policy targeted export-oriented manufacturing through involvement of both domestic and foreign firms otherwise which would not have been possible (Milberg and Amengual, 2008). Basically, the rationale behind industrial park development is that they are potential in attracting FDI and its associated benefits without which developing countries would not have realized such objectives. Experiences of Asian industrial parks showed that the program have formed the pillar for attraction of foreign direct investment and related benefits such as dynamic technological development. The sector into which government attract FDI vary across countries. For instance, in the context of most Latin American countries huge amount of resources has been channeled into development of value-added economic activities with the prior rationale to locate FDI in the zones (Rodriguez-Pose and Hardy, 2014). Despite the sectorial variation, foreign direct investment (FDI) in to zones with the desire to engender technology transfer, knowledge diffusion and demonstration effect to aggressively catalyse sense of entrepreneurialism in local business environment to shift from traditional economic activities to non-traditional production (Madani, 1999). The analysis in the literature also revealed that expansion of industrial park development policy over different parts of the world increased promotion and retention of FDI which was never

considered as prior agenda of most low-income countries of the world particularly in Africa (Farole, 2011).

Attraction of FDI and its contribution not only delimited to promote economic outcome rather presence of foreign companies serves as a tool to forge human capital formation. Industrial park contributes to skill development through: a) encouragement of "foreign educational institutions to set up local locations" to improve competency of local educational and training centers and b) partnership with foreign experienced companies to engage in research & development activities, with the desire to exploit company specific knowledge to capacitate local work force (UNIDO, 2018). Evaluating global experiences, successful industrial park operation generates holistic supportive environment for the entire manufacturing sector of the host country. Strategies employed in materializing the policy challenged by strong regional competition based on similar activities. There are countries managed to control major pitfalls and enjoyed success experiences. As evidenced in most researches, in the context of most SSA developing successful industrial parks is hardly achievable or unrealistic. The problem attributed to various factors including mis-management of zones, absence of clear strategy and most of them are isolated enclave at best far in set up from local context (Rodriguez-Pose and Hardy, 2014; Farole, 2011; Zeng, 2016).

2.6.2 Employment opportunity

One of the fundamental objectives of industrial park development is to generate employment. Theoretically, industrial park operation and their implementation targeted to generate considerable number of jobs in their host economies (Rodriguez-Pose and Hardy, 2014). Industrial park development aims to render job opportunity as its primary goal of establishment so that the program alleviates problem of unemployment and ultimately contribute to improvement of nations living standard through income generation; which further generate revenue for government from employment income tax and contribute to skill development in the local work force (Madani, 1999). Some view relationship between zone development program and job creation as a tool to encourage investment in less developed regions of the world. The association in this regard viewed as an attempt to promote manufacturing-based economy, up-gradation in the industrial sector which subsequently increase ratio of employment creation contribution of manufacturing sector. comparative studies showed that establishment of zones in most developing countries resulted in considerable increase of additional jobs (Cirera and Lakshman, 2017). Evidences across the globe on the performance of zones revealed that the program is a potential to spur employment and growth in the nationwide economy. As highlighted in FIAS (2008), aggregated picture of special economic zone's impact estimated to be around 68 million direct jobs, US$851 billion worth of exports, which accounts for about 41% of global exports. For instance, experience of Dominican Republic showed that employment trend in industrial free zone over periods of time increased from 500 in 1970 to almost 200,000 in 2007. Madani (1999), showed that although positive progression in special economic zones is impressive, when the figure evaluated against national labor market composition represents only small fraction of nation-based labour force. In the case of Philippines, zone development program employed around 183,709 it only represented 0.59% of the aggregate 30.88 million work force in same fiscal year.

On the other hand, the benefits of industrial park development remained at the center of debate in most literature of economic zone development. Some argue that the potential benefits of zones

supposed to transcend well direct employment generation and economic efficiency. With particular context of labour market outcomes, this entails that the impact of industrial park development on the host society become more viable and ensure sustainability when it offers quality employment, allow employees to experience both vertical and horizontal mobility and if the tenants not drive their competitive advantage from exploitation of low-wage workers (Farole and Akinci, 2011). Apparently, the issue beyond mobility of significant number of workers to the zone is the quality of skill development and promotion to next stage of occupation category (Madani, 1999). Reviewed literature revealed that industrial parks working condition criticized against most of ILO safety standards where mobility of workers hardly experienced and potential revenue from income tax of employee in the zone is not significant as most parks pay low wage exempted from taxation.

2.6.3 Technology transfer and skill development

Diffusion of technology and knowledge transfer is one of the fundamental indirect potential benefits of industrial park development program most cited in literature of special economic zones. Considering international experiences focusing on performance of countries with success stories, industrial parks' spin-off provides comprehensive supporting environment to manufacturing firms of different size. Best performing industrial parks in the world characterized by global standard infrastructure, incentive packages for resident enterprises, human capital development through range of various training schemes, support knowledge & technology transfer, and forge backward and forward linkages with the local industry. Foreign experienced tenants in industrial parks expected to safeguard technology transfer to local industry and support skill up-gradation of local workers through various training formats. This subsequently create skilled labour man power in manufacturing sector of the host country which may improve efficiency and productivity of domestic firms following recruitment of workers previously employed by resident firms (Gibbon et al., 2008).

Linkage of different varieties including both formal and informal one between foreign owned multinational enterprises (MNEs) and local businesses serve as a bedrock for innovation, nurturing entrepreneurship culture and knowledge building process (Tan, 2006). As highlighted in reviewed literature, desired human capital development formation following knowledge transfer would be realized if only skill transfer experienced. Provided that manufacturing sector demands skilled workers from the labour market of zone developing countries and tenants likely improve skills of workers through on job training. Knowledge diffusion and skill development become more important when labour mobility to domestic labour market is high and such workers recruited by local firms. Such mobility of workers potentially affects nationwide economy when skilled labour turnover (turnover of skilled workers worked in the position of managerial) is high among skilled workers of the zone and gradually recruited by domestic firms or inaugurate own firm following received experiences (Jenkins et al., 1998; Madani, 1999).

A key instrument to alleviate knowledge flow difficulty across space is strong and higher learning/research institutions serve as a hub of promoting regional innovation (Benko, 2000). As illustrated in Rodriguez-Pose and Hardy (2014), industrial park tends to be more of manufacturing oriented and the extent to which this model of park development entertains transfer of technology and skill based on research outcomes from universities has got little/secondary importance. However, experiences of countries with success stories revealed that technology up-gradation is vital for local development and sustainability of industrial parks themselves as well. Moreover, developing economy of

SSA countries and emerging economy in general suffer from absence of top ranked and dynamic Universities serve as a vital driving force for innovation, knowledge and technology transfer to take place. As revealed by the author, impacting and world class universities are non-existing in the context where localities or regionals are hungry of technological development and this questions viability of parks causing spin-offs in the areas of leveraging technology transfer. Beyond these, according to (Madani, 1999; Farole, 2011; Engman et al., 2007), contrast to the theoretical base of establishing industrial park development, there are factors that impede diffusion of technology from industrial park firms to local business environment and these factors include; labour intensive nature of industrial park, simple assembly operation activities and low technology manufacturing which less likely experience up-gradation to sophisticated technology. As advanced by Jauch (2002), skills upgrading also less likely happen provided that the tenants target to generate benefits from cheap labour and recruit foreign nationals/expatriates in technical and managerial positions mainly to avoid training costs.

Strong desire by the host countries particularly emerging countries to make most of technology and skill transfer warranty strategic intervention to improve higher learning institutions environment. Universities play paramount role to ensure innovation, knowledge and technology transfer (Rodriguez-Pose and Hardy, 2014). Strengthening local knowledge/innovation incubation centers is also important due to the fact that transnational corporations (TNCs) and multinational corporations (MNCs) engagement in research and development activities happen in their home country while the companies are investing in developing countries (Alarakhia, 2012). In countries like Mauritius, knowledge diffusion had brought substantial effect on domestic textile manufacturing sector following integration between industrial park tenants and local firms. Similar policy direction in SSA zone developing countries should target formation of quality linkages between domestic and foreign resident firms through creation of more opportunities and improve capacity of local firms to ensure learning opportunities between domestic manufacture and foreign firms (Omar and Stoever, 2008).

2.6.4 Backward linkages with the local economy

The long-term and indirect potential benefit of industrial park after massive capital infusion described by its capacity to generate backward linkages, stimulation of knowledge and skill transfer to local workers to capitalize capacity of local firms. Thus, beyond the capital infusion through FDI industrial park is preferred as a policy instrument in order to ensure broad social, economic and labour objectives including transfer of skills and technology, technology and human resources upgrade in the chain of production, consumption of local goods and services, local spin-offs, improve knowledge of how to participate in global market are of substantial gains (Stein, 2012; Zeng, 2012; Madani, 1999). As highlighted in most reviewed literature, the other potential benefit of industrial park development is improvement of productivity capacity of host economy following backward linkages between domestic firms and resident enterprises. Attraction of foreign firms into the zones desired to spin-off 'backward linkages' which refer to transaction based (supply-demand) relationships between foreign subsidiary and local suppliers which may subsequently forge desired over-spills (Farole, 2011; Madani, 1999; Engman et al., 2007).

Where industrial parks are able to integrate with the wider domestic economy, developing a network of backward and forward linkages in the process; the cumulative benefits of agglomeration and

industrialization economies can begin to generate the dynamic processes that are vital for the promotion of local economic development. In this respect, a multitude of ancillary factors can help parks evolve and produce sustainable development. As the knowledge and know-how of the management team expands, firms will be able to more efficiently upgrade business processes, improve product quality, and engender more effective forms of industrial organization, utilizing the available support mechanisms. However, where this fail to effectively develop, the viability of a park becomes highly questionable, heightening the risk of creating isolated entrepots that fail to drive local modernization and ultimately become a waste of precious (often public) development resources. Apart from this, respective performance of industrial park resident enterprises affected by locational advantage of firms. This entails establishments in the areas of already strong level of industrialization which supported by technology intensive manufacturing enabled backward and forward linkages with the multiplier effect of sustaining park competitiveness in the growing global competition (Madani, 1999; Zeng, 2012; Aggarwal, 2012; Rodriguez-Pose and Hardy, 2014).

Moreover, inter-industry relationships stimulated through backward linkages between local firms and industrial park tenants trigger flourishment of intermediate-input-producing sectors which further pave way to utilize backward linkages as conduit to ensure knowledge diffusion, technology transfer, skill development in the local work force and stimulate demonstration effect (Jenkins and Arce, 2016). A potential way for the host economy to experience spillover is when tenants trained employees of local firms to meet higher quality standard and stricter time demanded by zones set to operation (Jenkins and Arce, 2016). Despite the theoretical model of industrial park development, experiences of emerging economy showed that zones fallen far short of causing benefits of secondary importance of which backward linkages is basic one (Farole, 2011; Madani, 1999; Rodriguez-Pose and Hardy, 2014). As in the case of other potential benefits, there are a number of factors contributed to failures in generating backward linkages. The factors contributed to this limitation includes; import intensive nature of industrial park particularly in the case of export oriented park, infrastructures fall short of meeting global standard, weak absorptive capacity of domestic firms, low capability of local firms in producing quality goods and services in the context of highly competitive global market, incentive package which allow firms to import production inputs without tax imposition (duty free) and evolvement of manufacturing sector to suit with the new economic conditions (Madani, 1999; Engman et al., 2007; Milberg and Amengual, 2008; Jenkins and Arce, 2016).

2.7 Review of success factors or failure of industrial park

Literature of special economic zones revealed that evaluation of success and failures of industrial zones mostly made against their initial objectives. Industrial zones which were successful met respective policy objectives including; attracting FDI, export promotion, generating foreign exchange. Contrast to those successful stories the program failed in most emerging economy and their limitations attributed to enclave nature without forming meaningful integration with the local economy and operate based on fiscal incentives only (Zeng, 2016). To measure successful zones a 'holistic' or systematic approach has to be used which answers extent to which the program considered country's specific situation and how far it is well inside the host country's comparative advantage (Zhang, 2016). A model used to measure effectiveness or failures of industrial parks and most cited in large body of literature is policy objectives justify their establishments. These

objectives are key yardsticks to measure efficiency or inefficiency of industrial park development program (Farole, 2010; FIAS, 2008). Scholars put different indicators as a substantive element of measuring success or failure of industrial parks. According to Farole (2010) investment attracted to established industrial park is critical proximate variable to measure success of the initiative.

While attraction of investment to the developed zones is of critical economic importance of industrial park development and most cited to indicate success or failure of the initiative, there are literature which view the social importance of the program as a critical indicator. As revealed in (ILO, 1998; Engman et al., 2007; Milberg and Amengual, 2008) successful zone operation subjected to safe working conditions and quality of jobs created in the establishments. Accordingly, provided that this study is a piece in attempt to execute the role of industrial park development in less developed economy using comprehensive approach, the success in the context of this study is defined as extent to which the program stimulated investment, create jobs, generate export, support diffusion of knowledge & technology transfer and forge backward linkages.

2.8 Empirical literature on industrial parks nexus regional development impacts

Different researchers in different countries have studied the contributions and effect of industrial parks from different perspectives. In this sub section, the researcher reviewed different studies focused on industrial park development and employed different methodologies and reached on different findings. Evidences show the real contribution of industrial parks in both developing and developed countries. The following are some of the evidences that show the real contribution of industrial parks. In most case, the primary goal of the industrial parks is to alleviate unemployment problems and shortage of foreign exchange. In this regard, industrial parks have been recognized as a potential sector to minimize unemployment problems in developing and developed nations of the world, which as a result makes industrial parks to have significant impact on economies of many countries.

Overview of Countries' experience & review of success or failure of the programme

Experiences of different countries where industrial park development is used as a policy instrument for industrialization showed both success and failure stories. This questions how countries realize success factors? or why they fail to achieve holistic benefits of industrial park development? Industrial park development embedded in institutional arrangement of park developers and this entails countries set potentially varied realistic goals and respective feasible pathways to achieve this goal.

Industrial park development proliferated across the world and the has shown significant increase over the past couple of decades. Empirical evidences considering global experiences revealed that special economic zone play substantial role in terms of desired economic importance particularly investment attraction and export generation though employment contribution is modest for both low- and middle-income countries (Farole, 2011). Due to combination of factors related to country specific and regional level challenges performance across zone developing countries shown significant variation. Studies revealed that except in few successful cases, export processing zones share small account of total investment, and in some the initiatives' share of total investment have been to the expected level. Over all global picture of industrial park importance and contribution fallen short

of being considered source of sufficient investment into zones (Engman et al., 2007; Farole, 2010; FIAS, 2008).

Due to different reasons but mainly as a result of increasing territorial competition provided that many emerging countries particularly Sub-Saharan African countries trapped in a similar competition which subsequently increased pressure on; imperative regulatory frameworks, fiscal and non-fiscal incentive packages and labour standards (Rodriguez-Pose and Hardy, 2014). Similar to other park models, there are countries used industrial park development as a policy tool for development and have enjoyed success by way of devising realistic goals and feasible pathways enhanced to manage pitfalls. Countries with extensive experiences of industrial park policy implementation such as China, Malaysia, Dominican Republic, Mexico, Bangladesh and Vietnam were successful in terms of investment, export, employment, diversification and over-spills provided that the program implemented in an appropriate context (FIAS, 2008). Contrastingly, empirical investigations on impact of industrial park development linking impact of industrial park development and practices along the aforementioned major parameters revealed that in African countries case points with the exception of Mauritius, Nigeria, Ghana, Kenya and Tanzania the policy have had failure stories otherwise mixed outcomes (FIAS, 2008; Rodriguez-Pose and Hardy, 2014). Same study by Rodriguez-Pose and Hardy (2014) tend to confirm that "success stories are predominantly found in the places theory predicts they will succeed". The environments where the program succeeded characterized by industrialized economies, home to demanded technology, large number of competent firms and skilled labour man power required for the functioning of the sector. Argument at the center of this statement is that successful industrial parks should consider local context, internal capacities, abundant resources exist and scarce resources in the locality but consumed by resident firms and policies support the program.

The other substantive element and key objective of industrial park effectiveness measurement is jobs created following establishment of the initiative. Export processing zones considered as policy instrument to absorb large number of unemployment problem and this role is critical in labour surplus countries (Madani, 1999; FIAS, 2008; ILO, 1998). Contrast to this argument, direct employment generated/number of jobs created within zone is minimal as compared to desired figure by host country (FIAS, 2008). Studies also showed that special economic zones employment contribution share only 8% of global employment sources (ILO, 1998).

Industrial parks to become successful in generating potential advantages two compelling factors warranty a due attention. IP as a policy tool for industrialization should either render competitive advantage (global standard quality infrastructure, fiscal & non-fiscal incentives) resulted from clear and well framed strategy by planners. Failure to provide compelling competitive advantage drag industrial park operation to regional competition which embedded in provision of ancillary support mechanisms, exemption from any form of tax, cheap resources (labour, land, cost reducing regulatory procedure) and financial incentives. Industrial park as one of its major goal mainly target attraction of anchor foreign international enterprises and these firms determine suitability of zones based on the two major compelling factors/advantages articulated at the beginning of this paragraph (Rodriguez-Pose and Hardy, 2014). According to Aggarwal (2007), industrial park developed to locate experienced foreign enterprises by way of devising policy that provide ancillary support for alleviating institutional impairments in the local context. As highlighted in Lall (2001) experiences of emerging economies by itself indicate success stories in terms of attracting anchor foreign firms where they are able to establish industrial park in a convenient environment; which

literally means standardized facilities, market access and better comparative advantage in accessing skilled labour.

With the exception of few successful countries like; Mexico, Philippines and Malaysia; industrial parks in most emerging economies criticized for failing to integrate with the local economy and fail to contribute to human capital development formation through skill development in the local labour market. In countries where the program worked well, integration of parks with the local context through backward and forward linkages have been achieved as per the well-designed plan. Integration between industrial park tenant enterprises and external environment ensure supply of high-quality raw materials at competitive price rate and contribute to skills development in the local workforce (Farole, 2011).

Reviewed literature on success factors or failure of industrial park development revealed that though industrial park development program preferred as a policy tool to ensure local spinoff, technology and knowledge transfer and catalyze local development, the desired positive outcomes achieved only by few countries. However, when viewed in light of successful countries experience, the positive outcomes were consistent in South-East Asian countries. Despite high optimism by host countries in gaining back from zone program their progression is not significant enough (Farole, 2011). Study conducted by World.Bank (2011), also proofs as industrial park development have been successful in generating local economic development and other rationales for which they established for, but the outcome is not consistent or have not been uniformly worked across countries. When viewed against its major program goals, industrial park development in most Sub-Saharan African countries (SSA) with the exception of Mauritius are under-performing compared to experiences of other emerging countries (Latin America & Asia) (Farole, 2010, 2011; Madani, 1999). Majorly, industrial parks in Sub-Saharan African countries failed to create competitive advantage reduced to the level of relying on provision of ancillary support mechanisms such as generous incentive packages are an indicator of poor execution and ineffective implementation (Farole, 2010, 2011). In the context of most SSA countries implementation of industrial park program has not necessarily stimulated FDI due to their low progression (Engman et al., 2007; Omar and Stoever, 2008). Evaluated against its role of direct employment generation, many have created few jobs (Stein, 2012). As highlighted in Farole (2011), anticipated backward-forward linkages including knowledge and technology transfer and expected level of skill development in local workforce have not materialized. "There is historical evidence that shows early life cycle of industrialization characterized by super-exploitation of labor" Aggarwal (2012), zones share homogeneous character during start-up period life cycle Omar and Stoever (2008) while this common pattern as evidenced in some empirical studies do not exist in most African industrial parks (Farole, 2010).

Major obstacles that most African economic zones face in materializing industrial park development is inability to attract sufficient volume of FDI from very inception stage, absence of domestic enterprises as tenant in the parks from the onset, aggressive expansionary in park establishment and sectorial wise as well (Farole, 2010). Expected trend in industrial park development life cycle is a shift from one step to the other in a period of five to ten years (Omar and Stoever, 2008). According to Farole (2010), Sub-Saharan African countries industrial parks failed to graduate to expected level of maturity height or literally the trajectory experienced is failure to reach second life cycle due to limited development or stagnation. Generally, there is consensus across reviewed literature as industrial parks have become successful in Asia and Latin American countries. On the other hand, the benefit of industrial park development program on strengthening country's endeavours of

achieving industrialization goal found less significant. This variation poses questions how successful countries realise or why others fail to realise the benefits of IPD? It requires understanding how countries "set realistic goals and design feasible pathways" to effectively achieve its goal.

General consensus in previously conducted studies is that though combination of factors are behind failure of industrial parks in generating desired benefits of which weak institutional context particularly poor governance is major one. Different reasons have been stipulated in literature in describing reasons for the performance variation in cross country and regional evaluation. Some correlate major performance obstacles and impediments of successful operation to investment climate particularly quality of infrastructure into and inside the parks, institutional/administrative reasons, location and timing (Farole, 2011). When it comes to specific context of African industrial zones, their implementation failure associated to environment in which they operate (Farole, 2011); increased regional competition on same type activities, low competitiveness of local firms, poor materialization of planned activities and low experience in meticulously managing zones (Engman et al., 2007; Farole, 2010; Zeng, 2015, 2016). Some studies describe as it is mystery to successfully achieve anticipated goals due to basic obstacles pertaining to; low culture of entrepreneurism, insufficient volume of tenants that allows to materialize intra-park synergies and lack of common vision among major stakeholders (Kharabsheh, R. and Magableh, I, K. and Arabiyat, T, S., 2011). Empirical study by Rodriguez-Pose and Hardy (2014) advanced as combination of factors makes industrial park development less suitable approach to engender anticipated wide range local economic development. Major impediments associated to fragile domestic business, poor socioeconomic conditions, institutional tenuousness, absence of world class universities that allows synchronization of zones to local business environment. The study also revealed that industrial park development program in emerging economy provide little competitive advantage that transcends generous incentive packages and cheap labour to resident firms. If industrial parks competition reduced to the level of such auxiliary support mechanisms only, it intensifies regional competition on same standards which is of major obstacle by itself and ultimately makes the program less worth for fostering development aspiration by the host countries.

2.8.1 Determinants of success and effectiveness of industrial park development

The causal explanation of industrial zones failure is challenging and controversial as well, for it is difficult to detect which condition would have resulted in program failure. Some consider economic values of the initiative and evaluate the program against this indicator whilst other scholars measure success based on job quality and working conditions in the zone. Critics of special economic zones indicate as zone failure attributed not to single factor rather fail on several grounds including; low labour standards, labour market role limited to employment generation and wages put workers at low end of income, poor environmental compliance, and less cost-effective.

Studies showed that success or failure of industrial park development and operation not only attributed to a single factor rather combination of factors influence both conditions (FIAS, 2008; Farole, 2011). Some empirical investigations depicted as there exists relative variation across the conditions though interrelated, but some factors are more important than others (Farole, 2010, 2011; Aggarwal, 2012). The factors explored in detail as given below and can be categorized as those having connection with international situation and those resulted from nature of host country's economy or zone developing countries. International situations include timing/period in which

zones developed, locational advantage, park administration, incentive packages which cumulatively either create an opportunity for or obstacles to competitiveness and zone development program. Success stories or failures of industrial park operation also subjected to domestic conditions, such as country's level of economic development, previous level of industrialization, integration of zone development strategy with national industrial policy, strength of government in running & managing the program, overall investment climate including political stability of the country (Aggarwal, 2005, 2012; FIAS, 2008; Farole, 2010, 2011).

It is important to describe competitive advantages that affects zone operation and it includes; global standard quality infrastructure and services including; utilities, logistics, roads, transport and airports. The other substantive compelling factor deserves due attention is the availability of incentive packages and it is advised if the initiative operate based on facilitation of aforementioned services than falling into unnecessary regional competition based on comparative advantage such as tax and regulatory incentives (FIAS, 2008). Farole (2011) showed that standardized infrastructure services strongly linked to success stories of special economic zones, while it is bit confusing to associate tangible effect of incentive packages to zone success. Moreover, FIAS (2008) depicted that locational advantage of industrial park also plays paramount role to exploit potential benefits of the initiative. According to Aggarwal (2005) experience of South East Asian countries revealed that zones developed at the outskirts of metropolitan or designated industrial areas likely become successful. Additionally, successful industrial park operation also subjected to convenience in the host country's labour market particularly availability of necessary labour skills; productive, cheap labour equipped with demanded industrial discipline. Farole (2011); FIAS (2008); Aggarwal (2005), show that establishment of special economic zone in remote, underdeveloped areas and isolated from local environment locations (inappropriate place-based policy) less likely cause desired benefits or simply unrealistic and become wasteful.

Successful operation of zone also subjected to efficiency in the governance and administrative procedure. Therefore, governments should work effectively in addressing overall institutional barriers to zone implementation policy. The administrative arrangement assumed to catalyze effective park operation include; registration, access to operating licence, customs control center service, utilities and construction related service permissions are major ones (Farole, 2010; FIAS, 2008; Aggarwal, 2005). In some literature like FIAS (2008), it has been highlighted that strong position of authority among zone governing bodies and consolidated aims and services between participating stakeholders including sufficiently convincing finance contribute immensely to zone success (FIAS, 2008).

2.8.2 Major challenges to successful park operation

As highlighted in FIAS (2008) major factors impede successful operation of industrial park include; inappropriate locations, demand for huge financial expenditures, poorly designed policies majorly encourage tax incentives, rigidity in bureaucratic procedure, inconvenience in labour policies, poorly designed administrative structures and strategic practices, incompetent promotion activities to locate sufficient firms. Engman et al. (2007) also identified access to land, inadequate planning, excessive administrative requirements as major impediments of effective park operation. Reviewed literature revealed that, the aforementioned basic obstacles deep rooted in poor coordination between engaged stakeholders and intra-park arrangement itself (FIAS, 2008). Experiences

of successful countries show that special economic zone policies well integrated into regional development agendas and this approach failed to form synchronization in most countries whereas the initiative expected to be part of broader countrywide industrialization agenda (Johansson and Nilsson, 1997). Study conducted by World.Bank (2011) also depicted that poor performance pertaining to industrial park policy particularly dense regulation in execution of designed policy, untimely and less-relevant laws in response to constraints causes failures if not weak performances of operation.

Why IPD and operation failed to work in Sub-Saharan African countries?

As indicated in reviewed literature of preceding sections, most obstacles to successful industrial park operation in Sub-Saharan African countries include; bad timing/intense competition due to establishment of zones at same time, poor implementation & management capacity due to low previous level of industrialization, shortage of required skilled labour, inadequate coordination among engaged stakeholders/institutions (Farole, 2011; Zeng, 2016; FIAS, 2008). Accordingly, very few African countries with the exceptional case of Mauritius, appear to have recorded positive progressions in gaining potential dynamic benefits of special economic zone (Zeng, 2015).

Among others, some of the basic obstacles to special economic zone includes; (a) gaps in institutional frameworks due to total absence or not up-to date laws and in some cases zone development comes before necessary legal-frameworks "putting the cart in front of horse" (Zeng, 2016). (b) poor business environment which literally makes total cost of doing business high and institutional set-up such as 'one-stop-services' does not work to the level of its name and in most cases, it is 'one more stop shop' than single (Zeng, 2015; Farole, 2011). (c) lack of strong business-oriented demand because the initiative mostly resulted from political motivation. This also related to absence of strategic road map to integrate zone development policy with national development agenda (Zeng, 2016; Johansson and Nilsson, 1997). (d) inadequate infrastructure due to insufficient government support and commitment. Though, zone development, operation & management demand convincing experiences, most developing countries lack such operational-know how. This is also well evidenced in failure to follow gradualism approach rather trapped in overambitious plan which resulted in scaling-up of the program without checking workability of the initiative (Zeng, 2016). Beyond these obstacles, the issue of bad timing or engagement of many countries in similar initiative at same time a general external threat which makes the situation hard-hitting for developing countries in general and SSA countries in particular. Farole (2011); Zeng (2015) portrayed that, SSA established zones in 1970s include (Lesotho, Liberia, Senegal, Mauritius, Senegal); 1980s (Djibouti, Togo); 1990s (Burundi, Cameroon, Cape Verde, Equatorial Guinea, Ghana, Kenya, Madagascar, Malawi, Mozambique, Namibia, Nigeria, Rwanda, Seychelles, Sudan, Uganda, Zimbabwe); 2000s (Botswana, Democratic Republic of Congo, Eritrea, Ethiopia, Gabon, Gambia, Mali, Mauritania, South Africa, Tanzania, Zambia).

The evidences presented in the aforementioned paragraph portrayed that although several African countries launched IP programs in the early 1970s, most countries did not set the program to operation until the 1990s or 2000s and this is strong evidence for the unnecessary competition based on comparative advantage than competitive advantage (Farole, 2011). As highlighted in Zeng (2015) nearly about 60% (30) countries in the region took the initiative to implement the program, and over 80% of the initiative started at the same time (within the past couple of decades) whilst many more are in the process of developing the program as a latecomer. This has several important implications in considering their success to date. First, few parks see rapid growth in

their early years but most of the zones developed failed to takeoff or those set to operation failed to reach desired maturity height.

When viewed in global context of history of industrial zone development, African zones were established during and after Asia reached climax level achieving fundamental advancements in the manufacturing sector and named as manufacturing superpower. This dramatic shift of world economy to South-east Asian countries have had brought structural shift in trade and FDI patterns. Thus, the previous level of industrialization and competitiveness of local manufacturing sector and platform for export oriented FDI is a significant factor that may impede the overall development of African zones (Farole, 2011).

2.9 IPD in the case of Ethiopia

Ethiopia has been experienced rapid and stable economic growth over the past decade. For instance, according to the official data, between 2004 and 2014, on average, the Growth Domestic Product (GDP) growth was 10.9 percent per annum. To maintain this growth, the government has recently laid out an ambitious plan called the Second Growth and Transformation Plan (GTP-II) that implemented between 2015/16 – 2020 and extended for more additional periods. The GTP-II is seeking to achieve growth rates of 10 percent per annum (at least) during the plan period and has a strong focus on making Ethiopia the manufacturing hub of Africa by 2025 (primarily through the expansion of light manufacturing). The government is committed to make Ethiopia join middle-income countries by 2025 (World Bank Group, 2015).

The economic growth rate Ethiopia has achieved between 2004 and 2014 was the fastest that the country has experienced and is above the average growth rate achieved by low-income and Sub-Saharan African countries in these periods. Ethiopia's economic growth was driven primarily by structural improvements supported by the conducive external policy environment of the government. Since then, the country's export has quadrupled in nominal terms, while volumes doubled, reflecting a substantial positive commodity price effect. Industrial parks, have become a key instrument of the Ethiopian state's development agenda. A report produced by World Bank group on July of 2021 indicated that, as the second-most populous country in Africa, Ethiopia's total labor force was reported at over 52 million as of 2014.

When it comes to charting the origin of strong orientation towards export led industrialization initiative, the programme can be traced back to the country's Agriculture Development-Led Industrialization (ADLI) strategy. The programme envisioned to enhance Ethiopia achieve industrialization through robust development in the sector of agriculture by way of establishing linkages between the two sectors. Following this, subsequent five years programme Sustainable Development and Poverty Reduction Program (SDPRP) and Plan for Accelerated and Sustainable Development to End Poverty (PASDEP) played ground in establishing strong base for the first and second Growth and Transformation Plans (GTP I & II). Though Ethiopia is late starter in the industrialization activities in the region, steady engagement in establishing industrial parks since May of 2019 is of remarkable move deserves acknowledgment.

Among the main strategies of the GTP-II to achieve its intended goal is the provision of quality infrastructure for logistics and skills development. GTP-II recognizes that trade logistics as a priority area that needs transformative improvements and sustained development. Hence, the

government of Ethiopia (GoE) is working to improve trade logistics to help connect Ethiopia to the global value chains, produce more and better jobs, greater opportunities for domestic suppliers, increased exports, and higher productivity (GTP-II, 2016). In the development policies indicated above and particularly in GTP-II, government of Ethiopia recognized the value of sector prioritization whereby the document recognizes agricultural sector as a major contributor of country's GDP in the coming years. However, according to the plan the development of manufacturing sector has now become indispensable in the renaissance drive of the country. In the coming years, the growth of manufacturing industry will be critical as to ensure sustainability of the current economic growth and to be in the list of middle-income countries by 2025. Aggressive move by the government in the sector of industrialization can be considered as part of rapid economic transformation to achieve inclusive development. GTP-II furthered the core emphasis of strategic sectors of manufacturing industry by prioritizing "manufacturing industries that are labour intensive and use agricultural products as inputs so that they can significantly contribute to job creation and strengthen the agriculture-industry and the rural-urban linkages" (GTP-II, 2016). In addition to export contribution and employment generation, Ethiopia's industrial parks desired to contribute to development of prioritized sectors (FDRE, 2015). Some of the main priority sectors of manufacturing industries including agro-processing and leather were initially incorporated in the ADLI strategy and sustained over time as major priority area.

The second Growth and Transformation Plan (GTP II, 2015 - 2020) and the Ethiopian Industrial Development Strategic Plan (EIDSP 2013-2025) both specify the goal of bringing about structural transformation by increasing the share of the industrial sector to 27% of GDP by 2025 (13% as of 2012), and manufacturing sector to 17% (4% as of 2012) (World Bank Group, 2015). Special economic zones under operation across the country is assumed to achieve stated goals in the strategic plan. Based on positive results gained through implementation of GTP-II, Ethiopia has designed ' a home-grown economic reform agenda ' with the intention to undergo deep reform in the priority sectors particularly it aims to alleviate bindings constraints such as foreign exchange constraints and boost contribution of export sector to the national GDP, create quality jobs in well performing sectors and broaden the role of private sectors in the economy.

As indicated earlier in the above paragraph, during the last decade Ethiopia experienced unprecedented economic growth in which major macroeconomic and microeconomic outcomes gained. Reports by World bank group indicates the following strengths during the period; large market establishments, progress in the aviation hub, remarkable track record in growth and poverty reduction, massive public investment in infrastructure development are among major ones. However, agriculture which comprehend (70% of employment but contribute 40% to GDP) found less productive sector and conditioned by climate and changes in world price rate. The other shortcomings include; low contribution of manufacturing sector to GDP (up to 5%), land locked country, low foreign exchange reserves in the country, constraints in business and governance, insufficient power/power outages, unstable regional environment and political tensions arising from high ethno political arrangements. All these are indicators of inadequate structural change the country has achieved despite the fact the country has achieved rapid economic growth. The structural change is inadequate because, the rapid economic growth has not brought expected share of manufacturing in creating employment opportunities, output and exports. Moreover, this same period of economic growth characterized by high political instability due to unfair distribution of resources, increasing educated unemployment caused revolution which exploded before three years and caused

regime change in the country. The political crisis might threaten Ethiopia's economy and stability throughout the region.

According to report by (World Bank Group, 2015), during the period of intense economic growth Ethiopia has followed ' developmental state model ' which relied on combination of market forces and state intervention. Government relied on classical approach of power sharing between competent groups as a way to bring nationwide unity, an approach which didn't conform to western consensus and the country characterized by low score on governance indicators. Rivlin (2019), anticipated that the sound policy designed for the betterment of the society was paradoxical: citizens benefited less from the development policy because due to unhealthy center-periphery relationship. The author indicated that "engagement of citizens was at the local level while participation at the higher levels of politics was limited". Ethiopia's 'authoritarian developmental state' model partially associated to East Asia particularly China, Korea and Vietnam. In those countries a shift from agriculture to and development in manufacturing industry brought remarkable economic growth. When it comes to Ethiopia's case, economic activity (represented by outcomes in terms of job and outputs) failed to be aligned manufacturing industry and shifted to services and construction sectors.

Ethiopia is a mosaic of nations and nationalities whereby greater portion of the total population are youngster social class. Due to increasing joblessness in this segment of society, approximately some three million young people enter labour market every year in the country and this makes employment creation a vital national agenda. Job creation is of the fundamental challenge of the national development strategy. Government ambitioned to increase the share of manufacturing industry by four-fold and reach 20-25% of total GDP as to increase absorptive capacity of the sector. Industrial parks in Ethiopia are modalities preferred by the government to promote foreign direct investment in light manufacturing and in order to ensure this policy objective, attempt has been made to establish conducive investment climate; strengthened institutional and regulatory frameworks (Oqubay, 2019, See also findings in next chapter).

According to report produced by (UNIDO, 2018), industrial parks in Ethiopia have contributed significantly to the nation's industrial development in terms of creating employment, increasing government revenue and export, diversifying the industrial products, attracting foreign direct investment, and generating foreign exchange. Some newly built industrial parks have also started to implement sophisticated technology and introduce it to the local manufacturing sector. As the development of industrial parks are booming in Ethiopia with the vision of creating an eco-friendly industrial park and mission of generating employment opportunities for the Ethiopian people, there comes accompanying problems sometimes anomaly to their vision and failure to accomplish their mission, for which it is the reason for their existence. On the other hand, governments, industrial park developers and resident firms in Ethiopia experience multi-faceted challenges, such as complications associated with administrative and regulatory capacity building, coordinating key actors and stakeholders, infrastructure and public utility provision, financing issues, skills development, and linkages with local economies (UNIDO, 2018).

Over the past eight years the Ethiopia's industrial park development program has encountered a number of obstacles, which have had a significant impact on its development. Source of finance to facilitate quality infrastructure has been of a major challenge for developers, and the situation is tough when private developer's mandated to finance infrastructure leading to and within the zone. The analysis also indicated that Chinese owned first industrial zone in the country (EIZ)

receive support from government of China as part of development cooperation. However, it has been reported that subsidies offered by the Chinese and Ethiopian governments have proved to be difficult to obtain due to the required upfront investment and challenges in ensuring the disbursement of funds. Furthermore, both the developer and tenants have experienced difficulties in identifying local suppliers which impacts the integration with local SMEs. Furthermore, high transportation costs, general shortages of containers and lengthy cargo dwell -time at the Port of Djibouti continue to be a burden for the zone developer and zone companies alike.

2.10 Summary of literature review

Due to intensifying global competition to locate foreign owned firms in the industrial parks, late joiner economic zone developer countries like Ethiopia, enforced to heavily rely on generous incentive packages and regulatory incentives than other competitive environment. Government is voracious of locating foreign firms and failed to impose inspection frameworks in fear of losing the firms in the condition of enforcing regulatory frameworks. This actually related to growing competition between zone developers at a time. In the absence of standardized facilities, incentives and institutional support currently being provided in global arena of SEZs operation, the outcome is low performance in both investment attraction and other net benefits of IPs operation.

Evidences in reviewed study established that operation of economic zones of African countries rely on cheap, unskilled labour as major strategy to attract foreign investors into zones, such competitive devaluation may cause industrial park to be beneficial when established by a few countries but result in a drop in real wages and deteriorating terms of trade when established simultaneously by a large number of developing countries due to bad timing. The findings in this regard pertaining to regional or global competitiveness as driving factor to successful industrial park program operation otherwise, effectiveness challenge when implemented by many countries. Evidences showed that majority of developing countries in general and SSA countries are late joiners of the initiative in the time of intense competition to locate foreign owned firms in the industrial park.

In fact, there exists divergent views on life cycle of industrial park development. Historical evidences revealed that early industrialization or first cycle/generation of industrial zone development is characterized by super exploitation of labour. On the other hand, beyond life cycle approach such indicators are evidences of recipe for failure. Accordingly, as described in the literature part, there is a general fear of performance failure or effectiveness problem due to involvement of many countries in similar program implementation which intensified the temper of competitions in the field. However, it has to be well noted that there exists a combination of factors that impede overall effectiveness of the program.

Development of industrial parks must pay attention to one of the basic aims of an economy, that is to allocate both industrial production function and necessary services which consequently improve local environment where parks has been established. For successful industrial park operation, spatial selection for the establishment warranty special care, unless the dysfunctions of such policy direction end-up without causing desired benefits. The initiative for instance desired to lessen regional disparities whilst may worsen the existing regional disparities if not properly executed from planning stage to implementation. According to convergence theory of regional balance, regional balance is of the fundamental condition to achieve development objectives provided that such regions accumulate capital faster and better.

Empirical Results & Discussions

3 Chapter three

3.1 Governance: Administrative and regulatory environment

It has been advanced in previously conducted studies as successful industrial park operation subjected to structure of governance, effectiveness of institutional actors and the quality of its administration/management practices. Comparative studies on public and private industrial park schemes also showed that industrial parks owned and managed by the public criticized as less effective compared to private scheme counterpart. Industrial park as described in the reviewed literature desired to accelerate development of priority sectors, employment generation, increase export contribution etc. However, though private park developers discharge same role as developer due to different profit target, they would be hard pressed to successfully bring an initiative such as an industrial park to fruition on its own.

Methodologically speaking, major sources of information used in this particular chapter generated from primary information collected using interview conducted with zone developers, industrial park development corporation, Ethiopian investment commision. Additionally, the chapter also been informed by secondary information gained from document analysis, reports, policy documents and various pamphlets. In order to get comprehensive national image about the country's economic zones, purposely selected departments of industrial park development corporation and Ethiopia investment commision (regulatory institutions) used as a major source of information. Aggregate data on performances, impacts/benefits of industrial parks under both private and public schemes also collected from headquarters of the aforementioned major stakeholders or governing organizations of the country's economic zones.

3.1.1 Organograms of industrial park development

Organograms of industrialization program is of fundamental requirement for successful operation particularly in creating acceptable management. Since the very inception of Ethiopia's national development policy i.e., growth and transformation plan including other national plans which accounts for more than a decade, government used pragmatic approach to bring about rapid development in all rounds. This aspect of institutional structure followed by restructuring institutions, including ministries, authorities, and commissions without impaired core ministerial offices. An important aspect of the administrative setup in Ethiopia, particularly the one pertaining to industrialization agenda encompasses both core ministries at the apex of the organograms and specialized institutions designated to administer investment activities and industrial park operation. As indicated in the reviewed literature the complex nature of economic zones in general and industrial park in particular and varied objectives between potential actors/stakeholders (private, government and others) lead to different types of governance approach. In the case of Ethiopia, the stylised IP management model is strong central government led governance structure with its 'vertical coordination' in all aspects of planning, developing, operating and management of IPs (for the public scheme). On the other hand, as for the private scheme industrial park development, the dense role and commitment by the government offset by the private park developers. In this case

financing, planning and operating falls to private sector with substantive goal differences due to range of profit variation. The administrative structure of Ethiopia's industrial park development policy reserve fundamental power share for the federal government. It follows highly centralized organizational structure and lacks representation of regional government which might be potential for conflict of interest. The organizational structure of industrial park development follows centralization approach than the counter decentralization in the management design. The administrative structure is challenging for adjustment of park conditions to local situations at different levels and to develop preferential policies to ensure local development through integration. The organogram of Ethiopian industrial park development affects successful accomplishment of inward oriented industrial policy of the country. The structure affects power relation between federal and regional states in which the first one given the power to establish heavy manufacturing while the latter given the power to establish light industries. Apparently, the policy is to smoothen development evolution through tailored regulatory support with high efficiency. However, the project is being driven solely by the federal government without meaningful participation of local governments.

Organizational structure of industrial park development in Ethiopia encompasses different institutions with varied responsibilities to ensure road towards industrialization through structural transformation of industries and contribute for the competitiveness via designated institutional settings. The centralized approach is in fact driving tool for similar implementation technique across different corners of the country and also helpful to address skill related challenges at the lower governmental structure. This in fact reduces susceptibility of the system to corruption problems due to long chain of bureaucratic operations. Organizational structure of industrial park development in Ethiopia have involved different tiers of government as basic management structure. However, healthy operation and functionality of the system subjected to consistency of visions between participating stakeholders in the implementation of this development policy. A piece produced by Rodriguez-Pose and Hardy (2014) also conforms as strong coordination and nonfluctuating commitment across different actors over time is of substantive element trigger industrial park to success story and capacitate this complex development tool to achieve regional innovation system. The overall organograms of industrial park development mapped out in the following figure 1.

Figure 2: Organogram of Industrial Park Development
Source: Ethiopian investment commision

From top the **first tier of management structure** is the premier of the country (office of prime minister). At the apex level is investment board of the country and is chaired by the prime minister, and also encompasses other executive bodies/ministers from selected influential offices. Experiences of countries with success stories in the implementation of special economic zones showed that political commitment of senior government staffs played vital role in the road to such remarkable successes. In Ethiopia it is with this intention of easing potential constraints (both financial and non-financial ones), senior government institutions comprised in the top level of management tier. This top tier industrial park management given the key responsibility of leading overall investment and industrial park policy of the country.

Investment board of the country grants investment permits in large scale FDI particularly for industry park developers and also mandated to develop industrial policy in the country. The board specifically decide on establishment of industrial parks, grants set of incentive packages to investors, work on easing investment constraint including policy of regulatory frameworks. Considering power perspective this first tier of industrial park management is in better position of authority for it consists of highest-level government organs including prime minister of the country and mandated to lead investment policy of Ethiopia.

The **second administrative setup** next to the apex level is the Ethiopian investment commission (EIC). This administrative level is considered as a new strategy of government mainly work on promotion of manufacturing sector and focused on foreign direct investment or attract foreign

investors whilst the ministry of industry also targeted investment promotion focusing on domestic enterprises or local industries.

The commission is directly accountable to the prime minister and has the mandate to regulate industrial park developers, operators and enterprises. Promotion work is comprehensively targeted by all stakeholders or literally all tiers of industrial park management, whilst regulatory mandate is reserved for EIC. Unlike IPDC which deals with too technical activities, Ethiopian investment commission is responsible to handle the day-to-day administration, review and approve investment proposals and supposed to administer various regulatory provisions.

The **third tier** of Ethiopia's industrial park management is IPDC, the one explicitly focused and designated to develop, operate and administer industrial parks. Ethiopian Industrial Park Development Corporation (IPDC) was established in 2014, by council of ministers regulation number: 326/214 as one of public enterprises. Inspired from the full support of government, IPDC is becoming an engine of rapid industrialization that nurture manufacturing industries, to accelerate economic transformation, promote and attract both foreign and domestic enterprises. To activate both pre and post investment servicing, it avails serviced industrial land, pre-built sheds equipped with all-encompassing utilities and infrastructural facilities that fit international standards, work on workers security and environmental safety as well. IPDC, in collaboration with Ethiopian investment commission, Ethiopian revenue and customs authority and more institutions provides one-stop-shop services for tenants investing in industrial parks set to operation. Industrial park development corporation, including Ethiopian investment commission established to smooth national plan on industrialization and responsible for establishing conducive investment climate. These institutions are specialized administrative structure added to achieve industrialization agenda of the country. Apparently there exists strong motive and commitment by the federal government in establishing more industrial parks across the country though such scattergun approach is more politically driven than rational assessment.

In addition to these core specialized institutions, Ethiopia textile industry institute, Ethiopia leather industry institute, and Ethiopia metal industry institute also established as a specialized institution to achieve national industrialization agenda of the country. In reference to FDRE (2015), IPDC is in charge of developing and operating industrial parks. The organizational structure of the corporation is mapped out in figure below.

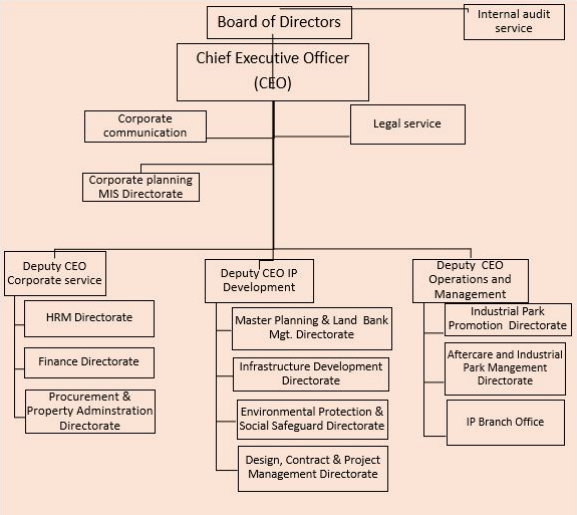

Figure 3: Adminstrative structure of industrial park development corporation
Source: Ethiopian Industrial Park Development Corporation

It is quasi-government owned enterprise dealing with three major roles including park development, operating, and due to absence of clear park normative principle this institution also plays regulatory role. As a developer IPDC is mandated to develop and manage facilities, services and shared infrastructure with the intention to address common constraints and improve operational efficiency. The corporation also serves as a land bank for private park developers. Moreover, the corporation prepare detailed national master plan based on the national special master plan and promote extensively the benefits of industrial parks and thereby attract investors to the park.

What the researcher found missing regarding the governance structure of industrial park development is power relation between regional states and federal government. The management model of industrial parks followed highly centralized organizational structure whereby designated institutions empowered with economic management rights and compatible administrative rights in which the top tiers of organizational structure enjoy high administrative rank. This high degree of autonomy for IPDC and other top tiers of the governance reported to have minimized governmental bureaucratic red tape especially in the public driven industrial parks. Flexible labor laws also alleviated labour market constraints including increase labor cost and slow labor market adjustment. Nevertheless, institutional capability is of fundamental problem to ensure comparative advantage of the country. This is characterized by flexibility of labour laws proclamation which disregard major labor right components including workers safety mainly due to poor regulatory and monitoring system in fear of losing investors. From my observation during the fieldwork, industrial parks established in the already better urban centers than improving the massively increasing small and medium urban centers. This is mainly due to centralized administration than the counter decentralized one which would have likely addressed this limitation to gradually address unbalanced growth of towns, and directly absorb the growing complexity of rural unemployment problem. The country has no well mapped implementation protocol to ensure targeted development inside and in the surrounding environment so that IPD will have catalytic effect through creating backward linkages. Unless innovative strategic intervention coupled by efficient organizational structure added in the implementation framework, fancy buildings in a selected geography or region per se is not a magic bullet for labor pooling and technology transfer.

Coupled with weak infrastructure into and outside the zones, low previous level of industrialization and the poor governance problem of the park operation process currently in place likely hamper sustainability of the initiative. The regulatory organ particularly (investment commission) should be given the power to propose reforms in policy, design regulatory frameworks, develop policy directives through sufficiently decentralized system. This potentially improves responsiveness of government to different factors impedes the IPs from achieving desired goals through its sub-federal government structure and to ultimately reap potential benefits from the initiative. Similar to this finding, FIAS (2008) holds that institution in charge of regulatory role of special economic zones operations play a pivotal role for the success or failure of zones. Power share and ability of regulatory department to oversee implementation of special economic zone efficiently under independent platform of operation matters to achieve the ambitions/goals by way of harmonizing different interrelated aims. This requires full power to propose reforms in the already existing policy and devise new strategy, leveraged inquired financial support, and exercise relatively better power/position of authority over other government ministries.

The implementation of Ethiopia's industrial park development program warranty clear operation procedure for different reasons as to alleviate the gap between performance and proposed regulatory framework that oblige to establish expected quantity of skilled and unskilled mobility of labour, creation of secondary effects (linkages with the local economy, transfer of knowledge, technology and skill). As in the case of other developing economy and Sub-Saharan Africa zones, Ethiopia's IPs trapped in fundamental problems of which weak capacities, the institutions directly corresponded to industrial park development program such as IPDC & EIC are not well staffed and less experienced in managing and operating industrial parks which are of main challenges for the proposed setting to implement IPs policy. The importance of strong institutional actors in the implementation of the intervention plays paramount roles in successful operation of industrial parks. According to Macdonald and Joseph (2001), of major component enhance successful park operation is institutional context particularly managerial capacity under which the program operates. Similarly, a weak organizational context due to less qualified staffs, absence of training packages on business and entrepreneurial skill impede park from delivering dreamed goals and even cause of many problems due to high inefficiency.

3.1.2 Power relations and administrative discourse

Industrial park development corporation is for profit public enterprise mandated to implement industrial park development policy. Compared to other countries experience, Ethiopia's industrial park administrative model follow 'specialized administrative model' different from system in the wider economy. Thus, the country established designated institution called industrial parks development corporation (IPDC) which exclusively work on developing major plans and implement strategies of industrial parks establishment in different corners of the country.

According to the country's legal framework; council of ministers regulation 326/2014 industrial park development corporation is designated as "corporation" and this organization has the power to exercise administrative jurisdiction in the following major areas; (a) park development and administration, (b) prepare detailed master plan crafted from national master plan, (c) serve as a land bank for private industrial park developers, and (d) make infrastructure available to industrial park developers (d) also powered to outsource industrial park management on contract basis for

better achievement in both promotion and attraction of resident enterprises.

Using the main power and role as a developer, the corporation is actively engaged in establishing and developing industrial parks in different corners of the country in a manner that ensures balanced regional development. Currently more than nine (9) industrial parks installed following coming to implementation of industrial park development program and this includes; Bole lemi 1 & 2, Hawassa industrial park, Kombolcha, Mekelle, Jimma, Adama industrial parks are already operational whilst Diredawa, Debre birhan, Bahirdar and Kilinto industrial parks are also finalized and commended for operation and have also investors in pipeline. Beyond this, industrial park corporation is planning to increase the parks number to around 16 (sixteen) and those additional industrial parks are on planning stage. According to the existing legal jurisdiction of the corporation, the power to intervene in privately established industrial parks is reserved for the EIC (Ethiopian investment commission) the institution deals with regulatory activities.

Compared to other countries experience, existence of 'specialized administration system' is of good experience in Ethiopia's industrial park development program provided that the system outside the park is not convenient for park operation in both fiscal and non-fiscal matters. Potential factors impede easy operation of firms in the outside the park environment include; absence of development friendly financial sector, poor infrastructure in the outside park environment, labor market limitations, and problems along transparent and accountable system of governance are among major ones, see also (see also FIAS, 2008). There are also some 'sound experiences' including OSS (One-Stop-Shop) which encompasses integrated services coordinated by EIC and this part of thesis will be discussed under independent session later on. Very recently Ethiopian investment commission has established regulatory department under the unit of industrial park development but ground realities indicate poor performance due to limited experience in the areas of operating and governing complex industrial programs of which industrial park is prototype.

The finding in this study identified set of issues hampering successful operation of industrial parks in the country. Moreover, in the condition of well management as it has been described in the reviewed literature, industrial parks contribute for the endeavored development goals. This implies that capable institutions to manage the initiative is of major ingredient for industrial parks to achieve their desired objectives whilst perhaps poor management is part of explanation for major cause of most problems including weak performance of zones. Level of skill development and experiences of staff members improved through basic training programs are vital but also what Ethiopia's industrial parks lacks in its current operation. This includes; ineffective administrative system, lack of institutional framework for all integrated service, weak implementation capacity of the institutions because they are not well staffed with experienced personnel, absence of innovative strategic monitoring and evaluation mechanisms to forge the park realizing desired objectives in response to massive social and economic investment allocated for their establishment. There exists a serious gap in the designated institution to oversees whether the anticipated business plan and development is with the expected pace as per binding agreements during award of investment permit to do business in the industrial parks. This mainly attributed to absence of implementation protocol. Unless regulatory framework is followed through set of inspections to avoid this problem the possibility for the host country to reap expected benefits and observe an impact on employment, potential synchronization with the local economy, skill and technology transfer will remain only theoretical. Considering the all-round importance and contribution of IPD, Ethiopia seems underutilized the full potential of established industrial parks for multiple reasons of which

its management component is basic obstacle. This finding also resonates with similar evidence in Macdonald and Joseph. (2001) which states inadequate qualification and absence capacity upgradation program through training to instinct basic business and entrepreneurial skills for the economic zone management staffs result in inefficient decision-making and ultimately the initiative falls short of meeting required purpose. FIAS (2008) showed that locational advantage, how developed and management approach are fundamental factor for success and failure of industrial zones. Farole (2011), also advanced that establishment of attractive physical environment or fancy infrastructure, well executed master plan only is not a magic bullet in attracting (FDI) and creation of jobs. Potential profit to trigger manufacturing growth with the deliberate effort to have major impact on local development is rather associated with relevance of the industrial park programs for context in which they are introduced and the effectiveness with which they are designed, implemented and managed.

3.1.3 The Political Economy dimension of Ethiopia's Industrial Parks

Ethiopia's industrial park development proclamation defines industrial park as geographically designated area operate under special laws. Ethiopia ambitioned to become manufacturing hub of Africa and the country envisaged to operate a number of industrial parks. As in the case of other countries where the program maybe referred special economic zones, export processing zones etc. it relies on various incentives packages to locate experienced foreign firms. The incentive packages comprehend; conducive infrastructure, tax exemptions and subsidized utilities. Moreover, Ethiopia being one of labour abundant country, used provision of cheap labour as major magnet to attract foreign investors, and offers labour at the lowest base wage maybe in the world at around 27.08 ET per day, which is less than $1/day (see also page. 93). According to Oqubay et al. (2018), Ethiopia's industrial policy is a strategy that comprehend range of implicit or explicit policy instrument selectively focused on specific industrial sectors to bring about structural change in line with a broader national vision and strategy i.e., growth and transformation plan. East Asian countries achieved 'structural transformation' which implies process by which labour and economic activities continuously shift from low to higher-productivity industries through executing industrial policy. This policy direction which Ethiopian government adopted associated with East Asian "developmental state model" which increasingly became challenging dominant narrative in 2000s and since the model brought remarkable economic growth in those countries EPRDF to adopt a developmental state model as a way to resolve domestic political challenges. When it comes to development and operation of industrial park in light of narrowing center-periphery relationship, there exists legal ambiguities as far as engagement of the states or local government structure in the due course of implementation. Industrial Park development and operation in Ethiopia follows highly centralized approach of management (see also page 58). However, constitution of the federal government of Ethiopia Federal Democratic Republic of Ethiopia (1995) guarantees the right to administer land to the state governments. Industrial Park development corporation serves as a land bank for both private and public zone developers while the land is transferred from local governments. As a result of interpretation attached to industrial park development objectives, the program perceived to be major source of employment generation and local governments refrained complaining the process of the program operation. In fact, the power relationship between center and periphery demands local governments to respect the decisions of federal government or national executives. As it has been indicated in other parts of this thesis project, due to increasing expansionary projects

in different parts of the country as a result of politically motivated decision the viability of the projects fall under question. This also related to attempt made by federal government to ensure regional distribution of industrial parks – because almost every region currently have industrial park. Although industrial park development is sole federal government project or initiative, it is intertwined with the existing nature of regional politics line-ups.

As described by Zeng (2012), starting operation of industrial park development with more numbers simultaneously at same time caused failures of the program. Similarly, distribution of industrial parks throughout the country in more or less same periods of time may have negative effects on Ethiopia's attempts to industrialize. In order to promote exports, developmental states require bureaucracies that implement 'reciprocal control mechanisms', which refers to the disbursement of subsidies to firms in exchange for meeting performance standards. Apparently, given the fact Ethiopia is highly heterogenous society, also characterized by deep rooted historic sensitivities resulted from inter-ethnic inequality, attempt to concentrate intermediate goods in a particular location would not be without political risks. Thus, it is more difficult for the country to focus on cluster based industrial program, strengthened by sector-specific performance standards. Moreover, Ethiopia being the second most populous country in Africa and is also land locked country. It is one of the countries where time and cost of trading across borders is high (see pg. 118). Provided that Ethiopia is landlocked country with single trade corridor or primary access to the sea i.e., port of Djibouti, the distribution of parks throughout the territory arguably fails to account for proximity to the port. Possible to understand from empirical evidences presented in the reviewed literature as spatial factor matters in successful implementation of industrial parks. In most industrial parks established in remote and periphery areas, critics highlighted issues regarding infrastructure, access to water, labour and local services availability. As stated earlier in the preceding paragraphs, government wanted to appear distributive as a way to respond to quests by regional governments especially management of increasing unemployment problem. However, in all the operational industrial parks of the country; high employee turnover rates, primarily due to low wages, have been well documented and have resulted in lower company profits due to higher training costs and lower productivity. Labour sourced from limited radius of distance where industrial parks established since the recruitment made by regional labour and social affairs bureau and this recruitment did not extend across the border even do not include nearby towns from neighboring regional states. To summarize, despite some negative externalities and idiosyncrasies, the progressions presented under chapter 4&5 of this thesis showed that Ethiopia's industrial policy has largely been effectively adapted to its local context given the country's rigid political economy constraints.

3.1.4 Effectiveness of Governance and Operation Management

One Stop Service is simple and centralized organizational approach with grand intention to establish better investment climate, offer comparative advantage to investors since it enhances efforts to improve constraints of scale and competitiveness. This is a platform to provide international standard quality service in modern industrial organization. It is a weapon to break red tape and rent seeking behaviour in dealing with different government departments. In this modality of service provision, the concept is IPs authority organizes all required procedures to incept operation; license renewal during post operation, clearances, permits, approvals and aftercare non-fiscal services from the government side.

'One Stop Service' OSS service is of the remarkable administrative system the government of Ethiopia took as a lesson from previous park developers for it is of main institutional advantage for successful implementation of the policy if truly one stop and not one more stop shop. This dedicated effort from government side in establishing OSS service and other investor friendly reform contributed in easing potential speculative tendency and supporting the system in achieving the intended objectives. Large scale investment in industrial parks warranty strong commitment from the government in providing services with minimum possible costs. But the question is does the devised management approach i.e., one stop service work?

As it has been anticipated earlier, industrial parks administration follows specialized administrative system which calls for involvement of different service providing organizations. OSS service in its current appearance only delimited to facilitation role for the investors. However, it has to be well noted that freedom of enterprises in the industrial parks has to be well protected but also followed by reasonable degree of regulation and should also be prevailed to dictate pace of business developments to manage expected impacts.

From the top OSS is being coordinated by Ethiopian investment commission, institution mandated to execute regulatory activities. OSS service is optimized by the industrial park administration of the country to successfully run the zones. This service is being provided in all the operational industrial parks with the intention to provide adequate leadership service through such self-contained institution. From the parks considered for case study in this paper, Hawassa industrial park has better representation of agencies/institutions. However, critics from the investors side highlighted as the representation is not fully supported by consolidated service rather most of the representative provides routine services in the public office similar to institutional set-ups outside the park. Unlike the massive investment on infrastructure by the government, service provision channel is not based on automated system.

The result from the current study showed that services by vast majorities of national institutional agencies are one more stop than one stop and not well tailored to the level of what the system needs. Few agencies delegated full approval powers to the industrial parks authority which impeded provision of consolidated services and investors deal directly with the real discretion to grant approvals.

Though concerned stakeholders represented in the parks to deliver required services, coordination between the agencies is weak enough to render expected level of efficiency. Structural transformation requires replacement of less effective economy, institutions with more effective one. In this regard transition from agriculture to strong manufacturing sector require efficient institutions

with the capacity to deliver sophisticated service. The service demanded to this level required to meet international standard in terms of effectiveness and efficiency. As it has been mapped out in the above figure manufacturing sector in general and industrial park development model of industrialization agenda involves tiers of different institutions including both core and specialized administrative structures/stakeholders.

Apparently challenge in all the institutions in-line is financial constraint, the services provided is not consolidated one; not tailored to efficient organizational set-up, inefficient handling of administrative procedure, absence of automated system to provide transparent and efficient service, delay in logistics and shipping services. A body of literature as portrayed in the review session indicated that leading stakeholders and nature of at the outset local business competitiveness are of fundamental driving forces to achieve goals behind industrial park policy. As highlighted in Zeng (2012) of the major challenge of special economic zones in Africa in general and SSA in particular is poor business environment. This impedes the industrial parks from making substantial progress forward to generate both static and dynamic benefits. In the condition where OSS is not available the cost of making business is very high and in their presence many one-stop-shops do not live up to their names.

According to industrial park development proclamation number 886/2015, industrial park development is mandate of federal government and current formation of the administrative structure is highly centralized. Additionally, the role of regional government and their respective institutions' is not clearly indicated in the policy which may raise conflict of interest between the two parties. With regard to the different zone management models, during this early take-off stage of industrial park development period 'government-led management model' with its 'vertical coordination' and 'centralized coordination' preferred (FDRE, 2015). Government led management model with its vertical coordination is being used to develop, operate and manage industrial parks in Ethiopia (see also figure 1& 2). The nature of such administrative model demands leading role of regional government where the industrial parks developed. Nevertheless, in Ethiopia political power tends towards democratic centralism and the power of regional state leaders is not causally convincing to administer the tax regulation and management of such multi-billion projects.

"Emancipating the mind seeking truth from the facts" guided a main principle of SEZ development in China. Adjustment of special economic zones conditions to local situations at different levels including provincial, regional and national levels provided the possibility to arrange preferential policies assured technology and knowledge transfer (Zeng, 2015). This adjusting measure of situation in the industrial parks to local conditions considering comparative advantages is missing element in industrial park development program of Ethiopia.

The efficiency of administrative structure is critical for the performance and successful operation of industrial park. Transparent institutional setup involving both private and public organs as major stakeholders in due operation would increase credibility of the park and is potential instrument for ensuring inflow of experienced foreign enterprises, which entails quality of governance is imperative for positive outcomes and to ensure sustainability of the program as well. With some power adjustment of Ethiopian industrial park administration to local conditions, and proactive measures by regulatory bodies through engagement of all stakeholders might curb red tapes and rent seeking behaviours by different departments. Moreover, incorporation of different variety parks into country's national development strategy lessened potential institutional challenges. Majority of industrial parks set to operation in Ethiopia are public owned and these parks to deliver de-

sired theoretical benefits, strong coordination across all tiers of government structure involved and quasi-government regulatory body as well determine effectiveness of the parks. Reviewed literature also conforms as strong institutional context benefited parks to become effective in delivering their roles. As highlighted in Rodriguez-Pose and Hardy (2014) relative to other emerging countries Indian parks supported by strong institutional structure perceived to be high in terms maturity height. This strong institutional context provided well established system of communication across local, regional and federal level tiers of government representatives. In the case of Ethiopia as late joiner, utilization of such institutional qualities enhances formation of quality ground that forge parks deliver expected benefits. This fully realized if government relentlessly work in consolidating service provisions by represented agencies with what modern industry organization requires and meeting international efficiency demanded.

To summarize, success in economic transformation warranty strong ability of the government to get things done and learn over time how to do things in more challenging environment and this transcends devising smart policy and regulatory frameworks. The implementation capability of different GoE structures varies widely, which has had tremendous influence on how responsibilities and policies related to the industrialization agenda have been executed. For instance, government abilities to accomplish complex tasks pertaining to investment was very limited due to absence of track record demanded to serve strategic investors. Of the institutional layers chartered, Ethiopian investment commission and industrial parks corporation would be molded as "pockets of effectiveness". They would have strong links to the PMO and could expedite the construction of industrial parks and lead the drive for investment, respectively. They installed new leadership in EIC, many of whom brought technical knowledge and experience from outside government; political savvy and problem-solving skills; and a strong motivation to contribute to the country's bold economic vision. They authorized (even urged) both agencies to pursue their tasks aggressively, while also tracking and holding them accountable for progress. Limited capability and differential performance across different layers of institutions designed to address investment climate related challenges, have held back desired progresses of major productivity outcomes such as in the areas of export promotions, employment creation and ultimately overall economic transformation the activity can bring. Therefore, as an input to bring about desired level of economic transformation, strengthening coordination between major government actors in the areas of both strategy design and actions to make the structures in place responsive enough in driving implementation. Strengthening and improving institutional basis of industrialization agenda is instrumental because, these objectives to be achieved, government's ability in setting priority, productive coordination for effective implementation play a pivotal role. In fact, massive progressions have been made from a bold economic vision on paper to a series of fully constructed industrial parks locating experienced foreign investors from different corners of the world, in the past years since inception of the program in 2017.

4 Chapter Four

4.1 Cross-sectional Comparative Analysis of four IPs in Ethiopia [BLIP, HIP, EIZ & KIP]

This chapter addressed interventions, implementation process, rationales why proliferations of economic zones experienced in most parts of world and how is it evolving in the context of Ethiopia. Identified proxies of measurement to capture what has been stated in the second research questions of the current study, comparative analysis of purposely selected industrial parks made particularly focusing on their implementation process. of the selected operational industrial parks in Ethiopia. As in the case of other chapters, a mixed method approach used whereby primary data gained from different stakeholders/institutional structures of industrial park development program. Accordingly, detail analysis of secondary data including; national development policy, industrial park development proclamation, quarterly and annually collected informations at the park and headquarter level utilized for further analysis in addressing the second research question. Semi-structured interview conducted with park level institutional structures including; integrated service and operation officers, labour unit, park managers, OSS coordinators to mention major of them.

4.1.1 Why industrial parks as a policy tool for development

Ethiopia as in many developing economies of the world committed considerable amount of resources and development efforts to implement industrial park program. The country's industrial parks form the center-piece of government's efforts to make the country Africa's largest manufacturing hub. Implementation of industrial park policy targeted to address complex socio-economic challenges including; employment creation, boosting productivity, stimulate investment thereby improve capabilities in the areas of technology and regional innovation. Implementation of this program also offer most promising prospect of alleviating Ethiopia's low manufacturing sector share in the whole national GDP (less than 5.5% of total GDP in 2017/18 compared to Sub-Saharan average which is about 10% of GDP). The country's industrial park also employed to meet challenges in the areas of export share in GDP which was as low as 3.4% Vs 24% share of GDP for Sub-Saharans in 2017/18 fiscal year. Thus, their recent performance and trajectory is of major research interest to judge progressions in this regard and country's prospect of achieving the intended targets of park policy. The purpose of this chapter is to address questions pertaining to what extent park operation has been successful and contribution of park policy implementation to the national economy when viewed in light of theoretical expectations. However, it has to be well noted that this study has major limitations in measuring potential progressions provided that it is at early stage of implementation life-cycle and nascent operation.

Ethiopia majorly as in the case of emerging economies of the world developed industrial park with the intention to achieve considerable economic growth and alleviate problems rooted in technological and scientific capabilities. The scheme through which industrial park development takes place is through massive public fund, private and public-private joint arrangement. Provided government have been seeking to improve the role of manufacturing sector through its various development policies, the federal government play a pivotal role in the planning, financing, developing, operation

and promotion of tailored global standard infrastructure projects including industrial park establishment. Reddy, R. and Srinivas, M. (2008), also established a more similar argument stating; the rationale behind promotion of economic zones is with the grand intention to solve collective constraints of investment in manufacturing sectors and this includes; infrastructural deficiencies, 'procedural and bureaucratic complexities caused by policies of monetary, fiscal, taxation, and labour issue'. Overall, the objective is to achieve structural transformation through world-class infrastructural provisions with the desire to bring about economic growth both within and outside the zones.

In the case of Ethiopia, wide range of issues exists as driving forces of industrial park development. It is basically in the vein of country's move on in implementing very substantial plans and policies to unleash manufacturing sector from collective constraints. With the presumption to realize major goals of industrial park development, government established designated institution like IPDC to serve as an engine of industrialization and nurture manufacturing sector. In the discourse of GTP-I implementation in which government planned to increase GDP account of manufacturing sector but faced critical problems including: inadequate supply of necessary infrastructure, large scale areas of land fenced by investors without expected benefits which consequently led to rent seeking behaviours (IPDC Pamplet, 2018).

Review of document produced by IPDC, (IPDC Phamplet, 2018) depicted that the rationale behind establishing industrial park in Ethiopia includes; government envisioned both substantial social and economic significance of such scheme to achieve industrialization. Given the fact that manufacturing sector has pivotal role to achieve economic growth through generating foreign exchanges, increase export earnings, ensure technology transfer by way of attracting both domestic and foreign enterprises the grand intention is to enable the country to queue up with middle income countries.

With regard to its social significance including other indirect benefits when fully operational, the industrial parks in different corners of the country expected generate employment opportunities to over 2 million people at the end of GTP-II improving the current employment opportunity of manufacturing sector which is about more than 380,000 (GTP-II, 2016). To achieve potential benefits and exploit merits of industrial parks it has to be first accessible to vast infrastructure in which either investors can build their own sheds through subleasing of land or alternatively, government would build large sheds and transfer on rent base to investors. With the second modality, investors benefit from well processed and world class infrastructure in which they buy machineries, raw materials, recruit labour man power, commence production and enter into the international market in short time.

Although Ethiopia's industrial parks established for various purposes main rationale behind includes; increase production capacity and efficiency, speed up the transformation of domestic private sector, proactively manage rapid urbanization, attraction of foreign direct investment, job creation and increased exports. According to FDRE (2015) the rationale for the establishment of industrial parks in strategic locations is to accelerate the economic transformation and development of the country by way of promoting and attracting productive domestic and foreign direct investment, upgrading industries and generate employment opportunity. In general term, industrial park/economic zone establishment in Ethiopia is to achieve growth through 'export-driven industrialization strategy' through light manufacturing industries by attracting both domestic and foreign investors to bring about sustainable development.

The proclamation for the establishment industrial parks of the country also dictates possible avenues for the development of industrial parks in the country. According to this categorization industrial parks can be established in three different ways; public for profit (fully developed by the government), public-private partnerships (literally PPPs with IPDC), and by the private developers. Accordingly, Ethiopia is currently home to over 11 established public industrial parks, five in planning stage by the federal government, four integrated agro-industrial projects by the regional governments, and four private parks. Industrial park development maybe restricted to a single industry or mix of different industries. The current stage of economic zones operation in the country is strategically positioned priority on specialized industrial parks particularly, textile and apparel, leather processing and leather products. However, expansionary projects aggressively being conducted by both federal and regional governments is debatable for it is taking place without checking workability of already operational industrial parks in the country.

As described earlier, Ethiopia is currently home for more than a dozen of operational parks and more than five commended industrial parks with investors in pipeline. Considering the incapacitated institutions to roll-out the management and operation of industrial parks due to low experience in the area, the aggressive ramification activities is difficult to be conceived as normal development and such scheme of zone development labeled by scholars as recipe for failure. According to study conducted by Zeng (2012), showed as realistic scheme is the one that starts small and scaled-up gradually and described this as strategic approach in implementation of special economic zones. Contrastingly developing countries who are 'latecomer' to the program rush towards expansionary to move special economic zone development to its larger of scale. "Many low-income countries start with 10 or 20 zones all at ones; and this speed up the likelihood for failure" (ibid).

Zeng (2012), argues as pragmatic approach is suitable to developing countries in implementation of special economic zones for, they demand huge resource both financial and non-financial one. Introduction of new policy and justifiability of its workability and ultimately subsequent reform warranty short to medium term. African countries recommended to experiment with one or two zones first before scaling-up the program to its highest number. Given the essence of this industrial model of production in most African countries is replication of East Asia particularly Chinese model of industrialization program, gradualism approach serves as a safety valve for learning process. Special economic zones model in China implemented when the country was suffering from a serious shortage of foreign currency and its successful implementation brought remarkable economic transformation. The recipe for success was gradualism with an experimental approach and strong political commitment by the government in supporting the system through easing institutional constraints.

Based on theoretical roles of industrial parks which will also be discussed in detail in the following sections, there is no guaranty that Ethiopian special economic zones are replication of previous failures in other African countries. Considering the envisioned target by the government, the country is targeting huge investment in the coming decade with US$ 1 billion in collaboration with its development partners to be hub of African largest manufacturing.

Detail analysis of efficacy measurement on early results of industrial parks operation in Ethiopia indicates some positive take off though the outcome is below what has been anticipated. Early indications in firm demand, investment and jobs created showed as the grand intention not limited to build IPs but also generating investment which is multibillion US$. A major limitation in scrutinizing the relationship between what has been targeted and achieved to date is serious data

hungry in all round years since operation came into effective. This makes difficult complementing discussions in this regard with exact figures and put things into context in absolute terms. It has to be well noted that the progress of the current investments in the four industrial parks towards targets has no relation with average size of the industrial parks and average number of investors located. This indicates less propensity of the industrial park to spur extra investment in local industry beyond own private costs and cause over-spills in the surrounding SMEs.

4.2 Bole Lemi-I Industrial Park (BLIP)

Bole Lemi industrial park is one of the first public industrial parks established by government and operational since 2014. The zone is built on 156-hectare areas of land at the south eastern out skirt of Addis Ababa the capital city and hub of the continent. BLIP is the first public owned industrial park in Ethiopia and operational since over the last five years. It is specialized industrial park focusing on textile, apparel and garment sector. This economic zone is initiated in 2012 though, started operation couple of years after in February 2012 with Chinese company named George Shoe Ethiopian PLC (UNDP, 2015). Currently the second phase is also built by IPDC in collaboration with the World Bank Group and made vast infrastructure accessible to investors having completed the earth work, but the handover delayed for over four months till the field work period due to controversy between the leaser and resident of the locality (Interview with Park Administration, January 2019).

It is established by the government of Ethiopia under the scheme of public for profit organization called industrial parks development corporation (IPDC), a designated institution established in 2014 by Council of Ministers Regulation No. 326/2014). Despite the fact that infrastructure related complains have been well documented by the investors. This industrial park has good locational advantage compared to other zones since it is connected country's railways and airlines. Its establishment by IPDC guarantees its ownership is fully by government and developed at a total cost of 2.5 billion ETB/over 125 million US$). Establishment of the park is financed by the state and the construction fully covered by domestic contractors. Within the IP there are 22 modern industrial sheds which can be categorized as 5,777m^2 and 11,217 m^2 in terms of their size. In terms of administrative services aiming to assist investors, there is a one-stop shop center and there is a custom clearance service for both import goods and export products.

As it has been stipulated earlier in terms of sectorial distribution, the zone is categorized under specialized industrial park in textile and apparel. It has attracted 11 more investors following George Shoe Ethiopia PLC and it includes; Ever top sportswear plc (South Korea company), Arvind lifestyle apparel manufacturing (Indian company), Vestis garment production plc (India), Jay Jay garment production plc (India), Lyou Shoutao factory plc (China), SUMEC Eth. Textile & manufacturing (China), Shints ETP garment plc (South Korea), KEI industrial engineering consultancy plc (South Korea), Ashton apparel manufacturing (India).

4.2.1 Investment stimulated vs economic and employment contributions

To its current operation (during the period of the fieldwork) the park created more than 15,000+ employment opportunity which is far below the planned capacity. According to information from the park manager in its full capacity including the full subleased or transfer of the second phase

or undergoing expansionary project i.e., (Bole Lemi-II) to investors it is expected to create 50,000 and above job opportunity. In terms of its sectorial orentation, it is specialized industrial park focusing on major priority sector and its major industries are garment and leather clusters.

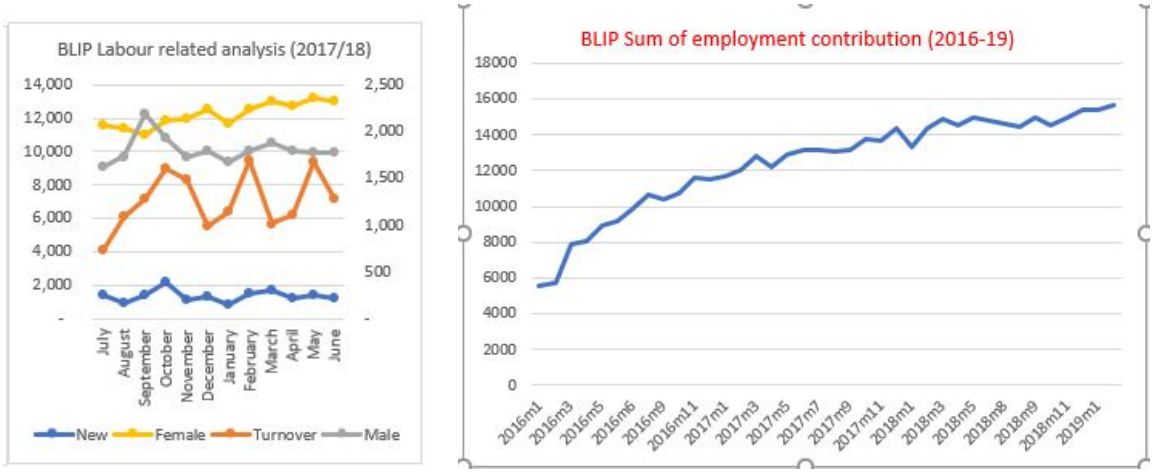

Figure 4: Employment contribution of bole lemmi industrial park
Source: Computed based on data obtained from Ethiopian investment commision

The steady increase of employment contribution particularly percentage of new jobs created in the fiscal year of 2017/18 started from around 12% to more than 22% around October and gradually at the end of this fiscal year it was 16%. Similarly, the result also indicates as turnover rate is high due to wide range of challenges pertaining to low wage, poor working conditions, little possibility for career promotion, limited motivation to execute skills and other fundamental problems. As in the case of other public industrial parks, the gender composition data indicates that BLIP also dominated by female workers. Detail analysis of what does this large dominance of female workers in the industrial parks mean discussed in the next chapters. In that particular discussion the synergy between employment opportunity and vulnerability of women, and issue of wage gap between male and female due to negligible wage paid in the zones also constituted.

The relation between investment stimulated and jobs created is far less than what has been anticipated by any measure including major macro level outcomes i.e., promotion of non-traditional export to generate foreign exchange earnings, attraction of right foreign enterprises and employment contribution. However, during the early inception period of January 2016 the zone only created less than 6000 jobs and at the beginning of 2019 over 15,000 job opportunities created in the industry park. Although the quantity has shown substantial increase over the past periods of time, human capital development contribution remained at margin provided that the jobs demand unskilled production workers from the local labour market. The job quality is only at low end skills and workers less likely experience upward vertical occupational mobility due to low skill-based production process of simple assembly operation in such labor-intensive manufacturing sectors.

Provided that the aim of this research is to analyse the comprehensive contribution of industrial parks in the wider local economic development, attempt has been made to touch every aspect of efficacy measurement which also constituted export performance of zones as a major pillar. As in the case of other industrial parks, compared to the planned national direction in terms of

benefits from special economic zones, export performance is far below the target. With regards to attraction of some FDI to locate in the commended industrial parks, the country has experienced positive take-off though the operation is far from meaningful operational heights. The result from descriptive analysis, showed that export performance of the park has shown some change even if it is not stable all-round the year- which suggests poor estimation of their monthly plan since the result is also far from respective firm's plan. Although the data is not comprehensive enough to describe fully the trend in all the three years, possible to understand as the larger share of export is dominated by very small plants in the park.

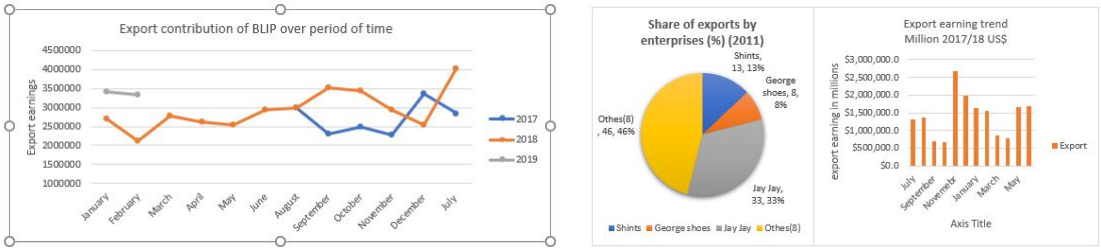

Figure 5: Some progression in economic role of bole lemmi industrial park
Source: Computed based on data obtained from Ethiopian investment commision

4.3 Hawassa Industrial Park (HIP)

Hawassa industrial park (HIP) is located at the heart of Hawassa city - 275km distance South to Addis Ababa. It is the largest textile and garment industry park and the largest in its size compared to other zones in the country operational to the present. According interview with Ethiopian Investment Commission (EIC)[1] HIP host investors leading apparel and textile manufacturers. This flagship industrial park is textile and garment cluster specialized park came into operation in 2017 though completed in 2016 within nine months of construction period with the highest speed of construction and zero emission commitment. The park is built at a cost of US$246 million after the government succeeded its attempt to get a finance source of a one-billion-dollar oversubscribed debut Eurobond from Europe and the United States (US), with a 6.625pc interest rate [2]. Hawassa industrial park is currently the second largest of the four IPs in the case study of the current research in terms of number tenants and the first in terms of levels of investment, export performance and numbers of employment opportunities created.

Hawassa city is the capital of Southern Nations and Nationalities which is one of the major states in the country and have direct access to [Ethiopian airlines services, railway connects the capital city with Moyale in Kenya and also this city lies on the trans-African highway, which stretches from Cairo to Cape town. The findings from the current study also revealed as the city is situated in the area where population of over 5 million unemployed people exists only within 50km radius of the industrial park. This implies as existence of abundant easily trainable cheap labour man power is available as major source of generating comparative advantage for the successful operation

[1]Interview with Yodit Wolde Tekleyes, Investment expert at Ethiopian Investment Commission, Addis Ababa, February 2019

[2]Interview with Belante Tebikew, Deputy General Manager of Hawassa Industry Park, Industrial Parks Development Corporation, Hawassa, February 2019

of the park in general and tenants in particular. Hawassa as one of major trade node in the in the country will have direct access to expressway connects Hawassa to Modjo which is very close to Addis Ababa, and this will have substantial role in improving locational advantage of the industrial park given Modjo is currently center of logistics network with the largest dry port service in the country [3] .

Overall establishment of industrial park in such important economic and political center of the country will have major role in ensuring expected benefits from developing industrial parks. According to report produced by UNIDO (2018), "HIP is currently Africa's largest textile and garment production center. The park is constructed by China Civil Engineering Group Co., Ltd (CCECC) and built on construction area of 230,000 sq.m including 37 standard plants, living facilities and other ancillary facilities". Initially IPDC outsourced administration of the park from the inception stage on contract base to Chinese company which administrated for a period of one year and gradually transferred to local staffs.

HIP has 52 factory sheds and 22 resident enterprises of which eighteen of them are actively engaged in production – 1 did not show up, 1- on setup stage, 1-finalized setup and training workers to commence production during the period of data collection (2/22/2019). The companies engaged mainly in export processing standard and single company in textile sector producing fabrics and supply to other garment producers through inter-company horizontal linkages. Resident enterprises and their specialized cluster category include establishments with big textile and garment manufacturers.

Company name	Country from/affiliation	Type of product or specialized cluster
PVH group	US	Garment and buyer
Hela clothing group	UK	Garment accessories
MUST Garment EPIC Group TAL Apparel Indochine Apparel Ltd., China Giangsu Golden Island Group	China and Hong Kong	Textile Mill, Garment
Chargeurs Fashion Tech.	France	Accessories
Busana Apparel (PTU)	Indonesia	Garment
Everest textile	Taiwan	Textile and Garment
Quadrant Apparel Group plc	Spain	Garment
Ontex Group NV	Belgium	Personal hygiene products
Arvind Silver Spark Apparel (Raymond fashion) BEST	India	Garment Garment
Hirdaramani garment plc Ethiopia Isabella socks manufacturing plc	Sri Lanka	Garment
Sumbiri intimate apparel Plc	Indonesia & Philippine	Garment

Table 2: Profile of investors located in Hawassa industrial park

HIP is a role model economic zone in the country with largest establishment cost, and position of authority of park administration organ is relatively better in providing administrative support

[3]Interview with Belante Tebikew, Deputy General Manager of Hawassa Industry Park, Industrial Parks Development Corporation, Hawassa, February 2019

compared to other public industrial parks in Ethiopia. Compared to other industrial parks facilities and infrastructure in the park is with world class quality standard and audited by independent international company work on standardized compliance whereby the company proofed the infrastructure is with standardized quality. In comparative perspective, HIP has exceptional quality compliances including; zero-liquid common effluent treatment plant, renewable energy, compliance with relevant fire and building standards, and compliance with customs-trade partnership against terrorism (C-TPAT). Moreover, compared to other operational industrial parks as described in the above table (table 1) the park is hive to giant, internationally well-known garment manufacturers such as PVH Group (USA), JP textile (China), TAL apparel (Indonesia), Silver Spark Apparel (Raymond fashion) (India), Hirdaramani garment (Sri Lanka). Locating foreign experienced companies specially those big names in the global garment and manufacturing companies by itself is of major successful achievement worth mentioning in Ethiopia's industrial park operation.

4.3.1 HIP sum of employment and export contribution vs stimulated investment

As it has been showed in the below chart (figure 5) export performance over the last one year is showing steady increase though still far from expected amount of export earnings. The amount of export contribution varies across time and companies. Apparently, HIP is the third best performing industrial park compared to the first ranking EIZ and BLIP at its second position. Whilst HIP is the largest industrial park in the country and created more than 21,000 job opportunities for the local community.

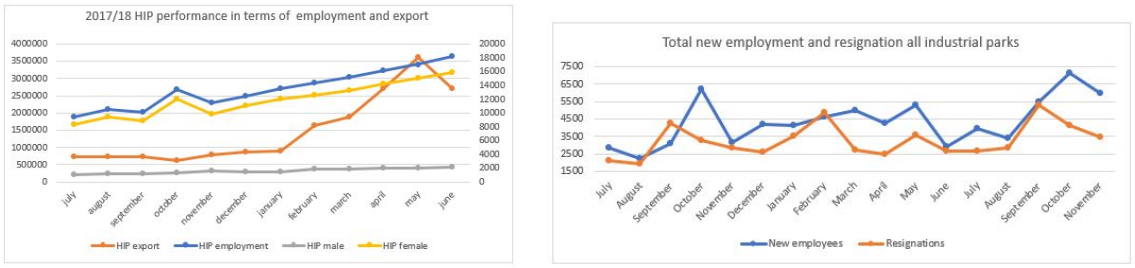

Figure 6: Some progression of economic role of bole lemmi industrial park
Source: computed based on data obtained from Ethiopian investment commision

This graph shows that labour turnover is fundamental problem as it is, in all other industrial parks of the country. Details about high resignation or turnover rate will be discussed in another section of the thesis. For the consumption of this section only, it is important to raise few points. There exists condition in which employers lost large number of "trained" workers even as equal as number of new entrants joined production line department. This attributed to wide range of factors including poor working conditions as reported by most of the employees, low wage, less likelihood to experience mobility given the manufacturers concentrate workers to low end skills only (see also the last chapter of the thesis). The increasing labour turnover negatively affect productivity of the companies. This is because, textile and garment manufacturing sector workers productivity increase with their longer engagement. The more they stay in production lines the more they meet required speed of production and fill the target gap. On the other way round increase in turnover also deter motivation for eliciting skill and on job training even including plan for specialized training to substitute expats with Ethiopian nationals/local workers. To put more

ideas on this due to poor domestic institutions in regulating resident enterprises to use total spaces provided or produce at full capacity including other benefits incorporated in the agreement, the return from the economic zones for the country/local economy is weak.

Despite the fact that employment contribution of HIP is far from expected level and limited to 1/3 of total jobs expected, monthly average jobs created showing steady increase over due course of time. The current employment contribution which is around 20,000 expected to increase up to 60,000 when produce at full capacity. Similarly export contribution is also showing better propensity of increase over increasing period of time, though the contribution in this regard is less than 50% when evaluated against the plan. In general, total monthly basis new recruitment is showing rapid increase whilst turnover rate stood very substantial and remained fundamental problem of HIP and others as well.

As stipulated in the five-year national development plan, Ethiopia's industrialization agenda targeted to boost the export earnings and drive overall economic growth of the country GTP-II (2016). In fact, zone developing countries measure efficacy of industrial parks focusing on major objective such as foreign currency earnings and this objective is substantial in the case of Ethiopia given the country invested huge amount of already shallow foreign currency in the country. This huge investment of foreign currency is for the establishment of the parks, expectation in this regard from resident enterprises is high. Nevertheless, similar to other industrial parks, HIP export performance is far from what has been anticipated despite large number of companies attracted in to the zone.

Figure 7: Some progression of economic role of hawassa industrial park and share of exports by enterprise (%) 2017/18
Source: own calculation based on data obtained from Ethiopian investment commision

The steady increase during the months of January-May is due to increase in the production order for Indochina, Hardaramani, Isabela, EPIC, TAL, PVH and JP. However, HIP is also not good performer in terms space utilization which is lot to mean in measuring export contribution and employment generation. The percentage is even very high in the case of this particular industrial park in which 50% of the total 171,395sq.m space is not utilized for production. For instance, focusing on export contribution as a parameter to measure performance of the park, during the month of November 2018, average export per unit sq.m was $37, and $4.1million potential export is lost due to unutilized space.

4.4 Eastern Industrial Zone (EIZ)

Eastern Industrial Zone (EIZ) is Ethiopia's first large scale private industry zone and a pioneer manufacturing establishment in the country through which the government of Ethiopia is learning about the concept of economic zones and way to make them workable. Eastern Industry Zone (EIZ) is 30km to Addis Ababa and Bole International Airport, and it is the largest Chinese owned private industrial park with its northern gate closely connecting the national highway and railway from Addis Ababa to Djibouti and 850 kilometers to the port of Djibouti. EIZ is located in Oromia regional state between two towns –Bishoftu and Dukam, with a population of 600,000. The total planned area of Eastern Industry Zone is 5 square kilometers, with phase I (2.33sq.km) planned for 6 functions like residence, commerce, industrial warehousing, road, public utilities and greenery area [4]. Unlike public driven industrial parks of the country, sectorial orientation of this industrial zone is mainly to cater to markets' demand in Ethiopia and other African countries in the field of textile, leather, construction materials, machinery, and electronics industries. Additionally, EIZ is devoted to developing auxiliary service industries such as warehousing, logistics, commerce and catering to form an integrated economic zone based in processing industries (Interview with EIZ general manager).

Figure 8: Location of Eastern Industry Zone in Ethiopia

This industrial zone is over 10 years since set to operation. EIZ launched in 2009 following agreement conveyed in Forum on China Africa Cooperation (FOCAC) in 2000, as part of road and belt program to share Chinese experience in the areas of special economic zones development and management. The cooperation agreement was formulated under the 'Overseas Economic and Trade Cooperation Zone' (OETCZ) programme during the Third Ministerial Conference of the Forum on China–Africa Cooperation (FOCAC) in 2006. In the meeting held during the same year with grand agenda to cooperate in economic and social development areas through experience sharing between China and African countries. In this framework of cooperation, China conveyed to establish Chinese special economic zones in six different African countries including Ethiopia. EIZ is fully Chinese owned special economic zone (World.Bank, 2011; UNDP, 2015). Though the zone initially developed and operated by Qiyuan Group and Jiangsu Yongyuan Group the latter one quitted and it's currently owned and managed by Jiangsu Yongyuan investment Co. Ltd. The

[4]Interview with Yodit Wolde Tekleyes, Investment expert at Ethiopian Investment Commission, Addis Ababa, February 2019.

company has China based steel pipe and aluminum manufacturer and it consists of subsidiaries in China, USA, and Ethiopia. The plan was to establish the park on of 5 sq.km area of land with an investment of $US 146 million as per agreement between the two group companies. Nevertheless, the initial plan gradually downsized from what has been initially anticipated to 2 sq.km (Interview with EIC).

4.4.1 Overview of zone's investment performance

The OETCZ programs operationalized in selected African countries have attracted debate on whether they would actually induce developmental spillovers and how they support the desired local economic development for the host countries. Data on profile of the enterprises located in EIZ showed that many companies engaged in cement production, footwear production, automobile assembly, steel rolling, textile and garment manufacturing. This entails that manufacturing companies in the zone is highly diversified beyond the initial cluster of production designated in the agreement. In comparative perspective, EIZ is with completely different appearance compared to plethora of industrial parks established and owned by the state.

When viewed against what has been anticipated, data organized by EIC showed that the zone managed to attract over 100 investors[5]. This is one of potential success factor in the implementation of Ethiopia's industrial parks development program given most low economy country suffer from failing to take off by attracting investors. Though this achievement is beyond the plan which was originally over 80, looking deep inside profile of the companies, it is more of investment monoculture or investors have similar background because the developer attracted firms to the zone from own country i.e. China. According to extensive interview made with resident enterprises, similar to experiences in public owned industrial parks, companies located in the zone targeted comparative advantages such as abundant and cheap labour, market destinations and preferential trade agreements and domestic market access. Government of Ethiopia provided set of incentive packages to stimulate zone developers expecting set of spillovers into local industries.

Lack of know-how in sourcing international market linkages, technology and knowledge of standardized production and finance are of major binding constraints of domestic manufacturing sector as pronounced in GTP-II (national development plan) (GTP-II, 2016). Similar to other public economic zones government hoped tenants under priority clusters would make integration with local economy in such a way domestic firms settled in the industrial zones capitalize on already existing strength to achieve local development agenda of the country through joint venture or experience sharing from Chinese counter side. The objective to improve competitiveness of local firms or capacitating local industry through vertical integration doesn't work for Ethiopia due to absence of meaningful integration. Experiences of successful countries showed that industrial parks enter second phase of development in 7-8 years of operation period and transform to the third phase within ten years in most cases. EIZ has been operational since last ten years without causally convincing outcomes or trajectories expected to be experienced in industrial park development life cycle.

As a developer, operator and manager of industrial parks development in Ethiopia, IPDC is institution working on major priority sector identified by the government. While public driven operational industrial parks like Bole Lemi, Hawassa, Kombolcha, are aligned to specialized industrial zone

[5]EIZ resident enterprises profile, industry type or production cluster

direction designated by government, EIZ's major target of production is difficult to explicate provided that sectorial classification in the zone is keep on diversifying and deviating from national industrialization agenda operate under special interventions.

4.4.2 Socio-economic role of the industry zone

As in the case of other public industrial parks, EIZ contributed to direct employment generation in the domestic labour market. The plan was to create over 20,000 employment opportunities but failed to hit the target. This shortfall happened despite the fact over 100 companies in pipeline, of which, 70 of them were operational and the industry zone is operating since over the last 10 years. The zone created 15,187 jobs, of which expatriate staffs accounts for +7% of the zone's total employment contribution.

The data presented in (figure 8) revealed that employment contribution trend showed steady increase over time and this indicator has also been acknowledged in the case of other public industrial parks. The number of male workers representation is relatively larger in EIZ as compared to public industrial parks. However, following same trend, the number of female workers remained dominant across time though less feminized compared to others.

Viewed against major yardsticks of efficacy measurement including both dynamic and benefits of secondary importance (mainly via linkages with local producers) the zone generated some recognizable employment contribution though only formed negligible linkage with local economy. This actually makes the program at large fall short of reaching the desired level in the policy design in forging catalyzation of wider national economy. Similar to public industrial parks, this zone is enclave for Chinese investors and beyond direct employment generation it has contributed minimal role in creating comprehensive developmental spillovers for local industrial development. In its over eleven years of operation the industry zone created jobs for thousands of local people and for over 1,100 foreigners or expatriate in the managerial and positions demand skilled labour man power though the legal framework requires them to replace higher operation level expatriate staffs with Ethiopian nationals after few years operation period. The industry park is of the main zones frequently face agitation and strike from workers due to poor working conditions. Nevertheless, the investors are negligent of improving workers safety and main interests to create better working environment.

Far below what has been anticipated in the original plan, the zone still failed to graduate to better maturity height or second phase of industrial park development life-cycle after all these years of operation. Despite such operational failures, regulatory organ of industrial parks development, taken no measurement in enforcing the existing laws or development of innovative strategic intervention or development of policy directives to curtail the problems and address the gap between what has originally been anticipated and its current status.

Basic results and major macro level outcomes across the case studies selected for the purpose of this paper showed that only few firms have shown positive progression whilst vast majority of them demonstrated poor performance in all rounds evaluation parameters. Performance variation across resident firms is significant in EIZ compared to operational public industrial parks. However, generous fiscal and coordinated non-fiscal or regulatory advantages offered by EIC/IPDC including cheap government land/sheds offered under similar umbrella of laws.

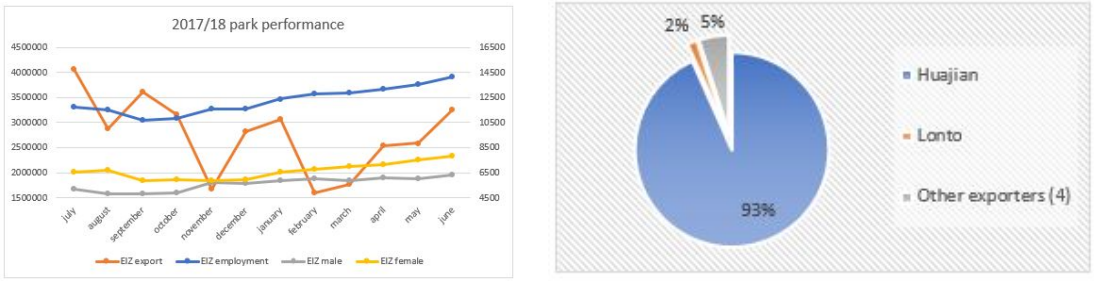

Figure 9: Some employment related progression and share of exports by enterprise (%) 2017/18, EIZ
Source: Computed based on data obtained from Ethiopian investment commision

As described in the above figure from total of six exporting firms in the economic zone, 93% of the exports made by Huajian a leading shoe factory firm in the zone. Efficacy of the zone against major primary benefits including growth of non-traditional export contribution showed as there exists large gap between investors in the zone and their export share compared to other public driven industrial parks. EIZ overall export earnings trend is relatively the same over time. Similarly, wide gap exists between zone investors production priority and national development targets. EIZ is not fully export oriented and only few companies engaged in export trade activities even if the country envisioned to achieve major economic transformation through such establishments. This finding complies with study conducted by Farole (2010), which portrayed as private industrial parks are now becoming dominant scheme of industrial park development policy though their operation divorced from long politics of industrialization agenda and mainly focused on private economic interests.

The industrial zone is the prospect of generating better export, technology transfer, skill up gradation of local workers, sourcing most of raw materials as an input for their highest level of production. The finding from the study depicted that Ethiopia's operational economic zones were not causally convincing when viewed against aforementioned factors. Hardly convincing to say resident firms are well capitalized to impact intra-park development and invest in local firms in an effort to promote vertical integration. Export performance data of the zone shows as large share of contribution in this regard limited to very few firms only and the rest are not well inside required capacity and coupled with poor institutional setup the propensity to switch zone operation to structural transformation agenda remained marginal. This also related to low profile of most of the resident firms since large share of the profile goes to small and medium scale enterprises. For instance, for the month of February 2019, the export contribution was about US$ 2.6 mill, which was 76% against the plan. The above diagram also shows share of export by enterprises which is limited to few large firms despite the program is inherently export oriented. Such scenario of large share of exports limited to few firms and imbalance between operational firms and export contribution at its nascent stage of operation indicates potential vulnerability.

According to data on firms' performance during the same reference period showed that export earnings lowered by 12% compared to preceding months performance. The decline in export contribution/growth attributed mainly to decrease in production order of Hua-Jian shoes and Dong Fung companies' exportation as reported by the zone's general manager. Apparently, a single firm's performance i.e., Hua-Jian shoes, accounts for 93% of the total export from EIZ. Unlike the case in other public industrial parks, it has been reported that all firms have "utilized 100% of the

total space for exporting". This actually attributed to the fact that majority of Chinese tenants in EIZ are labour intensive private manufacturers seek to benefit from cheap labour cost in Ethiopia. The rising labour cost in their home country, tough competition in their domestic manufacturing and strict regulatory framework enforced them to close down in their home country and plant in developing countries where the situation is easy for their operation with and targeted comparative advantage i.e., labour exploitation. This result comply with study conducted Ding and Chuan (2019) which revealed that the dramatic increase of labour cost due to increased competition in the domestic and global market resulted in enforced shut-up of many companies in China. Labour cost in Ethiopia is less than neighboring countries in the horn such as Kenya, one seventh of cost in China and even less than Sub-Saharan countries average. This study also identified that of major challenges for workers in different companies sampled for this study is dissatisfaction related to negligible wage paid by the employers. In fact, reviewed literature also portrayed as wage is major source of conflict between tenants in industrial park and local work force employed in the zone.

4.5 Kombolcha industrial park (KIP)

KIP was built by China Civil Engineering Construction Corporation (CCECC) within one year in 2017 within 75 hectares of land. The developer and operator of the park is the Ethiopian industrial park development corporation (IPDC). The park is located at a distance of 503 km from Djibouti port, 6 km away from Kombolcha dry port, almost zero walking distance from kombolcha airport and will have train station. It has been said that the park incorporates nine sheds in its first project phase; two are 11000 m2 and seven of them are 5500 m2 and other auxiliary buildings like clinic, police station, fire station and rental buildings. The park is also equipped with the necessary facilities including, one-stop shop services to investors though not fully represented by all concerned agencies to deliver pertinent services through single office with the intention to make production environment convenient to investors. It is expected to create 20,000 direct and indirect job opportunities when the six phases are finalized and once companies start production with their full capacity. The One Stop Service (OSS) database of the park showed that 1537 job opportunities have been created for the local community (as of January, 2019).

According to information from the park manager, eight of the nine sheds have been transferred through rent to five foreign companies namely Carvico Ethiopia PLC from Italy, Trybus Bridgetex Ethiopia Plc from the USA, Saytex Spinning PLC from China, Seyang textile and Pungkook Ethiopia Bag Manufacturing PLC from South Korea. The firms are explained to have produced one of world's trendy products. All except one have already started operation in the park. Seyang is at its pre-implementation stage, concluded agreement with Ethiopian investment commission to start production of textiles in KIP.

4.5.1 Any integration with domestic economy?

Kombolcha industrial park is also garment and textile specialized industrial park. Of the major areas thought to involve domestic producers is putting locally abundant raw materials consumed by firms such as cotton lint will have an impetus role for local development. One of the exceptional features of KIP is some spotty linkages with domestic cotton production sector and this is fundamental element of Ethiopia's industrialization agenda which assumed to cause positive impacts in the surrounding area development (see figure 9, page 56).

As in the case of some spotty and inconsistent integration of very few industrial parks resident enterprises registered critics about quality of locally available products. Very few firms source local products including leather by leather processors and cotton yarn registered complain on quality and still hoped to promote more embeddedness through gradualism approach. Cotton spinning sector of the country and ongoing integration sustain growth of the sector and contribute for social developments. As in the case of local leather processors in the value chain, there is quality complain which demands political commitment & policy direction, establishment of strong regional integration as well. As in the case of local leather processors in the value chain, there is quality complain which demands political commitment & policy direction, establishment of strong regional integration as well.

5 Chapter Five

5.1 Performance of Industrial Parks against broad Objectives

This chapter started with review relevant documents provide explanation on rationales of industrial park development program in Ethiopia. This majorly made based on thorough analysis of documents in such a way it guided performance evaluation of Ethiopia's operational industrial parks. Using purposely selected operational industrial parks of the country a mix of both primary and secondary data utilized in which; the primary data gained through set of interviews collected using semi-structured interview conducted at different levels. Relevant and valuable information collected from major regulatory departments of the country's economic zones particularly; ministry of industry, Ethiopian investment commision and deputy CEO of industrial park development corporation (national level). Additionally, extensive interview conducted with selected institutions including; Ethiopian textile industry development, national cotton gianiries association and selected resident firms to capture the issues from investors side. Overall, analysis in this chapter made from summary of information collected from various units at different levels.

According to Ethiopia's industrial parks proclamation (Industrial Parks Proclamation No. 886/2015) establishment of industrial parks basis its roots on the following major objectives: a) regulating the designation, development and operation of industrial parks; b) contributing towards the development of the country's technological and industrial infrastructure; c) encouraging private sector participation in manufacturing industries and related investments; d) enhancing competitiveness of the country's economic development; and e) creating ample job opportunities, and achieve sustainable economic development (FDRE, 2015).

"Evaluating impact of export processing zones in the host country is a daunting task" (Kusago and Tzannatos., 1998). As it has been described earlier in the method part due to data hungry, literature suggests the program can be better approached as a process than an end-product.

In this part of the thesis, major discussion revolves around effectiveness of industrial parks of the country in which analysis made majorly focusing on three fundamental questions. Based on insights gained from reviewed literature on global experiences of special economic zones, the researcher examined performance and efficacy of zones in terms of employment generation, export growth and economic diversification, sufficient quantity of investment attracted (both foreign direct investment and domestic entrepreneurs), technology up-gradation and skill formation in the local labour force.

5.1.1 Sectorial orientation and regional distribution of industrial parks in Ethiopia

As highlighted in the previous section of this thesis, Ethiopia is excellent case study due to long-standing government regulatory support to alleviate institutional constraint and development of quality infrastructure. Like many Sub-Saharan African countries (SSA), Ethiopia employed export led industrialization program in its growth and transformation plan, a nationwide plan aimed at transforming from agricultural production to industry led economy. Ethiopia with a plan to be the leading manufacturing hub of Africa by 2025, there are now 22 industrial parks planted and under different phases of establishments across the country of which (fourteen federal government owned, 4 by the regional governments, and the remaining by private developers). As in

the case of other African countries experience this figure highlights, strong domination direction and domination from government in industrial park development and operation. Currently a total of nine industrial parks set to operation (five government and four under private scheme) and the remaining likely to be inaugurated in forthcoming years. Ethiopia experienced big boom in establishment of industrial parks over the last five-six years and these figures are rising as more zones are approved for private developers. In terms of infrastructure and quality of sheds, the standard has been audited by external companies from abroad and confirmed they fulfill world class standard compliance though there exists variation across zones. In comparative perspective there exists substantial quality variation between infrastructure within, to the zones and outside zones in which conditions inside the industrial parks are exceedingly modern and meeting global standard in most cases. All the industrial parks are enclave and fenced to deliberately separate the zones from outside environment customs as well as for security reasons. This contradicts situation in other countries including China. According report produced by ILO (1998), 'in China zones are often of city scale and resemble any other modern business complex'.

Large percentage of the investors located in the Ethiopia's industrial park is from "two major investor source countries India & China". For instance China accounting for (73%) of total IP resident firms, India stood at (6.8%) South Korea (2.9%) and the remaining 17.8% investors are from different countries including Indonesia, Sri Lanka, USA, UK, Spain, Italy and others with little concentration to specific region[6]. When it comes to the question of priority sectors and type of investors; there exists significant variation across the regimes of industrial park development program (private and public schemes). In the case of public industrial parks as far as sector wise investors profile is concerned, there exists strong evidence of concentration to a particular region.

Type of industry/specialized cluster	**Number**	**percent**
Garment and textile	60	58.82%
Construction materials	5	4.9%
Metals and plastic industry	15	14.7%
Light assembly	4	4%
Agro-processing	2	1.9%
Leather and leather products	4	3.9%
Other manufacturing	12	11.7%
Total	**102**	**100.00**

Table 3: Characteristics of Ethiopia's industrial parks resident firms by sector
Source: computed based on data obtained from Ethiopian investment commision

The data from the above table shows that industrial parks set to operation including those recently inaugurated have investors in pipeline dominated by garment & textile which accounts for over 57% compared to other sectors. Apparently, compared to other manufactured products at Ethiopia's industrial parks, 81 out of 141 on site and operational firms which is around 57% (as of November 2018) are in textile and garment. Following this top product about 9% of resident firms are in metal, 12% in non-metal production sector and 6% in leather and leather products. This makes difficult the situation to with stand demand and supply dynamics and likely affected by changing waves of global situations due to adverse effect of investment monoculture. In terms of sectorial distribution of the investment, similar to data from global pattern of industrial composition in special economic

[6]* the number till the final stage of data collection period was 102

zones, Ethiopia's IPs dominated by garment and textile industry whereas agro-processing which is in the country's comparative advantage is non-existent in the already operational industrial parks of the country.

In terms of spatial location all industrial parks established during the first & second wave of implementation heavily biased to major cities where industrial cluster/clusterization program is relatively stronger. None of the industrial park setup in secondary cities of the country, which lessened the possibility to shift industrialization to outside main cities (intermediate or small size towns) of the country. In this perspective, though spatial distribution across the country represented different regions, concentration into major cities lessen the likelihood to have inclusive growth beneficial effects of such industrialization-based development intervention. However, design and dimensioning of the established industrial parks affected by geographic selection. Locational advantage determined by highways, railway connects the country to ports with long inland travel, other infrastructures including abundant labour considered in planting the zones. Additionally, industrial parks establishment followed principle of balanced distribution to ensure regional equality. So far, industrial parks been identified in the country installed in the Centre (Addis Ababa), two representing East, North, North west, North east, West and South of the country. The concentration of the country's industrial parks is in major urban centers with relatively better infrastructure. This happened due to limited capacity of government to provide standardized infrastructure in other areas seemingly less developed compared to where the zones concentrated.

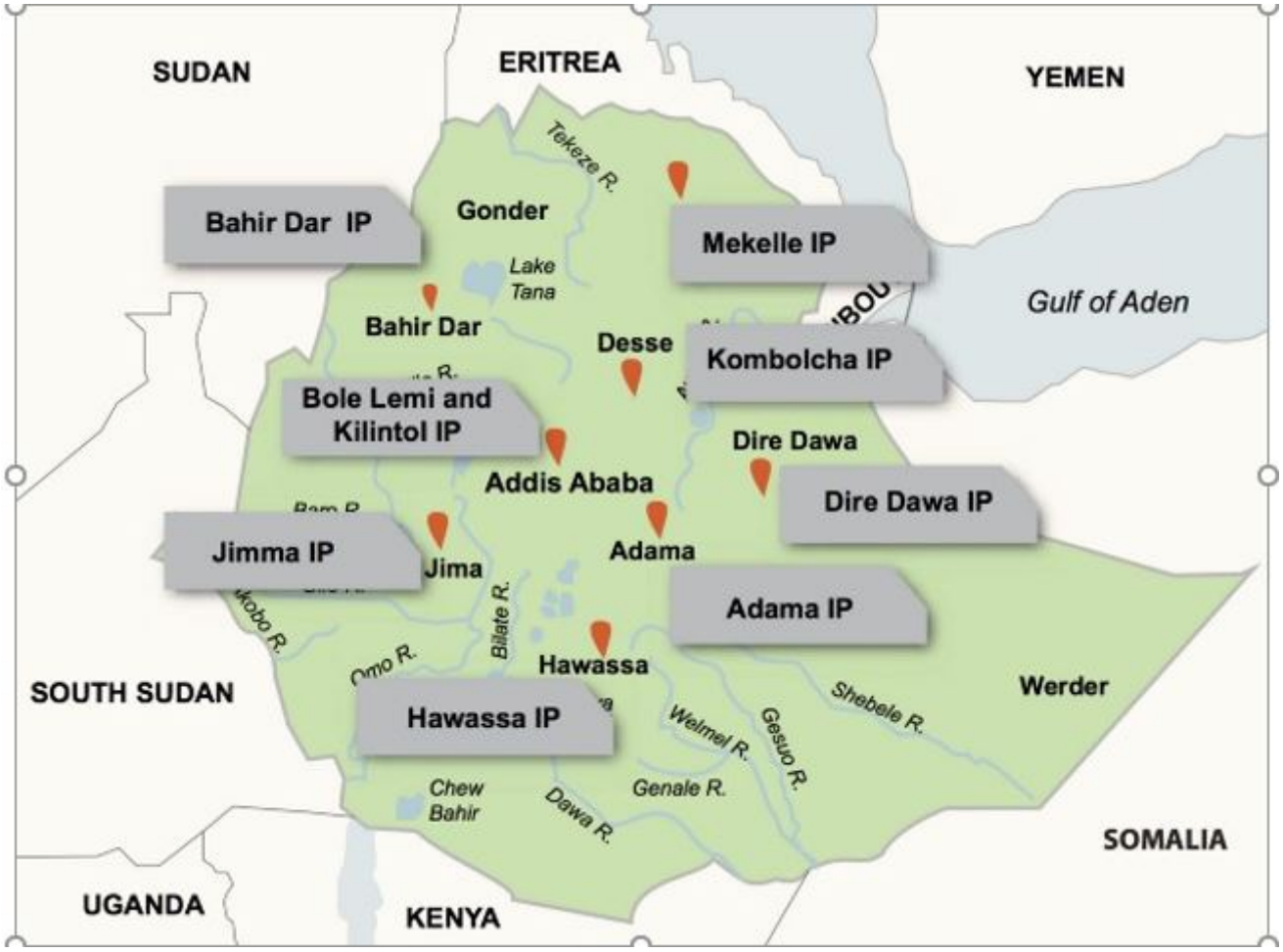

Figure 10: Spatial location of industrial parks in Ethiopia
Source: IPDC website

Representation of different geographic areas is seemingly good to bring about development in all corners in case the current trend drives to spot where merits of zone development potentially exploited. In Ethiopia, all the operational industrial parks (both public and private) are located near to or in the center of major cities including the capital of the country. Since government is not able to develop infrastructure in all areas, regulatory support at one major area selected for the development of industrial park is becoming popular development policy around the globe. However, it is a way to add congestion to already better performing areas or urban centers. The policy by itself defined areas potentially in the frame of such establishments. Following the concession provided, the same as in the case of Middle east, Africa, central Asia and Europe industrial park development trend is dominated by public sector. This gave birth to further problems around major urban centers of the country where people already experiencing multifaceted social problems due to pressure on land following influx to the cities.

To this end, the government establishes special industrial zones and clusters in the vicinity of the capital, Addis Ababa, with basic infrastructure and facilities including roads, telecommunications, water and electricity (GTP, 2011). Since 2003 the federal government's industrial development strategy has also identified a few sectors for special government support in addition to the general support incentives in all the areas identified considering the above-mentioned criteria.

As highlighted in the preceding chapter of this thesis, performance of industrial parks has shown positive trajectory in the areas of export performance and direct employment creation. Public owned industrial parks and ancillary support to private park developers consumed huge public fund hoping they would serve as a pressure valve in absorbing high unemployment and forge local development through potential spillovers. The industrial parks shown positive take-offs and were successful in creating few jobs and generated some foreign currencies; but in truth the costs of the project and what the country loses from export revenue offset the benefits. Beyond this, the nature of activities that take place include; labour intensive, simple assembly operation based on low technology, low scope for spin-offs through technology and knowledge diffusion are major limitation of the program unless substantial renewal or adjustments considered in the future.

Drawing on changing pattern of special economic zones there is increasing importance of the program and increased focus of academic research on the initiative. Mainly the academic researches on SEZs focused on secondary/indirect potential benefits such as skills upgrading, testing field for wider economic reform & demonstration effect, technology transfer & adoption of modern management practice, export diversification, enhancing trade efficiency of domestic firms, cluster facilitation, urban & regional development. Accordingly, in a piece of works conducted by Johansson and Nilsson (1997); Aggarwal (2005) described the role of SEZs in bringing about structural change through forward and backward linkage, stimulate knowledge and technology transfer and ultimately catalyze development inside and outside the zones through indirect benefits of SEZs. These researches described set of potential secondary effects of SEZs as a result of meaningful integration as substantive element of SEZs and this implies linkages or embeddedness of SEZs in local economy which is also of highly important concept in Economic Sociology.

According to Sindzingre (2013) economic zones considered causally significant based on fundamental demonstrable positive repercussions in achieving structural transformation objective of host country. Contribution in this regard include; increase of manufacturing sector role in the economy or increased role of the industry in export earnings, or structural transformation involves mobility of workers from agricultural sector to industry sector. Comprehensively, literature review shows that successful industrial park is to mean its progression against anticipated broad objectives which commonly refers to extent to which the initiative stimulates investment, allow mobility of both skilled & unskilled workers (employment opportunity), export earnings, promote linkage with local economy, and transfer of knowledge and technology.

Major indicators to measure effectiveness of industrial parks and its direct catalyzing effects such as investment stimulated, employment created and export earning contributions used as a benchmark in the analysis of effectiveness. Beyond the direct benefits, the study also framed in such a way it includes mechanisms allow technology transfer experience through integration with domestic economy. Methodologically both document analysis (mainly annual & six months) reports of Ethiopian investment commission & industrial park development corporation on industrial park performance used as a source of information. Additionally, primary data collected from resident firms and other stakeholders engaged in industrial park operation and management were utilized to explore major questions pertaining to this aspect of the thesis. The analysis to obtain the exact level of effectiveness found challenging/has limitations because of serious data hungry which is to mean timely and accurate data on major components pinpointed at the beginning of this paragraph. Measuring effectiveness of economic zones by industrial park developers poses three fundamental questions related to tangible outcomes of zones though it transcends and includes

some intangible potential benefits. The questions include;

- Are the concessions provided enabled industrial parks attracted sufficient quantity of foreign direct investment?
- Has the labor-intensive manufacturing by the resident enterprises created skilled and unskilled jobs as anticipated in the plan?
- Has the establishment ensured technology transfer and management skill transfer? - has the industrial park development schemes of the country have any catalytic potential in the development process of the country?

5.1.2 What the actual experience shows on stimulated investment, employment & export generated?

The analysis presented under different sessions of this thesis showed that industrial park as a policy tool is complex and entertain diversity in different aspects of efficacy measurement when evaluated against broad objectives. Ethiopia's industrial park development policy helped the country to attract foreign firms and the inflow have shown positive progression ever since the program set to operation. A major limitation of this study is difficulty to thoroughly examine long-term benefits on targeted structural transformation at both national and industrial level performances due nascent nature of the parks. Due to this, it is a bit early to conclude whether the parks set to operation are failed initiatives or recorded success story due to their nascent nature. Thus, it is imperative to demonstrate their evolvement and grow in-terms of catalyzing integration with local and global market. However, micro-level assessment at the investor and worker levels used as a viable methodological inquiry to generate insights on the performances and local impact of the parks. In this respect, based on trajectory of park model, none of export oriented Ethiopian industrial parks set to operation made linkage with their local territory and they are isolated enclaves contributed little to the national economy. Considering experience of countries with success story in the implementation of industrial park and dynamism in this complex development policy, it is possible to let IP forge integration with local development goals if they undergo fundamental self-renewal through technological up-gradation over time thereby improve capabilities. Failure to conduct renewal process along the broad goals they are established for, signal the likelihood of failure than expected positive outcomes.

By principle industrial park development program requires provision of different comparative advantages to investors including both financial and non-financial benefits through special measures. This includes; exemption from any kind of customs duties and taxes, provision of standardized infrastructures which is beyond national standard and meet international requirement, access to "standardized industrial park condition" (communications, water, and power), deregulated system or flexible policy are major amongst many (Madani, 1999; FIAS, 2008; Zeng, 2012). Summary of reviewed literature on special economic zones indicate standardized world quality infrastructure which is not available in the outside environment is major driving force behind attraction of inward investment which potentially impact domestic economy.

In return to all these provisions from the state and government, resident enterprises in the industrial parks are obliged to create jobs which allow mobility of both skilled and unskilled labour,

conform to environment and social compliance, create linkages with local economy (at least main local economy), ensure transfer of knowledge and technology through meaningful integration with local industries. It was with this intention government of Ethiopia introduced national laws and regulations in the establishment and management of industrial park development. With the exceptional case of HIP, other public industrial parks experienced long gestation periods. This is binding constraint of most public projects across the country which assumed to affect macro level scenarios due to the fact that efficiency of implementation in getting things done is very low. As highlighted in (Saleman and Jordan, 2014), industrialization has a pattern particularly implementation of the first phase of IPD program represent "natural learning period as stakeholders adjusted to innovative policy and its arrangement". Some indications of momentum building make its appearances following intensive engagement of stakeholders through learning by doing.

To ensure all these objectives capacity of institutions in designing policy directives and regulatory frameworks play a vital role. Viewed against this parameter, Ethiopia's industrial parks have no potential to be well managed and this makes it difficult to generate economic and labour return from the implementation of IPD due to poorly capacitated institutional setting. However, the role of industrial park development is paramount in transforming the whole economy and causing social impact in the condition of well management.

Ethiopia's industrial park managed to increase foreign direct investment in the manufacturing sector which accrued by boomed infrastructure costs but expected to have impact on wider economy of the country in the condition of well management. It has to be made clear here, though all the built sheds in the four operational industrial parks are transferred on rent to investors, the occupant's utilization of space is very low and sheds mainly serving as warehouses for the companies. Concomitant to this, the prospect of successful zone operation in Ethiopia, among others, is not solely subjected to the increased number of investors rather it demands meaningful linkage with local SMEs through vertical linkage or supply-demand chain.

Internally, business behaviour of resident enterprises skewed to independent business and homogeneous sectorial orientation or production class of the firms doesn't prompt horizontal linkage. There is no substantial evidence track of whether or not the scheme is generating agglomeration economies. Contrary to what has been pronounced in the policy, aspirations, some efforts from the government side and expected outcomes the program failed to achieve ambitioned developments to its current operation. Although industrial park development policy is assumed to cause wide range industrialization, creation of massive employment opportunities, technology and knowledge transfer; Ethiopia's experience of IPD have not shown these yardsticks to the appreciable extent. Absence of such evidences indicates as a lot expected to be done in bringing the disorganized firms into a more coherent scheme of operation internally and with local industry.

However, this doesn't mean the initiative is totally failed or haven't shown basic progressions. Currently, industrial park development in Ethiopia have shown some positive take-off but performance against broad objectives is far great from what has been anticipated. While industrial parks set to operation are successful in generating some macro level benefits particularly few jobs and did generate some foreign exchanges, none of them able to graduate into more mature stage of IP life cycle and net foreign earnings not constitute large enough sum to warrant the investment undertaken to accommodate the parks (infrastructure costs) to get the parks operational. But it is not for granted whether this "initial success" literally positive take off will follow similar pattern or diverge with some reversed results. IPs at early stage of operation (BLIP, HIP, KIP) and EIZ

which has relatively longer operational period, remained most dependent on low cost, cheap labour exports.

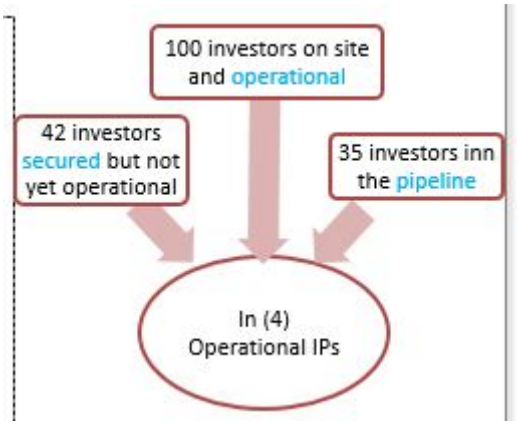

Figure 11: Composition of operational, secured and in pipeline investors in four industrial parks
Source: based on data obtained from Ethiopian investment commision

As in the case of Asian tigers where the model worked very well, it can be significant factor for local development, but IP do not in and of themselves lead to structural transformation for they are not magic bullet rather warranty right management and pragmatically responsive institutional base. As described in the above diagram, Ethiopia managed to attract large number of investors which mainly represented in a single private industry park. Out of 177 investors, 100 firms were on site and operational, 42 secured investors but not yet operational, 35 investors in the pipeline. Additionally, the industry parks wholly occupied by foreign companies since the parks became operational. As discussed earlier in the theoretical base of special economic zones (contrast to the neoclassical approach), such place-based policy offers numerous benefits and, can therefore, be considered as a strategic tool to attract FDI by filling pitfalls pertaining to binding constraints in the areas of technical, managerial, and marketing know how developing countries firms faced with. The country was not able to represent domestic companies either through independent competitor or joint ventures between Ethiopian and foreign investors. In absolute terms the percentage of foreign owned companies located during the period of over five years operation failed to make significant contribution in foreign exchange earnings which is of targeted goal of IP establishment. According to Ethiopian investment commission commissioner, during 2018/19 production year, total foreign exchange from industrial parks investment valued (US $103 million) which is considerably far great less than the number of companies and expected performance[7].

[7]Interview with Abebe Abebayehu, Ethiopian Investment Commission, Commissioner, Cited in Ethiopian broad casting corporation, May 1, 2019

5.1.3 Is the development well inside the national target?

Industrial park development as a basic component of industrial policy is very much at the epicenter of African development agenda. Along such an increasing popularization of special economic zones across the world there is a debate on types of industrial park a nation state or host country should follow. This is because general success or failure of country's special economic zones mainly depend on type of zone to be developed in terms of sectors or scheme of park development program.

In fact, the issue of success and failures also related to policy framework, institutional arrangement, incentives provided, regulatory system, and management of IPs. There are group of scholars who are pro focused or targeted sectorial industrial development to stimulate competitiveness of local industry through integration based on demand-supply relation. Contrast to the focused approach there are proponents of broad approach industrial park development policy. Researchers in side of targeted approach argued that attempt of broad approach particularly by low economy countries less likely induce catalyzing factor for the local economy as a result of devised feasible linkages (Hirschman 1958, as cited in Giannecchini and Taylor (2018). As for the nature of industrial park tenants, zones set to operation developed for simple assembly operation and processing activities. When it comes to Ethiopian experience, data on profile of the enterprises located in EIZ showed that many companies engaged in cement production, footwear production, automobile assembly, steel rolling, textile and garment making. Sectorial orientation of manufacturing companies in the zone is highly diversified beyond the identified initial cluster of production designated in the agreement. In comparative perspective EIZ is with completely different appearance compared to plethora of industrial parks established by IPDC in different corner of the country. Public industrial parks are specialized industrial parks and relatively more inside the identified country's comparative advantage to impact local development. In fact, operation based on prioritized sectors by itself is not only source of success factor in inducing local development rather subjected to conditions such as well management. Even if slight variation exists between private and public schemes in terms of sectorial orientation, most activities revolved around textile and garment along the low skill and low-technology. These low skill as well as low technology were of major obstacle limit benefits of the initiative particularly in terms of technology diffusion, knowledge transfer between domestic firms and zones. Additionally, net benefit from foreign exchange not worth the investment in the industrial parks and what the country loose from tax and other long-term concessions. Both public and private schemes adopted form of traditional export processing zones, which literally mean firms source materials from their international linkage through import on duty free basis and then assembled for re-export. This process impedes potential linkage between industrial park and local economy which further limited the desired impact on the country's economy. According to World Bank report (1999), African countries generate substantial amount of income from custom duties which accounts for 35% of total revenue.

This entails that loss in this regard from revenue due to duty free import incentive package for resident firms resulted in considerable loss. In this perspective EIZ likelihood of embeddedness into local economy through vertical integration is less convincing compared to its public scheme counterpart along this parameter. This zone came into effective following cooperation between China and less industrialized Africa to promote industrialization though echo from this zone as an instrument of national industrialization agenda is empirically below expected standard.

Previously conducted empirical researches revealed that designated region or geographic area spe-

cialized in manufacturing serve as development tool, route towards structural transformation, and offers most sustainable route towards local industrial development (UNIDO, 1997; World.Bank, 2011; Zeng, 2012; Johansson and Nilsson, 1997; Omar and Stoever, 2008; Farole, 2011; Aggarwal, 2012; Sonobe and Otsuka, 2006). Industrial parks shouldn't remain a simple enclave of traditional export processing or simple assembly line production process which the current schemes of Ethiopia's IPs failed to realize.

Ethiopia is targeting increased role of manufacturing sector through sustainable industrialization which demands integrated or well embedded industrial park into the local economy. In order to achieve this ambition, there has to be breakthrough to shift from the current enclave model which is separated from local economy to a well embedded zone with better forward and backward linkage as to impact development outside the zones. Compared to most low-income African countries where such "development corridors" failed at very commencement stage or even unable to attract firms; Ethiopia has experienced 'positive take-off'. Despite such positive repercussions, the increasing diversification of sectorial arrangements may result in strong deviation of the program from the targeted goals. Sectors or clusters of production in the EIZ is not focused on designated areas and increasingly much diversified over time. Additionally, due to absence of standardized treatment plant in the industrial park, companies are causing environmental pollution in the surrounding areas and degrading environmental and social compliance of the zone. Looking at the sectorial orientation of resident firms in the zone, large number of companies engaged in ceramics and cement production including mineral manufacturers[8], and these are sectors known by poor environmental compliance. Key informant interview conducted with selected farmers in the area also revealed as polluted air coming from inside the zone affecting their agricultural products including cereal plants and animal fodder.

5.1.4 Employment Contribution and social significance in comparative perspective

Evaluation of industrial parks efficacy varies across the world due to its varying type across the globe and within a country. However, massive job creation is of major objective of this policy initiative and it's most cited in various literature. Ethiopia's industrial park development program ambitioned to serve as a pressure valve to absorb large number of unemployment in the country. The program necessitated to induce economic transformation and development which allows massive employment generation. Government prioritized labor-intensive manufacturing sectors including garment and textile, and leather and leather products with the aim of generating significant number of jobs. The question is, does exist the desired social significance of industrial park operation in creating linkage with the local economy through job creation? The answer is simple 'no'.

Despite the fact the number of new jobs created fall short of desired level, parks set to operation created jobs in the local labour market during their start up life cycle. The industrial parks development and operation in the country caused substantial number of jobs showing some quantity increase and reducing unemployment of unskilled labour who are at the low end of skill category. To put into context industrial parks created 50,000+ jobs and yet not reached 50% of the anticipated employment contribution/proposed labor demand due to low space utilization by resident enterprises coupled by risk aversive behaviour of the firms, poor institutional and administrative

[8]Eastern industry zone enterprises basic data gained from Ethiopian investment commision

structure. For instance, Hawassa industrial park which is the biggest and comparatively with better industrial park conditions in the country and perceived as a flagship industrial park and hoped by the government to be home for more than 60,000 workers employed only 1/3 (one-third) of total employment anticipated due to the fact that firms are not producing at their full capacity. Ethiopian investment commission database shows that public driven industrial parks accounts for over 60% of total jobs created particularly HIP and BLIP were the two IPs pooled substantial number of local unskilled workers.

Industrial park	Type of industry park	Investors in pipeline	Jobs created	Jobs Planned
Bole Lemi-I IP	Public	11	15,119	35,000
Hawassa IP	Public	22	22,000	60,000
Kombolcha IP	Public	5	1537	23,000
Eastern Industry zone	Public	100	15,000	20,000

Table 4: Planned versus actual performance of industrial parks focusing on labor market outcome
Source: own calculation based on data obtained from Ethiopian investment commision

As it has been theorized and debated over the last three decades, IPD program can be instrument of development in the context of low- and middle-income countries and this subjected to fulfillment of necessary preconditions. For instance, Kombolcha and its surrounding areas is major corridor of illegal migration to the Middle East and Gulf countries. For this reason, the park could be one and the foremost option to increase employment opportunity and tackle illegal migration. The four foreign companies inside the park have created jobs for more than 1,547 youths and this number expected to increase to 20,000 and above when the park is fully operational. The Job creation in the park has been particularly strong for women and contributes significantly for the empowerment of women though the content has got fundamental problem. The increasing number of jobs in the zone particularly in the area where women are vulnerable to hazardous irregular migration play a paramount role in solving various socioeconomic problems of irregular migration. This indicates, the operation has a potential to retain potential migrants at home in the domestic labor market though the nature of jobs particularly quality of jobs created and employment relations are still questionable. Kombolcha industrial park promised to have fundamental role in the effort of stemming potential irregular migrants in North Wollo where culture of migration is strong and this to be ensured if viability of the park is improved for the workers.

Willing to employ youths relative to expatriates and type of employment

In addition to generous incentive arrangements including fiscal and non-fiscal concessions including duty free access to the US market (AGOA) Ethiopia's industrial park also benefited from low labor cost as part of major designs offers benefits to investors. As revealed in (Zeng, 2012) locating a number of enterprises in a tract of land where standardized services provided in flexible regulatory system increases competitiveness of resident firms by way of conducting technology up-gradation and training workers. Locating firms in a single place encourage competition in the areas of using updated technology including wages and benefit packages to workers.

In contrast to this finding, working environment in all the public and private industrial parks of Ethiopia presented exploitation of the surplus labour. Extensive interview made with confederation of Ethiopian industry workers association showed that workers treated as replaceable, investors are

not volunteer enough to bargain for the improvement of working conditions, far great from what they obliged to perform. In both private and public scheme industrial parks sampled for this study, low skill and labour intensive jobs are dominated by local workers, whilst occupations warranty skill including management position fully employed from abroad or reserved for expatriate staffs. Accordingly, in response to different provisions proportion of expat staffs didn't show substantial change ever since industrial parks operation started though supposed to undergo rapid substitution of foreigner by Ethiopian nationals as per the regulation.

On the other hand, extensive interview made with investors portrayed that domestic labour market is unable to provide people with demanded competency and skills. Overall, it has to be well noted that due to surplus cheap labour, labour-intensive industrial parks of the country created jobs of low-end in terms of skill, negligible wage for local workers (average of 650ETB/month or 27.08 ET/day which is less than 1US$/day) and dominated by low technology which implies the likelihood to experience technology up-gradation so that workers possibly experience vertical mobility is very less. Throughout the two schemes (both public and private) selected for the purpose of this study, Ethiopian export trade led industrialization process limited to low-wage, low-skill, and simple assembly operation-based production process. The current industrial policy path of the country is low road to technology based industrialization process and doesn't provide room to create integration with domestic economy to decrease dependence on import of raw materials dominantly consumed by the resident firms.

Economic value of industrial parks (export contribution)

The basic concept of industrial park development is drawn based on the assumption this program serves as a policy instrument for structural transformation and local industrial development. This is because they can help achieve three interrelated goals which include: enhancing foreign exchange by promoting non-traditional export, creating jobs & income, generating technology transfer and spillovers.

Ethiopia envisioned multifaceted objectives to achieve in designing policy enhance industrialization of which foreign currency earnings from the non-traditional export trade is basic one. Viewed against over 100 total number of resident firms in the four operational industrial parks included in this study the corresponding export earning is insignificant. Contribution in this regard found convincing when consumption of local raw materials exists through business-to-business linkage between investors and local industry. Nonetheless, linkage in this regard remained at margin without causing meaningful integration for the general industrialization of domestic economy except some scanty operations. Absence of meaningful linkages between tenants in industrial parks and local economy lessened the expected economic contribution to its present operation. My argument along this base on three major analytical grounds. **Firstly**, industrialization by its nature cause platform through which locally available abundant raw materials converted into manufactured goods and very scanty linkages less likely sustain the establishments operation to better maturity height. **Secondly**, interview with regulatory department revealed that foreign exchange stays in the country is very shallow due to poor linkage and absence of local goods and services consumed by resident enterprises. **Thirdly**, country's industrial park labour market composition is made of extensive use of unskilled labour and this less likely cause positive externality for rapid development of local economy going beyond direct employment generation.

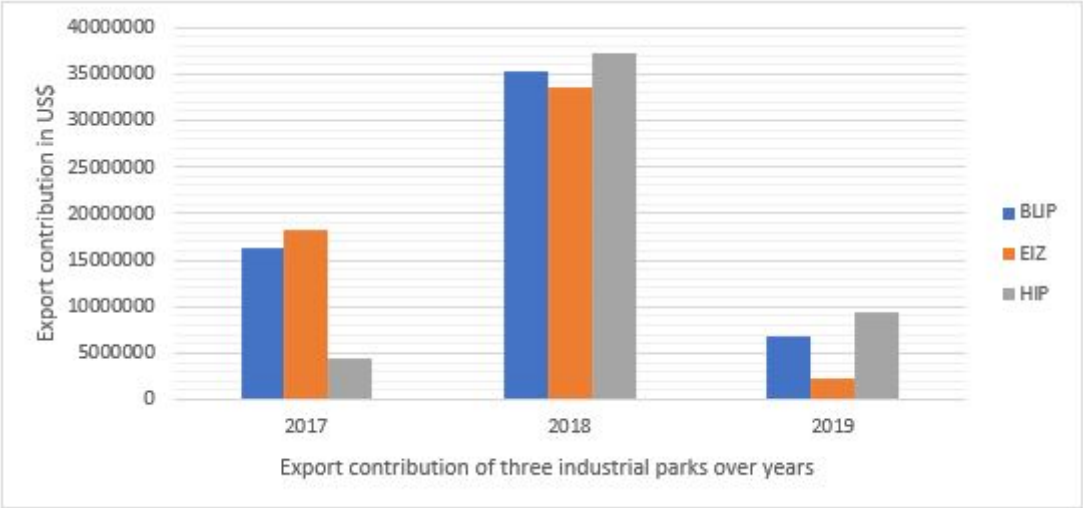

Figure 12: Export contribution of three industrial parks over the last three years
Source: own calculation based on data obtained from Ethiopian investment commision

Ethiopian investment commission as a regulatory institution is responsible for tracking performance though data which are accurate, comprehensive & up-to date on major indicators of IP performance such as employment, stimulated investment and export generated is not available or scanty. This makes attempt to make comprehensive analysis challenging due to lack of quality data. Performance records over the last few years shows that there exists trend of average monthly increase from export earnings though gap between achievement and what government hoped to gain is very huge.

With the increasing openness of the country, development of plethora of export oriented industrial park policy and subsequent inflow of foreign direct investment; the share of manufacturing sector in total export earnings still stood second next to agricultural sector. The Ethiopian Investment Commission disclosed that 103 million USD export has been generated from industrial parks in nine months of 2018/19 fiscal year. The performance exceeded that same period last fiscal year by 40 percent, it was learned. Investment Commission Commissioner Abebe Abebayehu told Ethiopian News Agency that 70 percent of the planned earning from industrial parks during the stated period has been accomplished [9].

Enclosed with the above description, the above chart shows that substantial increase of export earnings from different industrial parks over periods of time. Following steady increase of export order of resident enterprises, the overall export contribution of industrial parks shown substantial increase (see figure 12). However, it has to be well noted that it is far below operation capacity. While the Ethiopia's industrial parks set to operation appear successful during their first cycle of implementation, the aggregate performance is far below what they hoped for to achieve. The combined export performance of all represents only negligible proportion of country's total exports and employment generation has also been far below figure projected.

To conclude, like many other developing countries of the world, Ethiopia committed huge amount of resources for the development and implementation of industrial park policy with the desire to

[9]Interview with Abebe Abebayehu, Ethiopian Investment Commission, Commissioner as Cited in Ethiopian news agency, May 1, 2019

become manufacturing hub of Africa. However, when viewed in light of basic theoretical expectations at this nascent stage, success factor is exceptional to developed countries of the world where the program delivered expected benefits. The findings obtained from the analysis indicate that industrial park development initiative in Ethiopia has had achieved significant investment inflows though the success along other measures such as job creation and foreign currency was very little compared to the plan. Achievements in this particular context is positive take-off of industrial parks but not necessarily leads to speculation of success factor rather dense involvement of government in public owned IPs in planning, financing and provision of various ancillary supports during initial stage and after care services created conducive conditions. The actual values of investment including employment opportunities created and export outcomes as a subsequent result of the initiative are rather at far great distance from what has been anticipated and less convincing to perceive the initiative has been effective against basic performance measures. The analysis revealed that the country's industrial parks set to operation are from signaling evidences of integration with the local development agenda though there are still expansionary activities without checking workability of already operational parks which offer little hope to the upcoming similar projects. Despite some limitations of the study like delimitation to only first life-cycle operation process of the parks which makes it difficult to conclude as if the parks are failed, not more than failed or successful; the progressions highly resemble with previous weaknesses in Sub-Saharan African countries. This leads to speculative arguments on their importance for local economic development. One of the major reasons attributed to the fact that attracted investments to the zone is not due to convincing capacity for high-technology production rather due to cheap labor, ancillary support and large incentive packages compared to other competitors in the region. The findings indicate that Ethiopia's IPD contribution is neither significant for the human capital development formation nor for enabling domestic industry through backward and forward linkage. Ethiopia as a late joiner of IPD initiative would have gained lessons though its current actual experience is difficultly different from replication of previous weaknesses in other Sub-Saharan African (SSA) countries.

5.1.5 Backward linkages: Integration of IPs into the local economy in Ethiopia

Indirect effect of industrial park development particularly creation of backward linkage with the local economy is of major factor why the initiative is believed to be of particular interest of developing countries. As it has been indicated at the beginning of this chapter, it is daunting to measure impact of the initiative on local and regional economy. It is also problematic to comprehensively capture the contribution of secondary importance in the absence of quantitative data base. Although not considered as primary goal of industrial park development, the initiative expected form integration with local economy of the host country with the desire to achieve national industrialization agenda. Integration of IPs into the local economy can be made in two different ways which includes; sourcing industrial inputs from domestic market and establishment of network of production through subcontracting arrangement in which international companies perform top level of production and subcontract the rest of the activities to domestic firms. So, it is a factor-based measurements such as degree of value addition (exports minus imports). Looking at the global experiences, very few countries such as Republic of South Korea achieved meaningful outcome in the second type of linkage i.e., subcontracting arrangement with domestic firms. With regard to backward linkages of industrial park, there exists variation across countries and thus why success stories along this limited to very few countries.

Local Small and Medium enterprises and FDI linkages

Special economic zones positively impact local development by way of improving competitiveness of SMEs and this is conditional on capacity of local industry to create vertical integration through supply-demand relationships (Farole, 2011; Madani, 1999). Reviewed literature indicates that one of the positive impacts of industrial park development is it triggers establishment of partnership and alliances involving consumption of local raw materials, goods and services through supply and demand linkages which ultimately might also involve shared technology. Apart from this, some theorizes availability of raw materials in the local market is not necessary as far as the country is able provide other competitive advantage due to the heightened global chain relations. Apparently, linkages involving both local industry and resident enterprises yield knock-on effects in terms of broader social and economic development in the condition of well devised strategic integration. This makes local producers of goods and services consumed in mass by resident investors indirect exporters and such alliance reduce total production cost of the tenants likewise.

It has been established in previous researches that one of the theoretical benefits of industrial park development is ensuring local economic development or overall economic growth outside industrial parks following synchronization between zones and local industries through demand-supply relationships. Currently the nature of Ethiopia's IP policy implementation is simply traditional export processing zones. Given the fact that local industries financial capacity and absorptive capacity to accommodate technology transfer is very low compared to their counter foreign companies; linkage issue is not as easy as it has been theoretically pronounced in the establishment's program. Domestic economy established some spotty and inconsistent linkage with industrial park resident firms in which the latter complaining of the poor quality and incompatibility of local inputs (leather & cotton yarn) were good examples in this regard. According to piece of report produced by UNDP (2015), shortage of local raw material is of fundamental problem reported by both EIZ zone developer and respective resident enterprises.

The Government of Ethiopia (GoE) is implementing industrial development strategy in which industrial park (IP) presumed to promote; industrialization, job creation, increase exports and generate foreign earnings. Global experience with IP development suggests that the initiative can be a source of spillover effects to local companies through inducements to improvements in product quality, increases in workers' skill level, improvements in human resource and contracting practices, greater access to international markets, and other demonstration effects. IPs provides opportunities for increased employment, exports and economic growth if it works well.

In addition to direct job creation for the youth, IPs are expected to link with the domestic economy and technology transfer, knowledge & skills. There are currently more than five public IPs that are operational in Ethiopia, most of which are in garment and textile manufacturing. The operation of foreign firms in IPs can benefit the local economy by helping develop industrial culture among Ethiopia's workforce, by locally sourcing inputs for production, and by creating demand for the provision of services such as catering, banking, accommodation, or transport.

The Small and Medium Scale Enterprises (SME) sector on the other hand has been fully recognized by the government as another important vehicle for job creation and ensure vertical linkage with the industrial park through supply-demand relationships. To that end, the government has commissioned various support programs that foster job creation and economic growth through SMEs. However, there are indications that the sector continues to suffer from various challenges. For

example, the World-Bank-Group (2015) in its Enterprise Survey for Ethiopia highlighted limited access to finance as the biggest challenge to local firms. Other basic challenges include; access to foreign exchange, access to markets, lack of technology, unsuitable working premises, lack of skilled manpower and a lack of quality business development services.

There appears to be disconnect between the country's industrial park and SME sector. Ethiopia's industrial park development policy focus on job creation, promoting Ethiopia as a production and exporting hub while policies for the SME sector envisioned creating jobs at large scale too and encouraging import substitution through local production. IPs enjoy several fiscal & administrative incentives that are used as primary tools for attracting FDI into Ethiopia. However, due to various challenges, IPs are making limited local sourcing such as packaging materials and few resident firms are connected with local economy in terms sourcing production inputs from domestic suppliers particularly in leather industry. These challenges mainly involve quality and standards. Respondents were asked about their relationship with local firms outside IPs and many foreign firms were not willing to use inputs by local suppliers because they do not meet with the international standards and quality.

As in the case of many African countries export processing zones, Ethiopian industrial park development program allows both arrangement of single factory units and closed industrial park regime to locate resident firms in the zones. Reviewed literature established that the higher the likelihood of linkage effect the more knowledge transfer effect happens in the closed or designated territory where large number of firms locate together than its counter single factory units. Indeed, this become only possible where the initiative able to represent local producers in such a way they get advantage out of close spatial arrangement through network of production. Although, industrial park development initiative in Ethiopia has shown some progressions, backward linkages effect remained theoretical. Evaluated against successful East Asian countries such as South Korea and Thailand, the proportion of "closed" industrial park regime is higher in Ethiopia but the theoretical impact doesn't work very well. There are multifaceted factors behind this performance failures of which absence of innovative institutional arrangement and incentive packages support local firms to improve production capability problem play remarkable role. As a result of such "implementation paralysis" [10] almost all operational industrial parks in Ethiopia are enclave; neither joint venture platform arranged nor other forms of partnership took place with local entrepreneurs (see section on pitfalls of linkages) and failed to represent local firms. As described in the diagram over 99% of Ethiopia's industrial park dominated by foreign international companies (see table 3). This do not make the investment platform effective to bring about longer-term commitment to the industrial park development initiative of the country. This limitation subjected to combination of shortcomings, of which firm-specific variable is worth-mentioning. This entails that foreign owned firms may have higher likelihood to source their inputs from abroad or embedded in their international networks of production and presents less propensity to access production inputs from local markets.

[10] the concept of implementation paralysis is taken from Farole (2011)

Ownership category	Number of resident firms/on site & operational	Percent
Wholly foreign owned	100	98%
Local	2	2%
Joint venture - local and foreign	-	
Total	102	100%

Table 5: Stimulated Investment and Ownership type
Source: Computed based on data obtained from Ethiopian investment commision

Although it is not well strategized intervention as an attempt to promote linkage between local and international firms, government of Ethiopia is implementing Competitiveness and Job Creation Project "CJC project" in creating backward linkage. The World Bank-financed Competitiveness and Job Creation (CJC) Project of the government of Ethiopia aims to support business-to-business linkages between domestic enterprises and IPs through a matching grant fund, but no decent results achieved yet. As already described in the other section of this thesis, the project supports the provision of matching grants from a Business to Business Linkage Fund to selected local private sector enterprises with the aim of enhancing their capacities, productivity and market access; as well as to strengthen their business linkages with foreign firms operating in Bole Lemi Industrial Park and gradually in others as well. In the first round, five local manufacturing firms received financial support to upgrade machinery and nine manufacturing beneficiaries from the second round have already signed Letters of Grant Agreement (LGA). However, the firms accessed the grant funding during the first round have shown limited efforts to create linkage with IPs, especially due to a lack of foreign currency to import machinery, spare parts, and raw materials. The SMEs also face difficulties in accessing appropriate skills, technologies, and finance that keep them from growing out of low-productivity, low-quality traps and linking up with larger manufacturing firms. These and other possible combination of factors impede linking industrial parks to local economy through partnership (purchase of resources from local firms and subcontracting of production processes by the industrial park firms).

Government involvement and institutional needs: capable institutional actors?

The problem of poor integration between industrial park firms and domestic economy is not exceptional to Ethiopia, rather, mainly common to other low- income countries across the world. Failure to establish meaningful linkage between zone enterprises and local economy subjected to various factors of which political commitment of the government play fundamental role and this factor is as equal as the economic one . In the case of Ethiopian IPD program, absence of strategic direction that promote integration and catalyze to make its appearances is very low and/or non-existent. It is because integration rely on institutional needs; more of policy oriented, requires strong administrative set-up and demands political consideration.

Coupled with low previous level of industrialization, low absorptive capacity of local manufacturing and lack of capable institutional actors made industrial parks of the country simple enclave model. Ethiopian legal framework designated provisions for investment activities focused on export-oriented production or for industrial park tenants and not for the firms with direct linkage to domestic market access. There must be a policy coherence in between the two, to easily bridge the linkage between resident firms and domestic companies for better spillovers. In comparative perspective, set of generous incentive package to foreign entrepreneurs in the IP shows that they

receive net profit compared to operations outside the park where those fiscal and non-fiscal privileges do not exist. There should be measures to synchronize positive externalities of industrial park operation with local economy through strong joint venture between local industries with creation of policy coherence and alignment, coordination of objectives between IP resident enterprises and those outside in the wider economy. Previous studies also conform this finding showing that backward and forward linkages between tenants and domestic industries in the context of developing countries is not easy to realize. Fundamental problems are "compounded because most governments do not have a strategy, incentives, or necessary agencies to promote linkages between local and international firms" (ILO, 1998). Policies promote linkages between domestic enterprises and foreign investors are 'key in realizing dynamic potential of special economic zones' (Farole, 2011).

Industrial park operation in Ethiopia also is not good enough in terms of promoting linkages because of chronic lack of capable institutional actors work on improving skill and production capability of local small and medium enterprises so that domestic industries also located in the IPs. Provided that the country has low previous level of industrialization, there is no rational assessment of necessary preconditions to establish linkage and when it has to make appearances. The main challenges in creating value chain linkages in the priority sectors identified is obsession by the government to foreign enterprises, institutional gaps, and absence of local enterprises in the industrial parks. Besides, government of Ethiopia provide generous incentive packages designated under industrial park proclamation assuming FDI would not have happened without such concessions. Analysis in previous empirical investigations on performances of industrial park and overall success suggests that such initiative encouraged in a condition accommodate competition based on facilitation, facilities and world standard services than provision of generous incentive package including tax exemptions to compensate missing elements or other comparative disadvantages (FIAS, 2008). The investment incentive package among others allows resident firms to import all their inputs for production process duty free from abroad for they are not obliged to procure locally available sources and inputs for production. Very few firms in BLIP, KIP, & EIZ formed spotty and inconsistent linkage with local economy in the areas of cotton and leather production with firms complaining of the poor quality and incompatibility of local inputs (e.g., low quality hide and skin, cotton yarn). Study conducted by Engman et al. (2007), also suggested that lack of necessary quality demanded for products of global market, supply reliability and competitive pricing are fundamental problem of domestic inputs.

According to Economist.com. (2015) the idea of making big projects like industrial parks enclave without any connection with the local economy, end up in short term operation only and difficult to make it sustainable. Successful industrial parks are the ones that, with time, will over-spill to the national economy to make the whole country a special economic zone. In this regard countries implemented special economic zones policy and achieved good records like those in Asia including South Korea and Indonesia successfully integrated the zones with main local economy. On the other hand, countries like India only did less or no work in integrating enterprises inside parks with those outside. This scenario brought challenge to Indian special economic zones following reintroduction of taxes and disincentive. All that is needed and missing as well in the discourse of IPs implementation is absence of proactive approaches to solve critical problems by way of steady supply of resources and innovative strategies to synchronize positive externalities in the zones with the local economy.

There is scope for both federal and regional government to realize the desire for establishing linkage

between local industry and firms in the industrial parks. There must be strong institutional arrangement to encourage SMEs through improving production capabilities and skills, enhancement of enterprises competitiveness and infrastructural development given steady supply of pertinent resources will have substantive role in changing the game. Basically, production model followed by textile and garment industries in the local clusters/premises and their transition from such premises to industrial parks must be strengthened. This demands multifaceted interventions ranging from improving quality of current production to meet requirements demanded by industrial park tenants and up-gradation of skill levels and employment by enhancing skill level of workers. With its current state of operation, Ethiopian industrial park not fully operational in terms of production capacity. Consequently, its potential impact on employment and foreign currency earnings is minimal though the overall take-off is a positive. Unless the current situation gets improved the possibility to achieve desired goal of IPD and reap possible benefit from the parks will remain challenging. The current poor linkage attributed to poor strategic planning though difficult to infer as poor linkage is due to total mismatch of priority sectors with country's comparative advantage. However, due to the current national capacity, level of technological development and poor experiences it is also difficult to say the sectors are well inside the country's comparative advantage and this a big problem in the case of EIZ.

The current state of Ethiopia's industrial park is also similar with initiatives in other African countries. According to Farole (2011) African special economic zones suffer from implementation paralysis which subsequently resulting in failing to create eloquent links between industrial parks and main local economy/global markets. There is also ample evidence depicting as vast majority of African economic zones are impaired to ensure meaningful integration which is a base for establishing forward and backward linkages between entrepreneurs inside special economic zones and those in local industries (Stein, 2012).

It is a bit early conclusion to make an inference whether Ethiopia's industrial parks are not in a road towards realizing industrialization agenda of the country due to its nascent stage of development. However, with slight variation in terms of degree and intensity the criticisms are several across all operational units. Absence of substantial link with local industry negating industrial park development from its objectives further questions its sustainability. This signals as sustainability is of alarming issue warranty due attention in the course of industrial park development policy implementation process. Industrial parks in the country with their current form are enclaves because they are operating in full isolation from local economy and this will not create spillover to the local economy.

This limitation is attributed to poor integration between legal frameworks and regulatory system, poor commitment from the government side in assuring potential knowledge transfer and knowledge retention in labour man power. It is also because of highly disrupted mobility of unskilled labour (huge entry and exits deterred skill acquisition through on the job training & learning by doing), absence of skilled local labour manpower in IPs (at least in the positions occupied by expatriates), poor integration and mobility between main local economy and resident enterprises even in the clusters with better comparative advantage of the country in which skin & hide for leather sector and cotton yarn for textile/garment sector are strikingly worth mentioning. Additionally, contrast to what has been theorized in new international division of labour theory fundamental limitation related to linkage between resident firms and domestic industry outside the fenced zones is that intra-industrial park division of labour or vertical linkage doesn't exist at all.

Overall, the preceding analysis on backward linkages of Ethiopian industrial parks showed that the zones have shown positive take-off though, yet have not attracted large number investment into some of the public industrial parks. Public industrial parks, in comparison to private industrial park in the case study of this thesis, tend to be smaller in terms of stimulated investment and number of companies attracted to the zones. Few firms occupied large square meter of premises of which larger portion even remained unutilized in the public industrial parks. However, with smaller number private companies' participation, public industrial parks presented larger participation of employees. The study also presents that both public and private schemes have had poor integration into domestic economy given they have not been well inside institutional focus relative to the countrys' industrial policy priority sectors. On the other hand, similar to other African countries experience particularly SSA, location where industrial parks established and expansionary programs followed by the country is more of political driven than economic considerations which also suffer from chronic lack of capable institutional actors. In order to ensure backward linkages related problems policy-oriented solutions, strong administration deliver political solutions needs to be availed. Solving investment climate related problems and knowledge gap in managing and operating IPs needs priority intervention.

Pitfalls of establishing synergy between plan & implementation

Ethiopia envisioned to alleviate development problems such as poverty, achieve economic growth and economic transformation both through government and private industrial parks program. However, it did not have focused set of objectives followed by clear, achievable and monitorable institutional arrangement, to reap potential benefits from IPD in the country. Failure to create an elaborate institutional framework to regulate and govern the zones from the initial stage paved way for speculations/risk of fail related to firms to make its appearances. Moreover, the country do not have strategies nor independent institutional structure firmly work on promoting linkage between domestic enterprises and experienced foreign owned companies which aggravated the problem behind poor integration.

Employment opportunity generated dominated by people of low-end skill and contrast to what has been anticipated the likelihood for technology transfer is also low due to early focus of industrial parks on low-skilled simple assembly operations. Looking deep inside the inspection and regulatory capacity of the country, technologies imported by resident enterprises are not technically evaluated rather solely depend on strong driving motive of the current political administration/politicians of the country. This will be of the major negative repercussion hampering the program from reaching desired destiny. Controlling and legally inspecting techs imported, and monitoring establishment process of industrial parks demand minimum experience and this highly intertwined with industrial foundation of the country. Results in this regard showed that established institution's capacity in regulating and implementing industrial park program determine the possibility to fully exploit expected benefits of the initiative. Challenges addressed in previous studies also conform this finding. According to Aggarwal (2007), realization of special economic zones impact/expected potential benefits is up to the proactive role played by individual state government. Jenkins (2005) reported that "policies to increase participation of local firms in export processing zones could significantly boost positive spillovers to the broader economy".

Closer to the current study's result previous empirical findings advanced different factors behind

performance variation and failure of the program in the case of developing economies. Study conducted by Farole (2011) depicted that failure in African special economic zones deep rooted in bad investment climate; more specifically low competitiveness, incapable institutional problem (inability to operate and manage zones based on innovative strategy/planning), and governance problem (Farole, 2010; Zeng, 2015; Engman et al., 2007). Analysis of primary data collected using interview with different stakeholders' support findings in this literature. In thorough diagnosis of poor linkages or integration of industrial parks this study identified major factors impeding the dream of Ethiopian IPD program come true. The fundamental problems identified for poor embeddedness of industrial parks into local economy mapped out as; irrational behaviour/speculations, investment priority, enterprises related problems, poor local manufacturing, limited public private partnership, enclave nature of IPs and type of activities in which the companies involved are worth mentioning. Beyond these set of fundamental obstacles, the increased foreign direct investment and competition to locate experienced foreign companies in special economic zones also caused a serious challenge. Study conducted by Inotai (2013), showed that the very success of export-led industrialization strategy subjected to competitiveness of host country "export-led industrial park developers". The increased competition among developing countries to become manufacturing hub of the continent by way of attracting FDI to industrial park centers is also driving force behind less performance of the zones. Empirical findings showed that zone host developing countries are boxed in "unnecessary competition" to locate foreign international firms in the economic zones, of which generous tax exemptive packages and poor regulations of working conditions are worth mentioning and this can be expressed as race to the bottom. Indeed, the workability of SEZs in general sense and related analysis demands not only scenarios in host country but also global development perspective (Palley, 2003). Similarly, evidences in study conducted by (Kaplinsky, 1993 as cited in Johansson and Nilsson (1997) portrayed that "since cheap, unskilled labor is the major attraction for foreign investors in EPZs, competitive devaluation may cause EPZs to be beneficial when established by a few countries but result in a drop in real wages and deteriorating terms of trade when established simultaneously by a large number of developing countries".

As a consequential factor of different reasons, benefits of Ethiopia's IPs by far fall short of meeting satisfactory functions. Though the pitfalls attributed to multi-facets complex reasons, analysis from the interview with respondents showed five major reasons why Ethiopian industrial parks are ineffective in creating backward linkages. The very objective of export led industrial park policy of Ethiopia is to generate foreign currency and job creation. Despite the fact resident firms in different industrial parks provided with various ancillary incentives, their contribution for the national economy is little since their commencement though they are at nascent stage of operation to reach strong conclusion. Government loosened regulation and huge income from import and export revenues in the process of the program implementation. A serious threat to the country's industrial park viability and under-performance attributed to various factors including; weak institutional context, little coordination across relevant stakeholders/institutions, over reliant on incentive packages than competitive advantages, consumption of parks as a development tool for political ends by the government without considering local capacities along both manufacturing fabric and technology. Over ambitious plan by the government characterized by aggressive expansion of industrial park program likely end-up in nonviable project as it often led to failure in most cases. Experiences of successful countries where industrial parks utilized as development strategy showed that gradualism approach is more convincing than the counter aggressive expansion. Thus, industrial parks set to operation in the country failed to generate significant technological, social

and economic benefits to the expected level. The data presentation and analysis of major obstacles to effective industrial park operation of the country described as follows.

(a) Speculations/risk of loss related to resident firms

The result from extensive interview conducted shows that speculations or risk of loss related to resident firms is of main potential challenge faced in the industrial park development and operation. This includes: lack of motivation in transferring technology and management skill though obliged to leverage as per the agreement in response to varied concessions. In both schemes attempt to import outdated machine/technology but attachment of higher value as a new brand (over invoicing) and importing additional products enclosed with manufacturing goods and services out of permissible items.

There is problem pertaining to price transfer in subleasing land for shed development and under reporting the price in agreement with investors to concerned government officials and this is quite exceptional to private scheme. This semantically mean private developers set high price to sublease land for shed development though there exists designated amount in legal framework. A key motivating factor at the center of importing outdated technology and attaching high price as a new technology is explicit intention to upsurge asset value for bank loan and benefit from deduction in profit tax. The finding from this study revealed that existing institutional modality is not able to control actual figure from export earnings and there is fear of under reporting export outputs. A good evidence for this might be the huge gap between what has been anticipated and export outputs which was never consistent and showed huge fluctuation. The other major dimension is low productivity of labour, high labour turnover due to various industrial relation related problems between employers and employee. In fact, it has been reported by the resident firms as it is difficult to access skilled labour in the areas of both management and technical roles. Government facilitated necessary environment in hiring expatriate staffs and also encourage firms to represent them with Ethiopian nationals. However, this desire to see increased number of domestic workers in the technical and managerial role areas through after acquiring necessary training failed to make its appearance. In both private and public industrial parks, there are indicators of speculative behaviors that has to be avoided. To summarize, the problems should be avoided and needs innovative institutional arrangement and regulatory frameworks as to increase productivity of the economic zones and enhance the country to reap benefits from the overall programme. This is necessary because, the host country benefits in condition whereby productivity improved and increased productivity transcends market access, low factor and subsidies and how it productively shades impact on human capital paves way to increase participation of domestic firms.

(b) Investment priority

Ethiopia's deliberate policy choice to promote labour-intensive industries such as textile and apparel is with the presumption these clusters potentially provide job opportunity and absorb high youth unemployment which is of fundamental tension for social and political stability of the country. Cheap labour is of the main stimulus packages in pipeline to attract foreign enterprises to the industrial parks of the country though the initiatives likelihood to experience technology up-gradation and desired human capital development formation is very less. With its current formation, industrial parks set to operation across the country dominated by garment and textile in

all public IPs, and this makes it single sectorial orientation of the parks or investment monoculture. This further delimited potential benefit from both general and preferential trade agreements like; Africa Government Opportunity Act (AGOA), Everything but Arms by European Union (EBA) and common market for eastern and southern Africa (COMESA). Constituted by the enclave model, industrial zone program in Ethiopia is mainly inspired by preferential trade regimes as contended in the preceding analysis and this makes the program myopic and difficult to make it sustainable given the fact that continuation of the program is highly uncertain. The findings of this study corroborate evidences in reviewed literature which showed that dependence on specific market/export destination(s) likely affect industrial park performance and might be causal factor for performance variation. Moreover, reliance on short time trade preference arrangement presented serious challenge to sustainability of most African countries if not main factor for their poor performance (Kiria, 2017). Provided that coming to an end of such time bounded trade preference arrangements adversely affect effectiveness of the zone's long-term planning; strategic objective which is clear about the objectives and realism about the underlying model need due attention by the government in order to protect Ethiopian industrial parks from consequences of alike disease African economic zones suffered from pertaining preferential trade arrangement.

In its to date operation, sectorial priorities of Ethiopian industrial park development program have had impacted very less the expected comparative advantage of the country. The two schemes (public and private) industrial parks dominated by short length standardized operation which calls for labour intensive production process, low capital and technology. The less complexity of the production processes resulted in less likelihood of human capital development formation by way of producing skilled labour man power in the local economy. Previous studies conducted on the experience of developing countries also advanced similar findings on the technological and skill development role of export processing zones. Export driven zones delimited their production activities to specific centers and their roles in both skill development and technology transfer wise is limited (Kiria, 2017). Apart from this, due to institutional gaps Chinese industrial zone (EIZ) came into operation eight years prior to legal framework govern special economic zones of the country. Due to this and other consequential factors enterprises engaged in simple assembly operation as in the case of public scheme which is less dynamic in impacting local economy and domestic entrepreneurs. However, the problem with this industry park is its commencement prior to any legal framework on IPD which was devised right after more than five years. Additionally, its sectorial orientation is not well inside country's comparative advantage and keep on experiencing massive diversification of production.

The model in EIZ in comparative perspective is exactly superficial replication of Asian tigers and/or Chinese model in which this particular scheme is being "pushed" into untargeted development or sectors where it may not be appropriate as per the national industrialization agenda. Perhaps such unfocused expansion into untargeted sectorial development might cause failures in the implementation of the program. This doesn't mean there is no room for learning to happen perhaps there may be range of environment in which the replication of Chinese model generates useful elements but the current industrial foundation is not to the level of what height of the operation demands. To conclude, in the case of Ethiopia evidences shows that connection between industrial parks or/and industry zone and local economy is limited to labour market in which resident firms access low-wage abundant labour man power. This implies that comparative advantage of the country as a host is low-wage products or low-end skill labour.

(c) Enterprise related issues

The stimulus package structure of industrial park development/special economic zones development of the country is not strategically supported with innovative method in such a way it promotes local economic development. Due to increasing expansionary projects in different corner of the country, which is also politically motivated led to implementation of overly ambitious projects questions viability of the program. Compared to public scheme, private industrial park located enterprises that are not well inside the park development objectives. This actually resulted from both relaxation and lowering of entry requirements by the park developers in the context of loosened regulation by the government and desire to fill vacant shades by the park developers to meet profit objectives by way of relaxed entry criteria. "Amongst fundamental problem in current operation is absence of industrial park normative principle which decrees incentive benefits on performance not only on physical presence of the tenant. Even in the condition of some institutional reforms despite companies created substantial number of jobs and exporting hundreds of thousands of US$ and those at margin receive equal stimulus packages without any differential treatment" [11]. Accordingly, there are small business incubators/tenancies without meaningful technological capacities and low-level capacities to stimulate local development which also resulted in worsening the envisioned prospect of the centers in engendering knowledge generation and skill transfer. This is also consistent with previous studies conducted in emerging economies which revealed that diminishing level of technology or absence of knowledge catalyzing mechanisms in industrial parks is a threat for the sustainability of the program. Thus, such deviation of industrial parks from respective long term sustainability objectives caused failure to achieve significant level of social and economic developments despite massive social and economic investment for their establishments (Rodriguez-Pose and Hardy, 2014).

There are firms in the industrial parks which are causally not convincing to achieve backward and forward linkages. There are companies mainly in private industrial park and to some extent in public as well who applied for line of credit or loan application given they had no sufficient capital. Moreover, resident companies are not technology intensive rather import intensive due to the fact that most of the firms are in light manufacturing category with limited capacity to create jobs for the skilled and unskilled Ethiopian nationals. Apparently backward and forward linkage demands internal capacity of the enterprises to establish linkages and spillover to local economy. Thus, limitations pertaining to tenant enterprises is common across public and private schemes though intensity of the problem is higher in private industrial zone as compared to public owned parks. In fact, park development and operation can be achieved by both public and private sector though there exists variation along profit target between the two schemes. Reviewed literature also conforms as private park developers target profit or property aspect of park development and demonstrate low willingness in knowledge management and technology-based benefits of industrial parks. In the view of industrial park development life-cycle; formation of meaningful linkages between zones and local environment through well devised mechanisms support knowledge and technology transfer demands clear implementation guideline and financial resources (Rodriguez-Pose and Hardy, 2014). According to Fei D. Samatar and Liao (2018), resident enterprises in the Eastern Industrial Zone of Ethiopia share substantial similarities, of which, majority of them are privately owned small manufacturers. As highlighted in Brautigam. and Xiaoyang. (2011)

[11] Interview with Abebe Abebayehu, Ethiopian Investment Commission, Commissioner, Cited in Ethiopian broad casting corporation, May 1, 2019

deviating from African countries desire to foster export oriented national industrialization, Chinese government target to locate less competent, low-end, industries less comply with environmental issues.

Though, public and private parks set to operation in the country differ along fundamental proxy variables used to measure efficacy including; desired spin-off to local economy found ineffective in both schemes provided that the country has no clear road map to nurture intra and inter-industrial parks cooperation and with local environment. Incentive provision is not solely determined by tenants' performance rather by their mere presence only. This is a proof of poor planning given mainly investors resided in the industrial parks produce in under capacity and no single company in any of the zones producing in full capacity. Effective implementation of the policy demands strict and clear entry criteria in locating firms to bring better relative success in terms of; locating both domestic & foreign enterprises, develop needed level of foreign direct investment and catalyse local economic development. This is common problem in all the industrial parks and the intensity is very high in public industrial parks. Interview with IPDC officials portrayed that there are investors occupied up to seven (7) sheds in HIP & BLIP but only consuming a single of them. This firm level performance variation is well evidenced in current operation and very few companies contributing in this regard. In Comparative perspective the variation is exceedingly significant in the private one (EIZ). Very few companies dominated the entire export contribution of industrial parks. In EIZ Huajian company's export performance accounts for more than 92-95% of the total export contribution of the park. It has to be well noted that more than 70 operational firms are in pipeline in this industry zone only. The developer able to attract large number of investors into the zone from China, 'own country' but failed to align performance to national industrialization agenda even to present when the industry park is 'standalone' after years of operation. As highlighted in the reviewed literature concentration of large number tenants in specific geography theoretically expected to cause positive externalities in the national economy of the host country. However, as stipulated in the other section of this thesis there exists major impediments to achieve this goal due to risk minimization approach by the tenants. This is also similar with study conducted by Rodriguez-Pose and Hardy (2014), of the main factor for the industrial parks failure to integrate with the local economy or national industrialization agenda of the host country is "the presence of traditional, risk-averse attitudes that stigmatize failure in entrepreneurship and innovation". Thus, subsequent consequence of such firm-based attitudes can lead to under-performance in business formation, technology up-gradation program and productivity improvement which can consequently lead to parks failure.

Extensive interview made with investors showed that exemptive packages, 'cheap labour which accounts small of total production cost, preferential trade agreement like AGOA & EBA are of the major comparative advantage made investors convinced to join industrial parks. This might adversely affect the prospect of industrial parks of the country. Following disincentives of generous incentives plus coming to an end of preferential trade agreements perhaps end-up in worst scenarios which also makes industrial zone programs of the country myopic (short-sighted). Due to this and other related factors, investors with bad performance and less care about working conditions likely to leave considering comparative advantages in other countries. There are foreign resident enterprises in the industrial parks applied for line of credit or loan seeking credit from National bank (NB) of the country. This implies such establishments had no sufficient capital or undercapitalized for operations which has significant impact on basic zone focused characteristics. This

has tremendous impact on industrial park program particularly firm factors to have the potential value in the surrounding area and wider economy. This is because the synergy between IPs performance and surrounding area development mediated by IP firm factors which also determined by their capacity and other characteristics. This shows design of industrial park policy and programs including varied regulatory procedures need to be evaluated against all such adversities. Distribution of firms of specific value chain across industrial parks and provision of preferential treatment to local firms as an initiative to realize embeddedness into local economy should be considered in due course of implementation. While this hardly tested in the already operational industrial parks, it bears watching over in the prospective schemes as more IPs are in the pipeline to become operational. The phase of IP operation in Ethiopia is at its nascent stage and it is a bit too early to infer the current operation leading to positive outcome rather than negative outcomes. Although it is early to conclude on the nature program operation given it is at its nascent stage, the depth of challenges in the implementation probably result in performance failure or prolong achievement period of the targets. In its current form IPs of the country managed to avoid implementation failures pertaining to getting IPs built and attraction of investors.

In fact, though Ethiopia is experiencing better FDI attraction and got the opportunity to attract big names in garment manufacturers like PVH, there are also small and under-capitalized operations joined the parks due to generous incentives and low entry costs which makes the value of the resident enterprises to the zone and wider local economy uncertain. This implies to experience any of potential over-spill in the local economy and achieve economic growth, resident enterprises must be at first found causally convincing either through direct linkage or trickledown effect approach. Overall, poor planning and low monitoring by the government in selection of investors located in the private industrial parks resulted in location of less capacitated small and medium enterprises. This is the case show of what is going on in private economic zone of the country which came into effective prior to legal framework on industrial park development.

To conclude, the propensity of industrial park initiative impact on technology and knowledge transfer depends on the firm specific factor or characteristics of resident enterprises. empirical findings in vast literature indicate that the higher the proportion of labour & import intensive firms in IPs with limited technological orientation the lesser the likelihood of technology transfer to local economy. This is to mean generous incentive packages without any import restriction through duty free system for economic zones, adversely affects the propensity for outsourcing production to local economy.

(d) Poor industrial base

In countries where logistic and shipping delivery is part of main production costs, integration between local economy as suppliers and resident enterprises matters a lot and competitive national economy enormously contributes for the positive performance of economic zones. This competitiveness of national economies at least incorporates; labour productivity and costs, technological development, market linkage, and overall business environments or investment climates of the host country (Farole, 2011; ILO, 1998). A report by the World bank group on time and cost of trading across borders showed that relative to other countries trading across borders in Ethiopia is very expensive even compared to other African countries World.Bank (2011); World-Bank-Group (2015). Previously conducted studies revealed that in addition to firm specific factors there are

also country specific factors including level of development, countrywide investment climate (both physical and social infrastructure) and competitiveness are of critical importance for success or failure of industrial park operation (Aggarwal, 2005; Farole, 2011). Putting this major ground into Ethiopian context, GTP-I comprehend the aforementioned scenarios among others as part of critical constraint warranty due attention for the successful industrialization process.

As Madani (1999) stress the theoretic positive impact of special economic zones is integration between domestic industries or/and resident enterprises in the zones thereof. This positive impact of special zones can be achieved through supply and demand relationships following synchronization with domestic small and medium enterprises but determined by existing industrial base of the host country. Ethiopian late industrialization policy supported by GTP-II which is national five years strategic plan. This second plan is continuation of GTP-I and its implementation resulted in mixed outputs. The very intention and objective of this national plan was to achieve overall transformation from less productive to more efficient sector (agriculture to manufacturing).

In contrast to what has been required by the plan, fundamental obstacle in the process of triggering structural transformation was lack of substantial investment in the manufacturing sector particularly by the local investors. Poor performance of manufacturing sector during this plan implementation period attributed to less interest from private sectors in manufacturing sector and more tendency to engage in service sector (Interview with Ministry of Industry officials, 2019). Basically, existence of dynamic local manufacturing plays a vital role in ensuring technology transfer and spillover effects including joint venture arrangement between park enterprises domestic entrepreneurs.

Though the reason behind poor performance of the domestic manufacturing sector and the reason why private sectors tend to invest in service sectors other than manufacturing do not lead to easy answers, and this can be viewed in two different ways. First, poor capacity of domestic entrepreneurs to easily realize the expected linkage with enterprises in the industrial parks. In the very realm of technology transfer and knowledge of management skill between local industries and zone enterprises there are several price and non-price constraints. Overall technological readiness, shortage of foreign currency, expensive foreign raw materials, quality of domestic raw materials are major challenges to success. A research conducted by Milberg and Amengual (2008), also conforms this finding in which it states; special economic zones are developed to attract foreign companies because production capability of domestic enterprises is low to supply high quality inputs at low-cost for the production process. Second, weak institutional capacity in the local context and poor linkage between agriculture and manufacturing sector also caused fundamental obstacle. The other major impediment for the industrial park-domestic producers integration is failure to synchronize industrial park policy to local programs. Absence of platform that treat local entrepreneurs through same exemptive packages that apply to industrial park tenancies despite integration warranty competent & innovative local entrepreneurs and sufficient financial and technological support program. Unlike for foreign resident enterprises, absence of clear and well justified legal framework or institutional ground to attract local industries and to establish potential joint ventures with foreign companies is also of major impediments. Local industries are not able to compete with foreign enterprises under same model of production due to small investment capital, lack of access to improved technology to remain competitive, inadequate linkages with the global markets and paucity of foreign currency in the country (Interview with Ministry of Industry officials and EIC, 2019). Thus, obstacles to success in this regard deep-rooted in failure to develop

program favor domestic investors and put them at cost disadvantage of improving production capability. This conforms with evidences justified by Johansson and Nilsson (1997), on shortcomings of EPZs in impacting development process of the host country. The authors evidenced that contrast to unskilled labour man power which is abundant and main gates to form integration with local economy, skilled labour and total entrepreneurship activity are in short supply in zone developing countries.

Poor linkage between local economy (agriculture which burdened to shoulder larger share of national GDP) and domestic manufacturing sector is a multifaceted fundamental problem attributed to overall institutional capacity and technological readiness of local manufacturing. Ethiopia relies on expensive foreign raw materials for its less developed manufacturing sector [12]. According to report developed by UNDP (2015), on performance of Eastern Industrial Zone and Bole lemi-I, a basic obstacle to establish linkage was shortage of raw materials in the local industries except few connections with packaging material producer domestic firms. Four years after the report produced by UNDP, currently few local leather processors and packaging materials producers connected to industrial park resident enterprises due to aforementioned combination of factors. This finding is in same spirit with study conducted by Kharabsheh, R. and Magableh, I, K. and Arabiyat, T, S. (2011) in which poor culture of entreprenuerialism in the domestic economy identified as major obstacle of parks' performance. The study revealed that if local manufacturers are less competitive or their production capability is not sufficient enough to forge joint venture or other modes of trade relationships with resident enterprises, parks less likely become embedded in the local context.

In the second growth and transformation plan of Ethiopia (GTPP-II) government intended to address technology gap through three major modalities so that vertical linkage can be made between domestic clusterization of manufacturing sector and industrial parks. First, establishment of micro and small enterprises which supposed to grow to the next level after defined period of operation to economies of scale. This program mainly intended to address high urban youth unemployment and consolidated with urban safety net program. Second, regional clusterization program for small and medium enterprises was a bit overambitious plan in which firms supposed to operate for a limited period of time in the established premises with the expectation to form vertical linkage or enter into industrial parks. Third, major modality presumed to address knowledge transfer gap is industrial park development (IPD) through dense government all round support. This program has grand intention of realizing desire for technology transfer, serve as pressure valve to absorb high unemployment of both skilled and unskilled labour man power, generate foreign exchange which is fundamental problem currently in the economy of the country. However, the first two projects failed to pay off what has been expected along their respective goals [13].

When it comes to the third modality, public industrial parks take-off seems a way to make true industrialization agenda of the country. However, with their current formation the industrial parks are unable to locate domestic enterprises and are occupied by foreign firms which semantically mean enclave model. To this end, when evaluated against the main indicators/yardsticks to measure successful projects; time, budget and delivering purpose for which established they are though most of IPs are at their nascent stage and their contribution in terms of knowledge, technology transfer, employment creation, foreign currency earnings is far from expected goal. Achievement in terms of convincing spillover effects require appropriate regulation and policy incentives to

[12] Ethiopian chamber of commerce cited in Ethiopian broadcasting corporation May 9,2019
[13] Interview with Ministry of Industry officials, May, 2019

integrate resident enterprises with local entrepreneurs.

According to Omar and Stoever (2008) fundamental constraints or challenges of domestic industries potentially solved following establishment of economic zones to ultimately achieve national development goals. In the essay the following major problems identified; first, local industries lack required technical, marketing and industry managerial skills. Second, local industries "seldom have access to international distribution channel and need support from international or joint venture companies". This entails as it is tricky enough for domestic enterprises to experience technology transfer unless serious measures taken to integrate tenants in the industrial parks with those outside. With no circumstance, industrial parks achieve national development agenda if remain with its enclave formation or scheme.

In addition to low competitiveness of local industry absence of remarkable progress to establish linkage between zone investors and local industry in the case of Ethiopia attributed to absence of new institution promote linkages, lack of strategic direction to provide incentives for domestic industry and joint venture formation, and poor performance of local industry are among major factors. According to Altenburg (2010), nature of private sector in Ethiopia mainly adopt characteristics of short-sighted business, foreign product worship, real estate speculation, dependency on subsidies and protection, failure to create a new mind-set towards value generating manufacturing activities.

To conclude except very few countable companies in both private and public industrial parks EIZ and BLIP reported as sourcing raw materials from local economy although investors complain the materials sourced from local suppliers are below the expected standards of resident companies engaged in upstream production process. Additionally, interview with Competitiveness and Job creation project department of IPDC showed that domestic enterprises lack required capacity of being suppliers or sub-contractors for firms located in the industrial parks. This strongly confirms argument in reviewed literature which states capacity of SEZs and corresponding FDI demands absorptive capacity of local economy for spillovers to take place. There are ample evidences indicating as majority of economically successful countries have used industrialization as a preferred route towards structural transformation (Omar and Stoever, 2008; Farole, 2011; Sonobe and Otsuka, 2006). Drawing on agglomeration economic theory hypothesis, industrial estates offers the most sustainable route towards economic prosperity and had substantial effect on local industrial development e.g. textile sector of Mauritius, see (Farole, 2011; Aggarwal, 2012; Falcke, 1999). As it has been described absence of focused and monitorable institutional framework is of major contributing factors for pitfalls of backward linkage. Additionally, coupled with absence of designated institution work on improving skill and production capability of local SMEs Ethiopia is not able to took proactive measures to synchronize positive externalities of operational IPs with local economy. Literature indicate that special economic zone host countries particularly developing countries should aim to strongly support domestic firms to improve production capability which also expands opportunities to learn (technology & skill transfer) from experienced multinational resident firms (Omar and Stoever, 2008).

(e) Enclave model

Reviewed literature established that the discourse of enclave model refers to foreign investment operate under the neoliberal world order in emerging economy in general and Africa in particu-

lar. The concept directly refers to situation in which mobile giant multinational corporations or transnational companies generate comparative advantage from exploitation of surplus, cheap- and place-bound labor for rapid accumulation (Abbink, 2011). According to James (2006), those super mobile companies open satellite branches across the globe and strategically benefit from production components minimize total production costs and the tenants are more embedded in their previous global market connections than to the national economy of the host country. The subsequent consequences of enclave economies generate a development which is not suitable/fragmented spatially and socially fragile and therefore concentrated in a protected zone. As a result, enclave economies posited as a driving force behind uneven development in Africa.

Ethiopia's industrial park set to operation attracted low technology, simple assembly-based production activity and labour-intensive activities dominated by textile and garment sector offering limited benefits apart from direct employment generation. Potential contribution of industrial park development for local industry development depends on scheme preference and existence of institutional set up work on ensuring static and dynamic objectives. Benefits of industrial park range from minimum of development in the surrounding area through some over-spill of knowledge whereby local companies recruit workers previously employed in foreign enterprises to complex technology diffusion. In Ethiopia, the initiatives are an enclave dominated by foreign firms focused on simple assembly operation production process for export. The parks are also under enclave model due to the fact that their mode of governance is peculiar, operate under different economic structure, confined in delineated spatial and social relations as well and dominated by firms with foreign ownership. Moreover, management and positions demand skilled labour dominated by expatriate staffs who demonstrate minimal interest to form linkage with the local economy though it demands strong activist role by government. Additionally, empirical evidences in the reviewed literature stipulated that foreign owned firms reside in industrial parks are those already embedded in their global network of production, have better access to foreign suppliers and prefer to remain in trusted and known network from abroad. Coupled with poor planning and embeddedness of the international firms in own previous networks to source their inputs the prospect to generate dynamic benefits & spillovers is marginal. Contrary to theoretical benefits of IPD and premises in global value chain of production, embeddedness of resident firms in their previous network of production to source skilled expatriate staffs and purchase their inputs for upper-level production limits the likelihood of outsourcing lower-level production activities to local economy. Study conducted by Rodriguez-Pose and Hardy (2014), also conform that achievement of export led industrial park objective is through massive incentive packages, relaxed regulations and others which consequently lessened their spin-off to the national economy. These parks are enclave or isolated from wide local business because; they targeted export, highly embedded in international/previous networks rather than local products to source inputs.

Resident firms located in the parks are labor intensive and mainly engaged in simple assembly operations. Sampled foreign lead manufacturers in the zones were asked whether there exists linkage with domestic economy/market, linked with local enterprises, supporting local firms and protecting local economy, or whether a value chain linkage created to integrate the industrial activities with domestic economy. As expected, no single local firm is taking advantage of working with foreign lead enterprise through partnership and resident firms are import intensive due to various factors ranging from speculations of different forms and absorptive capacity of local economy yet not fully accommodate what it involves achieving such integration beyond production accessibility. In such

labour-intensive manufacturing without representation of local firms, coupled by; low level of industrialization in the local economy, low competitiveness of local firms to form vertical linkages with resident enterprises, decision to locate in the country's industrial park determined based on local and global incentive packages provided, and import based manufacturers impeded potential outsourcing to local firms. This questions sustainability of the industrial parks or might threaten the positive take-offs when the global or local incentives come to an end or when tax exemption re-installed. Study conducted by Zeng (2016) also stress, operation of industrial park in a condition whereby local manufacturers are not aggressive entrepreneur and failed to form trade relationship with resident firms due to low quality, and thereby enforced to import inputs for their production from international markets or remain in their already established network of production. In such circumstance, coupled with low skilled local workforce dominated industrial parks of the country and low production capability of local firms, the industrial parks grow to isolated enclaves which causes no local development benefits.

Representation of domestic industry in the industrial parks is of the vibrant channels of embedding IPs into local economy to ensure technology transfer from experienced foreign enterprises to local firms located in the industrial parks which will have multiplier effect on any kind spillovers to take place. Looking at the reverse side of this argument, absence or limited representation of local firms in the industrial parks is fundamental factor hamper transfer of technology and other potential benefits. Experience of other countries including South Korea and China shows how imperative it is to form synchronization between local firms and foreign companies to achieve technology transfer.

As it has been anticipated in the other section of this thesis, all the operational industrial parks occupied by foreign firms and failed to represent domestic enterprises to achieve grand intention of vertical and horizontal linkages through such establishments. The greater the representation of local industries or capital in the industrial parks/special economic zones the higher the likelihood of success in achieving backward and forward linkages and development in and outside the zones or nationwide economy of scale.

The World Bank-financed Competitiveness and Job Creation Project (CJC) of the Government of Ethiopia focus on rational assessment of linkages to occur between local industry and the investors at BLIP. In the project they compete legible local enterprises and work on capacity building of being suppliers or sub-contractors for firm located in the industrial park with the aim to support business-to-business linkages between domestic enterprises and IPs through a matching grant fund, but results to date are not satisfactory. The project supports the provision of matching grants from a business-to-business linkage fund to selected local private sector enterprises with the aim of enhancing their capacities, productivity and market access; as well as to strengthen their business linkages with foreign firms operating in Bole Lemi Industrial Park. In the first round, five local manufacturing firms received financial support to upgrade machinery and nine manufacturing beneficiaries from the second round have already signed Letters of Grant Agreement (LGA). This is a good initiative that has to be scaled up to other industrial parks, right policy should be designed to encourage local entrepreneurs and capacitate them to curb problem of sourcing potential networks and establish meaningful integration. Insignificant number of firms engaged in such backward linkage in the areas of sourcing packaging materials and accessories from counter local suppliers. However, so far, the firms who accessed the grant funding in the first round have shown limited efforts to create linkage with IPs, especially due to a lack of foreign currency to import machinery, spare parts, and raw materials. The SMEs also face difficulties accessing

appropriate skills, technologies, and finance that keep them from growing out of low-productivity, low-quality traps and linking up with larger manufacturing firms.

To summarize Ethiopia's industrial parks in order to induce developmental spillovers, it is imperative to transform the initiative from its current negligible-wage enclave to initiative facilitate efficient industrial linkage between experienced foreign enterprises and local producers in such a way to increase the possibility for knowledge diffusion and skill development in the local workforce. Across the parks studied in this thesis, zones heavily rely on expatriate staffs in the occupations demand quality workers and no jobs reserved for local workforce.

(f) Type of activities

Apparently, the major obstacles identified are highly intertwined than stand-alone pitfalls for successful park operation. Type of activities majorly under operation in the industrial park of the country is another challenge for Ethiopia to benefit from clusterization effect of the initiative. Ethiopia's national development agenda envisioned to achieve structural transformation by way of intensified industrialization program through public driven and privately developed industrial parks aimed at attracting inflow of foreign firms for embeddedness into local economy through active linkage. It has to be well noted that possible scenarios at the heart of forward and backward linkages subjected to the type of activities performed by resident firms against the national industrialization agenda. Operational zones are dominated by apparel which accounts for over 60% main activities in the zones and this implies the initiative is hub of low-skill type simple assembly production in which spillovers seldom happen and mostly not convenient to experience technology transfer. This challenge is aggravated by the enclave nature of industrial parks which is also another practical failure for backward linkage because forward linkage (access to domestic market to sell their products) is unthinkable given the program is export oriented.

When it comes real context in Ethiopia it is imperative to raise this question; does exist tendency from foreign investors to source their raw materials for production process? Does exist tendency to purchase goods and services for their production from local economy or embedded in local industry? We found the answers to be 'No'. Though the constraints attributed to various factors, type of activities in traditional export processing zones especially in simple assembly line type operations, the zones' impact neither knowledge and skills of employees nor source raw materials from local economy and these makes industrial park operation in the country less impactful deviating from the desired goals and objectives. Without improvement of basic structural defects country's comparative advantage in terms of supplying locally abundant resources consumed by the resident firms and employment multiplier effect fall short of meeting the desired target. This is actually due to the fact that firms allowed to import raw materials free of charge and they exploit variation in cost of factors. Most of interviewed resident firms also reported that they are embedded in their previous network of production because the type and quality of raw materials used in production even including accessories determined by global buyers through mother company in abroad and this makes the competition between global suppliers and potential domestic firms fierce in the demand for high quality & compliance with deadline for delivery. There are ample empirical findings suggesting the more special economic zones linked to local economy, the higher the likelihood to create indirect jobs following direct employment. According to analysis made by FIAS (2008), on the employment performance of different countries (Mauritius, Bangladesh,

Honduras, Madagascar) depicted that EPZs generated employment multiplier effect of around two times, implying as a subsequent consequence of single direct job created in the zone, two other jobs generated in the rest of the economy. In an actual sense, due to absence of linkages between IPs and domestic firms or local economy at large in Ethiopia loses as twice as the currently created jobs in the operational parks. Study conducted by ILO (2017) showed that special economic zones are theoretically desired to achieve multifaceted goals in the context of developing countries including being important source of foreign exchange, employment generation etc. Nevertheless, in the condition whereby production process is dominated by imports of both partially finished and raw materials to the industrial parks the likelihood to generate expected net impact is very low.

Compared to private industrial park the public driven counterpart where there is increasing dominance of garment and textile manufacturers could be potential building block to synchronize local economy with investors in zones in the condition of well management and up-gradation of activities performed by the tenants. This requires strong commitment from government side in designing innovative strategic road map to build synergy between textile - apparel -garment. Growth and transformation plan-II (GTP-II) identified leather and leather products, agro-processing, textile and apparel as priority sectors. The main reasons for selecting the sectors as priority include: a) strong linkages with the agricultural sector as they use inputs from huge livestock production in the country and cotton sector as well, b) serve as a pressure valve to absorb high unemployment provided the sectors are labour intensive, c) they have major export potential and low entry barriers. Industrial park development in different corner of Ethiopia is with the grand intention to unleash these industries with better embeddedness into local economy. This fancy piece of plan which of course is not a magic bullet by itself need to be well interpreted to sound implementation so that, desired effects from forward and backward linkage can be achieved. This actually demands strong institutional capacity, regulatory frameworks have to be well enforced, there should be policy directives work on capacitating local firms to experience spillovers, and improvement of industrial relations between employers and employees are major one.

To summarize, though the degree of influence of the obstacles varies in impeding successful park operation, the problems are highly intertwined and not solely independent for the defects of one component adversely affect situation in another. Lack of coordination among identified stakeholders, poor know how and lack of experience in how to operate industrial park are of major problems to mention few. One Stop Shop (OSS) service center in the industrial parks failed to exist to the level of name given and they are most of the time one more stop due to the fact that majority of them provide services which is not consolidated with the system in which industrial park operate. Majority of the tenants complain the services in OSS centers lack desired quality and coordination as well.

Moreover, viewed along other zone developing other countries experiences the pitfalls are also related to commonly cited factors for poor performance of industrial park operation which includes; absence of innovative planning and strategy to operate/manage, corrupted system, poor promotion, infrastructure to the zones or “outside zones”, and over subsidized enclave structure are worth mentioning. Apart from those major impediments, compared to many export processing zones simply on paper but never experienced take off, IPs in Ethiopia managed to attract investors, though.

Does exist potential to synchronize local producers with IP firms?

Through improvement of skills and production capability of local SMEs industrial linkage could be made in the textile manufacturing in such a way that spillovers facilitated. According to report produced by UNIDO (2018), the following production inputs could be sourced from local firms in production process. This includes: "fabric, trim and accessories (e.g., buttons, zippers, thread, labels, hangers); packing materials (e.g., cartoons and poly bags); capital equipment and machinery parts, assembly or finishing activities (e.g., sewing, embroidering, screen printing), and services such as transportation, logistics, information, and catering". Linkages with local economy which is fundamental element of Ethiopia's industrialization agenda in the condition of efficient implementation assumed to cause positive impacts in the surrounding areas development.

Moreover, of the major areas assumed to involve domestic producers is devising system to promote linkages in the areas of locally abundant raw materials used by industrial park firms such as cotton lint to produce cotton yarn is of major potential. Provided that cotton lint is available and sourced from local ginneries and traders, the role in transforming local economy through multiplier effect ranging from small holder farm to expected clusterization effect of IPD is bold. Interview with Ethiopia cotton producers, exporters and ginners association showed that government is following policy direction which dictates 80% of cotton production should be for the consumption of domestic market and remaining 20% for export purpose.

Exploitative comparative advantage from this sector requires deep surgery to fit to the level demanded by competitive global garment and textile manufacturing. Despite the fact there exists increasing demand of Ethiopian cotton in the international markets the sector is facing both quantity and quality problems. Improving binding constraints of this sector mainly quality complain by firms in the value chain will have positive impact on Ethiopia's social development and will offer sustainable growth model. Institutional needs have to be well considered to establish linkage between local cotton producers and ginneries with the intention to gradually substitute import of raw materials by the garment manufacturers. While textile and garment manufacturers in all the industrial parks are importing 100% of their inputs, Ethiopian cotton producers and ginneries association, on the other hand are complaining about shortage of foreign currency and sourcing international market linkage. This entails as relentless political commitment by the government and installation of institutional needs supposed to be taken to into consideration to alleviate problems of the sector so that it will cause enduring benefits to realize comparative advantage of the country. The way this shade light on desired social development through backward linkages mapped out in the following diagram. This diagram developed based on review secondary sources (pieces of reports produced by Ethiopian Investment Commission).

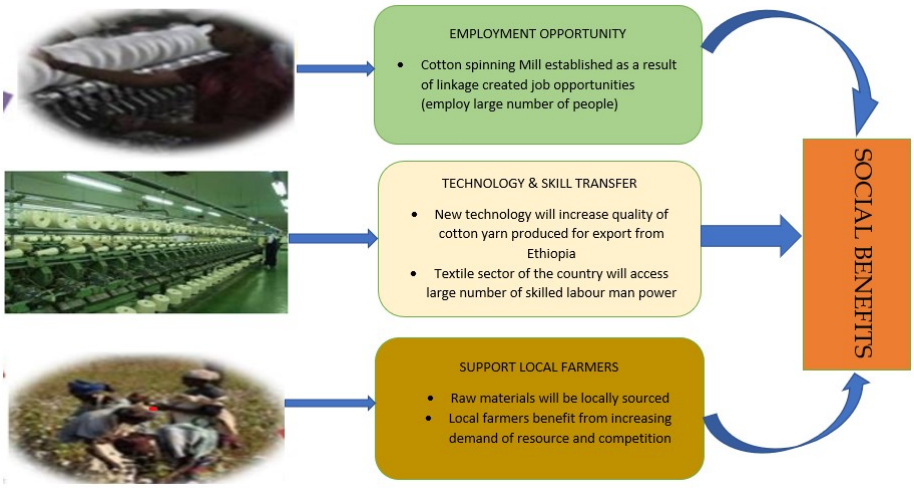

Figure 13: Some spotty integration of few firms with the domestic economy

However, scaling up such spotty linkages requires strong commitment and innovative strategy by the park operator provided that companies in the industrial parks are embedded in their own previous global networks. During the extensive fieldwork companies asked whether their respective establishment introduced new services, goods, main market destinations and for sourcing raw materials. As expected, the response was found to be yes for the first two and no for the third one. Which implies establishments are already in their own foreign market system and only placed segment of their production in the country looking for cheap labor as only way to linkage with the local economy. This conforms central argument of neo-Marxist dependency theory which assumes to present SEZs attract TNCs to locate part of their production processes, and they are typically more integrated with the foreign countries than the rest of the domestic economy. Appreciating the intense debate on the importance of IPD among scholars of this theory is bit outdated for most zone developing countries in developed economy but the empirics in low-income countries like Ethiopia is still within the presumption.

In such scheme of totally unconnected production procedure, the likelihood of SEZs to have the desired impacts through meaningful linkages is very less (Aggarwal, 2012; Farole, 2011; Omar and Stoever, 2008). In the case of Ethiopia, fundamental problem to form connection with local business is low absorptive capacity of local firms and absence of proactive institutional measures that takes industrialization agenda from its current low road to high road. This warranty strong capacity building program based on planned direction from the government side. There are companies engaged in leather sector line of production assuming access to raw materials from local leather processing industries is a major cost advantage in the country of which "Haujjan is a good example of such company. In addition to a single firm sourcing cotton from local market there are also firms in Bole lemi and EIZ Lyou, George shoe and Haujian respectively and KPP from Kombolcha industrial park reported quality problem of local raw materials or inputs. Huajian and Lyou leather source 85% and above hide and skin from local leather processors [14]. The other challenge reported in the already occurred linkage between local suppliers and resident firms is discouraging tax regulation for local companies to even fully engage in "indirect export channel" (Interview with

[14]Interview with Ewnetu, Competitiveness and Job Creation Project, Business to Business fund project head; a project aimed at linking local firms to IPs project head respectively)

company representatives, 2019).

Investment climate is favourable for export-oriented system and tax regulations of the country is discouraging for local supplier to fully engage in the linkage through supply-demand procedure as 'indirect exporter'. Linkage between very few zone investors and local leather producers and package materials through the indirect export procedure generated less profit for local companies. The generous incentive package for the resident firms particularly exemption from any kind of tax and customs charge also reportedly lower price offer by the foreign enterprises. Poor bargaining power of local firms in price adjustment procedure makes this situation challenging to overcome the problem. Overall policy issue, tax regulation for local companies, absence of vibrant institution mediates external factors affecting the situation are of worth mentioning. However, as far as connection with local suppliers is concerned there is slight connection in leather and leather products sector.

Questions were addressed to know firms' perspective where they access raw materials, why they import resources and type of technical assistance required to be given to SMEs to encourage local sourcing by IPs. The findings from the study showed that all operational and active resident firms relied on imported inputs because of "sourcing policies of international buyers which seems less encouraging local sourcing". Almost all firms reported unavailability of world standard quality inputs locally and "most of them produce within restricted framework of international buyers' ". Only small proportion of firms reported they relied on local raw materials for production process complaining about quality of locally supplied resources whilst almost all or significant majority consume none local goods and resources. Resident firms were also inquired to respond to innovation or technology up-gradation particularly whether the establishment introduced new or significantly improved marketing methods. Analysis indicates resident firms embedded in their mother company's or previous network of production and "ultimate decision to determine type of inputs used for production process subjected to international buyers policy". All respondents reported as they are not working on new market destinations provided, they already secured before they were located in the industrial parks. Additionally, almost all firm's logistics, delivery or distribution methods for inputs, products or services relied on already established system. This limited the likelihood to cause the ambitioned backward and forward linkage through implementation of IPD program.

Major practical obstacles for implementation

Despite some spotty linkages between local leather processors, packaging material producers, cotton lint producers and resident firms there are indicators that secondary benefits of industrial parks could be more actively strengthened and sustained. Linkage with local economy even shade positive light on productivity of foreign enterprises in many ways. Pieces of reports produced by World Bank group portrayed as constraints of private enterprises in Ethiopia associated to various reasons. Poor trade and logistics presents huge cost on enterprises that source inputs for their "higher level" production from abroad or export-oriented firms in general (World.Bank, 2011; World-Bank-Group, 2015).

Country	Cost to export a 20-foot container (US$)	Time to import (days)	Cost to export a 20-foot container (US$)	Time to export (days)	Ranking (2011)	Ranking (2015)
Ethiopia	2993	45	1890	44	157	166
Tanzania	1475	31	1262	24	109	180
Zambia	3315	56	2664	44	150	152
SSA avg.	2492	38	1962	32	-	-
Vietnam	645	21	555	22	63	99
China	545	24	500	21	50	84

Table 6: Time and cost of trading across borders in Ethiopia relative to other countries
Source: World Bank Group, 2011; 2015

The data presented in the table generated from enterprise survey (longitudinal type research) conducted by World Bank at two different periods of time i.e., (2011 and 2015). Specifically, the ranking described in the table is about constraints of enterprises due to logistical and institutional difficulties whereby export measured in terms of financial cost and import measured along time it takes to get raw materials readily available for production. The second and third columns represents (2011) survey result and fourth and fifth columns goes to that of (2015). The idea is that, establishment of linkage between economic zones and local economy will have paramount role in addressing the aforementioned constraints faced by firms, particularly pertaining to logistic and related issues.

The result described in the above table shows that compared to selected African countries and Sub-Saharan average trading across borders in Ethiopia is expensive both in terms of time and money wise. Particularly, challenges pertaining to logistical and institutional difficulties are of fundamental obstacles worth mentioning. According to result from the interview with tenant firms, logistic spending accounts for about 50% of total production costs. This heavy cost in both dimensions attributed to country's large geographic size and the poor state of its infrastructure, make transport costs high. Moreover, Ethiopia's logistic performance index is getting worse over time and made the country one among 25 low performing economies of the world by 2015. Concomitant to this practical challenge, high transportation costs, insufficient containers and lengthy cargo dwell-time at the port of Djibouti remained a serious source of burden for the both zone developers and tenant enterprises alike. According to Dinh et al. (2012), poor trade logistics in Ethiopia and other Africa countries is the result of six broad factors: higher inland transport costs, higher port and terminal handling fees, higher customs clearance and technical control fees, higher costs of document preparation and letters of credit, high cost of foreign exchange, and high shipping costs to and from Ethiopia. In addition to high costs, business also cited high levels of accidents and delays, which have a significant impact in sectors such as apparel, where quick turnarounds and meeting customer orders on time is crucial. This also leads manufacturing enterprises in IPs to use airline transportation which is another costly means of transportation.

Therefore, contrast to the current scheme under operation should be complemented by institutions provide justifiable remedy for local firms to enhance IPs leverage integration into local economy has to be devised. Major factor behind low-end indications of activities pertaining to linkage is, firms located in IPs are already in their own previous international network of production and reported as their inputs are determined by their international buyers who are also in another complex set of networks. Experiences of many zone developing countries showed that firm's expression

of interest prompted by encouraging institutions and production capability of local manufacturing. Institutional factors are of the fundamental scenarios determine strategic directions and successful implementation of industrial parks. This mainly attributed to inadequate know how about development, operation and management of industrial parks are of worth mentioning.

Some of the firms expressed interest and already formed linkage in sourcing their inputs from local economy (up to 80% in leather sector and 100% in cotton sector) reported quality problems of local raw materials. This actually related to low capacity of local manufacturing sector in absorbing know how knowledge, skill high implementation speed demanded by IP resident firms. It has also been reported by both developer and zone companies as they have experienced difficulties in identifying local suppliers. This impacts the integration of local SMEs and also firm companies in the park in direction of future development.,

In the scheme design direction has also been taken in the future IPs already in pipeline to operation. Industrial park program under implementation in Ethiopia, attract investors to locate only after the parks are commended, and in this firms less likely have sense of belongingness or it's difficult create strong cohesion as demanded in such milieu (Saleman and Jordan, 2014). In the case private industrial park developer and firms (EIZ in this case) there are some exceptional features of predicament which have had significant impact on its development. To put into context, means by which the scheme develop particularly financing presented fundamental challenge for the zone's developer, especially given the developer's responsibility to finance infrastructure leading to and within the zone. In-fact it is legal framework of the country which allows private developers to benefit from stimulus package services following infrastructure development. However, subsidies offered by Chinese and Ethiopian government alike presents a serious challenge in accessing the required upfront investment and modalities through which disbursement of funds takes place is not easy as it has been pronounced in the policy.

To conclude, the analysis obtained from current study indicate that; when evaluated against various yardsticks of industrial park performance effectiveness, in Ethiopia's industrial park progress is at far great distance from expected level of operation outcome. Despite some economic outcome following preferential investment policy, little or no progress has been made in terms of long-term development effect (backward linkages with the local economy) including technology transfer, representation of local industries, and improvement of socioeconomic inequality. At this stage industrial park's main source of value added is its connection with local labour market. Such limited connection between industrial park and local economy implies low share of global value added though there is an increase of global share of manufacturers. Major pitfalls of industrial parks' under-performance in Ethiopia attributed to; poor governance due to low experience, absence of innovative institutional framework and weak regulations, infrastructure problems, and coordination deficiencies among 'OSS' providing agencies or major stakeholders. reviewed literature stipulated that institutional structure outside industrial parks play a vital role in ensuring backward linkage benefits of the program. As highlighted in Milberg and Amengual (2008) in the condition whereby state play activist role in the institutions outside the zone in a well-designed industrial policy and "careful management and administration of EPZs the domestic economy gradually developed absorptive capacity". Dominican Republic, Costa Rica and Mauritius are good examples of this condition and their linkage found to be greater. This has also strong linkage with park level scenarios such as inefficient IP management due to low expertise and enclave nature of industrial parks also caused connection with domestic economy challenging enough to reap more benefits from the

operation. In the previously conducted studies, different factors have been mentioned but the most commonly cited factors of ineffective backward linkages between foreign resident firms in IP and domestic firms include: embeddedness of firms in previous networks of production & sourcing inputs through import (import intensive), facilities (inadequate infrastructures), low absorption capacity of domestic firms, low production capability of local firms to supply quality goods and services at internationally competitive price rate, and changing industrial composition of industry zones (Engman et al., 2007; Milberg and Amengual, 2008; Madani, 1999). As highlighted in Rodriguez-Pose and Hardy (2014) the complexity of major obstacles impedes positive functioning of industrial parks demand considerable institutional support mechanisms as to forge both static and dynamic benefits. Inherently industrial park as a development tool warranty supportive environment, competitiveness of local business, entrepreneurialism, innovation and new technology. Accordingly, to alleviate these major limitations well devised policy particularly "complementary policy" taking into account local context is important. Policies designed in such a way address obstacles of local business environment, well-tailored institutional context, incentive packages trigger innovation and integration between domestic manufacturers and IP resident firms.

6 Chapter Six

6.1 Assessing the outcomes in Ethiopia's economic zones; employment effects, wages, working conditions and land expropriations

In this part of the present study, attempt has been made to describe the social impact of industrial park development and this factor mostly explained in wide range of literature in terms of how the initiative affects family, local community, workers in the zone etc. More specifically, it examined the social impact of employment, wages and working conditions effect of industrial parks and issue of land acquisition and subsequent social problems and conflicts (as a proxy to measure interface between industrial parks and society). To put further ideas on this, problems pertaining to working conditions discussed in terms of mobility opportunities, transformations, legal infringements including unionization problems, consciousness about health and work place rights. Ethiopia being one of the least developed countries of the world, has a large, young and educated labour force. The findings from the current study depicted that those factories in the industrial parks are dominated by female workers, and most of them had at least primary education and were literate. This part of the thesis relied on survey of working conditions to uncover industrial relation issues, employment impacts of the program, wages and other additional issues. Moreover, in order to gain socially reliable responses for the most of survey questions addressed in the questionnaire, a lot has been done to suppliment the response gained by interview results. Accordingly, interview conducted with confederation of Ethiopian workers association and selected industry park workers. Provided that this part of the paper focused on detail analysis of industrial park operation and its impacts in the surrounding environment, further exploration has also been made using semi-structured interview in order to address subsequent adversities due to development induced displacement occured due to established industrial parks. In order to further contaminate the ideas with already established documents, review of relevant documents including labour proclamation of the country, various national and international protocols considered for further analysis.

The concept of social impact of industrial park also related to human development and poverty alleviation effect of the program. As highlighted in Aggarwal (2017), major channels through which economic zones affect human capital include; "employment generation effects and human capital formation effects". Most developing countries and some developed nations use industrial park development policy as a machinery to achieve up-gradation of low industrialization through attraction of investors to designated areas for manufacturing. Study of special economic zone demonstrates contextual variations even across parks in same country and makes cross country comparison difficult because the initiative structured on different goals, zone developers mainly tuned to different objectives particularly along profit orientations, target sectors and provide varied incentive packages. Similarly, employment outcome of IP depends on the type of economic zones, targeted sector and flexibility of labour laws or regulatory frameworks in place. The initiative sometimes criticized as it is second best option not the first for it does not solve directly some of the binding constraint of manufacturing sector.

Similar to the case in most developing countries, employment in Ethiopia's industrial park has shown steady increase. As it has been described in the previous sections of the current study, Ethiopia's industrial park dominated by simple assembly processing tasks of low wage. A major issue with regard to industrial park labour market outcome is the issue of additionality of jobs.

Which questions whether the jobs created in the zone are additional new job or relocation from other sectors in the economy. Based on finding in (Aggarwal, 2007, 2010), it is possible to argue jobs created in export processing zones are additional because firms are obliged to export their product without any access to domestic market (export oriented) and this makes the investment in the zone different from the one elsewhere in the economy.

Moreover, the author also argued that due to a number of binding constraints for investment, foreign experienced investors would not have located in the park without the initiative and associated exemptive packages. Although the number of jobs created fall short of desired goal, zones created substantial number of jobs. Although there is no clear evidence on the issue in the context of Ethiopia's industrial park the proxies indicated in the aforementioned literature pertaining to additionality of jobs holds similar for Ethiopia as well. Additionally, majority of the workers are young female workers who are new entrants without previous experience and is an indication of additionality of job than relocation. Few previously conducted studies also stipulated that contrast to skill intensive zones, those dominated by unskilled workers demonstrate high propensity of employing new entrants and this is another substantive aspect laid ground on the concept of additionality of jobs.

6.2 Working conditions and employment relations

Working conditions in the nutshell is the general working environment in a company including the safety and well-being of workers. Ali et al. (2013), indicate that the business dictionary defines the term working condition as "a working environment and all existing circumstances affecting labor in the workplace including working hours, legal aspects and workload and organizational climate". Managing proper working conditions in companies help to ensure not only the safety and well-being of the workers but it also increase productivity and protect the company's competitive advantage (Oviedo-Trespalacios et al., 2016). Thus, working condition in manufacturing industries needs extra considerations in order to achieve the anticipated objectives. However, this is not always the case especially in least developed countries like Ethiopia. Oviedo-Trespalacios et al. (2016), noted that there is lack of understanding regarding working condition impact in low and middle-income countries. At international level, efforts have been made to make sure decent work is created for all globally. As a result, decent work is included in the Sustainable Development Goals (SDG). Goal 8 of SDGs plan to attain full and productive employment, and decent work, for all women and men by 2030 in achieving peace and prosperity for all. Decent income, safe working environment and reliability of employment are stated as some of the indicators for decent work Manual (2013).

Ethiopia has incorporated all SDGs in the country's development policy and strategies. Moreover, many of working condition issues are addressed in Ethiopian labor Proclamation no. 377/2003 and details about working hours, wage, on-job training, employment injuries, occupational safety and health measures, and gender issues will be discussed in the next sessions.

Linkages between industrial parks and local labour market is of substantial integration between the zones and local economy. Labour manpower particularly local workers sourced from nearby local community mainly up to 50km radius of same regional states/local governance jurisdiction where industrial parks are located. Although there is no absolute restriction of workers mobility across regions, priority given for youths of the relocates and local nearby community. This doesn't mean there exists absolute restrictions of workers mobility across regions. There are few new labour migrants from other regions other than the location of the industrial parks and majority of the employees are nearby population or from close vicinity of short distance (up to 50 km) radius [15]. This entails, extent to which industrial parks contributing to systemic labour migration across regions is very less and not yet a real worry for social predicaments as a consequence of mass mobility.

Ethiopia's industrial parks access labour through promotion activities of park managers/labour unit department of Ethiopian investment commission in collaboration with municipalities, bureau of labour and social affairs, technical vocational education and training centers. In Southern Nations and Nationalities Region (SNNR) for example there exists around ten (10) labour harvesting centres where potential industry workers registered and wait for recruitment possibility. Industrial park tenants obliged to provide specialized training to instinct knowledge about industry relation, management, skills with the grand intention to replace expatriates with Ethiopian nationals. With regard to educational attainment of industrial park workers majority of the workers, some 98% are 8th graders or they are less educated workers. Moreover, despite the sharp increase in industrial park's employment contribution, the quality of jobs created is questioned. Ethiopia's industrial park experience high labour turnover due to negligible wage paid, demanding work environment,

[15] Ethiopian investment commission, Labour unit department and Industrial parks integrated service managers

absence of employee promotion plan to ensure human resource development in the local labour market were amongst major challenges behind stability of employment. The working conditions characterized by a number of challenging situations and lower wage. The findings in the current study corroborate with large body of empirical literature which also revealed that; in order to remain competent in the increasing global competition, companies pay low wage as a mechanism to exploit cost factor advantage, intensify work, enforce workers to work longer hours. The result from the current study established that; high labour turnover, stressful work environment, absenteeism, fatigue at the work place, low productivity of workers, and labour instability were of the subsequent outcomes of challenging working conditions of economic zones.

6.3 Policies and Institutional Framework for Labour Market and Employment creation

The Government of Ethiopia has introduced a number of initiatives to address issues pertaining to unemployment. The Labour Market in Ethiopia is governed by a number of proclamations. These comprehends; the National Employment Policy and Strategy of Ethiopia, the Labour Proclamation (Proclamation No. 377/2003), the Micro and Small Enterprise strategy and the Right to Employment of Persons with Disability (Proclamation No. 568/2008).

The National Employment Policy which was adopted in 2016 promotes social welfare through poverty reduction. The policy has an economic objective of accelerating and sustaining growth and development through proper utilization of the country's labor force in a productive manner. The government of Ethiopia and other actors use this policy as a tool to balance the supply and demand side of the labour market towards the creation of productive employment.

The Labour Proclamation (Proclamation No. 377/2003) adopted in February 2004 is in place to ensure that worker-employer relations are governed by the basic principles of rights and obligations with a view to enable both employers and workers to maintain industrial peace. This proclamation also guarantees the right of workers and employers to form their respective associations and engage, through their lawful elected representatives, in collective bargaining, as well as to lay down the procedures for the expeditious settlement of labour disputes that might arise between workers and employers. The Ministry of Labour and Social Affairs at the regional level and its regional bureaus are responsible to organize, co-ordinate, follow-up on employment services and employment exchange.

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In the condition of well management and special economic zones where tenants act responsibly; zones offer good working conditions and even pay higher than national average. This majorly happen in a condition whereby firms consider human relation aspect of labour productivity increase i.e., practice of human resource management which consider social and commercial value of efficiency improvement as a way to ensure welfare of workers and labour rights. However, most zones across the world and respective tenants criticized for generating comparative advantage from cheap labour, disrespect for employment and exploitative working conditions.

In case of Ethiopia, contrast to the labour law proclamation, resident firms often pay inadequate attention to principles constituted in the labour law, ambivalent towards trade unions, though

the legal framework allows unionization of workers. The study revealed that Ethiopia's labour laws proclamation which commonly works for zones and elsewhere in the wider economy allows unionization of workers. However, although the right is not restricted for workers, there are reports of systemic constraining of this right. The result showed that health safety equipment rarely provided by few companies due to absence of monitoring by regulatory bodies and poor knowledge of ILO conventions by the workers on labour standards and working conditions. The fact here is that low knowledge of ILO conventions among workers not necessarily related to the fact the workers more aware of domestic laws than international conventions. The conventions under remark in this section is fully adopted by the country and possible to consider it as part and parcel of the domestic laws.

			HIGHEST LEVEL OF EDUCATION ATTAINED				
			Some elementary	Some secondary	TVT	Degree	Total
Do you have awareness ILO Working condition convections	Yes	Count	11	20	35	51	117
		% of Total	3.4%	6.1%	10.7%	15.6%	35.8%
	No	Count	71	81	31	33	216
		% of Total	21.7%	22.9%	9.5%	10.1%	64.2%
Total		Count	92	101	66	84	343
		% of Total	25.1%	29%	20.2%	25.7%	100.0%

Figure 14: Workers awareness on ILO working condition conventions
Source: Computed based own survey data (primary)

From total surveyed workers some 64.2% of workers do not have knowledge about the convention. This entails that provided the concept of industrial park is new in the country and less experience exists how it operates; workers are not aware of their rights and this situation paved way for the employers to violate workers' rights in securing company's comparative advantage in such a way they are totally exempted from labour rights legislations. The worker's awareness on ILO working condition conventions show some increase with the increasing level of education attained by the workers (of major socially reliable reason for the response given). Government seeks to attract foreign investors to the industrial park by way of loosened regulation or/and flexible approach for social and labour rights. In Ethiopia, labour law proclamation simply mirrors the same legal framework and practice in the rest of the country's economy. However, in practice labour standards are weaker, employment rights paid less attention in the industrial parks, the national legislation not enforced with the expected degree and only infrequent inspection upon report conducted which also lackluster because government is in fear of losing the investors. In the era of heightened globalization and intensified competition in garment and textile manufacturing sector, cheap labour is main source of comparative advantage supplemented by weak implementation of labour laws. This implies that legal coverage of employment relations within economic zones is imperative and also critical instrument to secure this comparative advantage of resident firms.

Such poor law enforcement and flexibility of workers in forming union to quest for their right through collective bargaining resulted in challenging working conditions for workers and these remained unchecked though. As described in another section of current research; similar to many

zone developers, Ethiopia applies the same labour laws in the national economy to industrial park though the laws are not enforced to ensure welfare of workers. The weak enforcement of national labour laws proclamation in the context of Ethiopia's industrial park particularly social and employment laws pave way for the firms to operate in sub-standards than expected normal conditions. This scenario existed due to three major factors including; (a) difficulties in enforcing the laws because government is in fear of losing investors upon dense regulation thus turn a blind eye to malpractices as a way to encourage tenants in a condition of non-enforcement, (b) weak inspectorates in enforcing legislation in the context of such complex business environment, (c) government paid less attention for the labour department and the staff not provided with enough resources.

Compared to public industrial parks, in private zone there are many temporary workers recruited in a way suits interests of the firms but not the workers. Government turns blind eye to legal infringements in the zones because its current operation since the program incepted and even aggressively work on protecting parks from collective action from the employee side. The current study depicted that, all industrial parks of the country dominated by precarious jobs in which workers earning average wage of US $26 per month which is below USD 1 per day and engaged in low skill and low-tech activities. Industrial parks characterized by high labour turnover and large percentage of the workers reported job or payment dissatisfaction as major cause for why they planned to leave their job. Moreover, Ethiopia's industrial park known for breakneck burdensome production activities, low end wage, serious punishment upon errors and delay during entry time and intimidation of employees. But the good thing is that, compared to most zone developers there is no compulsory overtime and where exists it only subjected to workers willingness only. In contrast to experiences of many zone developers where employers shown to discriminate against women in terms of levels of pay/differential pay and benefit packages even for position of same level, this doesn't seem to be the case in the Ethiopia's industrial parks. To put further on this, due to negligible pay for the burdensome working conditions by the resident firms contrasting what has been presented in most literature which showed single, inexperienced, young workers are less prone to distractions and absenteeism and higher motive to work over time; the reverse has been established in current study.

As for trade union, though not denied entry into premises, industrial park developer and operator consider trade union and even government-based labour department as a threat for healthy industry operation. All the companies located in the industrial parks set to operation are fenced establishing independent compound within the larger premises and have their own private security guards. In such fenced premises the difficulty to enter by inspectorates and trade union is of major obstacle to form peaceful industry relation in the country. As it has been described earlier, the same legislation elsewhere in the national economy applies to industrial park although the possibility to practice labour rights such as joining trade unions and collective bargaining which exists in the proclamation is challenging.

According to Ethiopian labour law proclamation, a worker is entitled to causal leave, maternity leave, sick leave and annual leave on paid basis. Workers were asked questions on services pertaining to casual and annual leave on paid basis. Majority of workers interviewed (61.3%) felt as the service in this regard is not favourable or denied of major endowments whilst resident firms contrastingly described as they are granting the services as per the labour laws of the country. With regard to bargaining power of labour and employment relationships in the industrial parks, the response

was easy because trade union not existed in the zones. The workers similarly asked questions whether they are aware of ILO conventions standard on labour and working conditions and the finding stipulated that they have no knowledge about the convention. Attempt has also been made to address whether there exists institutionalized system of conflict management technique in the industrial parks. Resident companies reported that they report the case to regulatory departments i.e., investment commission bureau and industrial park development corporation personnel. There exists no instituted system of grievance management technique from the firms' side rather wait for intervention made by the authorities. This possibly implies that, resident firms less interested in settling challenges in the premises since they mostly consider workers replaceable upon turnover experienced. This doesn't mean high turnover is not a problem rather bargaining considered as costly procedure and firms insist on exploiting benefits from comparative advantage through cheap labour.

Due to poor bargaining power of workers in the zones and absence of conflict redressal strategy to address interests from both sides, infrequent grievances took longer hours experienced in zones and this claimed to have affected overall labour productivity and efficiency of firms. In all the parks we observed, shuttle service provision provided by the companies because the industrial parks established at the outskirt of larger cities and commuting with public transportation takes longer time for the zones are not linked to the centers of the cities. Additionally, the companies are supposed to provide shuttle services because the workers are already poorly paid and additional costs for transportation makes the scenario worst and costs demanded for basic standardized living expenses.

6.4 Employment, Labour and Gender Issues in Ethiopia's Industrial Park

Employment generation is of primary target for the zone developers. As described in the other section of this thesis industrial parks set to operation dominated by foreign firms. While Ethiopia managed to attract inflow of large number of firms into industrial parks of the country, large proportion of firms in Eastern industry zone; the first private industrial park in the country mainly dominated by small and medium enterprises from China. Resident firms located in the industrial park benefit from comparative advantages such as surplus cheap labour, flexibility in labour restrictions and other stimulant incentive packages. Following expansionary projects by the government and proliferation of labour-intensive industrial parks, more small and medium scale firms located in public industrial parks of the country.

As of February 2019, some 100 units were located and set to operation, 42 secured but not yet operated and 35 units in pipeline and jobs created had reached over 60,000. Similar to experiences of most zone developers, Ethiopia's industrial parks predominated by female workers as compared with male workers. When it comes to park specific data as of February 2019, proportion of women workers found to make 78% of aggregate employment in BLIP, 90.7% in HIP and over 90% in KIP, 58% in EIZ which is the only exception where overall female participation in labour force seems to be not lower but virtually equal to male workers compared to skewed distribution in the three remaining industrial parks. Overall, gender-based analysis of labour market participation makes industrial parks feminized labour in terms of gender composition with slight variation between 90%

(the highest) and 58% (the lowest) in the ratio when park case is considered and female workers form average of 74% of the country's industrial parks total labour force.

Although the number as well as quality of jobs created fall short of meeting investment height and desired goals, it is presumably significant contribution and effective way of employment creation which further contribute in poverty reduction. The industrial parks have been functional since over four years (in average) and it is difficult to assume the economy would create this number of jobs in the way back of those mentioned years. This entails that employment creation in and around the industrial parks set to operation has made the initiatives' contribution virtually enormous. However, when viewed along the desired expectation of the initiative and massive investment applied in establishment, the number of jobs created from operational zones by far appear quite smaller. This criticism also holds strong when viewed along experiences of other zone developing countries with success stories. Obviously, in labour intensive zones as in the case of Ethiopia's industrial parks, job creation tends to be higher. Operational industrial parks of the country were wholly foreign owned and engaged in simple assembly operation in manufacturing types such as garment, textile in those specialized public industrial parks and highly diversified in private one i.e., EIZ. As in the case of late joiner countries in industrial park development program and Sub-Saharan African countries the objective of the initiative were no different and as comprehensive as those countries experience. As for the performance of Ethiopia's industrial park, they were generating modest benefits for the national economy in terms of investment generation, employment creation and export earnings though the contribution is by far fall short of expected level.

Efficacy measurement of special economic zones should take into account different indicators which also varies across literature. Employment generation is one of the most cited core performance indicators of such efficacy measurement. Though the initiative is only at its nascent stage of operational period, progression along jobs created is positive take-off. Following expansion of labour-intensive industrial parks across the country, direct employment contribution shown considerable increase over periods of time. A joint collaboration between industrial park's labour unit department and local government's labour and social affairs bureau is institutional structure deviced for providing workers recruitment service to resident firms. The current study stipulated that worker employed in the zones supposed to fulfill basic hiring criteria mainly associated with socio-demographic characteristics such as; sex, marital status, age, and level of education.

Ethiopia's industrial park's created significant number of jobs and the parks tend to employ larger share of female workers than male counterpart. Provided that the established IPs dominated by apparel and textile sectors, such gender variation tend to be associated to sector composition because the sector tend to employ more women. Findings from the present study finds that one major feature of Ethiopia's industrial parks workers is that, they are characterized by high concentration of unskilled women and variation across parks along this only remained marginal. Economic zones mainly criticized for majorly hiring workers in the age class of 20-29 years who are young females with poor bargaining power and mostly susceptible to mass exploitation in the zones. This implies that contrast to theoretical assumption of economic zones contribution, the program doesn't empower female workers. This finding seems to corroborate Aggarwal (2017) which also showed that the age distribution of female workers in special economic zones is between 20-25. Finding from the current study revealed that the age distribution of female workers recruited in labour intensive industrial parks of Ethiopia are highly skewed with 79% of the workers are young in the age class of 20 - 29. From all the industrial parks in the case study of this thesis, in average

female workers constituted some 74% and above of total industrial park jobs and 67% of them were single/unmarried young workers below the age of 25 and less educated. The proportion of female workers is substantially higher in all across the parks.

			Age class of worker			
			15-19	20-29	30-39	Total
Gender of the worker	Male	Count	10	71	11	93
		% of Total	2.8%	19.7%	3.1%	25.8%
	Female	Count	49	213	5	266
		% of Total	13.6%	59.2%	1.4%	73.9%
Total		Count	53	285	16	360
		% of Total	14.7%	79.2%	4.4%	100.0%

Figure 15: Distribution of Male and Female workers by age class (Source: Computed based own survey data (primary))

Unlike experiences of some zone developer countries, there is no reported differential wage across gender for positions of same nature. However, each production line has its own independent supervisor or controller and this is relatively position or occupation of better rank such as 'line supervisor' possessed by the few male employees than predominant females and few companies sent their local employees for higher technical training of which males were dominant trainees. Therefore, there is practical indication of gendered labour market segmentation since the likelihood for male workers to get better jobs is higher than female counterpart. This finding and arguments along in the literature weighs association between dominance of women workers in the zone and exploitative industrial relations. Whilst as in the case of Madani (1999) for example, this goal has proven better advantage to women's employment and described as a strategy through which women empowerment can be achieved because they contribute to family income from their independent income earned through formal employment which might not be possible without special economic zones. Most of reviewed literature witnessed that majority of workers in different types of economic zones are female. The data from current study stipulated that proportion of women's employment share across the industrial park in the case study of this research is higher compared to male counterparts.

As described in Milberg and Amengual (2008), the dominance of female workers in industrial park is a well-documented evidence and the intensity holds similar across globe. In this regard the findings in the current study corroborates what has been demonstrated i.e., higher intensity of female workers in zones. The present study also revealed that major criteria for female workers preference in zones includes; they work at low pay, less likely to unionize, greater patience for the monotonous job operated in the industrial parks. Confirming to what mainly identified in the present study, Gordon et al., (2000) described as the reference mainly related; demonstration of good discipline, hard workers, patient and less likely cause pressure for the formation of trade union, better working conditions and higher wages. According to another study conducted by Sivananthiran (1994), most of economic zone workers are young, single, migrant workers from rural areas, and mainly from poor families.

Most of the reviewed literature associate the intensity of female workers with low skill intensity. This implies that with the increasing evolvement of zones to technology intensive production process the intensity of female workers declines, and they replaced with male counterpart if females are low skilled in average. This has been experienced at large in most zones of Republic of Korea, China etc. Aggarwal (2007) also revealed that the dominance of women in the export processing workforce is common in most emerging economy zone of developing countries such as; Philippines (74%), Korea (70%), Mexico (77.4%), Dominican Republic (60%). The finding also confirms what has been identified by Farole and Akinci (2011) which showed that export processing zones doubled female employment in manufacturing sector. In addition to this aggregate data on employment, survey conducted also captures more female participants which uniformly outnumber men. It is reported that companies prefer female workers and their higher dominance is associated with their compliance with the rules of the enterprise. Different set of ideas constructed in an attempt to answer the reason behind large share of women workers in the zone.

The data revealed that majority of female workers are new for the job and do not have previous work experience which implies apart from female dominance, vast majority of workers are first time job seekers. This also assumed to have association with age class of the female workers in which majority of them fall in (20 to 29) age group i.e., high teens and early twenties. Contrast to this socio-demographic characteristic of industrial park workers, literature showed that in some countries such as Dominican Republic, Mexico and Mauritius the characteristics goes to married women and single mothers. Reviewed literature also revealed that industrial park tenants likely rely on women workers than male counterpart in routine and repetitive tasks of labour-intensive garment and textile manufacturing. There is also a tendency to consider female workers more compliant, well-organized and hard worker.

This study testimony that large percentage of industry park workers are young females with less knowledge about legislation to safeguard workers right and frightened to form union or organize collective bargaining with the employers. Study conducted by Jauch (2002) also demonstrated that companies recruit young female employees for their strong concentration and commitment to work on same job for long period of time. When it comes to segmentation of role based on gender, provided that the current operation is dominated by simple assembly activities; tailoring or sewing and trimming were dominated by the young female workers while line supervision, checking, cutting were mostly domain of male. The finding is consistent with what has been presented by ILO (1998), which compared EPZ experiences of America, Africa and Asia. The study showed that dominance of women in export processing zones workforce particularly from rural young females for their higher compliance to company ethics at even lower pay rate. However, there is increasing concern in literature of special economic zone's working conditions associating the issue with gender segregation.

In some context, dominance of women in economic zones attributed to employment discrimination which also causes substantial effects on women's wage. In fact, it minimizes the competition in experiencing vertical and horizontal occupational mobility for women in such segregated occupational type than the one engaged both male and female workers. Supervision in this discourse required to be made by women over other women and this implies that the situation offers better jobs for women than they would otherwise have. The other major characteristics of industrial park workers is majority of them sourced from the immediate local labour markets. For instance, it is reported by the park manager in an interview conducted, Hawassa industrial park is located in the

area where population of over 5 million unemployed people exists within 50km radius of industrial park. Similarly, Bole lemmi industrial park source majority of the workers from Addis Ababa and nearby vicinity. This holds the same for the EIZ which sourced vast majority of industry workers from Dukem and Bishoftu towns. This entails that unlike experiences of developed countries inter-regional labour migration seldom happen and not yet widely happen. This is because, local township directly involved in screening workers through their offices such as bureau of labour and social affairs. Direction from local township requires industrial park to source their labour demand from local residents where the park is located. This is actually of the only component of industrial park organogram whereby local government involved in the operation to reserve employment opportunity for localities.

With regard to wages and general working conditions, the present study revealed that over 43% of workers felt that rates in the industry park were less than prevailing domestic market rates particularly those paid by local enterprises and do not conform to expected wage standard in the local labour market or non-zone wages particularly compared to booming service and construction sectors. The vast limitations pertaining to negligible wage paid to workers in the industrial park as well as poor working conditions subsequently resulted in plateauing labour turnover, fatigue, lack of faith; loyalty and low efficiency among majority of workers. Apparently, this is not global standard rather difference exists between different countries within zones. For example, there are countries pay higher wage (average) than elsewhere in the national economy and this includes; Philippines, Republic of Korea, China, Thailand and Siri Lanka.

Tenants claim as local workers do not demonstrate required high-level productivity, lack quality; skill and diligence. In fact, non-conducive working conditions associated with low efficiency/productivity among the workers as claimed by the enterprises. It is also noted that as a result of flexibility in the regulatory framework, workers exposed to various challenging working conditions including reproach to abusive language by their respective employer. Absence of trade unions and inspectorates with the intention to change major difficulties paved way for the legal infringements go unchecked and sustained bad working conditions. Bureau of labour and social affairs represented in industrial parks to inspectorate working conditions reported as the office is not provided with adequate resources support inspection activities, lack funding, not well staffed and also lack resources. This strongly associated with government's lack of will in reinforcing labour laws in industrial parks. The workers reported that although, there exists legislations to prevent legal infringements from happening and make its appearances authorities turn blind eye to the legal breaches against workers' rights.

In addition to the wage level, which is below local market rates, there were reported malpractices such as unavailability of health insurances, severe punishments particularly salary deduction in report to error and denial of leave permission which is against what has been stipulated in the legal framework and what the workers entitled to. Working condition survey also stipulated that there is variation across industrial park as well as tenants in terms of over time practices, incentive strategies, night shift arrangement, and provision of safety equipment at the production level.

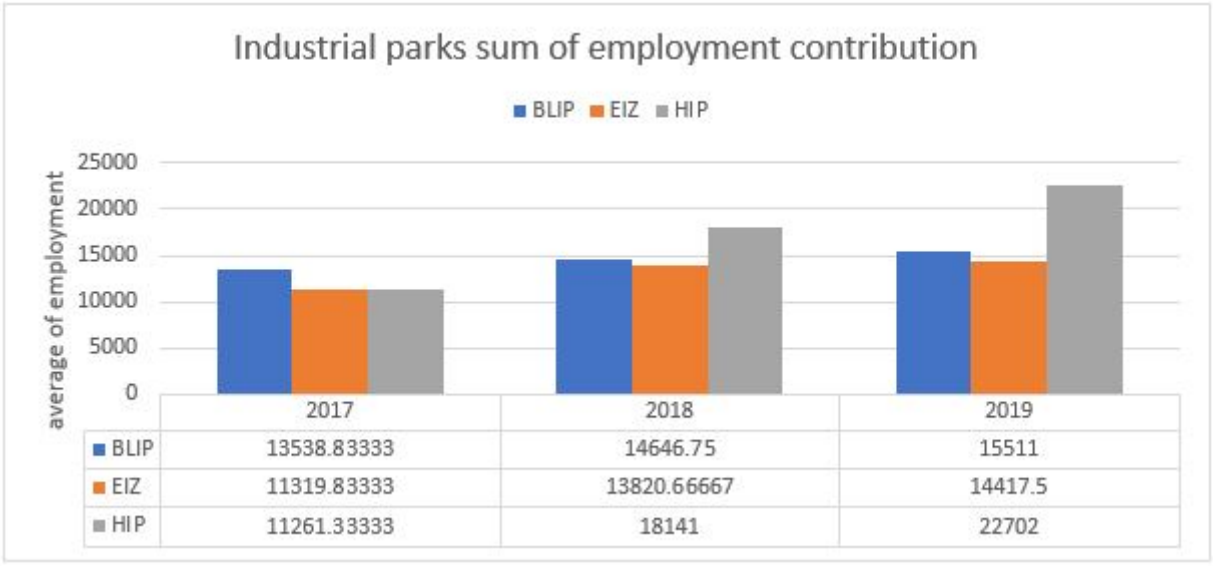
Additionally, the present study showed that, there were no formal training sessions as well as promotion for the workers and this scenario associated with the nature of the work (i.e., low skill production activities the workers engaged in). There were also associated problems such as; absence of bargaining between industry workers and employers coupled by weak confederation of industry workers in the country, inadequate social security benefits and other welfare benefits (medical re-

imbursement for workers and worker's family) including negligible wage paid and abusive language by employers are of critical problems faced by the industrial park workers. Moreover, what is of fundamental is institutional framework related gap particularly, the country do not have special regulation to govern employment relationships in industrial park rather rely on old proclamation which originally developed before 30 years when there was no plan to operate such development initiative. The absence of instructions for the regulatory structure reported as fundamental institutional gap in securing welfare of workers for it lacks new setups needed to govern situations in such a modern industrial relation context. This entails as new (modern) setup needed compared to old industries for which the proclamation developed very long years ago. The legal framework is not compatible to solve the current socio-economic situation which framed in complex global competition operandum. In sum, efforts must be placed to improve working condition challenges in industrial parks of the country in such a way considers comparative advantage of all actors including IPs, resident firms and should also take into account park specific conditions and situations in the broader economy.

What do the park operation miss in terms of social matters?

i. Employment opportunities and skills transfer (human development effect)

With regard to social significance and other indirect benefits, the economic zones expected to generate employment opportunities to over two million people at the end of GTP-II up on operation at full capacity, plus some indirect jobs improving the current employment opportunity of manufacturing sector which is about 380,000. This job creation contribution of IPD program translates into target of over 200,000 direct jobs by the four IPs selected for the purpose of this study. Ethiopia's industrial park development proclamation 2014 sets creation of job opportunities as one of major justification behind the initiative. Apparently industrial park development in Ethiopia created significant number of jobs which accounts up to over 60,000 or 30% of full capacity production.



	2017	2018	2019
BLIP	13538.83333	14646.75	15511
EIZ	11319.83333	13820.66667	14417.5
HIP	11261.33333	18141	22702

Figure 16: Industrial parks sum of employment contribution (source: Computed based on data obtained from Ethiopian investment commission)

The above figure suggests that the total factory employment generation of industrial parks increased slowly but unceasingly over periods of time. In contrast to what has been anticipated in the industrial development policy of the country, the impact in employment creation is not withstanding the potential of the initiative and factors behind needs thorough examination. The critics is whether industrial parks employment contribution as a component of "human capital development effect"[16] is additional new employment or relocation of jobs due to diversion of resources and investment to a specific geography. Scarcity of data makes it difficult to put it clearly which is exactly situation associated with this narrative.

The nature of production in manufacturing sectors within the various economic zones of the country relies on low skilled labour sourced from local area; mainly nearby rural areas. Provided that industrial parks set to operation are made of tenants engaged in simple assembly processing, they increased demand for unskilled labour of negligible wage. Moreover, due to shift in direct employment of unskilled workers, demand for various support services such as; hotels and transport

[16]The concept of human capital development effect is taken from Aggarwal (2017)

also increased which assumed to inject development into local economy by way of generating more employment.

Jobs created could be considered promising in the case of the three public driven industrial parks given they are at nascent stage of first cycle of development, whereas EIZ would have contributed more than what it does, provided it is operational since last ten years. Though at its early stage of development cycle, 35,000 (58.3%) of these jobs were in the three public owned industrial parks. This implies that although foreign owned private industry zone and public owned IPs dominated by foreign companies and expected to be more efficient with higher production capability to meet the targets, the achievement limited to 30% of what has been ambitioned.

There are ample evidences in previous empirical findings showing similar result with regard to addressing unemployment problem in labor surplus countries like Ethiopia. The result from the studies showed that apart from the concerns about the quality of jobs in economic zones, the contribution of such zones in absorbing large unemployment problem in developing countries is very less. Contrary to the expectation that industrial parks serve as a safety valve to address unemployment problem, it accounts for only small fraction compared to total labor force (Madani, 1999; Kiria, 2017).

Drawn on neoclassical premise of opportunity cost of establishing or not establish industrial parks, the critical question remained puzzle is how many employment opportunities would have been created in the absence of public money spent on IPD policy, the concern about additionality of jobs. Moreover, the issue is whether resource and investment concentrated in a particular spatial might have created the possibility to expand local entrepreneurs. Considering the nascent stage of the initiative as well as absence of clear data to answer this question we recommend it to be part of future research direction. Provided the challenge of manufacturing sector including bureaucratic system is very dense, firms located in the industrial parks reported as they would not have planted their industry without establishment of the industrial parks. Nevertheless, though achievements in this regard can be considered as a proof of new investment in the manufacturing sector the performance against anticipated goal is questionable in all the four parks. In comparative view, industrial park's employment contribution has shown steady increase over periods of time, which anyway does not serve as a proof they are all on the track to meet their job creation target. Obviously, amongst major factors enhance industrial parks to meeting their targets is innovative institutional revision to instill new technical road map. Building on the current status and evolvement of industrial parks, institutions in place should strongly demonstrate demand-driven capacity.

There exist ample evidences as special economic zones can play a catalytic role in creating structural change by way of institutional transformation which shades light in the wider economy. Industrial zones also play a vital role in inducing new work culture into the host economy country which further positively affects the private sectors in which previous IP workers employed and consequently the larger economy. Nevertheless, secondary effect of special economic zones including skill and knowledge development concentrated at low-end, low technology, and foreign investors tend to retain or even increase number of expatriate staffs in the areas of occupation categories warranty better skills. Managerial positions and technical positions fully dominated by expatriates to keep/omit specialized training cost (Madani, 1999; Aggarwal, 2012; Farole, 2010; Gibbon et al., 2008).

As it has been described earlier in previous sections, Ethiopia's industrial parks employment contribution characterized by bad reputation in the local labour market for its non-conducive working conditions for the locals, exploitative production activities and dis-respect for worker rights are amongst the major. Another associated concern with regard to foreign experienced companies and economic zones is the loss of descent job with sound wages for locals, sub-standard working conditions, replaceability of workers/job insecurity, and skill acquisition is limited at margin. This finding corroborates with Mireri (2000), described condition pertaining to this scenario particularly occupation contribution for locals as "dead-end-jobs" that offered limited possibility for local workers vertical mobility or career development. Similarly, Jauch (2002), demonstrated that foreign companies located in economic zones following set of generous incentive packages in the industrial policy, presented little interest to invest in technology up-gradation which subsequently result in skills up-gradation, or social protection benefits.

In the case of Ethiopia, despite the fact resident enterprises showed poor motivation, government not showed relevant commitment in developing IPs based skill development to contribute in human capital formation and this cast doubt upon net benefits of industrial park development program and operation across different corner of the country. For one thing even, government is not in a position to enforce the existing regulatory frameworks in fear of losing the investors overnight and turned blind eye than making attempt to build trust. On the other hand, zones are experiencing huge turnover rate due to exploitative and substandard working conditions in the industrial parks. Theoretically, industrial park development to the minimum case supposed to ensure skills transfer to local economy or local firms following recruitment of workers previously recruited in the industrial parks by experienced foreign firms. However, evidences in reviewed literature associated this condition to the type of the scheme and size of economic zones. According to Jenkins et al. (1998) when viewed along occupational positions; labour turnover or mobility of workers is impacting among highly skilled workers worked in managerial positions. When it comes to situation in Ethiopia's industrial parks although the zones dominated by labour intensive simple assembly type operation, positions of skilled or highly trained workers in the managerial positions including line supervisors dominated by expatriate staffs and this limited comparative advantage of the country as a host.

Regardless of its causes, due to non-conducive working conditions in the industrial parks & its negative social repercussions; the huge turnover adversely affected trust between workers & employers, and ultimately discourage the likelihood of on-job-training productivity which shade remarkable light on overall productivity in labour intensive IPs of the country. Perhaps following gradualism approach and based on efficient management approach, the current expatriate dominated managerial staffs across industrial parks would be replaced with Ethiopian nationals.

This warranty strategic intervention to ensure human capital development formation effect of IPs and at least set clear definition of quality of jobs in the zones in terms of wage paid for locals. In the extensive interview with industry park workers, it has been reported the workers are in exploitative work environment; being paid small amount of wages, poor working conditions even workers treated as replaceable, low inspection of regulatory frameworks by designated institutions are factors behind high resignation of workers from resident companies.

ii. Knowledge transfer and absorption of skill in local labour market

One major objective of zone developers to setup industrial park is technology transfer in human capital when absorptive capacity of domestic industry is low otherwise linkage failed to be executed. As highlighted in Aggarwal (2007), human capital development through skill up-gradation program is of major impact of special economic zones. As a proxy to measure this, sampled resident firms asked whether they have provided training and development opportunity for their employee. Few workers sent abroad mainly where mother companies found for advanced technical training whilst substantial on job training focused on lower end of skills specifically training on social skills. Workers received advanced technical training felt that the content of the training is on specific production process due to nature of production in the zones and prospect to get better jobs as a result is unlikely. This also implies although few workers (insignificant proportion of total IP employment) acquired skills from the advanced technical training, large majority of workers are low-skilled workforce because industrial parks based on low-technology which are of major criticism of the program.

Moreover, in line with the nature of production activities in the zone, except very few advanced trainings for technicians, the rest of such planned activities mainly provided is designed on simple assembly activities like sewing, soft skill training and social skill training. Workers interviewed asked to respond to question whether they had better future in getting descent jobs elsewhere outside the industrial parks as a result of working in the zones. Majority of them responded that working in the zone as well as the training are too specific to work in the production line of garment and textile sectors which accounts some 60% of total sectorial distribution of manufactures in the industrial parks. The responses from the respondents stipulated that although new experiences such as work culture is of good experience, the prospect is no better due to narrowed opportunity for skill development.

Developing countries targeted industrial park development to experience knowledge over-spills in human capital and thus why the initiative believed to be of particular interest of emerging economies though the outcome falls short of desired expectation. However, as highlighted in Aggarwal (2017), although the program criticized in terms of poor technology and low contribution to skill development, proponents of the program argue that economic zones instinct industrial discipline, basic work culture such as punctuality during work time and delivery of products within deadlines. Apart from this, provided that production process in the industrial parks is majorly of simple assembly operation, workers are not provided career development plan. Aggarwal (2017), revealed that employees growth plan or promotion plan is strategy to ensure human development in this globalized world. Madani (1999), argues that human capital formation effect of economic zones subjected to level of complexity in economic activities of industrial zones though industrial base and entrepreneurial culture in the wider economy also play a vital role.

The other yardstick to measure effectiveness of industrial park policy implementation is its indirect benefits such as technology transfer, adoption of modern management practice and skills upgrading. In this thesis, attempt has been made to assess extent to which knowledge diffusion took place as a result of the initiative. Reviewed literature indicates that in a condition of low absorptive capacity and production capability of domestic firms' knowledge retention in local human capital through skill up-gradation is possible way of technology diffusion. To discover existence of "vertical mobility of workers", sampled respondents asked whether their respective establishments have

formal training programs for its permanent full-time employees. Previously conducted researches presented that the role of industrial park development to the minimum case attributed to skills transfer to local economy or local firms following recruitment of workers previously recruited in the industrial parks by experienced foreign firms. Skill acquisition as a subsequent consequence of different training programs is assurance of knowledge transfer to local economy. When viewed along occupational positions, labour turnover or mobility of workers is impacting among skilled workers previously recruited in the positions of management by foreign owned industrial park firms (Jenkins et al., 1998; Madani, 1999).

In order to ascertain effectiveness of Ethiopia's industrial parks along the parameter indicated above, all the respondents reported that they have regular training sessions of different type mainly for the new entrants. The training provided focused on equipping workers with basic skills at production floor, soft skill training, on the job training by tenants is also another component mainly specializing on low level industrial management particularly line supervision of production workers. Small number of firms across the two schemes provided overseas technical training specialized on machine operation skills. Similarly, respondents asked whether they provide training at the managerial position and advanced production skills. The result portrayed that no single firm in the industrial parks provided training at the position of managerial and advanced production skills and these positions dominated by expatriate staffs.

The analysis shows that there is no clear evidence pertaining to the movement of workers from foreign owned industrial park resident firms to domestic firms. Reviewed literature portrayed that mobility of labour from foreign owned industrial park resident firms to local industry is fundamental for diffusion of skills gained through on the job training and learning by doing. Due to serious data hungry on the theme, analysis in this regard wouldn't be extended further beyond the preceding argument. Respondents did not have clear knowledge about destination of huge attrition rate they have been experiencing over periods of time in their operation. Nevertheless, minority firms provided overseas specialized training in operating machine reported labour poaching due to legal infringements. The present study also revealed labour turnover is very high mainly due to negligible remuneration and poor working conditions than potential transit to local manufacturing. Provided the nature of production is simple assembly operation deviated from specialized knowledge, makes workers replaceable. The huge labour turnover rates reportedly deterred skill development likely achieved through training, learning by doing on the job and labour productivity.

When it comes to the learning platform, strikingly different from the assumptions proposed by (Jenkins et al., 1998; Madani, 1999) the finding from this study showed that opportunities for skill acquisition of employees limited to basic production process expertise at the floor and not necessarily transcend this level. The current study presents positions of skilled or highly trained workers in managerial positions dominated by expatriate staffs and this limited competitiveness of the country's zones due to comparative disadvantage in labour. The result of the present study is consistent with previous studies Aggarwal (2012), which showed that during the first phase of IP operation labour market outcome limited to reducing high unemployment of unskilled workers (those at low end of income distribution) and this makes labor market reputation of the initiative low.

Human capital development effect is very low due to low wage and poor working environment constituted by low skill acquisition because production processes are low tech and low skill. Literature showed that industrialization has a pattern, composition of workers and skill levels expected

to change following transition of IPs to the next phases of development. However, potential dynamisms along this is scanty in the case of Ethiopian industrial park program since it presents little evidence as it has been described in the preceding analysis. Overall, analysis along skill acquisition and knowledge transfer to the local economy conforms neoclassical hypothesis which depicted that "there is historical evidence that shows early period of industrialization is characterized by super-exploitation of labor" (Aggarwal, 2012).

iii. Human capital development and management

Human capital management of industrial park involves innovative managerial strategies as to address social condition of their workers. Extensive interviews made with respondents showed that plateauing labour turnover is due to poor remuneration, absence of packages secure social conditions of workers, inability of workers to integrate themselves to demanding industrial conditions where productivity of labour is calculated each day and put workers under physical and psychological pressure. Although Ethiopia is labour surplus country, working culture is poor and needs to be addressed by government, investors, workers organization and social partners. Firms within industrial zones should show willingness to invest in workers training to instinct demanded skill & competency through on-job and off-job training, promote vertical mobility, ensure provisions such as of housing and other accommodations.

Human capital management demands technical inquiries that have to be executed carefully in such complex organizational settings to establish stable work environment through different provisions. Although there is high youth unemployment in the country, employment impact of industrial parks does not reach neither the expected height of quality jobs nor desired quantity. Recruitment of expatriates in the areas of HRM position and others better replaced by Ethiopian nationals so that better understanding can be made to address working condition problems majorly deep rooted in cultural differences and poor communication as well as influenced by lost in translation problem. Due to cross cultural competency problem, hierarchical arrangement is adversely affecting the working conditions in industrial parks of Ethiopia. According to Jauch et al. (1996), foreign companies located in industrial parks prefer their own nationals to omit training cost of what skilled managerial positions warranty and to benefit from greater flexibility in production processes.

Bureau of labour and social affairs (BoLSA) of municipalities where industrial parks established given the mandate to build harmonious labour relations and enforcement of labour laws. Fundamental problem with this kind of administrative structure is that from the beginning bureau of labour and social affairs is under jurisdiction of local government whilst organizational structure of industrial parks is highly centralized system of federal government since the projects are initiatives of federal government. In light of legal framework of industrial park administration and labour law proclamation of the country, labour issues are absolute mandate of 'ministry of labour and social affairs' (MoLSA). However, in some parks labour unit department in industrial parks represented by investment commission and this 'made' labour issues fall outside jurisdiction of the designated ministerial office. This is default condition that removes protections of workers against undesirable labour practice and lega l infringements. In the implementation process, the institutional arrangement is not with uniform structure. Ethiopian Investment Commission formed labor unit and this department is the only in charge of labour issues at Hawassa industrial park whilst in the other three case studies (BLIP, EIZ and KIP) BoLSA is in charge of containing labour issues as it has

been designated in the legal framework of the country.

Theoretically there is no substantial difference between the two organs in of terms strictness in enforcing labour laws though, functional role of labour unit represented by investment commission of the country concentrated on labour harvesting, grading and recruitment; putting interests of workers at margin. When viewed at aggregate level in both cases, the system in which and the way labour issues treated lacks strictness with investors, poor inspection of legal infringements, wage issue is totally at margin though it is one of major factor for high labour turnover, workers health and safety inspection is very poor not supported with technologies in some industrial parks.

iv. Occupational safety and health (OSH)

One of the fundamental issues in the analysis of working conditions discussion is personal safety, hygiene and employees having equitable access to service along with not having to experience discrimination and harsh treatment at workplace (Manual, 2013). OSH is working condition indicator component in industrial parks with particular emphasis on health problems of factory workers. Explanation of health problems in industrial parks can be viewed in three different ways; (a) health problems due to organizational arrangement of zones and their social repercussion such as (mass psychological disorder), (b) occupational and industrial disease (skin irritation, backpain, eyesight problem etc.,) and (c) standards of health and safety condition. In the case of Ethiopia working conditions issues addressed in the labor proclamation No. 377/2003 Article 92. Furthermore, Ethiopia have had occupational health and safety legislative framework which dated back to 1940s. The more recent legislation is included on the labor proclamation no. 377/2006 which has specific guidelines, rules and regulation on sector specific hazards (MoLSA, 2006). The question is to what extent the legislations are being utilized in protecting workers from abusive working conditions due to legal infringements?

This study demonstrated that Ethiopia's industrial park characterized by weak enforcement of labour laws proclamation which paved way for breach of health and safety legislations. The current study indicates that in all sampled industrial parks safety measures are rarely implemented and companies mainly run activities in a way maximize their productivity plan even at the expense of workers safety precautions. There are conditions in which Bureau of labor and social affairs, arrange awareness creation program on OSH and train workers. However, due to absence of inspectorates and weak enforcement of labour laws one can easily observe most awful health and safety breach in the industrial parks including; locking workers in premises during the entire working hours even including emergency exits. In premises where there is large number of workers packed together during working hours fire accident easily cause massive damages. Moreover, most resident firms in the in the case study of current research do not have a unit work on workers' health and safety issues or they have no experience of health and safety training to workers.

			Major HSL					
			No safety material	Lack of proper sanitary	Inadequate ventilation	Absence of training	Absence of training	Total
Name of the Industrial Park	BLIP	Count	41	20	27	15	20	120
		% of Total	10.8%	5.2%	7.1%	3.9%	5.2%	31.5%
	EIZ	Count	53	26	29	21	26	156
		% of Total	13.9%	6.8%	7.6%	5.5%	6.8%	40.9%
	HIP	Count	40	20	21	8	20	105
		% of Total	10.5%	5.2%	5.5%	2.1%	5.2%	27.6%
Total		Count	134	77	66	44	66	381
		% of Total	35.2%	20.2%	17.3%	11.5%	17.3%	100.0%

Figure 17: Major health and safety legislations breached in the industrial parks (Source: Computed based own survey data (primary))

Due to absence of health and safety department in most factories, although workers provided with safety equipment, they rarely use and follow safety precautions due to limited knowledge about the case. There were large number of workers complain of allergy, asthma due to dust in garment & textile factories, skin irritation, backpain, inadequate ventilation, noise in spinning factory, fatigue and others. Although there exists variation across parks the type of health problems were those most mentioned in different countries experience as well. This associated with absence of safety equipment such as dust masks, protective equipment to operate with cutting machine. From the total sample of interviewed respondents on working conditions, over 69% reported as the workers do not get protective materials. This research testimony as there is enough lightening in production premises across the parks whilst the sheds were not supported with ventilation system and the temperature in the factories is high. Corroborating result from qualitative interview, 91.3% of the workers reported that there is no adequate ventilation in factories, and this also found as major health and safety legislation breach in the industrial parks. The result from workers opinion survey also depicted that over 51.7% reported health problems contracted as a result of working conditions in the industrial parks.

Additionally, workers complain most factories dining room or canteens are not clean and quality of food provided also is questionable. As it has been described in the upcoming section most factories follow strong penalty if workers come late or absent from workplace even for legitimate health problems and workers enforced to stay on board when contracted disease and not feeling good to prevent cut in wages.

Mr. Kifile a labor inspector, has explained what the bureau does in this regard as follows;

> *"Our bureau mainly does coordination, monitoring and evaluation activities on labor inspection and OSH. The bureau conduct visits to evaluate companies' safety measures and working environment. We also monitor activities to make sure whether safety tools are provided to workers and all the necessary precautions are taken during production. So, we do inspection every month and if/when there is failure, we first give oral warning then we write letter if companies failed to comply in post-training periods".*

Contrast to major issues articulated in the above direct quote response from the workers side showed that the intervention in this regard is not favourable. Moreover, the data collected from production workers indicated that there were companies provided safety tools and train workers on occupational safety and health (OSH) issues. However, there is reported quality defect of the tools and untimely provision of safety tools. The tools are also reported poor quality and workers do not use most often. In most cases ones the safety equipment gets damaged or failed to protect workers from potential injuries, companies are not willing enough to provide replacements. A Cardin machine operator at KIP explain this as follows;

> *"The company usually provided the equipment too late so by the time we get mask the damage is already done because they don't deliver the tools on time, we often do our job with old and ripped masks. Besides, although the working environment as you notice is polluted with noise and dusts, the company does not provide eyeglass and ear cover for workers, they only give the glass to those who works as drawer operator but the whole factory is filled with cotton dust which causing worker develop health problems like allergies".*

As in the case of policy related technical gaps in the overall implementation of industrial park program there exists fundamental problem in labour policy of the country. For one thing the labour policy of the country is outdated and not well cornered considering the complex nature of industrial relation in industrial parks/special economic zones of the country. Moreover, even with the existing policy by itself designated institution is not properly practicing the enforcement of the legal frameworks although labour policy in the industrial park is not separate from the one that applies to the rest of the country. There are reports in which resident enterprises involved in legal infringements frequently, but government is taking no correction against those legal breaches. Due to absence of labour union in the industrial park of the country; labour and social affairs bureau entrusted with the task of handling employment relations, conflicts because the country hasn't officially excluded national labour proclamation and employment management relations from industrial park program. The following direct quote shows gaps in the institutional arrangement and how it is becoming source of negative social repercussions.

> *It has only been a few weeks that we started to work inside the park. It will take time to work things out. The park administration has given the bureau a desk as part of the one-stop system and we stated to spend two days a week inside the park and we are working together with park management to address the issues. It is a little complicated because we are not fully in-charge here. We have to formally request companies through the park administration to visit the factories and workers. Had it been in the outside industrial park manufacturing companies the story would have been different. Outside the park companies usually take immediate corrective measures on delivered inspection comments and we can directly contact company owners/managements at anytime. (Head labour unit department at KIP)*

Regardless of the gaps on quality and quantity of safety equipment provided in the sampled companies, at least labor inspectorate "coordinate and evaluate OSH implementation" represented in all the three industrial parks except Hawassa industrial park where BoLSA is not represented.

v. Labour laws proclamation and labour relations (Plan vs implementation)

This part of the paper considered issues pertaining to the nature of labour laws proclamation of the country, its applicability to industrial parks/special economic zones labour relations, and trends in the implementation or trajectories during practice. To start with global experience, most countries across the world and zone developers in particular are signatories of ILO's international conventions which implies countries adopt similar attitude towards labour standards. However, the problem is with the implementation and how it gets executed. The labor law in Ethiopia dated back to over 50 years and the first formal labor law was established in 1963 with "Labor Relations Proclamation No. 210/1963" which recognized the rights of associations of employers and workers by setting up a system of collective bargaining and the settlement of trade dispute.

The most recent labor proclamation is the Labor Proclamation No. 377/2003. The proclamation No. 377/2003 mainly address the following issues; employment security, working hours, overtime work, annual leave, safe and healthy working conditions and employment injuries. The proclamation on industrial parks development of the country mandated Ministry of Labour and Social Affairs (MoLSA) to address labour issues through 'tripartite modality' means arrangement whereby the Ministry of Labour & Social Affairs, employers of industrial park developer, industrial park operator or industrial park enterprise and employees' representatives through constructive consultations (IPDC Proclamation, 2014).

Productivity of industrial park residents mainly relies on productivity of workers. There are limitations on the side of the workers such as; poor work culture which further constitutes: high absenteeism, less commitment to the works they are assigned for, strong culture of holiday celebration with subsequent consequence of work off, less experience in the local labour market to work under challenging situation of manufacturing sector which is even more demanding during production peak period. When it comes to the other side limitation, workers complain as the work environment is not conducive, remuneration in response to their labour or large volume of workload is below expected standard compared to manufacturing sectors in the local industry.

Both private and public industrial parks in Ethiopia were built on very low labour cost to successfully achieve inflow of foreign direct investment than considering other competitive advantages. In fact, the system built on very generous incentives including cheap labour for foreign investors interested to involve in the investment as a developer and resident enterprise. This subsequently caused wage depression across the industrial parks with possibility to affect regions of the country. IPD program in the country is part of development policies intended to stimulate the country's economy towards rapid national industrialization to bring about structural transformation.

However, looking deep inside the institutional setup of industrial park, efficiency & effectiveness of administrative tiers involved in the policy implementation, particularly regulatory institutions are not supported with compelling institutional framework. Particularly, the labour law of the country is of critical problem worth mentioning in this context. To start with productivity of labour as it has been conveyed by almost all industrial park resident enterprises interviewed, labour productivity is very low. This low productivity is attributed to lapse and challenges of the institutional framework plus poor implementation capacity of mandated administration(s).

			Reason why you leave?					
			no commensurate with skill	Pregnancy	Health reason	Job or payment dissatisfaction	Family responsibility	Total
Do you have an intention to change your current job?	"Yes"	Count	64	18	17	156	10	276
		% of Total	16.8%	4.7%	4.5%	40.9%	2.6%	72.4%
Total		Count	64	18	17	156	10	276
		% of Total	16.8%	4.7%	4.5%	40.9%	2.6%	72.4%

Figure 18: Cross tabulation of workers intention to change current job and reason for leave (Source: Computed based own survey data (primary))

As described in the above table given the bad reputation of industrial parks in the local labour market, there exists high attrition rate because of many reasons including; for those already received training the job profile found non commensurate with the skills, dissatisfied with the salary, and health reasons which also affects workers productivity during their employment period in the zones. The result from survey of working conditions in the industrial parks revealed that some 72.4% of the workers have the intention to change their current job. Cross tabulation of intention to change job and reason why the workers leave portrayed that some 41.2% was due to job or payment dissatisfaction, 16% due to no commensurate with skill and other reasons as well.

Managerial strategy followed by human resource managers of resident enterprises is not convenient for building an effective human capital formation since it seldomly supported by technical measures to promote and preserve labour manpower or poor staff retention mechanism. It simply missed elements to build productive human capital base where absorption of technology transfer supposed to be performed (if any) given the zones are enclaves and deliberately separated from local economy. Study conducted by International Labour Organization (2006), on local development and decent job depicted that poor labour inspectorates in which practices of working environment largely go unchecked whilst due to attention paid to the cost/cost-oriented view of lowering wages adversely affect labour productivity since such discourse of work conditions characterized by poor competitive advantage including: skills, education, health, and training opportunities. This implies the zones drag the expected employment generation role to a low "skills equilibrium" where the resulting demand for low productivity of labour is met with low level of skills supply, wasted human resources, and labour "shortages".

To summarize, although the same labour law proclamation elsewhere in the economy is applicable in industrial parks of the country, the enforcement is lax, demanding working environment, negligible wage, trade union is almost non-existent, and all these made the situation flexible for the resident firms.

V. Decent working hours and wage

With regard to wages and other working conditions large percentage of workers responded that wage rates in the industrial parks were smaller compared to sectors outside zones whereby firms engaged in similar economic activities. Negligible wage payed by tenancies seen as major source of perceived challenges which is literally far below what workers need for basic monthly expenses.

On top of that there were reported malpractices by the workers including additional unreported temporary workers, unavailability of health insurance and denial of endowments even for periods specified by the labour proclamation of the country. In the study attempt also made to understand perceived challenges and incentives by the local workers in the industrial parks and the result depicted that wage paid is reported as a major challenge (61.3%) in the industrial parks followed by failure to instinct skills which accounts for about 19.2% (see figure: 20). The findings from the survey suggests that negligible wages were more of a serious challenge for the higher proportion of workers causing high turnover and those on board planned to change their current job in order to improve wages and benefits.

			Perceived challenges				
			Payment	Carrier	Job content	skills	Total
Name of the Industrial Park	BLIP	Count	73	16	7	20	120
		% of Total	19.1%	4.2%	1.8%	5.2%	31.5%
	EIZ	Count	95	18	11	27	156
		% of Total	24.9%	4.7%	2.9%	7.1%	40.9%
	HIP	Count	60	12	11	26	105
		% of Total	15.7%	3.1%	2.9%	6.8%	27.6%
Total		Count	233	46	29	73	381
		% of Total	61.3%	12.1%	7.6%	19.1%	100.0%

Figure 19: Perceived challenges of industrial park workers (Source: Computed based own survey data (primary))

On the other hand, work culture (30.7%), carrier (15.2%), skill development (12.1%) reported as a perceived incentive at the workplaces by the industrial park workers.

			Perceived incentives at the workplace						
			Culture	Carrier	Work Env't	Co-workers relations	Job Content	skills	Total
Name of the Industrial Park	BLIP	Count	68	17	5	10	<5	15	120
		% of Total	17.9%	4.5%	1.3%	2.6%	n<5	3.9%	31.5%
	EIZ	Count	83	25	8	10	8	20	156
		% of Total	21.8%	6.6%	2.1%	2.6%	2.1%	5.2%	40.9%
	HIP	Count	55	16	5	8	8	11	105
		% of Total	14.4%	4.2%	1.3%	2.1%	2.1%	2.9%	27.6%
Total		Count	206	58	18	28	20	46	381
		% of Total	54.1%	15.2%	4.7%	7.3%	5.2%	12.1%	100.0%

Figure 20: Perceived incentives at the workplace reported by the local workers (Source: Computed based own survey data (primary))

According to Ethiopian labor law proclamation No. 377/2003 normal working hour should not exceed 8 hours a day and a person not required to work more than the stated hour per day. Accordingly, the data collected from both company managers and employees indicate that normal working hours is eight hours a day in all sampled manufacturing companies. Similarly result from in-depth interview with different company workers showed that there is no problem with the

standard set for working hours. Most of the companies arranged their production in different shifts also reported as working hours doesn't exceed 8 working hours. Similarly, information collected from the workers stipulated that they had never worked more than normal working hours although the volume of work they have to undertake is demanding. Although long working hours is not widely practiced in the industrial parks of the country, there are few reported cases.

Compared to public industrial parks, workers in textile sector of EIZ reported violation of labour laws in which they mostly enforced to work two or three hours longer time in most cases. With regard to working conditions, the study also showed that there exists variation across firms and industrial parks particularly in overtime practices, overtime compensation, night shifts and the provision of leave and other facilities. Ethiopian labour law proclamation allows only 20 hours per month for overtime work. While employers complain about longer working hours and operate night shift program, majority of the workers interviewed are not demonstrated interests to work on over time and night shift arrangements. Though this law could protect labor abuse, investors complain it is too low relative to other countries (for instance Japan 42 hrs/month, Korea 48 hrs/month, Taiwan 46 hrs/month, etc.).

Moreover, firms provide varied incentives and wage arrangements for their workers. There are reports of considering workers unionization as a resource ignite strikes by most firms in the industrial park as well as regulatory organ from government side. This makes Ethiopia of the countries with economic zones who have taken a negative stance towards unionization of workers in practice, though government tended to act as the same labour law is applicable both within and outside industrial park. Despite regulatory restrictions and control by industrial park authorities, tenant such as shints company at bole lemi industrial park mobilized the company workers to get unionized. Overall variation across firms and legal infringements reportedly causing labour poaching of workers among the resident firms particularly targeting workers received advanced technical training on machine operation. So far, however, unionization of workers has been less efficient due to low experience and high turnover rate in the zones. Additionally, due to poor culture of organized labour movement across the sector rather seldom arise labour disputes, number of labour union in the zones failed to increase or make their appearances. It is also slow in management and government apply strict control as not to establish linkage with confederation of Ethiopia's industry workers. On the other hand, workers also easily breach labour contracts without any costs.

When it comes to wage level in the industrial park it is challenging to reach firm conclusion on comparative wage difference between workers in domestic economic activities and industrial park workers without performing comprehensive survey. In fact, for production workers in the park this seems to be the leading cause for high turnover along with other factors. This is because, local workers paid negligible wage ~650ETB/month or 27.08 ET/day which is less than 1US$/day). The major problem is that Ethiopia's labour law proclamation did not set minimum wage rate for private employees. Industrial park workers reported that the wage paid is by far lower than amount required to cover minimum living expenses of individuals when viewed at a height of local subsistence standard of living. This situation resulted in high labour turnover which subsequently deterred the pronounced skill development through training, learning by doing on the job, as well as it affected overall productivity. The problem is mainly due to poor labour law of the country and it mirrors government's effort of relaxing working conditions in zone operation. A good evidence is that Ethiopia's industrial park development proclamation stipulated that labour conditions including labour contract is up to negotiation between employer and employees. This is of major

issues authorities turn blind eye to, for not granting minimum wage rate and this as described earlier aggravated the labour turn over in the zones. This makes the situation more complex to solve and it is difficult for the authorities to solve complains from both sides in which employees complain about the low salary and employers issue related to high turnover. Labour disputes erupted in the industrial park failed to achieve desired increase in wage level and improvement of working conditions. Although employment generation is of major objectives through which industrial park form linkage with local economy, the practice suffers from the standardized welfare of workers of which wage is worth mentioning.

Miss A is a 19 years old worker in a yarn manufacturing company at KIP and stated the following;

> *The amount of work we do is backbreaking. We stand for hours doing a lot of activities which requires a lot of energy so by the time I get home, I go straight to my bed because I would be exhausted to do anything else. I earn little pay only which is by far less than what required for everyday provision. I left with nothing after spending on food for daily consumption for about twenty days in a month. Had it not been we rented a small flat in a group of five workers the amount is almost as my rent cost and I would have quitted the job. And, the fact that I am doing all these work for a little money has negatively affected me lot both psychologically and physically. This causing me have less time to share with my family which adversely affecting relationship with family members. Nevertheless, I am still here because of no option though tirelessly looking for another job to replace with the current one.*

Majority of the workers interviewed reported that industrial park job as assembly worker is not job of their preference. They described it as final resort when exhausted finding one elsewhere and desperated with the desire to gain better offers in the labour market or when it becomes the only opportunity to escape social and economic crisis of unemployment. Mr. Yohonnes, a finance and logistic manager at Trybus men's suit manufacturing company at KIP indicated that up to 50 production workers leave their job in the company per month. He stated that there is high turnover in the economic zone in general and the main reason especially in their company is workload. He stated;

> *"Many of them have hard time in handling the pressure the job presents and most of the time, production workers site workload at low pay as the main reason for leaving their job in the company although working conditions in our company is relatively better".*

Conceivably, in the sampled manufacturing companies the most important issue with regard to working conditions were found to be wage and workload. All employees utterly agreed that the money they earn working as production workers is very little and not enough to be able to lead a decent life in today's economy.

VI. Application of Physical and Psychological pressure

Industrial park firms characterized by their strong punishment upon committing mistakes over workers. Violation of factory rules, if worker arrive late during entry time employers calculate costs for each minute and conduct salary cuts. Additionally, if workers are absent from work the

subsequent penalty is also strong in such a way cause psychological pressure over workers whilst many of the legal breaches committed by the employers go unchecked due poor and/or absence of inspectorates. A good example is workers most often complain about inadequate wage paid by the employers, but they are so strict about late attendance. As it has been stipulated earlier, zones dominated by unskilled female workers mostly drawn from rural areas with no formal training or socialization to industrial environment.

All resident firms were not producing in their full capacity and to comply with due dates of orders they always put the workers under pressure not to make mistake, increase productivity and both physical and psychological pressure mounts during production peak period.

What is wrong with industrial parks working environment?

Labour conditions in labour intensive industrial parks of Ethiopia characterized by demanding tasks at low pay, monotonous tasks, low employment security, hazardous and unhealthy working environment are major amongst the many burdensome conditions. Inappropriate working conditions in industrial parks maybe mainly traced to poor inspection by the authorities and also exacerbated by absence of trade unions. As evidenced in preceding analysis of this thesis, industrial parks in case points, experienced dissatisfaction from internal and external stakeholders about its very purpose of existence to realize its shared vision. One of the internal dissatisfactions is the underpaid domestic workers by tenants in industrial parks, which is the lowest salary paid of offshore strategies adopted by foreign international enterprises.

A report produced by CNN (May 2019), depicted as poor institutional framework failed to shield worker in garment and textile dominated firms of Ethiopia's industrial parks from a set of challenges including poor working conditions and malpractices affected workers' rights. The report revealed as ".... but a report by the New York Stern Center for Business and Human Rights shows despite rapid growth in garment market Ethiopian garment and textile factory workers are on average, the lowest paid in the world. The country does not have a private sector minimum wage, and workers are paid $26 per month — far from enough to cover basic needs like housing, shelter and food. Their counterparts in South Africa earn a higher wage: $244 per month; and those in Kenya, $207." Despite the increasing number of industrial parks in the country, labour turnover is becoming fundamental problem due to inflation and lack of sufficient remuneration. During the first generation of its development IPs in Ethiopia intended to create job opportunity in the country.

Based on six months performance evaluation report by Ethiopian industrial parks development corporation, high labour attrition is of critical problem faced by the industrial parks. For instance, there is condition in which 98% of the recruited workers left immediately. The result from performance audit made by Ethiopian federal government audit bureau also indicates as workers turnover is dramatically increasing over time since the parks became operational due to inflation in the economy and lack of sufficient remuneration. Major dynamics observed in the wider economy and potentially affecting overall productivity of industrial parks is house rent inflation. According to the CEO, based on report developed by federal audit bureau on industrial parks performance audit selecting role model IP that is Hawassa industrial park. The report portrayed that house rent which was around 300ETB increased to 1100ETB after the park became operational [17].

[17]Interview with Lalise Name, Chief executive officer (CEO) of Ethiopian Industrial Parks Development Corpo-

This entails as the situation outside the parks showing dramatic change whilst working conditions and remuneration following similar pattern of lowering wages. The subsequent crisis is deviating the operation from government's main target in IPs which is boosting the manufacturing of export-oriented products and generating foreign currency provided that attrition rate transcends workers issues. **First**, since the parks are a kind of traditional export processing zones it adversely affects the export earnings due to low workers and resident enterprises productivity as well. **Second**, high exit and entry and corresponding training period deter enterprise's production at full capacity because the nature of business model followed by the industrial park tenants is more of incremental. No single company especially in all the industrial parks including private one producing in full capacity and to that level labour related issue is worth mentioning. This led to hampering grand intention of the IPs from achieving its main goal of achieving employment creation through labour intensive manufacturing which is basic component of local development. **Third**, the possibility for industrial parks to contribute in human capital formation remain very low. As in the case of other developing countries the potential benefits for the host countries are technology transfer in human capital formation and technology absorption in workers given local industries technology absorptive capacity is very low. However, real experience in the industrial parks of the country shows as industrial park workers are replaceable. Which implies if one goes out workers in the reserve or from labour catchment areas replaced which is real example for commodification of human labour.

Though, Ethiopian government's promise of cheap labour to attract foreign direct investment to the industrial parks is found to be successful (UNIDO, 2018), gradually it is found to be at the expense of employees' welfare which has resulted in labour strike, low productivity, high labor turnover provided the salary paid is unable to ensure even subsistence life. From the implementation against plan just described, though it is early to conclude stating the program is doomed to fail, the nature and characteristics is similar with cases in developing countries in general and Sub-Saharan African Countries in particular. With increasing labour turnover, it is difficult to consider IPs a powerhouse for absorptive of high unemployment as envisioned in the national development plan. Interview with enterprises in the industrial parks also showed that employers doesn't pay due attention why workers are leaving rather targeted how to replace with new entrants.

In the extensive interview with the production workers promotion to the next rank of production line or commensurate job with training obtained seldom happen. Workers less likely experience vertical labour mobility due to short life span of time workers stay on job before they leave the company. While the core value of industrial park development in Ethiopia is to serve as a pressure valve for absorbing high unemployment rate by way of creating employment opportunity for local community by way of which knowledge transfer can be achieved the current operation is yielding job which are at low end for the local community. With effective and sound strategic intervention, industrial parks established can however contribute immensely for human capital formation for local economy and this demands specialized training for knowledge transfer and skill development.

According to Ethiopia's labour laws proclamation, the same labour laws outside the park can work inside and it allows labour union formation and can be registered in the industrial park. However, this found challenging in practice, the finding showed that attempts to organize union discouraged by resident firms as well as by designated institution govern industrial parks (government). Though the right to get unionized allowed in the labour laws proclamation there is a perceived view consid-

ration, cited in Ethiopian Herald, January 24, 2019

ering labour union as resources to strikes among regulatory bodies. Beyond this, rights of workers subjected to seldom visits by regulatory bodies to resolve conflicts pertaining to employment relations i.e., Ethiopian investment commission due to the fact that practice of labour rights operate under restrictive measures by the resident firms. There are reports of quite time-consuming strikes in achieving resolutions, undermines industrial peace and productivity of industrial parks.

Apparently, the workers in the industrial parks complain remuneration or daily wage for the industry park workers is by far less than other sectors. Whilst with the booming of other sectors including construction sector daily wage exceedingly greater than manufacturing and service sector as well. On the other side, considering global competitive environment of manufacturing sector particularly in garment and textile, it is firmly difficult for this sector to install same wage as construction and service sectors. This will remain part of major challenge for the industrial parks due to high labour turnover.

Though, industrial zones in the country are currently suffering from high labour turnover, there exists no interventions or possible measures taken at different levels including enterprise, government and by the workers to curb the problem. The organizational structure of IPs and their negative social repercussions contributing mainly for such unprecedented number of labour outflows from the parks. As per Industrial parks proclamation number 886/2015, Ministry of labour and social affairs is organization responsible for labour issues. Nevertheless, this is not uniformly under implementation in the zones. For instance, there exists representative of Bureau of Labour and Social Affairs (BoLSA) at BLIP, KIP and EIZ whereas labour unit department of Ethiopian Investment Commission (EIC) is in charge of this same role out of the organization's scope. BoLSA is structure under the ministry but lower level in terms of power since it is at municipality level. When it comes to HIP, the office is not even represented as part of one-stop service rather investment commission established labour unit department which mandated to fix labour demand, through various labour harvesting/grading centers (around 10) in SNNPs region. Somewhere the issue directly remained for the institution directly responsible for the case in the outside industrial parks' environment too whilst in some parks it is ambiguous and park developer and operator (IPDC) is even not interested to represent the office.

It must be well noted that industrial parks of the country openly disregard means to create descent jobs in the industry parks, and this evidenced in poor enforcement of labour laws though the zones have the capacity to build human capital. The mandated administrative organ simply putting aside the labour laws which denoted even by the government as 'cheap labour' and they have not acted according to the legal frameworks since it serves as a mechanism to attract investors to the parks. Additionally, there exists presumption bringing the labour laws to the forefront will end up losing the foreign resident enterprises. While flexible institutional setup and easing some of the constraints in the labour laws has to be encouraged till the industry parks reach meaningful operational heights extent to which such flexibility practiced should be operationalized by the government/regulatory organs.

To build strong synergy between local development strategy and human capital formation contribution of industrial parks, social dialogue has to be strengthened through 'tripartite modality' in which representatives of MoLSA (government), employers, and workers involved in social dialogue to create platform in which different actors can organize their collective voice on wage, labour laws, employment relationships to create a comprehensive system that involves actors in planning and implementation of policy frameworks. Sound implementation of IPD policy in Ethiopia warranty

strong collaboration between government, private sectors and workers association/confederation of industry workers in the country. Successful arrangement in this regard will have a lot to contribute for local economic development.

Despite the liberal context in which industrial parks operate, where there is no or shallow regulation avenue for the tripartite modality to earn contribution from different actors so that way to create decent job will be created. However, the current operation platform is far from expected standard. From the various represented administrative tiers of 'OSS'- one stop service in most of the zones established and already operational, the role of 'labour unit department' is very poor in comparative perspective. This basically attributed to technical gaps in the strategic framework of industrial park development. The same labour laws proclamation protecting workers' right outside the industrial parks apply to the zones, but labour laws inspection suspended in most cases or otherwise no serious legal intervention up on discrimination or any unjustified dismissal which is most common across the industrial parks. Such inconsistency of labour laws proclamation with international labour standards made the industrial parks ineffective in terms of comprehensive performance including human capital development formation. So, the question is whether or not the same labour laws proclamation applies inside the zones as in entire country, rather how applicable the legislation is in practice and subsequent effects. For one thing the role of local or regional government is not clearly delineated well in the proclamation though representation in the zones is made from local/very smallest division of administrative structure. With the current performance evaluation, the role of both federal and regional governments in the delivery required legal and social protection for the workers is less apparent compared to other services/functions of OSS.

6.5 The Interface between zone and society

6.5.1 Land Acquisition and subsequent social problems

Mega projects such as industrial park development program invariably resulted in land acquisition followed by displacement of farmers from their land and main livelihood sources. In addition to poor working conditions, even though industrial park policy of the country has a vision to implement an eco-friendly industrial park from the outset, external stakeholders, especially, the local community evicted from their farmland for the development of the industrial park has been negatively affected. Industrial park development in Ethiopia caused a massive social problem associated to development induced displacement and the finding from current study indicated that based on the four cases selected to scrutinize this study, more than 2,000 farmers evicted from their main livelihood. In the area where bole-lemi industrial park (I & II) developed more than 346 households and exceedingly very huge number of households relocated for the development of Hawassa IP given it's the largest and first of its kind in Africa and this scenario holds similar in the case of other economic zones as well.

Bole-Lemi IP Data on Households by Phase of Resettlement and Sex of Head of Households

	Phase			
Sex	Lemi I	Lemi II	Total	Percent
Female	22	54	76	22.0
Male	133	137	270	78.0
Both Sexes	155	191	346	100.0
Percent	44.8%	55.2%	100.0	28.9

Displaced Households by Marital Status for the development of Bole-Lemi IP

Marital Status	Female	Male	Both Sexes	Percent
Divorced	7	14	21	6.1
Married	34	222	256	74.6
Single	3	26	29	8.5
Widowed	31	6	37	10.8
All	**75**	**268**	**343**	**100.0**

Figure 21: Socio-demographic characteristics of displaced households for development of BLIP
Source: Computed based on data from BLIP (secondary)

This development induced displacement left large number of farmers in very impoverished condition and sparked anger among local farmers due to poor rehabilitation and/or absence of compensation. Looking deep inside the demographic characteristics of the relocates, over 74.6% of them were married and head of households.

The sustainability of the livelihood of the farmers has been disrupted, alienated them from their main livelihood sources and the social fabric of the local community to sustain their life through shared values (culture) was disconnected as a result of this development induced displacement program. This situation worsened by lack of additional skills and other livelihood strategies practiced during pre-relocation period and farming found to be major source of their livelihood. For instance, data on the profile of farmers displaced for the development of Bole-Lemi industrial park revealed that over 50.1% of the relocates were illiterate and 68.3% of them reported as they none for the question whether they have any non-farm skills.

Level of Education and Sex of household heads

Level of Education	Female	Male	Both Sexes	Percent
Illiterate	50	121	171	50.1
Read & Write	5	34	39	11.4
Primary	12	54	66	19.4
Secondary	5	43	48	14.1
College & Above	2	15	17	5.0
All	**74**	**267**	**341**	**100.0**

Non-farm Skills

Non-farm Skills	Female	Male	Both Sexes	Percent
None	52	168	220	68.3
Driver		29	29	9.0
Trader	13	12	25	7.8
Student	2	9	11	3.4
Operator		10	10	3.1
Guard		9	9	2.8
Carpenter		8	8	2.4
Mason		6	6	1.8
Electrician		2	2	0.6
Storekeeper	2		2	0.6
Grand Total	71	251	322	100.0

Figure 22: Level education and non-farm skills of the relocates
source: Computed based on the data received from the park

The situation has put them in an economically disadvantaged, socially disconnected, and their livelihood sustenance and survival as a social group is under question mark. Therefore, parks set to operation guided by one of the corporate social responsibility theories (CSR)- the stakeholder theory, it has a social obligation to align its profit objective with social objectives for its stakeholders, which is in line with its eco-friendly vision and employment creation mission. It is also imperative to address institutional gaps and how legal frameworks failed to alleviate problems associated to land acquisition procedure. Investment laws of the country under proclamation No. 455/2005 designates as land acquisition procedure whether it is in rural or urban land category facilitated through joint collaboration of federal and regional states governments. Joint structure between states and federal government held accountable to handle displacement, compensation, and rehabilitation issues. In some countries where experience recognized as best arrangement; displacement issue facilitated by the state, compensation by the federal government and rehabilitation rely on immediate follow-up reserved for the state level government. In the absence of clear structure and well-organized system, inadequate services in all rounds following such development induced development adversely affect well-being of the relocates, their livelihood and surrounding community at large.

Basically, in order to minimize potential adverse effects of the establishments and associated expansionary activities, the rules should clearly stipulate strong association between location decision, industrial park master plan, and potential burden on the livelihoods of the relocates. In all rounds, possible to say locations where industrial parks of the country developed resulted in disposition of productive agricultural lands as part of development induced displacement from mainstreamed livelihoods of the peasants. Two fundamental problems must be explained here as major causal

factors. First, a very vast and controversial issue is urban policy of the country has got serious problem causing people to come outside to the street protesting life of impoverished and marginalized people. Urbanization, mainly urban sprawl takes place in the country by destroying indigenous people in the area i.e., mainly agrarians community. The problem further complicated due to contamination between industrial park development policy and urban master plan policy of the country. Second, such development induced displacement is not well followed by well-coordinated rehabilitation service to stabilize or bring back the displaced people to 'normal' livelihood conditions.

The relocation betraying life of the people in which some of them confronting the expansionary project requested for the second round by the developers given they faced same scenario few years back which was of short memory. "*We are people to whom land is a main stay*" reported Bulti, a farmer in the early 50s established in his argument as his entire family suffering from relocation program and lost his land for the development of industrial park. He lost his farmland years back to real estate construction due to urbanization and then for the industrial park development. He and around 345 households, total of over 2,000 people relocated without reasonable compensation in the name of development project. He argued that:

> *they paid us 1.75 per square meter of land, total amount which was not substantial for short period let alone sustaining life of my family or/and re-organizing livelihoods.* My family is destroyed, and I don't have capacity to provide care because I don't have land to farm. They came to us grouped women and men in different session of meeting and convinced us to leave the land with only cheap compensation.

Degu Gemeda, another 60-year-old farmer in rural village very close small town to the south of Finfinne and way to eastern corridor named Dukem. The farmer said, he would lose his land to the expansionary project of Eastern industrial zone. He said, "our land came from our forefathers and it is the only asset I was hoping to give to my children but now nothing exists". He said, they will be left barehanded if he lost his land to the second phase expansion of the zone. Their case reported to the local and regional land administration office as well. But till the day data collection made they didn't receive any remarkable feedback from government side. He also stated, "there are a number of unfulfilled promises from the government side including schools for the displaced children, health posts, 500 square meters of replacement land, infrastructures including clean drinking water". Finding presented by (Zeng, 2012), corroborates same discourse on resettlement issues. In his assessment of key challenges faced by wide range of economic zones in sub-Saharan African countries, the study revealed that several new zones seem to be haunted by new or similar problems despite new endeavors on increase of their viability. The study revealed that resettlement issue is of the key challenge of several special economic zones, provided that state governments promised to compensate the relocates in response to land acquisition and resettlement. Nevertheless, government were not or only partially fulfilled, which deters the further expansionary/development of economic zones. This challenge is very common among all the farmers extensively interviewed to have their insight on the issue and the farmers bitterly expressed their anger on this issue. The issue is that though a well-managed industrial park yields positive economic growth in the entire economy, it shouldn't be at the expense of livelihoods of already destitute people due to different cases.

There has to be consensus between the entire segment of society on development activities and

co-existing challenges and to minimize cost of development especially negative repercussions. A report developed by UNDP (2015), on understanding African experiences in formulating and implementing plans for emergence growing manufacturing industry showed that land is of critical resource assures life of more than 75% of rural peasants. On the other hand, according to principle of structural transformation "land needs to be shifted from a sector of low productivity to sector of high productivity. Despite productivity difference, the report portrayed that "for the poor farmer, it is a matter of right and livelihood to own the land irrespective of the difference in productivity. A win –win situation would have emerged if the transfer of land from farmers to developers led to increase in employment opportunities".

Study conducted in India mainly focusing on SEZs policy of the country established that acquisition of cultivable land left hundreds of thousands of rural household farmers and agricultural laborers solely generate their income for living without their livelihood and this will have a serious negative repercussion on production of agriculture (Sanyal, 2007). In fact, considering destitute life of previously relocated farmers for development activities including big projects like industrial parks development in Ethiopia, compensation for land has shown slight progress. However, due to massive urbanization mainly, urban sprawl around big cities to nearby rural villages, component of compensation particularly replacement land for the displaced, which is up to 500sqm of land seldomly happen given land is becoming very scarce resource and at epicenter of political agenda these days in and around Finfinne/Addis Ababa. In Ethiopia land is completely under absolute jurisdiction of government, one can't sell or exchange his/her own land but additional assets on it.

Reviewed literature on methods for resettlement and rehabilitation stated that land for land can be suitable mode of resettlement, provided conception for development of new land taken into consideration. Meanwhile, land usage and pressure on land due to industrialization program and rapid urbanization, affecting livelihood conditions of the farmers resided at the outskirt of major towns and regional cities. Interview made with selected farmers showed as subsequent problems following displacement are enormous.

> *"displacement is full of tragic event remain with you for life long. relocated households live impoverished life given we lost huge amount of income generating resources from our farmland. This subsequently exposed us to negative social repercussion affected entire household members mainly family heads enforced to look for as a daily labourer as part of new employment". (Farmer lost land to BLIP)*

This condition is more challenging for the older generation since they have been through homogeneous livelihood strategy for long and never tried non-farm skills to earn resource for living. In summary, there has to integration between economic zones and local conditions to develop sense of belongingness among the surrounding community to enhance sustainability of such projects. Additionally, as in the case of China, plan to make industrial parks or economic zones city scale and complex business center in developing countries demands comprehensive plan balanced all rounds scenarios. However, to handle problem of displacement and gaps in the rehabilitation service for the relocates substantial revision has to lead to win-win approach.

Any local development strategies in the pipeline with implementation of IZD?

Main efforts in place by the government of Ethiopia to achieve local development targets of industrial zone development includes; commitment in fostering public-private linkages, facilitating labour intensive cluster formation methodologies in the IPs (with the intention to realize unemployment absorptive capacity of manufacturing sector) and facilitating employment creation, and support for SMEs. The combination of this major strategies potentially leads to fruitful and inclusive local development. However, institutional set up of IPD in Ethiopia is impaired of such critical elements except progressive results in employment creation which is still facing critical problem of uncontrollable attrition rate.

The institutional setup of IPD particularly industrial park development proclamation provide generous environment for foreign companies, whilst there exists no special incentive outlined for domestic developer. The institutional framework identifies set of incentives for park developers, operators and park enterprises in which it has also been anticipated basic rights in such industrial model of production safeguarded evenly under similar platform. This makes difficult the grand intention of improving competitiveness of local firms through industrial park development program. Unlike success experiences of other countries in east Asia including South Korea, Singapore, China and very few African countries like Mauritius; IPD in Ethiopia as a road towards industrialization and structural transformation doesn't considered combination of potential building blocks of local development. As a late industrial park development joiner, Ethiopia is trying to reap benefits which is also core strategy of local development as indicated in the above paragraph. The problem is that the institutional setup at meso level is not crafted into very measurable, achievable, innovative strategy and also poorly followed by regulatory institutions. Low experience in the area by the workers and at the national level, absence of institutional arrangement due to low industrialization in the country are of the major reasons.

According to Farole (2011), in comparative lens, economic zones of Africa impaired to yield meaningful outputs due to absence of zone management and operational experiences amongst designated institution as a zone developer and tiers of government agencies. Additionally, the country is focusing on expansion of IPs mainly focusing on labour intensive methodologies and which also display on the tail of the coin employment creation. Ethiopia's industrialization agenda is currently tightened in aggressive design, construction and operation of industrial parks mainly commended since very short period of time. The policy deliberately chosen to promote labour intensive sectors including textile and apparel with the presumption these clusters provide job opportunities for youth. Apparently, jobs created and working conditions is not to the closest platform of descent job environment. In normal condition of its implementation, special economic zones allow mobility of both skilled and unskilled labour manpower.

Local economic development is a major strategy to achieve local development and it warranty combination of many other elements indicated somewhere in the above paragraph for better achievement than piecemeal implementation. This also shows as innovative methodologies needed to administer the very controversial but also important industrial parks development issues. The thing is that strength of regulation not only delimited to the way it has been designed, rather implementation capacity of regulatory organs or policy implementer matters to design innovative regulatory framework and convert the planned strategy into something achievable is core systematic position. As argued by Farole (2011), African special economic zones built on good proclamation

but poor in implementation particularly, in converting the legal frames into regulations. Thus, why most of them failed to record success factors.

To sum up the idea, industrial parks contributed in terms of direct employment generation and alleviating poverty. However, the operation falls short of meeting the desired number of jobs and this makes their total share of employment lower than expected standard. The other critical issue is that, the working conditions in the industrial parks mostly criticized for it practically lacks basic labour rights and presents a number of challenging industrial relations. However, major limitation of this study is that it lacks detail synthesis on industrial parks labour conditions and same economic activities in the outside environment in comparative perspective without which it is difficult to make generalization. There is no practical evidence of knowledge diffusion and skill transfer effect of the industrial parks for it is dominated by labour intensive simple assembly processing production activities, characterized by manufacturing and absence of R&D programs.

7 Conclusion

This study has been structured under four empirical studies. The first research question addressed in the third chapter of the thesis and it examined whether IP program as a policy innovation deliver the envisaged outcomes in the context of low income country like Ethiopia. This chapter is important because it addressed issues of institutional set-ups and how far organograms of the IP operation matter as a major contextual factor for the successful operation of the program. Chapter four explored comparative analysis of selected operational industrial parks. Empirically this is derived from the second research question with the intention to scrutinize in detail selected case studies focusing on interventions, implementation process, sectorial orientation and how they are evolved to present. Further on this chapter, dynamic benefits or short term outcomes of industrial park operation targeted as major areas of discussions.

The third research question which deals with contextual factors that affects benefits/impacts of industrial park program in ensuring development. This particular research question viewed the targeted objective in the sentence in terms of opportunities and barriers coexisting with the benefits of the program. These issues addressed in Chapter five described well impacts of the different establishments at the scheme level in comparative view (public Vs private schemes). It started with major progressions against broad goals and the analysis extended to contextual factors affects desired impacts or effectiveness of interventions; major obstacles and benefits those zones generated including why long term sustainability issues are far from being translated into desired goals. The findings from the posed research question indicates there are potentially significant employment creation opportunity whilst expectations along foreign exchange earnings and backward linkages remained theoretical. Even evaluated against major objectives of Ethiopia's industrial park development employment growth and its impacts along this has not yet caused a major outcome. In its current formation Ethiopia's IPs adopts nature of traditional export processing zones in which the zones are export oriented and firms are engaged in assembly operations/piecing together of products imported and processing for re-export. Neither total production or sourcing raw materials from domestic market nor sub-contraction of production to the outside zone firms (domestic) attempted and this further hampered association of such initiative with higher degree of knowledge and technology diffusion.

The last research question dealt with major outcomes of industrial park development program along employment relations, working conditions, wage, gender, land expropriations. Detail discussion on these identified theme discussed in chapter six-the final chapter of empirical results corresponded to the final research question. As it has been described, it examined the interface between industrial parks and society. Moreover, this chapter sought to describe whether the industrial parks operation impacts local skills development and social upgrading of workers. More specifically, it examined the social impact of employment, wages and working conditions effect of industrial parks and issue of land acquisition and subsequent social problems and conflicts (as a proxy to measure interface between industrial parks and society). To put further ideas on this, problems pertaining to working conditions discussed in terms of mobility opportunities, transformations, legal infringements including unionization problems, consciousness about health and work place rights. Ethiopia being one of the least developed countries of the world, has a large, young and educated labour force. The findings from the current study depicted that those factories in the industrial parks are dominated by female workers, and most of them had at least primary

education and were literate. Many of the workers reported, as this (their job in the industrial parks) was their first formal job. Across the industrial parks sampled for the current study, wages were found uniformly low, averaging around $2 per day, but after allowing for the cost of local accommodation this could fall to little over $1 per day. At these pay levels, the cost of industrial labor in Ethiopia was only about 25 percent that of China. Poor capacity to present comparative advantage other than cheap labour and the desperate need for employment to absorb surplus labor from the countryside helped keep wages low.

Industrial parks are increasingly proliferating across the world as a result of its increasing importance and have gained traction as a development policy to induce industrialization in low- and middle-income countries. Following strong concern of the government of Ethiopia to use IPD as strategy to achieve national development agendas, the country is becoming a veritable hive of industrial park development and operation. On the positive side few jobs created and employment generation has shown considerable increase though at slow rate, generated some foreign exchanges and significant investment inflow achieved though not comparable with the offset for the establishment which is by far greater. As a new concept, the initiative presents a number of context specific challenges. To put further on this issue, beyond park specific factors, strong territorial competition on implementation of industrial parks is also of major factors and this is specially the case in countries where FDI is low which further intensified pressure on the instrument and made it center of competition with neighboring countries in offering better incentives to foreign investors. For instance, currently over twenty five African countries are in strong territorial competition due the fact that they are home to different types of economic zones. It also associated with acquisition of land, exploitation of labour and abuse of human rights. Promotion of industrial park development policy to attract foreign direct investment resulted in displacement of many people for the investment following dispossession of their land rights. Though the initiative make sense in terms of economic importance, they fall short of generating envisioned local development due to different factors.

Ethiopia's IPs characterized by larger representation of textile and apparel sector and the production activities were very much focused on simple assembly operations. This sector composition indicates as the production relied on low skill labour with little compliance of labour standards. Government of Ethiopia has taken industrial park development as a policy tool to attract investment in the manufacturing sector and to improve competitiveness of the sector compared to its current low contribution to national GDP. Industrial park development policy as a program designed to trigger industrialization form the center-piece of government's policy direction with the ambition to become largest manufacturing hub of the continent. Ethiopia's industrial park promised to offer multifaceted social, economic and technological benefits. It is promised to ensure country's transformation from agriculture based economy to industrialization particularly to raise low share of manufacturing sector in GDP from around (5.5% in 2017/18) which is lower than Sub-Saharan average which is about (10% of GDP during same fiscal year). Ethiopia's industrial park program has been operational since over the last nine (9) years with commencement of country's first large scale private industrial park- Eastern Industrial Zone (EIZ) followed by Bole-Lemmi (I) the first public owned industrial park which is five years old. Following these two pioneer industrial parks in case points the country is now home to over 22 industrial parks in different stages of development ranging from planning to operation. In terms of sectorial distribution, large share of manufactured products in plethora of industrial parks set to operation goes to garment and textile

which accounts for about 60% as of November, 2018. About 9% resident firms are involved in metal and non-metallic sector while around 6% of tenants are in leather and products sector. Though the parks set to operation failed to form meaningful linkage with the local economy, the trend in direct employment generation and export contribution show positive trajectory. Analysis in the preceding sections showed that industrial parks have shown positive increase in export earnings which is about $72 mn (2017/18 FY) and $103 mn (2018/19 FY).

Compared to private industrial parks public owned parks set to operation have shown positive trajectory. Taking (FY 2017/18) in case point Bole Lemi industrial park only, generated $32 mn (44%) of total exports by the industrial parks followed by Hawassa industrial park which accounted for about $20mn and Eastern industry zone ($14 mn). Provided that HIP is one the largest industry park in the country, its export share having increased and now it is the leading public owned industry park in terms of both direct employment generation and export contribution. Moving little beyond period of wide range fieldwork period which was in November, 2018 as of March, 2019 jobs created by the operational industrial parks in case point of this thesis moved up to over 60,000 which is (42%) increment compared to last fiscal year. Hawassa industrial park is the leading in terms of jobs created (24,000) followed by Bole lemmi (16,000), Eastern industry zone (15,000) and Kombolcha industrial park (2147). The analytic in this regard highlighted as Ethiopia's industrial parks fell short of the target set to be achieved in both export and benefits beyond direct employment generation. Majorly as stipulated in the reviewed literature part, the benefits of operational industrial parks particularly the so called benefits of secondary importance such as skill development in the local work force is less significant due to the fact that distinguished professional/skilled positions across all parks in case points are dominated by expatriate staffs. As stipulated in vast body of literature, international experiences on industrial park performance indicates that private-owned industrial parks are more efficient compared public scheme counterpart. Contrastingly, in the case of Ethiopia though not in the context of "efficiency" measurement public-operated parks have shown relatively a better positive trajectory. This may be due to the fact that divergence of views and controversies pertaining to achieving "same" goals but different profit targets. For the private-developers, the program is perceived as profitable economic activity whilst government look at its strategic importance in terms of achieving nationwide economic growth, employment generation, knowledge diffusion and technology transfer to local business environment.

Apart from what has been theorized Ethiopia's industrial park failed to make meaningful integration with the local economy and going beyond direct employment generation the role importance of the zone in inducing catalytic factor for local development is not convincing. Moreover, the major pitfalls of establishing backward linkages with the local economy in Ethiopian industrial park development program is perplexed and touches park cases, institutional setting, resident enterprises and low implementation experiences of the country as well. Thus, core obstacles of the country's industrial park operation are lack of competitive business environment which support supply-demand relationships and institutional support imperative to achieve knowledge and technology transfer and skill development in the local workforce to ultimately forge local development roles. The IPs of the country missed an integrated and inclusive approach of IP development, so that sustained economic development and transformation outcomes are best achieved all the way through strong integration. The likelihood for the industrial parks to experience technology transfer transcends presence of foreign investors in the industrial parks and demands absorptive capacity of local firms and their representation in the zone as well. Considering type of enterprises

in all the industrial park is simply enclave in all rounds and they are deliberately separated from local economy.

As in the case of other Sub-Saharan African countries (SSA) engagement of resident firms in country's industrial parks delimited their main tasks to simple assembly/processing operations, isolated export oriented production centers given the economic zones tend to adopt more of traditional export processing zones. This makes Ethiopia's industrial park approach discounts of what contemporary industrial park form demands including; integration within domestic context, program impact local business climate, forge sustainable development in host countries. In such modality of operation, the likelihood of skill and technology transfer seldom happen but mostly non-existent. Additionally, indicative of loss of focus in the private industrial parks should be well incorporated in the body of documents designed for supervision and regulatory system in the upcoming private zones in Ethiopia. Technical gaps in the legal frameworks and limitations in institutional setup for every scheme of zone development must be well addressed by government. Though the country managed to crowd in investors from different countries institutional development to ensure comparative advantage of the country is by far below expected standard.

The initiative failed to form integration with local economy as it has been pronounced in the policy framework. Along with enclave model Ethiopia's industrial park program mainly inspired by preferential trade regimes like AGOA and EBA, which makes the initiative myopic and hard to ensure sustainability. This makes the initiative less reliable due to the fact that success factors of industrial park subjected to capacity to invest and capitalize comparative advantage in time as well as in space than fancy policy or mere physical presence of parks. This warranty strategic intervention in order to resolve binding constraints for local manufacturing sectors. This limitation or total absence of meaningful linkage in the country's industrial park development initiative, limited the possibility of local firms to take advantage of working with foreign enterprises through joint ventures (JV) or partnership formation. This is actually due to weak concern given to domestic private sector in the development, management and operation of zones, albeit this highly associated with nature of local manufacturing itself. Additionally, there should be institution work on exhaustively identifying potential links and promote linkages between investors inside and local industry outside IPs. Activities of the agency promote linkages should include development of strategy to ensure linkages, identifying raw materials locally available but still imported from abroad, identify banal goods and services consumed in mass by resident enterprises but not locally available, and support local industries to acquire demanded knowledge, skill and technology to supply resident enterprises or engage in joint production. At this era of mounting global competition, though government cannot impose local content and other burdensome on tenants, it can play active role in upgrading capability of domestic suppliers. There must be competitive incentive package and industrial financing i.e., economic and legal framework that ensure local suppliers that comply with expected standard and quality.

The low efficiency of 'OSS', unconsolidated service, and poor coordination between institutional actors and there must be joint planning, alignment and implementation of activities across and within spheres of engaged stakeholders and continuous investment performance, monitoring & evaluation need to be facilitated to successfully generate benefits from the program. Institutions must render rigorous service in all rounds working on existing gaps, supervise and control, type of investors and/or level of corresponding technology or their embeddedness which semantically mean pledge of integration with local economy. This will drive more the current operation towards

expected standard and ultimately enhance the host country to reap potential benefits of IPD. To conclude, figures and overall analytic pertaining to Ethiopia's industrial parks operation limited roughly to estimated 50% operation capacity, provided that tenants are not producing at full capacity due to different factors as described in the previous chapter.

Results from the study under the final empirical chapter established that in confirmation to the hypothesis of gendered employment Ethiopia's industrial parks are based on larger participation of female compared to male counterpart. Recruitment in the industrial parks is highly feminized. The result from the study indicates the vast majority of the workers are young, unmarried female workers in the age class of 20-29 years. No robust evidence whether the employment created is additional. This selectivity is an indicator of looking for new entrants into the labour, because they are groups assumed to be with less or no family burden. The study also established that despite many negative consequences of industrial park's working conditions on workers its effect on their social relationship with family was less significant. Employment creation and progression along is of major positive impact of the establishments. However, the recruitment is only at low wage for the local workers. The resident firms pay negligible wages than they would pay if located outside the industrial parks. Additionally, provided that major magnet at the core of attracting foreign firms is based on cheap labour than other comparative advantages firms pay significantly lesser wage than amount they pay at their head quarter. For instance, a resident firm in EIZ pay US $150 in Ethiopia and US $1500 in its head quarter in China.

Although there is no evidence that unionization rights have been legally constrained because the country uses the same labour laws for IPs as in the wider economy, it is visibly discouraged in the zones. This implies that theoretically there is no legal restriction on labour and rights but practically showed less impact due to the fact that firms are against unionization and other endowments. These factual evidences on legal infringements, absence of unions and restrictions on unionization indicates as labour law proclamation of the country maintained but there is serious gap associated to its enforcement. Multifaceted problems pertaining to poor working conditions in the industrial parks mainly aggravated by limitations in domestic labour institutions or institutional failures and absence of unionization of workers. The study established that there are significant occupational safety & health problems in the IPs and these problems gradually made its appearances due to absence of safety protective equipment.

Resident firms import skilled workers from abroad and positions demand skilled workers predominated by expatriates. There were few firms employ local workers as personnel and accounts but no Ethiopian national ascend to positions of senior management. The tenant firms not interested to train local workers to senior management positions although this pave way to address communication barrier due to cultural differences and also creates better relationships between management staffs and operation workers. As in the case of most zone developing countries in most emerging economies, IP firms in Ethiopia demonstrate strong preference for female employee and also predominated by less educated young operatives. Inspite of extremely low-pay in the IPs and quite insignificant employment impact of the initiative, working conditions in the zones are far from congenial. The poor working conditions particularly protective safety equipment in the factories has obvious implications for the different types of health problems reported by the local workers. Foreign resident enterprises not adhere labour proclamation frameworks especially regulations pertaining to endowments and this situation worsened by absence of labour union and incapable domestic labour institution.

Non-congenial working conditions, exploitative work environment at low pay resulted in serious challenges in discharging responsibility in terms of financial support for respective family members. Amongst major implications of simple assembly operations nature of industrial park activities in general and the zones in particular is that local workers unlikely develop skills due to repetitive jobs performed based on little simple training with no internal career promotion. It's apparent that positions demand skill predominated by expatriate staffs. Production line activities in apparel and garment factories is highly focused and this implies that it's unlikely to cause experience sharing and forge career development in the local labour force.

In the absence of descent job as a way to experience both horizontal and vertical mobility in such a way that workers acquire new skills, wage earned is another possible mechanism to get released from economic dependency to experience greater control on own lives. The overall employment relationships in the IPs deviated from acceptable practices of creating loyalty amongst employee and this resulted in high labour turnover. Lower levels of educational attainment amongst the workers maybe associated to the fact that factories intend to generate comparative advantage from cheap labour and fix skill and wages to the low end.

Caution must be taken to improve employment practice pattern through enforcing labour regulation framework to encourage loyalty and reduce the high labour turnover as a result of improved wage and poor working conditions. The improvements in the employment practice is a means to foster labour stability in the industrial parks which has also greater implications to increase stability of jobs in the zones. Policy makers should properly consider feasible strategies through which execution of effective coordination of industrial park development program takes place to engender desired local development. In its current appearance, Ethiopia's industrial parks are enclave or isolated from local economy provided that the tenants engaged in simple assembly operation. The government should execute a policy alongside this development initiative in order to well integrate it with local development agenda. Strengthening of institutions render services, provision of consolidated services by major stakeholders, building human capital and improvement of major institutions to make the entire investment climate attractive enough. This entails the low levels of previous industrialization, poor planning, gaps in implementation and low operational experiences are of basic obstacles need to be addressed to meet the gap between implementation and planned activities.

8 Implications for Policy and Practice

The objectives and policy goals of economic zones in general and industrial parks in particular presents major variations across different countries. Despite the fact that the initiative designed based on strong concern of the government to ensure industrial development through strong connection between spatial based intervention and local producers; the success story limited to few zone developers whilst it failed in most emerging economies of the world where large share of zones exists.

Amongst many more goals of industrial park development is to forge local economic development by way of creating connections between local producers and foreign experienced firms (connection between global-local actors). Analysis of contextual factors for poor linkage showed that deviating from its goals the policy failed to represent local producers or locate domestic firms. There must be a program on increasing absorptive capacity of local producers to put them at cost advantage of improving production capability. Further on this, special incentives must be provided for domestic producers to establish their plants in the zones and incentives must be provided for experienced foreign firms engaged in backward-forward linkages in such a way that skill development, knowledge diffusion and technology transfer achieved as a result of the integration between zones and local economy. Effort must be placed to change the current formation of wholly foreign owned firms and failures to embody local content. This is of basic instrument because, positive impact of economic zones operation including technology transfer and other over-spills involve competitive national economy and existence of dynamic local manufacturing. Overall, clear cut vision needed to improve total disconnect between IPs and local economy either through sourcing from domestic market or establish network of production through sub-contraction arrangement to ensure backward linkages. Integration between local and globally competitive firms is important because it forges local and national industrial development as well as it is instrument to combat potential failure or negative consequences of the initiative in the outside environment.

Despite the aggressive expansion of industrial parks in different corners of the country, the initiative hardly considered as successful because of its simple entrepots nature. The result revealed that of the many factors of absence of backward linkages is low level of previous industrialization. This also associated to the fact that preferential policy-based interventions (incentive packages) delimited to resident firms only. In-order to increase comparative advantage of zones for the national economy, application of preferential treatment or all policy-based measures in the zones in sectors of priority designated by the government need to be applied i.e., equal footing policy must be applied in similar sectors of local producers outside IPs. Technology transfer and knowledge diffusion are among many aspects of claimed positive spinoffs of the initiatives and this unlikely happen unless local producers able to benefit from same preferential advantages in the industrial parks so that they would be able to penetrate global production systems which is of major challenges.

Although industrial park development program is a complex business model showing growing popularity throughout the world, it also remained controversial and developers in low income countries like Ethiopia better follow gradualism approach. Inception of new zones or expansionary projects better follow workability of inaugurated one. It is more effective to starting smaller or phased approach and expanding the projects to different spatial areas after confirmed workability based on broader policy goals and envisaged incremental outcomes deviating from expansion simply based on political motive of the government. Government must initiate serious of researches on

progressions of both industry zones and industrial parks evaluating against broad goals of the program in comparative view in order to optimize positive outcomes in either of the two schemes to other zones and expansionary projects as well.

Despite the fact that operation of industrial parks in Ethiopia presented a number of challenges, there are some positive take-offs including dynamic benefits though not yet translated into envisaged level and this includes; attracted foreign firms, some jobs and some foreign exchanges. But the question extent to which the operation translated into catalytic factor for development in terms of generating opportunities for local producers or long-term benefits of the program seems not well utilized. In fact, the program operation is at its nascent stage and difficult to conclude whether the program already failed in its operation. In order to enhance the program forge desired development outcomes, innovative policy interventions demanded, improvement of management strategies in to well-functioning systems of operations to contain the various challenges demanded. With its current formation industrial parks in Ethiopia coupled with weak infrastructure into and outside the zones, low previous level of industrialization and poor governance likely hamper sustainability of the initiative. In this case regulatory organ particularly EIC should be given the power to propose reforms in policy, design regulatory frameworks, develop policy directives through sufficiently decentralized system. This potentially improves responsiveness of government to different factors impedes the IPs from achieving desired goals through its sub-federal government structure and ultimately reap potential benefits from the initiative.

The study also highlights that there were institutional constraints because most services under the umbrella of One-Stop-embeddedness which semantically mean pledge of integration with local economy based on sufficient coordination between different actors. This will drive more the current operation towards expected standard and ultimately enhance the host country to reap potential benefits of IPD.

This study calls for the government action to pay more attention in creating strong collaboration between different tiers of stakeholders for better human development outcome in the discourse of the implementation. Process of strong synergy between local development strategy and human capital formation contribution of industrial parks, social dialogue has to be strengthened through 'tripartite modality' in which representatives of MoLSA (government), employers, and workers involved in the social dialogue to create platform in which different actors can organize their collective voice on wage, labour laws, employment relationships to create a comprehensive system that involves actors in planning and implementation of policy frameworks. Sound implementation of IPD policy in Ethiopia warranty strong collaboration between government, private sectors and workers association/confederation of industry workers in the country. Successful arrangement will have a lot to contribute for the local economic development.

One of the major problem industrial park program of the country fraught with is, absence of clarity about the objectives of the policy implementation. There are set of objectives in the policy, but simply dead-end track without anything leading into it in terms of strategic approach for implementation. This problem and many more illustrated associated to lack of capable institutional actors/institutional needs. For instance, there is no strategic direction nor independent institution work on promoting linkage between firms in the industrial parks and domestic producers. This study calls for fulfillment of institutional needs because it is administrative in nature with presentation of strong political commitment of the government as equal as resources economic resources demand for integration.

This study established that poor working conditions and legal infringements attributed to poor institutional setup particularly, low enforcement capacity in domestic labour institutions. The problem resulted from complex set of institutional failures and warranty strong policy based intervention. Labour law proclamation of the country needs revision because, it is outdated and not well cornered considering complex labour relations in modern industrial setup, dynamic economic realities and complex nature of the business model. Insufficient coordination across state and federal level government structures in the management of disputes along this and others deserve attention. It is imperative to mention importance of clear policy implementation guideline in compliance with ILO conventions to manage problems associated to poor working conditions in the zones.

The current study established that in the discourse of implementation; IPs invariably resulted in land acquisition which caused displacement of farmers, livelihood of many farmers disrupted and alienated from main livelihoods. The policy doesn't seem well equipped in managing disputes resulted from various relocation and clear policy as well as institutional response needed to handle the problems.

As for implication for future research, a more comprehensive research in comparative perspective examining working conditions, employment relations and wages in the industrial parks with sectors outside the zones demanded to reach about conclusion on the phenomenon in the industrial parks.

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A Informed Consent Form

My name is Gamachu Fufa, a PhD student at the University of Milan, Italy, Economic Sociology and Labour Studies Programme under Network for the Advancement of Social and Political Studies (NASP). I am planning to conduct a study on the 'Cluster based industrial parks and how it affects local development' as a partial fulfillment of the requirements of PhD in ESLS. The purpose of the study is to understand the challenges, issues and benefits of industrial park development and potential success factors and pitfalls related to application of such policy instrument. For the successful accomplishment of the study, the cooperation of industrial park residents/tenant, enterprise managers, officers of industrial park development corporation, park managers, employees, all other stakeholders is worthy and I would like to ask for your permission to participate voluntarily in this study. Your participation in this study will help me to know the responses for the questions enlisted in the study under scrutiny.

The procedures to be used in this research are in-depth interviews and survey questioner. The time and conditions required to participate in this project will be scheduled at a time and place convenient for participants. In the course of data collection, any possible risks or discomfort to the research participant will be minimal. The researcher will clarify any unclear question(s) during the interview. If needed, the researcher will provide you a telephone number or his full address. During the whole process of the study and after that, I would like to assure you that your identity will not be disclosed to anyone. In this case the information you provide will have your name removed and only pseudonym or other codes will identify the participants during analyses and any written reports of the research. This is to protect your privacy and confidentiality of the information you provide. All tapes, transcripts, and written memos and field notes after completion of the study and will be locked and kept in safe place for a limited periods of time and be destroyed after the study is completed and approved by the University.

During this process, I would like to assure you that your identity will not be disclosed to anyone. This is to protect your privacy and confidentiality of the information you provide. I will use tape recorders to correctly record the conversations we do, and the recordings will be locked in a safe place and will not be exposed to anyone. By participating in this study, you will contribute to the success of my study. You will also be contributing to the advancement in the field of industrial park development trajectories affect it might have, if any on local production and development. As there are very few researches done in this area and the study results of this research will policy makers in generating inclusive benefit from such policy. Apart from the time you spend with me, I do not see any risk that you will under go by participating in this study.

I grant you for any data collected are to be used in the process of completing a PhD in Economic Sociology and Labour Studies and participating in this study will only depend on your decision. You are free to answer questions only if you want to do so. You may not answer questions if you feel uncomfortable. You can ask questions at any time during the filling the questioner, interview and in case you do not understand the questions or in case you feel tired and you want to continue later, that will be your choice. You have all the right to ask and get clarification at any time. Finally, I would like you to confirm your agreement to be part of the project by signing this form show your agreement to participate in this research under the provided conditions.

Name of participant (pseudonym) _____

Date_____

B Partnership with CIFA, Italia

In this project collaboration has been made with CIFA Italia, a Non-governmental Organization engaged in development cooperation activities in Ethiopia. Therefore, the current study is in collaboration with CIFA under a project entitled SINCE project which is on the onset of kick-off for intervention in Northern part of Ethiopia. The project targeted in stemming Irregular Migration in Northern and Central Ethiopia (SINCE)' under the lead applicant of EDUKANS foundation. The overall objective of the project is reduced irregular migration by improving the living conditions of the most vulnerable population, including potential migrants, returnees with specific focus on youth and women through improved capacity of industrial clusters in construction, metal, textile & garment to create additional (decent) job opportunities. Strengthening of clusters of companies in metal, construction and textile/garment sectors through training and facilitation of horizontal and vertical market linkages for increased employment and support them with materials.

The project targeted two main reinforcing each other objectives of which improving capacity of industrial clusters of companies of textile/garment, metal and construction sectors to create additional decent jobs and decent working conditions. As for the details about the project, the 24 months' project is called "Linking and up-scaling for employment", in the framework of the SINCE Programme – Stemming Irregular Migration in Northern and Central Ethiopia, co-funded by the European Union - Trust Fund for Africa, contracting authority Embassy of Italy in Addis Abeba. The project implemented by a consortium of local and international NGOs, lead by Edukans Foundation, aims to reduce irregular migration from Ethiopia. The two specific objectives of the project are:

1. Improve access of target groups to quality TVET training and decent employment opportunities in Amhara Region through the promotion of partnership between private sector, public institutes, TVETs.
2. Improve capacity of industrial clusters of companies in the textile/garment, metal and construction sectors to create additional decent job opportunities.

Accordingly, by way of conducting empirical investigation aiming at a deep analysis of the local economic development of South Wollo, value chains, specific raw materials available, working conditions, match between jobs demand and supply. Overall, to address all these issues it is imperative to scrutiny the progress, emerging challenges and future directions of industrial parks or special economy zone in the country as part of the largest research project mentioned above to identify the level of its clusterization effect. Targeting industrial parks is a technical leverage for the project implementation since it creates synergies with private sectors and contribute for the improvement of public employment service through creation of additional descent jobs.

C Interview Guidelines

Do Cluster Based Industrial Park Catalyse Developmental Spillovers? Evidences from Ethiopia's Experience Interview guidelines

General questions of interview

1. Respondent name _____
2. Respondent job title _____
3. Name of the industrial park _____
4. Name of the organization/enterprise _____
5. Organization main activity _____
6. Cluster or sector the enterprises' production _____
7. Total number of employees _____
8. Enterprise exist since (Year) _____
9. Enterprise is active in the IP/SEZ since (Year) _____

- Questions related to overall development of IPD in Ethiopia [macro level outcome] .... For park developers —-mainly for IPDC and private developers

What is your key motive for the establishment of industrial park?

Why industrial parks developed and why not individual industries?

Based on existing real performances in the industrial parks, is the value of such zones to the country clear in both long and short time operations?

Which are the main top priority industries in the industrial parks [in both public and private parks]? Why is that?

- The plan vs practice in the implementation; issues, ...

What are the parameter to define and measure good performing industrial parks/SEZs in the country?

Is the implementation of IPD programme effective when viewed against their core objectives?

If Yes, which is the level of outcomes on core selected areas including fostering industrial clusters, direct effects on FDI, capital formation and other economic outcomes, absorptive capacity of large number of unemployment (development goals) !!

Any signals portraying embeddedness of foreign firms in the local model of production?

What is the fundamental goal of FDI?

How do you evaluate the effect of FDI on productivity, competitiveness and spillovers?

Any reform in the economy due to clustering enterprises in the industrial parks?

Which is the involvement area of the country in terms of provisions? any provisions beyond cheap labour and basic low-grade inputs of materials?

How do you view technology gap between domestic firms and foreign companies?

Considering the technology gap between domestic firms and foreign companies, does it impede tech spillover effects for Ethiopian industry?

In countries like China, SEZ model was implemented under specific political and economic context, and the state were able 'direct' development. How do you see this situation in the context of Ethiopia across both private and public owned zones?

To what extent SEZs and IPDs in Ethiopia are different from replication of previous failures in other African countries? What lessons learned?

What are the requirements for the establishment of different zones in d/t geographies?

Why expansionary projects necessitated before checking workability of some projects?

- Strategic readiness to reap more benefits from the zones

Is there institutional arrangement for knowledge transfer between local economy and industry zones from the very inception of the partnership?

Is there institutional arrangement and planned activities on how technology/knowledge can be transferred?

If 'Yes' what are the target that can be measurable, monitored and achievable?

To what extent FDI exploited as a vehicle for formation of human capital formation? /how far important they are in transferring skills to improve local labor productivity?

What are the mechanisms in place by government to ensure such objectives?

- **Embeddedness of the SEZ in local production**

Are foreign lead manufacturers attracted by the EIDSP supporting local firms & protecting local economy/LD?

If 'YES' in which areas and 'how'? If 'not' why failed to do so?

Any foreign direct investment linkage with domestic markets or local enterprises?

To what extent value chain linkage created to embed the local production with foreign advanced firms located in the industrial parks?

What are the challenges in creating value chain linkages? Which sectors or clusters recorded better achievements in attaining the objective the objectives anticipated in the policy?

Any linkage between domestic and international enterprises within the zones?

How many local SMEs located in the parks? If exists, are they taking advantage of working with larger firms in the park through partnership?

How far significant is the number/the representation? If number is small, why is that?

Backward-forward linkages with the local economy?

What does it involve achieving such integration?

Absorptive capacity of local economy or domestic production to experience spillovers?

Any best cases (clusters/sectors/manufacturing types) in which such integration or either of them observed?

Which is the level of practices in EIPD when viewed against the theory of IPs?

Is there any connection b/n such issues and industrial policy of the country?

Any missing elements or attention deficit for integration?

Are companies selected and located in the industrial parks are causally convincing to achieve backward and forward linkages?

If 'no' why? If 'yes' which is the situation?

Any identified parks which are performing well to realize countries journey towards industrialization? If 'Yes' in what areas or ways?

Is there any substantial performance variation across parks in achieving the objectives and why?

How IPD in the country brings about social benefit? What are they?

What are the provision of the IPs that contributed for the development of the country? [for both private and public one] — if the practice is less than expectation which are the reasons?

Are there provisions of IPs that contributed for the development of light manufacturing industries as anticipated in the IPD program? [mainly private parks & public one] —-if the practice is less than expectation which are the reasons?

Are the parks real instrument of government industrial policy?

- **Regulatory or institutional settings in which IPDs perform their production**

Which is the level of inspection in IPs by government? [for both privately owned and public one Is there any tangible state involvement in the private zones? [less or dense intervention]

To what extent parks' activities are aligned with the country's needs in terms of industrial development? —how is this linked with the level of state intervention?

Which is the level of influence by government in choice of investing firms and their sectoral orientation? ——less or dense?

Is there any influence on industrial policy objectives due to profit targets by private developers?

To what extent profit targets of private developers aligned to industrial policy and sectoral orientation of the country's industrial development goals?

What are the specific rights set for granted for the operators in utilizing different assets?

1. The right in accessing resources out of incentive packages under IC?
2. The right to access loan by the foreign enterprises?
3. Which are the circumstances in which they can deal with land related issues?

What are the risks in involving private industrial developers?

Are there any speculations that needs to avoided in the process of implementing and managing IPD program in Ethiopia?

1. Do park developers/investors comply the principles specified in policy or other laws?
2. What do you think has to be avoided b/c it's misbehaving by resident enterprises? •
3. what has to be avoided in resource management?
4. What has to avoided in land administration? •
5. What has to be avoided in importing technology materials?
6. What has to be avoided in labour conditions and employment relations?

Any misbehaving by the investors (if any?) the subsequent consequences and measures?

What are the risk of involving operators under private industrial parks?

Are there any speculations pertaining to irrational behavior in tax, technology transfer, human capital development that impedes efficiency of parks or industrial zones?

Is there any innovative institutional framework in place to increase efficiency of the parks and curb challenging scenarios or constraints?

Any fruitful industrial linkages achieved so far and contributed for spillovers through domestic participation?

Is there any innovative strategy or packages of incentives to involve domestic firms in the zones or parks? ———if there are, which are outputs in this regard?

General institutional practices related questions. . . . . IPDC

- What are the mandates and aim of the IPD?
- How do you see IPDC's role as a developer, regulator and operator?
- Should it be compromised following same pattern?
- Is there board for which the corporation is accountable for?
- Who are the members of the board?
- How do you evaluate inclusivity of the board?
- Is IPDC fully in the position of authority to coordinate across IPs?
- Is the structural formation of IPD administration enabling IPDC to effectively coordinate?
- Does the system leverage the corporation full budgetary autonomy?
- Is there sufficient, predictable independent budget that enable to plan and carryout activities of the corporation?

- Is there any operational framework for measuring and monitoring (staff and program) performance?

Administrative organization and approval process

- Is that public, public-private or private sector industrial parks that faces difficulty in comparative lenses?
- Is that public or private zones fully functional as per the goal intended?
- Which is the structure of administration or tiers of government participate in IPD? Who is responsible for what?
- Which is the role of participants and are the roles played by the participants supported by clear guideline and well delineated in the instruction? ..... For labour, local dev't, main production, domestic enterprises etc?
- Is the current regulatory framework of governance arrangements of IPDs supported by clear guideline? -what it lacks, and which are the strengths? What are the subsequent consequences of the limitations?
- Who is responsible for the approval of the proposal?
- Is the responsible structure only taking the prime responsibility of zone related issues or other related issues are also there?
- What are the conditions supposed to be fulfilled for the approval and start a business?
- What are the main post and pre-entry services provided by the administrative structure?
- Is there any difference of in the structure of governance between the two or the three models of establishments?
- How long it takes for the approval of the project to start business in the zone and outside the zones?
- Is the coordination between different government agencies in the implementation of IPDs adequate in terms of participation? [both parties (for operators)!!!]
- Is the coordination in between d/t agencies of the government the one leading to effective and successful operation of IPDs?

Labor right related issues

- Is there any difference between laws governing IPs & the one in the rest of the country?
- Any special labor code developed to inspect labor issues in IPs?
- If exists whom it favours or give more flexibility?
- Is there operational labor inspection policy and how do you see its practices?
- Is there any restriction in creation and action of labor union in the parks?

- Feminized labor segmentation? If yes-Why females preferred most than their counter male class?

What are the main constraints for creating better working conditions?

- Is there regulation more in favour of enterprises or the workers?
- Does exists regulations that define context of such operations?
- Is trade union formation restricted? what are related constraints?
- What are the constraints in terms of working hours and pace of work?
- Is there capable institution for the enforcement of existing labor laws? To what extent such system affects the overall efficiency of production?

What are the salient features of Ethiopian industrial park program or special economic in terms of FDI permission?

Is there any routine examination of economic zones by customs?

PART TWO - [FOCUS: REGULATORY INSTITUTIONS] - For ministry of industry/EIC

To what extent pillars of industry formation or projects by government related the actual focus of the private industrial parks?

- Is there any pre or out of plan performances/inceptions by the private parks without considering carrying capacity of the local or central government of Ethiopia?
- What are the efforts by the government in inspecting to align private industrial parks to government's project direction?
- Any controversy related to the inception of the industrial park development in the country?
- Any constraints in administering such policy driven cluster program?
- To what extent institutional framework designed to govern such policy driven cluster assisting the expected outputs of the program?
- In order to improve administrative capacity of industrial park development, to what extent private and government sectors integrated and attention to their roles given equitable weight?
- What are the good sides of regulatory institutions and what are the limitations warranty administrative improvement to capacitate institutional arrangement of industrial park development?
- To what extent the country achieved short term/static benefit from the parks developed by the government and long term/dynamic benefits from the private industrial parks which been in place since long time?
- Any controversy related to implementation of such program in the country?

- Of the main actors in industrial park development and implementation, to what extent objectives of the government achieved?
- Is the experience in diversity of industries compatible in light of development theory?
- Is industrial policy of the country more steered and directed one considering the development of the country?

What are the main challenges Ethiopian industrial parks or zones mainly facing?

What are major management related problems?

- Is there any technical gaps in the policy/strategies of IPDs?.....missing/absence of clear frameworks?
- Is that essential measure to be governed from the top by very busy state ministers got lot to do for their respective ministries?
- Is the overall management of the industrial parks or economic zones effective?
- Is there any problem pertaining to organizational capacity in discharging regulation and implementation of industrial park responsibilities?
- Is the organizational structure and motivation of staffs' conducive environment for thepolicy implementation?

Specific focus on Ethiopian investment commision

- Is the organization having all the capacity to design the right regulation, directives and policy incentives for implementation of IPD? If not which are the reasons?
- Is EIC well-staffed to deal with the very controversial scenarios of IPD development and implementation, coordinating the activities, designing best fit business model, and monitoring the overall situation to achieve the best of practice?
- If 'No' what are the way forwards?
- Which is the case in IPDC?
- If IPDC is public for-profit park developer or operator why it has been given 'regulatory' role?
- Who is there to manage conflict of interests in land share since it also serves as a land bank for park development?
- Does the existing institutionos got compatible organizational or administrative structure?
- Do the IPDC as a new organization has the capacity to administer and manage both the corporation and IPD implementation?
- What are the challenges for the corporation in handling administrative, implementation and management together?

- Does the domestic market supply people with demanded competency and skills to handle the case?
- To what extent the corporation is successful in doing promotional activities to attract the 'right'?
- How and in what case regional governments involved in administration, development and management of industrial parks and improvement of urban functions?
- Which is the exact structure of production in the special zone model?
- Is that private SEZs/ IPs or public developed that performs better or have record of better performance?
- Which model is best strategy to reap industrial climate advantages including infrastructure and service available to industrial zones?

PART-THREE

Labour administration and the role of ministry of labour and social affairs

- Is there any major labor laws industrial parks or SEZs are exempted from?
- Is there 'instructions' that regulate classification of employees, leave, payment, minimum wages and other issues related to labor organization?
- Is formation of labor union allowed in industrial parks/SEZs?
- Any transformation in this regard since establishment of industrial parks particularly with the role of regulatory structures?
- Does the instruction in this regard clearly stipulate which is role of MoLSA?
- If 'Yes' what are the powers of the department to control and enforce labor regulations in SEZ?
- Is the department of labour equipped to monitor the zones effectively?
- Is there enough labor relations, health and safety officials, transport and other resources to extend activities of the department to the zones?
- Do you think zones are problematic sectors compared to other sectors of the economy?
- Who is responsible for labor administration issues of the zone?
- Is there independent labour administration department in the zones or demands government intervention?>if 'Yes' how they are staffed?
- In what way MoLSAs work with the zones to ensure national standards? Is there any national standards? If 'Yes' does the situation conforms national standards?

Wage related issues

- Is special economic zones/industrial parks enclave of cheap labor in the case of Ethiopia?

- Does minimum wage rate exist? If 'Yes' does the minimum wage rates specifies minimum wage at all skill levels and workers in each skill category?
- If Not, why is that? Is the MW (if any) zone specific or differs from national MW?
- Is the MW rate for free zone only one or vary across different sectors or qualification of workers?
- Is the MW higher than the national MW? In which cluster or sector/skill category there is higher record?
- Is there difference between minimum wage inside and outside the zones?
- Is the minimum wage rate fully apply to all zones based on nationally defined direction?
- If there are differences between minimum wage inside and outside is the take home pay of workers better for inside or outside?
- Is the unit labor cost higher for workers in the zone?
- Is there any additional non-wage benefits and other contributions on top of the basic wage?
- Is there social security benefit or contributions for the workers in the zone?
- Why discussion of wage rate is at the centre of Ethiopian special economic zone/industrial parks?

Hours of work

- Is the hours of work considerably similar across the industrial parks?
- Does the legal framework of labor market defines working days and working hours, including one shift of operations?
- Is there clear framework for social security and welfare provision for zone workers?
- Is there any major labor laws industrial parks or SEZs are exempted from?
- Is there 'instructions' that regulate classification of employees, leave, payment, minimum wages and other issues related to labor organization?
- Is formation of labor union allowed in industrial parks/SEZs?
- Any transformation in this regard since establishment of industrial parks particularly with the role of regulatory structures?
- Does the instruction in this regard clearly stipulate which is role of MoLSA?
- If 'Yes' what are the powers of the department to control and enforce labor regulations in SEZ?

Abuses and infringements of the law

- Which is the responsible organization or institution responsible for the administration and enforcement of all labour laws?

- Do the employer pay statutory deductions for unemployment accident insurance?
- Do workers get in regular contracts to workers after probationary or training periods?
- Is there compulsory overtime and other abuses of regulations concerning working hours?
- Do the enterprises secure access of provisions like paid maternity leave?
- Have you ever faced intimidation or victimization of worker organization?
- To what extent zone administrators concerned with this situation?
- Are the aforementioned cases potential for conflict?
- How zone administrators deal with or handle such cases?
- what are the potential punishments following failure of legal conformation?
- Does the regulation define clearly the delivery of employees' provident fund and trust fund?
- Which workers in terms of gender mainly trapped in low-skills and low-wage jobs?
- Since the parks operate in abundant labour supply context, are workers viewed as replaceable?
- If 'not'... To what extent their cases receive attention by labour and social affairs relations of parks and government-based organizations/agencies?
- Has the employer invest in training and social security benefit of the workers?
- Do they assume their workers leave the company after few years?
- How does this relate to overall productivity of the enterprises?
- Has the company well equipped with professional management in human resources & labour relations?
- If 'Yes' are they willing to invest in new technology, skills upgrading, productivity improvements, child care, pension and medical benefit, assist workers with transport services?

Performance assessment against broad goals

When evaluated against what has been described in Ethiopia's industrial park development program, does exists the following results?

- Condition of backward and forward linkages seems between IP investors and local enterprises?
- Transfer of technology and skills?
- Development of diversified export profile?
- Any increase in degree of value added in the zone enterprises?
- Frequent upgrading of technology, skills and organization of production?
- Is there signal for technology upgrade and human resources in the chain of production?

- If ‘YES’ does it mean the ‘type of industry’ is not at the stage of ‘labour intensive’ rather moved a bit?
- Is the type of enterprises due to generous incentives and low entry costs small or big one? -if ‘small’ does it mean they are also undercapitalized operations?
- Can we say the value of the enterprises to the zone and wider economy is certain?
- In terms of the type of activity, to what extent the enterprises are consuming local raw materials, goods and services?
- Why the incentive structure encourages investors mount assembly operations to import inputs duty free then process with low technology and export duty free?
- How do you see the synergy between low-technology labor intensive industries and type of employment?
- Is there possibility for upward mobility of workers?
- Whar are some of the local goods and services consumed by enterprises? If the consumption is less, to what extent FDI contribute to foreign exchange earnings?
- How much of the foreign exchanges stay at home?
- How stable is the investment operation of the country? Is exit easily takes place? How is the amount of value added in the processing of production? Low/high?
- If the value added is very low which are problems for such low performance?