

*Assessing the Role of Government in Sustainable Industrial
Development: A case study of Hattar Industrial Estate*



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DEDICATION

My Ever Loving Parents & My Amazing Wife Hira
& Beautiful Daughter Eshal

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
IMF	International Monetary Fund
ISI	Import Substitution Industrialization
KP	Khyber Pakhtunkhwa
KP-BOIT	Khyber Pakhtunkhwa Board of Investment and Trade
KP-EZDMC	Economic Zones Development & Management Company
MDGs	Millennium Development Goals
MLP	Multi-level Perspective approach
MNA	Member of National Assembly
NIE	New Institutional Economics
SDGs	Sustainable Development Goals
SEZ	Special Economic Zones
SEZA	Special Economic Zone Authority
SID	Sustainable Industrial Development
SNM	Strategic Niche Management
TIS	Technological Innovation System
UN	United Nations
UNIDO	United Nations Industrial Development Organization

ABSTRACT

The term “sustainable industrial development” stresses the need to adopt better natural resource governance mechanism and ensure better management of industrial practices. Pakistan over the years has been trying to move a step closer towards successful transition towards sustainable industrial development. Despite a lot of efforts, it still lags behind the developed nations who have successfully transformed their structures and governance mechanism to achieve sustainable industrial development. The present study keeping in view the policy debates and multi approaches towards sustainable industrial development transition discuss the role of Government in sustainable industrial development in Pakistan taking Hattar as case study. The present study adopts qualitative approach and the relevant public stakeholders of KPK and Federal Government as well as the private stakeholder’s in-depth interviews was conducted. The stakeholders include KP Board of Investment, KP Government, KP Special Economic Zone Authority, KP Economic Zone Development and Management Company, Hattar and Sarhad Chamber of Commerce as well as the industry owners in Hattar. The study results show that low coordination between government agencies, poor stakeholder consensus between industries and Government during policy formulation as well as implementation, poor utility distribution and lack of governance mechanism have been the key reasons behind non-sustainable industrial development in Hattar. Further there is a need to improve the incentive mechanism regarding tax and technology to enhance sustainable industrial development. It was found that the new KP Policy of 2020 focuses to address issues with increased focus on special economic zones development, creating ease of doing business, adopting an integrated approach and developing a monitoring mechanism for effective implementation of policy and ensure achieving the sustainable industrial development in future in KP. It is recommended that the institutions and policy interventions through which government attempts to transform the industrial development should focus on building institutional capacity, improving political power structures and creating stakeholder consensus before policy formulation and implementation.

Keywords: *Sustainable Industrial Development, Hattar Industrial Estate*

CHAPTER1

INTRODUCTION

Economic growth plays a significant role in social welfare and human development through enhanced purchasing power, employment, and production (Soyer, K., Ozgit, H., & Rjoub, H. 2020). Industrial development is the means to reach the long term socio-economic growth in any country and the industrial sector spill overs that leads in uplifting the economy by improving the social as well as economic condition of the society. Around the world, Industrial development has been the focus of Governments to improve their economy and similarly in the second half of the twentieth century, a lot of Asian countries were able to achieve significant industrial growth accelerations and began to rapidly catch up with advanced countries. The reasons for this success are based on the vigorous participation and competition in global markets, because of the backing of state and effective industrial policies. This competitiveness was developed by deliberate industrial policies that lead to sustainable economic growth in the East Asian countries. (Khan, M. 2015). It is evident that to foster industrialization at a rapid level for economic and social development a country needs to take policy actions to bring the desired change and therefore Government of a country plays the critical role in the process of economic growth through its industrial policy. It is the Industrial Policy of a country that brings economic reforms, development and transformation towards a modern sustainable industrial economy.

There are a lot of challenges faced, especially by developing countries in their pursuit towards industrial development. United Nations Member States and all relevant agencies acknowledged the fact that these challenges faced by developing countries

towards industrial transformation cannot be alone addressed by “aid”. This realization led to the need of increasing the level of engagement and the need for developing a new approach of inclusive and sustainable industrial development under the banner of Sustainable Development Goals (SDGs). The achievement of sustainable industrial development still remains a major problem across the globe especially in the developing countries like Pakistan. According to UN report of 2017 on SDG goal 9 i.e. Inclusive and Sustainable development, it is estimated that, in developing countries, only about 30 per cent of production goes through sustainable industrial practices.

This study aims to study the role of Government in sustainable industrial development and analyze the current level of policy formulation and implementation of industrial policy by taking Hattar as case study. It is important to understand that Hattar was the first special economic zone of KPK and Pakistan which was specifically developed with an aim of achieving sustainable industrial development and improving socio-economic wellbeing. Over the years, there have been a lot of governance and industrial policy challenges faced by industries in Hattar and all over Pakistan that have hampered the economic growth. In this study, after the chapter of Introduction, the second chapter intends to provide an in-depth literature review of approaches adopted by various countries towards sustainable industrial development and Pakistan journey towards it. The Chapter three of the study discusses the theoretical models adopted to analyze the role of Government in sustainable industrial development for the purpose of this study. Chapter four highlights the methodology adopted for this study followed by a chapter on the results due to detailed discussion from the relevant stakeholders of industrial development in Hattar and KPK. Chapter six focuses on a policy discussion that how KPK Government new industrial policy 2020 is different from the last policy

followed by the last chapters that gives recommendations in the light of the findings from the study.

1.1 Sustainable Industrial Development Goal and Pakistan

Industrial development in Pakistan has seen a lot of shifts over the course of history. Initially the first decade post-independence i.e. (1950-60) emphasized on the strategy of import substitution industrialization (ISI) which was actually the case in most developing countries of East Asia and Latin America. Khan, M. (1999) highlights in his study focusing on industrial development of Pakistan that during 1950's there was a direct control on investments, imports and prices. There were hardly any subsidies given to industrial sector. During the second decade there was a slight improvement as the liberalization of foreign exchange market, subsidizing exports and providing fiscal incentives lead to empowerment of the private industry. The policies that were adopted in first two decades led to impressive and substantial industrial development as the private sector grew immensely.

The industrial development of those two decades failed to translate desired results into the grass root level with regards to reducing poverty and improving the overall standard of life of the masses. There was a major shift of growth downward in the third decade (1970-1980) in 1972 when the nationalization of heavy industries took place. During the course of fourth decade (1980-90), Pakistan predominantly continued with the same policies except nationalization. The adhoc measures taken by the Government led to further deregulation of the economy. The fifth and sixth decades (1990s and 2000s) actually witnessed the rise of Pakistan dependence on structural adjustment programs to boost industrial sector.

Despite the developments in industrial sector the major issue has always remain the structural transformation and moving towards production using modern technologies. The overall analysis of issues with regards to manufacturing sector in Pakistan shows how industrial and trade policy distortions, a narrow industrial base, the poor quality of products, high costs of production and the regulatory framework problems coupled with weak infrastructure leads to the inefficient industrial sector. The challenges of economic, social and environmental nature with regards to sustainable industrial development are significantly increasing with each passing day and it is predicted that in years to come poverty might increase considering the energy crisis our industries are facing, high rates of inflation as well as the other factors.

1.2 Problem Statement

In Pakistan, the widely accepted factors for failure in achieving sustainable Industrial development are the governance and planning shortcomings at policy formulation and implementation level. It is necessary to have a better understanding of these factors before the appropriate future policies can be formulated. The proposed research will explore the determinants of lack of industrial development due to governance issues and focus on developing effective modes of smooth transition towards sustainable industrial development. The study will adopt qualitative approach using an appropriate conceptual framework that highlights the link between sustainable industrial development policies, approaches and institutional factors.

1.3 Significance of the Study

This study aims to analyze the current role of KPK Government of Pakistan in the formulation and implementation of policies that leads to sustainable industrial development. Generally, policies of Pakistan have ignored the sustainable principle in

industrial production which has caused huge social-economic and ecological impact. There has been a huge issue of resources depletion, circular debt and other factors leading to a lot of industries shut down or slow growth leading to poverty and unemployment. Therefore, there is a need to look towards the performance of Government using different methodologies to come up with the reasons behind lack of performance.

It is high time that Pakistan Government ensures implementation of SDG goals including sustainable industrial development which falls under target 9.2 of Goal 9. The policymakers are responsible to form effective policies for managing the industrial growth that leads to poverty eradication. Due to ineffective industrial policies there has always been a never-ending problem of poverty and unemployment. It is imperative for the policy makers to design sustainable industrial development strategy based on appropriate governance model of institutions that can boast economic growth leading to socio-economic welfare of the society. This study will aim to identify policies that can not only lead to revenue generation for industries but will make sure that the impact of development goes to grass-root level. This research will try to provide information based on the current existing patterns and developed countries experiences to the relevant policymakers in devising policies that lead to sustainable industrial development and overcome the current issues faced by industrial sector with regards to policy and governance.

The industrial policy of a country should use different tools to strategize the efforts to ensure the development and growth of the manufacturing sector of economy. The three main reasons behind having an industrial policy are to ensure by using economies of scale to overcome the negative externalities and negative spill overs. The second major reason for the rationale behind industrial policy lies in the coordination

failures that can be dealt effectively through a policy. The third aspect of an industrial policy is to keep a check on the informational externalities.

It is important to highlight that this study will look in detail the Government policies, its implementation and governance mechanisms considering major shutdowns of industries in Hattar due to energy crisis leading to absence of sustainable practices. The KPK industrial policy 2016 was in place but this research will show whether it has materialized in terms of giving the desired results in Hattar industrial zone. This study will also review the new KPK industrial policy 2020 and highlight the difference in policy measures compared to previous policy. Most of the researchers in Pakistan mainly focus on environmental impact or certain import-export issues of industries but ignore the structural policy reforms debate and overall governance paradigms of industrial zones. This study takes into consideration the issues faced by Hattar and look into the details of reasons behind non-sustainable industrial units and to find out solutions that can lead to sustainable development not only in Hattar but across the country. This research can be extremely relevant and important from policy perspective as it intends to look into both policy and governance structures in the industrial sector.

1.4. Research Objectives

1. To study the role of Government in structural transformation and promoting sustainable industrial development in Pakistan.
2. To investigate the roles of Government in the process of formulation of sustainable industrial policies keeping in view all relevant stakeholders.
3. To investigate the impact of governance and find out about the gains and shortfalls focusing on institutional processes and capacity.

CHAPTER2

LITERATURE REVIEW

There has been a dramatic change in the industrial sector particularly in manufacturing landscape in recent years due to many reasons including technological advancement, global financial crisis as well as the focus on adopting sustainable industrial practices to achieve economic growth. Under the light of sustainable development goals agenda. (Li, 2015) highlights the fact that to carter the changes in manufacturing landscape require structural transformation of industries and economies to ensure sustainable industrial development. According to the Lima Declaration, which is adopted by UNIDO's Member States in December 2013, it has set the foundation for a new vision of sustainable industrial development (SID). The term "sustainable industrial development" stresses the need to adopt better natural resource governance mechanism and ensure better management of industrial practices. This chapter provides a preview of role of state in economic as well as industrial development and then presents a detailed literature review of various studies focusing on different approaches of sustainable industrial development transition and different strategies adopted by various countries across the world. Furthermore, this chapter will highlight the role of Governments in sustainable industrial development. This chapter will look at the industrial development status in Pakistan and will provide the literature gaps in the context of Pakistan.

2.1 Role of State in Economic and Industrial Development

It is important to understand role of every state especially role of a developing state or government in economic development through its policies before discussion on

sustainable industrial development. The role of state especially for developing countries is established in the light of Washington consensus which included set of ten economic policy prescriptions developed by Washington based International Monetary Fund (IMF), World Bank and United States Treasury Department for developing countries that were facing economic crisis. Since the emergence of Washington consensus, developing countries have understood that the state or government needs to ensure liberalized trade, getting price right and macroeconomic stability for better economic performance (Williamson 1990). After the state deals with these issues then the private markets will efficiently allocate resources and move towards rapid economic development and growth.

However, a lot has changed since 1989 when for the first time the term Washington consensus was used by John Williamson. (Stiglitz 1998) highlights that despite the Asian countries in crisis the east-Asian countries development in the same time period has stimulated the thinking patterns with regards to role of state in economic development. Stiglitz mention that though the East-Asian countries followed the low inflation and fiscal prudence policies which were in line with Washington consensus however the emphasis of their industrial policy designed with an aim to close the technological gap between them and advanced countries was not as per the true spirit of Washington crisis. He highlights that the Washington consensus focus was controlling inflation based on the experience of Latin American countries in 1980's however the consensus led macroeconomic policies were not conducive for long-term growth of economy as it led to weakening financial sector by focus on freeing up markets. Similarly, the focus on trade liberalization, privatization and deregulation in Washington consensus led the policy makers ignoring to ignore elements like competition that helps in creating effective and efficient economy.

Similarly, another important element ignored was the role of technology in industrial and economic development. Though Washington Consensus emphasize on privatization of industries as one of the major principles of economic development however it is important as Stiglitz mention that privatization without creating the institutional infrastructure, regulatory bodies and competitive markets can lead to economic failure. Under the light of above discussion, it is clearly established it is the role of state to develop an industrial policy that fosters competition and technology-based innovations that lead to sustainable industrial development and long-term economic growth. Further it is also the responsibility of state to create institutional infrastructure and effective regulatory bodies that can implement policies, ensure competition and trade liberalization. The question arises what the different approaches can be adopted by the state to complete this transformation which are discussed in the next section.

2.2 Different Approaches towards Sustainable Industrial Development

The persistent economic and environmental problems across the world have raised question on how successful transformation to sustainable industrial development is achieved. Most of the times the transformation of industrial sector is slow despite introduction of new technologies, economic deregulation, consumption behaviour changes and governance modes. The sustainable industrial development in this section is mainly discussed through different approaches. The various approaches under new institutional economics focus on institutions playing the central role in sustainable industrial development transition.

To achieve sustainable development, the strategic niche management (SNM) approach focuses on societal experiments to facilitate the introduction and effective

diffusion of new sustainable technologies. (Kemp, Schot and Hoogma 1998) SNM approach is to ultimately achieve sustainable industrial development through integration of technological progress and social-institutional transformation. (Kemp, Schot and Hoogma 1998) discuss various challenges including the cultural, psychological, economic, environment, production, infrastructure etc. in the formation of niche which can be overcome through managing shifts in technological regime.

(Caniels and Romijn 2008) in their paper “Strategic niche management: Towards a policy tool for sustainable development” analyze the strategic niche management concept. According to their paper it is important to analyze the facilitating conditions and develop a policy to ensure appropriate technological interventions resulting in sustainable development. According to (Kemp, Schot and Hoogma 1998) they refer these conditions as not a mere promotion of technology but management of transition process. The authors highlight various structural changes at various levels of companies, chains, production, users and government policies along with changes in norms, values and attitudes needed for the swift regime shift to sustainable industrial development. Similarly (Raven 2005) highlights that the policy actors can play crucial role in sustainable development by formulating a regional vision after taking on board all stakeholders through network management. This will enhance learning and will lead to better monitoring of results of different technological experiments after the exchange of information. The author highlights that the conventional policy instruments including incentive policies such as tax and reward system can encourage emerging technologies and make them more attractive. The author points out in their study that the role of Government is to plan and build socio-technical regime and the key to implement policy effectively is through combination of decentralized market incentive policies, central directives and direct network formation activities after a stakeholder consensus.

Strategic Niche Management (SNM) calls for creating socio-technical experiments through stakeholder consensus in a protected space called niche, which will act as a new domain for technology. (Hoogma et al. 2002) points out in their study that the new technology has promising characteristics, but due to being unsupported through actual market sales, experiments are done which will create 'proto-markets'. When incubation goes according to plan and give good results, a technological niche will evolve into an actual market niche, in which the innovation can sustain itself commercially in a specific market segment. Another approach to sustainable industrial development and effective sustainability transition is Transition management approach.

(Loorbach, 2007; Rotmans et al., 2001) highlights in their studies that how transition management approach can help in sustainable development transition. The authors highlight that structural transformation is important to resolve the persistent societal problems. (Rotmans et al., 2001) in his study shows that the transition requires system innovations which means organization exceeding, qualitative innovations, which are realized by a variety of participants within the system. It fundamentally changes both the relation among the participants and the structure of the system. One of the examples is a possible future energy transition to biomass that will require system innovations in electricity generation (combustion, gasification of biomass), transport (bio fuels), and agriculture (bio crops). It will also require changes in policy (integral biomass policy regarding energy, space use, biodiversity, agriculture and transport) and culture (surmounting barriers among the public against alternative energy carriers).

It is important to highlight that the world currently face the need to innovate and bring structural changes in several societal systems. According to authors of transition management, sustainable industrial development is intrinsically an ambiguous, normative, and subjective notion and the implementation of sustainable development

must incorporate the inherent conflicts between the values, ambitions and goals of a multitude of stakeholders approach to sustainable industrial development and effective sustainability transition is Transition management approach. A central approach that describes complex sustainable development transformation process is the multi-level perspective (MLP). In this regard (Geels 2004, Geels and Schot 2007) have analyzed the complex transformation process of sustainable development from multi-level perspective in their study.

Multi-level perspective (MLP) approach envisions the socio-technical transitions to take place by developments on three analytical 'levels'. The three levels include socio-technological regime, landscape and technological niche. The concept of socio-technological regime is based on the economic concepts such as path dependency or technological trajectories and social insights on institutions and their structure. (Geels 2011, p .5) terms that the "socio-technical regime forms the 'deep structure' that accounts for the stability of an existing socio-technical system. It refers to the semi-coherent set of rules that orient and coordinate the activities of the social groups that reproduce the various elements of socio-technical systems". The regime represents the highly institutionalized but not necessarily coherent informal and formal rules that are constructed by various actors in the system. The term niche has already been explained in strategic niche management approach above which means creating socio-technical experiments through stakeholder consensus in a protected space called "niche", which will act as a new domain for technology.

Niches represent the alternative socio-technical configurations which can be achieved through a strong degree of institutionalization. The landscape refers to the external forces that are operating on regimes. The landscape forces include cultural values, climate change or demographic transitions or political ideologies. (Geels and

Schot 2007) have explained in their study that the Landscape forces, regimes and niches can be differentiated from their degrees of structuration (very strong, strong and weak, respectively). This is the reason they are called ‘levels’ (of structuration) in the Multi-level perspective framework. The authors highlight that the sustainable development transition takes place after a dynamic interplay among these ‘levels’ that leads to a whole set of various pathways of system transformation. These pathways of system transformation range from incremental innovations to radical transitions.

Another approach that has gained attention towards sustainable development transition in the recent years has been the Technological innovation system (TIS). (Bergek et al., 2008, 2015; Hekkert et al., 2007) has done major work on technological innovation system. In their study technological innovation system explains the technological change through interaction of dynamic network of agents. The agents are operating in a specific industry with a specific infrastructure are involved in the utilization of technology. The three basic categories of structures discussed in technological innovation system to understand sustainable development includes actors, technological factors and institutions. The public actors or Government implement the transition and overcome the inertia or barriers to change by reorganizing the institutional configuration as well as mobilizing resources and ensure formation of niche markets. It has given seven system functions which bring the sustainable development. The functions given by Hekkert include guidance for the search, Entrepreneurial activities, knowledge development, knowledge diffusion, niche market formation, support from advocacy coalitions and resource mobilization. The authors highlight that the interplay of dynamics between actors, institutions and technological factors bring the desired sustainable development.

From the above approaches the main role played by different institutions and structuration of these institutions determine the effectiveness of sustainable industrial development. Institutions are extremely important to foster economic performance of the country. (North, 1991) highlight show the institutions are pivotal in incentivizing structure of economy and shape up the economic change towards progress and growth whereas the failure of institutions leads to stagnation or failure. The Government or the state is primarily responsible for the protection and maintenance of formal institutions as well as the processes through which the alterations are made in the system. (Lin, 2008) highlights how the institutions can play a better role towards the development by following the new structural development framework which revolves around the structural changes. The study also highlights in their study how sustained economic development or growth is not possible without structural changes. The debate that has been centre of institutional economics or development economics with the emergence of governance has been that whether the structural changes lead to enhance industrial capacity that lead to sustainable industrial development or just focusing on the good governance without focusing on structural factors can lead to industrial development. In either case the basic underlying fact is that institutions existence and an industrial policy are key factors to shape up industrial development. (Khan, 2004) highlights how the institutions play their role in developing countries in sustainable industrial development transition and gave the basic understanding that how institutions failure occurs in these developing countries. He highlights that the transformation strategy of reforms can play a critical role in success. He has also explained the success factors that can lead to industrial development in developing countries.

To achieve sustainable industrial development successfully different countries design and implement different industrial policies. (Chang & Rowthorn, 1995)

highlights how the economic transformation of a modern economy needs a state that can perform the roles of the conflict manager as well as the ultimate entrepreneur. The authors highlight that Government regulate regulates industries through the help of different institutions that are governed through an industrial policy. Institutions and in this regard economic institutions play a key role in the pursuit of sustainable industrial development. (Veeman & Politylo, 2003) highlights in their study how these economic institutions are at the centre of any form of industrial development. The interaction between the environment and economics is managed through these institutions including matters regarding the natural resource management for industrial development. It is important for the state to ensure the development of these institutions through a strong industrial policy to ensure sustainable industrial development.

When the literature about institutions importance towards industrial development is discussed it is important to understand the role of industrial policy that gives the direction to these economic institutions to move effectively towards the industrial development goals. It is important to understand the role of an industrial policy and why it is important for the government to develop an industrial policy which is focusing on inclusive and sustainable industrial development in today's world. The industrial policy of a country uses different tools to strategize the efforts with a purpose of the development and growth of the manufacturing sector of economy. (Pack & Saggi, 2006) explains the three arguments behind having an industrial policy is due to economies of scale and availability of knowledge spill overs. The second major reason for the rationale behind industrial policy lies in the coordination failures that can be dealt effectively through a policy. The third aspect of an industrial policy is to keep a check on the informational externalities. If all the close reasons are examined, institutions and policy are inseparable from each other. Therefore, it is extremely

important for a country to have an industrial policy developed by the country in a way to tackle the economic challenges facing country effectively.

It is discovered through the literature that the industrial sustainable development is measured through various approaches however the focal point of all approaches remains institutions of Government whose structuration determine the effectiveness of sustainable development in the country. Policy makers make different industrial policies to ensure sustainable development and institutions play a critical role in implementing those policies. The structural factors as discussed in the approaches above are critical to sustainable industrial development. This requires a closer look at some of the existing research on the different strategies adopted by various countries towards sustainable industrial development.

2.3 Global Approaches to Sustainable Industrial Development Transition

It is pertinent to highlight the role of Government in achieving sustainable industrial development through different case studies across the globe. (Huang et al., 2019) discuss how the Eco-industrial Parks (EIP) are now gaining a central stage in sustainable industrial development of China. In this regard China Government has played a crucial role in developing eco-industrial parks (EIP) to boost industrial growth. The authors present the argument that China is the only country that has established as well as practiced EIP standards and indicators leading to significant results. China has been able to do it through ensuring implementation on social, economic and environmental indicators set in EIP standards. The social benefit evaluation indicators can play important role in ensuring inclusive industrial development. The economic and environment indicators ensure the sustainability of industrial development. The authors have also indicated how even the EIP standards can be improved further by several

policy initiatives like giving incentives in form of tax discounts for EIP enterprises. Similarly (Su, Heshmati, Geng, & Yu, 2013) discuss how the CE i.e. the circular economy strategy developed by China Government in 2002 revolves around three basic principles, 3Rs that are reduction, recycle and reuse which shows how the Government want to promote industrial development using a sustainable industrial strategy.

(Noronha, 2011) highlights the importance of public policies made by Government creating a huge impact in Portugal. The author explains that how once after the European Commission approved funding after looking into national strategic reference framework for development through different programs. Portugal received 21.5 billion Euro of EU funding between 2007-2013. Portugal used NSRF to suggest five key priorities that include guaranteeing social cohesion improve skills of population, promote sustainable growth, to improve governance efficiency and to ensure the development of the territory and the cities. The key priority areas strategized were put under give principles of investment that includes economic viability, concentration, financial sustainability and territorial cohesion; and strategic monitoring. These priorities will be implemented through set of operational programs. Similarly, another program PRIME that is Incentives program for the modernization of economic activities was instituted by Portugal Government after EC approval in 2003. The program was developed exclusively for Industry, Energy, Transport, Tourism, Building, and Trade and services industry. The program incorporated a set of medium-term economic policy instruments for the period 2000-2006 which were applied to different economic activity sectors mentioned above in Portugal. This shows how sustainable and inclusive industrial development in Portugal is also based on the policy initiatives taken by the Government.

(Kivimaa & Mickwitz, 2011) in their article highlights how Government interventions have been pivotal to bring change in energy systems in Finland. The author terms them important to facilitate or hinder transitions towards sustainable solutions in energy sector. The article explains how the policy interventions designed by Finish Government have evolved over time and how the bio energy policy options have been framed and implemented by the Government. There have been total fifteen (15) government programs and about nine (09) national climate strategies developed by the Government. Similarly (Berg & Hukkinen, 2011) highlight in their article that how Finland created a strategy and policy to promote sustainable consumption and production (SCP). The authors explain how the program has been extremely useful in deliberation and learning for other sustainable industrial programs. It highlighted how strategies that incorporate all the stake holders while its formulation and implementation is very helpful in raising hopes, expectations as well as the outcomes of the program. The different approaches adopted by various countries towards sustainable industrial development have been discussed in detail however to understand the approach adopted by Pakistan a closer look at the context of sustainable industrial development in Pakistan and existing research is required.

2.4 Sustainable Industrial Development Status in Pakistan

According to Pakistan's Vision 2025, there will be around 1.5 million young people that will enter the Pakistani job market every year till 2040. This means that around 1.5 million new jobs need to be created to ensure that the unemployment remains in control at stable rate. The jobs need to be of high value and inclusive in nature for everyone otherwise they will create demographic divide across the country. The ninth Sustainable Development Goal (SDG) in fact holds the most important value especially considering the huge chunk of youth population that is looking towards jobs.

The Goal 9 intends to “build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”. Sustainable industrialization has two integral parts that includes infrastructure and innovation.

With regards to infrastructure there has been development in recent years considering CPEC showing progress is in right direction but there is still a long way to go to achieve long term goals. The biggest challenge for the Government lies in boosting industrial development through innovation and use of modern technologies that are sustainable in nature. Successive governments have already made investments in infrastructure. The main risks of not completing the desired policies or plans includes delays and lapses in implementation like the one observed in Orange metro project in Lahore or the metro project of Peshawar. A process that is evidence-based as well as transparent and inclusive in nature for planning infrastructure projects would result in creating sense of ownership among masses as well as it will ensure a healthy competition.

Innovation can prove pivotal in creating high value jobs as well as act as driver of growth, whether it will be directly or indirectly. The direct growth can be through technology products and industrialization whereas indirectly the growth can happen through harnessing better designed solutions specially to overcome local developmental challenges. There is a huge scope for R & D activities to foster innovation and there is always need of more specialized workforce to boost industrial development. The R & D sector of economy can be filter down to quality of education, especially the standards of higher education, which continues to plunge downwards are way below the actual targets set for the country. Innovation further requires a very stable and efficient investment climate and Government needs to ensure that they give

confidence to all the technology partners and attracts investment. The lack of implementation of policies coupled with the frequent changes in policy environment has been the major cause of lack of investment in industrial sector. Similarly, failure of having national standards to regulate different industrial sectors like auto-mobile sector has discouraged the new investments and attracts firms to boost R&D in Pakistan.

Sustainable industrial development has always been on the agenda of the Governments in power in Pakistan since late 80's however the intentions failed to translate effectively into results. Despite the developments in industrial sector the major issue has always remain the structural transformation and moving towards production using modern technologies. (Abdul Razzaq Kemal, 2006) in their paper while discussing the overall issues with regards to manufacturing sector in Pakistan have highlighted how industrial and trade policy distortions, a narrow industrial base, the poor quality of products, high costs of production and the regulatory framework problems coupled with weak infrastructure leads to the inefficient industrial sector. The challenges of economic, social and environmental nature with regards to sustainable industrial development are significantly increasing with each passing day and it is predicted that in years to come the poverty might increase considering the energy crisis our industries are facing, high rates of inflation as well as the other factors.

The debate has often revolved around what types of institutions are needed as well as what is the industrial policy that will lead to economic growth. The political and structural factors need assessing to figure out the performance with regards to inclusive and sustainable industrial development in Pakistan. Our Pakistan still has poor industrial growth and large amount of poverty and the current literature shows how Government fails to address the failures of our industrial sector of Pakistan. In this regard, the studies will use NIE approaches and frameworks discussed above to show

the missing link between industrial policy and sustainable industrial development in Pakistan. The New institutional framework focuses on political and institutional factors that require attention to achieve sustainable industrial development. The aim of the Government of Pakistan should be to strengthen institutions that lead to sustainable industrial development with good governance as the product rather than the means to industrial development. The industrial policy should address the factors discussed above under the umbrella of political and institutional factors critical for sustainable industrial development.

2.5 Research Gap

By reviewing the international and national studies on different approaches adopted towards sustainable industrial development, it is discovered that the measurement of performance of Government in achieving sustainable industrial development can be done by taking a deeper look at the structural factors of institutions responsible for bringing the sustainable industrial development transformation. The biggest structural factors that hinder the sustainable industrial development include lack of use of modern technologies and innovation to boost industrial development. This research aims to study the focus of Government with regards to boosting industrial development through encouraging innovation and modern technologies. This study will assess the steps taken by KPK Government taking Hattar as case study to identify the steps taken by the government previously and currently including the policy changes and investments in infrastructure. Another structural failure that has hindered sustainable industrial development has been the lack of policy implementation in past as highlighted in above discussion in literature. For this purpose, the study will aim to research what are the tools developed by the current KPK Govt to improve the implementation of policies compared to previous years to achieve sustainable industrial

development. Some of the major risks associated of implementing the desired policies include delays, lapses and financial losses.

In the light of above discussion it is also important to understand that sustainable industrial development as defined by the World Commission on Environment and Development WCED (Brundtland Commission) means a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Hence, sustainable development means thinking of the future. Currently, In Pakistan economic, social and environmental challenges to sustainable industrial development are significantly increasing with each passing day and it is predicted that in years to come the poverty might increase considering the energy crisis our industries are facing, high rates of inflation as well as the other factors. This study will also aim to assess the performance of Government from the multi-level perspective and new institutional economics approach discussed above as these two methods have not been merged together to evaluate the performance of Government. In doing so, this research will serve as a benchmark for future research while understanding the policy challenges and will aid in the formulation of effective policies in future to achieve sustainable industrial development not just in Hattar which will be study area of this study but for all areas of Pakistan.

CHAPTER 3

THEORETICAL FRAMEWORK

3.1 Theoretical Foundation

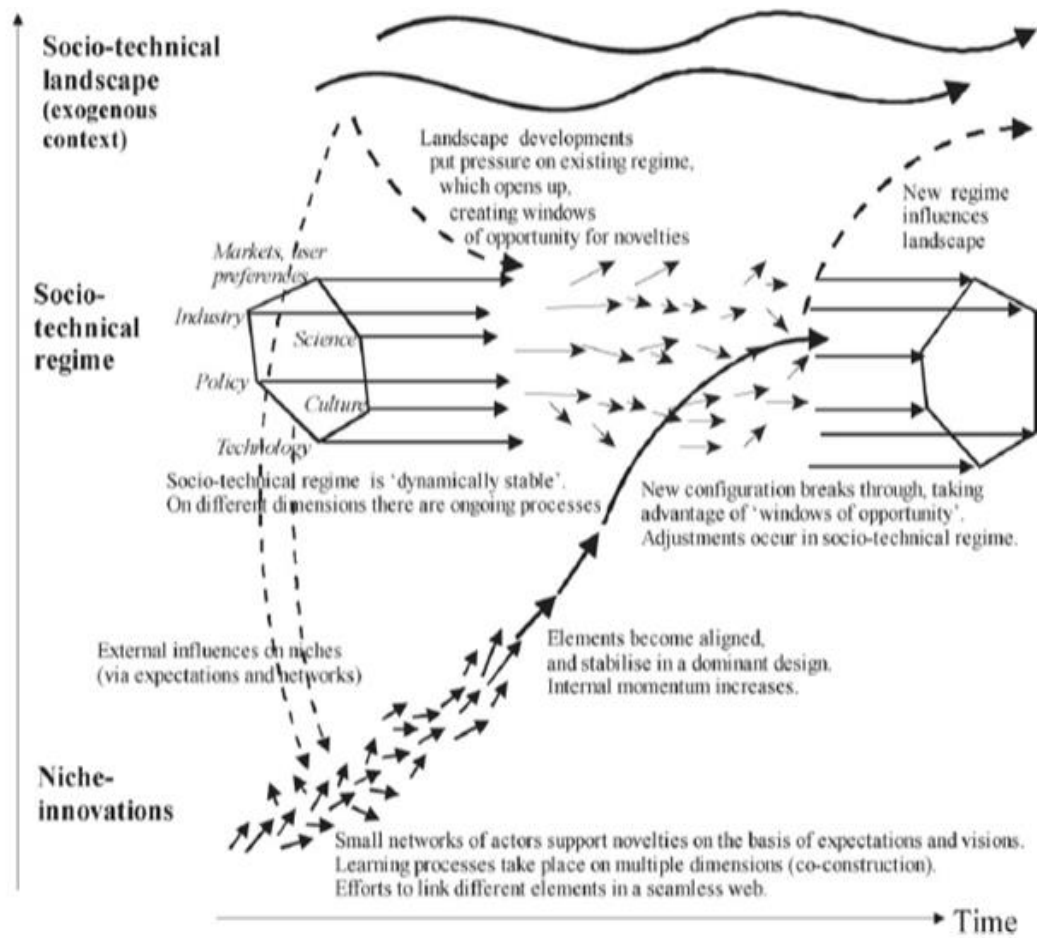
The literature on the sustainable industrial development shows that there has been a lot of focus on the different approaches that should be adopted by the Governments to effectively complete the transition towards sustainable industrial development. For effective sustainable industrial development in a country, it is important in the light of the review of literature given above that the policy makers of the country chose a transformation strategy incorporating the technological needs and focus to enhance competition to foster industrial development. Further it is important that the institutions of the country are developed to bring industrial development. The planning, design and construction of an industrial sector of country is a long and complicated process due to the scope of action as well as the presence of various stakeholders. Government requires acting upon all the multivariate strategic dimensions of industrial development.

With the rise in globalization, a lot of studies focused on how the firms of a particular country were able to create a competitive advantage against their global competitors. In this regards the Porter's Competitive Advantage of Nations framework (1990a) gained a lot of attention which focus on the essential factors to build competitive advantage in the industries vital for economic growth. Porter listed four determinants that shape the competitiveness which included the factor conditions, related and supporting industries, demand conditions and firm strategy-structure-rivalry that plays their role in establishing competition within a nation and among the particular industries. However, his theory led to his own criticism, like Jacobs and de Jong (1992)

in their study concludes that the divergence and convergence of specific industries is vague and not clear in Porter's book, which is important for developing a strategic perspective of economic growth in sectors. Also, Porter study can't be hold applicable on the Asian or African industrial sectors, where there are a lot of structural factors crucial for building competition and industrial development.

3.2 Multi-level Perspective Approach

The review of literature shows various approaches like Strategic niche development, transition management approach, technological innovation system approach and multi-level perspective approach that guide the policy makers towards an effective transition of industrial sector towards sustainable industrial development. In this regard a central approach that has been chosen as one of two approaches to analyze the role of government in sustainable industrial development is the multi-level perspective (MLP) approach. The reason for choosing this approach is that the complex sustainable development transformation process is very effectively explained in the multi-level perspective (MLP). (Geels 2002, 2004, 2008, Geels and Schot 2007) have analyzed the complex transformation process of sustainable development in their study shown below.



Multi-Level Perspective on Transitions (Geels, 2002, 2004, 2008).

Multi-level perspective (MLP) approach envisions the socio-technical transitions to take place by developments on three analytical ‘levels’. The three levels include socio-technological regime, landscape and technological niche. The concept of socio-technological regime is based on the economic concepts such as path dependency or technological trajectories and social insights on institutions and their structure. (Geels 2011, p .5) terms that the “socio-technical regime forms the ‘deep structure’ that accounts for the stability of an existing socio-technical system. It refers to the semi-coherent set of rules that orient and coordinate the activities of the social groups that reproduce the various elements of socio-technical systems”.

The regime represents the highly institutionalized but not necessarily coherent informal and formal rules that are constructed by various actors in the system. The term niche means creating socio-technical experiments through stakeholder consensus in a protected space called “niche”, which will act as a new domain for technology. Niches represent the alternative socio-technical configurations which can be achieved through a strong degree of institutionalization. The landscape refers to the external forces that are operating on regimes. The landscape forces include cultural values, climate change or demographic transitions or political ideologies.

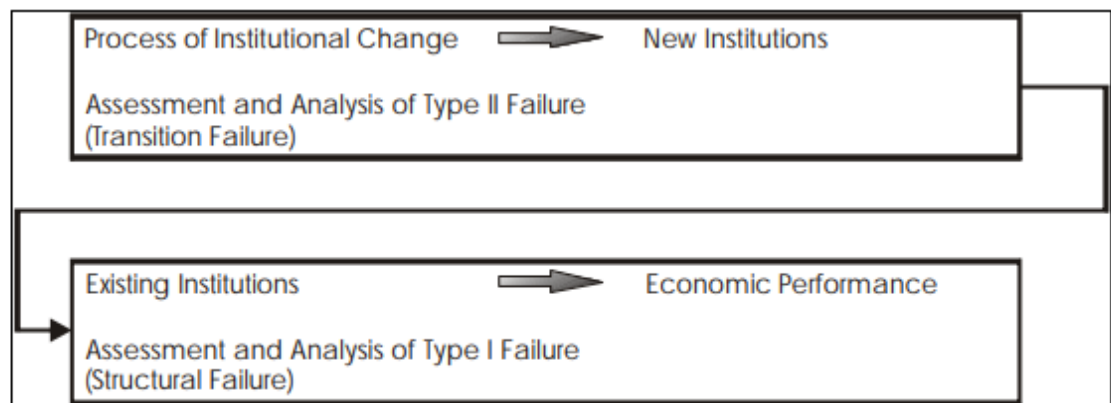
(Geels and Schot 2007) have explained in their study that the Landscape forces, regimes and niches can be differentiated from their degrees of structuration (very strong, strong and weak, respectively). This is the reason they are called ‘levels’ (of structuration) in the Multi-level perspective framework. Sustainable development transition takes place after a dynamic interplay among these ‘levels’ that leads to a whole set of various pathways of system transformation.

3.3 NIE Approach

Institutions are extremely important to foster economic performance of the country. There are various ways that the governance and institutions role can be accounted for. In this study the NIE approach aims to identify the institutional cases of state failure. (North, 1991) highlights how the institutions are pivotal in incentivizing structure of economy and shape up the economic change towards progress and growth whereas the failure of institutions leads to stagnation or failure. (Coase, 1992) explains how the exchange takes place when transaction costs are not high and institutions play important role in keeping the transaction costs low by protecting property rights. (Bates, 2001) has explains that how the social and political context in which institutions can

operate can result in economic consequences. The Government or the state is primarily responsible for the protection and maintenance of formal institutions as well as the processes through which the alterations are made in the system.

The NIE approach looks to explain the relationship by establishing link between institutional and government failure. The terms can be used interchangeable and a framework given below will be used as the key concept to pursue the research objectives using the research methods.



Source: Khan. (2002)

The figure shows two types of failures whereas the first failure is called structural failure as Type 1 in figure. The most general objective of the first type is to maximize the level of net benefits for society. The failure occurs when there are structural failures as the institution results on lower net benefits for society compared to an alternative structure. The better set of institutions could be theoretically identified or empirically observed. NIE in this regard uses transaction cost and rent-seeking analysis to compare the performance as well as net benefits under alternative sets of institutions to analyze the possibility and magnitude of Type I failure which will be studies for studying the performance of industrial sector.

Type II state failure or transition failure occurs when the process for changing the structure of institutions attains a lower cumulative set of net benefits for society compared to an alternative process over a given period. Since the industrial development needs to foster innovation and sustainable production mechanisms it is important to compare and assess the possible failure as well as impact for creating the systematic change in institutions in industrial sector based on technology. The governance principles that have evolved over the year will also be studied through New Institutional Economics approach to understand the institutional performance with regards to inclusive and sustainable industrial development in Pakistan.

The following determinants will also be considered for the purpose of the study that includes.

- a) An existing working body or institution for industrial development in Pakistan and Haripur including Ministry of industries and production as well as other relevant institutions.
- b) The level of institutional governance from the lens of new institutional economics framework.

3.4 Suitable Approach in the present context of study

To conduct this research effectively, I intend to use the Geels multi-level perspective theoretical approach together with the New Institutional economics model of Mushtaq Khan State Failure model to analyze and assess the role of Government in sustainable industrial development in Hattar. The combinations of both theoretical models have not been used previously to assess the sustainable industrial development status and transition. The purpose of using these two theoretical models in combination is because to determine Government efforts for transition towards sustainable industrial development institutions hold importance and the centric point of both theories is

“institutions”, as multi-level perspective theory focus on effective transition towards sustainable industrial development through institutions and new institutional economics also looks to explain the relationship by establishing link between institutional and government failure.

CHAPTER 4

METHODOLOGY

4.1 Study Area

Hattar is one of the 44 union councils and administrative subdivision of the Haripur District. It lies in the south of the district capital Haripur, which lies in the province of Khyber Pakhtunkhwa. The industrial sector is situated of around 16 (sixteen) kilometres at Kot Najibullah. The sector was established back in 1985-86 with a total area of 1,032 acres. There are around more than 400 operational units that are mainly composed of food and beverage, textile, crockery, paper printing, chemical, cement, publishing, chemical, rubber, carpets and leather products. The study is conducted in this industrial estate as it was the first industrial estate and first special economic zone in Pakistan. The sample of this industrial estate will help as a case-study in determining the performance and role of Government in sustainable industrial development for whole Pakistan.

Figure 3.1. Map of Hattar Industrial Estate



(Map Source: Google Earth)

4.2 Research Approach

The study will be carried out using a qualitative approach to study the role of Government in sustainable industrial development in-depth. The qualitative approach will help in achieving research objectives through explaining and analysing the respondent's viewpoint, which is relevant and critical for this study. (Bryman 2012) highlights that qualitative research focuses on in-depth understanding of a social setting or social phenomenon compared to quantitative orientation which is primarily focused to generalization through measurable data. A qualitative research finding is based on its emphasis on understanding meanings, definitions, concepts, symbols and description of units of research. The unit of research for this study will be the key stakeholders involved in policy making with regards to sustainable industrial practices keeping Hattar industrial estate in focus.

4.3 Research Design

The qualitative study will be done through case study approach. Case study is among the research designs outlined by (Creswell 2013) and according to the author, case study is an approach which deals best with the natural context, uniqueness and the bounding of the object of inquiry. Case study research helps in investigating a group, community, institutions, person, phenomenon or process. It is also referred as an approach which facilitates the in-depth investigation of the specific instead of general. According to (Cristine and Stake 2006) several groups, individuals or institutions are investigated by multiple case studies. Case studies may be explanatory, descriptive, exploratory, intrinsic or instrumental (Cristine and Stake, 2005). Keeping in view my research questions and objectives I have used descriptive case study research design. A descriptive case study research design enables the researcher to obtain an accurate and

precise description of the characteristics of the institutions, individuals, groups, phenomena or a particular social group being studied to determine the frequency with which some characteristics or events occur in the population. Data collection mode will be primary in nature.

According to (Paltridge and Phakiti 2015), choice of a case is critical and important which is chosen through puzzles, questions and curiosities about a social process or a person, group and institutions chosen as a case. A case study research gives a detailed explanation and analysis of a chosen case. For the current research, my case is the role of Government in sustainable industrial development taking Hattar Industrial estate and I intend to describe in detail the Government policies of industrial development in the context of Hattar and accessing the structural transformation of institutions for sustainable development using the theoretical and conceptual framework. I would try to provide a detailed analysis of governance and economic sustainable dimension of industrial development. In order to facilitate this analysis, the research method used is detailed in the following text.

4.4 Research Methods

The research methods used for this study refer to the methods or techniques adopted for the purpose of data collection. Given the qualitative research strategy and descriptive case study research design, the techniques to be used in this research are as follows:

4.4.1. Key Stakeholders Interviews& Survey

(Sarantakos, 1993) highlights that the purpose of using interviews as data collection is to ensure the collection of data using well-defined research objectives and questions which are controlled by interview to avoid biases. For assessing the

performance of Government through qualitative research it is important to put in detail the perception and viewpoint of key stakeholders engaged in sustainable industrial development practices especially in Hattar. (Berg and Lune 2014) present strong case for using interviewing as a method to conduct research and collect detailed information.

For all three research objectives, key stakeholders' interviews will be conducted which will help in determining the role of Government in effective structural transformation of industrial development towards sustainable industrial development. Further the interviews will provide insights on how Government has formulated and implemented industrial policies especially with focus on sustainable industrial practices at Hattar in particular, and Khyber Pakhtunkhwa in general. The interviews will also help in studying the impact of governance structures loopholes in building institutional capacity and processes for sustainable industrial development.

According to some experts in qualitative research the topic of "how many" interviews "are enough," is basically a question to determine the minimum number of in-depth interviews. Morse, (J. M. 2000) in his study on determining sample size highlights that for a qualitative research "anywhere from 5 to 50 participants as adequate" however it also depends on the nature of research. For the purpose of this research, twenty two (22) in-depth interviews are conducted from the key stakeholders related to Industrial development in KPK and Hattar in particular. The Government representatives chosen were key public office holders involved in policy making and implementation. Further due to the complications arising out of COVID-19 during the data collection and keeping in view time constraints the number of in-depth stakeholder interviews of relevant stakeholders was limited to ten. A key stakeholder for this study is the industrialists on ground at Hattar. For the purpose of this study, a survey was also

sent to some of the industrialists, as it was not possible to conduct interviews personally due to COVID.

The key persons whose interviews were conducted included one official from KPK ministry of industries and Commerce department in the study, as it is important to get the bureaucratic representation of Khyber Pakhtunkhwa Industries. One official from Khyber Pakhtunkhwa Economic Zones Development and Management Company (KPEZDMC) was interviewed as they directly regulate Hattar Industrial Zone. Two officials from federal ministry of industries and production were interviewed to get insight about Federal Government policies regarding sustainable industrial development. It also included two representatives from Sarhad chamber of commerce and Haripur chamber of commerce as these chambers are primarily responsible to stimulate the trade, business and industrial activities in the Khyber Pakhtunkhwa and in the surrounding tribal belt. One official from KPK Board of investment was interviewed as Khyber Pakhtunkhwa Board of Investment and Trade (KP-BOIT) is established for the promotion of trade and investment activities in Khyber Pakhtunkhwa (KP).

Twelve officials representing the two prominent industries of Hattar Industrial Estate were interviewed to get the insights of problems they face with regards to Government policies. Lastly it includes a local union council representative and a law maker in shape of member provincial assembly from Haripur. The purpose was to get insights about the KP Govt steps to develop Hattar through provincial development funds and to access their efforts, challenges faced in developing Hattar Industrial estate located in Haripur. It will give insights at grass-root level. In the forth-coming section I have tried to explain the type of interview method used to conduct this research.

4.4.2 Data Collection Process

4.4.2.1. Semi-Structured Interviews

(Bryman, 2012) classifies the interviews under the umbrella of unstructured and semi-structured interviews. The author highlights that's in a semi-structured interview, a specific list of topics, or questions are followed by interviewer response however the response of interviewees are not kept restricted instead they have the control to what extent they want to share the information with the interviewer. In this regard the formulation of questions and sequence are not kept fixed and the questions included in the interviewer guide by the interviewer may not follow the same probes and order. Further prompts are used commonly during the interviews. Further the reason to use this methodology as (Bernard, 2006) illustrates that such interviews are most appropriate to interview those individuals who may be unable to meet researcher more than one time. As a result of the reasons mentioned, I have used this research method to collect data for my research objectives and to interview my key stakeholders. The interviews were conducted using interview guides designed according to the stakeholders.

4.5 Data Analysis process

4.5.1. Thematic Analysis

I have used Thematic Analysis approach for the analysis of data collected through semi structured interviews. (Braun & Clarke, 2006) highlights that thematic analysis is a type of independent qualitative descriptive approach which is mainly described as “a method for identifying, analysing and reporting the patterns (themes) within data”. Thematic analysis is a well-known technique in qualitative analysis. (Nafees et al., 2012) highlights that the data collected or retrieved from the respondents

will be grouped into similar themes. The data collected is 'coded' and assigned the label that reflects the answers to research questions. The themes are generated based on the views and answers of questions by the respondents.

CHAPTER 5

RESULTS AND DISCUSSION

5.1 Data Analysis and thematic Discussion

The analysis included three themes that are based on the objectives of the research study and the questions. The first theme constructed on the basis of models to be used and the study objectives is the Government effort to effectively create a transition towards sustainable industrial development. The second theme will explain the governance and policy factors that affect sustainable industrial development under the light of Geels Sustainable Industrial development transition model. The third and final theme of discussion will highlight the reasons of policy failures in achieving sustainable industrial development in the case of Pakistan taking Hattar as case study using Mushtaq Khan NIE model of state failure. All the themes will be discussed under the light of interviews and discussion with the key stakeholders (list given in appendix) by constructing the questionnaire that adheres to the research objectives and the themes.

5.1.1 Thematic Analysis Approach

Keeping in mind the nature of the study, the interview guide was divided into several themes with various questions that were open ended in nature. The purpose of an open ended nature of questions based interview was to get a deeper insight into the reality we seek to know in this research. The questions were based on digging out the contextual explanation of the existing scenario let it be education or their identity. The thematic analysis is basically a research approach of qualitative analysis that is based on generating themes from the data. The purpose of using thematic analysis is to ensure interpretation based on process and the collected data is thoroughly searched for the

identification of connecting patterns and linkages that helps in explaining a certain phenomenon. This method helps in the generation of important themes instead of explicitly developing any theory (Tesch 1990). Thematic analysis is also helpful in providing deep and insightful explanations for the understanding of various phenomena. It can help in testing any existing theory or a range of new theories/approaches can be formed (Braun and Clark 2006). The data was collected in the form of open ended statements that explained the causes and perceptions about the issues and questions asked. For a better understanding all the interviews who gave consent were first recorded using mobile voice recorder as well as separate notes were taken side by side. Later the recorded interviews were written and then coded by identifying common trends in answers.

5.1.2 Ethical Considerations

While recording the responses, the participants' were asked if they are okay with recording the audio for research purposes. Only those who gave permission, their audio were recorded for the purpose of coding and write-up of analysis. The industrialists as well as the chamber and other relevant stakeholders who were interviewed, they were ensured that their names will not be used in any form for any other purpose than the thesis study. Further, while interviewing the key stake holders it was made sure that questions were drafted and asked in a totally unbiased manner.

5.2 Study Themes and Analysis

For present study analysis, under the four themes given below the role of Government in sustainable industrial development taking the case study of Hattar will be discussed. Each theme is analyzed based on the collected responses from interviews conducted of key stakeholders. Their responses are interpreted keeping in mind the

context of this study. Now each theme will be separately discussed with all the questions asked to the key stakeholders of present study. **In each theme discussion first Government response is highlighted followed by the industries and chambers response.** Lastly, this analysis will be followed by a chapter that exclusively analyses and discuss the policy narration of each theme in the light of KPK industrial policy 2016 and the new KPK industrial policy 2020.

5.2.1 Government efforts towards sustainable industrial development

The first theme under discussion is developed keeping in mind the different models of sustainable industrial development also discussed earlier that underline the role of Government in sustainable industrial development. In this theme it is to be discussed that what are the key steps undertaken by the Government with regards to sustainable industrial development in particular Hattar and KPK. The industries and chamber of commerce input was also taken to ensure that all relevant stakeholders are incorporated in the analysis.

Government Stakeholders when asked about “What are the steps taken by KP-BOIT/KPEZDMC/KP and other relevant institutions towards sustainable industrial development in KPK?”

- The public sector respondents of these organizations mentioned that with regards to sustainable industrial development, KPK has launched a new industrial policy in 2020.
- This policy focuses on ease of doing business and smooth transition towards sustainable industrial development.
- On a question, the CEO of KP Board of Investment mentioned that Government plans to further develop Hattar Industrial Estate by launching Hattar 2, a special economic zone that has been specifically built keeping in view the sustainable industrial development paradigm.

<ul style="list-style-type: none"> • With regards to question probing steps taken by Government for sustainable industrial development, he mentioned that Government has announced different tax incentives including tax reductions and exemptions to various industries, traders and investors just like how they have done in Rashakai Special Economic Zone. • With regards to steps taken by KP Government for special economic zones, he mentioned that for special economic zones, KP Government has set up Special Economic Zone Authority (SEZA) an extension of KPBOIT that look into affairs of special economic zones of KPK including Hattar. • In the discussion the public stakeholders acknowledged the issues faced by industries in form of shortage of electricity or electricity pricing for which KP Government representative of ministry of industries and federal industrial ministry's parliamentary secretary mentioned that Government is trying to resolve IPP's and other issues to overcome power shortage crisis.
<ul style="list-style-type: none"> • Private Stakeholders including the industrialists on ground and officials of chamber were asked about "What are the steps taken by KP-BOIT/KPEZDMC/KP and other relevant institutions towards sustainable industrial development in KPK?"
<ul style="list-style-type: none"> • The respondents were not satisfied with the role of KP Government and relevant agencies. • The industrialists of Hattar Sector on ground highlighted the power shortage issues they face which is severely affecting the production. Further they mentioned that they also face tripping of power which affects the output as well as production process. • The Haripur chamber of commerce and Sarhad chamber of commerce presidents also mentioned that with regards to KP Government steps, they said that the steps are not uniform and long term. When inquired in detail through open-ended questions, they highlighted how the new industrialists and new special economic zones like Rashakai Special Economic Zone are focused more by Government, whereas the old industrialists and old special economic zone like Hattar is getting ignored. It has left a bad taste in the mouth of those industrialists of Hattar, who have established business in Hattar and are ignored over the years by KPK government.

- The industrialists of Hattar also highlighted how industries are becoming non-sustainable due to high power tariffs and low tax incentives and urged the government institutions to take actions.
- The industrialists mentioned that the industrial sector is going through a very difficult phase and the revenues are severely affected due to lack of sustainable practices coupled with recent situation created by COVID-19 pandemic.

With regards to this theme, different questions were asked to all relevant stakeholders. From the discussion and findings, it seems that the new government is putting effort to transform the industrial sector in KPK; however after hearing the industrialist's issues and chambers problems, there is also a need for stakeholder consensus before final policy is drafted. It seems currently the engagement plan of public sector stakeholders especially KP-BOIT is lacking this mechanism and the current policies are drafted without stakeholder consensus of relevant stakeholders. Further it is important that government brings long term sustainable uniform policies for old and new industrialists and special economic zones. The industrial development should be inclusive and sustainable therefore the Government policies needs to be uniform for all special economic zones and industries including those established in Hattar. It is also observed that Government is trying to put efforts to create ease of doing business which was ignored in previous policies. It seems that there is a disconnect between industries, chambers and public stakeholders and there should be a platform and more meetings to ensure that policies are drafted after incorporating the feedback of all relevant traders, investors and other actors.

5.2.2. Policy Factors Affecting Sustainable Industrial Development

The second theme of the study is to discuss the Policy factors that affect sustainable industrial development and status in Hattar Industrial Estate under the Geels

determinants of transformation and analyze the stakeholder's actions in the light of Geels multi-level perspective towards sustainable industrial development and . Multi-level perspective (MLP) approach highlights that for the socio-technical transitions towards sustainable industrial development, there are three important levels where policy interventions need to be made. The three levels include socio-technological regime, landscape and technological niche. The concept of socio-technological regime is based on technological trajectories and insights on institutions and their structure. It also describes the semi-coherent set of rules that assist in coordinating the activities of the social groups that reproduce the various elements of socio-technical systems. The term niche means enabling socio-technical experiments to take place through stakeholder consensus in a protected space called "niche", which will act as a new domain for technology. The landscape refers to the external factors that are operating on regimes. These include cultural values, climate change or demographic transitions or political ideologies. Sustainable development transition takes place after all the factors collaborate and the dynamic interplay among these 'levels' leads to a whole set of pathways of system transformation.

According to the Geels multilevel perspective there are different factors that affect sustainable industrial development directly that plays important role in sustainable industrial development. The stakeholders were asked questions regarding these factors status to access the status of sustainable industrial development in KPK in particular Hattar. These key policy factors that play a key role towards sustainable industrial development include industrial zone infrastructure, policies including tax and industrial policy and access to technology.

Government Stakeholders when asked about “What are the policies with respect to technology, taxes and markets? How the transition took place in Hattar Industrial Estate focusing sustainable industrial practices by KP-BOIT/KPEZDMC/KP?”

- The public sector respondents of KPK Government organizations mentioned that with regards to policy factors involved in sustainable industrial development, they have made changes in tax regimes.
- The Government representatives said that they have also given incentives for those industries that use green technologies i.e. environment friendly technologies in the industrial production. The incentives include tax exemptions and reductions for industries especially under the new industrial KP policy 2020, which awaits the approval of cabinet. T
- The government stakeholders including KPBOIT, FBR, BOI and ministry of industries mentioned that such changes in tax and technology regimes are focus of government to boost industrial development and also attract new investments. The policies have resulted in huge interest especially in resource based investment in various industrial sectors of KPK and new special economic zones like Rashakai. F
- Further on probing, the Government representatives mentioned that due to COVID-19, a lot of changes have been also made including the following tax changes under the new policy according to officials in 2020 especially to protect vulnerable sectors like construction, tourism etc. These changes are also applicable on Hattar Industrial Estate, which comes in KPK sector.
- According to the spokesperson of ministry, a key change is that the sales tax on services (STS) has been reduced for 27 categories in the province. The purpose of this intervention is to ensure that there is a reduction for sectors where the economic activity has dampened or got affected amid covid crisis. These sectors include construction sector, business support services, hospitality sector, oil and gas exploratory services etc.
- Along with tax measures, the KPK government representatives also highlighted that they intend to revive the sick industrial units. When more details were asked, the representative of KP Economic Zones Development and Management

Company (KPEZDMC) said that KPK Government intends to revive job market by revitalizing the sick industrial units.

- In this regard they have launched KP Revival of Sick Unit (RSU) which will create 1,800 indirect and direct jobs after the launch of 70 new units and creating 400 jobs after revival of sick units.
- Along with tax, technology and market measures the KP Government officials highlighted that they have also introduced mechanism to monitor policies in the new policy so that midcourse corrections through interventions can be made in case if a policy is not yielding desired results.

Private Stakeholders including the industrialists on ground and officials of chamber were asked about “What are the policies with respect to technology, taxes and markets? How the transition took place in Hattar Industrial Estate focusing sustainable industrial practices by KP-BOIT/KPEZDMC/KP?”

- The representatives of industries complained that Government has failed to give tax concessions to industrialists in Hattar. Further the chambers officials and industry officials mentioned that the Government has imposed taxes and duties on raw materials and there have been a lot of additional taxes imposed since 2018.
- There are withholding adjustable and non-adjustable taxes on different raw materials imported. Also they mentioned that federal excise duty is imposed on the finished goods or products followed by sales tax.
- According to the industrialists, these taxes makes the overall price high coupled with increase in dollar price and fuel price have cut down the net profits.
- The chamber representatives complained of double taxation being charged from the industries. When the profits are getting minimal along with the power price going upwards the industrialists complained that they face an uphill task of keeping their industries sustainable.
- Further the industrialists and chamber officials were not satisfied with the policy steps taken for markets. They complained that Hattar industrial estate has been ignored and the Hattar 2 claimed by the Government launching soon, has not been focused since 5 years.

- The industry owners and chamber officials demanded that they should be taken on board when the policies are formulated rather than only informing us after formulating policies.
- Further the representatives said that the policies drafted should be long term and not just for short term benefits. They demanded that Government should make interventions on tax, technology and market fronts keeping in view all type of industries and planning the interventions outcomes in longer run compared to making policies for only short term benefits.
- The industry owners as well as the chamber officials highlighted that another issues with the Government is the failure to implement the policy after drafting the policies. Despite the policies drafted on ground, there is a huge need for improvement on policy implementation side where there is poor coordination and monitoring mechanism leading to poor outcomes.

With regards to this theme, different questions were asked to all relevant stakeholders. In the light of discussion, the major problem that is hampering sustainable industrial development is the poor communication between the Government and industries. It seems that Government is creating policies without taking on board the industries and the chambers have been not involved in the policy process despite being an important stakeholder. Further it is important that the problems of double taxation as well as different taxes should be reduced and the Government should communicate effectively the policy interventions as well as ensure the effective implementation of the policies. In my opinion and research, the government in KPK should also be lauded for trying to incorporate the stakeholder's opinion in the new policy that is drafted in 2020. For this policy, all the relevant stakeholders were taken on board and the copy to cabinet was sent after getting inputs from the chambers, industries, investors, donor agencies and other relevant stakeholders. Despite COVID-19, KPBOIT, KP GOVT, SEZA and other relevant institutions arranged zoom sessions to ensure that the

stakeholder relevant to industrial policy are on board and the new policy incorporate the feedback of everyone. There needs to be a clear policy with regards to steps taken by KPK Government to promote technology and encourage local industries to move towards cheap and environment friendly technologies. Further, for new special economic zones, the government plans to conduct environment impact assessment however there should be environment impact assessment for older special economic zones including Hattar.

5.2.3 Policy failure in achieving transition towards sustainable industrial development

The third theme is to discuss the possible reasons behind failure to achieve sustainable industrial development in Pakistan taking the case study of Hattar, KPK under the light of Mushtaq Ahmad New Institutional Economics (NIE) model. The discussion is based on the responses of the private and government stakeholders which clearly depicts the reasons of failures as mentioned by the model of Mushtaq Ahmad. Before I highlight the findings and analyze them using model I want to briefly give an overview of the model and focus the argument towards role of institutions in policy success. It is important to highlight that Institutions play a key role to foster economic performance of the country. There are various ways you can access the role of institutions and governance. The New Institutional Model (NIE) explains the role of institutions as centric towards incentivizing economy structure and shape up economic changes. Without the effective institutions and institution building, the structural transformation towards sustainable industrial development is not possible. The NIE approach helps in explaining the role of institutions in industrial development by establishing link between institutional and government failure. The Government or the

state holds responsibility for the protection and maintenance of formal institutions as well as the processes through which the alterations are made in the system.

(Khan, M. 2002) NIE Model explains State or Government failure in Developing Countries by explaining that there are two types of failures that lead to development failure. The first failure is called structural failure. This failure occurs when the Government fails to make structural changes in existing institutions that lead to poor economic outcomes which include lower net benefits for society compared to an alternative structure. The better set of institutions lead to better economic growth. Type II state failure or transition failure occurs when the process for changing the structure of institutions is faulty and it leads to attaining a lower cumulative set of net benefits for the society.

When asked from the private stakeholders and public stakeholders about the effectiveness of institutional enforcement and reforms, the answers depicted a conflict. The Government stakeholders including KP-BOIT, KPEZMIC, SEZA and KP Government highlighted that to ensure the policy implementation they have ensured effectiveness of institutions and the enforcement mechanism have been very effective. They acknowledged the fact that in previous policy the monitoring mechanism to ensure the policies was not present however the 2020 KPK policy has focused on monitoring and evaluation mechanism to ensure the institutions that are responsible for implementing the industrial policy are working properly. Further, the processes that lead to transformation towards sustainable industrial development will also be monitored through implementation and oversight committee constituted under the new KP Policy 2020. The Government actors when interviewed about the industries complain about the poor behaviour of regulatory authorities and how they often try to

exploit industries, they rejected the claims of industrialists. They claimed that despite repeated calls to industries to collaborate on ways to make institutions and policies better, they fail to respond and later after the policy is enforced; they try to create hurdles to gain ground for favours outside the scope of policy. According to Mushtaq Ahmad model, the institutional enforcement is effective in advanced countries because, the state institutions have the monopoly and the ability to enforce the policies. In my analysis, I found that the KPK Government lacks the monopoly and the ability to enforce the policy because the previous policy of 2016, led to a lot of loopholes that eventually led to the new policy of 2020. It failed to create ease of doing for business because the institutions lagged the ability to enforce the regulations regarding creating ease of doing business. Similarly due to the lack of control rights, a lot of times the industrial policy implementing agencies have failed to enforce the policy steps like in the case of announced subsidies, which were not reallocated to industrialists equitably because of ineffective institutional structures and ineffective processes leading to the ineffectiveness of policy enforcement.

Similarly when the private stakeholders were asked about the institutions of Government and agencies they complained about the way institutions treat industries. The chambers representative complained about the way key stakeholders are totally ignored in the policy formulation phase. They said that the institutions don't have coordination among them leading to problems of double taxation. Due to poor policies of energy and power sector, they complained that they face continuous power issues which show the poor institutional capacities. For years they claim that despite Government announcements for Hattar, the reforms in power sector seems a distant reality and the industry remains at the realm of poor power transmission. Further the high prices of power as well as the high taxes shows how the margins of profit of

industrialists have reduced leading to a lot of industries shutting down according to the industrialists and chambers representatives. Further the private sector industries and chamber representatives complains about the way the regulatory authorities have given privileges to some powerful industries like sugar cartels etc., whereas they have totally ignored the interests of larger group of industries like in special economic zone of Hattar.

In my view, after listening to both sides, I find that to ensure the effective enforcement of policies it is important that the Government has the institutional capacity and the institutional processes ensure the protection of interests of larger and common social groups or in this case the industrialists. I agree with the reasons that have been highlighted by (Khan, M. 2004) in his model of state failure and institutions debate that are present in the failure of Hattar becoming one of the top special economic zone of Asia is that the Government has not been able to develop the institutional capacity neither refined the institutional processes to ensure comprehensive stakeholder consensus based policy formulation, good governance, good coordination and effective implementation of policies leading to non-sustainable and poor industrial development and growth. However, the new Government with the new policy of KPK 2020 seems to focus its energies on some of the grey areas of previous policies especially with the focus on ease of doing business as well as creating an effective monitoring mechanism is commendable.

5.3. Reflective Analysis

After taking in detail the responses of all the key stakeholders, I want to give analysis of role of KP Government with regards to Hattar and sustainable industrial development. In my findings, it is important to understand that a lot of complaints of

industries and chambers are simply because of Government and institutions failure to engage them in policy debates and ensuring stakeholder consensus while drafting key policies like KPK Industrial Policy 2020. In this regard it is critical that Government policy institutions ensure that they engage the larger group of industries to ensure effective policy formulation and effective enforcement or implementation of policies. If the state only indulges in intervening to protect few industries, then they are promoting a capitalist transformation which leads to social injustice.

Further in my point of view, it is critical for sustainable industrial development that the Hattar Special Economic Zone and the industries are ensured utilities without any hiccups. All the industries have complained about the power shortages or power failures as well as the power tripping that leads to poor production. Further the power supply should be given at discounted rates to the small and medium industries especially whose revenues are cut short as a result of high utility prices. This ultimately leads to shutting down, if profits don't reach the level of expectation of industry makers or leads to salary cuts and firing of employees which leads to unemployment. In this regard it is critical for Government to build their institutional capacity especially when it comes to power sector. Another issue that needs immediate attention of the government is to focus on driving mechanism to develop the appropriate bureaucratic structure and bureaucratic capacity that leads to effective coordination and implementation of policies.

It is also found according to the government stakeholders that there are few industries that try to dominate the interests of other industries through the practices of rent seeking and corruption. In this regard it is important that the political capacities are enhanced and the political governments should take the charge and devise stringent rules to manage and control such practices effectively. It is important to develop

political capacities along with institutional capacities as both are closely linked and intertwined. As the political failures to enforce the policies can lead to loss of morale as well as personnel in the bureaucracy as mentioned by the Mushtaq Ahmad model. Further it is important to improve the quality of public officials playing key role in developing and implementing the industrial policy through foreign trainings and workshops. In this regard some of the officials of KP Government have been given such trainings like Mr. Ali of KP-EZMIC heading SEZ's KP media strategies. In the light of my research, it is important that such practices are further increased to improve the institutional capacity of policy making institutions as well as the policy implementing agencies.

It is important to understand that every industry has its own specifics and the industrial policy should be based sector wise entailing the detailed plan for increasing the manufacturing capacity and exports of that particular industry. It was found in the interviews that the previous policy of KP 2016, failed to focus the industries sector wise. The industry policy mentions the strategy generically for manufacturing industry however the industries and chambers highlight absence of any type of sectorial based policy to solve their problems.

When the growth of East Asian countries including South Korea, Japan and Thailand are studied in detail, and the issues were raised with industries and chambers, it is found that there has also been little action to make a leap towards sustainable development transformation by addressing market structures. KP Government has failed to make necessary interventions to help the new industries (Sunrise) in blooming and the going out or struggling (sun set) industries take a step forward in achieving market success or production increase leading to rising exports trend.

Another finding is how the Government in countries like have been based on model of small bureaucratic agency in form of Industrial development bureau. The bureau in Thailand consisted of 150 top engineers and they were divided into different industry sector teams like electronics, chemicals, daily necessities etc. These members practically visited factories of their sector and after gaining the information and knowledge from country wide popular practices and the problems faced by their own industries, found policy solutions. This two way information system and knowledge help them designing the relevant policy interventions backed by bureaucracy and state leading to sustainable industrial development. It was found that no such technical committee existed to ensure the policy constituted in 2016 is successfully implemented and incase of market or policy failures midcourse corrections are made to ensure the desired and planned policy outcomes leading to sustainable industrial development and long-term economic growth. Further it was noted when Mushtaq model and the eastern Asian countries development is analyzed that a country like Thailand and Japan boosted their industries by contacting their foreign subsidies. The collaboration between local and foreign subsidies lead to information exchange and enhanced the capacity of local industries. Such a mechanism has been missing and not devised by KP Policy institutions in 2016 and Hattar in this regard is no different as due to failure to incorporate such innovation based policy interventions, lead to non-sustainable industrial practices.

In the light of my research objectives, i want to highlight that it is important for state to shape the industrial policy so that it encourage innovation, competition as well as control monopolistic trends by exerting strong regulatory checks and building institutional capacity to improve governance and ensure sustainable industrial development. The state also needs to shape market and fix market failures by

overcoming the negative externalities. There should be a strong collaboration and coordination mechanism between private and public sectors. The industrial policies should promote technological interventions. The focus to bring structural reforms has been totally missing in our policy drafts previously. The focus to build export discipline by supporting business and government support to increase exports as well as policy to give interests and incentives to those industries enhancing exports is also a missing factor in our KP 2016 industrial policy.

I am also going to provide a detailed policy review and analysis of new KPK Industrial policy 2020 policy in the following chapter to show the change in approach and vision in both policies followed by policy recommendation and conclusion chapter that highlights some of the key areas that still needs to be focused by KP Government in line with the NIE model and sustainable industrial transformation approaches earlier to ensure long term sustainable industrial development.

CHAPTER6

POLICY DISCUSSION

6.1. Policy Discussion

The discussion includes the review of the new revised KP industrial policy 2020 which substitutes the old KP Industrial Policy 2016. The purpose of this analysis is to identify the difference in approach with regards to sustainable industrial development transformation as the policy applies directly to Hattar Special Economic Zone which lies in KP. The analysis includes the areas where KP Industrial policy 2020 is different from the previous policy of 2016. . All the discussion will be based on the draft of KP 2020 policy shared by the KP-BOIT and KP Government during the course of this study with the researcher and in the light of discussion with relevant government and private stakeholders.

6.2 KP Industrial Policy 2020

KPBOIT, KP Government and relevant stakeholders launched KP Industrial policy 2020 with an improved focus to enhance sustainable development in KP. According to the officials, when interviewed KP BOIT CEO highlighted that this is a unique policy as the policy focus sustainable industrial development by focusing on special economic zones development and improving governance practices. The policy drafted for 2020-2030 focuses on following key area

6.2.1 Comparative Analysis of KP Industrial Policy 2016 & 2020

6.2.1. A) Development of Special Economic Zones and Ease of Doing Business

The focus of the Government under the new policy is to develop the special economic zones across the province in upcoming ten years. According to the new policy the work will be taking on following

- A) Hattar SEZ Extension (1000 Acres)
- b) Swat EZ
- c) Buner EZ
- d) Shahkas (KPEC route)
- e) Daraband (D.I Khan) SEZ (1500 Acres)
- f) Mohmand EZ (350 Acres)
- g) Nowshera Extension EZ (77 Acres)
- h) Chitral EZ
- i) Ghazi
- j) Jalozai

According to the policy modern logistical parks of international standards will also be developed in future. The focus of the policy and KP Government is to develop new special economic zones as well as ensure developing sector specific zones across districts of province which was not the focus earlier in 2016 policy. The policy aims to specifically focus on formation of a one window utility for easing and facilitating the registration, licensing, registration and simplification of documentation procedures. It will also hope in better regulatory awareness and compliance in special economic zones. The one window opportunity will be jointly operated and managed by the KP Board of Investment & Trade and the KP Economic Zones Development & Management Company (KP-EZDMC). According to the CEO KP BOIT, Mr. Hassan, this is ground-breaking as previously in the industrial policy of KP-2016, the focus to

build ease of doing business was missing. Further he states that this shows commitment of KP Government to follow the international standards set by World Bank and other international organizations with relevant to ease of doing business to promote trade and investment in KPK. Another feature of the ease of doing business in this new policy is the plan to establish integration and coordination among the Government functionaries to facilitate the industrialization as well as create ease of doing business for facilitators. This will be coupled with the plan to ensure easy access and availability of diversified credit lines by Commercial Banks for the industries in KP.

6.2.1. B) Focus on Good Governance

KP Industrial Policy 2020 also focuses to develop a governance mechanism for ensuring proper implementation of the policy drafted. The policy compared to 2016 policy gives a clear monitoring mechanism for policy. Some of the steps along with the monitoring mechanism in the new policy include ensuring close coordination for provision of necessary utilities including electricity and gas between Federal and Provincial Government. The utility provision and poor governance is a key area that needed improvement as it was repeatedly mentioned by the industries as a major hindrance towards sustainable industrial development. It also aims to ensure governance to support import substitution, export led industry and encourage joint ventures. The policy also aims to improve coordination with international and national zone developers for establishment of SEZs.

The implementation and oversight framework drafted to monitor the KP industrial policy 2020 will be led by KP-BOIT, SIDB, KPEZDMC, KPTEVTA and directorate of industries. According to the representatives such implementation mechanism didn't exist under the 2016 policy. According to the new policy, an implementation and oversight committee is constituted that will ensure the coordination

among key stakeholders to ensure the effective policy implementation. According to the representative and the policy draft, the committee will address grievances as well as ensure the effective implementation of the policy. According to the policy the following members will constitute the Committee.

1. Minister/Special Assistant to CM for Industries, Commerce and TE (Chairman)
2. Secretary Industries
3. Additional Secretary Finance
4. Additional Secretary Planning and Development
5. CEO KP BOIT (Secretary of the Committee)
6. CEO KP EZDMC
7. MD KP TEVTA
8. MD SIDB
9. Chief Manager State Bank of Pakistan, Peshawar
10. MD Bank of Khyber
11. Provincial Chief SMEDA
12. Director Industries & Commerce, Directorate of Industries
13. President Women's Chamber of Commerce & Industry
14. President Sarhad Chamber of Commerce & Industry (SCCI)

Such a mechanism was not present earlier in 2016 policy. According to the policy the Committee will be responsible for effective implementation of the new revised KP 2020 industrial policy and also it will be responsible for amending, including or deleting the provisions of policy after review of the industrial development of the particular province. This policy will be reviewed after every two (02) years and will also take into account the new technological inventions, innovation and performance. The committee will monitor and draft annual report that will be submitted to Chief Minister KP.

6.2.1. C) Policy Connectivity and integrated approach

According to the draft and spokesperson, the Industrial Policy 2020 of KPK has been made more credible as well as effective by adopting a gender equality and integrated approach. In this regard effort has been made to establish pertinent connectivity with other existing policies of the province and various and acts from which possible inputs into the Industrial Policy are identified along with the Departments to collaborate with. The connectivity with other acts and policies will help in ensuring adding value and assisting in achieving the objectives of Industrial Policy 2020. The approach will help in enhanced collaboration and co-operation amongst the key stakeholders for the purpose to reactivate, revitalize, or use idle capacities. It will also help all the relevant stakeholders in exploration of new overseas market for export potential. This was a missing factor in 2016 policy. The approach structure is shared here on the next page in form of table.

S. No.	Sectors / Policies	Inputs into the Industrial Policy 2020	Collaborating Department
1	Energy PEDO (Hydro Power Policy 2016) KPOGCL	<input type="checkbox"/> Indigenous energy resource for sustainable economic growth through Hydro power generation, Oil & Gas and renewable energy <input type="checkbox"/> Clean and economical dispatch of Electricity & Gas to Industrial Estates & SEZs <input type="checkbox"/> Energy generation from recycling	<input type="checkbox"/> Energy Department <input type="checkbox"/> Pakhtunkhwa Energy Development Organization [PEDO] <input type="checkbox"/> Khyber Pakhtunkhwa Oil & Gas Company Limited [KPOGCL] <input type="checkbox"/> Electric Inspectorate
2	Minerals Mineral Policy 2016 Mineral Governance Act, 2017	<input type="checkbox"/> Mineral resource mapping <input type="checkbox"/> Development of Mineral resources <input type="checkbox"/> Facilitating access to reserves <input type="checkbox"/> Value Addition	<input type="checkbox"/> Mines & Minerals Department <input type="checkbox"/> UET Peshawar <input type="checkbox"/> PASTIC

3	Planning	<input type="checkbox"/> Facilitate / support in strategic planning and appraisal of new initiatives. <input type="checkbox"/> Formulation of statistical information in liaison with Federal & Provincial departments	<input type="checkbox"/> Planning & Development Department <input type="checkbox"/> Directorate of Monitoring & Evaluation <input type="checkbox"/> Bureau of Statistics <input type="checkbox"/> Provincial and Federal Assemblies
4	Taxation The Urban Immoveable property Tax Act, 1958 (KP-Finance Act, 2017) KP Finance Act; 2013	<input type="checkbox"/> Facilitate / support in provision of Tax Credits to the businesses	<input type="checkbox"/> Excise & Taxation Department <input type="checkbox"/> KPRA
5	Labour Management KP Factories Act 2013 KP Shops and Establishment Act 2015	<input type="checkbox"/> Women, the poor and the vulnerable to have equal rights to economic resources, job opportunities and labour rights <input type="checkbox"/> Facilitate / support to substantially increase technical and vocational trainings for employment especially non-traditional vocation for women	<input type="checkbox"/> Labour Department <input type="checkbox"/> Directorate of Labour <input type="checkbox"/> Employees' Social Security Institution [ESSI] <input type="checkbox"/> Workers' Children Education Board <input type="checkbox"/> Labour courts <input type="checkbox"/> Social Welfare Department

6.3. Conclusion

The revised Khyber Pakhtunkhwa Industrial policy 2020 compared to previous policy of 2016 focuses on building sustainable industrial development by focusing on building special economic zones, creating ease of doing business through one window operations and building effective strategy to monitor the policy implementation. The policy aims to build coordination mechanism between relevant stakeholders. On the face of it the policy seems a good effort to promote rapid industrialization. The policy is built on the three pillars of rehabilitation & revival, competitiveness and growth. In the later years the bigger picture will come clear that how well the targets set in the policy and the overall monitoring process planned is implemented but for now KP Government should be commended for coming up with a policy to develop the sustainable industrial development in KPK.

CHAPTER 7

RECOMMENDATIONS AND CONCLUSION

7.1 Conclusion

The issue of non-sustainable industrial development has everlasting impact on the economic growth and welfare of the country. Pakistan over the years has failed to develop the effective policy mechanism to ensure sustainable industrial development. Hattar special economic zone, the study area for this study faces similar problems due to non-sustainable development practices and poor governance measures in the past. In this regard the study was conducted to analyze the role of Government in sustainable industrial development in Pakistan taking Hattar as case study. For the purpose of this study, Geels Multi-level perspective approach and New Institutional Economics (NIE) approaches were used to evaluate the state of industrial development in Hattar.

For current evaluation of the state of Hattar Industrial estate primary research was conducted and interviews were taken from the list of private and government stakeholders. The interviews were conducted from the key stakeholders of KP Government which included KP Board of Investment and Trade (KP-BOIT), KP Special Economic Zone Development Authority (SEZA), KP-Economic Zones Development & Management Company, KP Ministry of Industries, Federal Ministry of Industries, Federal Board of Investment and the private stakeholders including the industrialists of Hattar and members of chambers of commerce. The interviews findings and analysis results show that there existed a low coordination between government agencies leading to poor industrial growth outcomes. The regulatory authorities responsible for implementing policies and the formulating agencies including the

ministries failed to intertwine effectively leading to a gap between policy formulated and implemented in form of KP 2016 policy. Further the interview results show that the industries face consistent power and gas issues that have hampered the growth and cut down the exports as well as reduced profits leading to many industries becoming non-sustainable and shutting down.

The results have also shown that there existed a poor stakeholder consensus between industries and Government during policy formulation as well as implementation when it came to KP Policy 2016. The chambers and industrialists complained that they were not made part of the policy process that ultimately lead to a policy formulated without incorporating key stakeholders like chambers and industrialists feedback. This led to the non-compliance of the policy as well as failure to achieve the desired outcomes in Hattar. The lack of focus on building a sustainable industry by taking actions to give tax reliefs, reduce utility prices, ensure utilities provision, promote green technologies led to continuance of non-sustainable practices in Hattar despite the KPK policy of 2016 on ground.

The results also shows that their exists lack of institutional enforcement, rent seeking and lack of governance in processes as well as policy implementation leading to the non-sustainable industrial development in Hattar. With regards to focus on manufacturing sector, the practical steps lacked the vision shown in the KPK 2016 policy along with the other failures mentioned above leading to poor exports and non-sustainable industrial development in Hattar. Another important finding is that the policy alignment and policy consistency is missing with a lot of incentives like subsidies given to sugar or the new industries whereas the larger group of industries and the older industries felt ignored and demands equal measures for all new industries and also a focus on old sick industries to revive their performance. The Government

agencies claims that they have revived sick industries however their lacks a vision of how to make such industries sustainable. The study shows that there is a need to improve the incentive mechanism regarding tax and technology to enhance sustainable industrial development.

The study also conducted a policy review of KP Industrial Policy 2020 to analyze how the policy is different from the previous 2016 KP Industrial policy. It was found out that the efforts of KP Government were commendable as the new KP Policy of 2020 aims to address some of the issues with increased focus on special economic zones development, creating ease of doing business, adopting an integrated approach and developing a monitoring mechanism for effective implementation of policy and ensure achieving the sustainable industrial development in future in KP. The policy draft was also shared with industrialists before sent to federal cabinet to take them on board and incorporate their recommendations before sending the draft to cabinet for approval. The future will only tell whether KP 2020 policy achieved the goals it sets however the setting up of monitoring mechanism specifically shows a step in right direction towards sustainable industrial development.

This study identified the various causes of non-sustainable industrial development in KPK including Hattar through qualitative study and explored the current situation of sustainable industrial development in Hattar. The purpose of this study was also to come up with different policy recommendations under the light of successful sustainable industrial development transformation models adopted worldwide by developed countries especially Eastern Asian countries including Japan, South Korea and others to highlight the key policy measures that are missing in Pakistan Industrial Policy formulation and implementation. These policy recommendations are

given below which needs attention of Government and private stakeholders to ensure sustainable industrial development in Pakistan.

7.2 Policy Recommendations

According to the various case studies, approaches and models discussed in this research, the states which have achieved sustainable industrial development transformation successfully shows the following trends that are suggested to be adopted in Pakistan.

- It is important for KP Government and the Pakistan Government to improve the enforcement capacity of our institutions to ensure effective implementation of industrial policy.
- Under the light of discussion from private stakeholders and literature review, the enforcement capacity of our institutions can be enhanced by creating effective political strategies that neutralized the powerful interest group's influence on policies through rent-seeking behaviour and corrupt practices. For instance in Japan the power structure was organized and developed by state in such a way that it could allocate rents and rights to those that followed policies and were liked leading to all those who were inefficient with no state payoffs.
- For KPBOIT, It is also important to focus on the investment policy and strategies to foster industrial development in Pakistan. Currently the investment strategies have lacked the focus on increasing efficiency based investments with 97 % of investments primarily falls under resource based investment. In this regard the example of Malaysia is discernable, where state through building its ability and focus on investment policy able to attract multinational investors by promising to protect their rights.

- For KP Government, it is also important to improve the monitoring mechanisms for bureaucratic agencies especially the implementing agencies to ensure good governance.
- For KPBOIT and other relative agencies dealing with industrial development, it is suggested that detailed institutional reforms are also required for sustainable industrial development in Pakistan. For this it is important that a comprehensive strategy focusing on transformation of industry that are ambitious but feasible on the lines of development approach undertaken by country like China and Korea.
- For KP Government and Pakistan Government, It is also important to direct the spending of multilateral agencies like World Bank and others in the right direction to foster industrial development for sustainable future. Over the years World Bank, ADB and IMF programs we have failed to achieve desired results due to pushing for major reforms on the basis of dubious public reports and evidences.

In the light of these recommendations and the suggested results, it is evident that state failure to transform industrial regimes toward sustainable industrial development occurs when the institutions fail because of an inappropriate power distribution structures. The institutions and policy interventions through which government attempts to transform the industrial development should focus on building institutional capacity, improving political power structures and creating stakeholder consensus before policy formulation and implementation.

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APPENDIX

Interview Guide for Policy Makers - (Policy Makers and Implementing Agencies)

- a) Mr. Hassan Daud Male CEO, KP Board of Investment & Trade (KP-BOIT)
- b) Mr. Muhammad Ali Ozgen Male Head of Business Development & Media, (KPEZDMC)
- c) Mr. Usman Yaqoob Male Secretary Industries & Commerce KP

1. Name: _____

2. Designation: _____

3. Area of work: _____

Theme: Government efforts to create transition toward sustainable industrial development (SID)

4. How do you see the current status of sustainable industrial development in KPK?

5. What are the steps taken by KP-BOIT/KPEZDMC/KP Government to bring sustainable industrial development in KPK?

6. Do you think the special economic zones in Pakistan have been built around sustainable industrial practices?

7. How the transition took place in Hattar Industrial Estate focusing sustainable industrial practices?

8. What are the recent developments on policy fronts to promote sustainable industrial development?

Theme: Discussion on determinants of transformation of sustainable industrial development under Geels Theory and Government efforts

9. How the KP-BOIT/KP Government has promoted Technology based initiatives to bring sustainable industrial development in KPK especially Hattar Industrial Estate?

10. Are there any tax friendly policies introduced to promote sustainable industrial practices in Hattar Industrial Estate?

11. How many industries operating under Hattar Industrial Estate have received any tax incentives if given under the policies of KPK Government?

12. Has there been any changes introduced in the supply and demand market for industries working in industrial zone to bring sustainable industrial development?

13. How the industries performance in Hattar Industrial estate is assessed by the Government agencies?

Theme: Governance and policy factors that affect Sustainable Industrial Development

14. What are the steps taken by KPK Govt and agencies to build infrastructural changes necessary to bring sustainable industrial development?

15. What are the steps taken by KPK Government to improve good governance in industrial sector? _____

16. What can be steps taken by KPK Government and agencies that can be taken to improve sustainable industrial development and governance?

Interview Guide for Chambers

- a) Mr. Muhammad Atta-ur-Rehman Yousafzai, President, Haripur Chamber of Commerce
- b) Mr. Faiz Muhammad Faizi Male President, Sarhad Chambers of Commerce, Pakistan (SCCIP)

Personal information

1. Name _____

2. Name of Chamber _____

Chamber Characteristics & Role of Government

1. What is the role of your chamber in industrial development?

2. How the chamber establish link between Government and the industries? _____

3. How the industries of Hattar have adopted sustainable industrial practices?

4. How is Government monitoring the sustainable industrial practices in KPK?

5. Are you satisfied with the role of Government in Sustainable Industrial Development? _____

6. How can the role of Government be improved to bring sustainable industrial development? _____

Work and Hattar Industrial Estate

7. Have the industries of KPK-Hattar Industrial Zone focused on sustainable industrial development? _____

8. What type of work chamber of commerce and industrial estate zones are doing together to bring sustainable industrial development?

9. Are chambers engaged in the policy making process with respect to sustainable industrial development? _____

10. How do you think the chambers can play more active part in policy making process to bring effective sustainable industrial development changes?

11. What are the steps Government can take to improve transformation into sustainable industrial development?

Interview Guide for Industry owners

1. Name _____

2. Name of Industry _____

3. Nature of Work _____

4. Do you get any guidelines about how to adopt sustainable industrial development practices?

5. What is the role of KP Government with regards to facilitating you in acquiring technology to improve industrial development?

6. What are the incentives given by KP Government with regards to tax, if any to promote industrial growth and development? _____

7. Have you faced any kind of problems while contacting Government regarding your problems? _____

8. Do you know about the industrial policy introduced by KPK Government for SEZ's?

8. How, if the new industrial policy introduced by KPK Government for SEZ's has helped you? _____

9. Do you know about the one window facility introduced by KPK Government to facilitate the businessmen? _____
10. How, the one window facility introduced by KPK Government to facilitate the businessmen? _____
11. How has KPK Government facilitated you in research and development of new products making it more sustainable? _____
12. What are the major problems faced by the industries established in the Hattar Industrial Estate? _____
13. What steps the KPK Government can take further to facilitate the industrial sector and ensure sustainable industrial development? _____

Interview Guide for Local and Provincial (MPA) Leadership

1. Name: _____
2. Designation: _____
3. What are the problems faced by the residents of Hattar and Haripur due to Industrial Zone?
4. How the local/provincial leadership is facilitating the general public affected by the Hattar Industrial Estate due to non-sustainable practices?
5. How well you are aware about the issues faced by the industries of Hattar established in Hattar industrial zone?
6. Have you ever tried to communicate and highlight the issues of Hattar industries employees and owners to provincial and national assemblies?
7. If yes, what is the response of the provincial legislature regarding the problems?
8. How do you think, the KPK Government can play its role better in transforming Hattar Industrial Estate?
9. What is the level of coordination between provincial and local tiers of Government with regards to nullifying the negative impact of non-sustainable industrial practices in Hattar?

10. How can the provincial government improve its policies to ensure adoption of sustainable industrial practices?

Interview Guide for Federal parliamentary secretary for ministry of Industries

Name: _____

Area of work: _____

1. Is there any difference observed in industrial development since the new government took over? _____
2. Do you think current government is prioritizing sustainable industrial development?
3. If yes, what are the steps taken by the current federal government in prioritizing and promoting sustainable industrial development?
4. How the federal government is facilitating KPK Government in promoting sustainable industrial development?
5. How the federal government is bringing reforms, if any to improve the institutions playing centric role in sustainable industrial development?
6. What are the steps taken by federal government to ensure good industrial governance?
7. What are the tax relief measures given to promote industrial growth?
8. How the federal government is improving the industrial growth through establishing SEZs?
9. What are the steps taken by Government to facilitate acquiring technology for industries in SEZs?
10. What are the future plans of PTI Government in promoting and enhancing sustainable industrial development transition?
11. In your opinion what are the implications of non-sustainable industrial practices?
Cultural hindrances for people like you to freely move or do

12. Do you think the main cause of failure to transform industrial sector is bad governance or poor structural reforms?

13. What do you think is the cause for previous governments not focusing on structural reforms to improve institutions?

14. What is the role of institutions in your opinion in bringing sustainable industrial development in the country?

15. How the current government is focusing to bring structural reforms to ensure sustainable industrial development?