

FINAL RESEARCH PAPER
INDUSTRIAL POLICY



(KHYBER PAKHTUNKHWA)

PAKISTAN

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This document is purely an academic exercise submitted in partial fulfillment for the Masters program of Engineering & Public Policy

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ACRONYMS

KP:	Khyber Pakhtunkhwa
NMC:	National Management Consultant
SDA:	Sarhad Development Authority
BSS:	Business Support Services
SEZ:	Special Economic Zones
IGC:	International Growth Center
FATA:	Federally Administrated Tribal Area
KPCCI:	Khyber Pakhtunkhwa Chamber of Commerce and Industry
SMEDA:	Small & Medium Enterprises Development Authority

ABSTRACT:

To development more sustainable society as industry in Khyber Pakhtunkhwa and needs to better understand how to respond to environmental, social and economic challenges and transform industrial behavior. At the center of the industrial sustainability, the purpose is to develop knowledge and tools that help accelerate the transition towards a sustainable industrial system. Industrial sustainability now appears to be moving up the management agenda in many organizations. [1] Industry is a key player in the transition to a sustainable society but there are many problems, which usually break the flow of performance. In practice there are number of barriers to the implementation of industrial sustainability ideas. The paper looks at the industrial sustainability policies. Industrial survey is done to analyze the challenges that are faced by different industries and ends with recommendations. Challenges particularly faced by organizations include the choice of appropriate products and process technologies, life cycle valuation techniques, changing employee and other stakeholder mindsets, law and order, and possibly most importantly creating a new business model altogether. [2]

INTRODUCTION:

To build prosperous Khyber Pakhtunkhwa through sustainable and balanced industrial development, creating large employment opportunities and fiscal space for human and infrastructure development and to mobilize resources to overcome problems of low investment, poor productivity and degrading physical and social infrastructure. The importance of a sustainable industrial sector cannot be overemphasized, given that industrialization has been the main driver of productivity and higher living standards of the developed countries in the last two centuries (Murphy, Shleifer, and Vishney, 1998).

Countries that did not successfully industrialize remained poor. The link between industrialization and poverty- alleviation has attracted attention of policy makers in Pakistan and to some extent in the US, in the wake of rise in terrorist activities in Pakistan. This is because literature purports that members of the poor class of a society are more likely to join or form violent groups (DFID, 2005), and commits violence (Sambanis, 2004). A reason for this is poverty breeds feelings of injustice, which are used by the perpetrators of violence to justify their acts. [3]

ABOUT KHYBER PAKHTUNKHWA:

Khyber Pakhtunkhwa, which was formerly known as North-West Frontier Province, Northern most province of Pakistan. The total area is 74,521 square km. The total population of KP province according to 1998 census was 17.7 million. According to 2011 census Bureau of Pakistan house listing operation, the total population of KP was estimated to be more than 26.8 million. The name Khyber is taken from the famous Khyber Pass located on the border of Pakistan and Afghanistan, while Pakhtunkhwa means the land of *Pashtuns* or *Pathans*. To the west and north, it is bounded by Afghanistan. Azad Kashmir and the Northern Areas to the east and northeast. Punjab province is located to the southeast and Baluchistan province to the southwest. On the western boundary of Khyber Pakhtunkhwa, along with the Afghan border, are the federally Administered Tribal Areas (FATA), a series of semiautonomous areas that are ethnically homogeneous with the province but politically not connected to it. Peshawar city is capital of Khyber Pakhtunkhwa province. [4]

Khyber Pakhtunkhwa is inhabited mainly by Pashtun, who are noted by their independence. Pashtun comprise many tribes and clans, each that takes great pride in its

genealogy. Variety of languages is spoken in KP. The main languages spoken include Pushto, Gujar, and Hindko. Other languages spoken include Bateri, Chillisso, Dameli, Dari, Kalami, Kalasha, Kalkoti, Khowar, Kohistani, Palula, Torwali, Ushojo, and Wakhi.

Khyber Pakhtunkhwa is divided into two major administrative setups. Settled Areas and Federally Administered Tribal Areas (FATA). Settled Areas comprise of 6 Administrative Divisions which includes Hazara, Mardan, Peshawar, Kohat, Bannu, and Dera Ismail Khan. FATA contains 1 Administrative Division of Malakand. Though FATA is not included in KP's territory, the Governor of KP as a representative to the President of Pakistan administers it, under the supervision of the Ministry of States and Frontier Regions. Whereas major cities of KP include Peshawar, Chitral, Abbotabad, Dera Ismail Khan, Bannu, Charsadda, Hangu, Manshera, Tank, Mardan, Kohat, Swabi, and Swat.

KPK province has 7 divisions as follow:

- *Malakand Division* that includes 7 districts Chitral, Upper Dir, Lower Dir, Buner, Swat, Shangla and Malakand.
- *Hazara Division* that includes 6 districts Kohistan, Mansehra, Battagram, Abbotabad, Haripur and Tor Ghar.
- *Mardan Division* that includes 2 districts Mardan and Swabi.
- *Peshawar Division* that includes 3 districts Charsadda, Peshawar and Nowshera.
- *Kohat Division* that includes 3 districts Kohat, Hangu and Karak.
- *Bannu Division* that includes 2 districts Bannu and Lakki Marwat.
- *Dera Ismail Khan Division* that includes 2 districts Dera Ismail Khan and Tank.

The Province economy is essentially based on agricultural, even though the mountainous terrain is not favorable to extensive cultivation. Irrigation is carried out on about one-third of the cultivated land. Wheat, corn, sugarcane and tobacco are major crops. The principal industries are the manufacture and refining of sugar, the canning and preservation of fruits and vegetables, tobacco processing and the manufacturing of small arms and accessories. Other products are cotton textiles, cement, ghee (clarified butter), furniture and milled grains.

NORTH WEST FORNTIER PROVINCE



The province has a wide range of physical and climate conditions. Though situated in a temperate zone, the climate of the province varies immensely from region to region. The average annual rainfall varies from 25 to 58 inches. Heavy snowfall occurs in Chitral and the Kaghan Valley and a large glacier is a feature prominently in this landscape. Snow also cuts Chitral off from the outside world for most of the winter. Similarly Dir and Hazara are among the wettest places in Pakistan. The region South of

the Himalayas and the Hindu Kush foothills has a hot and dry climate, with summer temperature quite high. This region is both warmer and generally drier than the rest of the province. KP province is a mountainous region intermixed with the fertile valleys of Peshawar in the center and the dry plains in the South.

INDUSTRIAL BACKGROUND:

Khyber Pakhtunkhwa is the third largest province of Pakistan in terms of population with population of 26 million out of 190 million of total Pakistan's population, having total land area of approximately 74,521 sq.km. Khyber Pakhtunkhwa is bequeathed with natural resources, which have resulted in many investment opportunities. Despite the fact that the population of Khyber Pakhtunkhwa is generally known as hardworking, the industrialization in the province has no significant role in its overall socio-economic development.

As per available data given by SMEDA, SDA and KP chamber of Commerce and Industry, there are 12000 small, medium and large units in KP out of which, 2299 are registered with the directorate of Industries, Khyber Pakhtunkhwa. Among 2299 industries 478 registered units are closed.

Industrial sector of KP is of great importance for economic development of a country. It is a historical fact that countries with strong industrial sector have exhibited better economic and development indicators. The industrial sector contributes 20.8 percent of GDP of Pakistan and is a major source of revenue and also contributes significantly to the provision of job opportunities for the labour force. Industrial development is a pre-requisite for upliftment of the economy and improvement of socio-

economic condition of the citizens due to its multi-dimensional forward and backward linkages, with spill over benefits to agriculture and services sector of the economy.

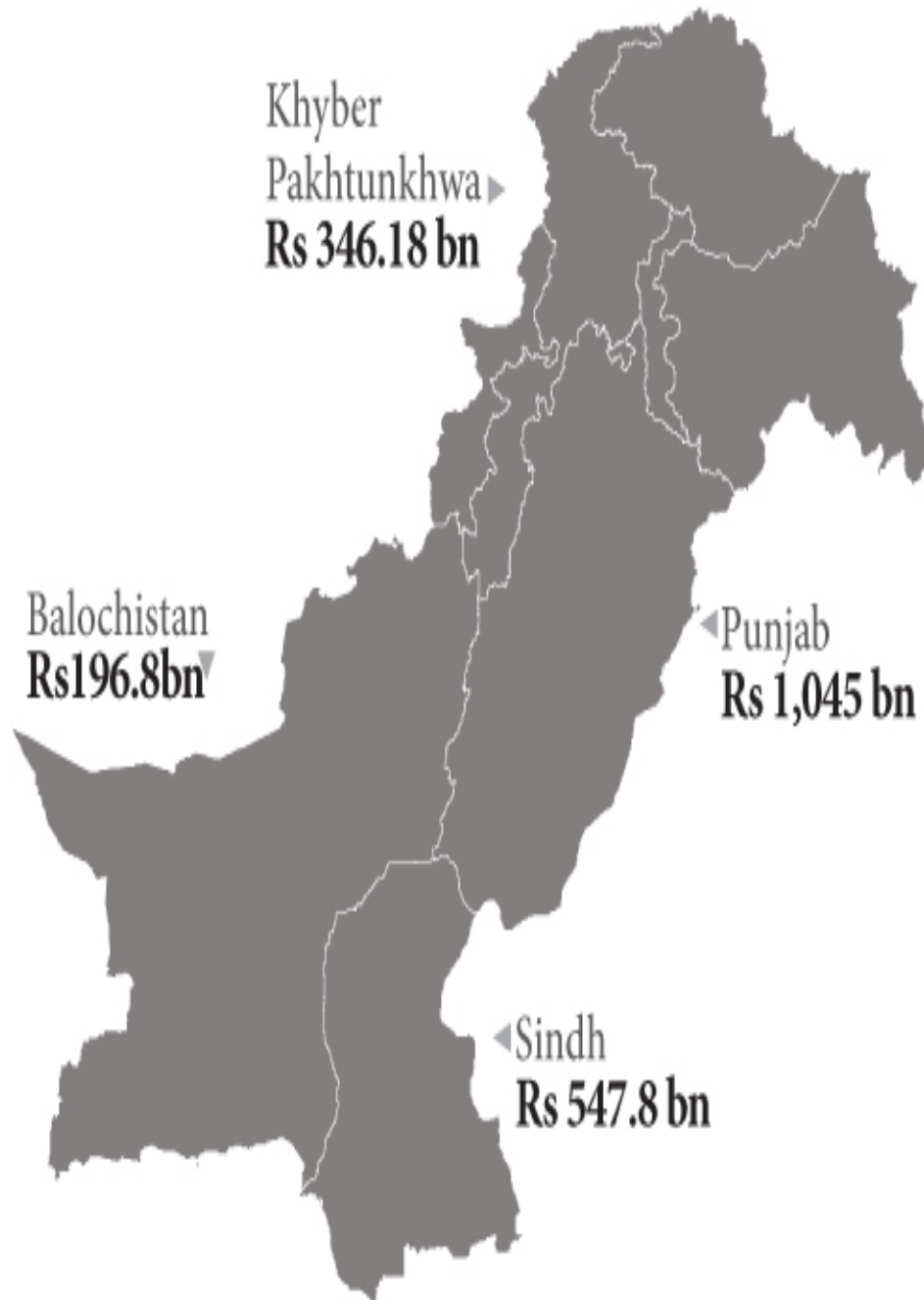
Though the Khyber Pakhtunkhwa government is setting up four industrial Estates in different areas to create more jobs and promote economic and trade activities in the province, there is no clear plan so far to revive the closed industrial units. There are 1145 closed industrial units, which is 62 percent of the total industrial units in the province. Government of Khyber Pakhtunkhwa is planning to establish in Abbottabad, Chitral, Hattar and Dargai area. A master plan for Nowshera Industrial Estate is in process as well. According to government of KP, to develop these industrial estates on modern lines, KP government has set up “Industrial Estate Management Company”. According to officials industrial estate management company will play a vital role in strengthening administrative and progressive mechanism of an industrial unit. Apart from, it can also empower industrialists and private sector.

Right now there are six main industrial areas in KP, which include Hayatabad industrial Estate, Gadoon Industrial Estate, Hattar Industrial Estate, Nowshera Industrial Estate, Export Processing Zone Risalpur and Kohat Industrial Estate but unfortunately, most of the units in these industrial estate are closed. In this connection, federal and provincial governments in the past had surveyed these industrial estates and number of committees and bodies were constituted for their revival but to no avail as these committees remained ineffective in achieving the desired goals. Previously total of 323 industrial plots were allotted for various industries, out of which at present only 62 units are operational, 149 closed and 29 have completely been shut down. In previous policies, it been promised to revive the industry by restoring confidence of investors and to create

10 million new jobs for youth by shifting focus to skill development. The PTI industrial policy aimed to build solid foundation for revival of industry by creating thousands of new job opportunities for the youth and to make sector more viable and competitive in international markets. However, what the PTI's industrial policy would do with that sick industrial units in KP due to which thousands of people have already been unemployed.

The contribution of industrial sector towards the socio-economic development of the province is not sufficient. It is horrifying to note that about 1145 industrial units have been closed, which has given birth to many social evils like increase in smuggling and unemployment. According to officials' reason for sick industrial units in the province is due to inconvenient locations away from seaport, non-availability of skilled labour, inconsistent of government policies, dearth of local capital and lack of proper infrastructure. KP is bestowed with rich natural resources, a hardworking population and immense opportunities for investment. However, industrially the province is backward and its share in the total installed industrial units is just 7.5 percent. Industries in KP could not contribute significantly to the economic development of the country because majority of industrial units are not working. As economic development without industrialization is a dream, accelerated industrialization is considered by most developing countries as the key to rapid economic development and social prosperity. According to Directorate of industries department, KP total number of registered installed industrial units in the province is 1848, out of which 1145 units are closed. The overall percentage of closed units in the province is thus 62 percent. [5]

Provincial Transfers (Rupees in Billion)



Provincial transfers of each province of Pakistan (Rupees in Billion). [15]

Khyber Pakhtunkhwa: 346.18 billion

PRESENT STATUS:

As per KP's directory of Industrial Establishment published in 2012, there are 2299 industrial units in KP. Out of these, 478 units are closed and 1821 units are functional. [7] In a recent Industrial Survey conducted by National Management Consultants (NMC) it was concluded that the major factors responsible for the closure of the industrial units are primarily attributable to the following factors: [6]

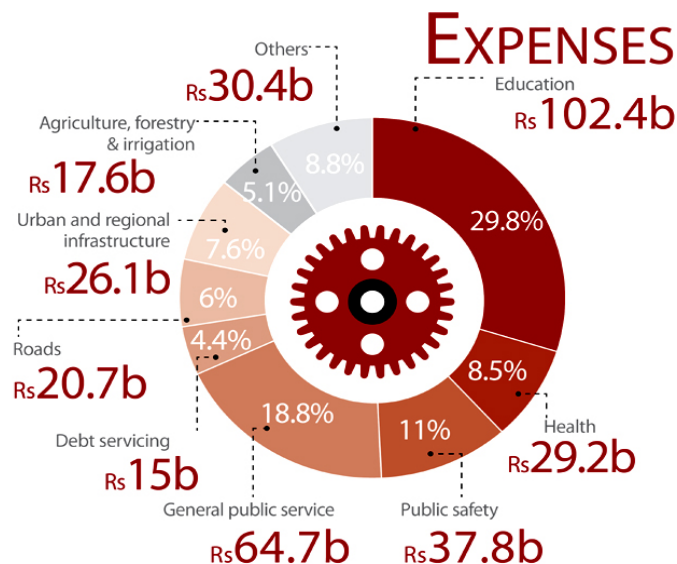
- Unfavorable and inconsistent Government Policies.
- Deterioration of plant and machinery.
- Technological obsolescence.
- Lack of adequate and regular power supply.
- High transport cost.
- Costly raw materials.

Other less severe problems for the closure of industrial units have been identified as under:

- Lack of skilled labor.
- Lack of infrastructure.
- Lack of managerial qualities.
- Marketing constraints.
- Legal disputes.
- Industrial relations.

Apart from the above dismal scene prevailing in closed industrial units, even the functional units in KP have been facing threats which if not met effectively and timely, may eventually become insurmountable. Some of these adverse factors include:

- Unrealistic Government Industrial Policies.
- Access to finance from banks and market.
- Technological obsolescence.
- Lack of marketing channels.
- High Cost of unreliable power supplies.
- Widespread smuggling.
- Deteriorating law and order conditions
- Difficulty in procuring raw materials.
- Difficulty in getting skilled manpower.



Notwithstanding the above impediments afflicting the industrial sector of KP, the industrial potential of the Province is such that it can be the engine of growth for the economy if measures are taken in right direction. [7]

OBJECTIVE OF INDUSTRIAL POLICY FOR KHYBER PAKHTUNKHWA

The Objective of the Industrial Policy is essentially to develop KP's economy by taking the following steps:

- To rehabilitate the sick/ closed industrial units by taking necessary remedial measures.
- To encourage setting up industries, which have comparative cost advantage and market, based on local raw material, skilled labor, having potential for local and export markets.
- To create more jobs by facilitating Small and Medium Enterprises (SMEs) by providing Business Support Services (BSS) including necessary finances.
- To create more Special Economic Zones (SEZs) for attracting local and foreign investors to set up industries
- To improve infrastructural facilities in the existing industrial estates
- To make available cheaper energy through hydro and renewable energy projects.

SENSITIVITY

Khyber Pakhtunkhwa has the 3rd largest provincial economy in Pakistan but its growth has been relatively poor. The newly formed government in 2015 asked the IGC to conduct a study that would double as a strategy for economic growth in the region. [8]

The IGC report identified the policies that would generate the best growth for Khyber Pakhtunkhwa, with the caveat that the province is still not entirely the master of its own fate. Key policy areas that impact critically on the private sector in the province, such as monetary and fiscal policies, law and order, and the overall macro economy, lie mostly within the domain of the federal government. The researchers found that Khyber Pakhtunkhwa has 4 possible paths to growth available: [8]

- Increased transfers from federal government
- Urban agglomeration
- Regional trade
- Remittances from abroad

The provincial government needs to attract investment in industry, construction, agriculture, livestock, mining, and tourism through private sector friendly policies. The report also suggests there is a need to improve the general business environment in the province, which can be done through public investments in energy, transport and the rule of law. [8]

The reshaping of KP's economic growth will be based on the effective utilization of natural resource endowment of the Province, essentially targeting sectors with comparative advantages of indigenous raw materials, hydra and other natural resources cheap labor and both local and export markets.

RECENT POLICIES:

INFRASTRUCTURE

Infrastructure of the existing industrial estates can be strengthened to support existing and new industrial & commercial units and can be ensured that the Industrial Estates would have all required utilities and a proper waste management system.

For balanced industrial development, industrial estates can be developed for micro and small industries in different districts. Special Industrial Areas / Parks / Zones shall be made for the development of cluster based industries.

Recommendations were that government of KP can strive to follow public private partnership (PPP) mode in the development of integrated infrastructure in the Province such as roads connectivity, water supply and sanitation, solid waste management, and social infrastructure e.g. hospitals, clinics, housing schemes, schools, colleges, transport systems etc.

Access roads to industrial estates, inter provincial transport systems, railways and airport facilities can be streamlined and strengthened.

DEVELOPING LESS DEVELOPED AREAS

Majority of people in KP live in those areas, which are less developed. They don't get clean water. Roads are in very bad condition. If those areas are developed, people will have job opportunities and their basic needs would be fulfilled.

Government of KP can focus on setting up industry in less developed areas in order to alleviate poverty. Besides, providing infrastructure such as power, water, roads etc. Government of KP will also provide incentives and necessary subsidies and soft loans to attract investment in these less developed areas.

AGRICULTURE AND LIVESTOCK

Agriculture is a large contributor to the economy of KP, providing direct and indirect livelihood to a majority of the rural population. However, despite the centrality of the sector, the overall performance in terms of growth has remained poor. Farmers in the province are locked in low value crop production due to lack of institutional support, fear of food shortage and lack of developed markets. The decrease in land use intensity over the years and lack of expansion in irrigation (despite KP's many rivers) is further deteriorating the sector's performance. The horticulture sub-sector has seen some progress in developing high quality fruit farms in recent years but the success remains localized to a few areas. [9]

Four factors shape the main development challenges for KP and adjacent Federally Administered Tribal Area. [10]

- A frontline state role
- Distance from sea port
- A limited modern private sector
- Weakness in human resources

CHALLENGES IN AGRICULTURE

- Shortage of irrigation water
- Wide spread poverty among farmers and inadequate credit facilities
- Lack of technical knowledge
- Low price of agricultural output
- Lack of attention to livestock and forestry
- Absence of agriculture- based industries

RECOMMENDED STRATEGY

- Government should increase the number of research station in each locality, especially applied experimental research stations, so farmers may be kept informed of new-found high-yield varieties of crops and the latest usage recommendations for pesticides and herbicides. [11]
- As most of farmers in KP have very small land holdings, agricultural policies in the area should favor small farmers. Agricultural credits, which have ignored the small farmers, should be refocused on small farmers, giving them loans with zero or minimal interest. [11]
- Another problem that needs proper attention is the availability of quality inputs at reasonable prices. There is a dire need to ensure the availability of inputs at proper times and prices. Big farmers can get these inputs by hook or by crook while small farmers need special attention. Lack of access to inputs creates many hindrances in the way of increasing agricultural output.
- Government should encourage livestock by supplying new breeds for milk and meat, as this sector is playing an important role in raising income levels and also diversifies food basket to ensure food security. [11]

SKILL DEVELOPMENT

KP is passing through a demographic transition that is creating a “youth bulge”, which provides a one-time window for stimulating growth. However, this may turn into a disaster if the young are not productively employed. Realizing the dividends of the demographic transition will require addressing critical challenges related to human capital development, jobs and the labor market. It will require building skills sets that

enable citizens to benefit from the province's tradition of migration. Since a large proportion of the young have poor educational attainment because of high literacy rate and lack of schools, skill development is the most important pathway for human capital accumulation for the citizens of KP. In the case of KP this pathway will be fundamental in restoring livelihoods and generating employment in the province, in the conflict zones and in FATA. [12]

RECOMMENDED STRATEGY

Government should ensure that all the training institutes should focus on sector specific training skills development and through industry participation. Besides, Government of KP shall create models for enhancing employability.

TRANSPORT

Transport equipment consists of equipment for moving people and objects. This includes transport equipment, such as motor vehicles, trailers and semitrailers; ships; railway and tramway locomotives and rolling stock; aircraft and spacecraft; and motorcycles, bicycles, etc. [16]

The geographical location of KP, landlocked and being furthest from the seaport makes the role of transport (13% of KP's GDP) critical in its economic progress. Road connectivity plays a critical role in the formation of industrial clusters, which in turn results in agglomeration economies, attracting more businesses. This creates a virtuous cycle benefiting the economy in three ways: [12]

- Pooling of labor with the required skill-sets
- Reduction in the cost of transportation

- Technological diffusion due to the exchange of ideas.

Industrial and economic disparity within KP is also a consequence of geography (elevation and terrain), which impedes infrastructure development. The regions of Kohistan, Battagram, Shangla, Hangu, Karak and Tank are the least industrialized districts with relatively low road density and lack of access to highways.

Since most economic activity is concentrated in the central region of KP, the aim of transport infrastructure should be to improve the connectivity of economic clusters in the center with the less developed regions of KP. This will lead to increased economic activity and creation of employment and income across KP. [12]

RECOMMENDED STRATEGY

- **Connecting relatively poor areas to economic hubs:**

Investment in road networks is required in Kohistan, Battagram, Shangla, Hangu, Karak and Tank to better connect these regions to the rest of the province and the country. This will open up the relatively remote and economically depressed areas and facilitate inter and intra-provincial flow of goods, local investment and labour.

- **Continued maintenance of existing road network:**

In the absence of an extensive railway service, roads and highways are heavily used for passenger and freight traffic. To mitigate the resultant deterioration of road and transport infrastructure, the existing network needs to be improved with special emphasis on transport infrastructure up-gradation and maintenance. Existing projects to repair and rehabilitate the road network damaged in the 2010 floods need to be expedited towards completion, to recover the lost connectivity of the affected areas.

- **Mass Public Transit system for Peshawar:**

Mass transit system (MTS) for Peshawar is one of the major projects planned by the government. It includes the establishment of a bus rapid transit system in combination with a rail-based system. This will facilitate commuters by providing them with a safer, faster and convenient mode of transport.

- **Completion of existing and planned initiatives:**

The government should also focus on completing existing initiatives on the regulatory and reform side as well as those dealing with infrastructure. This includes the following:

- i) Establishing and strengthening of a Transport Regulatory Authority that will take over some critical regulatory functions of the Transport Department
- ii) Construction of trucking terminals at Peshawar and Dera Ismail Khan, to serve as focal points for trucks and containers and assist the government to better regulate the trucking industry.

TRADE PROMOTION [9]

KP has long enjoyed the advantage of being located at the apex of Pakistan's North-South economic corridor, linking the port of Karachi and Pakistan's economy to Afghanistan and beyond to Central Asia and China. Afghanistan and Pakistan are natural trading partners with complementarities in trade in goods and services. Karachi port facilitates a significant share of Afghanistan's foreign trade. Since 2000-01, Pakistan's exports to Afghanistan increased from US\$ 100 million to US\$2.4 billion in 2010-11 spanning a range of products including agricultural commodities, cement, pharmaceuticals, leather and footwear, machinery and household products. There is also substantial export of services (health education, IT etc.) with potential for significant

increase. KP benefits from much of this trade and, if positioned well, stands to gain much more. [13]

RECOMMENDED STRATEGY

Government of KP can ensure promotion of its products both locally and regionally for boosting both domestic commerce and exports of KP products and will set up its own trade promotion institution with budget and targets.

KP has great potential for exports. Government of KP will, therefore, in association with TDAP, take export promotional measures by setting up Foreign Trade Facilitation Centers in selected Countries such as China, Afghanistan, the 06 Central Asian Republics (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan, Afghanistan), Turkey, UK, etc. These will also act as investment facilitation centers. In collaboration with TDAP, Government of KP will hold trade fares, product exhibition and trade tours to selected Foreign Countries.

Government can set up “One window” operation to attract investment. The incentives already existing with Khyber Pakhtunkhwa Board of Investment (KPBOIT) will strictly be implemented. Efficient E-Governance system will be implemented for effective delivery of services by various regulatory agencies involved in foreign trade.

REHABILITATION OF CLOSED / SICK UNITS

Rehabilitation Scheme will be framed for economically viable but closed/ sick industrial units. Serious efforts will be made towards revival of closed / sick industrial units by providing assistance to the owners to restart the unit, sale to an interested party or hand over the unit to an experienced contractor. [14]

Government of KP can also negotiate a subsidy package with Bank of Khyber (BoK) for revival of closed / sick units.

Government of KP can form a high-powered ‘Sick / Closed Units Revival Committee’.

The committee may comprise of the following:

- An Industrial Engineer of caliber
- A chartered accountant
- A lawyer
- A management consultant
- Representative of Bank of Khyber (SVP or above level)
- Representative of SDA/SIDB (Director Level)
- Representative of related Industrial Estate (Director Level)

This Committee shall also be required to analyze the industrial units one by one and determine the following:

- Present state of the Building / civil works of the factory
- Present state of the plant and machinery
- Actual reason for closure
- Chances of revival by the same party
- Possibilities of ‘change of management’ may be on contract basis
- Prospects of selling the unit to some other party
- Disputes among the management / owners
- Labor disputes

- Position of bank loans and their repayment
- Position of other liabilities including payables to labor
- Investment required for restarting the unit by the same / new party
- Government dues
- Legal cases and their settlement.

During the process of the above analysis, it would be necessary to have a detailed discussion with the existing owners of the factory and to convince them and make them agreeable with the Committee's point of view.

INDUSTRIAL SURVEYS:

Previous policies, which were made by different consultants and government officials, the policy makers were inclined to keep two objectives in view while designing public policy aimed at industrializing the province. The first was to gain self-sufficiency in items of basic consumptions. Second was to exploit the province's perceived comparative advantage. In both the cases the industrial policy overlapped considerably with trade policy.

I conducted industrial survey for different industries in KP during the visit to Pakistan in June. During my visit, I interviewed many people. Main focus was to interview industry owner and specific industry association leaders. They were interviewed because they were in the industrial market and they knew what policies are there and what needs to be done. Few politicians who are also running the industries were interviewed as well. Industrial survey questionnaire was based on industry information, type of business, reasons of industry's survival and development in KP area, financing arrangement of industry by different financial institutions, technology used, labour and material provided, helpful policies and facilities by the government and industrial zone, main problems faced and how they are tackled. During the survey met owners of industry. The owners of industry gave some positive response and feedback, which was really helpful to me getting knowing industrial problems and to put them into my research paper.

While meeting different industrialists, I came to know that they were unhappy with the current manufacturing technologies, which were used in their industries. The main source of power was electricity that was provided to them by national grid.

Electricity shortage in province was a main issue. Industries in KP are not allowed to install solar plants, micro-hydro power plants or biomass to run their industries. Every industrial area was provided with only a separate Electricity grid and due to the heavy load, there is a electricity drop. There are no such technologies to make industry sustainable, which mean no government incentive as well.

There is shortage of skilled labour and raw material in the province. While talking to industrialists, their main objection was that skilled manpower is not easy to find. All the skilled labour was brought from the other provinces to run their industries. There is no technical institution in the province where the labour or manpower is being trained. KP is rich with mineral but raw material is again a huge challenge.

According to industrialists there are no policies and facilities by the government in the province. During survey no one found government policies helpful. There are no incentives available by the government in the industrial zone. There are no tax holidays, sales tax exemption. Concession in tariffs, custom duty exemption, transport subsidy, government loan and incentive on export. There are only few facilities available in every industrial zone. Available facilities are roads and side roads, water supply, electricity grid, telephone exchange, labour colonies, police station. According to them there is a need of effluent disposal, solid waste management, sewerage disposal, healthcare facilities and banks in every industrial zone.

Overall problems faced by different industrialist are:

- Power and Energy crisis
- Problems related to production
- Problems in marketing the products

- Problems in accessing credit/ finance
- Government policies
- Unavailability of faulty parts
- Law and order
- The freight charges on raw material
- Lack of skilled labour force

CHALLENGES AND STRATEGY FOR INDUSTRIAL GROWTH

LAW & ORDER:

KP and FATA have been challenged by the specter of worsening conflict during the past decade. In addition, the province is faced with challenges of growing litigation and weak contract and regulatory 14 enforcement. These are important pre-conditions for slow growth and low employment creation in the province. Therefore, rule of law and governance reforms need to be a central pillar of KP's Growth Strategy. [8]

The justice gap (the offenses brought to justice rate) in KP's criminal justice system is high. This is due to challenges related to the quality of police investigations; in particular evidentiary challenges related to the lack of forensic evidence and absence of witnesses; the lack of established processes, guidelines and standard operating procedures; and poor cooperation framework between police and prosecution. It is also adversely impacted by a weak, nascent and fragmented prosecution function that is based on a weak legal framework that has not ensured a transition to a truly autonomous and independent prosecution service. At the level of the courts, the justice gap is impacted by

delays in litigation, growing case pendency and inconsistent sentencing. These problems are worsened by low barriers to entry for new cases and appeals and low costs for frivolous litigation and delays.

RECOMMENDED STRATEGY:

There is an urgent need to institute a Police and Prosecution Reform Committee headed by senior members of cabinet, members of the KP legislature and other relevant stakeholders that propose implementable reforms that build on the Police Order 2002. The Reform Committee should also suggest reforms to the Police Rules 1934 and propose a legal framework that institutionalizes an independent and autonomous prosecution service. It should also frame a holistic crime prevention policy that consolidates and coordinates the divergent legal and regulatory frameworks for provision of security and information gathering. It should frame a modern sentencing law and work in coordination with the Local Government Department to propose a framework for strengthening linkages between the formal justice system, the local government system and informal dispute resolution mechanisms.[9]

There is also a need to establish an effective case and docket management system at the level of courts that is integrated with the policing and prosecution system. There is also a need to introduce a performance management pilot for the Capital City Police and prosecution along with an independent case review board. Finally, it is important to design an evaluation model of legal aid and scale-up the more successful designs.[9]

ENERGY

Based on the discussions above in the policy analysis section and survey results, energy shortages are a major reason for the poor performance of KP's manufacturing.

The government of KP has to engage effectively with the federal government to address the shortages arising from national constraints. At the same time, KP can develop its own considerable hydroelectric potential.

The total number of consumers under Peshawar Electric Supply Company (PESCO) has increased by approximately 3.5% over the past five years to 2.78 million. This is accompanied by a gradual rise in consumption by small, medium and large industries, reflecting a positive trend in the provincial economy. KP also has significant potential for power generation. Due to its terrain the province has a strong comparative advantage for hydel power generation; with a potential of generating 27,000 MW electricity of the 40,000 MW available in all of Pakistan [9]. The province has also seen increased activity by nonprofit organizations such as AKRSP and SRSP in taking forward micro-hydel initiatives. Pakhtunkhwa Hydel Development Organization has already identified five big sites with a total capacity of 5000 MW and 67 small hydel sites with a total capacity of 400 MW. [11]

A critical source of inefficiency in the power sector is the large magnitude of losses that occur at the transmission and distribution stages. These losses are both technical (due to physical components of the power system such as transmission lines or transformers) and non-technical (external to the power system such pilferage, non-payment, defective meters, errors in accounting etc.) The severe gap between the supply and demand for electricity has taken a significant toll on KP's economic growth and KP must exploit its power generation potential to address the power shortfall by either setting up power generation stations by itself or through PPPs. Within thermal power, the government can focus on power generation through coal or bio fuel as oil becomes

expensive. For hydel power generation, small projects may be initiated in different parts of KP instead of large power generation units, which require large investments and more security measures. Micro hydel power generation has also got potential, but success rates have been slower mainly due to issues with sustainability.[11]

RECOMMENDED STRATEGY

- **Increased provincial stake in Natural Grid: [9]**

PESCO, a federal government entity, relies significantly on assistance offered by the provincial government for its operations. To bridge lapses in cooperation, it is recommended that the KP government acquire controlling shares of PESCO. KP may offset amounts, which the federal government owes to it on account of net hydel profits or other outstanding's to fund the acquisition. [9]

- **Bifurcation of Electric supply company:**

PESCO may be bifurcated by setting up of another independent company on the basis of geography, or consumers' mix; this would improve the performance and efficiency of the two companies. [9]

- **Make idle plants functional:**

The UAE government gifted a 320MW thermal power plant to Pakistan in 2009. Presently the plant is idle and it can use the gas from KP for power generation. [9]

- **Encourage micro hydro power generation:**

For every single industrial area, there should be a separate micro hydropower generation plant.

ENVIRONMENTAL PROTECTION

Environmental protection groups together all actions and activities that are aimed at the prevention, reduction and elimination of pollution as well as any other degradation of the environment. This includes measures taken in order to restore the environment after it has been degraded owing to the pressures produced by human activities.

Actions and activities that have a favourable impact on the environment but that serve other goals do not come under environmental protection. Hence, excluded from the field of environmental protection are activities that, while beneficial to the environment, primarily satisfy technical needs or the internal requirements for hygiene or security of an enterprise or other institution.

OTHER POLICY OPTIONS

PROVIDE LOGISTICS PARKS

Government can facilitate investors in establishing logistics parks for the industrial sector by providing security management and reliability in logistics by product movement facilities:

- Material handling / loading / unloading.
- Transportation
- Warehouse, Cold Storages
- Container and Freight Station
- Silos for grain storage

PROMOTE CHINA PAK ECONOMIC CORRIDOR (CPEC)

The CPEC is important to the economic growth of Pakistan as it aims to connect Gwadar Port to Xinjiang. When the project is completed it will expand the number of trade routes to other countries as well. [12]

KP can also use CPEC as a platform for export promotion and industrial development as the route is meant to go mostly through KP cities e.g. Khunjerab, Gilgit, Kohistan, Shangla, Battagram, Mansehra, Abbottabad, Haripur, Hassanabad, Mianwali, and Dera Ismail Khan etc.

DEVELOPMENT OF DRY PORTS & BORDER TERMINALS

In modern industrial development practices and trade development, Dry Ports and Border Terminals (DPs&BTs) with client friendly facilities and state of the art infrastructure play a very critical part. NLC has already set up Border Terminal at Torkham / Jamrud (KPK) to boost trade with neighboring Afghanistan. Similar Terminal is being established at Sust (Gilgit) to act as multimodal transit hub in boosting trade with China.

Government of KP can review the existing DPs&BTs and set up more such terminals in the Province where businessmen and traders are afforded facilities like customs clearance, comprehensive handling services, safe and accessible warehousing and inland movement of goods to any location within Pakistan. It is to be ensured that DPs&BTs are adequately equipped with latest scanners, weighbridges, cranes, fork lifters, firefighting equipment, generator, tractors, etc.

DEVELOP SPECIFIC SECTORS

Manufacturing sector in KP suffers from locational disadvantages made worse by infrastructural inadequacies. There is tremendous scope for development of many industries in KP. [15]

Government should encourage setting up of industries in the Province based on its rich natural resource endowment and traditional industries most notably, building and construction, tobacco and farming industries.

To exploit the natural resource wealth of the Province such as gems and precious stones, marble, granite, limestone, silica, clay, gypsum and other construction materials, feldspar, phosphates, coal, rock salt, chromate or hydropower, government of KP can move significantly in these directions. For that government should have to make a policy plan and also more finance and skill sector development is needed. This will bring about healthy industrial growth in KP effecting low input cost and cheap labor and thereby having comparative cost advantage.

In order to achieve self-reliance in industrial development in KP, special efforts can be made to set up and encourage Engineering and Capital goods industry in the Province which will be supported by transfer of technologies needed in the manufacture of plant and machinery for different industries from advanced countries.

CONCLUSION

Directorate of Industries and Commerce can formulate rules and regulation and enforce their compliance. KPEZDMC can help in developing state of the art new industrial estates. They can also help in revival and rehabilitation of existing industrial estates. They can provide one window facilitation for industrialist and for investors who want to investment in Khyber Pakhtunkhwa. SIDB can help in develop of small industrial estates in the province and rehabilitate the existing small industrial estate. KP TVETA can assess the labour market requirement for skilled workforce and rehabilitate the existing training institutes as per market requirement. Capacity building of teaching staff and expansion of training programs is important as well.

Government of KP can ensure access to finance for the industrial sector, even if it has to subsidize it. The Govt. of KP established the Bank of Khyber a few decades ago with a clear mandate to support local trade and industry. [13] This is being done by the Bank of Punjab and the Sindh Bank in their respective provinces. The BoK actually follows a policy of not supporting the industrial sector of KP. This needs to change. Infact the Government of KP can even arrange subsidized financing for new projects and for revival of sick units. This may be done through establishment of separate industry support fund.

Further, the Government of KP can enter into dialogue with all local and foreign banks operating in KP to allocate funds for industrial and commercial development of KP and can closely monitor the BoK and all other banks to ensure that they do provide project finance and working capital for industrial projects in KP.

APPENDIX:

Industrial Survey of Functional Units in KP

S. No.

Date: __/__/2016

Dear Respondent,

I am Student of McMaster University, Canada. As part of my research for studies at the McMaster University, I am conducting industrial survey of *functional* industrial units in KP, with the objective of formulating policies for the betterment of these units. Please respond by ticking/ answering questions of this questionnaire that are relevant to you.

1.0 INDUSTRY

1.1 Name of Industry: _____

1.2 Established on: _____

Address: _____

_____ ; District _____ ;

Ph.: _____ ; Email: _____

1.3 Owner's Name: _____ ;

Email: _____ ; Qualification: _____

1.4 How did you get into business: Family Business Self Initiated

1.5 Respondent's Name: _____ ; Designation: _____

Cell: _____ Email: _____

2.0 TYPE OF BUSINESS

2.1 Products _____ Manufactured: _____

2.2 Industry Sector: _____

2.3 Sub Sector: _____

2.4 Installed Capacity: _____

2.5 Total Investment (PKR): _____

2.6 No. of Employees: _____

3.0 REASONS FOR SURVIVAL AND DEVELOPMENT:

PLEASE RANK IN TERMS OF IMPORTANCE (LEAST 1– MOST 5)

3.1 Product has good Demand	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.2 Competitive Pricing of Product	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.3 Easy Availability of Raw Material	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.4 Availability of Skilled Labour	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.5 Good Labour Relations	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.6 Appropriate Technology	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.5 Appropriate Technology Up-gradation	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.8 Leadership of Owners	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.9 Good Management	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.10 Availability of Finance from Banks	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.11 Availability of Finance from Market	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3.12 Any Other (Pls Explain) _____ _____	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

4.0 FINANCING ARRANGEMENT

4.1 How did you arrange finance?

Self

Financial Institution

4.2 Did you manage to get financing easily?

Yes

No

4.3 Problems faced in getting loans _____

5.0 TECHNOLOGY

5.1 What technologies do you use to make industry sustainable?

Solar

MHPP

Biomass

Other

Do you get Government incentives while using these technologies?

Yes

No

6.0 LABOUR AND MATERIAL

- 6.1 Was skilled man power easy to find?
 Yes No
- 6.2 Where was raw material procured from?
 Locally from KP
 From other Provinces (Pls Specify) _____
 Imported from (Pls Specify) _____

7.0 POLICIES AND FACILITIES

- 7.1 Do you find Government policies helpful?
 Yes No
- 7.2 What Incentives are available in your industrial zone?
 Tax Holiday Sales Tax Exemption
 Concession on Tariffs Custom Duty Exemption
 Transportation subsidy Govt. Loans
 Incentive on export Other _____
- 7.3 Are the following facilities available in your industrial zone?
 Roads and Side Roads Electricity Grid
 Water Supply Telephone Exchange
 Effluent Disposal Labour Colonies
 Solid Waste Management Police Station
 Sewerage Disposal Banks
 Healthcare Facilities Training Centers

8.0 PROBLEMS FACED AND HOW TACKLED?

PLEASE RANK IN TERMS OF SEVERITY (LEAST 1- MOST 5)

SR No.	Factors	RAN K	How Tackled
8.1	Power and Energy crises		
8.2	Problems related to Production		
8.3	Problems in marketing products		
8.4	Problems in accessing credits/finance		
8.5	Unavailability of Faulty Parts		

8.6	Government Policies		
8.7	Law and Order		
8.8	Availability of Raw Material		
8.9	The freight charges on raw material		
8.10	Lack of skilled labour force		

8.11 Any other suggestion you wish to provide

Thank you for your valuable feedback

NOTES

DIFFERENT INDUSTRIES VISITED IN DIFFERENT AREAS OF KPK

NAMES OF INDUSTRIES AND THEIR PORTFOLIO

1.

Industry Name: Sarhad Board and Chemicals
Owner Name: Malik Mohsin Sajjad
Location: Peshawar
Established: 1994
Phone No: 091-5814441
Email: info@sarhadboard.com

2.

Industry Name: Pak China Tractors Pvt Ltd
Owner Name: Arbab Shabir Ahmad
Location: Peshawar
Established: 2002
Phone No: 0300-3050555
Email: arbabshabir@gmail.com

3.

Industry Name: Frontier Techwood Industries
Owner Name: Shaukat Hayat
Location: Peshawar
Established: 2005
Phone No: 091-5812781
Email: info@frontierplatinum.com

4.

Industry Name: Dew Point Health Care
Owner Name: Asghar Saleem Keen
Location: Peshawar
Established: 2010
Phone No: 091-5891647
Email: keenmarketing@gmail.com

5.

Industry Name: Mehmood Plastic Industry
Owner Name: Saif Ur Rehman
Location: Dera Ismail Khan (DI.KHAN)
Established: 2013
Phone No: 712767

Email:

6.

Industry Name: Moeed Industries
Owner Name: Muhammad Ishaq
Location: Peshawar
Established: 1990
Phone No: 091-5891291
Email: moeeds@live.com

7.

Industry Name: ITHFZ Mills Limited
Owner Name: Waseem Ur Rehman
Location: Gadoon
Established: 2005
Phone No: 0938-270274
Email: subhanl_ithfzmills@yahoo.com

8.

Industry Name: Saif Textile Mills Limited
Owner Name: Luqman
Location: Gadoon
Established: 1992
Phone No: 051-2219884
Email: luqman@saifgroup.com

9.

Industry Name: Colony Sarhad Textile Mills Limited
Owner Name: Mian Farooq A Sheikh
Location: Nowshera
Established: 1963
Phone No: 0321-4433111
Email: info@cstml.com.pk

10.

Industry Name: Frontier Wollen Mills Limited
Owner Name: Syed Liaqat Hayat
Location: Peshawar
Established: 1980
Phone No: 091-5812781
Email: admin@frontierplatinum.com

11.

Industry Name: KPK Pharma Association
Owner Name: Imtiaz Ahmad
Location: Peshawar
Established: 2012
Phone No:
Email: kppma1@yahoo.com

12.

Industry Name: AL-Hafiz Crystoplast
Owner Name: Ghulam Dastagir
Location: Peshawar
Established: 2007
Phone No: 091-5891354
Email: alweena@ahcpet.com

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