Planning Minister's Task Force for Integrated Industrial Development Policy & Planning at Provincial and Federal Levels

Neelum Sultana Khattak[1], Abdul Qadir[2], Muhammad Tanveer Javed[3]
Habib ur Rehman[4], Dr. Muqeem ul Islam[5]

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Abstract:

Industrialization is widely regarded as a key driver of economic growth and development. For Pakistan, implementing a comprehensive and integrated industrial policy is essential to overcome structural constraints and capitalize on opportunities in the global economy. This paper examines Pakistan's industrial journey, from early industrialization and nationalization to privatization and recent initiatives like the China-Pakistan Economic Corridor (CPEC). It highlights persistent challenges such as energy shortages, regulatory inconsistencies, and limited SME financing, which have constrained industrial growth. Recommendations include improving infrastructure, rationalizing land and taxation policies, enhancing ease of doing business, fostering innovation, and promoting export diversification. Furthermore, the policy must integrate sustainable practices and emphasize public-private partnerships to build a resilient industrial sector. Aligning with global value chains and leveraging Pakistan's geographical and resource advantages can position the country as a competitive player in the global industrial landscape, fostering inclusive and sustainable economic development.

Key words:
Industrial policy, economic growth, Pakistan, sustainable development, global value chains.

[1] *Pakistan Administrative Service (PAS), Email: neelumkhattak@yahoo.com*
[2] *Election Commission of Pakistan (ECP), Email: qadir50@gmail.com*
[3] *Secretariat Service AJ&K, Email: Tanveernawaz71@gmail.com*
[4] *Economist Group (Eco Gp), Email: h.Rehman720@gmail.com*
[5] *Chief Instructor, National Institute of Public Administration (NIPA), Peshawar*

Introduction

There is a general belief among economists, policymakers, and the general public that industrialization implies economic growth and development. Unless countries industrialize, the assumption goes, they will continue to remain undeveloped or underdeveloped. The progress of countries like South Korea, Taiwan, and other East and Southeast Asian countries, which have been called the Newly Industrialized Countries (NICs), only reinforces that view (Zaidi, 2005). According to Finance (2022–23), manufacturing holds a dominant position within Pakistan's industrial sector, contributing 12.01 percent to the country's GDP. The sector-wise contribution of each industrial sector to GDP is as follows:

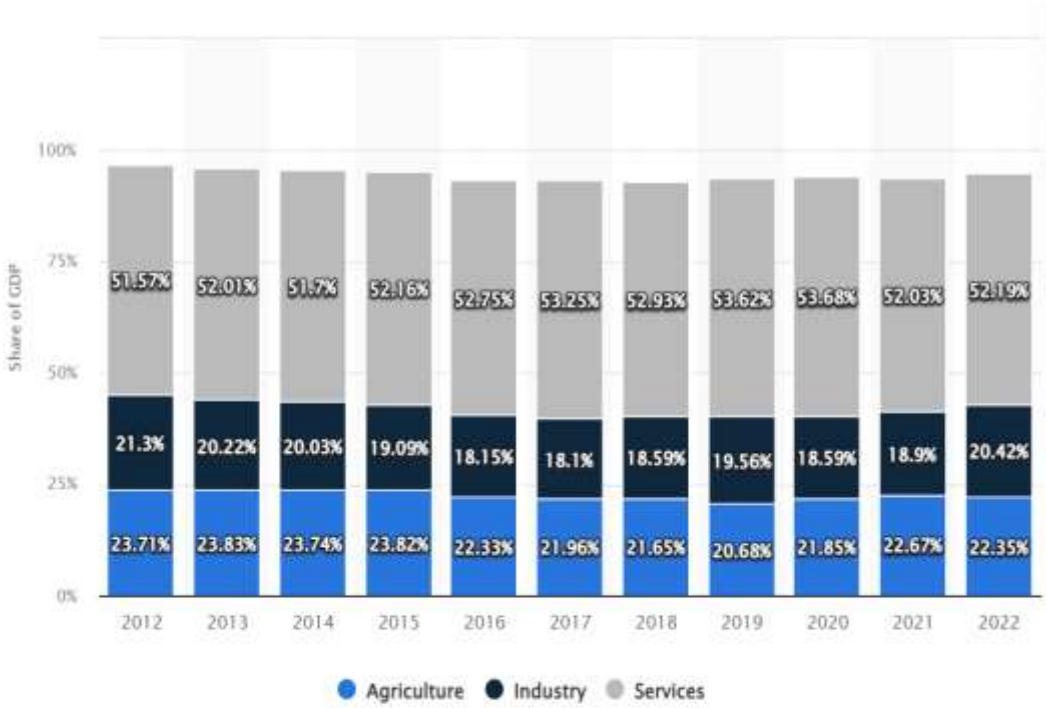


Figure 1

Source: https://www.statista.com/statistics/383256/pakistan-gdp-distribution-across-economic-sectors/

Integrated Industrial Development Policy

A developing country such as Pakistan needs an industrial policy to guide its economic growth and development strategies effectively. Industrial policy serves as a roadmap for achieving key objectives such as fostering industrialization, creating employment opportunities, promoting innovation and technological advancement, enhancing productivity, and diversifying the economy. By outlining targeted measures and interventions, industrial policy helps address market failures, overcome structural constraints, and capitalize on comparative advantages to build competitive industries. Additionally, industrial policy provides a framework for coordinating public and private sector efforts, attracting investment, facilitating trade, and integrating into global value chains. Overall, a well-designed industrial policy is essential for driving sustainable and inclusive economic development in a developing country.

Purpose of Integrated Industrial Development Policy

The globally recognized guidelines of the United Nations Industrial Development Organization (UNIDO) may be used to prepare the National Industrial Policy (NIP) for fostering sustainable economic growth. The NIP leverages both existing and emerging instruments to address the multifaceted challenges faced by Pakistan's industrial sector, ensuring alignment with national development goals and the global economic landscape.

Overview of Pakistan's Industrial Policies through various decade

Pakistan's uneven journey with industrial policy has been marked by shifts in strategies that mirror its broader economic, political, and social transitions. Since gaining independence in 1947, Pakistan has adopted various approaches to industrialization, each influenced by the prevailing economic philosophies of the time, the views of political leadership, and shifts in global and national economic conditions.

Early Industrialization (1947–1971)

In the initial years following independence, Pakistan's industrial policy focused primarily on building a base for heavy industry and import substitution to reduce reliance on foreign goods. The government established key institutions like the Pakistan Industrial Development Corporation (PIDC) to promote industrialization. However, this period also saw increasing income disparities and regional economic imbalances, including in parts of the then East Pakistan.

1. **Era of Nationalization (1970s)**

The early industrialization phase transitioned into nationalization during the 1970s, aiming to address economic disparity but yielding mixed results. Major industries, banks, and educational institutions were nationalized. This move was intended to distribute wealth more evenly but instead caused inefficiencies in the economy and discouraged private investment. A large state-owned enterprises (SOEs) sector remains a legacy of this era.

2. **Deregulation and Privatization (1980s–1990s)**

The late 1980s and 1990s marked a significant shift as Pakistan moved towards liberalization, privatization, and deregulation. Policies focused on reducing the state's role in the economy, encouraging private sector participation, and attracting foreign investment. However, issues related to transparency and governance undermined public confidence in these reforms.

3. **Post-2000s Industrial Sector**

The government launched initiatives to promote sectors deemed to have a comparative advantage, such as textiles, agriculture, and IT. Policies were crafted to address the challenges of modernization, technology adoption, and innovation. As a result, key industries such as textiles, telecommunications, and construction experienced significant growth, leading to job creation and increased exports. Another paradigm shift occurred with the advent of CPEC, heralded as a game-changer for Pakistan's economy. However, implementation delays, security concerns, inter-provincial coordination issues, and challenges with profit repatriation slowed the pace of CPEC-related projects, limiting their impact on the industrial sector in the medium to long term.

Problem Statement

There is a general belief among economists, policymakers, and the general public that integrated industrial policy fosters economic growth and development in any country. However, the formulation and implementation of Integrated Industrial Policy and Planning in Pakistan face significant challenges at both provincial and federal levels, such as fragmented policy frameworks, regulatory inconsistencies, inadequate infrastructure, limited access to affordable financing, and a shortage of skilled labor. Therefore, the current situation necessitates a research endeavor to identify the root causes and challenges faced by the country in formulating and implementing an integrated industrial policy and to suggest feasible solutions in light of the lessons learned.

Scope of the Study

This study aims to analyzes the policy framework for integrated industrial development at federal and provincial levels in Pakistan. It will also examine policy coherence, alignment, and will identify gaps that hinder industrial growth. The study evaluates policy frameworks, implementation and coordination mechanisms, focusing on their impact on regional disparities. The goal is to provide actionable recommendations for enhancing policy integration and promoting balanced, sustainable industrial development in Pakistan.

Literature Review

One of the significant reasons for the sluggish industrialization in Pakistan is the prolonged absence of a dedicated industrial policy. Consequently, the roles such a policy would typically fulfill are being managed through other public sector policies related to investment, trade, and monetary matters. The SMEDA Act of 1998 was established to regulate small and medium enterprises (SMEs) by the federal government, followed by Vision 2025 (Burki, 2008). An SME policy was formulated in 2007, which has since been amended and is pending cabinet approval. The 18th Constitutional Amendment devolved Part I of the Federal Legislative List, including the industrial sector, to the provinces, transferring industrial affairs to provincial governments (MOIP, 2021). Frequent changes in government are a major contributor to policy uncertainty in Pakistan. Moreover, past governments have often implemented ad-hoc industrial policies in reaction to crises (Kemal, 2008). The conflict between federal and provincial industrial policies has further complicated the achievement of desired outcomes in the industrial sector (Burki, 2008). The Pakistan Business Council advocates for a "Make-in-Pakistan" initiative to drive industrial growth, leveraging Pakistan's domestic market of over 200 million consumers to develop scale and competitiveness, eventually addressing global demand (PBC, 2018).

Research Methodology

The research study employed a qualitative methodology, utilizing both primary and secondary data sources. Data was gathered from research articles, newspapers, and reports available online. Additionally, a round of interviews was conducted to delve deeper into the core issues. The collected factual and critical data was then analyzed using various methods including situational analysis, legal analysis, SWOT analysis, gap analysis, and log frame analysis

Situational Analysis

The first Integrated Industrial Policy is in draft state at federal level to be revived by the concerned stakeholders, however, sector specific policies of the following sectors exist:

a) Fertilizers Policy-2021
b) Electric Vehicle Policy-2022
c) Mobile Device Manufacturing Policy-2020
d) SME Policy-2021

Situational Analysis of Policies

National Industrial Policy

An Industrial Policy can be defined as government measures aimed at shifting production focus toward sectors with the potential to contribute significantly to economic growth—an outcome unlikely without such measures. A policy serves as a guiding document for both the government and the private sector, outlining long-term objectives to be achieved (Saggi & Pack, 2006). Historically, various governments have followed fragmented industrial development policies, but a single comprehensive policy focusing solely on industrial growth has never existed.
The Ministry of Industries and Production (MoIP) of the Federal Government is currently developing a National Industrial Policy (NIP 2021) with assistance from ADB. However, the details of this policy have not yet been made public. It is encouraging to see the government taking such an initiative, but it is noteworthy that successive governments have neglected this crucial policy area for decades. Following the 18th Amendment, the MoIP's role in industrial development was significantly reduced, with provinces being empowered to manage industrial matters. Nonetheless, international coordination and industrial policy formulation remain under the MoIP's mandate (MoIP, 2017).

Developing countries like Bangladesh have implemented clear industrial policies that have facilitated robust economic growth. These policies are revised every five years to adapt to changing circumstances (Financial Times, 2021). In contrast, Pakistan's industrial policy development has been erratic. Industrial policies were often not independent documents but were part of medium-term development plans or responses to crises.

Since independence, Pakistan has implemented five such policies:

1. The first was in 1949, following India's trade embargoes.
2. The second was integrated into the two five-year plans during Ayub Khan's era from 1960 to 1970.
3. The third policy emerged during PM Zulfiqar A. Bhutto's tenure, who initiated the nationalization of industries.
4. The fourth policy was adopted during the democratic governments from 1988 to 1999.
5. The fifth was implemented during President Musharraf's rule.

Subsequent democratic governments largely followed past policies without establishing a comprehensive industrialization strategy (Burki, 2008). A National Industrial Policy was drafted during President Gen. Pervez Musharraf's period but was sidelined by vested interests. The history of industrial policymaking in Pakistan shows that incoming leaders heavily influenced policy, often changing it with each new government. This lack of long-term planning has hindered industrial development, leaving Pakistan's industrial sector lagging behind other Asian economies.

Policymaking in Pakistan tends to be uneven, as illustrated by the case of industrial development. Ideally, the federal government should formulate a national policy upon which provinces could base their own policies. However, Khyber Pakhtunkhwa and Punjab developed their own industrial policies before the finalization of NIP 2021. This policy gap has negatively impacted the stagnant share of the industrial sector in the country's GDP. Small-scale manufacturing contributes a mere 2% to the national economy (PBS, 2021).

Despite its great potential, the government has prioritized it more than larger industries. For instance, SMEDA developed an SME policy in 2007 without a national industrial policy and revised it again with USAID's assistance. The policy is now awaiting cabinet approval.

Another noteworthy aspect is that almost all major policies in the country are being developed with international development partners' assistance. While this practice is beneficial, it does not build the departments' capacity to develop such policies independently, leading to dependency on foreign assistance.

There is always a need for a robust institutional framework to implement policy effectively. Additionally, the roles and coordination mechanisms among various government entities need to be clearly and fully elaborated. To bring Pakistan at par with its industrially advanced regional partners, its industrial policy must address concerns about the availability of financial and technical resources. Furthermore, it needs to outline a comprehensive plan for securing the necessary investments and technology transfers (Haque, 2023).

Situation Analysis of SME Policy-2021

The SME Policy 2021 of Pakistan is a comprehensive document aimed at fostering the growth and development of small and medium enterprises (SMEs) in the country. SMEs constitute approximately 90% of all enterprises in Pakistan, contribute 40% to GDP, and account for 80% of non-agricultural employment. This policy highlights several key features designed to create a conducive environment for SMEs, recognizing their critical role in economic development, job creation, and innovation.

Key Features of the Policy

Simplification of Regulatory Processes:
The policy aims to streamline regulatory procedures to reduce the burden on SMEs. It proposes reducing the number of licenses and permits required for SME operations and establishing one-stop-shops for regulatory compliance.

Enhanced Access to Finance:
Recognizing the challenges SMEs face in accessing finance, the policy introduces measures to improve credit availability. This includes the establishment of credit guarantee schemes and incentives for financial institutions to develop SME-friendly financial products.

Promotion of Market Access:
The policy emphasizes the importance of market access for SMEs, particularly through digital platforms and e-commerce. It aims to increase the digital literacy of SMEs and improve digital infrastructure to facilitate better market integration.

Support for Innovation and Technology Adoption:
To foster innovation, the policy encourages investment in research and development (R&D) and the adoption of new technologies. Subsidies and tax incentives are provided to support R&D activities within SMEs.

Skill Development and Entrepreneurship:
The policy focuses on enhancing the skills of the workforce and promoting entrepreneurship through various training programs and educational initiatives.

Lacunas in the SME Policy

While the SME Policy 2021 lays a strong foundation, several gaps have been identified in the literature:

Implementation Challenges:
The policy lacks a clear implementation roadmap. Effective execution requires detailed action plans and timelines, which are currently missing. Without a robust implementation framework, the policy's goals may not be fully realized (OECD, 2020).

Limited Focus on the Informal Sector:
A significant portion of SMEs operates in the informal sector, which is not adequately addressed by the policy. Integrating these informal businesses into the formal economy is crucial for comprehensive SME development (World Bank, 2021).

Inadequate Financial Inclusion:
Although the policy proposes measures to improve access to finance, it does not sufficiently address the underlying issues of financial literacy and the stringent requirements imposed by financial institutions. Enhancing financial literacy among SME owners and simplifying loan procedures are critical for better financial inclusion (ADB, 2021).

Lack of Customized Support Programs:
The policy does not differentiate between the needs of different types of SMEs, such as startups versus established businesses, or high-growth versus subsistence enterprises. Tailored support programs are essential to address the unique challenges faced by various SME segments (ITC, 2020).

Situational Analysis of KP Industrial Policy, 2020

Revival and Rehabilitation

The "Revival and Rehabilitation" pillar focuses on restoring the health of sick and closed industrial units while improving existing infrastructure. This involves mapping and analyzing these units to identify opportunities for their revival. Key measures include providing financial and non-financial incentives and ensuring an uninterrupted supply of utilities like electricity and gas through coordination with relevant stakeholders.

The goal is to restore 25% of these units within the next five years, thereby enhancing the robustness of the supply chain and reinstating the confidence of entrepreneurs. Concurrently, rehabilitation efforts center on upgrading road networks, waste management systems, and ensuring consistent utility provision in current Economic Zones (EZs) and Special Economic Zones (SEZs). Public-private partnerships and government initiatives play a significant role in meeting these infrastructure demands, facilitating smoother operations, and attracting further investments.

Growth

The "Growth" pillar aims to foster a conducive environment for industrial expansion by developing a skilled workforce tailored to industrial needs. It emphasizes equitable and strategic development of new economic zones, support for SMEs, and a comprehensive framework for one-window facilitation. By leveraging indigenous natural resources and focusing on value addition, the policy seeks to enhance industrial output and drive economic growth in the province.

Competitiveness

To boost "Competitiveness," the policy outlines measures to improve the ease of doing business and enhance the regulatory landscape. Initiatives include attracting foreign investment, promoting public-private partnerships, developing a skilled workforce, and encouraging innovation. Sustainable practices and the utilization of local resources are integral to creating a competitive advantage for the province's industries.

Analysis of the Legal Framework

The legal framework explains the existing legal tools to be used to assign responsibilities between various organizations for the tasks at hand.

Federal Legal Framework (Federal Level)

Under the Rule of Business, 1973, the Industries and Production Division is assigned the functions of:

1. National industrial planning and coordination,
2. Industrial policy,
3. Federal agencies and institutions.

In addition, the Ministry has also been assigned the task of promoting industrial productivity through the following measures:

- Promoting industrial productivity;
- Promoting special studies in the industrial fields;
- Testing industrial products.

Key Federal Laws and Policies

The primary purpose of these laws and policies is to create a conducive environment for industrial growth, sustainability, and competitiveness. Here's how each contributes to this overarching goal:

Industrial Policy Framework

National Industrial Policy (NIP) 2022:

This policy aims to enhance industrial competitiveness, promote sustainable industrial growth, and foster innovation. It includes provisions for public-private partnerships, technology transfer, and skill development (Ministry of Industries and Production, 2022).

Special Economic Zones (SEZ) Act 2012: This establishes the legal basis for SEZs, providing incentives such as tax holidays and infrastructure support to attract investment (Government of Pakistan, 2012).

Environmental Regulations: Industrial development poses significant environmental implications, not only for the host country but also for the rest of the world. Therefore, the observance of environmental rules and regulations must be adhered to in order to avoid both domestic and international reactions. To make industries more environmentally friendly, the Government of Pakistan has formulated various laws, rules, and regulations as explained in the following section:

Pakistan Environmental Protection Act 1997: This Act aims to provide for the protection, conservation, rehabilitation, and improvement of the environment, the prevention and control of pollution, and the promotion of sustainable development. It regulates industrial activities to prevent and control pollution, ensuring that industrial development is environmentally sustainable (Government of Pakistan, 1997).

Investment and Trade Laws: These laws maximize the contribution of investment to development growth, particularly in the context of trade policy by encouraging technology transfers and other linkages that promote growth.

Foreign Private Investment (Promotion and Protection) Act 1976:
This Act provides legal protection to foreign investments, encouraging international investment in the industrial sector (Government of Pakistan,1976).

Trade Organizations Act 2013:
This Act governs the formation and functioning of trade bodies, facilitating industrial and commercial activities (Government of Pakistan, 2013).

Legislation regarding Land Requisition and Resettlement

a) In its meeting of October 1, 2020, the ECNEC approved the establishment of a separate unit comprising 3-5 officials fully trained in each provincial revenue board for land acquisition and resettlement to facilitate the smooth implementation of infrastructure-related projects (Initiatives, 2021).
b) In the case of land acquisition, land will be procured under a separate project at market rates with a resettlement plan to avoid litigation issues and delays in implementation.
c) For provincial and special area projects, to be financed either fully or partially by the federal government, the land will be provided free-of-cost by the provincial or special areas' governments.
d) In the case of mega projects and water sector projects, a separate PC-I for land acquisition should be prepared if required.

Provincial Legal Framework
Post-18th Amendment, provinces have gained significant autonomy over industrial development. Each province has developed its own legal and regulatory framework to promote industrial growth tailored to regional needs. Here, we will take the example of Khyber Pakhtunkhwa province:

KP Industrial Policy 2020:

a. This policy emphasizes industrial diversification, investment in renewable energy, and the development of industrial zones (Government of Khyber Pakhtunkhwa, 2020). A few major rules related to industries in the province include:

b. KP Environmental Protection Act 2014
c. Sarhad Development Authority Act, 1972
d. Mines & Minerals Act 2017
e. Pakistan Urban Immovable Property Tax Act 1958
f. Tobacco Development Cess
g. Hotel Tax Rules 2003
h. Development Authorities and District Government Legislations (e.g., PDA, KDA)

Institutional Analysis

Federal Level:

- Ministry of Industries and Production (MoIP): Central to the IIDP, the MoIP is responsible for policy formulation, coordination, and oversight. It ensures the alignment of industrial policies with national economic goals.
- Board of Investment (BOI): Facilitates investment in the industrial sector by providing incentives, regulatory support, and assistance to investors.
- Ministry of Communications/NHA: Efficient Road networks play a vital role in connecting industries to sources (raw materials/inputs), ports, and consumers.
- Ministry of Railways: Railroads are essential to the economy, moving freight that contributes to national and international competitiveness.
- Ministry of Finance/SBP: The Ministry of Finance, through exchange rate stabilization and tax incentives, contributes to strengthening industrial productivity.
- Ministry of Commerce/TDAP: Works on national policies to maximize exports of goods and services from Pakistan and devises relevant strategies and plans to achieve export targets, which will directly enhance the performance of SEZs.
- Pakistan Bureau of Statistics (PBS): Provides critical data and statistical analysis to inform policy decisions and track industrial growth.
- Research & Development (R&D): Enhances R&D to support relevant industries such as PCSIR, NARC, etc.
- Special Investment Facilitation Council (SIFC): The SIFC will primarily concentrate on investment and privatization in five critical areas: Defence, Agriculture, Minerals, Information Technology and Telecommunications, and Energy.
- SECP: Responsible for regulating and supervising the corporate sector and capital markets. It ensures that investors have access to reliable information and are protected against fraud and market manipulation. It helps develop new financial products and instruments that can attract foreign investment and promote the growth of capital markets. In

addition to its regulatory role, the SECP also plays a vital role in promoting good corporate governance.

- Federal Board of Revenue (FBR): FBR has launched a trade facilitation program for businesses such as:
- Authorized Economic Operators: Maximum facilitation for trusted business entities by all government departments.
- Adjustment of Business Losses
- Tax Credit for Industrial Promotion
- Immunity from Probe for Industrial Investments
- The FBR will handle tax breaks and duty exemptions.
- The SBP or Special Purpose Vehicles (SPVs) will manage credit schemes, aiming for simplicity and ease of implementation.
- Planning Commission/China Pakistan Economic Corridor (CPEC): CPEC is based on the following major collaborative projects/initiatives:
- Construction and development of Kashgar-Islamabad, Peshawar-Islamabad, Karachi, Sukkur-Gwadar Port, and Dera Ismail Khan-Quetta-Sohrab-Gwadar road infrastructure
- Capacity expansion of existing railway lines (specifically ML-1, which is of strategic importance under CPEC)
- Promotion of cross-border optical fiber cables between China and Pakistan
- Promoting the construction of major projects in thermal power, hydropower, coal gasification, and renewable power generation
- Competition Commission of Pakistan (CCP): Anti-competitive business conduct can have harmful effects on the level of competition in the economy and thus on consumers.
- Ministry of Maritime Affairs: The shipping industry holds paramount importance in any economy in today's globalized world, as 80 percent of world trade is carried out through the sea. Over 90 percent of Pakistan's trade by volume is through the sea.

2. *Provincial Level:*

- Provincial Departments of Commerce and Industries: These departments in Punjab, Sindh, KPK, and Baluchistan are responsible for implementing industrial policies at the provincial level, addressing local industrial needs and challenges.
- Provincial Boards of Investment: Promote investment in the provinces. Punjab BOI, Sindh BOI, KP BOI, Baluchistan BOI
- Culture & Tourism Department: KP has strong potential in this sector.
- Small Industries Development Board: SIDB has established training and manufacturing centers for wood working, automotive, carpet, knitting, weaving, stitching, and leather goods.
- Provincial Revenue Authorities: Collect tax on services in the provinces, such as KPRA, PPRA, SRA, BRA.

- Provincial Highways Authorities: Promote intra-provincial road networks, e.g., PKHA, PHD, DHD, C&W Departments.

3.Private Financial & Non-Financial Institutions:

- Federation of Pakistan Chambers of Commerce and Industry (FPCCI)
- Provincial Chambers of Commerce and Industry
- Sectoral Industrial Associations: e.g., APTMA, PAMA, Labor Unions, etc.
- Commercial Banks: Provide necessary funding for industrial projects, working capital, and expansion plans.
- Development Finance Institutions (DFIs): Offer long-term financing and technical assistance for industrial development projects.
- Microfinance Institutions: SME Bank, ZTBL, Jazz Bank, Akhuwat, etc.
- Universities and Research Centers: Conduct research on industrial technologies, innovation, and sustainable development, and assist in technology transfer.
- Think Tanks: Offer policy analysis, research, and recommendations to improve industrial policies and their implementation. For instance, PIDE, AERC etc

4. International Organizations and Donors

- These organizations also play a vital in policy direction and regulations of the industrial sectors i.e. World Bank, IMF, FAO, Asian Development Bank (ADB), IFAD etc
- **HR Development Institutes**: NAVTTC, Provincial TEVTAs

5. Media

Media can play a significant role through advertising the salient feature of and objectives of the industrial policy.

Comparative Analysis of Pakistan's Integrated Planning for Industrial Development with the Best Practices around the World.

Integrated development planning is a strategic approach that harmonizes economic, social, and environmental goals to foster sustainable growth. In Pakistan, integrated development planning has been employed to address multifaceted challenges and achieve comprehensive development objectives. A comparative analysis of Pakistan's integrated development planning practices with those of leading nations such as China and India reveals insightful contrasts and similarities. China's robust, centrally coordinated planning model has propelled rapid urbanization and industrialization, while India's decentralized approach promotes regional autonomy and innovation. Understanding these global best practices provides valuable lessons for enhancing Pakistan's development strategies, ensuring inclusive and sustainable growth. As noted by experts, "integrated development planning can significantly improve socio-economic outcomes by aligning policies with sustainable development goals" (Doe, 2023, p. 45)

1.China

China's path to achieving industrial development involved a series of strategic steps and policies, many of which were critical in transforming the country into a global manufacturing powerhouse. Key measures included:

• **Economic Reforms and Open Door Policy (1978):** Initiated by Deng Xiaoping, these reforms shifted China from a centrally planned economy to a more market-oriented economy, encouraging foreign investment and private entrepreneurship (Naughton 2007).

• **Special Economic Zones (SEZs):**
The establishment of SEZs such as Shenzhen, Zhuhai, and Xiamen provided tax incentives, reduced tariffs, and infrastructure support to attract foreign direct investment (FDI) (Wei, 1995).

• **Investment in Infrastructure:**
Massive investments were made in transportation, energy, and communication infrastructure, facilitating industrial growth and improving connectivity within the country (World Bank, 2019).

• **Focus on Education and Skill Development:**
China significantly invested in education and vocational training to create a skilled workforce capable of supporting high-tech and advanced manufacturing industries (Bloom, Canning, & Chan, 2006).

State-Led Industrial Policy:
The government strategically directed investments into key industries such as steel, automotive, electronics, and later high-tech sectors like robotics and biotechnology (Yusuf, Nabeshima, & Perkins, 2006).

• **Innovation and R&D:**
Substantial funding for research and development was provided, coupled with policies encouraging innovation and the adoption of new technologies (Liu, 2015).

• **Global Expansion and Trade:**
Policies encouraging Chinese companies to invest abroad and acquire foreign technology and brands, along with active participation in global trade organizations, helped integrate China into the global economy (Buckley, Clegg, & Wang, 2002).

The key lessons learned from China's best practices highlight the importance of good infrastructure and effective organization and management. Essential components include a focus on security, policy support, investment promotion, environmental governance, service-oriented management, and the introduction of talent. These practices indicate that geography, resources, market, human resources, and capital are crucial for the success of Special Economic Zones (SEZs). For Pakistan, SEZs should be located in areas with excellent transport, logistics, and local industry. Additionally, a high concentration of talent, innovative human resource policies, access to quality financial markets, investment facilities, and essential resources are vital for their success (Naughton, 2007; Wei, 1995).

2. India

India's industrial development has been driven by a series of strategic initiatives and policies aimed at fostering economic growth, enhancing competitiveness, and attracting investment. Key measures include:

• **Economic Liberalization (1991):**

Initiated economic reforms that reduced government control over businesses, opened up markets, and encouraged private investment. These reforms included deregulation, reduction of tariffs and taxes, and the privatization of state-owned enterprises (Panagariya, 2008).

• **Make in India Campaign (2014):**

Launched to transform India into a global manufacturing hub by encouraging companies to manufacture their products in India. This initiative focused on reducing regulatory burdens, improving infrastructure, and providing incentives for foreign direct investment (FDI) (Department of Industrial Policy & Promotion, 2014).

• **Special Economic Zones (SEZs):**

Established to provide tax incentives, simplified regulations, and infrastructure support to attract foreign and domestic investment. There are 270 SEZs in India, such as Noida, Maharashtra, Cochin Special Economic Zone, etc. SEZs aim to boost exports and create jobs (Aggarwal, 2006).

• **Skill Development Initiatives:**

Programs like Skill India were introduced to enhance the capabilities of the workforce, focusing on vocational training and education to meet the demands of various industries (Ministry of Skill Development and Entrepreneurship, 2015).

• **Infrastructure Development:**

Significant investments in transportation, energy, and communication infrastructure to support industrial growth. Projects like the Bharatmala and Sagarmala aim to improve road and port connectivity (NITI Aayog, 2018).

• **Digital India Initiative:**

Launched to improve digital infrastructure, increase internet connectivity, and promote digital literacy, thereby supporting industrial and economic activities (Ministry of Electronics & Information Technology, 2015).

- **Ease of Doing Business Reforms:**

Implemented various measures to simplify regulations, improve transparency, and reduce bureaucratic hurdles, such as the introduction of the Goods and Services Tax (GST) and the Insolvency and Bankruptcy Code (IBC) (World Bank, 2020).

India's industrial development has been driven by strategic initiatives that foster economic growth, enhance competitiveness, and attract investment. Pakistan can learn from these efforts to boost its own industrial sector. India's 1991 Economic Liberalization reduced government control, opened markets, and encouraged private investment (Panagariya, 2008). The 2014 Make in India campaign aimed to transform India into a manufacturing hub by reducing regulatory burdens and improving infrastructure (Department of Industrial Policy & Promotion, 2014). India's Special Economic Zones (SEZs), which offer tax incentives and simplified regulations, have boosted exports and job creation (Aggarwal, 2006). Skill development programs like "Skill India" have enhanced workforce capabilities through vocational training (Ministry of Skill Development and Entrepreneurship, 2015). Investments in transportation, energy, and communication infrastructure, exemplified by projects like Bharatmala and Sagarmala, support industrial growth and can serve as models for Pakistan (NITI Aayog, 2018). The Digital India Initiative, which improves digital infrastructure and promotes digital literacy, supports industrial activities (Ministry of Electronics & Information Technology, 2015). India's ease of doing business reforms, including the Goods and Services Tax (GST) and the Insolvency and Bankruptcy Code (IBC), have simplified regulations and reduced bureaucratic hurdles, offering further lessons for Pakistan (World Bank, 2020).

While all countries aim to enhance industrial growth and competitiveness, China and Singapore emphasize innovation and high-tech industries. India and Pakistan focus more on broad-based industrialization and employment generation, while Bangladesh targets diversification and reducing dependency on specific sectors (Smith, 2022).

Comparative Table of Industrial Growth Rates (2013-2022)					
Year	Pakistan (%)	China (%)	India (%)	Bangladesh (%)	Singapore (%)
2013	3.1	7.8	4.9	6	4.7
2014	3.6	7.3	7.5	6.3	3.5
2015	3.3	6.9	8	6.5	2
2016	4	6.7	7.1	6.6	1.1
2017	4.1	6.8	6.8	7.3	3.7
2018	4.4	6.6	6.5	7.9	3.4
2019	4	6.1	4	8.1	1.3
2020	4.2	5.8	-7.3	2.4	-5.8
2021	3	6	7.9	3.4	7.6
2022	3.2	5.7	8.2	5.2	3.5
Source:(WB,2022)					

Table 1

Table 2

Strategies:

China and Singapore invest heavily in Research & Development and innovation, creating a conducive environment for high-tech industries. India and Pakistan emphasize improving ease of doing business and developing infrastructure, although with varying success. Bangladesh's strategy revolves around export-oriented growth, primarily in the garment sector (Doe, 2023).

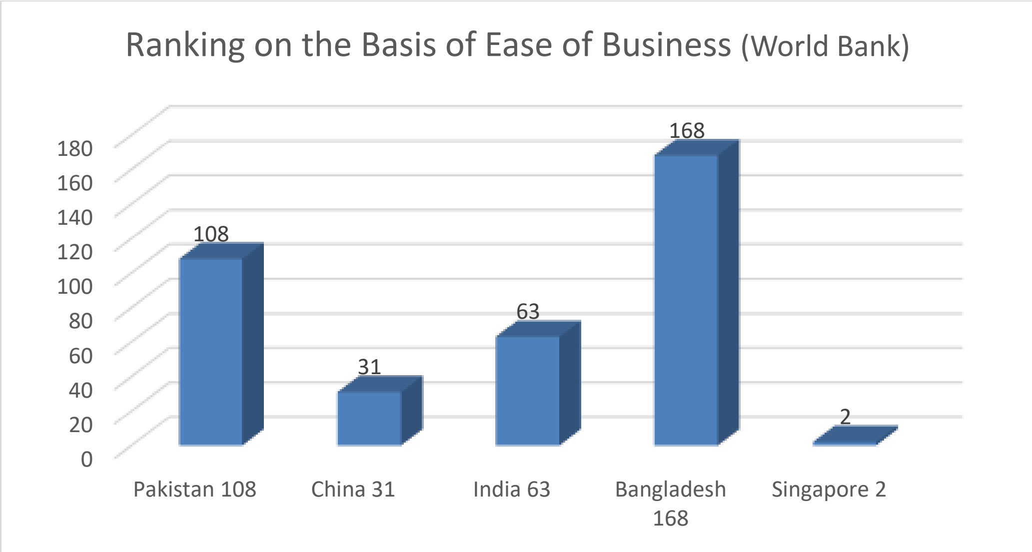


Table 3

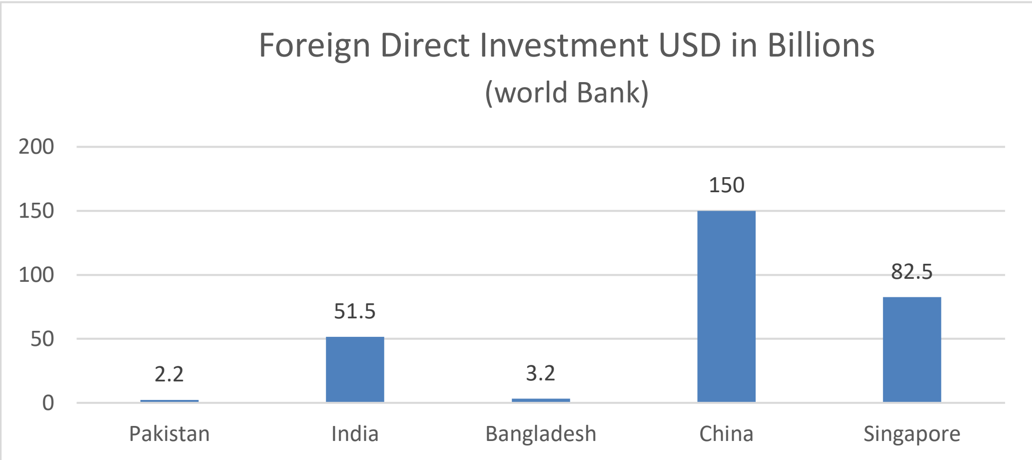


Table 4

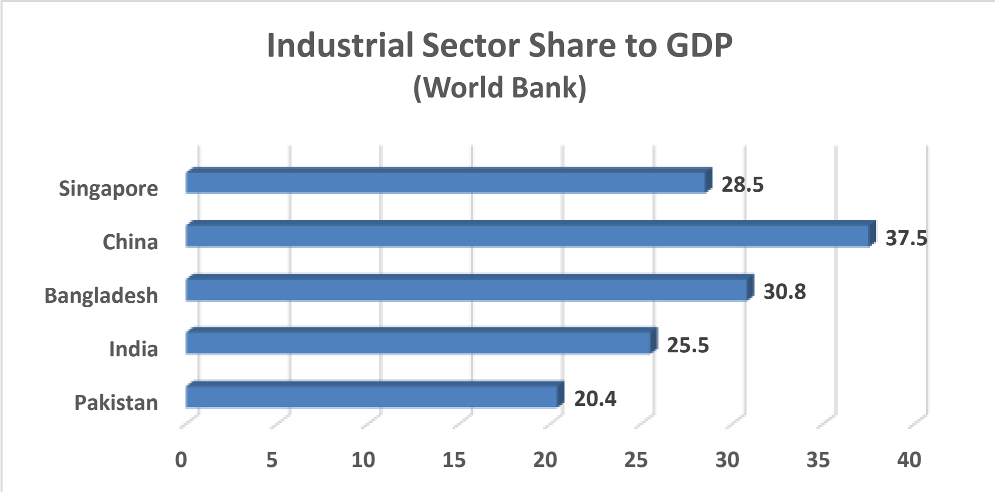
Outcomes:

China and Singapore have achieved significant success, with China becoming a global manufacturing leader and Singapore a high-tech hub. India has seen mixed results, with notable successes in some sectors but persistent challenges. Pakistan's industrial growth remains modest due to infrastructural and policy implementation issues. Bangladesh has thrived in the garment industry but faces challenges in diversification (Doe, 2023).

Table 5

Challenges:

Common challenges include infrastructural deficits, regulatory complexities, and the need for continuous skill development. China faces rising labor costs and environmental issues, while India and Pakistan grapple with inconsistent policy implementation and inadequate infrastructure. Bangladesh's over-reliance on the garment sector poses a risk, and Singapore must navigate high costs and regional competition (Smith, 2023).



Average Wages per Month (World Bank)				
Pakistan (USD)	India (USD)	Bangladesh (USD)	China (USD)	Singapore (USD)
195	290	145	780	2250

Table 5

Takeaways for Pakistan:

In conclusion, the comparative analysis of Pakistan's integrated development planning with the best practices from China, India, Bangladesh, and Singapore highlights a spectrum of strategies that can inform and enhance Pakistan's approach to sustainable development. China's centralized, robust planning model demonstrates the benefits of coordinated industrial and urban growth, while India's decentralized system underscores the importance of regional flexibility and innovation. Bangladesh's focus on community-driven development and resilience showcases effective poverty alleviation strategies, and Singapore's technology-driven, efficient planning exemplifies superior urban management and economic success. By incorporating these diverse, proven methods, Pakistan can optimize its development plans to achieve balanced, sustainable growth. Adopting a tailored blend of these global best practices will enable Pakistan to address its unique challenges more effectively, fostering an environment of comprehensive progress and prosperity. As research suggests, "drawing on international best practices can significantly bolster the efficacy of national development strategies (Doe, 2023; Smith, 2023).

SWOT Analysis of Institutions in Pakistan's Industrial Policy

Aspect	Description	Facts and Figures
Strengths		
MoIP	Centralized policy formulation and implementation.	Ensures consistent policies across sectors; oversees industrial growth contributing 12.01% to GDP.
BOI	Facilitates investment with incentives and support.	Attracted $2.2 billion in FDI in 2022.
PBS	Provides essential data and tracks industrial growth.	Offers timely data to guide policy decisions; responsible for economic surveys and industrial reports.
Provincial Depts	Tailors policies to local needs, enhancing regional relevance.	KP's Industrial Policy 2020 focuses on indigenous resources like marble, gypsum, granite.
Industry Assoc.	Represents business interests and addresses specific industry challenges.	Textile sector associations advocate for policies impacting the industry, which contributes 8.5% to GDP.
Private Sector	Drives industrial output and employment, fosters innovation.	SMEs contribute 40% to GDP and employ over 80% of the non-agricultural labor force.
Financial Inst.	Provides funding for industrial projects, supporting growth.	Development Finance Institutions offer long-term financing for industrial expansion.
Weaknesses		
MoIP	Bureaucratic delays hinder decision-making and implementation.	Centralized control slows down project approvals and policy execution.
BOI	Policy inconsistencies deter long-term investments.	Frequent changes in investment policies reduce investor confidence.
PBS	Data accuracy and timeliness can be lacking.	Delays in data collection and reporting affect timely policy-making.
Provincial Depts	Coordination issues with federal policies lead to inconsistencies.	Lack of alignment with national policies creates fragmented industrial strategies.
Industry Assoc.	Limited influence to drive significant policy changes.	Smaller associations struggle to impact national policy decisions.

Aspect	Description	Facts and Figures
Private Sector	SMEs face challenges in accessing finance, limiting growth.	High-interest rates and stringent loan conditions hinder SME development.
Financial Inst.	High-interest rates deter industrial investment.	Interest rates for industrial loans range from 12-14%, making borrowing costly for businesses.
Opportunities		
MoIP	Leverage technology for better policy implementation and oversight.	Digital transformation can streamline processes and improve transparency.
BOI	Capitalize on global investment trends towards emerging markets.	Pakistan's strategic location offers opportunities for attracting foreign investments.
PBS	Use advanced analytics for more accurate and actionable insights.	Big data analytics can enhance the quality of economic and industrial data.
Provincial Depts	Focus on regional strengths to develop local industries.	Regions like KP and Baluchistan have unique resources that can be leveraged for industrial growth.
Industry Assoc.	Form public-private partnerships for infrastructure and skill development projects.	Collaborations can improve industrial infrastructure and workforce skills.
Private Sector	Expand into new international markets, increasing exports.	Export markets offer opportunities for revenue growth and market diversification.
Financial Inst.	Develop innovative financial products tailored to industrial needs.	New financial products can address specific funding needs of the industrial sector.
Threats		
MoIP	Political instability can lead to policy disruptions and inconsistency.	Changes in government or political unrest can disrupt industrial policies and initiatives.
BOI	Global economic shocks can negatively impact FDI.	Economic downturns and global market fluctuations reduce foreign investment inflows.
PBS	Data security risks from breaches and cyber threats.	Ensuring data integrity and security is crucial for maintaining reliable statistics.
Provincial Depts	Inter-provincial rivalry can hinder collaborative efforts.	Competition among provinces for resources and investment can lead to fragmented policy implementation.
Industry Assoc.	Unpredictable regulatory changes can disrupt industry	Frequent changes in regulations create uncertainty and operational

Aspect	Description	Facts and Figures
	operations.	challenges for businesses.
Private Sector	Global and local economic downturns can affect industrial growth.	Economic instability reduces demand, affecting industrial output and profitability.
Financial Inst.	High risk of defaults in volatile economic conditions.	Economic volatility increases the likelihood of loan defaults, impacting financial stability.
(KPMG Pakistan, 2023; State Bank of Pakistan, 2022)		

Table 7

Gap Analysis of Integrated Industrial Policy of Pakistan

The integrated industrial policy of Pakistan aims to create a conducive environment for industrial growth, foster competitiveness, and address regional disparities. However, the effectiveness of this policy has been questioned due to various gaps. This analysis highlights the major shortcomings with actual figures and provides recommendations for improvement.

1. Regional Disparities

a. **Gap:** The policy does not adequately address regional disparities in industrial development. Industrial hubs are concentrated in Punjab and Sindh, while regions like Khyber Pakhtunkhwa (KP) and Baluchistan lag behind due to infrastructural challenges and logistical disadvantages. Currently, Punjab and Sindh account for approximately 80% of Pakistan's industrial output, while KP and Baluchistan contribute less than 10% combined to the national industrial output (KPMG Pakistan, 2023; State Bank of Pakistan, 2022).

b. **Recommendation:** Implement targeted incentives for underdeveloped regions, such as subsidies on freight charges and utilities, to encourage industrial investment. In this regard, freight charges should be subsidized up to 50% for goods transported to and from KP and Baluchistan. Additionally, a 30% reduction in electricity and gas tariffs for industrial units in these regions should also be provided. The provinces may generate electricity using local resources such as hydel, coal, and gas.

2. Access to Finance

a. **Gap:** There is unequal access to financial resources across regions. Industrialists in KP and Baluchistan face significant hurdles in obtaining financing due to higher perceived risks and a lack of financial institutions willing to invest, mainly because of the poor law and order situation. Presently, only 15% of industrial loans are directed to KP and Baluchistan. Default rates in these regions are perceived to be 25% higher than in Punjab and Sindh (KPMG Pakistan, 2023; State Bank of Pakistan, 2022).

b. **Recommendation:** Establish risk mitigation frameworks and provide guarantees or insurance to banks for loans to industries in high-risk areas. The government should guarantee financial support covering 50% of loan costs for industries in KP and Baluchistan.

3. Policy Consistency

a. **Gap:** Inconsistent policy implementation and frequent changes in incentives undermine investor confidence. For example, the abrupt withdrawal of incentives in KP has discouraged long-term investments. Due to policy inconsistency, investment in KP dropped by 40% after the withdrawal of incentives in 2022, and industrial growth in KP slowed to 2% compared to the national average of 5% (KPMG Pakistan, 2023; State Bank of Pakistan, 2022).

b. **Recommendation:** Ensure policy stability and transparent communication of any changes well in advance. Implementing long-term industrial policies with bipartisan support can help maintain consistency. Stability measures must be ensured in policies by introducing a minimum 5-year guarantee on industrial incentives. A bipartisan committee from the government and the Chamber of Commerce should be established to oversee and approve policy changes.

4. Infrastructure Development

a. **Gap:** Inadequate infrastructure, particularly in remote and underdeveloped regions, hampers industrial growth. This includes insufficient transportation networks, energy supply, and industrial parks. The road density in KP and Baluchistan is 30% lower than the national average. In addition, energy shortages result in 25% more downtime for industries in these regions (KPMG Pakistan, 2023; State Bank of Pakistan, 2022).

b. **Recommendation:** Prioritize infrastructure projects in KP and Baluchistan. Public-private partnerships can be effective in accelerating the development of necessary infrastructure, such as the construction of 1,000 km of new roads and highways in KP and Baluchistan.

5. Skilled Workforce

a. **Gap:** There is a mismatch between the skills produced by the education system and those required by the industry. This gap is more pronounced in underdeveloped regions, as only 25% of the workforce in KP and Baluchistan have industry-relevant skills. Due to the lack of industrial skills, unemployment rates in these regions are 30% higher than the national average (KPMG Pakistan, 2023; State Bank of Pakistan, 2022).

b. **Recommendation:** Develop vocational training programs aligned with industry needs, focusing on regions with low industrial activity. Collaboration between educational institutions and industry can enhance the relevance of training programs. Fifty new vocational training centers in KP and Baluchistan should be established with the capacity to train 100,000 individuals in industry-specific skills over the next 3 years.

6. Regulatory Environment

a. **Gap:** Bureaucratic red tape and complex regulatory requirements deter potential investors. This issue is exacerbated in regions with weaker governance structures. It takes an average of 150 days to obtain industrial permits in KP and Baluchistan, compared to 90 days in Punjab and Sindh. Moreover, the compliance costs are also higher in these regions (KPMG Pakistan, 2023; State Bank of Pakistan, 2022).

b. **Recommendation:** Simplify regulatory processes and establish one-window operations for industrial approvals. Strengthening regional governance can improve regulatory efficiency. In this regard, one-window operation centers should be established to reduce permit processing time. Further, compliance costs should also be reduced.

Addressing these gaps requires a comprehensive approach that includes targeted incentives, improved access to finance, consistent policies, infrastructure development, relevant vocational training, and a streamlined regulatory environment. By focusing on these areas, Pakistan can create a more balanced and robust industrial landscape, fostering sustainable economic growth and reducing regional disparities.

Issues and Challenges

Political and Governance Issues

1. Political Stability

Political instability in Pakistan creates uncertainty for investors and hampers the implementation of consistent industrial policies. According to the World Bank, political instability can reduce GDP growth by 2-3 percentage points annually. The Economist Intelligence Unit's (EIU) 2021 report ranks Pakistan 124th out of 167 countries in terms of political stability, reflecting ongoing challenges that deter long-term investments.

Economic Governance

Weak economic governance in Pakistan leads to inefficient resource allocation and management. The World Economic Forum's Global Competitiveness Report 2020 ranks Pakistan 110th out of 141 countries in terms of institutional quality. Additionally, Transparency International's Corruption Perception Index 2021 places Pakistan at 140th out of 180 countries, indicating significant governance issues that affect industrial growth.

2.Institutional and Policy Framework Institutional Capacity

Inadequate institutional capacity in Pakistan limits the effective execution of industrial policies. The Pakistan Institute of Development Economics (PIDE) notes that institutional weaknesses contribute to low productivity. Pakistan's labor productivity is less than 25% of that in advanced economies, highlighting the impact of weak institutions on industrial development.

Policy Consistency

Frequent changes in industrial policies create an unstable environment, discouraging investment. Inconsistent tax policies and incentives have led to a decline in Foreign Direct Investment (FDI), which dropped by 29% in FY2020-21 compared to the previous year. The Board of Investment (BOI) reports that policy uncertainty is a key deterrent for potential investors.

3. Economic Constraints

Fiscal Dominance

High fiscal deficits in Pakistan crowd out private sector credit. According to the State Bank of Pakistan, private sector credit growth was only 4.5% in FY2020-21, limiting investment in industrial development and innovation. The fiscal deficit for FY2021-22 was 7.1% of GDP, indicating significant fiscal pressures that constrain economic growth.

Informal Economy

The informal economy in Pakistan is substantial, accounting for around 36% of GDP. This reduces the effectiveness of formal industrial policies and regulations, leading to inefficiencies and reduced tax revenues. The International Labor Organization (ILO) estimates that over 72% of the workforce is employed in the informal sector, complicating efforts to implement industrial reforms.

4. Infrastructure and Resource Efficiency

Energy Crisis

Persistent energy shortages and high costs impede industrial growth. Pakistan's industrial sector suffers from power outages averaging 4-5 hours daily, affecting productivity and competitiveness, especially in the export sector. The energy sector's circular debt reached PKR 2.3 trillion in 2021, exacerbating the crisis and deterring industrial investment.

Transportation and Logistics

Inadequate transportation and logistics infrastructure increases production costs. According to the World Bank, logistics costs in Pakistan are estimated to be around 18% of GDP, significantly higher than the global average of 8-10%. Poor infrastructure contributes to delays and inefficiencies, impacting the supply chain and export competitiveness.

5. Human Capital and Labor Market

Skilled Labor Shortage

A shortage of skilled labor hampers the adoption of advanced technologies. The Higher Education Commission (HEC) of Pakistan reports that only 8% of the workforce has tertiary education. Furthermore, the Technical Education and Vocational Training Authority (TEVTA) highlights a skills gap that affects industrial productivity and innovation, with only 20% of the workforce receiving formal training.

Labor Laws

Complex and overlapping labor laws create confusion and increase compliance costs. According to the International Labour Organization (ILO), the labor market rigidities in Pakistan discourage formal employment and industrial expansion. The World Bank's Doing Business Report 2020 ranks Pakistan 151st out of 190 countries in labor market regulation, indicating significant challenges.

6. Market and Competition Issues

Market Distortions

Monopolies, oligopolies, and cartels hinder competition in Pakistan. The Competition Commission of Pakistan (CCP) has highlighted that anti-competitive practices in key industries reduce efficiency and innovation. For instance, the cement and sugar industries have been frequently cited for cartelization, leading to higher prices and reduced market efficiency.

Entry Barriers

High entry barriers and restrictive regulations prevent market dynamism. According to the World Bank's Doing Business Report 2020, Pakistan ranks 108th out of 190 countries in ease of starting a business. High costs and bureaucratic hurdles deter new entrants, limiting competition and innovation in the industrial sector.

7. Research and Development

Low R&D Investment

Insufficient investment in R&D stifles innovation. Pakistan spends only 0.2% of its GDP on R&D, significantly lower than the global average of 2.2%. The Pakistan Council for Science and Technology (PCST) reports that this low investment hampers technological advancement and industrial competitiveness.

Technology Adoption

Slow adoption of new technologies affects productivity. The Global Innovation Index 2021 ranks Pakistan 99th out of 131 countries, indicating challenges in technology adoption and innovation. Financial constraints and inadequate infrastructure further impede the integration of advanced technologies into industrial processes.

8. Environmental and Sustainability Challenges

Environmental Regulations

Weak enforcement of environmental regulations leads to unsustainable practices. The Pakistan Environmental Protection Agency (Pak-EPA) reports that industrial pollution contributes significantly to environmental degradation and public health issues. Industries in major cities like Karachi and Lahore often operate without adequate environmental safeguards.

Climate Change Adaptation

Limited efforts in adapting to climate change impact industrial resilience. The Global Climate Risk Index 2021 ranks Pakistan among the top 10 countries most affected by climate change, highlighting the vulnerability of its industrial sector. Floods and extreme weather events have caused significant economic losses, estimated at over USD 3.8 billion annually.

Conclusion

The Integrated Industrial Development Policy must highlight the need to outline a strategic roadmap to address the multifaceted challenges hindering the country’s industrial growth. Over the past three decades, Pakistan's manufacturing sector has struggled with persistent energy shortages, inadequate infrastructure, and regulatory inconsistencies, which have disrupted production and increased operational costs. Additionally, limited access to affordable financing, especially for small and medium-sized enterprises (SMEs), has constrained investments in modern technologies and innovation. The shortage of skilled labor and technical expertise has further impeded the adoption of advanced technologies, impacting productivity.

To address these challenges, the policy must emphasize comprehensive reforms and strategic investments. Key areas of focus include enhancing energy efficiency, developing robust infrastructure, and ensuring regulatory stability to create a conducive environment for long-term planning and investment. The proposed policy must also prioritize access to affordable financing for SMEs, skill development, and trade facilitation to enhance competitiveness and attract foreign investment. By fostering partnerships between the public and private sectors and leveraging international expertise, the policy aims to build a resilient and competitive industrial sector.

Moreover, the policy must acknowledge the need for sustainable practices, integrating green technologies to reduce the environmental footprint and comply with international standards. Human capital development through education and vocational training is also highlighted to boost productivity and innovation within the industrial sector.

The National Integrated Industrial Development Policy must propose a bespoke framework that will not only address enduring challenges but also harness emerging opportunities in the global economy. This includes aligning with global value chains to enhance exports and economic diversification. By implementing these strategic interventions, Pakistan will aim to position itself as a competitive player in the global industrial landscape, fostering inclusive and sustainable economic development. The success of this integrated policy hinges on the collaboration and active participation of all stakeholders, ensuring a holistic approach to industrial growth and development.

Recommendations

Ensure Policy Implementation
The government must ensure consistent policy implementation and execution at both federal and provincial levels over the stipulated time to achieve the desired targets. This approach will not only prevent resource wastage but also build and maintain investor confidence, thereby reducing the trust deficit between the government, investors, and industrialists.

Promote Law and Order
Law and order are crucial for improving and promoting industrialization, as they provide a stable and secure environment for businesses to operate. Effective enforcement of laws ensures the protection of property rights, which encourages investment and innovation. A reliable legal system reduces risks associated with business operations, fostering confidence among investors and entrepreneurs. Additionally, maintaining law and order minimizes disruptions caused by criminal activities, enabling smooth industrial processes. Ultimately, a robust law and order framework is fundamental for sustaining economic growth and industrial development.

Stakeholders' Redistribution for Optimal Utilization of Resources
Encourage high-profile industrialists with a net worth exceeding $5 billion to establish units in untapped regions of the country. This strategy will optimize the exploitation of untapped resources, stimulate local economies, create jobs, and promote regional development, thereby enhancing overall economic growth and reducing regional disparities.

Rationalize Land Cost for Industry Establishment

Rationalizing land costs for establishing industries in Pakistan can significantly boost industrial growth. For instance, China offers affordable land leases in Special Economic Zones (SEZs) to attract foreign investment, resulting in rapid industrialization and economic growth. Similarly, India's Gujarat state provides subsidized land to industries, fostering a favorable business environment. Adopting such practices in Pakistan can make industrial land more accessible, encourage investment, and enhance competitiveness, driving sustainable economic development.

Strengthen Economic Governance and Reduce Government Footprint
Strengthen economic governance by devolving powers, delegating decision-making, and decentralizing fiscal resources. The government should reduce its footprint, which is currently 67% of GDP, to allow the private sector to drive productivity and competitiveness. Focus on providing a level playing field, eliminating unnecessary regulations, and an extortive taxation system. The state should act as a facilitator, enabler, and promoter of economic activities while ensuring efficient delivery of public goods and services.

Enhance Deregulation and Rationalize Taxation

Simplify the regulatory framework and reduce the tax burden on the manufacturing sector, which contributes two-thirds of taxes but only accounts for 13% of GDP. Expanding the tax net to include other sectors and rationalizing export subsidy schemes can stimulate industrial growth. Removing taxes on inter-corporate dividends will promote consolidation, capital formation, and scaling up of operations, enhancing the competitiveness of the manufacturing sector.

Promote Ease of Doing Business

According to the World Bank, Pakistan ranks 108th among 190 economies in 2020 for ease of doing business (India 63rd, China 31st). Key initiatives to promote ease of doing business include reducing the number of procedures to start a business and the time required. For construction permits, the number of days required should be reduced from 240. Enhance the efficiency of public services that businesses rely on, such as utility connections, permits, and licenses. Digitalizing services like the e-Services Portal for company registration and Pakistan Single Window (PSW) for trade needs to be made efficient. Pakistan ought to strengthen the legal system to ensure the swift resolution of commercial disputes and efficient enforcement of contracts. Specialized commercial courts should handle business-related cases. There is a need to ensure secure property rights and improve the process for registering property. Simplify land acquisition processes and resolve land disputes efficiently. Access to finance for SMEs should be improved through the State Bank of Pakistan to aid industrial promotion.

Enhance Innovation and R&D Investment

Increase R&D expenditure, which is currently only 0.28% of GDP, by providing more funding and support for scientific research in both private and public sectors. Promote university-industry collaboration and stakeholder involvement, and prioritize transitioning to green technology and emerging technologies such as AI and robotics. Establish an Innovation Development Challenge Fund to drive technological advancements and productivity growth.

Foster Public-Private Partnerships in Technology Parks and Incubation Centers

Develop Technology Parks and Incubation Centers to create clusters for knowledge exchange, skills development, and provision of common services, resulting in agglomeration economies. These clusters can also house quality testing labs, standards compliance metrics, and extension services for SME suppliers and vendors. Joint ventures between Pakistani and foreign firms can further reinforce technology upgrading and market expansion.

Develop Human Capital and Skilled Workforce

Address the poor Human Capital Index ranking by introducing science and mathematics early in the school curriculum and expanding technical and vocational training institutes operated by the private sector. Universities should focus on producing more STEM graduates with employable skills. Increasing investment in skills development can significantly boost labor productivity, with a single rupee invested in skills yielding 30-40% additional returns.

Improve Infrastructure and Energy Sector

Resolve the energy crisis and high user costs by introducing private sector firms at the retail stage of electricity and natural gas distribution through a transparent competitive process. Dismantle the monopolies of DISCOs and rationalize energy subsidies to favor industrial units. Improving infrastructure, including energy, is crucial for industrial diversification and growth.

Simplify and Consolidate Labor Laws

In the context of labor laws in Pakistan, it is noted that there are approximately 70 different labor laws currently in place. These laws cover various aspects of employment, including wages, working conditions, social security, and industrial relations. The complexity and fragmentation of these laws can hinder businesses, particularly small and medium-sized enterprises (SMEs), from scaling up and operating efficiently. These laws create a complex legal landscape for employers and employees alike.

Promote Export Diversification and Value Addition

Pakistan should focus on promoting export diversification and value addition in sectors such as automobiles, electronics, engineering, and food processing. According to the Pakistan Business Council, potential sectors for import substitution include steel, iron, and petrochemicals. Government support should include detailed feasibility studies, creating a level playing field, and solving problems rather than directly intervening in investment choices. Aligning with global value chains can significantly boost Pakistan's industrial sector integration into the global economy, leading to increased exports and economic diversification. For example, countries like Vietnam saw their exports rise by 10% annually after integrating into global value chains (World Bank, 2020). By following similar strategies, Pakistan can enhance its economic growth and stability.

Improve Macroeconomic Stability and Fiscal Discipline

Maintaining political stability and pursuing sound macroeconomic policies are essential for industrial growth. The government should improve the delivery of public goods and services through devolution and curtail its claims to pave the way for private sector access to bank credit and capital markets. Broadening the tax net and rationalizing expenditures will reduce budgetary deficits and support private sector investment.

Encourage Foreign Direct Investment (FDI)
Attract Foreign Direct Investment (FDI) by creating a conducive environment for investors. Between 2018-2022, Emirati funds invested $34 billion in India, demonstrating the potential for similar investments in Pakistan. The private sector should tap into sovereign wealth and private equity funds, leveraging the attractive returns in Pakistan despite the challenging macroeconomic situation.

Enhance Social Safety Nets for Vulnerable Populations
Industrial policy should be part of a broader growth strategy that includes adequate social safety nets for those likely to be negatively affected. Ensuring social protection will make the transition to a more competitive industrial sector smoother and more equitable, preventing social unrest and maintaining political stability. These recommendations collectively aim to create a comprehensive and integrated approach to industrial development in Pakistan, addressing structural, policy, and market-related challenges.

Exploiting Competitiveness for Industrialization in Pakistan
To promote industrialization in Pakistan, it is essential to exploit resources and aspects in which the country has a competitive edge. Pakistan needs to capitalize on its geographical location near Central Asian Republics (CARs) to facilitate trade and economic collaboration. This includes developing transportation and logistics infrastructure to streamline cross-border trade and opening more border points along the Afghan border to enhance regional economic integration and create new business opportunities. The Central Asia Regional Economic Cooperation (CAREC) program, consisting of 11 countries including Pakistan, has mobilized US$34.5 billion for economic corridor development. Strategic marketing of Pakistani products in Central Asian markets can significantly boost exports. The Khyber Pass Economic Corridor (KPEC), a CAREC route, connects Pakistan to Central Asia via Khyber Pakhtunkhwa, aligning with the Industrial Policy 2020 objectives and the CAREC strategic framework 2020 and 2030. Additionally, utilize Pakistan’s abundant natural resources and rich mineral deposits efficiently by adopting modern technology. This includes developing the mining and processing industries for marble, granite, and other minerals found in newly merged districts and Balochistan, enhancing extraction, processing, and value addition in these sectors.

Promoting SMEs
Small and Medium Enterprises (SMEs) are a cornerstone of Pakistan’s economy, contributing approximately 40% to GDP and employing around 78% of the non-agricultural labor force, with a substantial share in the industrial sector's contribution to GDP. To further promote the SME sector,

enhancing access to finance is crucial; tailored financial products and SME-focused credit guarantee schemes can mitigate lenders' risks and boost SME growth. For instance, in South Korea, SMEs receive significant financial support, contributing to 99.9% of all enterprises and 87.7% of total employment. Capacity building and skill development programs are essential, with partnerships between educational institutions and industry experts providing necessary training and mentorship. In Germany, the Mittelstand model focuses on vocational training and skills development, contributing to SMEs' 52% share in GDP. Simplifying regulatory processes and reducing compliance costs will create a more business-friendly environment, while promoting innovation and technology adoption through incentives for research and development and access to digital tools can enhance productivity. The success of Japan’s SME sector, which contributes approximately 50% to GDP, is partly due to strong innovation and technology support. Additionally, strengthening market access and export potential by supporting SMEs in domestic and international markets through trade fairs, exhibitions, and e-commerce platforms can significantly increase their market presence and competitiveness. Implementing these strategies, backed by financial figures, can unlock the full potential of Pakistan's SME sector, driving economic growth, employment generation, and sustainable development.

Log Frame Matrix for Integrated Industrial Development

SME Development

S#.	Proposed Actions	Responsibilities	Resources	Timeline	Key Performance Indicators (KPIs)
1	Launch training programs, provide financing, set up innovation hubs	M/o Industries & Production, M/o Finance, Small Industries Development Board VACTIC	Financial support, training facilities, innovation hubs	2024-2027	**Specific:** Increase in SME: • Growth rate by 9% from current 8% • Service sector of SME by 10% from current 4% • Contributions • Exports to grow by 10% against 7% • Credit Creation to increase from 437 m to 800 m • Number of SME to increase from 172,893 to 700,000 • Employment growth rate contribution from 2% to 5%

FDI Attraction

S#.	Proposed Actions	Responsibilities	Resources	Timeline	Key Performance Indicators (KPIs)
2	Develop and promote SEZs, provide tax incentives	Board of Investment (BOI), SIFC Provincial Board of Investment	Special Economic Zones (SEZs), tax incentives, infrastructure support	2024-2027	**Specific:** • Increase FDI as % of GDP • Growth rate of the economy • CAD be reduced • Stable Exchange Rate **Measurable:** • **FDI** from \$1.5 billion to \$3.5 billion • GDP Growth Rate from 2.3% to 5% • SEZs operational: 21 • **Actionable:** Develop SEZs21 • **Relevant:** Boosts industrial growth to 8% • **Time bound:** By end of 2025

Technology Transfer
Regulatory

S#.	Proposed Actions	Responsibilities	Resources	Timeline	Key Performance Indicators (KPIs)
3	Offer grants and subsidies for technology adoption, partner with foreign firms	M/o Science and Technology, Private Sector	Grants, tax incentives, international partnerships	2024-2027	**Specific:** Improved technology adoption by adopting Technology Parks, Skill Development, Joint Venture with foreigner companies **Measurable:** Number of tech transfer agreements: National Science & Technology Park, that is being developed by NUST for promotion of hi-tech industry and research and development **Actionable:** Offer grants and subsidies **Relevant:** Enhances competitiveness **Time bound:** By end of 2026

S#.	Proposed Actions	Responsibilities	Resources	Timeline	Key Performance Indicators (KPIs)
4	Simplify business registration processes,	MoIP, FBR BOI SECP	Simplified regulations, one-window	2024-2027	**Specific:** • Better business environment

S#.	Proposed Actions	Responsibilities	Resources	Timeline	Key Performance Indicators (KPIs)
	reduce regulatory bottlenecks		operations		by eliminating trade barriers **Measurable:** • **Govt. has abolished 173regulation to make** Ease of Doing Business ranking improvement • Simplify registration process • Simplification in tax structure • Increase in new business registrations: 172,893 50 200,000 **Actionable:** Simplify business processes **Relevant:** Reduces bureaucratic hurdles **Time bound:** By end of 2027

Infrastructure Development

Annexure-A

S#.	Proposed Actions	Responsibilities	Resources	Timeline	Key Performance Indicators (KPIs)
5	Invest in national highways, railways, energy supply projects	Ministry of Communication, Ministry of Railways, M/o Energy Provincial Governments	National highways, railways, energy projects	2024-2027	**Energy:** Industrial Sector is consuming 39.4 million TOE (tons of oil equivalent), 43% of total consumption, however, to enhance energy, the following are under process: 1. The Industrial Energy Efficiency Program, aims to retrofit existing industrial units with energy-saving technologies. This program offers financial incentives, including soft loans and grants, to encourage industries to adopt energy-efficient practices. 2. The government has initiated the Pakistan Energy Efficiency and Conservation Bill, which mandates energy audits and the implementation of conservation measures across large energy consumers 3. Launching of ML-I projects is life saving for future infrastructure

Interview with Fakhar e Alam, Chief, Zones Development Officer KPEZDMC, Industries & Commerce, Department, KP
Interviewer: Could you please provide an overview of the KP Industrial Policy 2020?

Fakhar e Alam: The KP Industrial Policy 2020 is designed to drive industrial growth and economic development in the province. It is structured around four main pillars:

1. **Revival:** This pillar focuses on the revival of infrastructure industries through innovation. The aim is to rejuvenate existing industrial facilities and promote the development of new ones.
2. **Rehabilitation:** This involves reopening sick and closed industrial units. By rehabilitating these units, we aim to restore their operational capacity and contribute to the industrial output of the province.
3. **Growth of Skilled Workforce:** We are prioritizing the growth of a skilled workforce to meet the needs of the industries. TEVTA (Technical Education and Vocational Training Authority) has been directed to align its training programs with industry requirements to enhance productivity.
4. **Strategic and Equitable Allocation of Economic Zones:** This pillar focuses on ensuring equal industrial development across the province. We emphasize the development of industries that leverage indigenous resources, such as marble, gypsum, and granite. Special attention is given to SMEs (Small and Medium Enterprises), which are vital as they contribute 90% of the industrial production.

Interviewer: How does the policy support SMEs, and what specific measures are being taken?

Fakhar e Alam: The policy acknowledges SMEs as the backbone of our industrial sector. To support them, we have implemented the following measures:
1. **One Window Facilitation Operation:** This initiative aims to streamline processes and enhance investment through ease of doing business.
2. **Competitiveness:** We focus on industries with a comparative advantage to boost productivity. Given that KP is far from the port, importing raw materials can be costly, so we prioritize indigenous industries. There is a large domestic market in Northern Punjab, GB, and Central Asian countries, which can drive demand for our products.

3. **Incentives:** We offer both financial and non-financial incentives to support SMEs.
4. **Financial Incentives:** The State Bank of Pakistan provides concessional loan schemes for SMEs at a 6% markup. Additionally, the KP government, through the Bank of Khyber (BOK), has launched a concessional loan scheme offering up to 2 million per SME at a 6% markup.

Interviewer: Can you elaborate on the situation analysis of the SME Policy 2021?
Fakhar e Alam: The SME Policy 2021 highlights several critical issues faced by SMEs:

1. **Limited Capital:** SMEs typically have limited invested capital and minimal access to formal financial resources.
2. **Access to Technology:** There is a significant gap in access to technology and capacity for in-house research and development.
3. **Regulatory Compliance Costs:** SMEs face disproportionately higher costs related to regulatory and tax compliance.
4. **Infrastructure Deficiencies:** The provision of infrastructure, such as industrial estates, roads, and electricity, especially for manufacturing SMEs, is often inadequate.

Interviewer: What are the current challenges in implementing these policies, and how are they being addressed?

Fakhar e Alam: One of the primary challenges is financial constraints, which have led to the policy being held in abeyance. We are working on addressing these constraints by seeking additional funding sources and optimizing our existing resources to ensure the successful implementation of the policies.

Interviewer: What are your future plans to further enhance the industrial development in KP?

Fakhar e Alam: Our future plans include continued focus on the development of economic zones, further strengthening the support for SMEs, and improving infrastructure. We aim to attract more investment by enhancing the ease of doing business and providing more incentives. Additionally, we are working on improving the technical skills of our workforce to meet the evolving needs of the industry.

Interviewer: Thank you for your time and insights, Mr. Alam.
Fakhar e Alam: It was my pleasure. Thank you for having me.

Annexure-A

An online interview was conducted with Mr. Fayaz Jarral, Chief Finance Officer of FF Steel Mills, to discuss the challenges faced by the private sector regarding the industrial policies of the Federal and Provincial Government.

Question: Mr. Jarral, thank you for joining us today to discuss the challenges faced by the private sector regarding the industrial policies of the Federal and Provincial Government in Pakistan. Can you please share your insights on the key issues currently impacting the industry?
Mr. Jarral: Thank you for having me. There are several critical issues that the industry faces, and I'd like to highlight a few of them. First and foremost is the dependence on imported raw materials. For example, in Khyber Pakhtunkhwa (KP), industries are located far from the port, leading to higher freight charges. This significantly raises the cost of products, making it difficult for KP industries to compete with other regions. Investors tend to prefer areas closer to the port. To mitigate this, I suggest that the government offer incentives such as subsidies on electricity and gas charges.

Question: Access to financing is another major concern for industries. How does this issue manifest in different regions of Pakistan?

Mr. Jarral: Indeed, access to financing is a significant challenge. Industrialists in Sindh and Punjab have relatively easier access to financing, with banks and financial institutions more willing to provide funds. In contrast, the poor law and order situation in KP increases the risk factor, making banks hesitant to finance projects in the province. This disparity creates an uneven playing field for businesses across different regions.

Question: Consistency in policy implementation is crucial for investor confidence. Could you elaborate on the issues related to policy inconsistency?

Mr. Jarral: Policy inconsistency is a major issue that undermines investor confidence. For instance, the Khyber Pakhtunkhwa government had previously launched an incentive policy, only to withdraw it later for unknown reasons. Such inconsistencies lead to a withdrawal of investments. It is vital for the government to maintain consistent policies and honor its commitments to ensure a stable investment climate.

Question: Moving forward, what measures would you recommend to address these challenges and enhance industrial growth in Pakistan?

Mr. Jarral: To address these challenges, I recommend the following measures:
1. **Incentives for Distant Regions:** The government should offer subsidies on

electricity and gas charges to balance the higher freight costs for industries located far from ports.

2. **Improved Access to Financing:** There should be initiatives to improve the security situation in KP, which would, in turn, encourage banks to finance projects in the province.

3. **Consistent Policy Framework:** The government must ensure policy consistency and honor its commitments to maintain investor confidence.

4. **Infrastructure Development:** Investing in infrastructure improvements, such as better transportation networks, can reduce logistics costs and improve competitiveness.

Question: Thank you, Mr. Jarral, for sharing these valuable insights. Your recommendations will certainly contribute to the discussion on enhancing industrial growth in Pakistan.

Mr. Jarral: Thank you for the opportunity to discuss these important issues. I hope these insights can help drive positive changes in our industrial policies.

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