Industrial Policy Making and Facilitation at National Level

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Citation:
Khan, A., Arif, H., Iqbal, M., Iqbal, A., Soomro, F., & Islam, M. U. (2023). Industrial policy making and facilitation at national level. Khyber Journal of Public Policy, 2(2), Summer 2023, 2(2)

Article Info:
Received: 31/03/2023
Revised: 07/04/2023
Accepted: 10/04/2023
Published: 24/04/2023

Abstract:

The industrial sector is crucial for economic development, with Pakistan's manufacturing sector contributing 12.79% to GDP in FY 2021-22. It drives growth through employment, exports, and meeting local demand. However, Pakistan lacks a national industrial policy for three decades, leading to challenges such as security issues, inadequate infrastructure, energy crises, financial constraints, and outdated manufacturing practices. Unlike regional peers like India and China, Pakistan has not adopted globally recognized best practices or smart manufacturing technologies. The study emphasizes the urgent need for a National Industrial Policy to address these challenges, boost exports, and create employment opportunities by leveraging Pakistan's strategic location. Recommendations include forming a collaborative framework involving the Prime Minister's task force, private sector, and government entities to develop and implement industrial policies effectively. Addressing issues like international competition, political instability, and inconsistent policies is key to driving sustainable industrial growth.

Key words:

Economic Growth, Industrial Policy, Manufacturing Sector, Smart Manufacturing, Policy Implementation

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Introduction

After independence, Pakistan inherited only 34 small industrial units out of 921 in the subcontinent. These were largely related to cotton textiles, cigarettes, sugar, rice husking, cotton ginning, and flour mills. All these contributed only seven percent (7%) to the GNP and employed a little over 26,000 people in the country (Saeed, 2010). The growth rate of Pakistan's industrial sector in the 1950s emerged from a non-existent base. During this period, the industrial sector's growth rate doubled in the early years, achieving more than 20% growth between 1950 and 1955 in large-scale manufacturing. By the 1960s, large-scale manufacturing experienced extraordinary performance (Saeed, 1995).

Industrialization is a process that accelerates economic growth and brings changes to economic segments through resource exploitation, utilization, distribution patterns, production functions, income generation, and social changes conducive to further growth and development (Khan, 2006).

Pakistan faces the challenge of boosting industrialization and improving the efficiency of its industrial and manufacturing sectors to enable rapid export growth. To address this, the Prime Minister's Task Force on Industrial Policy and Facilitation has been established at the national level.

Problem Statement

The industrial sector is a major contributor to Pakistan's GDP. Large-scale manufacturing is considered the backbone of an economy. However, Pakistan's industrial development has not been very impressive over the last two decades compared to other countries in South Asia. There is no single overarching national policy to steer the process of industrialization. This warrants an in-depth analysis of the industrial sector's performance to evaluate policy gaps and recommend the best policy options in light of regional best practices.

Scope

This study aims to analyze the industrial policy framework in the country and evaluate the performance of large- and small-scale manufacturing industries over the last three years. The study will also analyze international best practices in the region and devise a National Industrial Policy to boost the industrial sector.

Research Methodology

The current research paper aims to assess industrial policymaking in Pakistan by employing a qualitative design, which was deemed most appropriate. Through this approach, the research paper provides detailed insights into industrial policymaking by considering various factors, such as comparing global business practices in the implementation and formulation of industrial policies. Consequently, the qualitative design has offered detailed and valuable insights.

Secondary data was collected by studying relevant websites, articles, and journal data to analyze industrial policymaking in Pakistan. Data related to different aspects was gathered. For data analysis, analytical tools such as SWOT and GAP analyses were used.

Literature Review

One of the major causes of retarded industrialization in Pakistan is the absence of a comprehensive industrial policy for a long time. As a result, the functions of this necessary policy are being managed through other public sector policies, such as investment, trade, and monetary policies. The SMEDA Act of 1998 was introduced 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 currently pending cabinet approval.

The 18th Constitutional Amendment devolved Part-I of the Federal Legislative List, including the industrial sector, to the provinces, thereby transferring industrial affairs to the provincial governments (MOIP, 2021). Frequent changes in governments in Pakistan are a leading cause of policy uncertainty. Moreover, past governments have often followed ad-hoc industrial policies, primarily as reactions to crises (Kemal, 2008).

The conflict between federal and provincial governments regarding industrial policies has further created confusion in achieving desired outcomes in the industrial sector (Burki, 2008). The Pakistan Business Council (PBC) advocates a "Make-in-Pakistan" strategy to drive industrial growth. This strategy aims to leverage the domestic market of over 200 million consumers to develop scale and competitiveness, which could eventually address global demand (PBC, 2018).

Historical Perspective and Situational Analysis

During the 1960s, private sector-led industrialization was encouraged, while in the 1970s, the public sector was given the leading role through the nationalization of industries. In the 1980s and 1990s, the private sector was once again assigned a leading role. During the 1990s, Pakistan adopted liberal, market-oriented policies and declared the private sector as the engine of economic growth. Moreover, an attractive package of incentives was offered to attract FDI (Khan and Kim, 1999).

1950s and 1960s - Import Substitution Industrialization

Emphasis was placed on export promotion, and industrialization started gaining momentum. By the end of the 1960s, the private sector dominated sectors such as banking, insurance, basic consumer goods industries, and the export of cotton and jute products. Industrial production increased, but the unregulated private sector led to the concentration of wealth and the formation of monopolies (Amjad, 1976).

1970s - Nationalization of Industry

Through the Economic Reforms Order of 1972, the government took control of the management of ten major categories of industries. This move eroded the confidence of the private sector. Nationalization was further reinforced in 1975 when small-sized agro-processing units were also nationalized. The Ministry of Production controlled 75 industrial units through 8 holding corporations, which included chemicals, fertilizers, automobiles, cement, petroleum, and steel (Khan, 1999).

Privatization and Export-Led Industrialization

The Transfer of Managed Establishment Order, 1978 nullified the Economic Reforms Order of 1972. Further, the Industrial Property Order, 1979 declared that the government could not arbitrarily take over the industries. The number of industries requiring approval of the government was reduced; the private sector was allowed to participate in infrastructure development, power generation, highway construction, etc. Over 100 enterprises were privatized, (Kishwar, 2021).

1990s - Liberalization and Market Oriented Reforms

Pakistan became a member of the WTO in 1995. However, the results of the Uruguay Round were rather "discouraging" for Pakistan, primarily due to less-than-average tariff reductions on its main export products and the slow integration of textiles into the GATT. The high protection given to domestic

industries insulated Pakistan from foreign competition, generated a strong anti-export bias in resource allocation, and led to increased inefficiency, waste, and a decline in quality. Consequently, Pakistan's export structure remained overly concentrated on a small number of agriculture-based products, while in more sophisticated product areas, the country's export structure remained internationally uncompetitive (Kishwar, 2021).

2000s - Privatization, Diversification and Export Orientation

Pakistan fully opened its industries (with only a few exceptions) to FDI and granted national treatment to foreign investors in industries with respect to duties, tax exemptions, and concessions on imports of plant and machinery. Tax relief was provided for the first-year allowance for value-added, export, and high-tech industries, with priority given to engineering/capital goods, chemicals, and agri-based industries. Other major objectives included increasing the capacity utilization of indigenous industries. Textiles and clothing were supported through several assistance packages, including R&D grants and freight subsidies for exports.

2010 Onwards – An Era of De-Industrialization

The government could make efforts to promote industrialization, such as through the Pakistan Council of Scientific and Industrial Research, which assists in R&D on problems faced by the industrial sector, and tests raw materials and products. Industries in designated areas and export processing zones are granted exemptions from customs duties, surcharges, and sales taxes on imported machinery. Incentives for industries include the Export Development Fund, the duty drawback scheme, support for specific activities such as subsidies for obtaining standards certification, and export finance facilities. The overall industrial strategies aim to protect domestic manufacturing industries such as clothing, non-electric machinery, transport equipment, and processed agricultural products (KP Industry Policy, 2020).

Prime Minister's Incentives Package for Exporters (2017-2021)

It was a financial package of PKR 180 billion, aimed at increasing exports by US$3 billion by the end of the financial year 2017. The duty drawback rate for the garment sector was increased from 4% to 7%. Sales tax on textile machinery imports was removed, and customs duty on the import of cotton and man-made fiber (except polyester) was also eliminated. Additionally, the industry could import related machinery duty-free, subject to reduced energy tariffs and the removal of sales tax on packaging. However, much like earlier policies, this package did not meet its objectives due to non-release of funds, frequent upward revisions of energy tariffs, and a liquidity

crisis caused by delays in duty drawback refunds to exporters. Moreover, the Federal Budget of 2019 withdrew the zero-rating facility (Kishwar, 2021).

Situational Analysis

LSM are referred to those industries that are having huge infrastructure raw material high manpower requirements and large capital requirements. Major large scale manufacturing industries of Pakistan include cotton textile, automotive, cement, steel, tobacco, chemical, machinery and food processing. A few of them are discuss as under:

Textile Sector

This sector contributes nearly one-fourth of industrial value-added and provides employment to about 40 percent of the industrial labor force. Barring seasonal and cyclical fluctuations, textile products have maintained an average share of about 61.24 percent in national exports. The textile sector grew by 3.2 percent during July-March FY2022, compared to 8.0 percent in the same period last year. According to PBS, exports of the textile group increased by 25.4%, from 11.4 billion to 14.2 billion during July-March FY2022.

Automobile Industry

It is the sixth-largest sector, with an annual contribution of 2.8% to GDP. The automobile sector marked vigorous growth of 54.1 percent during July-March FY2022, compared to a 21.6 percent growth last year. Except for sluggishness in some areas, such as buses and two/three-wheelers, there has been robust growth across all automobile sectors during July-March FY2022. The auto sector constitutes about 15 percent of LSM, representing a significant portion of the country's industrial output. According to PBS, the automobile sector recorded a 54.1 percent upsurge during July-March FY2022. Despite robust growth during the first 9 months of FY2022, the higher numbers, to a great extent, fall short of installed capacities. This indicates a bright future for the automobile sector, which has been the best-performing sector among large-scale manufacturing.

Iron and Steel

Production jumped by 16.5 percent during the period under review, compared to a contraction of 8.6 percent in the same period last year. Billets/ingots, mainly used in the construction industry, grew by 32.8 percent, and H/CR Sheets/Strips/Coils/plates increased by 7.9 percent. Both reflect the growth momentum in the automobile and construction-allied sectors. Non-metallic Mineral Products inched up by 1.1 percent,

compared to an 18.5 percent increase last year (Pakistan Economic Survey, 2021-22).

Fertilizer Industry

Total fertilizer production during July-March FY2022 was 6,833 thousand tons, which was 2.9 percent higher compared to the corresponding period last year. Urea is the main fertilizer, accounting for 70 percent of total production. The installed production capacity of 6,307 thousand tons per annum is sufficient to meet local demand, subject to the availability of uninterrupted gas and RLNG supply. There are nine urea manufacturing plants, one DAP plant, three NP plants, four SSP plants, two CAN plants, one SOP plant, and two plants producing blended NPKs, with a total production capacity of 9,172 thousand tons per annum.

Cement Industry

Total cement dispatches stood at 5.04 million tons (mt), compared to 5.38 mt last year. Domestic consumption grew by 4.02 percent, reaching 4.75 mt, compared to 4.56 mt in March FY2021. The largest decline was observed in exports, which drastically decreased by 63.8 percent to 0.30 mt in March FY2022, compared to 0.82 mt during the same period last year. This was largely attributed to rising international freight rates, political and economic instability in Afghanistan, and a trade ban with India.

Performance of Industrial Sector of Pakistan during Last Three Years

Pakistan's economy is characterized by volatile growth pattern over the years. It has been struggling hard to achieve long-term, inclusive and sustainable economic growth. Presently, the economic landscape is changing for the better by showing some optimistic signs.

Industrial Sector Performance (FY 2019-20)

The rapid spread of COVID-19 since February 2020 has brought economic activities to a near halt, and FY 2019-20 witnessed a contraction in economic activities. The GDP growth rate for FY 2020 was estimated at negative 0.47 percent. The industrial sector posted a negative growth of 2.64 percent. However, construction activities increased by 8.06%, largely due to enhanced government general expenditure (PES, 2021).

Industrial Sector Performance (FY 2020-21)

The industrial sector has witnessed promising results with a growth of 3.57 percent. The value added in the mining and quarrying sector has declined by 6.5 percent. The large-scale manufacturing (LSM) sector showed an unprecedented healthy growth of 9.29 percent. Construction activity increased by 8.34%, mainly due to an increase in general government expenditures and private sector construction-related expenditures (NAC, 2021). All the sub-sectors have shown marked improvement over the past three years.

Industrial Sector During FY 2021-22

Industrial sector during FY 2022 with 9.2% of GDP dominates the overall manufacturing sector, accounting for 74.3% of the sectoral share followed by Small Scale Manufacturing, which accounts for 2.0% of total GDP and 15.9% sectoral share. The third components, slaughtering, accounts for 1.2% of GDP with 9.7% sectoral share.

Analysis of policy making history reveals that the uniform industrial polices encompassing all export-oriented sectors were missing. These were a domain specific policy formulated for various mafias. Therefore, instead of promoting certain sectors, policy intervention should aim to support new technologies and new activities which are cross cutting in nature and benefit the entire spectrum of production processes. Sectoral protection has caused businesses to move away from technology-based industries and into less technology-intensive industries like textiles and clothing which provided minimal value-addition. Therefore, Pakistan needs an industrial policy that encourages other industries with a global dynamic demand in order to achieve diversification in international trade.

Legal/Policy and Institutional Framework

Legal/Policy Framework

Textile Policy, 2020-25

In March 2020, the Textile Policy 2020-25 was prepared, aiming to increase exports to $28 billion by 2025. The policy addresses some key areas, including the energy shortage and the fixation of energy tariffs for the next five years, as well as the formation of Specialized Economic Zones. The policy acknowledges that no state-of-the-art infrastructure is available for Special Economic Zones, which shifts common infrastructure costs to the investors. The policy also envisions the construction of workers' residential colonies through the Prime Minister's Housing Scheme around the SEZs.

Auto Industry Development and Export Policy, 2021-26

This policy encompasses the localization of parts and components, the implementation of safety regulations, the promotion of new technologies, the export of auto parts and completely built-up units, consumer welfare, and the promotion of manufacturing specialized vehicles. Moreover, the "Make in Pakistan" notion in the new policy includes, among others, the Meri Gari Scheme, the New Product Policy, and the setting up of export targets. Pakistan approved an ambitious NEVP in 2020, with targets and incentives aimed at having electric vehicles capture 30% of all passenger vehicle and heavy-duty truck sales by 2030, and 90% by 2040. Under the new EV policy, the Pakistani government aims for an EV-to-charging-station ratio of 33 to one by 2025.

Pakistan Fertilizer Policy, 2001

The Government of Pakistan issued the Fertilizer Policy in 2001 which had the objective to attract investors in newly installed fertilizer plants to compete in the domestic market in Pakistan. Due to a gradual increase in the off-take of fertilizer in the recent past, the short-fall has further been increased. To cope with the problem, the Government has decided to further encourage the local manufacture of fertilizers in the country.

Institutional Framework

Ministry of Industries and Production

The role of Ministry of Industries and Production is that of a facilitator in creating an enabling environment for industrial development and promotion of entrepreneurship through policy intervention, setting up industrial parks and export processing zones for investors, skill development of human resource for industrial sector and socio-economic development of country with particular focus on SME development and promotion of traditional crafts of Pakistan.

Engineering Development Board (EDB)

EDB is the apex government body under Ministry of Industries and Production entrusted to strengthen engineering base in Pakistan. EDB focuses primarily on the development of engineering goods and services sector on modern lines enabling it to become technologically sound and globally integrated. The main objective of EDB is to develop a long-term vision for the development of the engineering sector and formulate and coordinate all government policies relating to the engineering sector.

Pakistan Industrial Development Corporation (PIDC)

PIDC was created in 1952 as a statutory body with the objective of setting up an industrial base in the country. The operational strategy was to set up projects on a continuous basis and transfer them to the private sector after successful operation, which encouraged and involved the private sector in national development. PIDC established 94 industrial units during the period from 1952 to 1982 in major sectors of the economy, such as mining, fertilizer, cement, automobile, chemicals, pharmaceuticals, cotton and textile, ginning, and sugar, etc. The role of PIDC was redefined in 2004-05 as an "industry facilitator" to help the private sector in promoting industrialization.

Export Processing Zones Authority (EPZA)

EPZA is a Pakistan Government venture established in 1980 for accelerating the pace of industrialization in the country and enhancing the volume of exports by creating an enabling environment for investors to initiate ambitious export-oriented projects in a network of export processing zones, being established in close cooperation or under joint venture arrangements with the private sector.

Special Economic Zone (SEZ)

The SEZ Act was promulgated on September 13, 2012, and later that year, the SEZ Rules were notified. The law allows SEZs to be set up by the federal or provincial governments themselves, or in collaboration with the private sector under different modes of public-private partnership, or exclusively through the private sector. The fiscal benefits under the SEZ law include a one-time exemption from customs duties and taxes for all capital goods imported into Pakistan for the development, operations, and maintenance of an SEZ (both for the developer and for the zone enterprise), as well as exemption from all taxes on income for a period of ten years. The provincial SEZ authorities, established under the law, are required to forward the applications received from developers to the Federal Board of Investment, which acts as the secretariat to the Board of Approval and the Approval Committee. So far, 22 SEZs have been approved by the competent authority.

Small Medium Enterprises (SME)

Worldwide, Small and Medium Enterprises (SMEs) are acknowledged by governments, especially in developing countries, where they contribute to economic growth and stability in the form of employment, new job creation, social cohesion, and development. Globally, small and medium enterprises account for 90 to 95% of businesses and generate between 60 and 70% of job

opportunities in most countries. Pakistan is among the developing nations whose economy is supported by different business sectors, both in terms of their share in GDP and labor force employment. In Pakistan, 90% of all businesses are SMEs, which contribute 40% of GDP and 30% of exports. SMEs also provide 78% of non-agricultural employment. The Small and Medium Enterprises Development Authority (SMEDA) was created under the SMEDA Ordinance of 2002. The main responsibility of SMEDA is the formulation of policies to promote and facilitate SMEs. The current policy framework is the SME Policy 2021. Additionally, SMEDA helps provide training and education to entrepreneurs.

National Vocational and Technical Training Commission (NAVTTC)

NAVTTC was established in 2005 to regulate and manage the TVET sector in Pakistan. NAVTTC, under the Ministry of Federal Education and Professional Training, is the apex body mandated to promote, facilitate, regulate, strategize, revamp, approve curricula, train, and provide policy direction for the country's entire Technical and Vocational Education and Training (TVET) system.

Apprenticeship is an established international best practice for "informal" and "traditional" learning of skills through on-the-job training, where trainees go to industry and are trained by industry experts/professionals. Under PMYSDP, NAVTTC is training youth in various large, medium, and small industries and enterprises in collaboration with provincial TEVTAs. Apprenticeship/industry-based training is contributing greatly to grooming the TVET sector into a more responsive system for bridging the skills gaps and addressing the skills mismatch between institutes and industries, in addition to reducing youth unemployment ratios in the country.

Best Practices of the Region

India's Industrial Policy

India's current industrial policy is centered around the "Make in India" initiative, which was launched in 2014. The objective of this policy is to transform India into a global manufacturing hub and increase the share of manufacturing in the country's GDP from 16% to 25% by 2025.

The key features of India's current industrial policy include: The government has taken several steps to simplify procedures and reduce the regulatory burden for businesses. This includes measures such as the implementation of a single-window clearance system and the introduction of online platforms for various regulatory processes. The government has

committed significant resources towards the development of infrastructure such as highways, railways, airports, and ports to support the growth of the manufacturing sector. India has made significant investments in research and development and technology infrastructure to promote the growth of high-tech industries and improve productivity in traditional industries. India has established SEZs to attract foreign investment and promote exports by providing a favorable regulatory and tax environment. The government has introduced various policies and schemes to support the growth of SMEs, such as access to credit and technology, and promoting entrepreneurship. The government has provided several incentives for foreign investment, such as tax exemptions and reduced tariffs on certain goods, to encourage multinational corporations to set up manufacturing facilities in India (Aggarwal, 2019).

China's Industrial Policy

China's current industrial policy is focused on advancing the country's economic development by promoting innovation, upgrading traditional industries, and fostering emerging industries. This policy is outlined in the Made in China 2025 initiative, which was announced in 2015.

The main goals of this initiative are to upgrade China's manufacturing capabilities, increase the use of advanced technology in production, and promote the development of key industries such as information technology, aerospace, biotechnology, and new energy vehicles.

To achieve these goals, the Chinese government has implemented a number of policies and measures, including:

- Providing financial support and incentives for research and development (R&D) activities, as well as for the adoption of advanced technologies.
- Encouraging mergers and acquisitions to consolidate and strengthen industries.
- Increasing investment in infrastructure and transportation to improve connectivity and logistics.
- Enhancing intellectual property protection to encourage innovation and prevent infringement.
- Promoting international cooperation and participation in global supply chains.
- Developing talent through education and training programs to support the growth of emerging industries.

Overall, China's industrial policy is aimed at transitioning the country from a low-cost manufacturing hub to a high-tech industrial powerhouse (Jia Barwick, 2019).

Application of Analytical Tools

SWOT Analysis of Pakistan's Industrial Sector

Strengths:

• **Abundant Natural Resources**: Pakistan has a wealth of natural resources, including minerals and energy resources, which can support industrial growth.

• **Strategic Location:** Pakistan's location at the crossroads of South Asia, Central Asia, and the Middle East makes it an important transit point for regional trade and commerce.

• **Growing Middle Class**: Pakistan's growing middle class presents a significant market for consumer goods and services, which can stimulate industrial growth.

• **Skilled Labor Force**: Pakistan has a relatively large and educated workforce, which can support industrial development in emerging industries.

Weaknesses:

• **Poor Infrastructure**: Pakistan's infrastructure is often inadequate or outdated, leading to higher production costs and lower competitiveness.

• **Low Levels of Innovation:** Pakistan's innovation capacity is limited due to a lack of investment in research and development, which could restrict the country's industrial growth.

• **Weak Governance**: Corruption, bureaucratic inefficiencies, and political instability can hinder the implementation of industrial policy and discourage foreign investment.

• **Energy Shortages:** Frequent power outages and energy shortages can disrupt industrial production and negatively impact competitiveness.

Opportunities:

• **Emerging Industries:** Emerging industries such as e-commerce, renewable energy, and biotechnology present new opportunities for industrial growth in Pakistan.

• **Regional Integration:** Greater regional integration through initiatives such as the China-Pakistan Economic Corridor (CPEC) can stimulate trade and commerce and support industrial development.

• **Investment in Infrastructure:** Increased investment in infrastructure, including energy and transportation, could support industrial growth by reducing production costs and improving connectivity.

• **Technology Transfer**: Greater focus on technology transfer and collaboration with more advanced economies could improve Pakistan's technological capabilities and support industrial growth.

Threats:

• **Political Instability:** Political instability and security concerns can discourage foreign investment and disrupt industrial production.

• **External Economic Shocks**: External economic shocks, such as fluctuations in global commodity prices or international trade disputes, can negatively impact Pakistan's industrial growth.

• **Environmental Concerns**: Environmental concerns such as climate change and air pollution can lead to stricter regulations and higher production costs for industries in Pakistan.

• **Global Competition**: Intense global competition can make it difficult for Pakistan to establish a competitive industrial base, particularly in advanced industries.

SWOT Analysis of EDB

Strength	Weaknesses
• Significant role in nurturing domestic automobile industry and attracting significant investment therein • Promoting growth in indigenization/localization of auto parts • Saving valuable foreign exchange • Certifications and skills development • Strict implementation of deletion programs in 1990s • Preparation of a WTO compliant Tariff Based System • Formulation of auto policies in 2007 and 2016 • Revival of trucks/busses manufacturing • Efficient management of auto sector regulations (SROs 655, 656, 693) • Monitoring that local parts are not imported at concessionary duty rates.	• Remains under-staffed • Operated without a full-time CEO for almost 3 years between 2012-15 and then in 2017 (adhocism) • Alleged involvement of staff in corruption and malpractices • Failure to establish national technology development fund and engineering training fund

Opportunities	Threats
• Export of engineering goods through product diversification and latest technology acquisition • Trading/export opportunities offered by EU-GSP for EU market • Large pool of domestic engineering talent • Generation of employment opportunities	• Kept under constant pressure to operate with limited resources • Political instability and lack of government patronage/attention • Never allowed to establish as an independent organization due to deep-rooted vested interests. • Absence of political will to accord priority to engineering sector

SWOT Analysis of Pakistan's SMEs

Strength	Weaknesses
• Flexible and informal entrepreneurial firm structure. • Strong family support (majority of small businesses in Pakistan are inherited). • Access to effective advertising tools. • High motivation in developing the business.	• Inability to adapt new technology and mismanagement of valuable resources. • Shortage of skilled human resources. • Scarcity of entrepreneurial education. • Financial constraints.
Opportunities	**Threats**
• Exchange of technology through international alliances and networks; (Pakistani SMEs are exporting surgical, sports and textile products, this can be supportive for upgradation of existing technology. • Opportunity of franchise and joint venture with other firms. • Government is building special industrial zones to help the	• Change in customer preferences (because of price war, paradigm shift in expectations, aspirations and the social habits of consumers. • Entry of multinational and more powerful competitor into the local market. • Inefficient infrastructure

businesses flourish. • SMEs can build their reputation through getting international quality certificates. Fear of losing control on overseas operations. Source: Prefeasibility Report of SMEDA.	as compares to international standardization. • Fear of losing control on overseas operations.

SWOT Analysis of Export Processing Zones

SWOT	
Strength	**Weaknesses**
• Strategic location • Number of investors • Globally recognized companies • Intellectual workforce • Low cast of doing business	• Lack of digital system for marketing • Less focus on entrepreneurial SME • No setting short term objectives • No management meeting • No annual inspection system of registering units.
Opportunities	**Threats**
• Solar energy technology • Digital financial and marketing system • Waste to energy technologies • Formation of total quality management division. • Research and development • Welcome to entrepreneurial firms • Virtual offices	• Increasing level of competition from Bangladesh and India. • Governmental changes in accordance with a changing economic environment

Issues and Challenges

Absence of National Industrial Policy: One of the major causes of retarded industrialization in Pakistan is the absence of an industrial policy for a long time. As a result, the functions of this desired policy are being managed through other public sector policies, such as investment, trade, monetary, SME policies, and Vision-2025. Due to the lack of a national policy, the government is unable to attract FDI for industries and steer the sector toward high growth (MOIP, 2021).

Political Instability & Uncertainty in Public Policy: There has always been uncertainty in public policies regarding tax exemptions, tax holidays, incentives, lending institution conditionality's, and revenue considerations due to the frequent change of governments in Pakistan, which is one of the leading causes of uncertain policies.

Regulatory Burden: Pakistan is an over-regulated country where the ease of doing business is not optimal. There are many problems in the regulation of industries, such as the multiplicity and frequency of inspections, harassment by public officials and inspectors, cumbersome, expensive, and time-consuming compliance procedures, and illegal demands by public authorities (DAWN, 2002).

Expensive and Inadequate Energy: Energy is a major input in most industries. Energy prices in Pakistan are among the highest in the region. Energy theft, transmission losses, and non-recovery of bills are also major issues for the industrial sector. Due to the energy crisis, industrial growth has remained inconsistent.

Tax Burden: The industrial sector faces multiple challenges, such as high taxes and a cumbersome and complicated e-filing system. The trust deficit between taxpayers and tax officials discourages the private sector from investing in these sectors. The tax rate on the manufacturing sector is much higher, at 37% of profit (PBS, 2021).

Lack of Capital: For labor-intensive industries like steel, iron, chemicals, automobiles, etc., the capital required is quite high. Similarly, industries such as textiles, carpets, sugar, paperboard, etc., require huge amounts of capital to establish and expand. Although financial institutions are well-established, high-interest rates limit the availability of credit to the private sector (Khiswar, 2021).

Market Imbalances: The market for industries faces several problems, such as low purchasing power, the production of substandard goods, higher

production costs, and a limited domestic market size. Due to the poor quality of goods produced, potential markets in the developed world are reluctant to purchase Pakistani manufactured goods (Kishawar, 2021).

Lack of Skilled Labor: Due to a lack of technical skills, the quality of goods produced is also subpar. The non-availability of skilled human resources discourages investors from engaging in the industrial sector (LCWU, 2012).

Lack of Credit/Finances: Due to the lack of credit and financing facilities, the industrial sector cannot acquire the latest machinery and equipment to cope with changing market demands.

Lack of Technology: The industrial sector in Pakistan lacks sophisticated modern technology to compete in the international market and maintain competitiveness.

Limited Access to Finance for SMEs: Although overall capital costs for private sector investors have reduced in recent years, SMEs in Punjab often face challenges accessing finance. Instead, they finance their operations based on retained earnings, leaving them unable to invest in growth and productivity improvements. Commercial banks have historically focused on lending to the government and large corporations, while SMEs are often side-lined as they are perceived as too risky. The situation has worsened recently, with the SME share of total private sector lending almost halved in the last decade.

Lack of Publicly Available and Updated Information: Most enterprises, especially new entrants, do not have access to a central source for securing market information, limiting their ability to assess feasibility for market entry. Despite the amount of data and studies created by the government and academic institutions, there is no central repository of critical trade, industrial, and economic statistics at a provincial or district level. Similarly, the government has limited data on the types of firms located in various areas.

Underdevelopment of Industrial Clusters: There is already significant industrial activity in Punjab, particularly in light manufacturing, garments, and basic agri-processing. However, the industrial sector is dominated by small firms, and the lack of larger, more sophisticated players inhibits the development of thriving industrial clusters. As a result, the potential benefits of agglomeration—such as shared know-how, value chain linkages, technology transfer, and a shared workforce—are not available to Punjab's businesses.

Law and Order Situation: The law-and-order situation in the country has always remained volatile. Due to insecurity and the deplorable law-and-order situation, both foreign and local investors are reluctant to invest in the industrial sector.

Gap Analysis

National Industrialization Policy and Policy Gaps

Industrialization is a process in which countries shift from an agriculture-based economy to an industrial one. The growth of an economy is dependent on the development of the industrial sector (Sarkar, 2012). The industrial sector in Pakistan is divided into four sub-sectors: Mining and Quarrying, Manufacturing, Electricity and Gas Generation, and Construction. For the purpose of this analysis, the focus will be on the manufacturing sector, which is also termed the backbone of the economy, particularly large-scale and small-scale manufacturing. However, the share of manufacturing in GDP has remained low in the last two decades due to various reasons such as lack of product diversification, tariff barriers, lack of credit, cost of doing business, political instability, law and order issues across the country, and lack of technology (PBC, 2018). The most important factor for this dismal performance has been the lack of a national industrial policy for the past three decades.

An industrial policy can be defined as government measures to shift the production focus toward sectors that have the potential to contribute more toward economic growth, which would not happen without such measures. A policy is not only a guiding document for the government and the private sector but also lays out the long-term objectives to be achieved (Saggi & Pack, 2006). Although various governments in the past have followed different fragmented industrial development policies, there has never been a single comprehensive policy focusing solely on industrial growth. The Ministry of Industries and Production (MoIP) of the Federal government is currently working on developing a National Industrial Policy with the assistance of ADB; however, the details of the policy have not been made public yet. It is heartening to see that the government has taken this initiative, but it is worth noting that successive governments neglected such an important policy for decades. After the 18th Amendment, the role of MoIP in industrial development was considerably reduced when provinces were empowered to deal with the subject of industries. However, international coordination and industrial policy formulation remain the mandate of the MoIP. The provincial governments of KPK in 2020 and Punjab in 2018 have formulated their industrial policies. Even those provinces have not been able to attract sufficient FDI and local investors.

Developing countries like Bangladesh have had very clear industrial policies, which helped them achieve robust economic growth. They have revised their policies every five years to meet the demands of changing times (Financial Times, 2021). On the other hand, the industrial policy development in Pakistan has had a chequered history. Industrial policies were not independent documents but were made part of the medium-term development plans or were in response to some crisis in the country. Since independence, five such so-called policies were put in place. The first policy was adopted in 1949, when India placed trade embargoes on Pakistan. The second industrial policy was embedded in the two five-year plans of Ayub Khan's era from 1960 to 1970. The third plan was adopted during the tenure of PM Zulfiqar A. Bhutto, who started the process of nationalization of industries. The fourth policy was adopted during the democratic governments from 1988 to 1999. The fifth policy was made during the rule of President Musharraf. Later on, various democratic governments mostly followed the policies of the past without any holistic policy for industrialization in the country (Burki, 2008). A National Industrial Policy was drafted during President Gen. Pervez Musharraf's period, but it was shelved by vested interests. The brief history of industrial policy-making in Pakistan shows that leaders who came to power had great influence on the policy, and as soon as the next government came into power, the policy was changed. Industrial development requires long-term planning to deliver results, which has never been practiced in Pakistan due to abrupt changes in regimes. This political imbroglio has kept our industrial sector backward compared to other Asian economies.

Policy-making in Pakistan is usually lopsided, as indicated in the case of industrial development. Ideally, the federal government should have formulated a national policy, based on which the provinces could develop their own policies. However, the provinces of Khyber Pakhtunkhwa and Punjab have already developed their own industrial policies before the finalization of the NIP. This policy gap has had an adverse impact, as is evident from the stagnant share of the industrial sector in the GDP of the country. The small-scale manufacturing sector has a very meagre share of around 2 percent in the national economy (PBS, 2021). Though it has great potential, the government is giving it less priority compared to larger industries. This is evident from the fact that SMEDA developed an SME policy in 2007, without having a national industrial policy. Moreover, the SME policy has been revised again with the assistance of USAID and is awaiting cabinet approval. Another interesting aspect is that almost all the major policies of the country are being developed with the assistance of international development partners. There is no harm in such a practice; however, it will not develop the capacity of departments to develop such policies on their own and will create dependency on foreign assistance.

GAP Analysis of Ministry of Industries and Production

S. No.	Desired State	Current State	Gap	Actions to Close the Gap
1	Policy Intervention	i. Auto Industry Development and Export Policy, 2021-26	Only selective entrants were given relief to launch products, e.g., small cars, new tractors, motorcycles (for export only)	Extension of policy incentives should be broad based across the whole sector in shape of National Industrial Policy.
		ii. SME Policy, 2021	Cannot be accessed as yet.	N. A.
		iii. Electric Vehicle Policy	Lack of financial resources (USD 40-50 billion) for putting up charging infrastructure.	Electric vehicles to be used on fixed routes with charging stations at beginning and end of route.
		iv. Fertilizer Policy, 2001	Although area under cultivation of crops has increased, yet there is no proportionate increase in yield of crops.	Import duties on raw material and machinery be reduced and power should be supplied at subsidized routes.
2	Setting up Industrial Parks/SEZs	22 Nos SEZs established.	Complicated institutional and implementation arrangements	Delegation of approval powers by BOI to provincial SEZAs.
3	Export Processing Zones	07 Nos EPZs established; 02 Nos upcoming.	• Ban on zero-rating facility on exports to Afghanistan and CARs via land route. • Imposition of sales tax on import for EPZs in finance bill. • Non-availability of off-shore account facility in close vicinity.	Affirmative action by Federal Government to remove the identified gaps and lacunae.

			• Non-availability of ANF inspection team within the Zone premises.	
4	Skill Development of Human Resource for Industrial Sector	PMYSDP Apprenticeship Training; 1500 plus youth trained in leading industries.	Very limited scope and capacity of technical and vocational training.	Enhancement/diversification of training scope and manpower coverage.
5	SME Development		SMEDA has been kept under-staffed since long (only 90 employees countrywide against sanctioned strength of 300) due to financial constraints and lack of political will to accord priority to SME development	Allocation of enhanced budget and hiring of staff against vacant posts.

Gap Analysis Auto Policy 2021-2026 (AIDEP)

Objectives	Current	Gap	Action Required
1. Localization of Parks	Target was set earn 1 billion dollar export	Incompetitiveness in international market	Discouraging import by increasing regulatory duty & tariff rate
2. Implementation of safety regulation	While export of 70 million dollar achieved so far	High imports of vehicles & parts	Quality enhancement
3. Promotion of new technologies			Effective role of EDB
4. Export of auto part & completely built up units			

Conclusion

The key findings of the paper are that currently there is no national industrial policy. Industrial policy is a key factor in industrial development and economic growth if it is well-planned, goal-oriented, and strictly implemented. LSM picked up momentum and showed an overall growth of 10.4% during the last financial year (2022). However, efforts are required to pave the way for fast-track industrial development, which is pivotal to achieving inclusive and sustainable economic growth. The government has devised sector-wise policies, such as those for sugar, textiles, and automobiles, which are allegedly framed to benefit the elite class or certain sections of society. Effective industrial policy implementation would translate into significant benefits for Pakistan, such as enhanced opportunities for employment in both large- and small-scale industries and increased revenue generation.

Recommendations

1. Preparation of a suitable industrial policy in consultation with all stakeholders.
2. Improving the technological base through innovation and R&D, and diffusing it, particularly to areas where the raw materials for crucial industries are produced.
3. Ensuring the uninterrupted and cost-effective supply of energy to the industrial sector to maintain market competitiveness.
4. Developing a mechanism to review the implementation of industrial policy with the involvement of high-level management and bureaucracy.
5. Integrating industrial policy into a national development vision is a crucial step. Social dialogue and debates should help in finding the development vision.
6. Enhancing the impact of industrial policy through the quick disposal of industries' concerns.
7. Implementing a rational process to define and carry out industrial policy, aligned with other policies using direct and close information channels. There should be confidence from investors and workers in the government—this may be a forum to solve issues. Dialogue and debates among each stakeholder, and their participation in policy-making, should be ensured.

8. Overall macroeconomic management, including a competitive exchange rate and access to affordable credit for the private sector, including SMEs and micro-SMEs.
9. Removing structural bottlenecks and improving supply chain logistics to make them more cost-effective and efficient.
10. Targeting human resource development through appropriate education and skill development policies.
11. Integrating markets through trade policy tools to achieve economies of scale and enhance competitiveness.
12. Installing level four machinery/technology instead of obsolete technologies.
13. Continuously enhancing the technical skills of the industrial workforce to keep pace with international technological advancements.

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