Industrial Development in Nepal: Navigating Challenges and Harnessing Opportunities

Govind Nepal, PhD
Former Member of the National Planning Commission, Nepal
Corresponding Email: ggovindnepal56@gmail.com

Abstract
Nepal's industrial policy has traversed through various phases. A comprehensive industrial revolution plan is imperative for fostering the prosperity and development of the nation. In this backdrop, this paper aims to present challenges and opportunities of industrial development in Nepal. Despite efforts directed to industrial development since the 1930s, Nepal has been struggling to establish a sustainable foundation for industry. Presently, Nepal is confronted with multiple problems inducing stagnation, inching deindustrialization, with the zenith of industrialization reached in the 1990s. Even with an apparent increase in the number of industries and capital investments as per company registrations, a significant portion of these registered entities remains non-operational. Moreover, structural issues within the sector, coupled with entrenched rigidities among stakeholders, have hindered its resurgence. Nevertheless, genuine commitment to investment and program implementation remains elusive. Poor investment in research and development and innovation, stagnation has exacerbated the issue. Furthermore, unclear industrial development perspectives, high production costs, interest rate volatility, inadequate trade and industrial infrastructure and insufficient backward and forward linkages, protracted registration processes, and an unpredictable investment climate collectively have impeded industrial progress. To revive industrial development, significant investment in industrial and trade infrastructure, including roads, telecommunications, and electricity should be built. Simplifying legal provisions, implementing import substitution strategies, exploring international markets, and upholding quality standards are imperative for industrial development. Commitments should be towards green industrial policies. Finally, technical interventions must be accompanied by a shift in bureaucratic and leadership mindsets.

Keywords
Industrial development
Infrastructure
Investment
Product
Import substitution

Introduction
Nepal has been striving for planned industrial development since the late 1950s under the active leadership of the government. However, starting in the 1990s, the state not only liberalized the industrial sector but also initiated the privatization process of state-owned enterprises. During this period, the state appeared to be confined itself to industrial policy liberalization. Nepal underwent a phase where neither the private sector could effectively establish and manage industries nor the government could demonstrate satisfactory performance in state-owned enterprises. Contrary to expectations, over the last two decades, the private sector has failed to contribute to
a significant economic growth, generating employment, or earning foreign exchange through the establishment, development, and expansion of competitive export industries. Instead, the private sector has been found guided by short-term gain rather than a long-term vision for sustainable industrial development, as seen in the cases of the carpet and garment industries.

Industrial development has emerged as a daunting challenge for the government of Nepal. Despite numerous government slogans and political statements, the situation of industrial development has remained stagnant and even deteriorated. The manufacturing sector’s performance has been less than satisfactory over the last two decades, with its share in GDP falling from around 9% in 2099/2000 to a stagnant level of 4.87% in 2023/24 (NSO, 2024). To address this decline, the government has implemented some legal reforms and introduced acts such as the Special Economic Zone Act 2016, the Public-Private Partnership and Investment Act 2019, the Foreign Investment and Technology Transfer Act 2019, and the Industrial Act 2020 to facilitate and accelerate investment.

In the process, the government has announced 14 special economic zones (SEZs), of which only the Bhairahawa Special Economic Zone has commenced operations. Similarly, the government has announced several large industrial estates across the country and industrial villages at the local level. Additionally, the government intends to develop industrial corridors, economic zones, and cross-border economic zones to promote industries and industrial exports.

Investment summits are also organized almost every year by federal as well as provincial governments, inviting potential investors from the global landscape. The private sector also organizes similar summits and makes tall commitments to investment, growth, and employment generation through flagship publications aimed at informing investors about the investment climate and opportunities in Nepal. However, the situation remains largely unchanged except in the hydropower sector.
Despite the government’s efforts to improve the industry ecosystem, the degree of improvement seems inadequate to attract industries of different sizes and types. There are gradual shifts in the interests of the business community from industry to trade. Only a few industries, namely energy, cement, pharmaceuticals, and footwear, seem promising. Securing cost competitiveness and high-value addition are two critical challenges for Nepal in the industrial sector.

The major research question of this study is why the industries in Nepal are stagnant and not progressing despite the Government’s continued efforts. What are the major constraints that have blocked the road to industrial development? Are there any opportunities for Nepal for Industrial Development? Against these research questions, the objective of the article is to identify the challenges facing the industrial sector of Nepal and the opportunities Nepal can still harness. There is no dearth of literature on the issues of industrial development in Nepal. However, a synthesis of academic findings and the results of nationwide discussions on the different dimensions of industrial development in Nepal is rare. This article attempts to contribute to filling this gap.

**Methodology**

**Revisiting approaches of industrial development**

Industrial policy has undergone different phases corresponding to the dominant view of the State in the economy: interventionism after the Second World War and up to the 1980s, liberalism in the 1980s and 1990s, and what could be called a pragmatic approach since 2000 (Bianchi & Labory, 2006).

Marxian industrial policy addresses the inequalities and exploitative nature of capitalist industrial systems by prioritizing the needs of the working class and fostering collective ownership and management. According to Engels, the Industrial Revolution started with the introduction of machinery driven by the steam engine, beginning with the cotton factories. It not only created the proletariat – the revolutionary class of the future – but also asserts ushered in the transformation of the whole of society. Early capitalism depended mainly on the extraction of absolute surplus value, by extending the working day and year, intensifying work, and keeping wages low. With the onset of the Industrial Revolution, the extraction of relative surplus value became decisive. The introduction of machinery and the reorganization of production into centralized factories released the full productive potential of social labor organized by capital (Heller, 2011).

Liberal industrial policy, grounded in classical liberal economic principles, emphasizes minimal government intervention in the economy and the promotion of free markets to drive industrial growth and prosperity. The liberal doctrine was widely rejected immediately after the Second World War, and the newly independent countries around the world intervened in the economy and implemented active and selective industrial policies. However, such interventionism was increasingly criticized in the late 1970s and 1980s, in the era of Structural Adjustment Program, because of some inefficiencies created and the capture of politicians by some industrial lobbies. A wave of neo-liberal approaches therefore started (Bianchi & Labory, 2010). By promoting market-oriented reforms, deregulation, and trade liberalization, the neo-liberal policy aims to unleash the potential of the private sector and create a more dynamic and competitive industrial economy. The neo-liberal policy, however, could not stop the financial crisis of 2008. The crisis called for a sort of “pragmatist” approach that locates between the two extremes of interventionism and liberalism (Bianchi & Labory, 2010).

The new industrial policy is characterized by two aspects. First, market forces and private initiatives are considered the driving force of
industrial development. Second, governments have a strategic and coordinating role to play in the productive sphere beyond simply ensuring property rights, contract enforcement, and macroeconomic stability.

Another powerful strand of thought is that structural change is the essence of economic and industrial development. According to Rodrik (2008), markets do not provide enough incentives to push for these changes. These are market failures that prevent structural adjustment. Hausmann and Rodrik (2003) reject the standard interpretation of the route to economic growth set out by the Washington Consensus, involving openness to foreign trade and capital flows, market liberalization, and improved governance and institutional development. They argue that while some of these measures individually may have positive effects, standard reform packages miss the key issues of dynamic entrepreneurship and its link with innovation and product discovery. Entrepreneurs face significant financial constraints in the production of new goods and that the government could play a key role in industrial growth and structural transformation by encouraging innovation and creating appropriate incentives through trade credit for entrepreneurs to invest in a new range of export activities (Weiss, 2020).

In the article “Industrial Policy Revisited: A New Structural Economics Perspective” (2014), Justin Yifu Lin argued that (1) sector-targeted industrial policy is essential to achieve dynamic structural change and rapid, sustained growth in an economy; (2) most industrial policies fail because they target industries that are not compatible with the country’s comparative advantages; (3) successful industrial policy should target industries that reflect the country’s latent comparative advantages; (4) historical experiences show that in the catching-up stage, the industrial policies of successful countries, in general, have targeted the industries in countries with a similar endowment structure and somewhat higher per capita income; and (5) the Growth Identification and Facilitation Framework (GIFF), based on new structural economics, is a new, effective way to target latent comparative-advantage industries and support their growth. In addition to an effective market mechanism, the government should play an active role in facilitating industrial upgrading and infrastructure improvements (Lin, 2011).

The role of the private sector in Nepal is quite similar to the African context today, as depicted by Andreoni (2019). In the African context, Andreoni says

The private sector is characterized by a limited number of industrialists capable of investing competitively, and a plurality of big players involved in trading activities, construction, and services. These latter are powerful players whose interest conflict with those of the industrialists and other SMEs. Given the lack of productive capacities, importing produce from other countries tends to be cheaper and less risky. Moreover, investments in productive activities are perceived to be riskier than operating in the construction or services industries. As a result, financial capital and interest rates mostly favor the latter sectors, and investments in productive activities remain limited in scale and scope. (p. 140)

This article follows a qualitative approach and utilizes both secondary and primary sources of information. It is primarily based on knowledge gained from literature reviews and wider consultations with industry owners, their associations, government agencies, and experts conducted during two studies: a) “Assessment of Policies for Improving Investment Climate in Nepal” conducted by the Investment Board Nepal, and b) a study entitled “Reversing the Industrial Decline in Nepal” conducted for the Ministry of Industry and Commerce. Thus, the
primary sources of information are the views expressed by business communities, government agencies, and experts during nationwide consultations.

The secondary sources of information are data available on government portals or in publications, used to provide further insights into Nepal’s industrial situation. Additionally, the article attempts to briefly review Nepal’s industrial development process from the perspective of People’s Multiparty Democracy (PMPD), as postulated by Madan Bhandari—the People’s Leader, Nepal Ratna, and prominent political thinker of Nepal. The conceptual framework aims to explore aspects directly related to enhancing production and productivity, increasing competitiveness, and expanding markets. These aspects include the development and upgrading of industrial and trade infrastructure, product identification, investment promotion, and domestic and international trade promotion.

In the Nepali context, Bhandari held a strong opinion that an industrial revolution plan needs to be formulated and implemented for the prosperity and development of the country to end poverty, socio-economic backwardness, and inequality among the common people, and to promote equitable socio-economic development (1993).

Bhandari has emphasized:

- Promotion of industries of different scales based on domestic raw materials.
- Investment of national capital, both public and private, in industrial development.
- The private sector should be encouraged for export promotion.
- Protecting and facilitating the private sector and encouraging them to establish and run industries.
- Allowing transfer of foreign technology and capital to the country without compromising national interests in order to enhance the productivity and efficiency of Nepali industries.
- Industry is the main sector for employment generation.
- The focus should be on industries that substitute imports and promote exports.
- Providing training to Nepali workers and gradually replacing foreign workers in the workplace.
- Guaranteeing the workers’ rights and adequate wage rates for workers sufficient to cover their education, health, and livelihood expenses.

Reviving the industry is very challenging and calls for an effective market mechanism and government facilitation and regulation for sustained dynamic industrial growth, aligning with the approach of Ricardo Hausmann, Dani Rodrik, and Justin Lin. In this context, the thoughts expressed by Bhandari in PMPD (1993) are also relevant in designing industrial policy in the national interest.

Results and Discussion

Assessment of the past efforts and realization

The government failed to handle the industrial development process properly in the past, resulting in a low level of industrial development in Nepal. Several factors contributed to this situation:

i. The government privatized public industries in the 1990s without assessing the capacity of the private sector. However, the private sector did not responsibly take up that responsibility. Privatized industries closed one after another, and the properties were utilized for other purposes.

ii. When garment industries flourished with duty-free quota-free facilities, the government was content with the export revenue earned during that period but did not encourage the industries to develop backward linkages. Had they established such linkages, they could have used domestic raw materials and made the industry
sustainable as seen in Bangladesh’s garment industry, which could have generated more employment. Neither the industry nor the government considered the sustainability aspect of the industry.

iii. Easing import licenses gradually shifted industrial investment towards trading. Industry creates a base for development, generates employment, and has backward and forward linkages, thus flourishing other sectors of the economy as well.

iv. Commitments to industrial development outlined in National Plan documents failed to materialize due to partial legal and policy reforms, inadequate infrastructure development, and insufficient budgetary allocations. The bureaucracy was not swift enough to cooperate with the demands for services from the private sector, leading to a trust deficit.

v. Industrial development became just a slogan outlined in election manifestos, as most of the politically declared industrial estates, industrial villages, and other establishments were never set up and made functional. These political declarations were never followed up with plans, programs, institutions, and resources, leaving most of them neglected and prone to encroachment.

vi. The erosion of trust between the private and government sectors has led to an unequal level playing field in the industry sector. Those with connections with the ruling government do enjoy policy advantages through Financial Act, disadvantaging their competitors and deteriorating the competitive environment.

vii. The industrial sector, particularly the manufacturing sector, has yet to graduate to the corporate sector, missing opportunities to become larger, more inclusive, and competitive. During the budget season, industries often seek protection with a list of demands in hand.

viii. The cost of lost opportunities is high. Even if large industries are established now, they may suffer from a shortage of industrial workers as around 2500 youth migrate out of the country daily in 2024. The once-fertile agricultural lands are now barren. Reversing the migration trend is challenging, as the salaries and other income earned abroad outweigh what Nepalese companies can offer. The push factor are stronger than the pull factor.

Nepal should learn lessons from past mistakes and take true responsibility in handling the industrial sector. It is necessary to identify products with high value and high demand to stay in business and retain returning migrant workers in Nepal. The country cannot create a solid foundation for economic growth or stop outmigration of youth until it generates sustainable growth and decent employment mainly in the industrial sector.

Problems and challenges of industrial development

Nepal faces some structural problems in its economy. The dynamics of the industrial sector and its governance are quite complex and, to a certain extent, self-defeating. The protection-seeking behavior of industries and the rent-seeking behavior of states have hindered competition and innovation. Investment in industry is not generating growth and employment as is generally expected. Government policies adopted and programs implemented in the industrial sector are not yielding results. The best practices showcased in other countries are not effective here. Some of the problems in Nepal’s industrial sectors are outlined below:

i. Many industries in Nepal are operated like family businesses. Compared to corporate industries, family-run industries generally exhibit limited transparency, smaller investment, traditional technology, and
problematic industrial relations. They are relatively uncompetitive and often seek state protection.

ii. There are delays in decision-making regarding amendments to legal provisions in parliament, and by the time decisions are made, the context may have already changed. Policy decisions made through the budget (Finance Act) often lack implementation due to delays in formulating rules and procedural guidelines.

iii. Taxes and duty rates change almost every year through Finance Act, making the price of imported industrial raw materials and capital equipment unpredictable. Allegations are that Finance Ministers manipulate these financial instruments for their private gains. Unpredictable tax policies negatively impact businesses, potentially favoring certain firms and causing disasters in the industry sector as a whole.

iv. Retail imports of large quantities of consumer goods, electronics, and other products at lower prices from India through open borders have challenged the demand for Nepalese products, adversely affecting the sustainability of Nepalese industries.

v. The industry sector faces a severe shortage of technical manpower. Nepal’s educational system does not produce human resources aligned with industrial sector needs, resulting in a clear mismatch of demanded and supplied skills. Although many educated Nepalese youths are unemployed, a significant number of Indian workers are employed in industries like steel, cement, paints, chemicals, plastics, wires, etc.

vi. There is a gradual shift of industrial investment towards trading businesses in Nepal due to quicker returns on investment compared to the industry, and insufficient custom duty differences between finished goods and raw materials to make industry sector investments attractive.

vii. The capacity of most industries, such as steel, cement, bricks, wires, pipes, etc., is underutilized, with many operating at 40-50% capacity due to limitations in the small domestic market.

viii. Despite the provision of One Stop Centers, registration, renewal, approval, and licensing processes are time-consuming and cumbersome, discouraging investors. Investors are more concerned about industrial administration delays than about policy issues.

ix. Managing finance for business is also problematic, with Nepali banks generally limited capacity to long term lending. They typically enter into consortiums to finance large projects, such as hydropower projects, with companies taking loans from 10–15 banks for a single project.

x. One major concern for investors is the volatility of interest rates in Nepal. For instance, the average interest rate was 8.43% in July 2021 but increased to 12% in July 2022, with borrowers paying interest rates of 14–16% for newly disbursed loans. This volatility, coupled with the lack of a sovereign country rating, negatively affects investment in Nepal.

xi. There is no sovereign country credit rating of Nepal and common hedging mechanism. This has limited the inflow of foreign investment in Nepal.

Opportunities and prospects of industrialization in Nepal

Nepal is now land-linked with both neighbouring countries boasting big markets. However, Nepal lags far behind in the competitiveness of the products compared to those of the neighbouring countries, both in terms of agricultural and industrial production. This factor has hindered Nepal from benefiting from these proximate big markets. Identifying products suitable for the neighbouring market is the need of the time.
Nepal enjoys friendly relations with trading partners worldwide, facing no obstructions in exports or imports of commodities. Therefore, by complying with prevailing rules and regulations, Nepal can easily trade with any country, especially its neighbouring ones, harnessing the benefits of diplomacy.

Nepal has a high potential for forest-based and quarrying industries. The government should formulate pragmatic policies for their utilization, relinquishing the idea of conservation for conservation’s sake. Several studies have been conducted regarding product identification for both exports and import substitution. An analysis of strengths, weaknesses, opportunities, and threats (SWOT) of individual products was carried out before selection, as seen in NTIS 2080. There is a lengthy list of products suitable either for import substitution or for export promotion. Products with high export potential include processed cardamom, electricity, processed herbal medicine (Ayurvedic), handicrafts, coffee/tea, processed water, crushed stones and aggregates, processed wood/furniture, edible oil, plastics, textiles/fibres, pharmaceuticals, food items, construction materials, sugar, wooden items/furniture, soap and detergents, footwear, cement, tobacco, beverages, dairy, and steel. Additionally, cement, steel, metal fabrications, wire manufacturing chemicals, dairy, HDP, and PVC pipes are among the selected high energy-intensive industries.

The current position and status of Nepal demonstrate opportunities for industrial development. The constraints are mostly man-made and can be alleviated with systemic reforms.

**Likely solutions**

Industrial policy entails more than just one policy or one institution. It involves the design, implementation, and enforcement of “packages of interactive measures” and their strategic coordination. These policy packages enable the government to provide productive organizations with the most effective mix of incentives and capabilities to develop industrial competitiveness (Andreoni & Chang, 2019). The likely solutions are organized into 12 key areas, including infrastructure, investment, production, market, and others crucial to enabling the growth and sustainability of the industrial sector. The solutions presented below are more technical and should be complemented by investment-friendly industrial governance and a supportive political environment. Reforming this aspect is challenging, but there are no other alternatives.

i. Nepal should have a clear vision regarding the orientation of industrial growth. The thoughts of Bhandari outlined in the PMPD are still relevant from the national development perspective. Some thoughts related to industrial development are outlined below:

a. Emphasis on national capital formation and a self-reliant economy.

b. The government should engage in defense industries and take care of service industries that contribute to the welfare of the people.

c. Emphasis should be placed on the development of import substitution and export promotion industries by harnessing existing natural and other resources in the country.

d. Foreign investment and technology transfer should maximize the utilization of government and private capital existing in the country so that industries established by foreign investment and technology transfer cater to national interests.

e. Arrangements should be made to train indigenous unskilled workers to engage them in industry and replace foreign workers.
f. Emphasis should be placed on ensuring balanced regional development while formulating industrial policy. A policy of encouraging the establishment of cottage and small industries in rural areas and arranging markets should be adopted.

g. Appropriate policies should be implemented to develop and enrich government institutions and operate them according to their intended purposes.

ii. Nepal needs to improve industrial governance and simplify the legislative framework by consolidating investment policy, legal provisions, and incentives. There should be no inconsistencies and ambiguities in legal and policy documents that could create problems during implementation. Furthermore, scheduled periodic meetings between government agencies and industries could build trust and confidence. For coordination and better facilitation, a centralized data system with a server could provide information access to every government official. Lack of timely communication also creates unnecessary hassles to the investors and cause conflicts.

iii. Road, telecommunication, and electricity infrastructure are required for industrial development. Completion of the north-south corridor, including the upgrading of the road connecting Rasuwa and Tatopani customs, is a strategic initiative to facilitate trade. Roads should connect the production centers with points of raw material supplies. The telecom sector should contribute by reducing enterprise internet solution costs. Similarly, connecting energy-intensive industries like cement, steel, and chemical industries with high voltage and dedicated transmission lines, reducing the electricity tariff, introducing TOD metering, and selling electricity to industries at average electricity export prices are some of the infrastructural reforms necessary to make industrial products cost-competitive.

iv. The provision of complete digitization of custom declaration forms, expansion of ICPs to additional major borders like Nepalgunj, Janakpur, Rasuwa, and Tatopani, and construction of adequate parking infrastructure at each ICD could strengthen the supply chain and reduce logistics costs.

v. The industry sector suffers from a credit crunch from time to time. A partial solution to this problem may be to raise the threshold of loans to be disbursed to at least 25%, introduce a system of online loan approval and sanction system for SMEs based on creditworthiness, and cap the interest rate for the industry sector at a single digit.

vi. In order to ensure the linkage between industrial investment, growth, and employment generation, the utilization of loans disbursed to corporate houses should be tracked.

vii. There is a need to expedite the process for sovereign credit rating assessment in Nepal and establish a robust system of managing credit rating on annual basis. This shall help investors to anticipate economic, social, political, labor and capital risks. Further, there is a need to establish a functional mechanism to manage foreign currency risk management using hedging tools. The one-stop-service center for company registration and other licensing requirements should be made effective. There is also a need for the extension of the Technology Transfer Support Fund for products identified by this study as having a comparative advantage.

viii. A labor management and information system would help match skills with industries. For this, measures like periodic forecasting of industry labor demand and supply, introduction of apprenticeship programs, demand assessment of technical institutes
for supporting major industries, and connecting foreign employment returnees to industries through a digital platform, using a dedicated employment search platform for laborers, are suggested.

ix. Branding of production and maintenance of quality are critical during the production process. The development of green production policies and pollution control technology for upgrading industries that contribute the most to emissions, such as cement, brick, steel, plastics, paint chemicals, etc., are important in the present context. This policy helps to put the products on the priority list of users.

x. There are three areas where the government has to focus on market expansion: a) the establishment of an Export Marketing unit under the Department of Customs for marketing Nepali products in the international market, b) institutional capacity-strengthening for the Trade and Export Promotion Centre and product-specific training institutions, and c) the organization of public campaigns to promote the consumption of domestic goods such as food, pharmaceuticals, footwear, and garments.

xi. In the context of a huge trade deficit, Nepal is bound to think about import substitutions. Nepal should take strict measures to control the imports of those goods which can be produced within the country. Nepali industries are suffering from the inflow of foreign commodities through formal and informal channels. Against this background, to the extent possible by the trade agreements, domestic productions related to agriculture, medicine, footwear, garments, etc., should get state protection. The government should run Domestic Goods Consumption Campaigns through all forms of media.

xii. Nepali exports did not remain sustainable. History tells us that Nepalese exporters reacted only with promotion policies. Once the policy was over, the volume of exports nose-dived. The reason behind this is that, as mentioned above, they did not develop backward linkages and did not diversify markets. They merely saved export earnings without investing in the future, leaving them vulnerable to any shocks and jerks. To boost exports, the Government of Nepal has to take the following initiatives:

- Conclude bilateral and multilateral trade agreements with more trading countries and establish a laboratory of international standards for Ayurvedic products, handicraft items, and food items.
- Establish an Export Marketing department under the Department of Customs for marketing Nepalese products in the international market.
- Facilitate the payment of Export Linked Cash Incentive based on declaration forms, bills of lading, and other documents.
- Provide tax concessions and subsidies for backward-linking industries of major exports. Provide necessary incentives for the exports of products identified in NTIS 2080.

Conclusion

The industrial sector in Nepal continues to grapple with numerous challenges, including a lack of clarity in industrial development perspectives, policy inconsistency, program discontinuity, rent-seeking behavior of the state and protection seeking behaviour of the business, inadequate backward and forward linkages, and a deficit in corporate culture. These issues have led to delayed amendments to Acts and other legal provisions, an underdeveloped state of industrial and trade infrastructure, low investment in R & D and innovation, the underutilization or non-utilization of newly developed industrial estates, an unpredictable and insufficient
credit market, poor implementation of industrial strategies, and a shift of investment from industry to commerce.

To rejuvenate industrial growth amidst these challenges, the government must devise a new industrial strategy with a focus on agro-based, forest-based, mineral-based, and hydro-based industries. Priority should be given to import-substituting industries, while commodities identified by the Nepal Trade Integration Strategy 2080 should be actively promoted for exports. Modernizing the industry is necessitating increased investment in the sector and fostering a corporate culture within industrial businesses.

References


Nepal, G., Industrial Development in Nepal: Navigating Challenges and Harnessing Opportunities