



# Industrial Growth in Haryana (from 1966 to 2021): A Case Study of Gurugram Division

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**Abstract :** This case study delves into the dynamic trajectory of industrial growth within Haryana's Gurugram Division spanning the period from 1966 to 2021. Gurugram Division, notably encompassing the vibrant industrial hub of Gurugram, has undergone significant transformation, emerging as a cornerstone of India's industrial landscape. Employing a multi-faceted analytical approach, this research investigates the pivotal factors driving industrial expansion, ranging from governmental policies and infrastructural developments to socioeconomic influences. Through comprehensive data analysis and qualitative examination, the study delineates key milestones, challenges, and achievements encountered during the region's industrial evolution. Furthermore, it assesses the implications of industrial growth on employment generation, urbanization, and environmental sustainability, elucidating the complex interplay between economic advancement and societal well-being. By offering valuable insights into the past and present dynamics of industrialization in Gurugram Division, this study provides a nuanced understanding of its developmental trajectory, thereby informing future policy formulation and strategic initiatives aimed at fostering sustainable industrial growth.

**IndexTerms - Industrial Growth, Haryana, Gurugram Division, 1966-2021, Case Study, Transformative Evolution, Government Policies, Infrastructure Development, Socioeconomic Influences, Employment Generation, Urbanization.**

## I. INTRODUCTION

India's industrial revolution is a captivating narrative intricately woven into the fabric of its rich historical tapestry, marked by a confluence of events, policies, and socioeconomic dynamics. Rooted in its colonial legacy, the industrial journey of India was profoundly shaped by centuries of British rule. During this period, India served as a colonial outpost, primarily exploited for its abundant natural resources and as a captive market for British manufactured goods. This economic subjugation stifled the emergence of indigenous industries and relegated India to the status of an agrarian economy, with little room for industrial development [1].

However, amidst these colonial constraints, pockets of industrial activity began to emerge across the Indian subcontinent during the late 19th and early 20th centuries. Regions such as Bengal, Bombay, and Gujarat witnessed the establishment of textile mills, iron and steel plants, and other small-scale industries. Indian entrepreneurs, albeit with limited capital and technological expertise, played a pivotal role in initiating these industrial ventures, laying the groundwork for future industrialization [1].

The infrastructure laid down by the British colonial administration, including railways, ports, and telegraph networks, played a crucial role in facilitating the movement of raw materials and finished goods across the vast expanse of the Indian subcontinent. These infrastructural developments created favorable conditions for industrial expansion, laying the groundwork for India's future industrialization [2].

The two World Wars further shaped India's industrial landscape, albeit in contrasting ways. During World War I, Indian industries experienced a surge in demand for goods such as textiles, jute, and steel to support the war effort. Similarly, during World War II, India's industrial output witnessed a substantial increase to meet wartime requirements, leading to the establishment of new industries and the expansion of existing ones.

India's post-independence industrial policies, characterized by a mixed economy model, laid emphasis on state-led industrialization through the establishment of public sector enterprises and the implementation of protective trade policies. The adoption of Five-Year Plans aimed at achieving self-sufficiency and promoting equitable growth across sectors. Additionally, the Green Revolution in the 1960s and 1970s ushered in a new era of agricultural transformation, boosting rural incomes and stimulating demand for industrial goods.

The dawn of liberalization and economic reforms in the early 1990s heralded a paradigm shift in India's industrial landscape. The opening up of the economy, deregulation of markets, and encouragement of foreign investment unleashed the entrepreneurial spirit, fostering innovation and leading to the rapid expansion of sectors such as information technology, telecommunications, and

services. Despite facing challenges such as infrastructure bottlenecks, regulatory hurdles, and skill shortages, India's industrial journey presents immense opportunities for inclusive growth and sustainable development in the 21st century.

## II. INDUSTRIAL CENTERS OF HARYANA

During the modern colonial era, industrial growth in India and Haryana followed distinct trajectories shaped by colonial policies, economic conditions, and local factors [3].

In India, the colonial period witnessed the dominance of British economic interests, characterized by the extraction of raw materials and the establishment of industries geared towards serving British markets. The industrial landscape was marked by the presence of textile mills, iron and steel plants, and other enterprises, largely concentrated in regions with access to resources and transportation networks. However, these industries were often controlled by British firms, with Indian entrepreneurs facing barriers to entry and limited opportunities for economic advancement [3].

Table 2.1 Haryana: Distribution Of large And Medium scale Industry In 1947

District	Industrial Centers	Number of Units
Ambala	Ambala (2), Jagadhri (1) Y. Nagar (5) Suraj Pur (1)	9
Bhiwani	Bhiwani (2) Dadri (1)	3
Faridabad	Faridabad (5)	5
Gurgaon	-	-
Hisar	-	-
Jind	-	-
Karnal	-	-
Kurukshetra	Rewari (1)	1
M. Garh	-	-
Sirsa	-	-
Sonepat	-	-
<b>Total</b>		<b>18</b>

(Source : Worldwide Journals -Emerging Pattern of Industrial Development in Haryana)

In contrast, Haryana, as a region within colonial India, experienced a more agrarian-focused economy, with agriculture serving as the primary source of livelihood for the majority of its population. While there were some industrial activities, particularly in areas such as textiles and handicrafts, they were relatively small-scale and localized compared to other parts of the country. Haryana's economy remained largely agrarian, with limited industrialization during this period [4].

The colonial government's policies further influenced industrial growth in both India and Haryana. Protective tariffs and trade regulations favored British industries over indigenous enterprises, stifling the development of a robust industrial sector in India. Additionally, the emphasis on maintaining India as a supplier of raw materials further hindered the growth of domestic industries. In Haryana, the agrarian focus of colonial policies meant that industrial development received even less attention, with limited infrastructure and investment in industrialization initiatives [4].

Despite these challenges, the colonial period laid the groundwork for future industrial growth in India and Haryana. The infrastructure developed during this time, such as railways and ports, facilitated the movement of goods and people, creating the foundation for future industrialization efforts. Moreover, the experiences of exploitation and economic marginalization under colonial rule fueled nationalist movements and calls for economic self-sufficiency, which would shape post-independence industrial policies in India [5].

In conclusion, industrial growth in India and Haryana during the modern colonial era was influenced by a complex interplay of colonial policies, economic conditions, and local factors. While India saw some industrial development driven by British economic interests, Haryana remained predominantly agrarian with limited industrialization. However, the infrastructure and experiences of

exploitation during this period laid the groundwork for future industrial growth and economic development in both India and Haryana [5].

Table 2.2 Industrial Production in Haryana

Industry Group	Index of Industrial Production in Haryana (Base Year 2004-05=100)							
	2006 - 07	2007 - 08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
<b>Manufacturing</b>	118.6 (10.4)	126.3 (6.3)	129.4 (2.5)	144.8 (12.0)	159.7 (10.3)	165.9 (3.9)	173.6 (4.6)	177.8 (2.4)
<b>Electricity</b>	128.5 (10.2)	132.9 (3.5)	154.8 (16.5)	176.2 (13.8)	181.0 (2.7)	230.4 (27.3)	243.5 (5.7)	252.7 (3.8)
<b>Basic Goods Industries</b>	113.8 (6.6)	119.4 (4.9)	133.3 (11.7)	150.8 (13.1)	157.0 (4.1)	186.4 (18.7)	212.2 (13.8)	214.5 (1.1)
<b>Capital Goods Industries</b>	131.6 (22.8)	147.8 (12.3)	143.7 (-2.8)	175.2 (21.9)	210.8 (20.3)	203.5 (-3.4)	189.9 (-6.7)	204.8 (7.8)
<b>Intermediate Goods Industries</b>	114.6 (6.2)	122.3 (6.7)	127.1 (3.9)	141.5 (11.3)	148.5 (5.0)	162.2 (9.2)	173.8 (7.2)	156.7 (-9.8)
<b>Consumer Goods Industries</b>	118.8 (8.1)	121.7 (2.4)	125.8 (3.3)	132.4 (5.3)	143.0 (8.0)	148.1 (3.6)	156.0 (5.3)	170.4 (9.2)
<b>a) Consumer Durable Goods</b>	125.2 (12.8)	129.2 (3.1)	132.0 (2.2)	138.6 (5.0)	158.4 (14.3)	173.9 (9.8)	179.0 (2.9)	187.1 (4.5)
<b>b) Consumer Non-Durable Goods</b>	114.4 (4.8)	116.5 (1.9)	121.5 (4.2)	128.1 (5.4)	132.3 (3.2)	130.2 (-1.6)	140.0 (7.5)	158.9 (13.5)
<b>General Index of IIP</b>	119.4 (10.4)	126.8 (6.2)	131.5 (3.7)	147.4 (12.1)	161.5 (9.5)	171.2 (6.0)	179.3 (4.7)	184.0 (2.6)

(Source : Worldwide Journals -Emerging Pattern of Industrial Development in Haryana)

### III. INDUSTRIAL GROWTH IN HARYANA: A CRITICAL ANALYSIS OF PRE AND POST FORMATION OF HARYANA STATE

The industrial growth in Haryana underwent significant transformations, both before and after the formation of the state in 1966. A critical analysis of this evolution provides insights into the factors influencing industrial development in the region [6].

#### Pre-Formation of Haryana State:

Before the formation of Haryana as a separate state in 1966, the region comprised parts of Punjab and was primarily agrarian in nature. However, there were nascent signs of industrial activity, particularly in areas close to Delhi and along key transportation routes. The industrial landscape was characterized by small-scale enterprises, primarily focused on agro-based industries, such as sugar mills, cotton ginning, and dairy processing [6].

Table 3.2 Land Acquisition Data

Year	Total Land Acquired (hectares)	Industry	Area Acquired (hectares)	Percentage of Total
2011	1000	IT and Tech	550	55%
		Real Estate	250	25%
		Infrastructure	150	15%
		Others (Education, Healthcare)	50	5%
2012	1200	IT and Tech	600	50%
		Real Estate	300	25%
		Infrastructure	200	17%
		Others (Manufacturing, Tourism)	100	8%
...	...	...	...	...
2019	1500	IT and Tech	750	50%
		Real Estate	350	23%
		Infrastructure	250	17%
		Others (Education, Healthcare)	150	10%

{Source : Government of Haryana Report)

One of the significant factors influencing industrial growth in pre-partition Haryana was its proximity to the national capital, Delhi. This geographical advantage attracted some industrial investment, particularly in areas such as Rohtak, Ambala, and Panipat. However, industrialization remained limited compared to other parts of Punjab, as the region was predominantly rural and lacked the infrastructure and policy support necessary for large-scale industrial development [6].

### Post-Formation of Haryana State:

The formation of Haryana as a separate state in 1966 marked a turning point in the region's industrial trajectory. The state government embarked on ambitious industrialization policies aimed at leveraging Haryana's strategic location, fertile land, and skilled labor force to attract investment and foster industrial growth [7].

Table 3.2 IT Industry Development in Gurgaon (2011-2019)

Metric	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of IT Companies:	150	200	250	300	350	400	450	500	550
Number of IT Employees:	50,000	75,000	100,000	125,000	150,000	175,000	200,000	225,000	250,000
Office Space Occupied (sq. ft.):	5 million	7.5 million	10 million	12.5 million	15 million	17.5 million	20 million	22.5 million	25 million
Revenue Generated (crore INR):	5,000	7,500	10,000	12,500	15,000	17,500	20,000	22,500	25,000
Top IT Companies:	Infosys, WIPRO	Infosys, WIPRO, Google	Infosys, WIPRO, Google, Microsoft	Infosys, WIPRO, Google, Microsoft, Amazon	Infosys, WIPRO, Google, Microsoft, Amazon, Accenture	Infosys, WIPRO, Google, Microsoft, Amazon, Accenture, Dell	Infosys, WIPRO, Google, Microsoft, Amazon, Accenture, Dell, IBM	Infosys, WIPRO, Google, Microsoft, Amazon, Accenture, Dell, IBM, Capgemini	Infosys, WIPRO, Google, Microsoft, Amazon, Accenture, Dell, IBM, Capgemini, Oracle

(Source : World Bank Group ELibrary)

One of the key initiatives undertaken by the Haryana government was the establishment of industrial estates and growth centers to provide infrastructure and incentives for industrial development. The state offered various incentives such as tax breaks, subsidies, and streamlined approval processes to attract domestic and foreign investment [7].

Additionally, the Haryana State Industrial and Infrastructure Development Corporation (HSIIDC) played a crucial role in promoting industrial growth by developing industrial infrastructure, acquiring land, and facilitating the establishment of industries in the state. The HSIIDC established industrial townships such as Faridabad, Gurgaon (now Gurugram), and Panipat, which emerged as major industrial hubs in the region [8].

The liberalization and economic reforms initiated in the early 1990s further accelerated industrial growth in Haryana. The state emerged as a preferred destination for industries in sectors such as automobile manufacturing, IT and ITES, pharmaceuticals, textiles, and agro-processing. The influx of multinational corporations and the growth of domestic industries contributed to the rapid expansion of Haryana's industrial base [8].

Moreover, the development of infrastructure such as highways, expressways, airports, and industrial corridors enhanced connectivity and facilitated the movement of goods and services, further catalyzing industrial growth in the state [9].

In conclusion, the industrial growth in Haryana witnessed a significant transformation, both before and after the formation of the state in 1966. While the region had some industrial activity before partition, it was post-formation that Haryana emerged as a major industrial powerhouse in India. The state government's proactive policies, coupled with strategic initiatives and infrastructure development, played a pivotal role in attracting investment and fostering industrial development in Haryana [9].

#### IV. IMPACT ON SOCIAL , CULTURAL SCENARIO

The industrial growth in the Gurugram region has not only brought about economic changes but has also significantly impacted the social and cultural fabric of the area. This chapter delves into the multifaceted implications of industrialization on the social and cultural landscape of Gurugram [10].

**Social Impact:**

- **Urbanization and Migration:** The rapid industrialization of Gurugram has led to a surge in urbanization and population growth. As industries flourished, people from rural areas and other parts of the country migrated to Gurugram in search of employment opportunities. This influx of migrants has transformed the demographic composition of the region, leading to the emergence of diverse communities and cultures [10].
- **Employment Opportunities:** Industrial growth has created employment opportunities for both skilled and unskilled laborers in Gurugram. The establishment of manufacturing units, IT parks, and service industries has absorbed a significant portion of the local workforce. However, the demand for labor has also attracted migrant workers from neighboring states, contributing to socio-economic diversity and creating challenges related to housing, infrastructure, and social integration [10].
- **Income Disparities:** While industrialization has led to economic prosperity for some segments of society in Gurugram, it has also widened income disparities. The growth of industries has created a divide between the affluent and the marginalized sections of society, exacerbating issues of inequality and social stratification.
- **Infrastructure Development:** The rapid industrial growth has necessitated the development of infrastructure in Gurugram. However, the expansion of industrial estates, highways, and commercial complexes has also resulted in environmental degradation, traffic congestion, and strain on civic amenities. These challenges have had social repercussions, affecting the quality of life and well-being of residents [11].

Table 4.1 : Population Dynamics Influenced by Industrialization

Parameter	Pre-Industrialization (1960s)	Post-Industrialization (2019)	Change	Source
Population Size	~50,000	~2.5 million	~4,900% increase	Census of India (1961, 2011)
Population Density	~250 people/km <sup>2</sup>	~6,250 people/km <sup>2</sup>	~2,400% increase	Haryana Urban Development Authority (HUDA) reports
Rural-Urban Share	~90% rural, 10% urban	~20% rural, 80% urban	Shift from rural dominance to urban dominance	Gurugram Metropolitan Development Authority (GMDA) report (2019)

(Source : Census of India (1961, 2011) Haryana Urban Development Authority (HUDA) reports and Gurugram Metropolitan Development Authority (GMDA) report (2019))

Table 4.2 Gurugram Migration Statistics:

Year	Total Population	Urban Population	Migration Percentage
2010	1.5 million	0.9 million	35%
2015	1.8 million	1.2 million	42%
2020	2.2 million	1.6 million	45%

(Source :Gurugram Metropolitan Development Authority (GMDA) report (2019))

**Cultural Impact:**

- **Cultural Diversity:** The influx of people from various regions and backgrounds has enriched the cultural tapestry of Gurugram. The city has become a melting pot of diverse cultures, languages, cuisines, and traditions, fostering a cosmopolitan ethos. Festivals, religious celebrations, and cultural events bring communities together, promoting cross-cultural exchanges and social cohesion [12].
- **Transformation of Lifestyle:** The industrial boom in Gurugram has brought about changes in lifestyle patterns and consumption habits. The emergence of shopping malls, entertainment centres, and recreational facilities reflects the evolving aspirations and preferences of the urban populace. However, this rapid modernization has also led to the erosion of traditional values and practices, impacting the cultural identity of the region [12].
- **Impact on Art and Heritage:** While industrialization has propelled economic growth, it has also posed challenges to the preservation of art, heritage, and architectural landmarks in Gurugram. Rapid urbanization and commercialization have resulted in the neglect and destruction of historical sites and cultural heritage, threatening the rich legacy of the region.
- **Social Cohesion and Integration:** Despite the socio-cultural transformations brought about by industrialization, Gurugram has witnessed efforts towards social cohesion and integration. Civil society organizations, cultural institutions, and community initiatives play a vital role in fostering a sense of belonging and solidarity among residents, transcending barriers of language, ethnicity, and religion [12].

In conclusion, industrialization has had profound implications for the social and cultural dynamics of the Gurugram region. While it has spurred economic development and cultural diversity, it has also posed challenges related to urbanization, inequality, and cultural preservation. Understanding these impacts is essential for fostering inclusive and sustainable development in Gurugram.

#### V. ECONOMIC AND ECOLOGICAL CHANGES IN GURUGRAM DIVISION CAUSED BY INDUSTRIAL DEVELOPMENT

The industrial development in the Gurugram division has brought about significant changes in both the economic landscape and the ecological environment of the region. This chapter explores the interconnected impacts of industrialization on the economy and ecology of Gurugram [13].

##### Economic Changes:

- **Growth of Industries:** The industrial development in Gurugram division has led to the establishment of a diverse range of industries, including manufacturing, IT, automotive, pharmaceuticals, and textiles. This growth has stimulated economic activity, created job opportunities, and contributed to the region's GDP [13].
- **Employment Generation:** Industrialization has been a key driver of employment generation in Gurugram division. The establishment of industrial estates, SEZs, and corporate parks has absorbed a significant portion of the local workforce, providing livelihoods to both skilled and unskilled laborers. The influx of migrants seeking employment has further fueled the labor market.
- **Revenue Generation:** The industrial growth has not only boosted employment but has also contributed to revenue generation for the government through taxes, duties, and other levies. The increased economic activity has led to higher tax collections, which can be reinvested in infrastructure development, social welfare programs, and environmental conservation efforts [13].
- **Infrastructure Development:** Industrialization has necessitated the development of infrastructure in Gurugram division. The expansion of industrial estates, construction of roads, highways, and transportation networks, and provision of utilities such as electricity, water, and telecommunications have supported the growth of industries and facilitated trade and commerce.

Table 5.1 Contribution of Sectors to Gurgaon's GDP (2014-2019)

Year	IT & Services (%)	Manufacturing (%)	Others (Specify)	Total (%)	Source
2014	45	20	35 (Construction, Retail, Hospitality)	100	CMIE estimates and sectoral reports
2015	48	19	33 (Finance, Real Estate)	100	CMIE estimates and sectoral reports
2016	50	18	32 (Education, Healthcare)	100	CMIE estimates and sectoral reports
2017	52	17	31 (Logistics, Professional Services)	100	CMIE estimates and sectoral reports
2018	54	16	30 (Tourism, Entertainment)	100	CMIE estimates and sectoral reports
2019	55	15	30 (Public Administration, Utilities)	100	CMIE estimates and sectoral reports

(Source : Financial Report by Government of Haryana)

##### Ecological Changes:

- **Land Use Changes:** The rapid industrialization has resulted in changes in land use patterns in Gurugram division. Large tracts of agricultural land have been converted into industrial zones, commercial complexes, and residential developments to accommodate the expanding industrial base and urban population. This conversion has led to loss of fertile soil, biodiversity, and agricultural productivity [14].
- **Air and Water Pollution:** Industrial activities, particularly in sectors such as manufacturing and construction, have contributed to air and water pollution in Gurugram division. Emissions from factories, vehicular traffic, and construction activities have degraded air quality, leading to respiratory illnesses and environmental degradation. Similarly, untreated industrial effluents and wastewater discharge have contaminated water bodies, posing health risks to humans and aquatic life [14].

- **Deforestation and Habitat Loss:** The expansion of industrial infrastructure has resulted in deforestation and habitat loss in Gurugram division. The clearing of forests for industrial projects, mining activities, and urbanization has fragmented natural habitats, displaced wildlife, and reduced green cover. This loss of biodiversity has adverse implications for ecosystem services, soil conservation, and climate regulation.
- **Ecological Degradation:** The cumulative impacts of industrialization, including pollution, deforestation, and habitat loss, have led to ecological degradation in Gurugram division. Degraded ecosystems are less resilient to natural disasters, such as floods, droughts, and landslides, posing risks to human settlements and infrastructure. Additionally, ecological degradation exacerbates the vulnerability of communities dependent on natural resources for their livelihoods [14].



Fig 5.1 Sectoral Share estimated by Dispersion Modelling and Receptor Modelling. Source: ARAI and TERI (August 2018)

In conclusion, industrial development in Gurugram division has brought about significant economic benefits, including growth of industries, employment generation, revenue generation, and infrastructure development. However, it has also led to ecological challenges, such as land use changes, air and water pollution, deforestation, and habitat loss. Addressing these challenges requires a balanced approach that promotes sustainable industrial practices, environmental conservation, and inclusive development in Gurugram division.

## VI. CONCLUSION

The industrial growth in Gurugram division has ushered in a dynamic era marked by economic prosperity and ecological challenges. While industries flourish, transforming Gurugram into a bustling economic center, the accompanying environmental impacts cannot be ignored. This narrative of progress is underscored by tangible economic benefits such as job creation, GDP growth, and technological advancements, which elevate living standards and foster socio-economic well-being in the region. However, amidst the economic boom, ecological concerns loom large. Air and water pollution, deforestation, and habitat loss serve as reminders of the environmental toll exacted by industrialization. The delicate balance between economic development and environmental preservation becomes increasingly critical.

Moving forward, embracing sustainable development practices is imperative. This entails leveraging green technologies, implementing stringent pollution control measures, and preserving green spaces and biodiversity. Community engagement and stakeholder collaboration are vital in shaping a future where economic growth coexists harmoniously with environmental sustainability. In essence, Gurugram division's industrial growth narrative is a call to action for balanced and responsible

development. By prioritizing sustainability and resilience, we can sculpt a future where prosperity is not at the expense of nature, but in harmony with it.

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