

ROLE OF INDUSTRIALIZATION IN TRANSFORMATION OF CITY: CASE STUDY OF FARIDABAD, HARYANA

Dr.REGAN MOODY

Guest Faculty, Department of Architecture, Aligarh Muslim University, Aligarh, India

ABSTRACT

Industrial activity plays an important role in transforming the city. Industrialization provides the opportunity for jobs and improves the economic condition but it affects the morphology and environment of the city. Since industrialization started in Faridabad in the 1950s after the partition of India, the size and population of city increase with an increase in industrial activity. The growth of Faridabad highly affected by industrialization and three industrial clusters in Faridabad works as urban generators. The research aim is to identify and analyse the transformation and urbanization in the city through industrial activities. Industrial activities work as an urban generator and change the land use from agriculture into developed land which affects the morphology of the city.

Keywords: Industrialization, Urbanization, Urban morphology.

1. INTRODUCTION

Faridabad is largest, most populous and first industrial city in Haryana State. Industrialization in Faridabad highly generated by machinery city, textile, wooden products, weaving and die casting industry in 1950s. The developments in the city of Faridabad can be traced in four phases with each phase having witnessed differential industrial development. The process of development started from the time of partition when huge Pakistani refugees migrated to Faridabad, for providing them livelihood and employment central government develop Faridabad as an industrial town and this was the Nehruvian vision. There are the cluster of industrial unit and two clusters along NH-2 and one near the east side of Agra canal. Industrialization become the urban generator to change the land-use, from agriculture into developed land, this urban generator affected the morphology of city (Damayanti, 2011). The surrounding area near the industries become more and more develop and occupied for residential and commercial uses.

Since industrial activity play role of urban generator and change the land-use hence this affects the morphology of urban area. The research analyses the growth of the city due to the urban generator. Based on secondary data from related research the development of industrial estate could extend the boundary of city.

2. RESEARCH METHODOLOGY

The researcher collect data by primary and secondary source like document/literature study, land-use survey and interviews. Secondary source data comprises report/document/literature study, this data helps to understand back of city and the growth of city industrial activities. While the primary source data comprise interview, interview is important method to collect the accurate data and analyses the industrial activity work as an urban generation.

3. URBANIZATION

Faridabad is the most urbanized city in Haryana state. Urbanization in Faridabad has started after industrial development. In 1950s, After India-Pakistan partition this city was establish as a resettlement town for Pakistani refugees. Jawaharlal Nehru was the superpower behind this decision and for providing the employment and livelihood to the refugees. Nehru had vision of developing the township based on the modern western colonies, where industries on modern line with proper worker quarter, schools and markets etc.

In 1960-70s, the Nehruvian vision of development of new urban space in Delhi, which was made by American planners, ford foundation, who prepared the first master plan of Delhi, 1962. The master plan endeavored produced order by creating magnet town to Delhi which would absorb future urban growth and sprawl. (Mehra, 2012). The initiative of master plan was to shift the heavy and polluted industries to DMA (Delhi Metropolitan Area). DMA being, town adjacent to Delhi and Faridabad identified as a DMA. The idea behind this was to decongest and decentralized the Delhi. In 1970-80s, the main focus of master plan was on decongesting the city and shifting the heavy and polluted industries outside the Delhi, make Delhi clean and greener by shifting industries at DMA. Therefore, industrilization in faridabad was at huge level as compare to other DMA town in 1960-70s, with setting up of large scale industries. Due to industrilization huge population growth to faridabad and growth rate was 169percent in 1970-80. This was only because

of migration of people in the city. Noida was not in the picture since it was declared census town in 1991 and Gurugram was class III town with 50,000 population.

In 1980-90s, the growth of Faridabad was remarkable in terms of industrialization in last few decades. When Faridabad compared to other DMA towns shows that Faridabad placed at the best position in terms of number of industries.

In 2000, Haryana state industries policies 1991, 2005 and 2011 pushing small, micro and medium scale industries in Faridabad and KMP Expressway have been undertaken by HSIIDC, which is boosting industrial opportunity. Due to high growth of industrialization and lack of infrastructure, city is suffering with traffic congestion, slum and pollution.

Industrialization attracts large number of workers both skilled and unskilled occupation. Urbanization is directly proportional to industrialization as people migrated to urban areas for job opportunity. In 1961, the population of Faridabad city was 59,039. In 1971, when industries were shifting to Faridabad the population of city increased up to 1,22,817 with 106.83 growth rate. In 1981, when industrialization was at the peak in Faridabad the population increased up to 3,30,864 with 169.40 growth rate. In 1991, population increased up to 6,17,717 with 86.70 growth rate here, the growth rate started decline because Gurugram became industrial city. In 2001 and 2011, the population increased up to 10,55,938 and 14,38,855 with 70.94 and 36.26 growth rate. As growth rate declined after 1981 but if Faridabad compared to other cities of Haryana, it is the most populous city of Haryana. Industrialization transformed the Faridabad city.

Table 1. Population of Faridabad

Year	Population	Growth rate(perce)
1961	59039	-
1971	1,22,817	106.83
1981	3,30,864	169.40
1991	6,17,717	86.70
2001	10,55,938	70.94
2011	14,38,855	36.26

4. INDUSTRIALIZATION

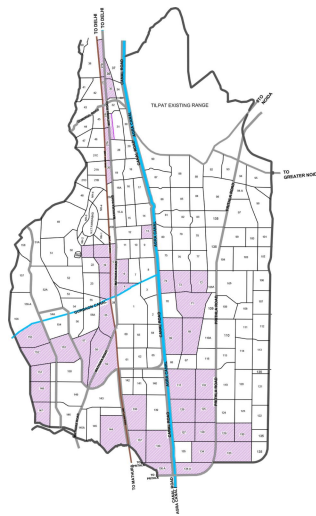


Figure 1: Master of Faridabad, 2031
Source: Master Plan 2031

Faridabad has three industrial clusters. Faridabad is 9th biggest industrial city of Asia and Industrial capital city in Haryana. Faridabad has about 200 large/medium units and 15000 small scale units and it generates about 60 percent of revenue of Haryana. (Tarun Punia, 2013). The history of industrialization in Faridabad started in 1951 with setting up of New industrial township. Large scale industries setup in 1950 and 1960s in the field of auto parts, tractor and shoes therefore attracting small and medium scale industries to invest in the area. The availability of cheap land in the DMA towns, establishment of Faridabad as Industrial town, along with industrial policies of Haryana state, had lured many industrialists to spend in the city, therefore providing opportunity for economic growth and occupation. However, eventually due to infrastructure development not meeting the demand of and labor union creating huge problems in daily processes of the industrial production, the attraction faded and some big industries also moved out to the

neighboring areas of Haryana attributable to industrial policies of the state, providing incentives in industrially backward districts.

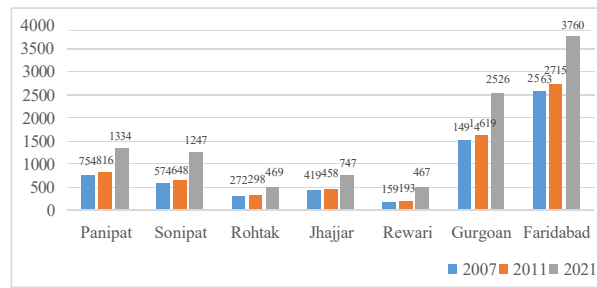


Figure 2: District wise industrial scenario since 2007

Source: Sub-regional plan for Haryana sub-region of NCR, Department of Town and Country planning

Above figure shown that the highest growth of industries in Faridabad

5. TRANSFORMATION IN FARIDABAD CITY:

The transformation in Faridabad city started after industrialization i.e. 1950s and the city became over crowded and polluted.

On 19th January, 1966, first development plan was released. Faridabad planned as an industrial town around the Delhi to reduce the migrant's inflow in Delhi and Faridabad-Ballabhgarh area develop because of railway line, road communication and water supply. In 1961, the population of Faridabad was 60,000 but in 1971 population increased up to 1,22,817 with growth rate 106.83. Pressure of industries was increasing day by day at Faridabad-Ballabhgarh area. Due to this rising pressure and haphazard development the amendment had been done in final development plan of Faridabad in 1974. In amended plan 1974, the Faridabad complex regulation and development Act 1971, Haryana government merged the three local bodies of Faridabad town, old Faridabad and Ballabhgarh into one complex named Faridabad municipal complex. In amended plan 1974, converted the designated rural zone in 1966 plan to industrial land use i.e. sector 57, 58, and 59.

However, no such simultaneously planning for provision was carried out, in spite of the population growth of 108.63% in decade 1961-71. The share of industrial labour to total workers has grown tremendously with industrial workers percentage to total workers reaching to 75 percent in 1981.

In Master Plan 1991, the idea was to accommodate 17.5 lakhs population 2011. The extension developable area to the east of Agra canal and dedicated 6 sectors for industrial estate development. The provision of low income however, is something which was untouched upon, despite of witnessing population growth rate of more than 150percent in the year 1981-1991. Therefore, emergence of such unplanned housing colonies which were informal in nature was something which could be prophesized and stated obviously, seeing the huge industrial development in the city along with new infrastructure developments.

In Master Plan 2031, an area of 6179 hectares has been proposed for industrial development in the master plan 2031. The existing Gas based Thermal Plant has been declare as special zone. HSIIDC has already developed an Industrial Model Township (IMT) in industrial zone situated in the east of Agra Canal.

Table 2: Area (in acres) under different types of land use (percent)

Landus	1966 (in acre)	1974 (in acre)	1991 (in acre)	2031 (in acres)
Industrial	2080 (18.35%)	4944 (22%)	7749 (20%)	15268.64 (17.98%)
Residential	6800 (60%)	9922 (44%)	19,262 (49.71%)	35973 (42.6%)
Total	1,13,30	22,495	38,743	84925

Source: Master plan of 2031, 1991, and 1966

The huge labor availability in Faridabad because of immigration is because of the rapid industrialization that took place after 1950s in the city. This has led to huge growth in unplanned development in the city. This unplanned development is at the cost of rise of informal housing because of lack of provision of affordable formal housing by the government.

Due to lack of affordable housing unauthorized colony and slum areas in Faridabad increased very rapidly in 1981. As the private developer buy land from owner, converted that land illegally agricultural land to residential land and sell the

plotted land at lower rate. Unauthorized colonies also emerge on vacant land which are near industrial and commercial center and are used by people for housing purpose and where no building bye-laws are followed.

Faridabad case different from Delhi. The large industrialization after 1950s, with no proper planning for migrant industrial workers and housing for them at affordable rate, lead to springing of slum and unauthorized area. Maximum number of slum in Faridabad city are near the industrial estate, along railway line, and along drainage line.

According to census of India 2001, Faridabad had 46.5% slum population which is second largest slum population in India.

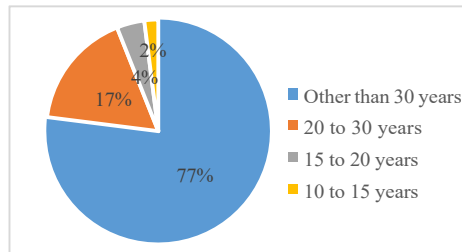


Figure 2: Age of slum:
Source: Municipal Corporation of Faridabad, 2013

77% area of slums are 20-30 years old.

6. CONCLUSION:

After this study, it can be concluded that industrial activity transforms the city informally. Industrialization in Faridabad started in 1950s and Faridabad has many industrial sectors, previously the area around the industrial sectors were vacant land and agricultural land. As predicted by master plans of Faridabad, industrial activities works as a urban generators. After more than 50 years of development, the growth generated nears the industrial estates. Agricultural land changed into developed land, land use also changed such as agricultural to residential, residential to commercial, public land to private use. According to Rully Damayanti (2013), industrialization shapes the city and affects the people. Population of that city increase rapidly since industrial activity starts in any city, because it provides the job opportunities.

This research understands that industrialization attracts the people and works as urban generator. If we see the case of Faridabad, after industrialization the population growth rate increased up to 150 in 1981 and lack of housing provision slums and unauthorized colonies established.

According to Rully damayanti (2013), in urban areas industries works as an urban generators that affects the urban land value. Faridabad has strong industrialization so, most of the slums and unauthorized colonies near the industrial estates. In 1974, due to the pressure of rising industries, Haryana government plan and introduced three more industrial estate. As the final discussion, cities in most of the developing countries are growing very fast in both perspective formally and informally. Proper planning and designing of the city are only way to land occupancy formally.

7. REFERENCES:

- [1] Punia and Cheema, 2013, Status of Industrial Settlement of Gurgaon and Faridabad(NCR, Haryana), International Journal of advancement in Research & Technology, Volume 2, Issue1. ISSN 228-7763
- [2] Rekha, 2018, Economic growth and Urbanisation in Faridabad (1981-2011) with a time change (2011-2018), Journal of Advances and Scholarly Researches in Allied Education, Vol. 15, Issue No. 11, November-2018, ISSN 2230-7540
- [3] Prasant Kumar Behera, 2015, Socio-Economic Impact of Industrialisation and Mining on the Local Population: A Case Study of NALCO Industrial Area, Koraput, International Journal of Economics & Management Sciences, Volume 4, Issue 8, ISSN: 2162-6359
- [4] Rully Damayanti, 2011, Industrialization and informal sector in shaping the city: case study of Ahmedabad-India, Journal of Architecture and Built Environment, Vol. 38, No. 1, 15-22, ISSN 0126-219X
- [5] Renu Sardana, and Monisha Chaudhary, 2016, Emerging Pattern of Industrial Development in Haryana, Indian and Journal of Research, Volume 5, Issue 2, ISSN - 2250-1991
- [6] Laxmi Narayan, 2014, Urban Poverty and Slum in India, International Journal of Research(IJR) Vol-1, Issue-10 November 2014 ISSN 2348-6848
- [7] Sub-Regional Plan for Haryana Sub-Region of NCR-2021, Town and Country Planning Department, Haryana.