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## **Urbanisation in the Periphery of Metro Cities in India: A Case Study of Faridabad**

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### **Abstract**

*Over the years, the mainstream development paradigm has been such that there has been a consistent increase in urbanisation across the globe. In fact, not only the proportion of urban population is increasing at the cost of rural population, but also the metropolises are growing at the cost of small towns and cities. The towns on the periphery of metro cities, which were initially developed to decongest the metro cities, are turning into megacities. The city of Faridabad is a classic example of it. Against this backdrop, this paper intended to analyse and discuss the nature, levels, growth and structure of urbanisation in Faridabad as a case study. Using the available latest census data, the study finds that in terms of both population and area, there has been urban expansion and rural contraction in Faridabad. The district has achieved very high rates of urbanisation within a short span of time owing to its high growth of urban population. Structurally, the urban population of the district is highly concentrated in the city of Faridabad, which has turned it into a megacity, whereas the small towns of the district have been left behind. Such a pattern of development raises serious questions on the pattern of development from sustainability perspectives.*



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## 1. Introduction

Today urbanisation has become a global phenomenon. Almost all the countries in the world are inflicted by increasing urbanisation. As a matter of fact, there has been a tremendous increase in world urban population(Ghosh et al. 2022). Over the last 50 years, the world has witnessed a dramatic growth of its urban population. In 1950, only around 30 per cent of the world's inhabitants i.e. about 734 million, people lived in cities. By 2018 it had become 4.2 billion, around 55 per cent and is expected to reach close to 70 per cent, i.e. roughly 6.6 billion by the mid of this century.

India is not far behind in terms of population growth in general and urban population growth in particular. During the last fifty years the population of India has grown two and a half times but its urban population has grown about five times. In numerical terms, India's urban population is the second largest in the world after China, and is higher than the total urban population of all countries put together barring China, USA and Russia.It is estimated that by the end of this decade more than 500 million Indians shall live in nearly 6000 towns and cities spread across the length and breadth of the country(Sarkar and Lakshmana, 2022). This shall comprise nearly 40 per cent of its population, in sharp contrast to 15 per cent on the eve of independence. Because of rapid growth of urban population not only new towns and cities are created but also the existing cities grow (Pathik and Gupta, 2022). However, there exists a wide dispersal in the urban structure in India. In India both at national and regional levels, the entire urban structure is dominated by the large cities whereas, the medium and small towns are playing a very negligible role (Hassim, 2022).

In developing countries like India, due to the absence of diverse economic core centres, the mega cities attract a high degree of migration from rural areas. The migrating population further increases the population base of the mega cities. As a result, the mega cities experience a phenomenal rise in their population. The rapid and uncontrolled growth of population in mega cities has generated a series of negative socio-economic effects; lack of infrastructure and basic services; housing problems; congestion; health problems, etc. (Soni et al. 2022). Pertinently, increasing land prices are cause and effects of such growing urban problems. The increase in land price makes housing unaffordable for large section of the population, particularly middle class and the urban poor (Chakravorty, 2013). As a result, people who cannot afford houses in the city look for housing facility in the periphery of the city. As a consequence, there has been increasing suburbanisation of megacities. There have been increasing construction activities in the fringe areas. The geographical boundaries of the cities are expanding to rural areas, which has resulted in changing land use pattern (Mitra and Kumar, 2015). The changing land use pattern is characterized by land transfer and conversion from one use to



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another. The land which was hitherto used for agricultural activity paves way for the provision of housing and other urban infrastructural facilities. Today India supports 15 per cent of human and animal population of the world in just 2 per cent of the world arable land and with 1 per cent of rainfall. Hence, the changing land use pattern has serious implications for food and water supply in the long run for the growing population even if agricultural productivity increases in the short run. Thus, the increasing urban expansion has been creating the problems of long-term sustainability.

### **1.1 Research Questions**

Against the aforesaid backdrop the major research question that broadly arise is “how have the megacities impacted the emerging process of urbanisation in their periphery? We delve into the literature to find an answer to the aforesaid research question.

### **1.2 Review of Literature**

Although there is a plethora of studies on urbanisation in India, there is hardly any literature that directly dealt with aforesaid research questions. However, we discuss a few related ones chronologically.

Dittrich (2007) discusses the socio-economic disparity associated with the ever-growing large cities in the context of Bengaluru. The study maintains that the very nature of economic activity in Bengaluru has resulted in aggravating disparities and creation of a highly fragmented polarized society. Further, the study suggest that a tiny fraction of its population benefits from the ever-expanding city like Bengaluru, while a large fraction of people remains poor and are further marginalized. Chakraborty (2013) studied urban and rural land prices in India between 2007 and 2010. The study finds that land prices in urban and rural India has increased rapidly in the last decade. In fact, in some of the urban areas, the estimated increase is more than fivefold. The same is also found in some of the rural areas. Certainly, the possibility of it can hardly be doubted. After all, owing to urban expansion of rural land, the land prices in latter is a manifestation of the former. Further, the study, using comparable international data, shows that the urban prices are significantly higher than what is commensurate with state or national income. Also, the peaks of these prices are extraordinarily high. Similarly, rural prices in several regions were found to be unreasonably high by international standards. Apart from other things, it argues that the phenomenal rise in land prices in general and urban land prices in particular could be attributed to combination of factors like growth in land scarcity, rise in money supply owing to expanded housing credit, and rising incomes from various sources and increasing income and wealth inequality. The study thus views that instead of bubble, the urban land prices rises



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due to a host of factors. Certainly, the study neglects the role of a bubble in the growth of urban land prices. Parishwad and Singh (2014) is one of the important studies in recent years. The study maintained that India's recent stand on smart city development and involvement of various high-income countries are developments in the right direction. The study suggests that the aforesaid development at least initiates a talk on ideal variables for smart city evolution. The study highlights the importance of smart city from a perspective of urban governance for general liveability. Taking the vision of smart city into consideration, the study echoes the role of human diversity, physical and social networks and information and communication technology in our spatial planning models. Taking these aspects into consideration, the study focuses on the role of infrastructural developments in making Indian cities more conducive for human living. Parishwad and Singh (2014) study helps us spell a regiment of actions in the direction of urban planning. The urban planning thus should have a bearing on environmental, social and economic structure of cities. The study further finds the scope of progress, encouraged from various government policies for successful implementation of smart city development. It also allows a peek into future scenario of improvements and deliberations particular to Indian standards in consideration with the scenario of other countries. Singh and Singh (2015) may be considered as a study that attempted to expand the study by Chakraborty (2013). The study questioned the rising land prices where there is a continuous availability of land for urban development. The study also questioned the rising housing prices in spite of growing skyscrapers. In particular, the study attempts to explore the existence of a land price bubble in urban India, the presence of which was not found in Chakraborty (2013). The study also explored the casual link between the rural and urban land prices. However, the study found that root cause of increase in land and housing prices in urban India is because of regulation. In particular, it found that it is the permit raj that is restraining the real estate sector prices to cool down. The study opined that dismantling the permit raj may go long way in making housing more affordable and increase the economic surplus. Also, the study went on to suggest that the dismantling of permit raj will give more room for welfare schemes including those related to land and housing. Among the recent studies, Mitra and Kumar (2015) have discussed the emerging patterns with regard to urbanisation in India with the help of 2011 census data. The study found that the urban activities tend to spill over to adjoining rural hinterland leading to a change in character of occupation of rural populace. Also, the migration of labour to non-farm activities owing to livelihood constraints in the agricultural sector changes the character of the village from rural to urban. Boob (2015) study viewed that the making of a smart city is emerging as a new urban phenomenon. It is conceived as a strategy to address the problems generated by rapid urbanisation. But the study is appalled by the absence of clarity over the concept of smart city though there has been a lot of discussion about the concept both in east and west. Nevertheless, the paper

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views the scanty literature on smart cities, present scenario of cities in India; existing urban development laws play a key role in transforming urban development in to smart cities. The study sketches out frameworks to understand the concept of smart cities in Indian context and the challenges country may face while introducing the concept of smart city. The study also recommends modified solution for improved results. Finally, the study suggests that the components like E-governance, smart people and smart environment need extensive study and research so that they can serve as tools to assess the success of local government in implementing the smart city mission of the central government. The study by Sethi, M. (2015) underscores the facts that India's smart city mission is undergoing a revolutionary change. The central government has initiated it with an objective of modernizing India. The study maintains that information technology solutions and improved infrastructure are the main focus of smart city mission. Also, the study maintains that the real concerns of the smart city mission are of poor state of sanitation and hygiene. The study highlights the problem of routine open defecation and seepage as the primary cause of epidemics in India. The efforts in this direction are constrained by funding and public apathy. The study however believes that a new era of urban planning in the form of the smart city can make general people contribute to the next frontier in transforming Indian urban landscapes into healthy and hygienic spaces. In view of the above fact that the study put forth a wide variety of issues and challenges encountered in achieving sustainable sanitation and hygiene. In the end, it speaks about proliferation of pilot projects with good initiatives that can be successfully rebooted across the nation. Finally, the study by Trindade et. al. (2017) is an improvement over all the previous studies. To begin with, the study presupposed a close relationship between environmental sustainability and smart city. The study attempts to assess the said relationship by reviewing various scientific studies in this regard. In the process, the study takes various aspects of the existing studies into account. Similarly, the study by Asher Sam and Paul Novosad (2017) suggest that the rural living standard is a negative function of the distance from the cities. Using a cross sectional data of 6 lakhs villages in India, the study finds that remoteness from urban centres to be a major and persistent predictor of low living standards in the villages in India. The study suggests that each additional 10 kilometres from a town is associated with a 3.2 percent reduction in mean earnings, a 5.2 percent reduction in non-farm employment, and a 1.9 percentage points decrease in the proportion of literate residents. Further, the study finds that there has been no significant change in scenario since 1991, implying that two decades of economic reforms have not improved the scenarios. This indicates that urbanisation in the last couple of decades has resulted in faster growth of megacities whereas the small towns and cities have languished far behind.

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Thus, although the various studies have deliberated on various aspects of emerging urbanisation in India, the available literature is silent about nature and extent of urbanisation in the periphery of any of the mega cities in India. Hence the present study intends to fill this void in literature by analysing the process of urbanisation in the district of Faridabad in Haryana, which is situated in the periphery of Delhi, the megacity. In particular, the study aims at assessing the levels, growth and structure of urbanisation in Faridabad. The study is organised as follows. Apart from the current introductory section, there are three more sections. The second section describes the study area, data and methodology. The third section analyses the process of urbanisation in the district of Faridabad from various dimensions as per the objectives of this study. The fourth and final section summaries the entire discussion and highlights the policy implication and sketches the future direction of research.

## **2. Study Area, Data and Methodology**

Faridabad city had been developed as a satellite township with the purpose of decongesting Delhi. But within a very short span of time it has turned out to be a large city. The city, which was developed to solve the urban problems of neighbouring Delhi, has itself being inflicted by numerous urban problems. Faridabad Township is the largest township in the district of Faridabad. Faridabad district is one of the important constituents of the state of Haryana. Among the various districts of Haryana, Faridabad is the nearest district to the union territory of Delhi.

The district lies between 27° 51' 15" and 28° 30' 52" North Latitude and 77° 04' 30" and 77° 32' 50" East Longitude. On its north is the Union Territory of Delhi. To its north-east, east and south-east is the state of Uttar Pradesh. On its south-west and west is the district of Gurgaon (Figure 1). As per 2011 Census, total area of the district is 741 sq. kms. The district with its head quarter in Faridabad, comprises of two census towns besides one statutory town i.e. the municipal corporation of Faridabad, 144 inhabited villages and two tehsils namely Faridabad and Ballabgarh.

As far as the data for urban population is concerned the census data published by the registrar general of India, Ministry of Home Affairs, Government. of India has been considered. Importantly, the latest available census data i.e. 2011 is used in this study. As far as the use of methodology is concerned the various statistical tools such as percentage and growth rates have been used for present study.



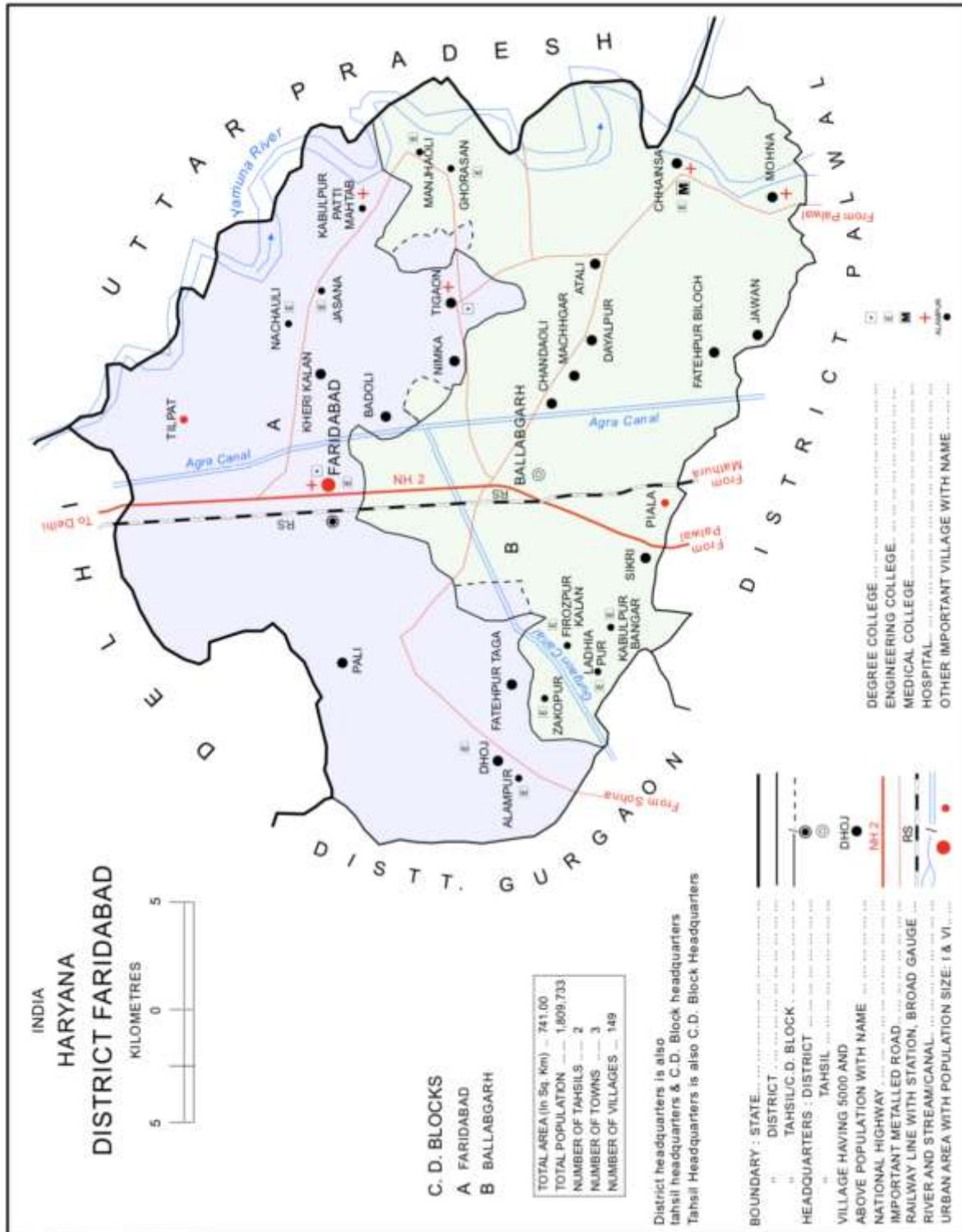


Figure 3.1: Faridabad and its Administrative Divisions

Source: District Census Handbook of Faridabad, Census of India (2011)



### 3. Analysis and Discussion

The analysis and discussion are focused on various dimensions of urbanisation in the context of Faridabad district. The various dimensions include the urban expansion, levels, growth and structure of urbanisation in Faridabad. Each of the dimensions is discussed in turn.

#### 3.1 Urban Expansion in Faridabad

Primarily, urban expansion in the district of Faridabad is the result of substantial state intervention in the process of urbanisation. State has intervened mainly through the institution like Haryana Urban Development Authority (HUDA). The main role of HUDA in the district of Faridabad has been the provisioning of better urban facilities particularly housing to the urban population in the district. For that there has been a large-scale acquisition of rural land by HUDA in the district. However, as a result of such acquisitions the numbers of inhabited villages are declining continuously over the years whereas the number of census towns remained constant or increased at least till the creation of new district of Palwal in 2008 (Table 1).

**Table 1: Declining Rural Villages in Faridabad**

Year	Total Number of Villages	Number of Deserted Villages	Number of Inhabited Villages	Number of Census Towns
1971	501	46	455	5
1981	505	80	425	5
1991	439*	25	414	5
2001	432	n.a.	n.a	6
2011 <sup>#</sup>	149	5	144	2

Source: District census handbook of Faridabad, 1991,2001 and 2011, Haryana census operations.

\* Excludes 35 villages wholly merged in Towns.

n.a: not available.

#: owing to creation of new district of Palwal from Faridabad district in 2008.

Further, even if the number of villages do not decrease, the village often sheds its land to the towns on account of land acquisition by the development authority like HUDA or it becomes the part of urban agglomeration (UA) or both. Nevertheless, it will not be wrong to say that the existing towns have expanded at the cost of rural villages. Taking the pattern of development into consideration, we discuss the levels of urbanisation in Faridabad.





### 3.2 Levels of Urbanisation in Faridabad

Faridabad has emerged as the most urbanised districts in the state. It has retained its 1991 position i.e. first rank among the districts in the state. More than half of its population is urban. It contributes nearly 20 per cent of urban population to the state. Whereas its share in total rural population of the state is just 6.5 per cent. It ranks the last among the districts in the state in rural population.

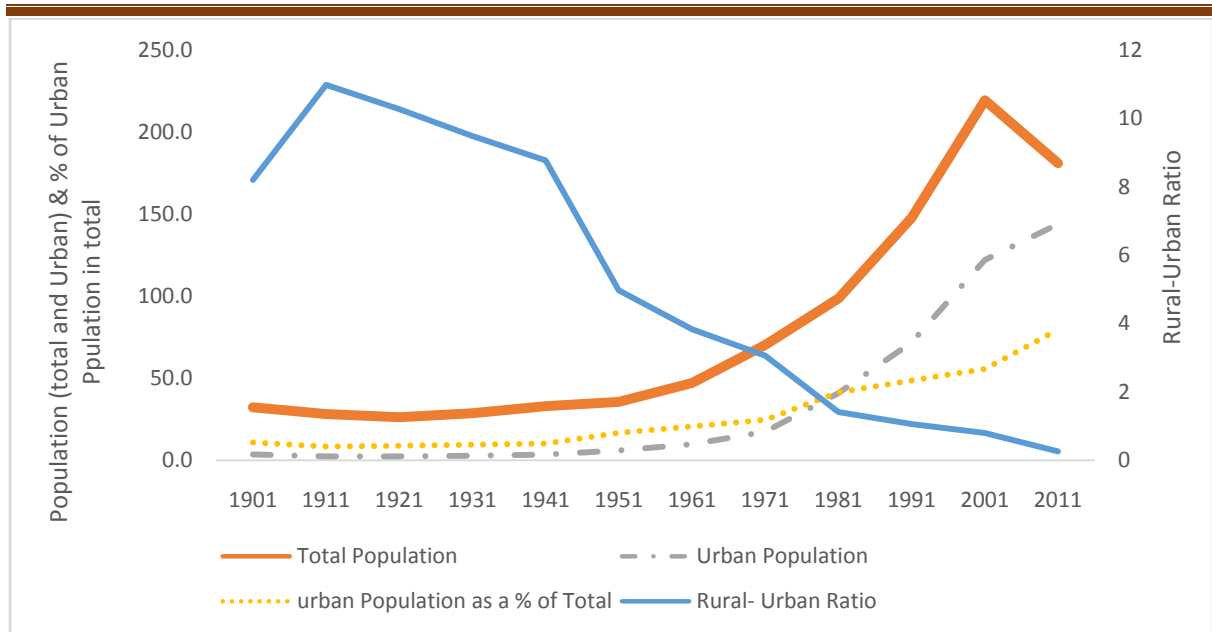
The extent of urban growth in Faridabad is no different from that of India and world. There has been a phenomenal rise in urban population in Faridabad in the last century (Table 2). As a proportion of total population, it has increased to nearly 80 per cent by the beginning of this century from a mere 11 per cent of population at the beginning of the last century. The level of urbanisation in Faridabad measured by proportion of urban populations to total population is in fact higher than that of the country as a whole which is just 31 per cent.

*Table 2: Population and its Changing Shares in Faridabad*

Year	Total Population	Urban population	Urban Population (in %)	Rural- Urban ratio
1901	322816	35089	10.87	8.2
1911	281499	23493	8.35	10.98
1921	262211	23264	8.87	10.27
1931	286625	27361	9.55	9.48
1941	329515	33742	10.24	8.77
1951	355894	59611	16.75	4.97
1961	471216	97460	20.68	3.83
1971	702999	173168	24.63	3.06
1981	986090	408594	41.44	1.41
1991	1477240	717513	48.57	1.06
2001	2193276	1220194	55.63	0.8
2011	1809733	1438855	79.51	0.26

*Source: same as Table 1*

In absolute terms, the urban population has increased by more than 40 times whereas the total population itself has increased by just over 5 times during the same period which implies that the population growth in urban areas has been much higher than rural areas. Of course, it is evident from the declining rural urban ratio, there has been a continuous decline in rural urban ratio since 1911 (Figure 2). A much clear picture may emerge if one analyses the decadal growth pattern.



**Figure 2: Population and its Changing Shares in Faridabad**

### 3.3 Growth of Urbanisation in Faridabad

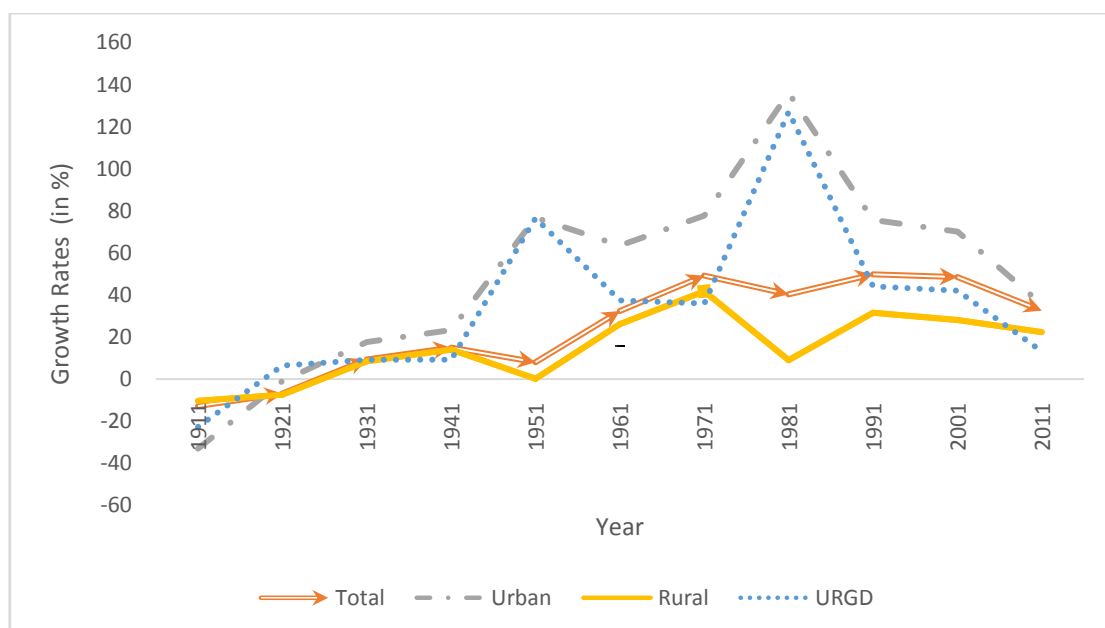
During the first two decades of the last century there was negative growth of urban population as well as total population. The reason best known to all, i. e. due to high death rate and low birth rate and the year 1921 is considered as the year of great divide. However, there has been a more or less continuous rise in the decadal growth of urban population in the district since then (Figure 3). The same phenomenon is also experienced in case of total population also.

**Table 3: Growth of Total, Urban and Rural Population in Faridabad**

Year	Decadal Growth of Total Population	Decadal Growth of Urban Population	Decadal Growth of Rural Population	URGD (Urban-Rural Growth Differential)
1911	-12.8	-33.05	-10.33	-22.72
1921	-6.85	-0.97	-7.39	6.41
1931	9.31	17.61	8.5	9.11
1941	14.96	23.32	14.08	9.24
1951	8.01	76.67	0.17	76.49
1961	32.4	63.49	26.15	37.35
1971	49.19	77.68	41.76	35.92
1981	40.27	135.95	9	126.96
1991	49.81	75.61	31.56	44.05
2001	48.47	70.06	28.08	41.98
2011	32.54	35.45	22.34	13.11

Source: Same as Table 1

One striking feature of the level of urbanisation in Faridabad is that it more or less represents the fact that the level of urbanisation can be significantly influenced with the active intervention of the state. Faridabad as a district came into existence only in the year 1977 and Haryana Urban Development Authority (HUDA) took an active role in the late Seventies for the urbanisation in the district through large scale acquisition of rural land for the urban development, as a result the proportion of urban population and decadal growth which was just 26.63 per cent and 77.68 per cent respectively, rose to a gigantic level of 41.44 per cent and 135.95 per cent respectively (Table 4).



**Figure 3: Growth of Urbanisation in Faridabad**

Of course, it is doubtful to say that the active role of the state or public authorities is backed by substantial economic logic. We also found that there has been a significant decline in the proportion of rural population in the district. If we compare urban growth vis - a -vis rural growth we will find that urban growth in the district has far outpaced the rural growth. This is evident from more or less increase in urban rural growth difference (URGD). URGD was the highest (126 %) in the year 1981 (Table 4). This again reflects the effectiveness of state sponsored urbanisation programmes. It also can be said that the urban area has been given much more attention than the rural area because according to the mainstream development paradigm, economic development can only take place through increasing industrialisation. Moreover, according to the above paradigm industrialisation mainly implies urban industrialisation rather than rural Industrialisation. The discussion however



remains incomplete without an analysis of the level of urbanisation in different administrative constituents of Faridabad district. Due to the constraints on the availability of data the analysis is confined to the year 2011 only.

### 3.4 Levels of Urbanisation in the Different Tahsils of Faridabad

In Faridabad and Ballbgarh tahsils of Faridabad district, there are very negligible levels of urbanisation. The former has around 2 per cent urbanisation while the latter has around 11 per cent urbanisation (Table 4). As maintained earlier, after the reorganisation of the district in 2008, both these tehsils have one census towns each. The district has one statutory town in the name of Faridabad municipal corporation. Thus, the Faridabad municipal corporation accounts for nearly 98 per cent of the total urban population of the district because of their proximity to the union territory of Delhi. Also, it is true that much of the state action in the direction of urbanisation is confined to the Municipal Corporation of Faridabad.

**Table 4: Levels of Urbanisation in the Different Tahsils of Faridabad (2011)**

Units	Total Population	Urban Population	Urban Population As A Percentage Of Total Population
Faridabad Tahsil	188782	20514	10.86
Ballabhgarh Tahsil	206901	4291	2.01
Faridabad District	1809733	1438855	79.51
Faridabad Municipal Corporation	1414050	1414050	100

Source: Computed from Provisional Population Total (2011), Haryana, Part II, Directorate of Census Operation, Haryana.

Besides analysing the levels and growth, we also looked the structure of urbanisation in the district of Faridabad.

### 3.5 Structure of Urbanisation in the District of Faridabad

The structure of urbanisation is analysed in terms of distribution of categories of the cities. As per the available 2011 census data, apart from the Faridabad municipal corporation, which is a class I city, there are 2 more census towns, namely Tilpat and Piala which are class III and VI cities respectively i.e. they are medium and small cities. The analysis suggests that more than 98 per cent of the urban population of Faridabad is there in the Municipal Corporation of Faridabad (Table 5). Naturally its share in total urban population is the highest whereas the shares of Tilpat and Piala

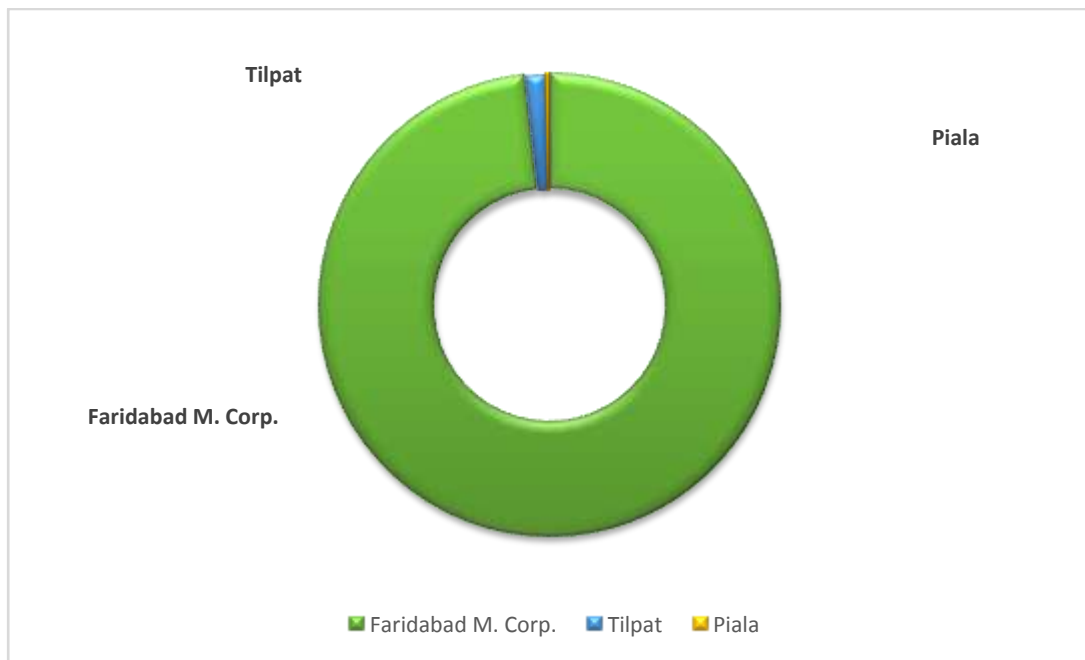
census towns are very negligible. The combined shares of class III and VI cities (the constituents of Medium and Small and Mini cities) is just close to 2 per cent.

**Table 5: Share of Different Towns in total Urban Population of Faridabad**

	Nature of Town	Census Category	Population	As a % of Total Urban Population Of Faridabad
<b>Faridabad M. Corp. Tilpat Piala</b>	Statutory	Class I	1414050	98.28
	Census	Class III	20514	1.43
	Census	Class VI	4291	0.29
		Total	1438855	100

Source: Same as table 3.1.2

Thus, in Faridabad the share of class I cities in total urban population of the district are very high. But, the shares of medium and small cities are very low in spite of being numerically high (Figure 3).



**Figure4: Share of Different Towns in Urban Population of Faridabad**

Thus, the structure of urbanisation in the district of Faridabad has been highly dominated by the large cities. Faridabad Municipal Corporation is the largest urban agglomeration with more than 98 per cent share in the total urban population of the district.





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#### 4. Conclusion

The analysis of the latest available 2011 data suggests that there has been a significant degree of urban expansion in the district of Faridabad. As a result, the numbers of inhabited villages in the district are declining continuously over the years, whereas the numbers of census towns have not changed. Which gives an indication that the existing towns have expanded at the cost of rural villages. Moreover, there has been a phenomenal rise in urban population in Faridabad district. In fact, the level of urbanisation in the district is higher than that in the country as a whole. Very high rate of urbanisation in the district could be due to rise in land prices in the metropolitan city of Delhi. Further not only the level of urbanisation is very high but also the district has witnessed very high growth in its urban population. Last but not the least, it appears that the structure of urbanisation in the district of Faridabad has been highly dominated by the large cities. Faridabad Municipal Corporation is the largest urban agglomeration with more than 85 per cent share in the total urban population of the district.

Given the concentration of urban population in the township of Faridabad and the experiences of the developing countries including India, it can be predicted that the problems of housing congestion, health etc going to be aggravated in the years to come. The policy prescription in this regard could be that the state should put more emphasis in developing medium and small towns in the district such as Tilpat and Piala. Of course, one of the major limitations of this study is that the latest available census data dates back to 2011. The future direction of the research could be a comprehensive study using new set of census data.

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