

# Changing Urban Scenario in Haryana - 2001-2011: A Spatial Analysis

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**Abstract –** The investigation of urban zones and their advancement centers around urban communities, their physical and statistic extension and the pressures and effects that accompany urban development. Particularly in creating nations and developing national economies like India, predictable and cutting-edge data or other arranging important information very regularly isn't accessible. With its Brilliant Urban areas Mission, the Indian government places extraordinary significance on the future advancements of Indian urban zones and pays tribute to the huge scale rustic to urban movement. The possibilities of urban remote detecting and its commitment to urban arranging are talked about and identified with the Indian Keen Urban communities Mission. A contextual investigation is exhibited indicating urban remote detecting based data items for the city of Ahmedabad. Coming about urban development situations are introduced, hotspots distinguished and future activity choices proposed.

**Keywords:** Urban, Urbanization, Urban Growth, Haryana, Spatial Analysis.

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## INTRODUCTION

### 1. Urban Development

Urbanization (1) is a worldwide wonder, with rates shifting from mainland to landmass. While in Europe over 70% of the populace live in urban territories, the urbanization rate in Asia is still underneath half, however - rather than Europe - becoming amazingly quick; measurable information for India displays a rate of urbanization of 31 % (Mucke et al., 2014). Despite the fact that in a worldwide examination these rates may seem low, the expanding populace weight has brought about impromptu development in the urban territories.

Spatial and statistic forms caused by urbanization allude to the expanded significance of towns and urban areas as a convergence of populace inside a specific economy and society (Bhatta, 2010). It in this way gives the idea that urban development runs as an inseparable unit with monetary development and is consequently broadly acknowledged. Bhatta (2010) however, has introduced that inside the logical world, there is no presence of mind whether conservative or scatter urban development is especially good.

It is for the most part concurred that fast and impromptu urban development debilitates maintainable improvement when the essential framework isn't created or when approaches are not actualized. In a few urban areas, impromptu or deficiently oversaw urban extension prompts fast sprawl, contamination, and natural corruption,

together with unsustainable creation and utilization design. Hence precise, predictable and auspicious information on worldwide patterns in urbanization and city development are basic for surveying present and future needs concerning urban development and for setting approach needs to advance comprehensive and impartial urban and rustic improvement (Joined Countries, 2014).

In spite of the fact that data in type of changes in arrive cover and land utilize are pointers for the improvement of areas or quarters, we must know that we for the most part can just do articulations about long back exercises or the current past. The advancement of urban procedures and urban improvement designs or land utilize designs needs facilitate information and data about structures, recreational zones, impenetrable surface and so forth. Urban remote detecting inferred items may not just show urban development designs and urban sprawl from the past however may likewise be utilized to create future situations of urban development and its spatial appropriation. These situations would then be able to be utilized by districts and arranging specialists to call attention to the interest for manageable and guided urban extension.

This paper manages the perception of urban development situations and city advancement in light of information and data obtained through remote detecting. By methods for various building structures and densities distinctive situations are made to show diverse land utilization rates.

## 2. India and Brilliant City

The first Brilliant Urban communities India 2015 Expo held at Pragati Maidan in New Delhi featured the aspiring 'Shrewd City' activity of the Indian government. In June 2015, the Indian Leader Narendra Modi, previous Boss Pastor of the state Gujarat, declared that hundred Indian urban areas will create under the 'Shrewd Urban communities Mission'. This mission will most recent five years (2015 - 2020) and contains a financial plan of in excess of 7 billion dollars (Rs 48,000 crore). Ahmedabad, among other five urban areas of the state Gujarat will be a piece of this mission. Despite the fact that it is misty what a "shrewd city" is, the objective(s) is clear: "In the way to deal with the Brilliant Urban areas Mission, the goal is to advance urban areas that give center framework and give a better than average personal satisfaction to its nationals, a clean supportable condition and utilization of 'Keen Arrangements'." (Administration of India, 2015) "Savvy arrangements" with regards to the Indian Shrewd City approach involve powerful IT availability and digitalization, clever movement administration, brilliant metering and savvy stopping; it implies the application and consolidation of the supply of open and business administrations into one digitized organize.

The Indian government's approach and its vision of Brilliant urban areas (firmly) vary from the European thought of shrewd urban communities, not just regarding measurements (previous with a populace of in excess of 1 billion occupants) yet in addition as far as its principal state of mind (sufficient water supply, sanitation and so forth.); consequently European keen city ventures and thoughts are not additionally talked about in this work. Disengaged and sporadic enhancements might account for one basic and all-encompassing technique for approach.

With everything taken into account Keen Urban communities India contains numerous administrative regions, from brilliant ports, shrewd armed force powers and savvy airplane terminals to the production of modern parks and halls like the DMIC: The Delhi Mumbai Mechanical Hallway (DMIC). The Savvy Urban communities India program is a program to improve among others quality and execution of urban administrations, lessen expenses and asset utilization inside urban situations which incorporates complete urban arranging methodologies. Be that as it may, as experienced and guaranteed in numerous logical inquires about, the absence of information, information accessibility and information reality are frequently restricting components. The Keen Urban communities mission and the accomplishment of its objectives however require merged information about the urban region including dispersion of developed zone, connection of developed and green zones, learning about future advancement pivot, building thickness and so forth.

Urban remote detecting may assume a critical part for the use of Keen Arrangements that "will include the utilization of innovation, data and information to improve foundation and administrations." (Legislature of India, 2015)

### 1.3 Potential of Urban Remote Detecting in Setting of Keen City

Urban organizers in creating nations are stood up to with a quick development of urban agglomerations. Casual settlements are all the time parts of urban areas and casual financial movement frequently assumes a critical part inside urban communities economy. Through the absence of assets the social occasion of information on the ground turns out to be increasingly testing.

Urban remote detecting may substitute missing information and extension data holes, can underscore spatial patterns and encourages city organizers to execute vitality arranging in a spatial setting.

The interminable change of dynamic and detached sensors and in addition the availability of high determination pictures and other remote detecting information are the base for the these days various exercises in the field of urban remote detecting. In any case, the fields of use of earth perception for urban arranging and vitality arranging purposes frequently keep up to be dubious or obscure to urban organizers, districts or arrangement producers.

The dissemination of urban focuses isn't uniform all through the ponder region; there is fairly huge variety in the progressive system of urban focuses which is spread all through the examination territory. In spite of the fact that the quantity of urban focuses in the state has expanded from as little as 72 out of 1971 to as substantial as 214 out of 2011, the extent of urban populace has seen an expansion from 8.8 % to just 14 % amid the said period. Be that as it may, the state has encountered a striking rate of urban development both in wording of urban populace and urban focuses promptly after its freedom. With this foundation, an endeavor is being made to break down the changing example of spatial association and chain of command of urban focuses in Assam especially amid the period 1971-2011.

## LITERATURE REVIEW

Carl O Sauer wound up powerful in urban topography as he propelled geographers to think about acity's populace and financial angles with respect to its physical area. as far as a progressive system of urban areas — a convention that goes the

distance back to Walter Christaller's great work written in 1933, Focal Places in Southern Germany.

O.H.K Spate and E. Ahmad (1950) their article was distributed in Topographical audit under the title of "five urban areas of Gangetic Plain". R.L singh in 1995 concentrated the Ghettoes of Allahabad under low urbanization. Ashish Bose (1980) examined the India's Urbanization 1901-2001. Amitabh kundu (1992) distributed his book urban improvement and Urban Exploration in India. R. Ramachandran(1995) examined Urbanization and Urban Framework in India. J.B Ganguly (1995) composed a book "Urbanization and advancement in North East India". . B.K Prasad (2003) he plot the different variables influencing the urban improvement design in Assam.

### Information Sources and Procedure

The present examination is primarily in view of optional information, which is gathered from Registration of India, Evaluation of Haryana and Factual Dynamic of Haryana. The registration year 2011 is chosen for this investigation. The information has been prepared, classified, examined and mapped utilizing reasonable measurable and cartographic methods.

Locale shrewd spatial variety in urbanization, has been appeared on maps by utilizing choropleth technique arranged in Circular segment GIS. Qualities has been ascertained by utilizing the accompanying recipes:

- Levels of urbanization in Per penny =  $\frac{\text{Urban Populace}}{\text{Add up to populace}} \times 100$

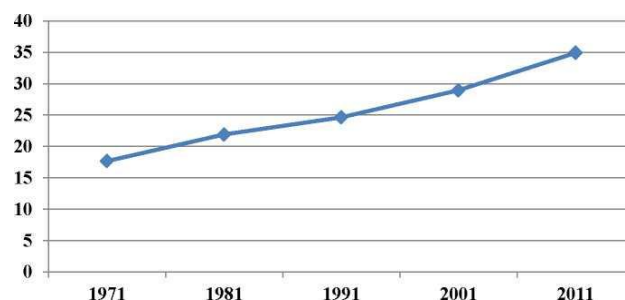
### RESULTS

While examining about the patterns of urbanization in Haryana since 1971 to 2011; the percent of urban populace has expanded from 17.66 to 34.90 separately. It demonstrates that in most recent four decades percent urbanization has multiplied.

**Table-1: Patterns of Urban Populace and its Development in Haryana, 1971 - 2011**

Years	Urban Population (per cent)	Growth Rate
1971	17.66	35.58
1981	21.88	59.47
1991	24.63	43.41
2001	28.92	50.52
2011	34.90	44.59

### TRENDS OF URBAN POPULATION



Essentially this pattern demonstrates the adjustment in kind of economy. As in Haryana at first the agrarian economy overwhelmed amid 1971; however with the progression of time it changed into modern based economy. So the procedure of urbanization was accelerated (adapted). While examining the development rate of urban populace since 1971 to 2011; the most extreme development rate was in 1981 i.e. 59.47%, which demonstrates a fast improvement in field of horticulture and thus the advancement of mandi towns in urbanization demonstrates that it is more urbanized when contrasted with the national average. Intends to state that the level of urbanization in Haryana (2011) is 34.90 % while the national normal is 31.16 % (table 1.1) and fig 1.1.

### PATTERNS OF URBANIZATION:

Amid the enumeration of 2001 the urban populace in Haryana was 28.92% and it expanded upto 34.90% of every 2011. Faridabad was exceedingly urbanized and Mewat was at the most minimal point in the evaluation 2001 and 2011. To comprehend the procedure of urbanization it is important to center around various social, economy, recorded and political elements of specific area. On the off chance that we see levels of urbanization in entire India it demonstrates the least urbanization rate when contrasted with different states. Be that as it may, amid this Haryana stayed at the fourteenth place among different states i.e. 2001 and 2011 both.

For better understanding we will classifications the levels of urbanization in Haryana for 2001 and 2011. Table-2: Level of Urban Populace, with male and female populace (Haryana)

Districts	Urban Population (in percent) 2011			Urban Population (in percent) 2001		
	Total	Male	Female	Total	Male	Female
Panchkula	55.8	53.2	46.8	44.48	53.9	46.1
Ambala	44.4	53.3	46.7	35.2	54	46
Yamunanaga	38.9	53.5	46.5	20	54	46
Kurukshetra	28.9	53.7	46.3	26.1	54.1	45.9
Kaithal	22	53	47	19.4	52.9	46.1
Karnal	30.2	52.9	47.1	27	54	46
Panipat	46	53.5	46.5	40.5	55	45
Sonipat	31.3	53.5	46.5	25.12	54	46
Jind	22.9	53.2	46.8	20.3	53.8	46.2
Fatehabad	19.1	52.6	47.4	17.6	53.2	46.8
Sirsa	24.6	52.8	47.2	26.3	53.3	46.7
Hisar	31.7	53.7	46.3	26	54	46
Bhiwani	19.7	53	47	19	54	46
Rohtak	42	53	47	35	53.7	46.3
Jhajjar	25.4	53.6	46.4	22	55	45
Mahendragra	14.4	52.9	47.1	13	53	47
Rewari	25.9	53.4	46.6	18	54	46
Gurgaon	68.8	54.2	45.8	36	54	46
Mewat	11.4	52.4	47.6	07	53	47
Faridabad	79.5	53.4	46.6	60.8	55	45
Palwal	22.7	53.1	46.9	-	-	-

**Table 3 Categorization of Districts**

S. No.	Category	Districts in 2001	Districts in 2011
1.	Very High Urbanization (Above - 50%)	Panchkula, Faridabad	Panchkula, Faridabad, Gurugram
2.	High Urbanization (40 - 50)	Panipat	Panipat, Ambala, Rohtak,
3.	Moderate Urbanization (30-40)	Ambala, Rohtak, Gurugram	Yamunanagar, Karnal, Sonipat, Hisar
4.	Low Urbanization (20 - 30)	Kurukshetra, Jind, Karnal, Sonipat, Sirsa, Hisar, Jhajjar	Kurukshetra, Kaithal, Jind, Sirsa, Jhajjar, Rewari, Palwal
5.	Very Low Urbanization (Below - 20)	Yamunanagar, Mewat Fatehabad, Bhiwani, Rewari, Mahendergarh, Kaithal,	Mewat, Fatehabad, Mahendergarh, Bhiwani,

The similar examination is appeared in delineate for urbanization in 2001 and outline for urbanization in 2011. Amid registration year 2001; about areas having level of urbanization beneath the state level i.e. 28.92% . Also, there are just six regions which were more urbanized than the state level. Panchkula and Faridabad are exceedingly urbanized and having urbanization over half. In the state exceptionally poor urbanization exist in Yamunanagar, Kaithal, Fatehabad, Bhiwani, Mahendergarh, Rewari and Mewat.

In 2001; seven regions i.e. Yamunanagar, Mewat, Fatehabad, Bhiwani, Rewari, Mahendergarh lie in the category of low urbanization. This example demonstrate a noticeable change and just 4 locale are currently in this category. These locale are Mewat, Fatehabad, Mahendergarh, Bhiwani.

In the class of low urbanization; there are seven locale amid both statistics years and the area of Palwal (the recently made region) and Rewari moved from low urbanization to low urbanization.

In the classification of direct urbanization; Gurugram lies in 2001 statistics however amid the registration year 2011 Gurugram is having high level of urbanization i.e. over half. In 2001 evaluation Panipat was the single state in classification of high urbanization (40 % to half); However amid 2011 enumeration there are three locale ( Rohtak, Ambala, Panipat) in this class.

High urbanization in 2001 evaluation incorporates the region of Panchkula and Faridabad and amid 2011 enumeration there was one more expansion i.e. Gurugram. mid evaluation year 2011; the very urbanized areas are Panchkula, Gurugram and Faridabad. Low level of urbanization, Bhiwani and Fatehabad. Subsequent to seeing every one of the classifications of percent urbanization demonstrate a positive change in Haryana from 2001 to 2011.

## CONCLUSION

The primary reason for the examination is to investigations the patterns of urbanization in Haryana since 1971 to 2011. These patterns demonstrates a nonstop up degree in percent urbanization from 17.66 % 34.90 % individually. Most extreme development rate is amid 1981, other than this there is a positive growth rate in consistently.

## REFERENCES

- Amitabh, K. et. al. (2005). "A Handbook of Urbanization in India", Oxford College Press, Washington.
- Bhagat, R.B. (1992). Segments of Urban Development in India with Reference to Haryana :a Discoveries from Late Censuses Nagarlok, Vol. 25, No.3, pp.10-14.
- Chandna, R.C. (2009). 'Geology of Populace: Ideas, Determinants and Examples', Kalyani Distributors, New Delhi.
- Enumeration of India (2001). Last Populace Aggregates: Urban Agglomerations and Towns, Arrangement I, India, pp. 59-70.
- Goel, S., (2012). 'Levels, Patterns and Examples of Urbanization in Haryana, 1971-2001', Asia-Pacific Diary of Sociologies, Vol. 4(2), pp 1-41.
- Haryana Government, "Urban Nearby Bodies Office," Notice No. 18/6/2010-3C1, 2010.

Heggade, O.D. (1998). 'Urban Improvement in India: Issues, Arrangements and Projects', Mohit Productions, New Delhi. |

Jain, M.K., Ghosh, M. also, Kim, W.B. (1992). "Developing Patterns of Urbanization in India", Infrequent Paper No. 1 of 1993, Office of the Enlistment center General, and Enumeration Magistrate, India, New Delhi, p. 22.

Kumar, S. et. al. (2011). Urban Populace: Appropriation and its Financial Characteristics in Haryana (2011) Universal diary Worldwide research investigations Volume : 2 | Issue : 12 | Dec 2013 • ISSN No 2277 - 8160

Measurable Theoretical (2011). Legislature of Haryana, India.

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