

HOUSING TRANSFORMATION AROUND MAJOR URBAN TRANSPORTATION CORRIDORS IN THE MEGA CITY DELHI

Abstract

The paper analyses the physical, socio-economic and land value transformation in Housing seen in Delhi over the last fifteen years around four metro stations especially in affluent as well as middle income localities, the affluent being Green Park and Hauz Khas on the Yellow line and the middle income being Janakpuri West and Subhash Nagar on the Blue line. It concludes describing the transformation which is Socio-economic that Delhi seems delicately poised with its in migration and parking problems and the recently arrived metro network eighteen years now which has improved and provided the necessary Accessibility. And taking that TOD (Transit Oriented Development) step of relaxing FAR or FSI and relaxing building heights could be catastrophic for Delhi.

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Introduction

With the introduction of the metro in a number of cities in India, it has suddenly improved accessibility resulting in land use transformation also resulting in increase in urban transport activity. Residential or Housing transformation generated due to MRTS is due to the intensity of use, increase in real estate values, prime location in city, housing typology & redevelopment potential of an area due to revision of development controls.

In this article we shall be dealing with the transformation in Housing around metro stations due to improved accessibility. On the face of it most of the

transformation is from Residential use to Commercial use around transport corridors (which include arterials).

Delhi Development Authority in its MPD2021 Transit Oriented development guidelines has increased FAR around metro stations and corridors and earmarked minimum housing component in all projects. As Delhi is facing a shortage of 24 lakh housing units by 2021. Thus the thrust is on densification to overcome the sprawl that has already taken place. But the implication of DDAs revised TOD guidelines have to be reviewed carefully taking into account Quality of life, green areas and infrastructure. Thus the current situation of Delhi its land use picture, density of areas, green areas available and infrastructure will have to be reviewed.

Within the revised DDA guidelines land owners of small residential plots in metro station and corridor areas can pool in their plots (a minimum of 3000sq.m. in total) and avail the revised FAR & relaxation in height restrictions. This may have serious implications in the future growth of Delhi and quality of life and hence needs to be reviewed, considering that metro stations and corridors now cover most of Delhi. The Transit Oriented Development guidelines in the MPD2021 (Master Plan of Delhi) offers a FAR of 450-500 in the 800 metre radius of metro station and 500 metre on either side along metro track.

1.1 PROFILE OF DELHI

National Capital Territory (NCT) of Delhi, it is the eighth largest metropolis in the world. Delhi has nine districts with a total area of 1483 sq. km. and these are administratively divided into a total of 272 wards.

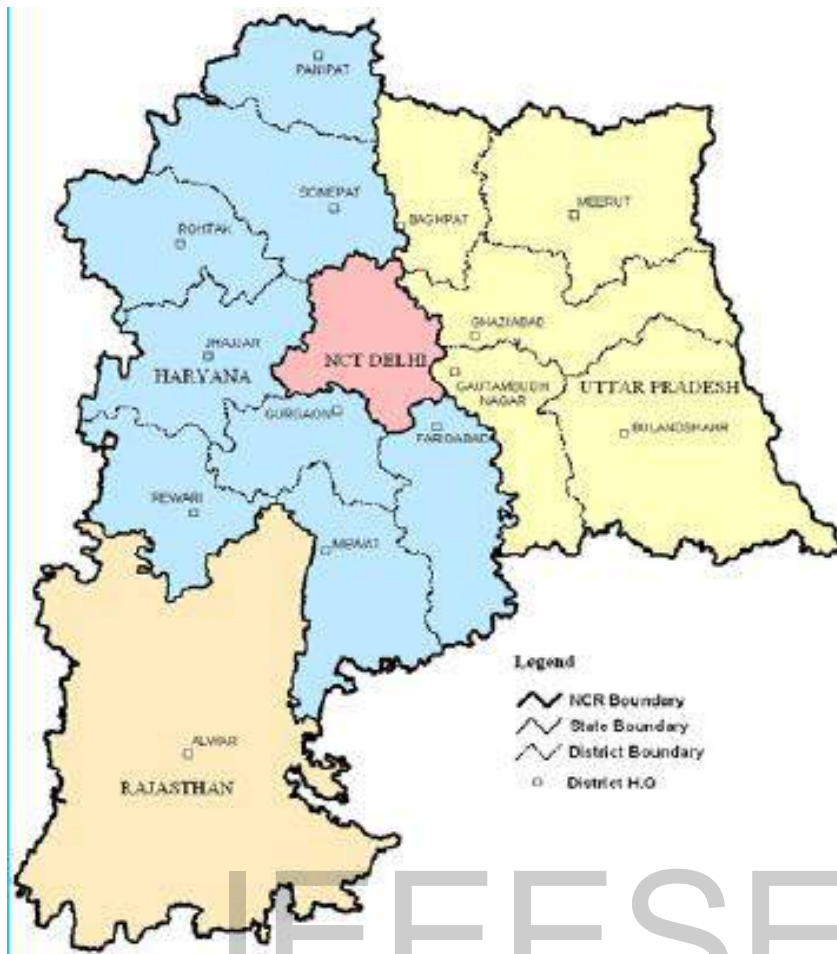
Delhi sprawled over an area of 1483sq.km. with a current population of 163lakhs approx. and a projected population of 230lakhs by 2021, would imply a housing

requirement of 24 million units to accommodate this growth while greenfield land available for future urbanization is less than 20% (Sashidharan Sahil, Masters SPA 2011). The majority of housing units required are the 25sq.m. and 40sq.m. units as this is only what the majority of the population can afford.

The National Capital Region has a total area of 33578 sq. kms which includes:

- The National Capital Territory of Delhi.
- Haryana Sub-region comprising of eight districts namely, Faridabad, Gurgaon, Rothak, Sonapat, Rewari, Jhajjar, Mewat and Panipat.
- Rajasthan Sub-region comprises of Alwar district.
- Uttar Pradesh Sub-region comprising of five districts namely, Meerut, Ghaziabad, Gautam Buddha Nagar, Bulandshahr and Baghpat.

The spatial expansion in the centre of NCR-Delhi can be expressed as a function of population growth and economic transformation, and the changing mode of transportation. The projected population increased from 4.8million in 1977 to 11.8 and 16.3million in 1999 and 2010. Delhi is not an industrial city and was reliant on trade & commerce. In 1977 economic liberalization had not started and the economy was driven by the public sector, which saw relatively slow paced growth. The public transportation via buses was sufficient to cater to the population growth; as a result development was concentrated around the Core of the city. (Manisha Jain, Stefan Siedentop, Hannes Taubenbock and Sridharan V Namperumal)



The nodes of suburban development (satellite towns) were separated by open spaces and connected to Delhi through national highways. But urban growth picked up momentum from the first phase of economic liberalization in 1991 in the second phase in 2000 which increased job opportunities paralleled by population and intensified development pressure to house offices and residential spaces.

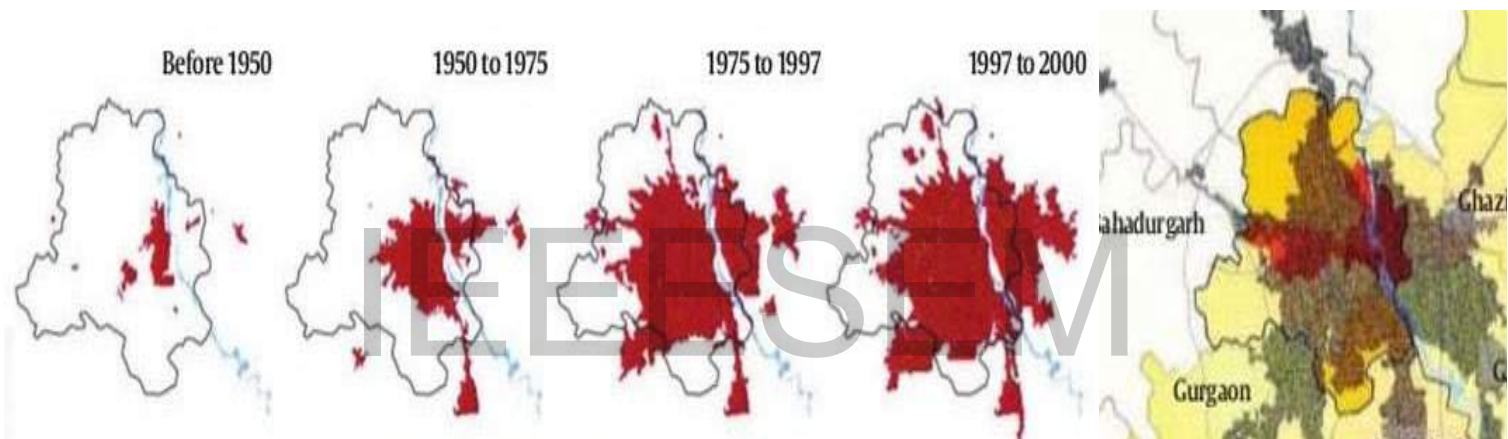
Furthermore, the increasing population and income increased car ownership (i) buses were insufficient to cater to the population demand (ii) public transport was not reliable. The increased reliance on cars broke open the city in all directions with increased ribbon development along the national highways connecting satellites with Delhi which expanded towards each other merging their built-up area resulting in a coalescence of the initially separated suburbs with Delhi

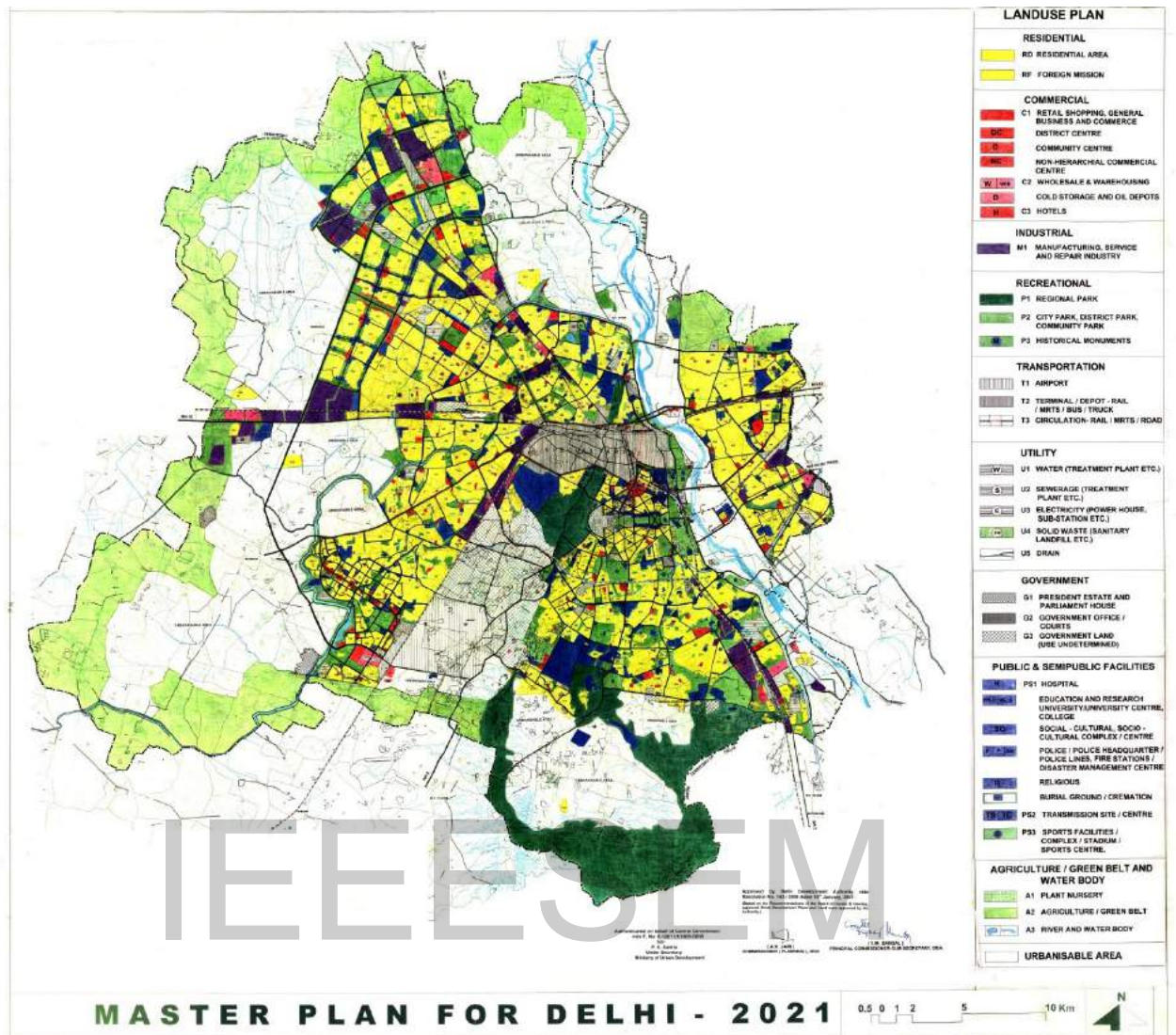
rendering state boundaries obsolete. Finally ,the introduction of Mass Rapid Transit System(MRTS) since 2000 has further accelerated growth.

The above increased the ratio of total built-up area of the total area of Delhi from 11% in 1977 to 32% and 38% in 1999 and 2010, respectively. Since the developments mainly targeted the urban periphery due to the availability of large parcels of land, the radius of spatial extent of the built-up area increased from 15km in 1977 to 35km in 2010. The growth until 1977 was characterized as nodes with the developments limited to the identified towns. By 1999, the nodes were transformed to corridors with developments along the transport network, especially along the national highways and regional rail lines connecting Delhi with its satellites. Eventually, by 2010, nodes and corridors merged into one mass characterized by Gottmann (1957) as a megapolis. (Manisha Jain, Stefan Siedentop, Hannes Taubenbock and Sridharan V Namperumal)

Apart from the aforementioned, the spatial spread of Delhi has been caused by a combination of factors (i) single use zoning and low FARs allocation in the master plans, (ii) large scale land acquisition and disposal policy resulted in lack of affordable housing and delayed release of developed land for implementing master plan, and (iii) the Rent Control Act, and Urban Land Ceiling and Regulation Act did not release the envisaged housing and property in the market. As a result of all the above restricted developed land and housing supply to the market forcing new development mostly on the periphery (Ashok Kumar 2004). Simultaneously, in 1976, Haryana adopted the Public Private Partnership model for land development which propelled the developments in Gurgaon and Faridabad. Besides, U.P. pitched Noida & Greater Noida that propelled built-up area outside the Core of Delhi.

Delhi started in 1981 with the stage of suburbanization, however with a difference. The later decades of urban development in NCR-Delhi led to a high rate of population growth which outpaced employment growth. This is in contrast to developed countries, where employment growth was either parallel or higher than population growth (Berry1971; Bradshaw 1987). This rendered a character of growth marked by increasing slums and an expanding informal economy which resulted from the lack of employment opportunities in the formal service sector for unskilled migrants, resulting in degradation and generation of disproportionate costs of urban growth and maintenance of urban facilities.





Land use plan of Delhi MPD 2021

2.1 PROFILE OF DELHI METRO NETWORK

Delhi metro which began operations in 2002 consists of eight color coded lines- Red, Yellow, Blue, Violet, Magenta and Pink and when completed no point in Delhi would be further than 15 minutes walking distance from a metro station.

It consists of both overground elevated and underground stretches. It has made the giant 1483sq.km sprawled Delhi accessible and improved connectivity. It covers a length of 343km with 250 stations.

It has reduced automobile pollution and congestion to a great extent and one cannot help but notice the complete metro network with the built development in Delhi is delicately poised.

The Delhi metro stations and lines are running over mostly the main arterials of Delhi except in the case of Dwaraka which was planned recently in the 1990s.

2.1.1 PRIMARY SURVEY

Now let us analyze the Housing transformation around metro stations in Delhi and we shall analyse transformation around stations in the oldest metro lines of Delhi as maximum transformations can be seen there, namely the:

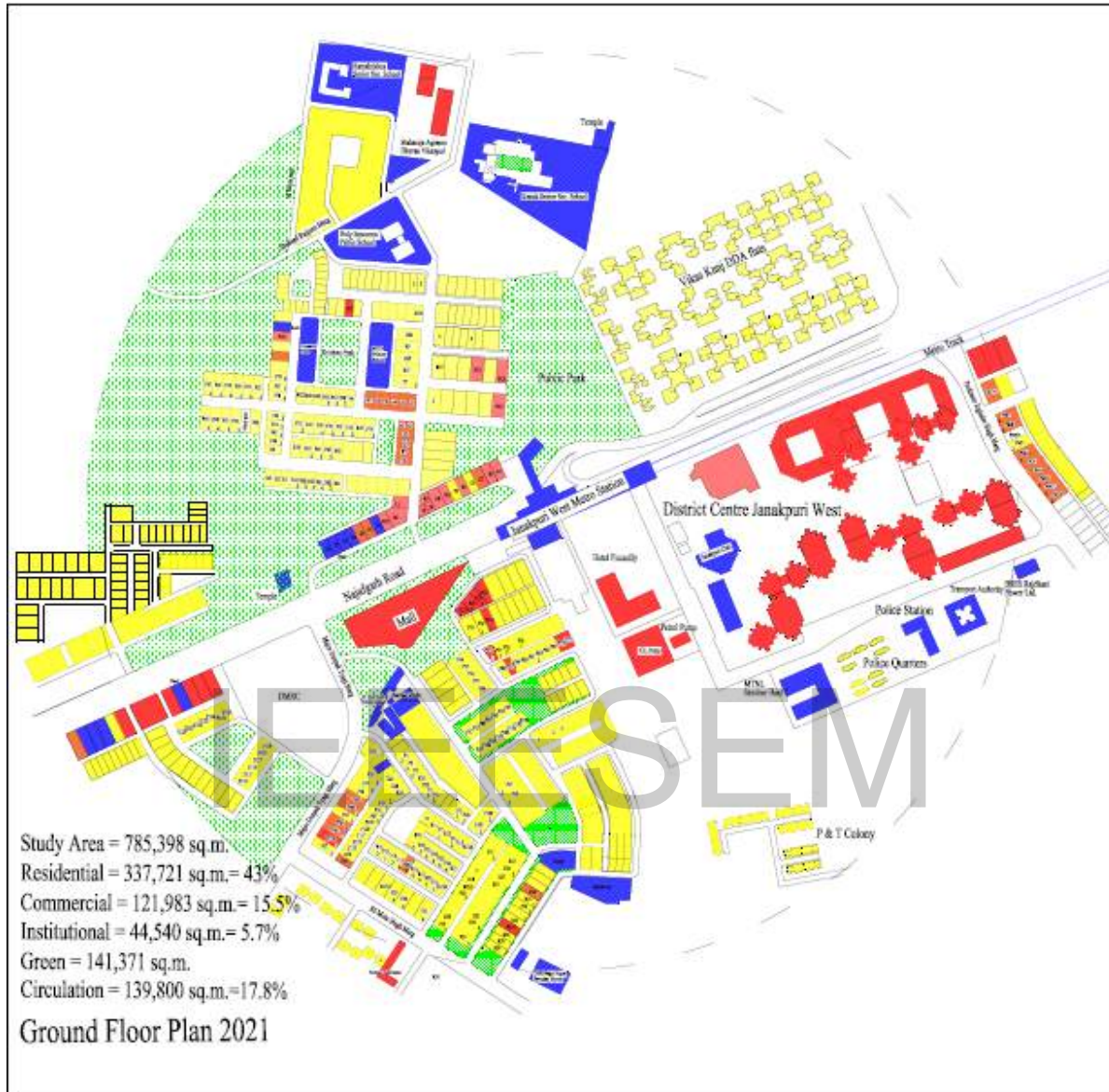
1. Blue line
2. Yellow line, and
3. Red line.

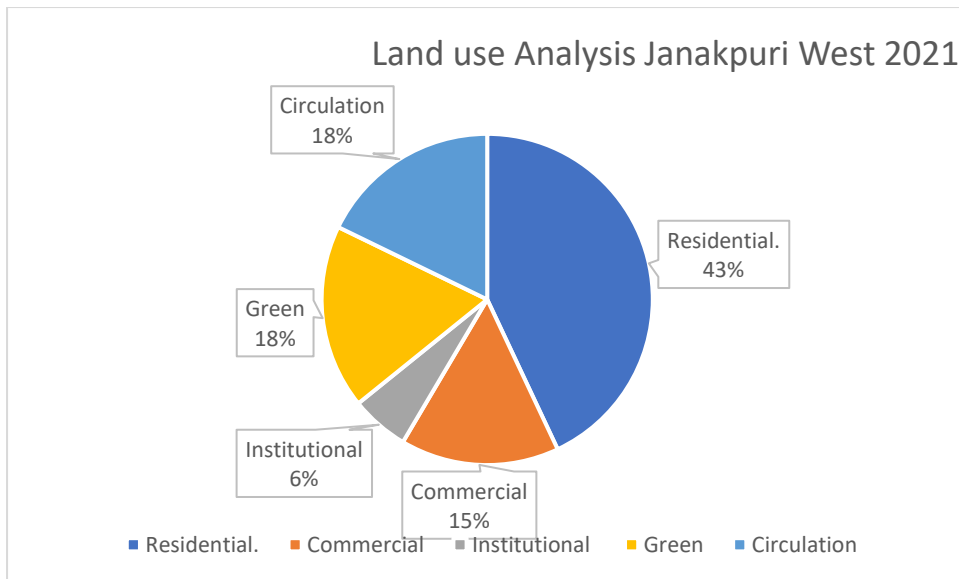
The metro stations are Janakpuri West and Subhashnagar on the Blue line; Green Park and Hauz Khas on the Yellow line and Seelampur & Welcome on the Red line. The analysis of Seelampur & Welcome mostly unauthorised colonies shall be dealt with at a later date.

2.1.1.1 JANAKPURI WEST METRO STATION

Janakpuri West metro station is located at the fringe of Janakpuri along Najafgarh road. It has the Piccadily Hotel and a couple of malls adjacent to it. It is also located adjacent to the Janakpuri District centre. Across Najafgarh road lies Krishna Park a plotted residential development and adjacent to it along Najafgarh road lies a DDA housing encircled by a high perimeter wall thus cutting it off from rest of the area. Across the road from Krishna Park adjacent to Piccadily hotel lies another plotted residential development- Chandernagar.

It is been noticed over the last fifteen years that the plotted housing is transforming to Commercial development and Developer floors at a rapid pace.



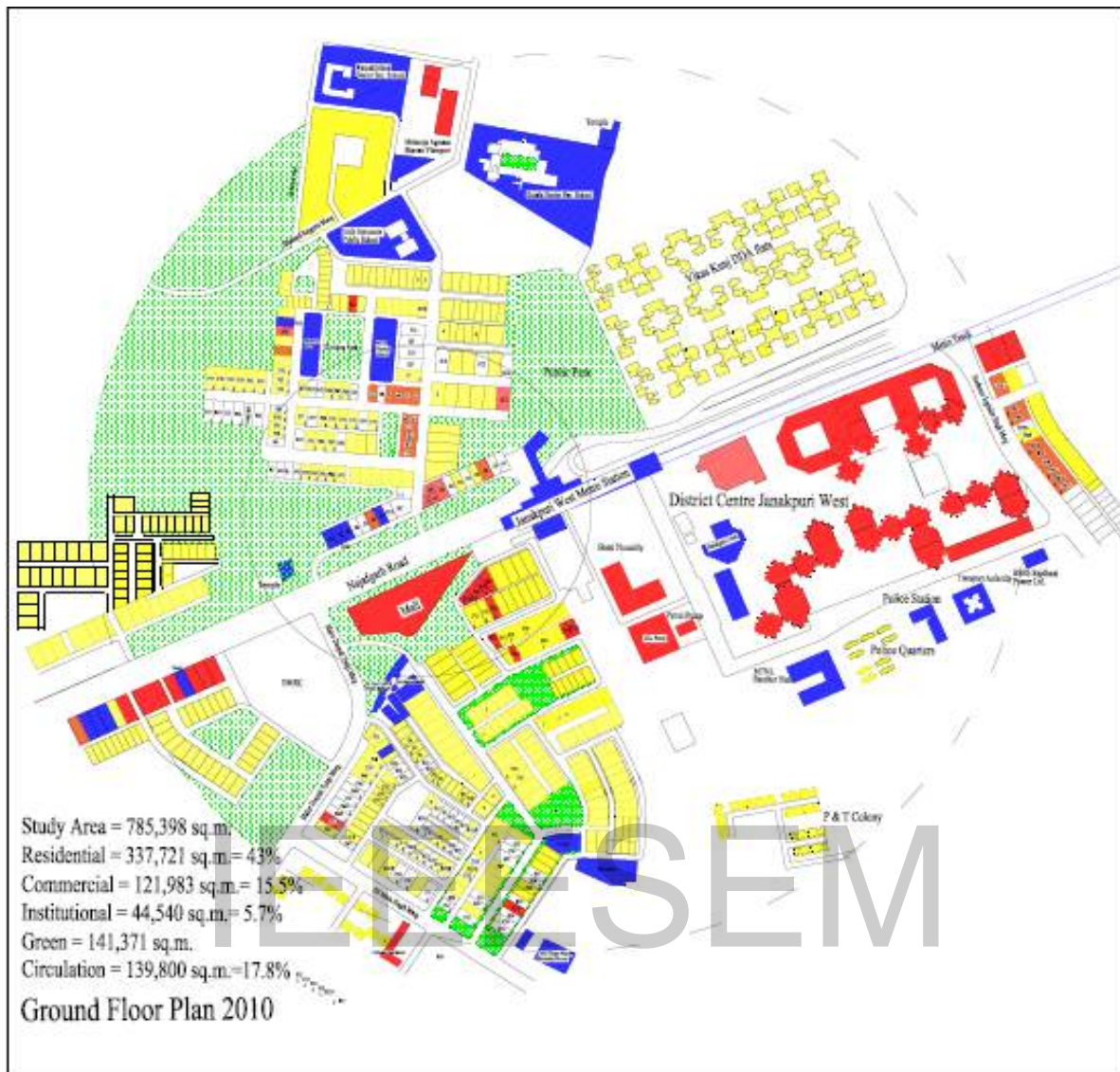


Janakpuri West metro station area vicinity has been undergoing observable transformation in the last 15 years, residential plots getting transformed to commercial use specifically on the main Najafgarh road being the pattern that is evident throughout along this main arterial. The trend being Health care facilities, multinational electronic enterprises, Coaching institutes imparting computer courses , Apparel retail etc.

PROPERTY PRICES AT	
JANAKPURI WEST 2020	
(i) Resd. plots	Rs3.8lakhs/sq.m.
(ii) Builder floors	Rs 1.2lakhs/sq.m.

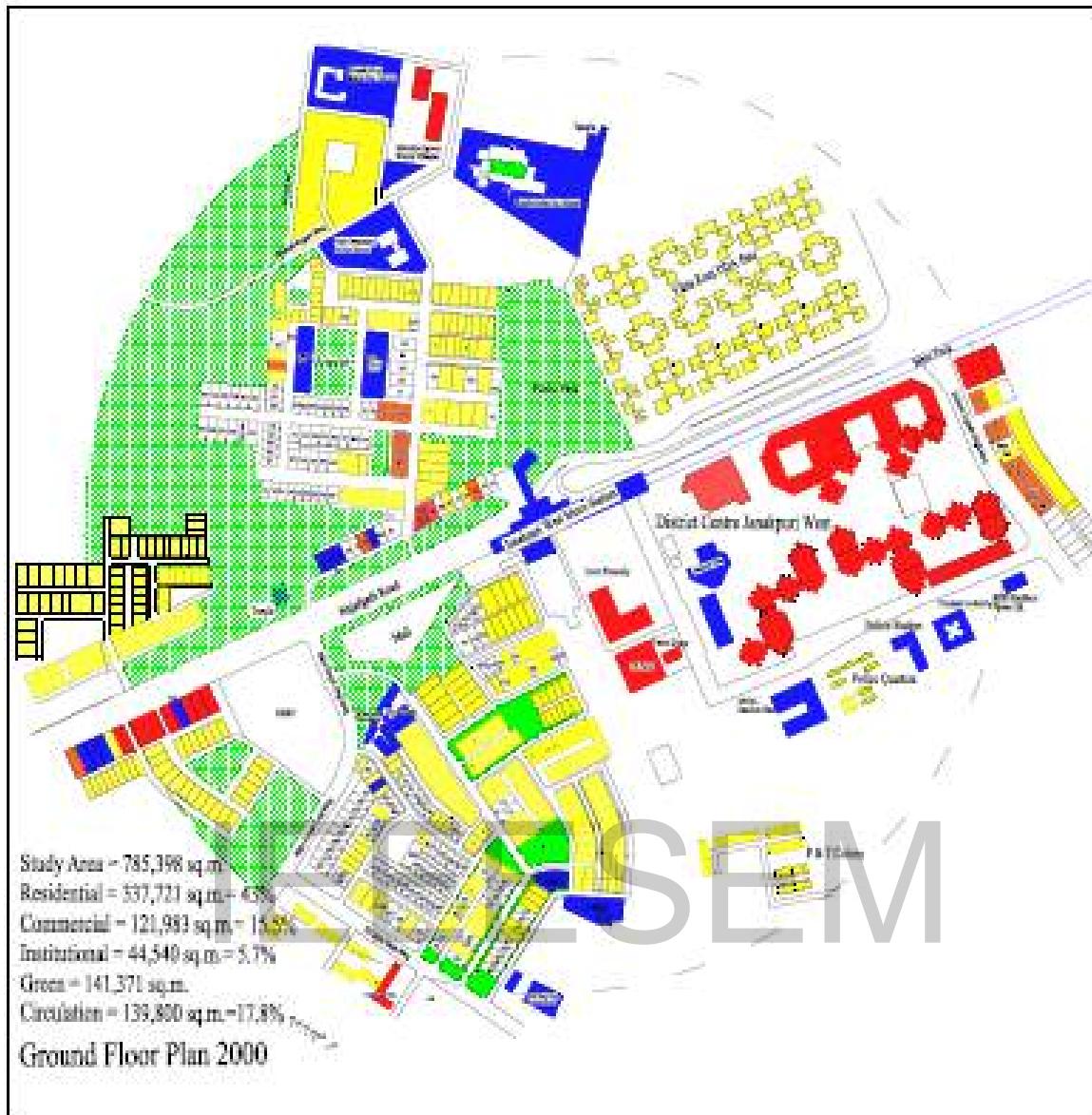
Population

Chander Nagar, Krishna Park and the Janakpuri District centre fall in the catchment of Janakpuri West metro station .Population in the 500 metre radius catchment of Janakpuri West metro station is 15413.



Comparative land use maps of the years 2000,2010 and 2020 reveal the transformation taking place during the period the major transformation being into Developer floors, the transformation to Commercial being miniscule in comparison.

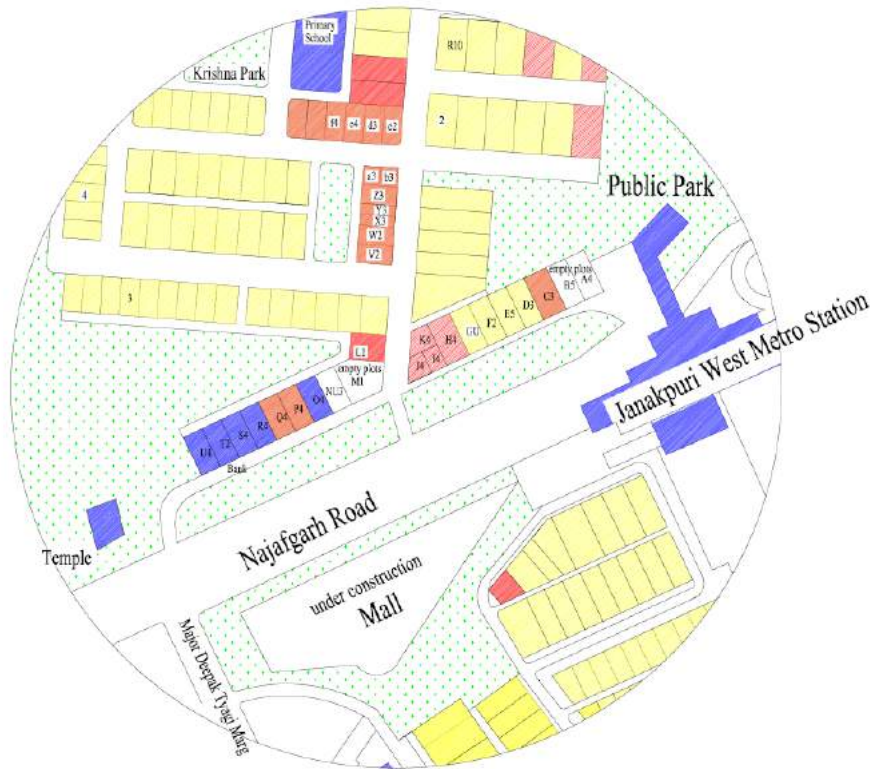
Plots left uncoloured signify no development till then or no transformation.



HOUSING TRANSFORMATION ON STREET NORTH WESTERN SIDE OF JANAKPURI WEST METRO STATION

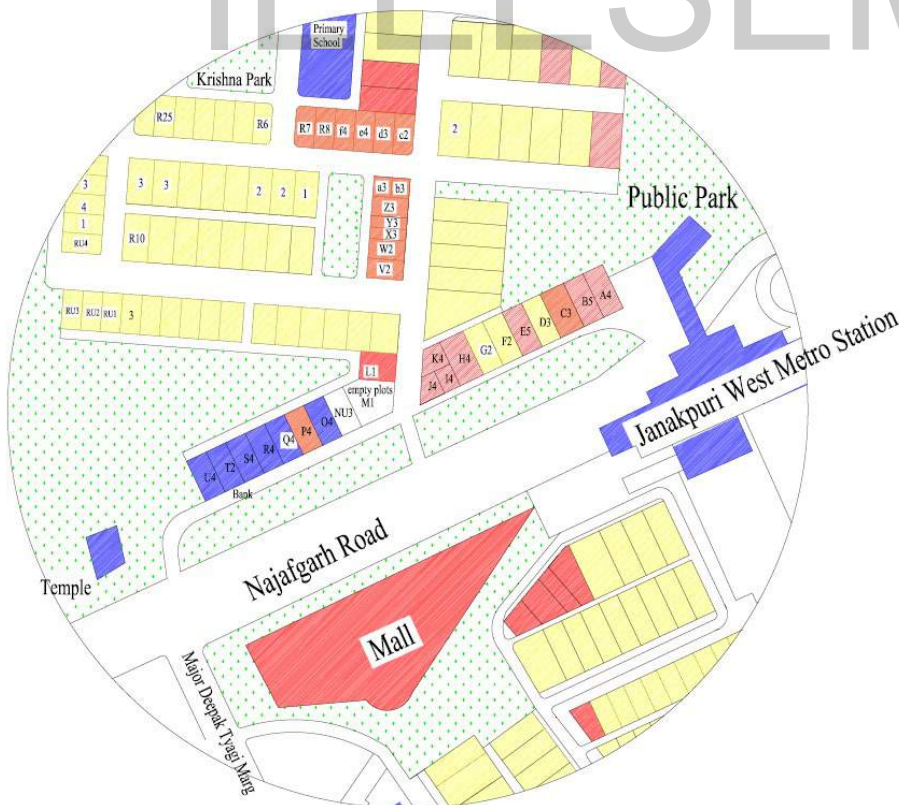
Plots getting transformed to 4-storey developer floors have been marked R-1, R2, The numeral given along with the plot no. in the coding of each plot conveys the total number of storeys of the building. In case of most developer floors the ground floor is common parking.

The part plans below exhibit the transformation from 2008 to 2020 in front street fronting Najafgarh road.



Part Ground Floor Plan 2008

IEEESEM

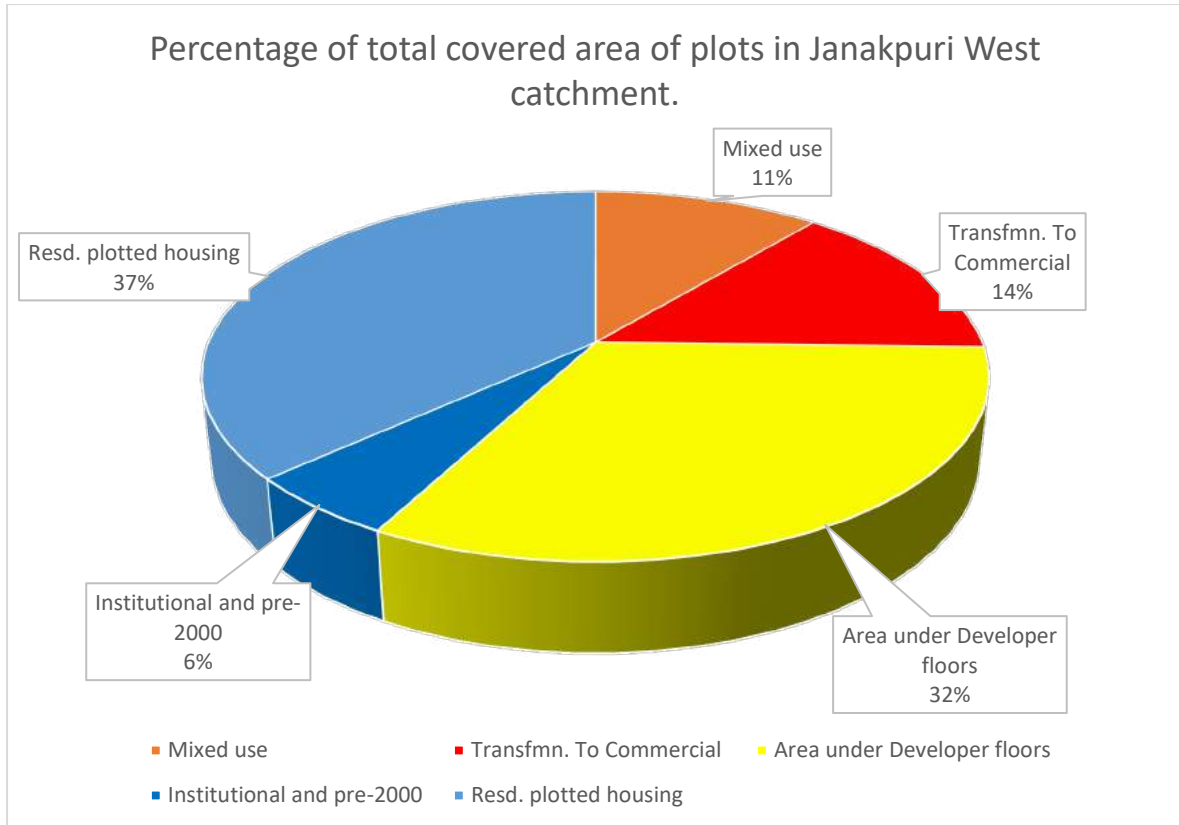


Part Ground Floor Plan 2016

Maximum transformations have been seen on this front street in Janakpuri West in the last twelve years, mostly conversion of Residential to Commercial use.

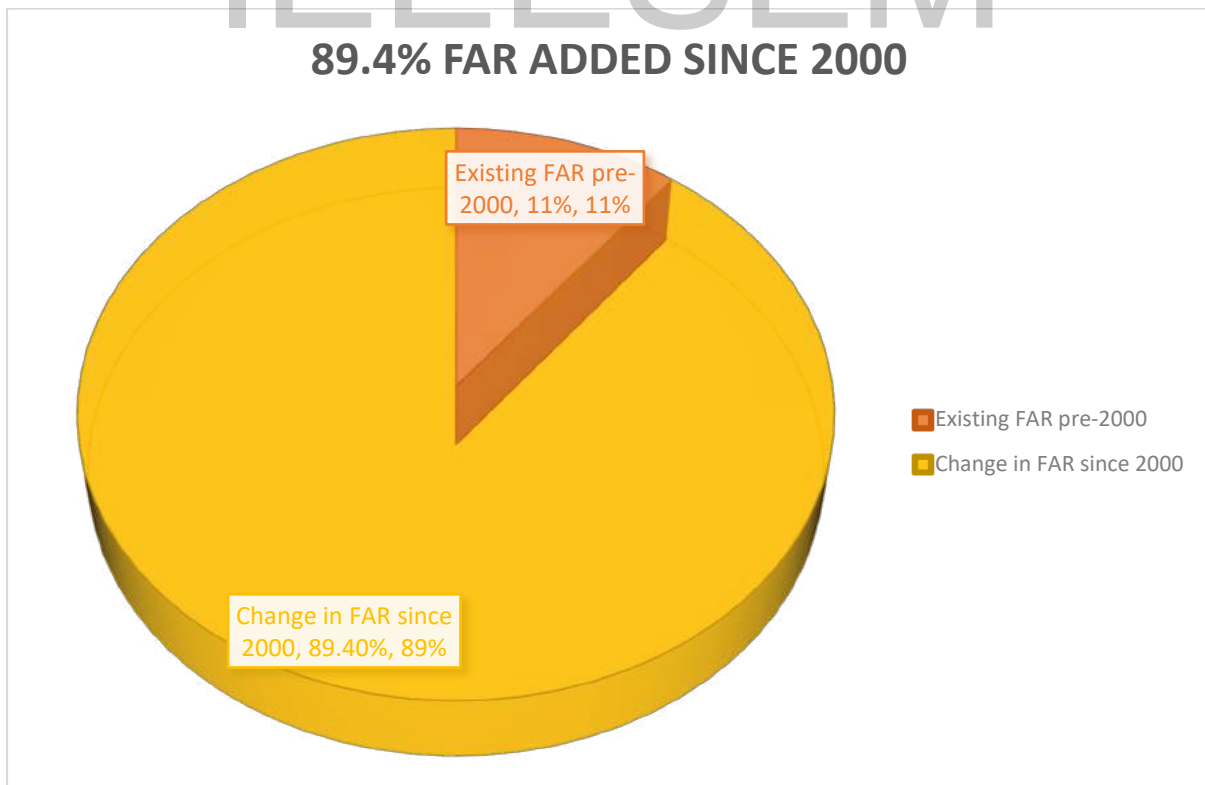
Plot sizes & classification around Janakpuri West metro station

S.No.	Plot area sq.m.	No. of plots	Original land use	Land use after transformation	No. of plots after transformation	Remarks: Transformed to	Physical transformation	Land use transformation
1	140	6	Residential	Residential	6	2 Developer floors	✓	
2	145	2	Residential	Residential	2		✓	
		1	Residential	Commercial	1		✓	Yes
3	150	4	Residential	Residential	4		✓	
		1	Residential	Commercial	1		✓	Yes
4	155	6	Residential	Commercial	6		✓	Yes
		3	Residential	Institutional	3		✓	Yes
5	160	10	Residential	Residential	10	4 Developer floors	✓	
		3	Residential	Commercial	3	3 Developer floors	✓	Yes
		1	Residential	U	1		✓	
6	165	5	Residential	Residential	5		✓	
		U	Residential	U	U		✓	
7	170	16	Residential	Residential	16	2 Developer floors	✓	
		6	Residential	Mixed	6	4 Developer floors	✓	Yes
		2	Residential	Commercial	2		✓	Yes
		1	Residential	U	1		✓	
8	180	16	Residential	Residential	16	3 Developer floors	✓	
		1	Residential	Mixed	1		✓	Yes
		1	Residential	Commercial	1		✓	Yes
9	195	1	Residential	Residential	1		✓	
		2	Residential	Commercial	2		✓	Yes
10	210	6	Residential	Residential	6		✓	
		1	Residential	Mixed	1		✓	Yes
11	220	3	Residential	Residential	3	2 Developer floors	✓	
12	225	3	Residential	Residential	3		✓	
13	230	4	Residential	Commercial	4		✓	Yes
		4	Residential	Mixed	4		✓	Yes
		6	Residential	Institutional	6		✓	Yes
		1	Residential	U	1		✓	
14	235	6	Residential	Residential	6		✓	
15	250	1	Residential	Residential	1		✓	
		2	Residential	Commercial	2		✓	Yes
16	260	7	Residential	Residential	7	4 Developer floors	✓	
17	270	4	Residential	Residential	4		✓	
		2	Residential	Commercial	2		✓	Yes
		4	Residential	Mixed	4		✓	Yes
18	275	2	Residential	Residential	2	2 Developer floors	✓	
		9	Residential	Mixed	9		✓	Yes
19	280	4	Residential	Residential	4		✓	
20	320	1	Residential	Mixed	1		✓	Yes
21	325	1	Commercial	Commercial	1		✓	
22	330	8	Residential	Residential	8	5 Developer floors	✓	
23	335	1	Residential	Residential	1	1 Developer floor	✓	
24	355	2	Residential	Residential	2		✓	
25	360	3	Residential	Residential	3		✓	
26	395	1	Residential	Residential	1		✓	
27	415	1	Residential	Commercial	1		✓	Yes

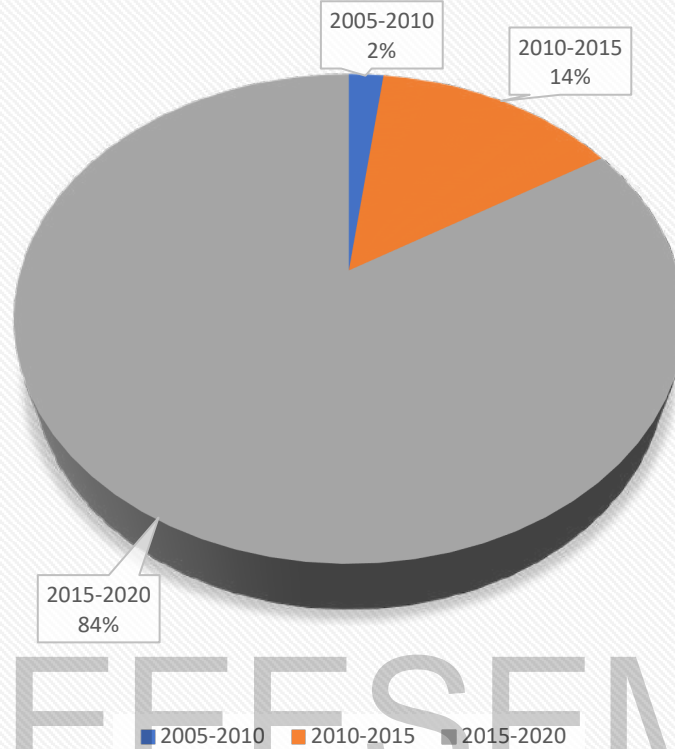


IEEESEM

89.4% FAR ADDED SINCE 2000



Transformation of Residential in 500m catchment of metro station to Residential Developer floors



Increase in no. of Developer floors 2005

Plot size in sq.m.	No. of plots	Developer floors
140-225	27	1
225-400	22	0

2005-2010

Plot size in sq.m.	No. of plots	Developer floors
140-225	34	0
225-400	20	0

2010-2015

Plot size in sq.m.	No. of plots	Developer floors
140-225	0	0
225-400	21	3

2015-2020

Plot size in sq.m.	No. of plots	Developer floors
140-225	32	25
225-400	10	10

2.1.1.2 SUBHASHNAGAR METRO STATION

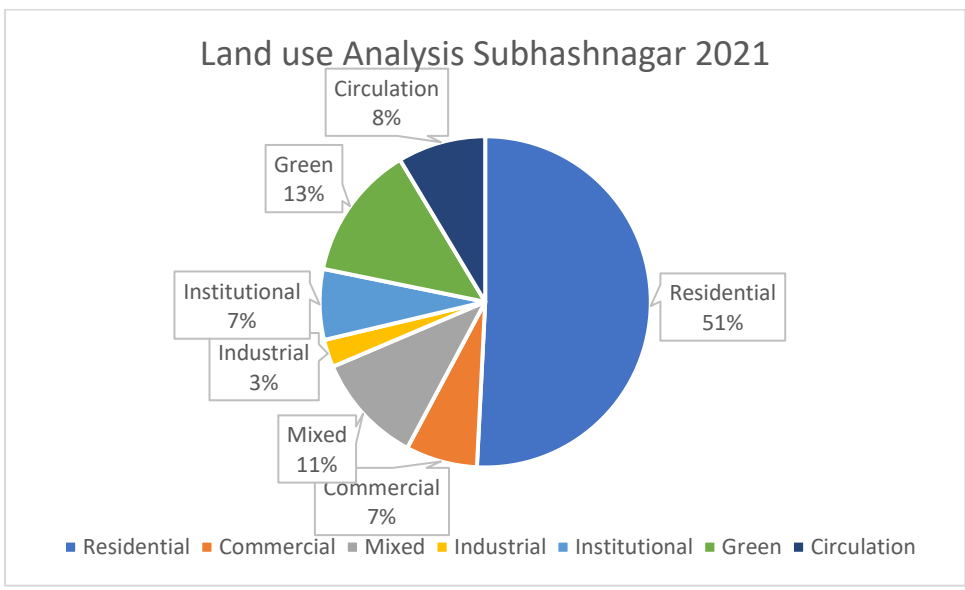
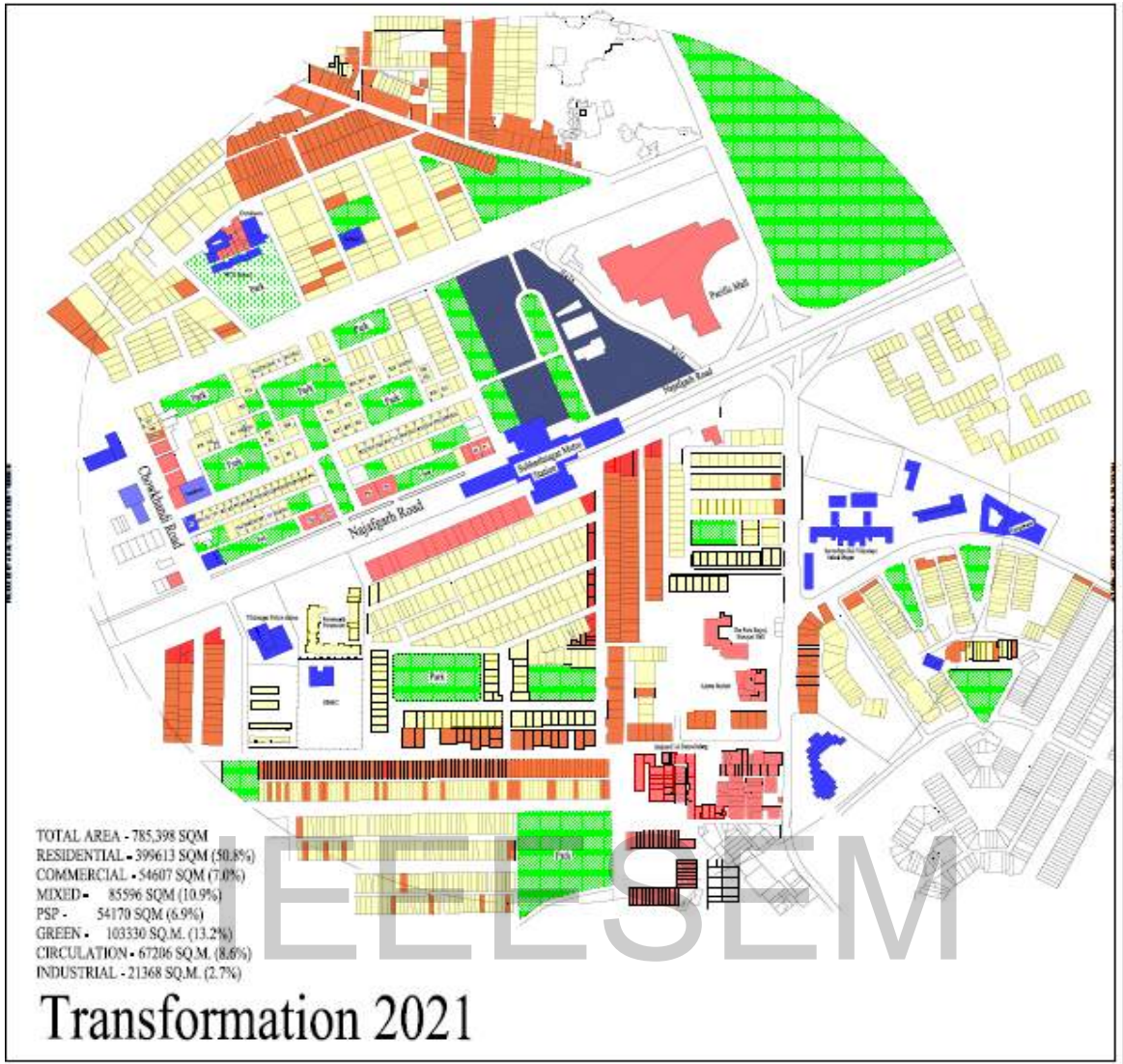
History

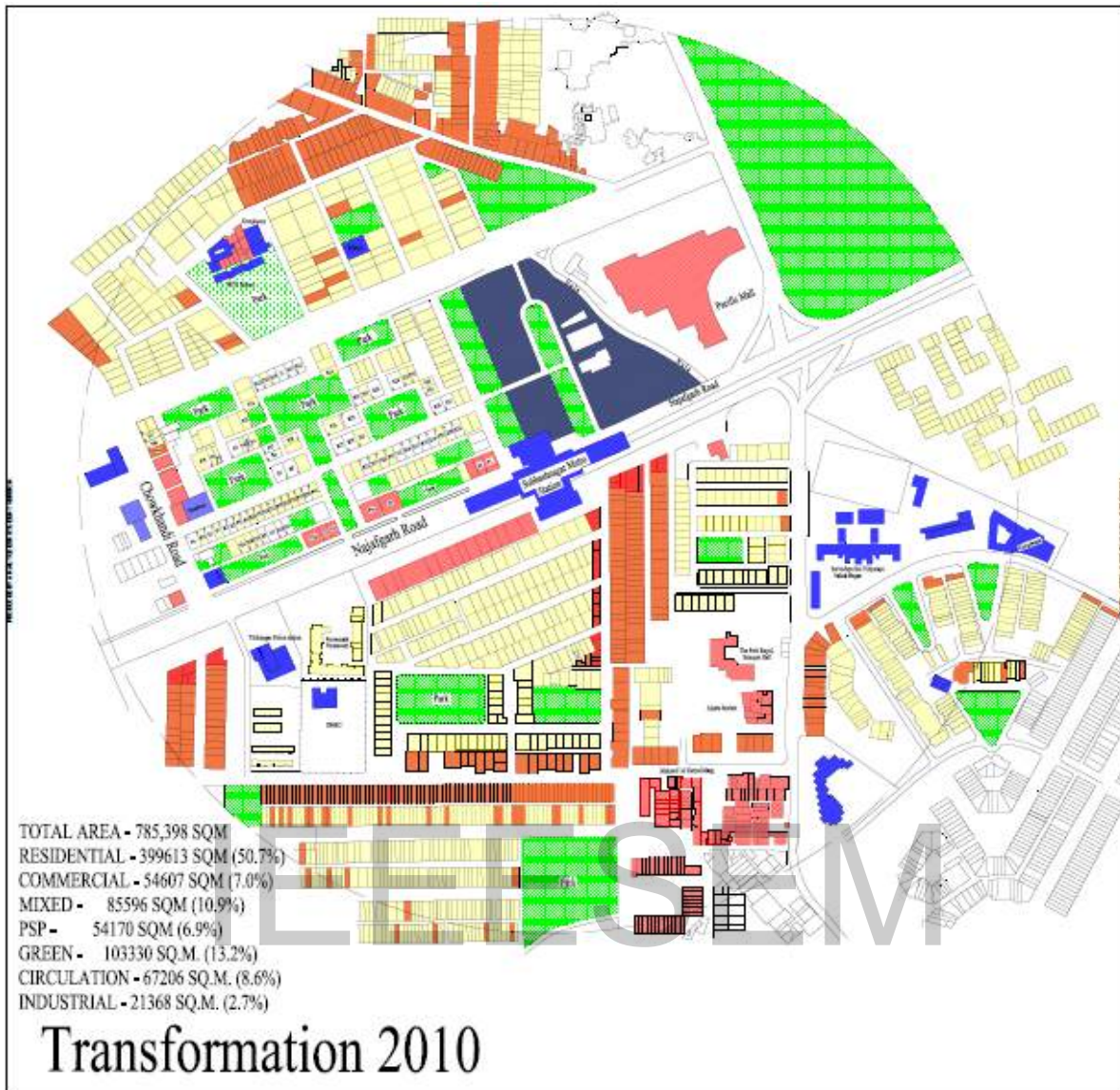
Subhash Nagar metro station is located between Rajouri Garden, Tagore Garden on one side Ashok Nagar on other side in west part in New Delhi. The metro station catchment area consists of parts of Mukherjee Nagar, Meenakshi Garden located on the south side of Najafgarh road, parts of Tihar village and parts of Subhash Nagar. Mukherjee Nagar and Meenakshi Garden were basically refugee colonies with the people those who migrated from West Punjab, Sindh and Northwest Frontier Province but now people from Uttarakhand, Rajasthan, West Bengal, East Punjab and South India are also living in this place. The housing sub-type were two room refugee housing on an average 135sq.m. plots allotted in the 50's.

Meenakshi Garden consists of much smaller plots and are less affluent in development, less green areas and quality of life in certain zones is poor. The development is generally G+3, transformation seen in the last 10 years are a number of developer floors all over a result of rise in property values. Commercial use has crept into ground floors corner plots which are often used as warehouses.

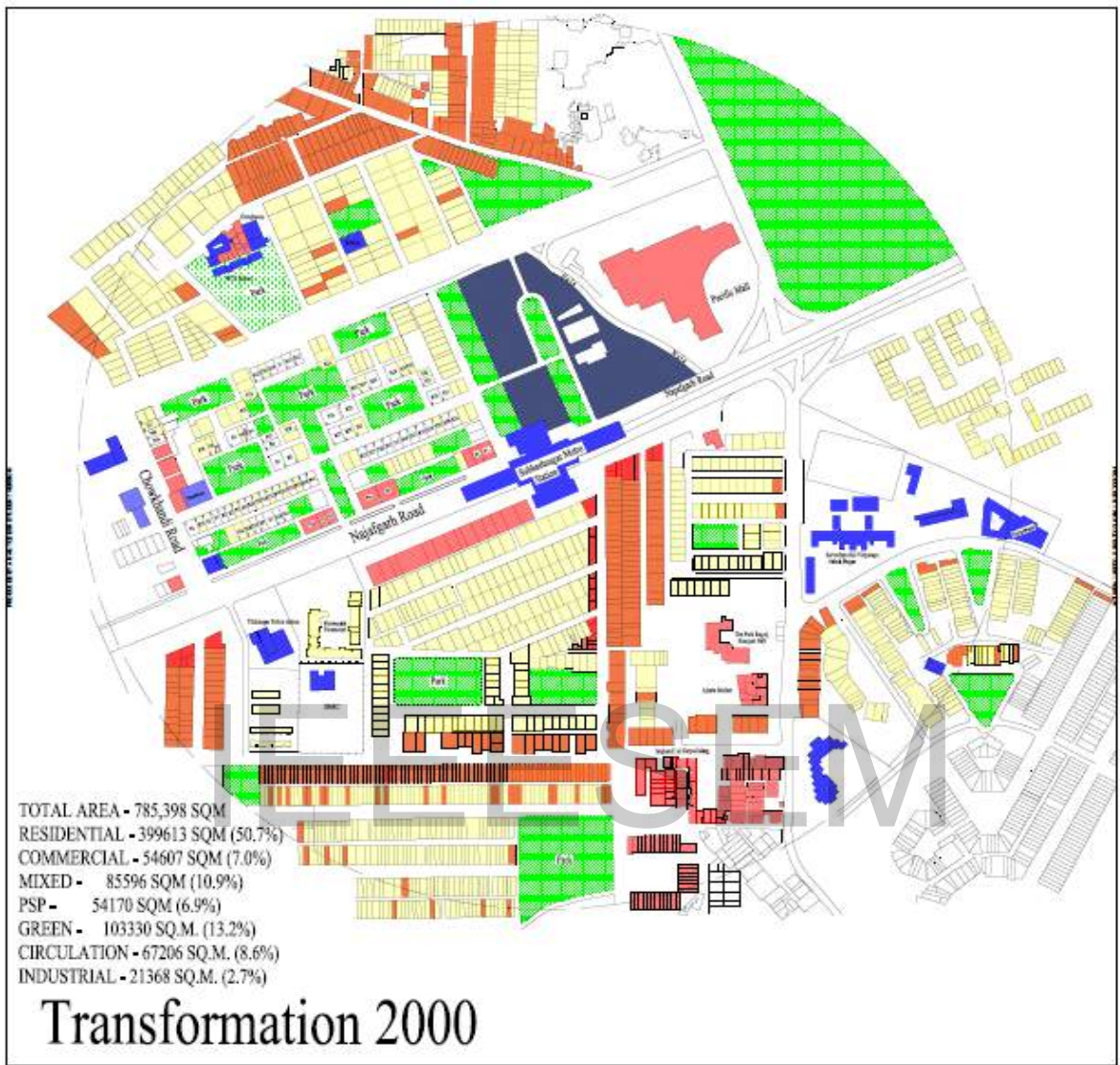


Tigaon village at periphery of catchment south-eastern periphery of catchment. Rising land values have resulted in the coming up of such structures in all areas of Delhi.





This metro station catchment has Industries & godowns adjacent directly North of metro station.



Transformations have been recorded only in the avenue North-West of metro station. Plots left uncoloured signify no development till then or no transformation.

Plot sizes and classification around Subhashnagar metro station

S.No.	Plot area sq.m.	No. of plots	Original land use	Land use after transformation	No. of plots after transformation
1	95	1	Residential	Residential	1
2	120	1	Residential	Residential	1
3	126	2	Residential	Residential	2
4	136	16	Residential	Residential	15
			Residential	Mixed	1
5	150	14	Residential	Residential	14
6	160	1	Residential	Residential	1
7	165	3	Residential	Residential	3
9	180	11	Residential	Residential	11
10	190	2	Residential	Residential	2
11	210	3	Residential	Residential	2
12	222	1	Residential	Residential	1
13	245	5	Residential	Residential	5
14	260	1	Residential	Residential	1
15	265	2	Residential	Residential	2
16	320	2	Residential	Residential	2
17	360	1	Residential	Residential	1
18	380	3	Residential	Residential	2
			Residential	Mixed	1

Population

Subhashnagar, Meenakshi Garden and Mukherji Park fall in the 500m radius catchment of this metro station. The total population stands at 31,365.



Plot no. R5 Developer floor just completed in 2020, top view under construction; bottom completed in 2020

16.09.2019



Same photograph shows completed, occupied Developer floor.

15.12.2020

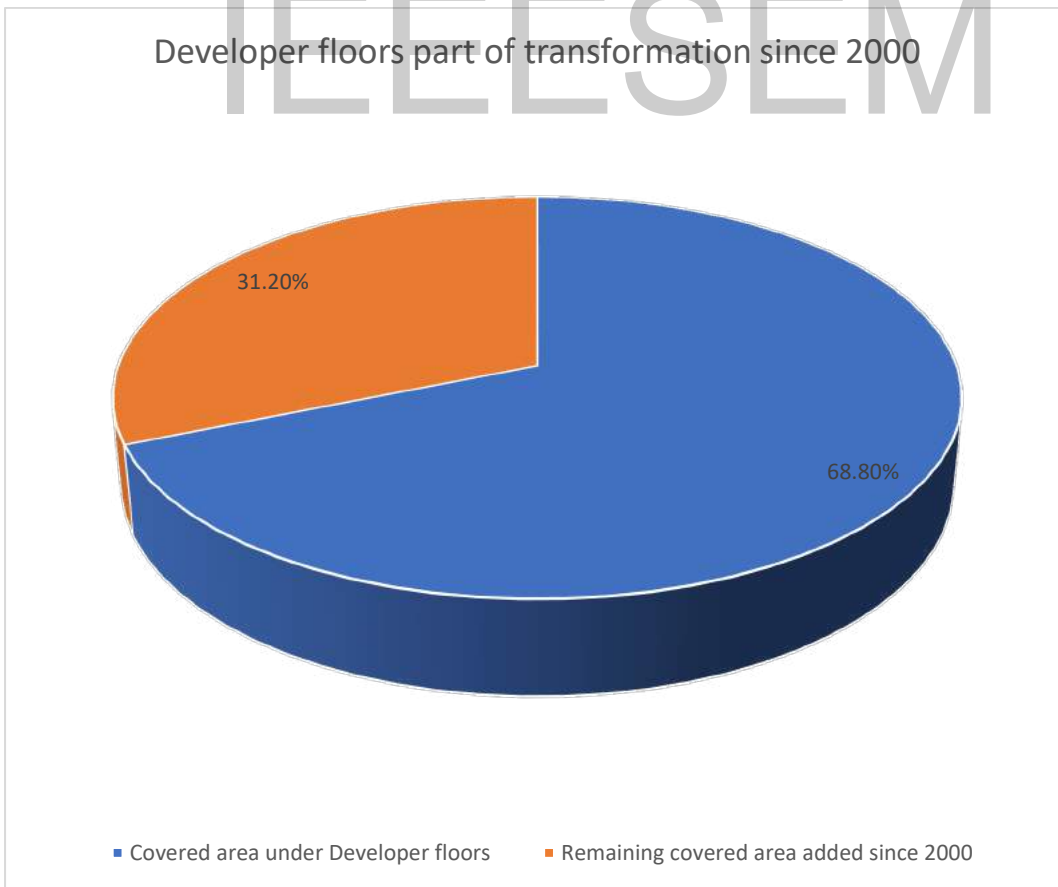
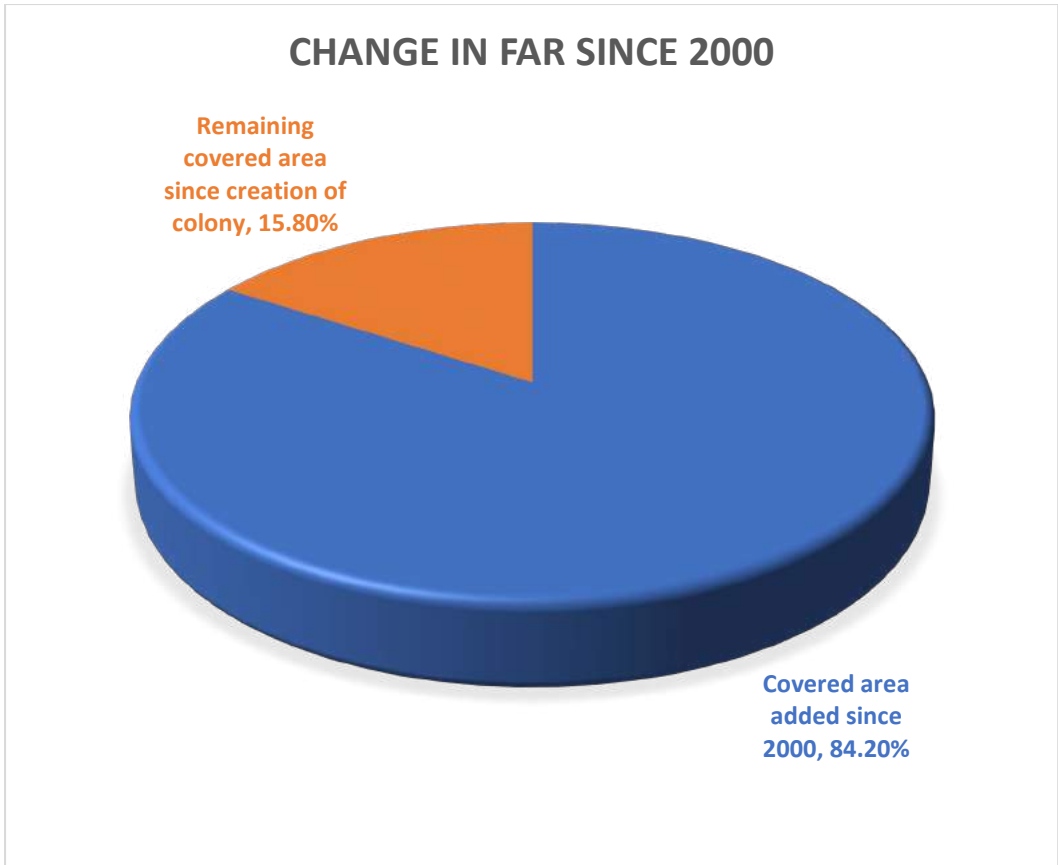


Located close to Tilaknagar metro station; Subhashnagar metro station area in this case which is actually Mukherji Park has nice parks and plotted housing facing neighbourhood parks with a good quality of life, mostly G+3 development. 16.9.2019



The same view of same buildings as above photograph. Notice transformation, and also transformation underway. 19.12.2020

The two vertical commercial streets on the eastern side of Meenakshi garden, between Meenakshi garden and Tigaon village area are chaotic and congested with commercial mostly restricted to ground floor and two to three storeys of residential above.



Of the total transformation 68.8% of the covered area is under Developer floors.

2.1.1.3 GREEN PARK METRO STATION

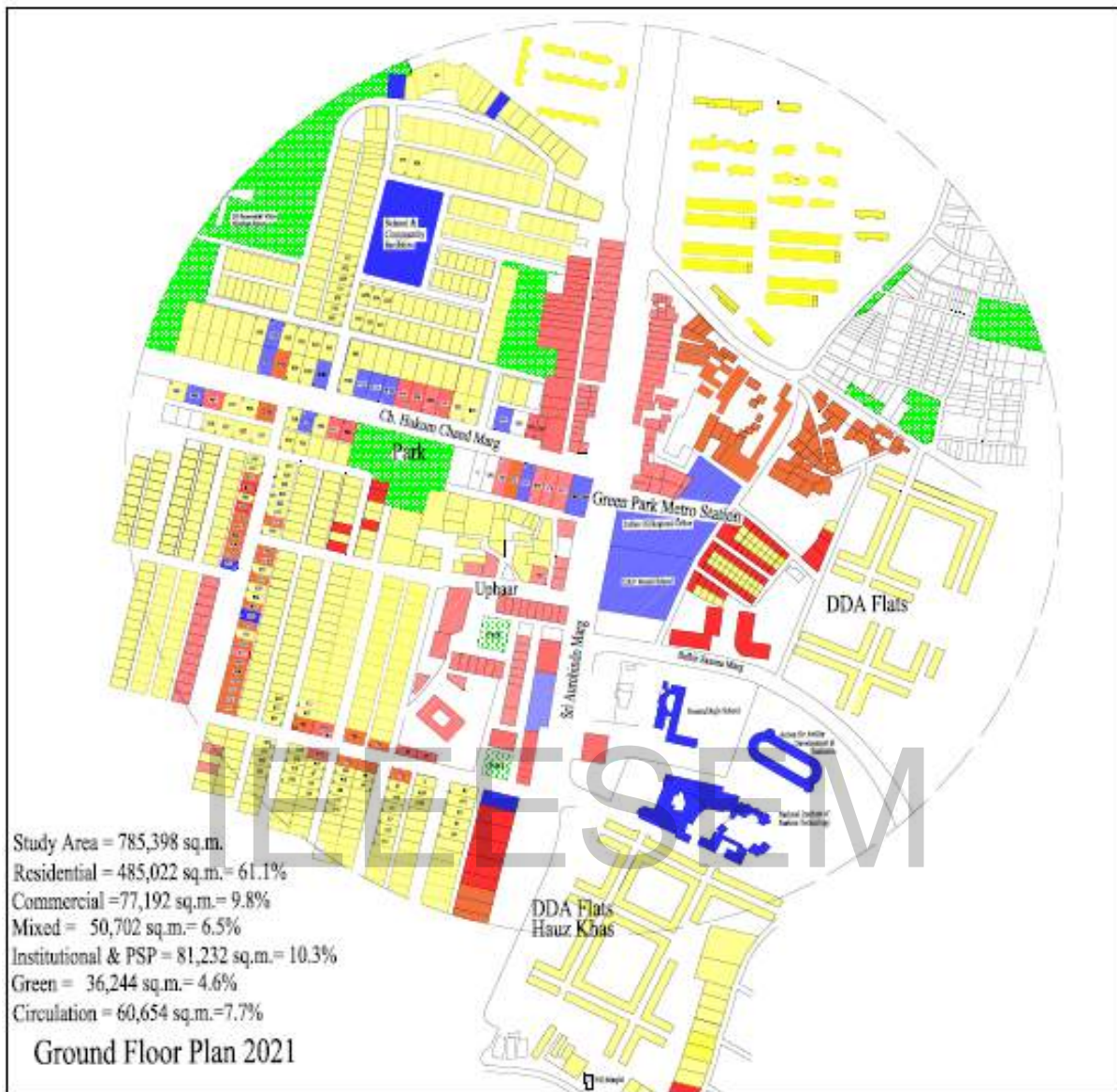
History

It was established in early 1960's and today has all the amenities of a rich cosmopolitan culture along with large residential and commercial areas and many religious places. It has its own prime market which hosts numerous chic salons, boutiques and eating joints. It also borders the famous Deer Park which is known to be among the very few large green spaces left in today's heavily urbanized Delhi.

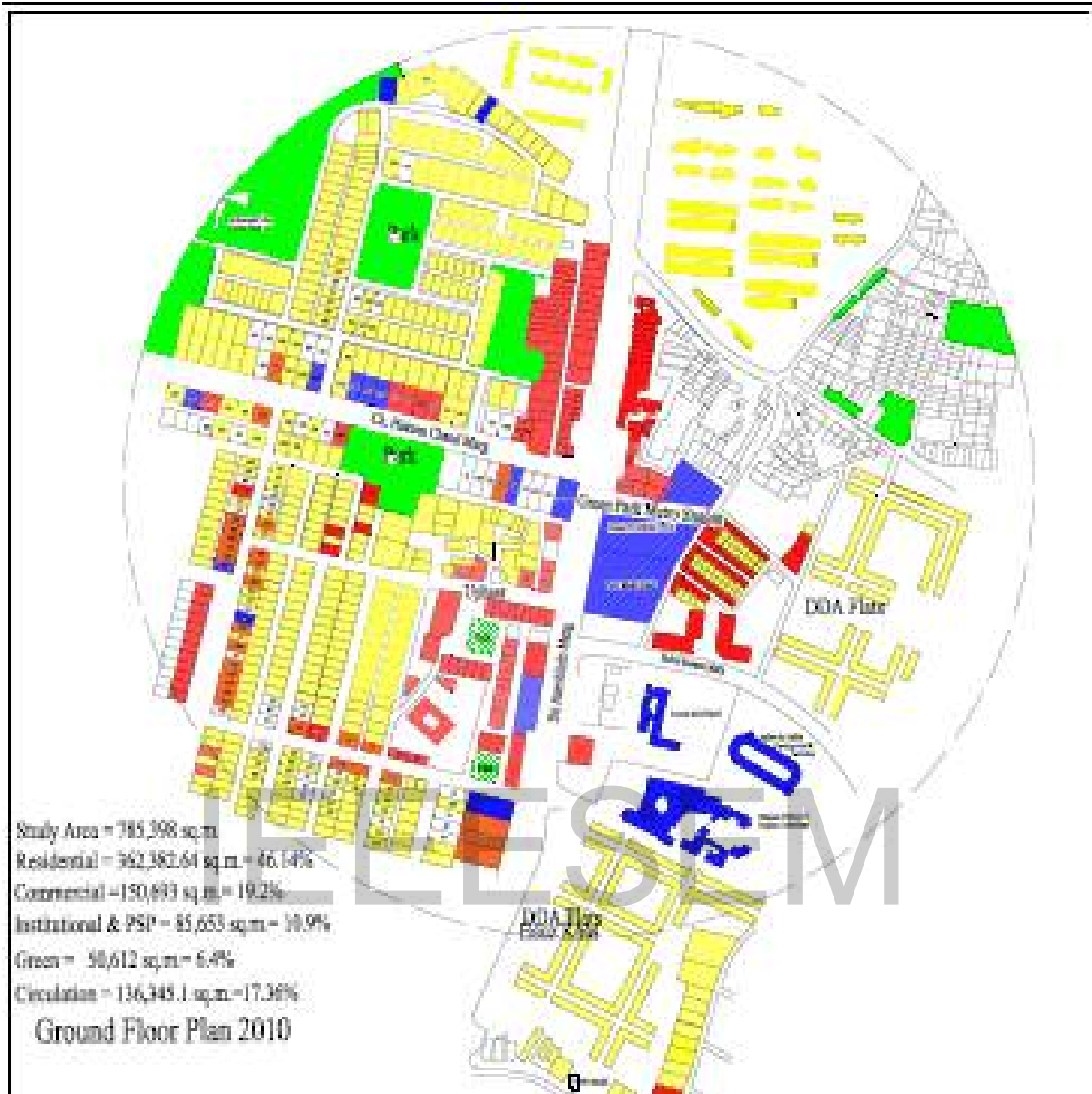
Green Park is a high income group colony, centrally located part of South Delhi. Thus land value has shot up in the last 20 years being so located that it is not far from Lutyen's Delhi or South extension or Safdar Jung. And the Yusuf Sarai market located next to the metro station and what has perhaps spurred this commercial transformation is the location of this busy market. Approximately nearly 40 per cent of the residential houses have part of their house let out to commercial establishments.

There is the famous General Raj public school, Indian Oil Corporation regional office and National Institute of Fashion technology close to the metro station. The 500 metre radius catchment of the metro station is criss-crossed by the Aurobindo Marg which runs North-South and the East-West Ch. Hukumchand Singh Marg. The Aurobindo Marg fringes of the colony are completely commercialised with car showrooms, banks and automobile parts outlets.

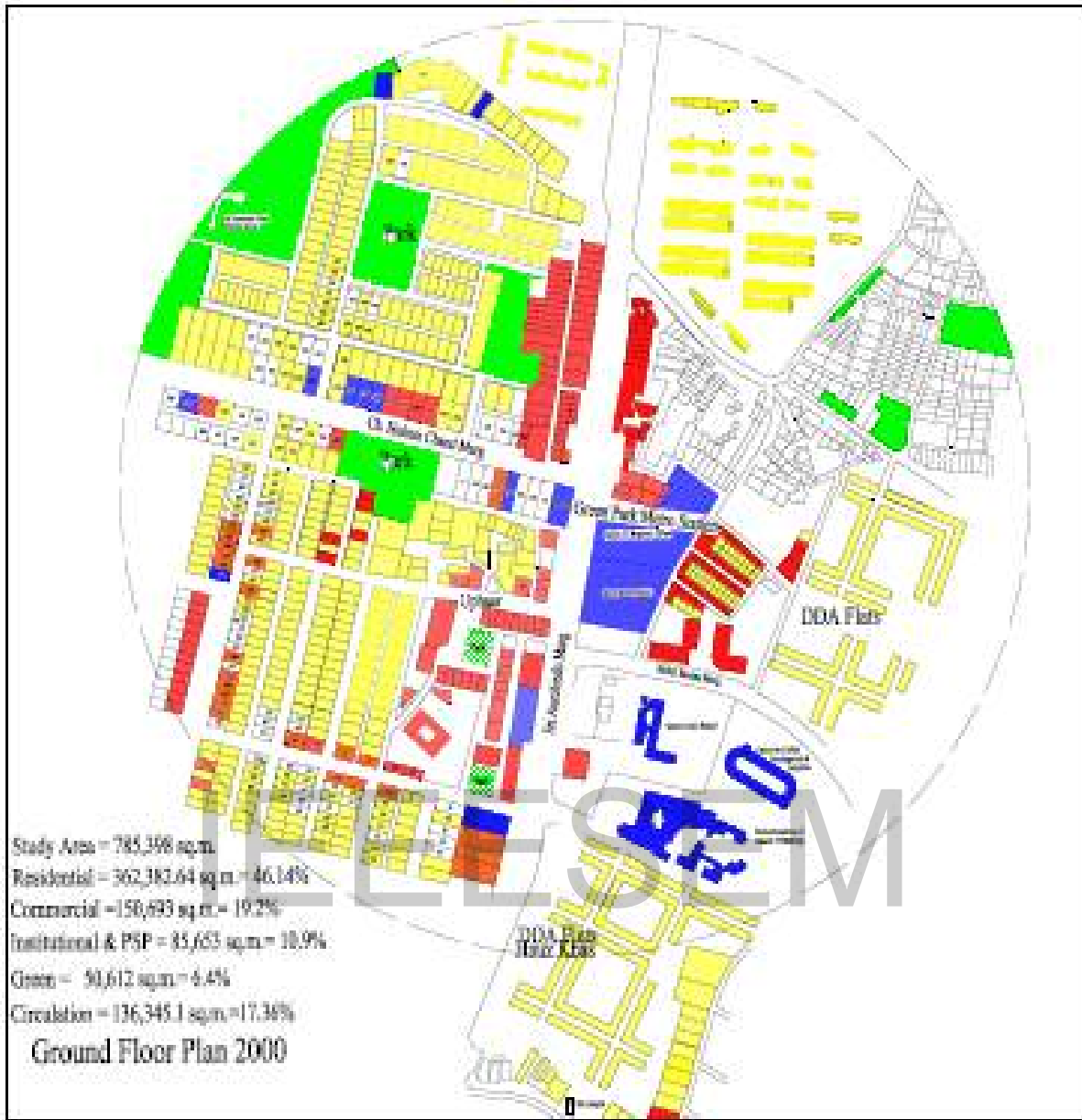
GREEN PARK METRO STATION LAND USE 2021



In the following pages the land use plans of 2010 & 2005 can be seen, transformation of plots into Developer floors and commercial use can be seen.

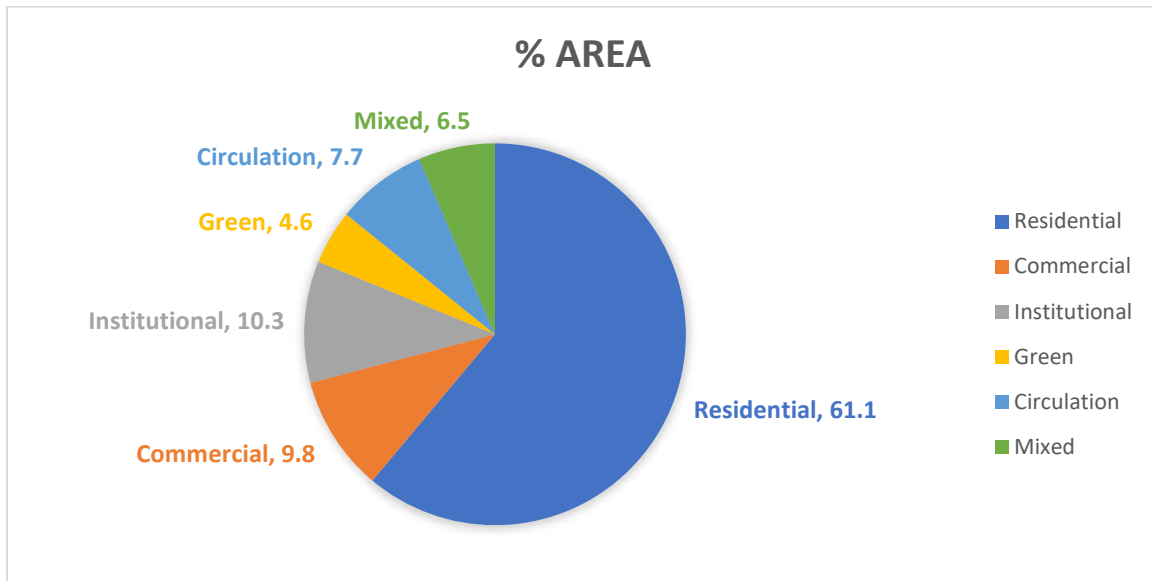


Plots left uncoloured signify no development till then or no transformation.



The western side of the catchment consists of public sector offices, schools and National Institute of Fashion technology. Ch. Hukumchand Singh Marg is dotted with medical diagnostic facilities and banks. Commercialisation of plots is rapidly spreading inside Green Park and across Ch. Hukumchand Singh Marg is Green Park extension which was a later addition.

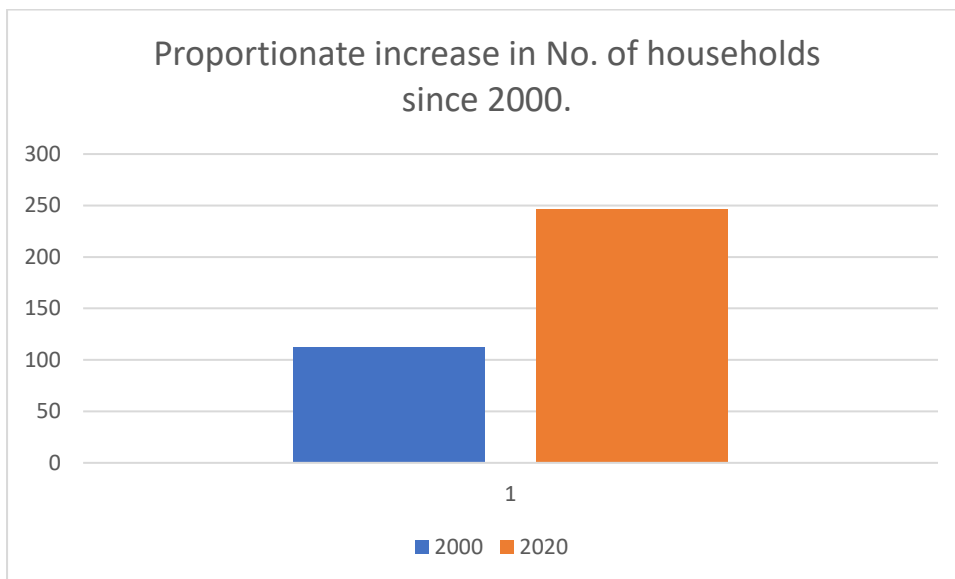
LAND USE ANALYSIS 2021



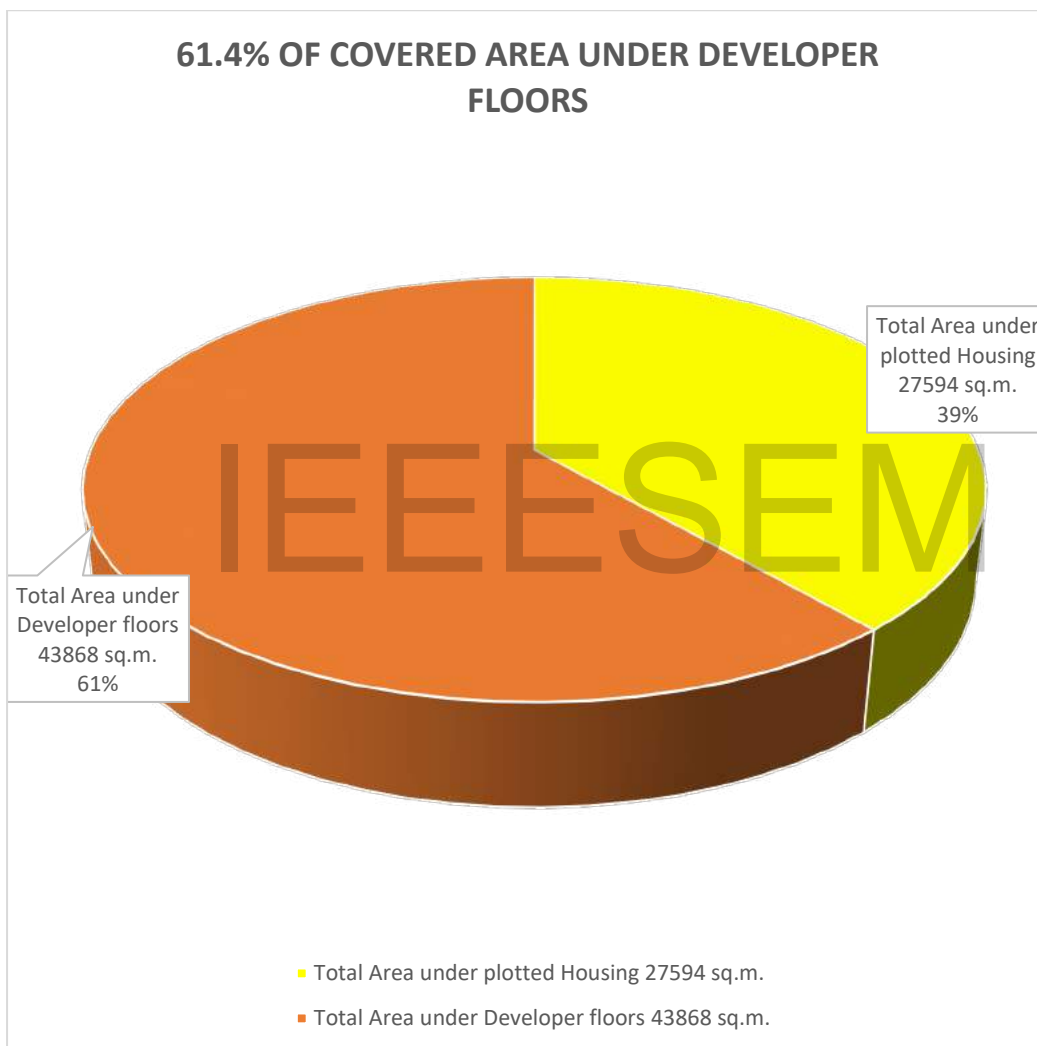
Population

Green Park metro station catchment which comprises Green Park Extn., Yusuf Sarai, parts of Ansarinagar is 0.7854 sq.km holds 27,935 persons.

Green park's proportionate increase in number of households from 2000 is a proportionate leap to 246 from 112.



PROPERTY	PRICES	AT
GREEN PARK 2020		
(i) Resd. plots		Rs4.5lakhs/sq.m.
(ii) Builder floors		Rs 1.5lakhs/sq.m.



Ch. Hukumchand Marg

Maximum high budget transformations can be seen on this street and even now transformations are underway. Property prices are highest on this street.

Diagnostic labs and medical facilities are located on this street being close to the two largest hospitals of Delhi –Safdar Jung and AIIMS.



Plot no.P-77 Hotel at entry to street.



Plot P-78 newly transformed.



11.08.2019

Note building behind green curtain under renovation and part of Diagnostic lab in plot P-99 in red cladding beside it on the above-mentioned date on Ch. Hukumchand Marg.



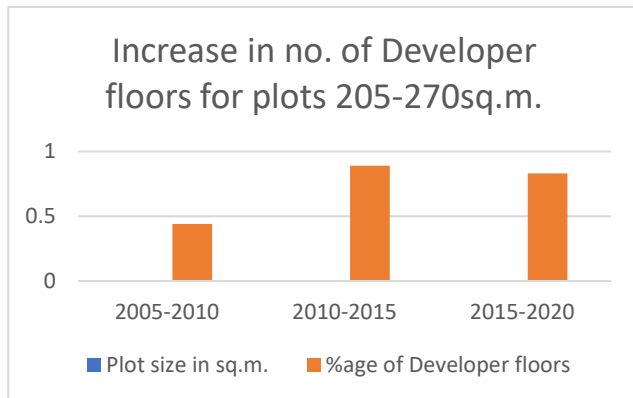
25.12.2020 The same plot, the now transformed building commercial Developer floor alongwith the smaller building beside it, the Diagnostic lab has shifted.

Plot sizes & classification around Green Park metro station

S.No.	Plot area sq.m.	No. of plots	Original land use	Land use after transformation	No. of plots after transformation	Remarks: Transformed to	Physical transformation	Land use transformation
1	205	2	Residential	Commercial	2		✓	Yes
2	210	1	Commercial	Commercial	1		✓	Yes
3	215	16	Residential	Residential	16	1 Developer floor	✓	
		4	Residential	Mixed	4	2 Developer floors	✓	Yes
		4	Residential	Commercial	4	2 Developer floors	✓	Yes
		2	Residential	Institutional	2		✓	Yes
4	230	24	Residential	Residential	24	7 Developer floors	✓	
		2	Residential	Commercial	2	2 Developer floors	✓	Yes
		1	Residential	Institutional	1		✓	Yes
5	263	7	Residential	Residential	7	1 Developer floor	✓	
6	270	19	Residential	Residential	19	7 Developer floors	✓	
		1	Residential	Mixed	1		✓	Yes
7	275	1	Residential	Residential	1	1 Developer floor	✓	
8	315	1	Residential	Residential	1		✓	
		1	Residential	Mixed	1	1 Developer floor	✓	Yes
		2	Residential	Commercial	2		✓	Yes
9	330	2	Residential	Mixed	2		✓	Yes
10	340	1	Residential	Residential	1		✓	
11	350	1	Residential	Residential	1	1 Developer floor	✓	
12	370	4	Residential	Residential	4		✓	
		1	Residential	Commercial	1		✓	Yes
		1	Residential	Mixed	1	1 Developer floor	✓	Yes
13	380	2	Residential	Residential	2	1 Developer floor	✓	
		1	Residential	Commercial	1		✓	Yes
14	410	4	Residential	Residential	4	4 Developer floors	✓	
15	420	1	Commercial	Commercial	1		✓	
16	450	1	Residential	Residential	1	3 Developer floors	✓	
		21	Residential	Commercial	21		✓	Yes
17	455	1	Residential	Mixed	1	1 Developer floor	✓	
18	470	U	Residential	U	U		✓	U
19	495	2	Residential	Residential	2		✓	
20	574	1	Residential	Residential	1		✓	
		3	Residential	Commercial	3		✓	Yes
		1	Residential	Institutional	1		✓	Yes
		1	Residential	Mixed	1		✓	Yes
21	635	1	Residential	Commercial	1		✓	Yes

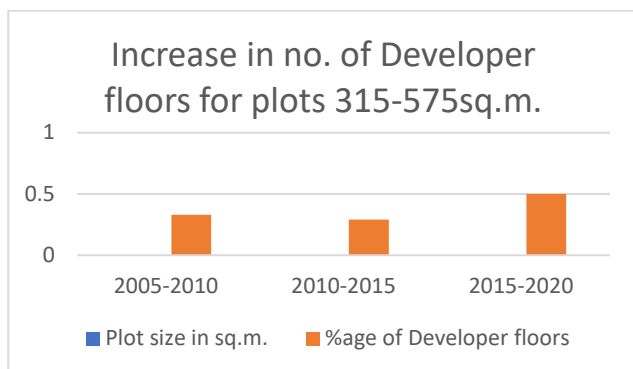
Increase in no. of Developer floors
2005-2010

Plot size in sq.m.	No. of plots	Developer floors	%age increase
205-270	9	4	44%
315-575	3	1	33%



2010-2015

Plot size in sq.m.	No. of plots	Developer floors	%age increase
205-270	9	8	89%
315-635	7	2	29%



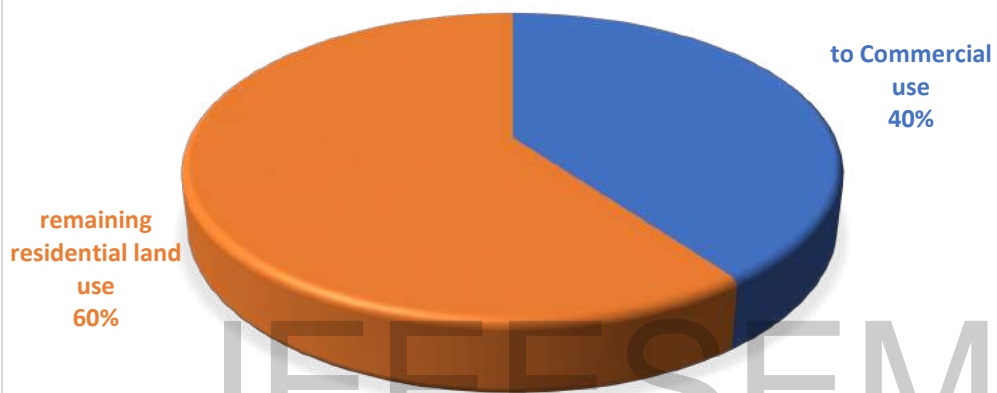
2015-2020

Plot size in sq.m.	No. of plots	Developer floors	%age increase
205-270	12	10	83%
315-635	20	10	50%

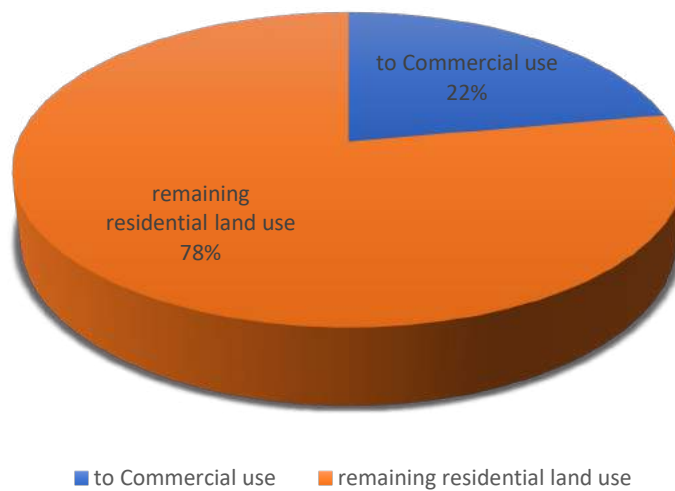
Conversion to Developer floors and change of Land use

Plot size	215sq.m.	230sq.m.
to Commercial use	40%	22.20%
to Mixed land use	40%	

CONVERSION TO DEVELOPER FLOORS AND CHANGE OF LAND USE PLOT SIZE 215 SQ.M.



Conversion to Developer floors and change of Land use in plot size 230 sq.m.



2.1.1.4 HAUZ KHAS METRO STATION

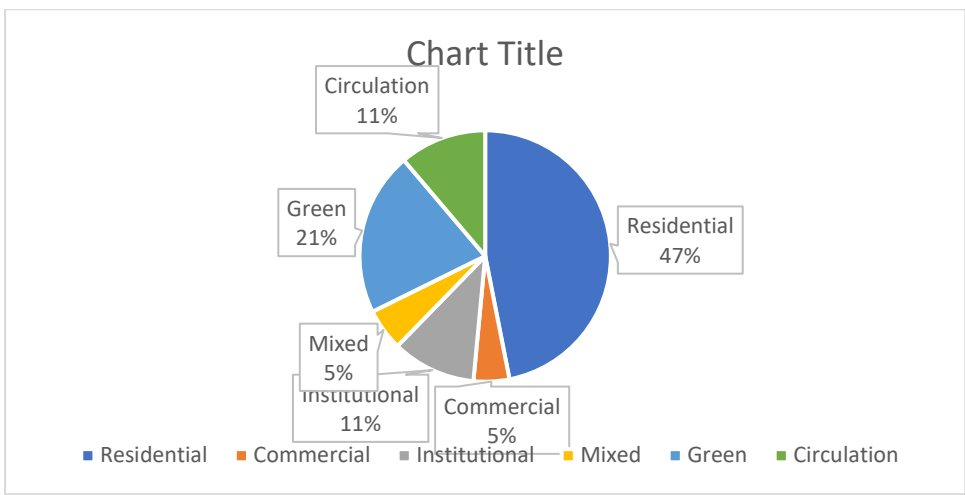
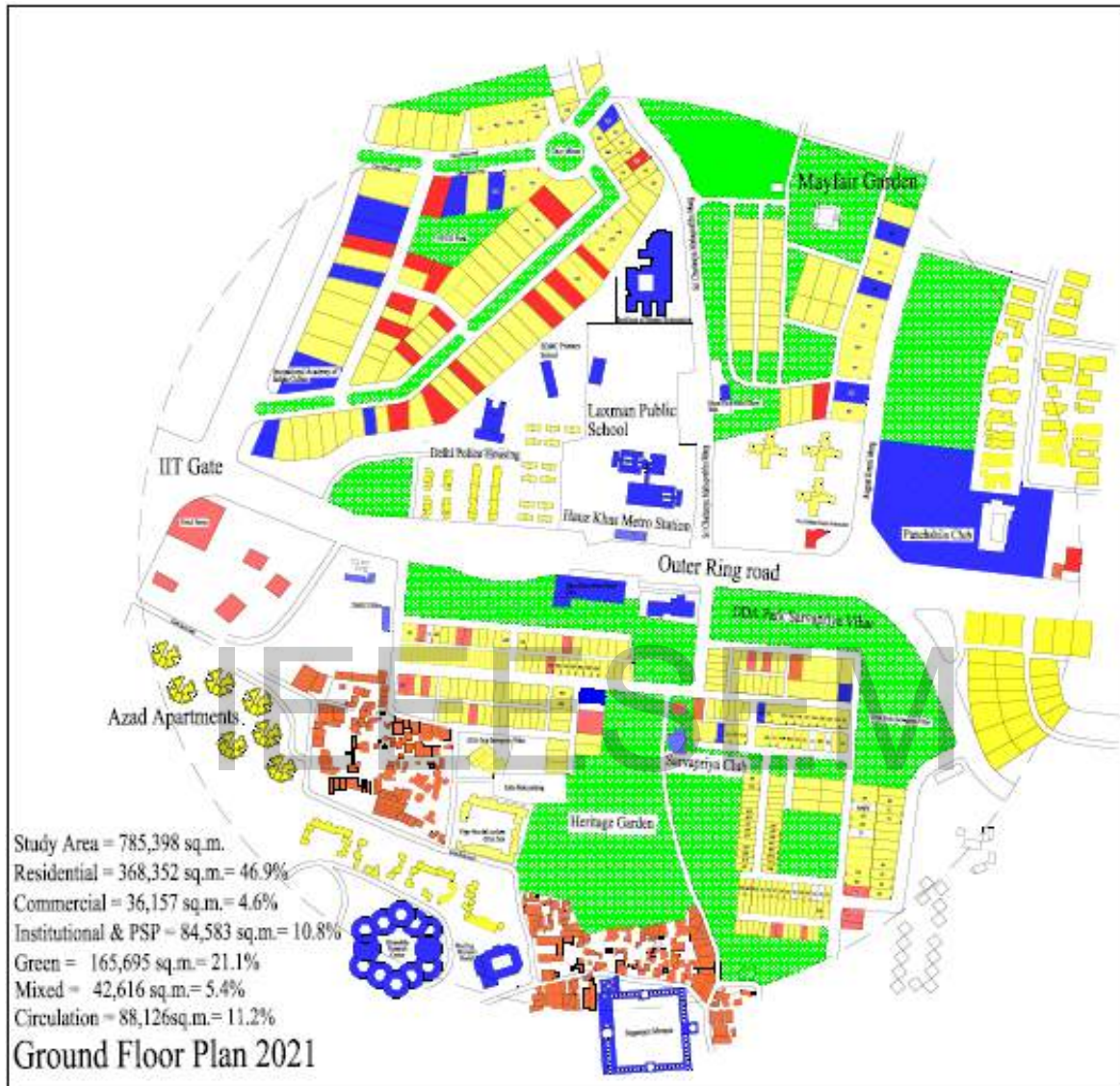
History

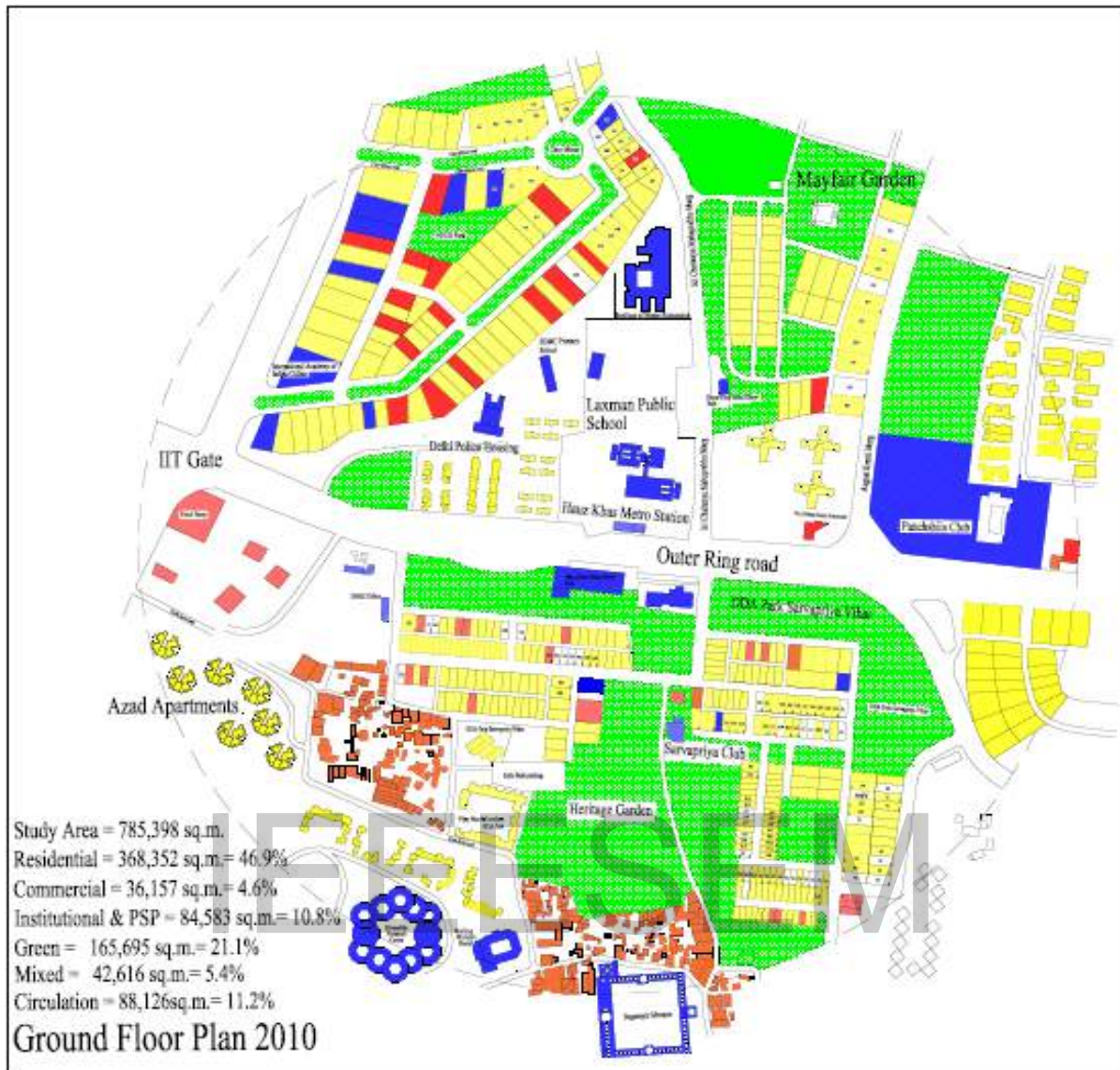
Hauz Khas is an affluent neighborhood in South Delhi, its heart being the historic Hauz Khas Complex. Well known in medieval times, the Hauz Khas village has amazing buildings built around the reservoir. Alauddin Khilji had got this complex built by Firozshah around 1300 AD. The complex comprised of a lake, a mosque at the north end of the tank and a Madrasa in the building along the northern and the western banks. Firozshah's tomb also stands here. The lake which is about 700 years old was fed by trapping the stormwater generated in southern ridge in an embankment from where it was diverted to the Hauz (existing tank).

Hauz Khas is also home to various diplomatic missions such as the ones of Albania, Iraq, Guinea Bissau, Burundi and North Macedonia. The famous Laxman Public school is located in the catchment, also the Delhi Police housing. Hauz Khas is approachable by Outer Ring road and Aurobindo Marg. The 500metre radius metro catchment is divided into two halves by the Outer ring road.

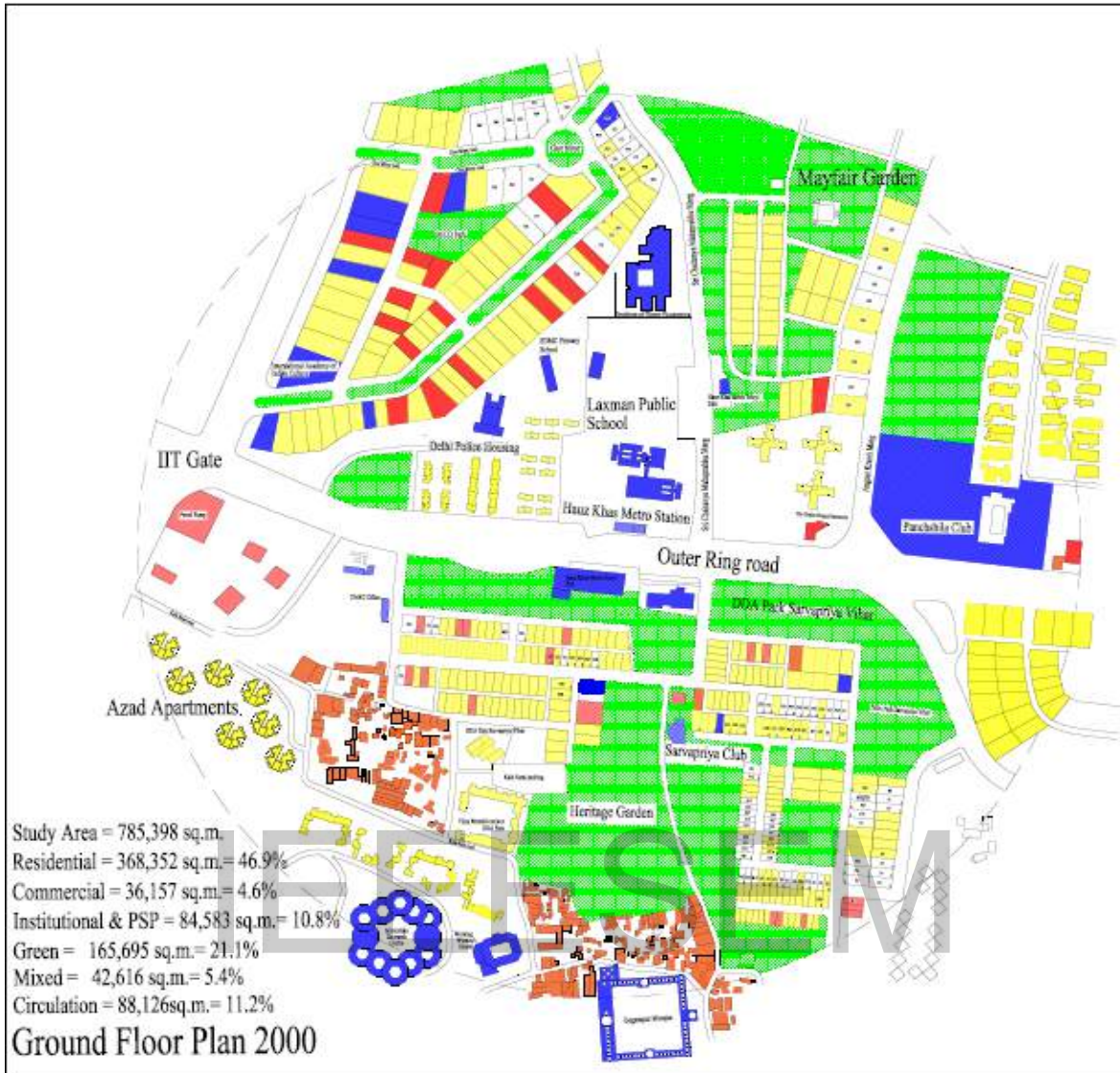
The northern part has large luxurious plots with large setbacks and relatively calmer than Sarvapriya Vihar which is of more recent origin with land claimed from Kalu Sarai and Begumpur. Residential plots in Sarvapriya Vihar are rapidly getting converted to Developer floors due the escalating property prices. Southern part of metro station Sarvapriya Vihar has got more commercial transformations but nowhere close to transformations seen in Green Park. There are DDA flats in the southern part of metro station.

The transformation of residential plots to Commercial is almost insignificant in the northern part that is Hauz Khas enclave and not of much significance in Sarvapriya Vihar.





Plots left uncoloured signify no development till then or no transformation.



PROPERTY PRICES AT HAUZ

KHAS 2020

(i) Resd. plots

Rs 6 lakhs/sq.m.

(ii) Builder floors

Rs 1.8 lakhs/sq.m.

It must be kept in mind that residential plots in Hauz Khas are large and luxurious 600-800sq.m., hence costlier.

Plot sizes & classification around Hauz Khas metro station

S.No.+AZ	Plot area sq.m.	No. of plots	Original land use	Land use after transformation	No. of plots after transformation	Remarks: Transformed to	Physical transformation	Land use transformation
1	130	19	Residential	Residential	19		✓	
2	130	15	Residential	Residential	15	15 Developer floors	✓	
3	140	4	Residential	Residential	4		✓	
4	150	9	Residential	Residential	9		✓	
		1	Residential	Commercial	1		✓	Yes
6	170	5	Residential	Residential	5	5 Developer floors	✓	
		15	Residential	Residential	15		✓	
		1	Residential	Commercial	1	1 Developer floor	✓	Yes
6	170	1	Residential	Institutional	1		✓	Yes
		1	Residential	Commercial	1	1 Developer floor	✓	Yes
8	200	1	Residential	Residential	1	1 Developer floor	✓	
9	235	2	Residential	Residential	2		✓	
10	260	3	Residential	Residential	3		✓	
11	265	3	Residential	Residential	3		✓	
12	270	8	Residential	Residential	8	1 Developer floor	✓	
13	280	2	Residential	Residential	2	1 Developer floor	✓	
14	295	3	Residential	Residential	3	1 Developer floor	✓	
		2	Residential	Commercial	2	1 Developer floor	✓	Yes
15	300	1	Residential	Residential	1		✓	
16	310	1	Residential	Residential	1	1 Developer floor	✓	
17	330	1	Residential	Residential	1		✓	
18	370	1	Residential	Residential	1		✓	
19	380	1	Residential	Residential	1		✓	
		1	Residential	Institutional	1		✓	Yes
20	395	1	Residential	Residential	1		✓	
21	425	1	Residential	Residential	1	1 Developer floor	✓	
22	520	2	Residential	Residential	2		✓	
23	690	1	Residential	Residential	1		✓	
24	740	10	Residential	Residential	10	2 Developer floors	✓	
		3	Residential	Institutional	3	1 Developer floor	✓	Yes
25	765	4	Residential	Residential	4		✓	
26	790	2	Residential	Residential	2	1 Developer floor	✓	
27	850	1	Residential	Residential	1		✓	

Population: Hauz Khas metro station catchment which is 0.785 sq.km comprising Hauz Khas, part of Gulmohar enclave, Laxman Public School and Sarvapriya Vihar holds 15,704 persons.

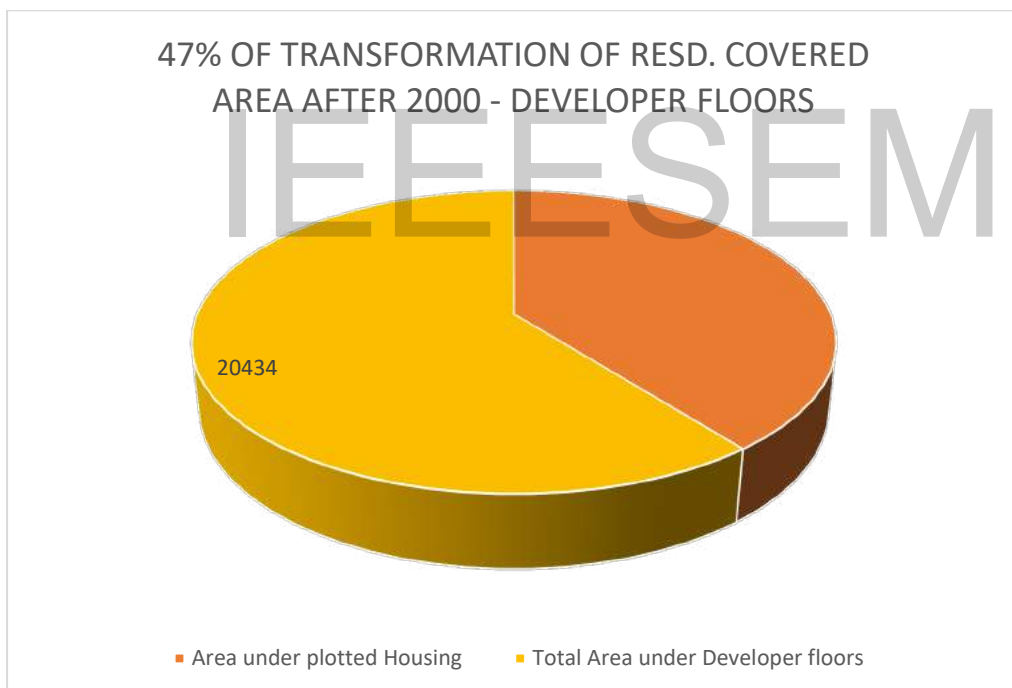
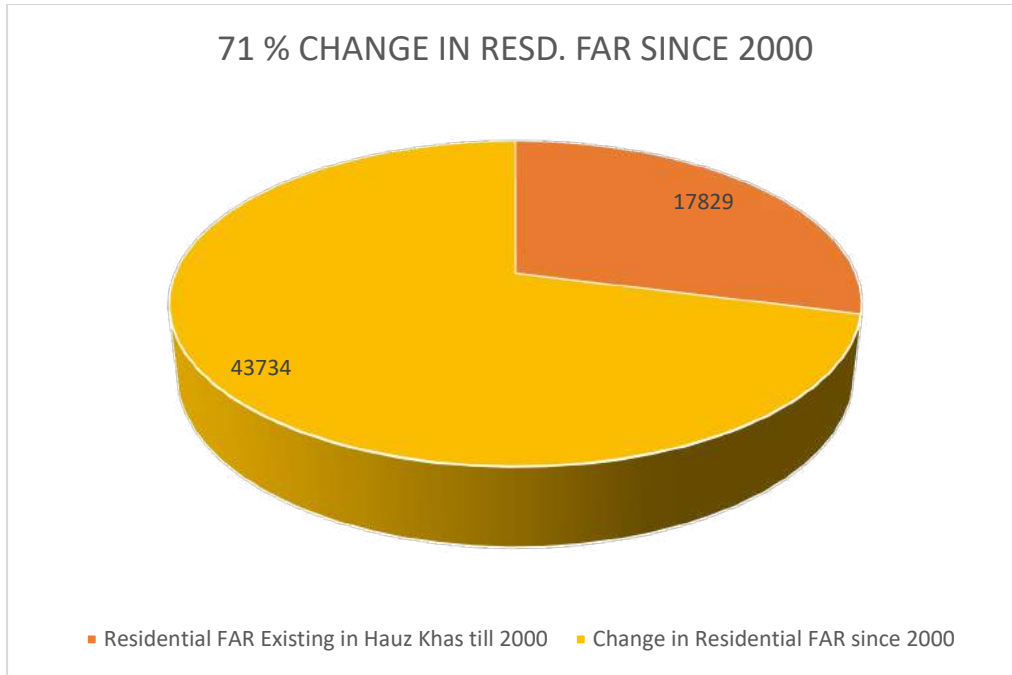


No transformation.

Large spacious plots for individual houses in area of Hauz Khas North of metro station with well-maintained greens and vegetation. Development is mostly G+1 or G+2.



Plotted housing in Sarvapriya Vihar, gated community from adjacent Kalu Sarai village. Sarvapriya Vihar is G+2 or G+3 plotted housing development, note the lavish façade treatment.



Conclusion

The major transformation underway in Delhi is conversion of residential plots to Developer floors which is an apartment on each floor the owner gets two of them out of four floors and the other two the developer sells for a profit, this is due to the sudden rise in property prices seen in the last ten years.

Metro network has certainly improved accessibility and has exposed to us the already congested condition in Delhi. Adopting Transit oriented development for Delhi has to be very selective, the grid-iron street network near and around stations is fine, the pedestrian scale of TOD areas is fine, but increasing the density (FAR) would be catastrophic as it is going to result in congestion and drop in quality of life (Nambiar 2021). The infrastructure may just give in under this load. Thus adopting TOD for Delhi requires a great deal of thought and one cannot help but think that the present metro network along with the scale of development is finely poised such that nothing needs to be added further (FAR). We are all familiar with New York and Brooklyn and the psychological problems people living in high-rise towers suffer from.

The development seen in Delhi which has brought it to its present picture is clearly the result of unplanned ad-hoc adding on of residential colonies over the period of the last 50 years with spurts of planned layouts which we see recently in Dwaraka and was seen in the seventies in Defence Colony, Greater Kailash, South Extension, Green Park, Hauz Khas, Safdar Jung, Janakpuri and Pusa road area. And seen in the sixties with R.K.Puram and Motibagh. It is what was envisaged to be a sprawl planned along arterials which had its limitations due to land acquisition problems. My attempt is to open up a discussion about the TOD guidelines proposed by the DDA regarding the future growth trajectory of Delhi.

The path forward is certainly not densification with high rises but providing employment and infrastructure in India's smaller towns arresting urban migration. It seems we have to go back to our basics of Garden cities and start all over again.

References:

1. Kumar Ashok (2004), The Inverted Compact City of Delhi.

2. Jain Manisha, Siedentop Stefan, Taubenbock Hannes and Namperumal Sridharan V, From Suburbanization to Counterurbanization? Investigating Urban Dynamics in the National Capital Region Delhi, India.
3. Sashidharan Sahil (2011) unpublished thesis; Residential Restructuring for TOD: Case of Delhi Department of Housing, School of Planning & Architecture, New Delhi,
4. Master Plan of Delhi 2021, Delhi Development Authority.

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