

# The Inner City - Decline and Legal Framework-Case example of Bhopal

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**Abstract**— Inner cities - The Historic Center of the city is the starting point of any agglomeration. Inner city tends to become a city by adding various rings to the original historic city. The inner city is defined as majorly in housing the central business district and the surrounding residential areas. The paper will discuss the spatial characteristics of inner cities in terms of the point of origin, its spread, layout, built residential areas, open spaces, land uses, transit routes, infrastructure etc.

The paper describes the inner-city characteristics and the reasons of its decline. The economic gap between the city and suburb; motivates the residents to move towards the suburb areas leaving the inner city deserted. But not only the economic gap but the public policies are also responsible for this decline. Changes in the economic landscape, adversely impacted the employment and retail centres of the inner city. The emergence of shopping Centres in the suburbs further eroded the inner-city market.

The colonial and princely inner cities have gone through a cycle of changes and the impact of these changes has also impacted the outside city. The paper focuses majorly on the reasons of decline by means of literature and discusses in detail the inner-city characteristics, the inner city declines and the reasons of decline.

The paper looks into the policies framed by the development authorities which points towards the gaps which have occurred in the policies and are affecting the decline of cities and inner cities.

**Keywords**— *Inner City, Residential Areas, Urban Decline, Spatial Characteristics*

## INTRODUCTION

The inner city has many definitions and versions. The paper majorly aims at understanding the inner city by various authors and the factors which are governing the origin, growth and decline of these inner cities. The paper looks into various definitions of inner cities and the reasons of decline.

The study is focusing on the inner-city area as the central area of the city responsible for major travel routes, indigenous Trade & Commerce, origin wrt temple complex, location of fort or palace or official headquarter or military headquarters. There are many inferences which are similar in the Indian and western Inner-city characteristics. The oldest area of the city is responsible for major developments in the city. So, this becomes an area of research which discusses the inner-city definitions, the inner-city characteristics, reasons of decay.

Bhopal is taken as the case example to understand the origin, the growth and decline of its inner-city area. The inner city of Bhopal needs full attention to understand various factors related to initial settlement study and evolving into a full-grown city.

The deteriorating condition of inner cities in western and Indian examples points to the economic factors and policies leading to worsening the case in India in Colonial and princely states which have very less intervention about the town planning after the spread of these areas.

Literature Review:

### A. *Inner cities and its Characteristics:*

Inner city cannot be defined in a single definition or a word. Inner city is related to a specific point of reference and it is within specific political and social context and surroundings.

Inner city is the oldest part of the urban which immediately surrounds the central business district. In some cases, it includes CBD and in some definitions it does not or in some cases the spatial behavior continues till the political boundaries. (Bourne)

Inner city is also defined as the transitional space between the CBD and the housing rings.

Inner city enhouses a geographical area in which the built mass that may be a fort, a king's palace, a temple – acted as a social capital which is on an average older than the rest of the urban area.

The inner-city area is subjected to three processes

1. The aging and deterioration of housing, social services, infrastructure and industries.
2. As the inner city expands there are land use changes which are seen mainly commercial areas increase and the networks become more complex.
3. Demographic changes happen as the rich and the old residents are replaced by the lower income groups and new residents.

This suggests where these 3 processes are not significant the inner city is not in a problem situation.

The inner city is representative of many social problems, traditional problems, physical deterioration, poverty, declining economic and population base, increasing crime and financial problems, all these problems appear to worsen with time because of inflation resulting in high unemployment, racial discrimination, economic uncertainty and replacement of indigenous population with lower working class. (Bourne)

The oldest part of the cities has been considered as grave areas. Most of the industrial towns are the basis of many inner-city characteristics (Jr., 1999)

The older inner cities were in action during the following situations – massive Industrial Growth, post war period, urban renewal process, at the time of riot. The maximum reason behind these changes is migration. At other times the inner city is not the point of interest (John P. Blair, August 2007)) Aging Housing Stock is one of the most obvious characteristics of inner cities. This happens in areas subject to pressure through land use competitions and undergoing acute physical deterioration and very fast social change.

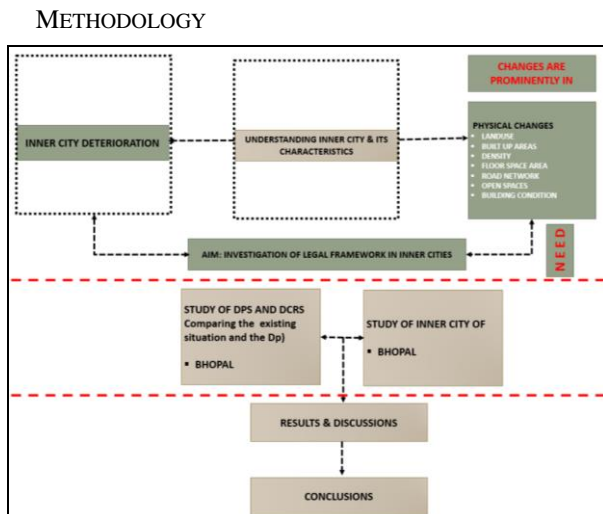
### B. Decline of Inner Cities

The inner-city neighborhood undergoes through a sequential number of changes.

A five-step temporal process of neighborhood change is postulated: 1) single family residences, 2) transition, 3) downgrading, 4) thinning out, 5) renewal ((Sugie Lee, 2007) The explanation of the above process describes the changing growth rate. The blight exists mainly in the inner transition zone and is a result of three main reasons.

1. The horizontal expansion in the core.
2. Piecemeal growth of cities as a whole and decline of property values.
3. The automobile and Transportation networks

The notion of the inner city as an area under stress with a declining social status is not universal. It applies to the old industrial cities. The inner-city decline is not typical, in France and Germany in most of these countries there are negative results of land use competition but these are mostly controlled, the cities are tied by the indigenous inner cities by effective government policies and they have not allowed to decentralize rather they are placed in the central location with higher amenities rather than spreading towards the suburbs. The opportunities of relocation and attractiveness of suburbs is very less. The choice between increased living space and the travel distance will largely capture to explain the housing consumption. Many urban families do not replace and rent saving for accessibility. Attempts of creating or encouraging huge rental housing in the inner city will make the reversal of wealthier in the inner city and the poor to the margins.



### C. Legal Framework & Decline:

D. Objective 1: To understand the inner city, its decline and reasons of the decline

E. Objective 2: To understand role of one reason of decline by investigating the legal framework of past, present and future

F. Objective 3: Understanding Bhopal as a Case Example to elaborate the condition of the inner city and also the problems in the Legal Framework.

## II. STUDY AREA, BHOPAL

### A. Introduction to Bhopal:

The city was founded by Raja Bhoj, in the 11th century. Sulbha mandal (shows imprints of Temple Planning) a place of worship and learning was constructed by Rani Salami. In the 18th century, the city was established again and fortified by Dost Mohammed Khan, when he was invited by Rani Kamalawati as a protector of her territory. In 1871 Qudisia Begum started constructing Jama Masjid on the ruins of Subha Mandal also built shops around the Masjid. The first extension of Bhopal was Jehangirabad. The city sprawled beyond the fort walls towards Gimmori and Mangalwara in haphazard manner. Begum Shahgahan built second planned extension in Tajul Masjid – Shopping Center and residential areas. Hamidullah Khan added some colonies, Industries, demolished fort walls and constructed Sindhi Market and Azad Market led to congestion in central areas. Bhopal was planned to be capital but lacked with residential quarters, secretariat and office buildings. These areas were lacking in consistency, uniform distribution of amenities built on low densities. Overall development plan was decided for capital project area in 1959.

Bhopal city lies in a hilly terrain which slopes towards north and south east. Hillocks are located along the south west and North west portion of the city. These hillocks form a continuous belt. City has two manmade lakes upper lake and lower lake. (Rathor, 2017)

### TIME LINE – DEVELOPMENT PLANS

#### EXISTING SITUATION IN 1963

The city has gone through successive town extensions done in different periods as they were developed to serve different purposes

- The parent walled town has grown into a city
- The town extensions were mainly
- Walled city around the chowk
- Outgrowth abutting walled city – Bairagarh, Bhel Township, Capital Project Townships, Military Cantonment

**BHOPAL DEVELOPMENT PLAN 1991:** It is focused on the efficient and judicious land utilization, compact city development, hierarchical city structure in terms of self-contained units and effective and direct linkages between the work centers and living areas, minimizing travel distances. (Bhopal Development Plan 1991)

**Bhopal Development Plan 2005:** The existing five cities are Parent City, BHEL, BHEL Service Township, Capital Township and Bairagarh. The proposed sub cities to

accommodate an additional population of approximately 10 lakhs are one located near Misrod towards Mandideep and the other between Chola Road and Narsingharh (Airport) Road in NW. (Bhopal Development Plan 2005)

**As Per Dp 2031** The projects like Smart City and Metro Rail Project are being implemented which needs to be incorporated in the Draft BDP 2031. The city has evolved into eight sub-cities. The eight sub-cities are Bairagarh, Neori, BHEL, BHEL Extension, T.T. Nagar, Misrod, Kolar and Old city. Zoning was applied to spread the growth of the city across its total area instead of concentrating on selected land pockets. land-use planning to zoning has been brought about to promote equitable development across the city. (Bhopal Development Plan 2031)

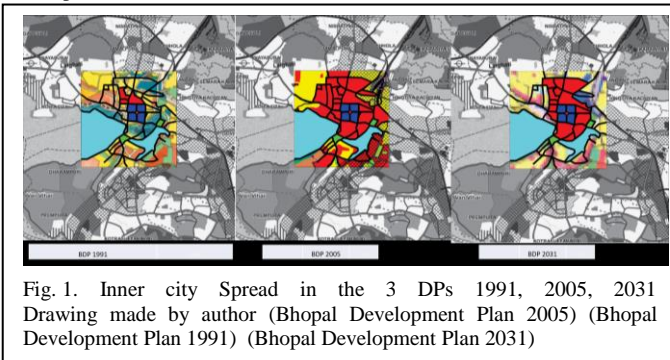


Fig. 1. Inner city Spread in the 3 DPs 1991, 2005, 2031 Drawing made by author (Bhopal Development Plan 2005) (Bhopal Development Plan 1991) (Bhopal Development Plan 2031)

**B. Inner City Problems in Bhopal:**

Inner city areas are hubs of trade and commerce with the historic structures in the center of the area. The city of Bhopal has a rich heritage represented by Maidans, museums, Masjids, Mahals Gateways etc. for e.g., Iqbal Maidan, Gauhar Mahal, Moti Masjid, Sheesh Mahal etc. at the same time inner city constitute old residential cum commercial premise with an organic planning result in chaotic area. Parking Problems, congestion, overcrowding in peak hours, mixing of commercial and residential traffic on inner narrow lanes creates a lot of congestion problems. Old housing stock with traditional shops, enhance the culture and tradition of the inner city but at the same time the greed of converting into more commercial, has took away the whole essence in some parts of the inner-city areas. The decaying housing stock, the congested roads, the over built structures create problems in day-to-day life as well as takes away the taste of old city area. The parking in the old Bhopal commercial areas has become critical because of heavy concentration of activities, narrow road widths, and encroachments on roads, non-motorized traffic and limited space available for parking. In spite of the decentralization of the commercial's centers to the outskirts of the city, the old city portion is still the commercial heart and hub of the city thereby facing acute parking problems.

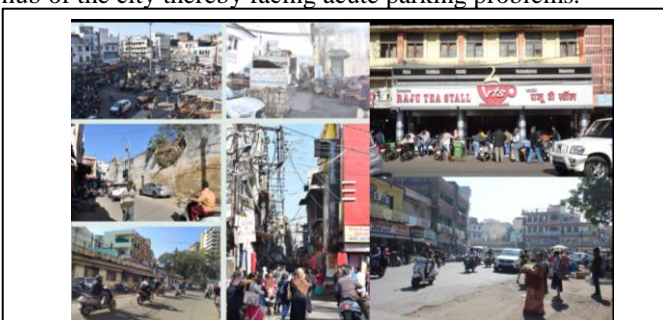


Fig. 2. Inner city of Bhopal (Images clicked by Author)

**C. Inner City Legal Framework:**

The activities of Town and Country Planning Department (TCPD) are guided by the provisions of the Madhya Pradesh Nagar Tatha Gram Nivesh Niyam, 1973 (the Rules). The State Government, as per provisions of the Rules declares a region including major urban areas and its surrounding settlements as a planning area, and orders the preparation of a development plan for the region.

The legal framework in the form of Development plans have been reviewed in this paper to understand the relation between inner city decline and the existing Legal Frameworks. The parameters identified to understand the existing and projected situation in the city and old city in the consecutive Development plans are Population, density, Area and Land use.

**III. RESULTS AND DISCUSSIONS**

**Population:** According to the 2011 Census of India the population of the city is 17, 95,648 with a declining growth rate (25.33% in 2001-11) indicates that the population growth rate of the city increased tremendously in the earlier decades and then showed a sudden decline due to Bhopal gas tragedy in 1984 and also due to formation of Chattisgarh, many of the government employees migrated to the new. Having 70 wards, covering a gross area of 285 km<sup>2</sup> (Bhopal municipal limit) including the lakes and hills, the city has a low gross density 50 persons per hectare (PPH). Even if the areas of hills and the lake area of 38 km<sup>2</sup> are not included, the density on habitable land is still low at 80 PPH.

TABLE I. POPULATION OF THE CITY

Time Period	Population of the City, Bhopal			
	Development Plan	Existing	Proposed	Achieved
1973 - 1991	BDP 1991	4,37,000	10,00,000	10,62,771
1994 - 2005	BDP 2005	10,62,771	25,00,000	18,00,000
2005 - 2018	BDP 2005	18,00,000	25,00,000	21,00,000
2018 - 2031	DRAFT BDP 2031	21,08,427	36,00,000	26,25,000

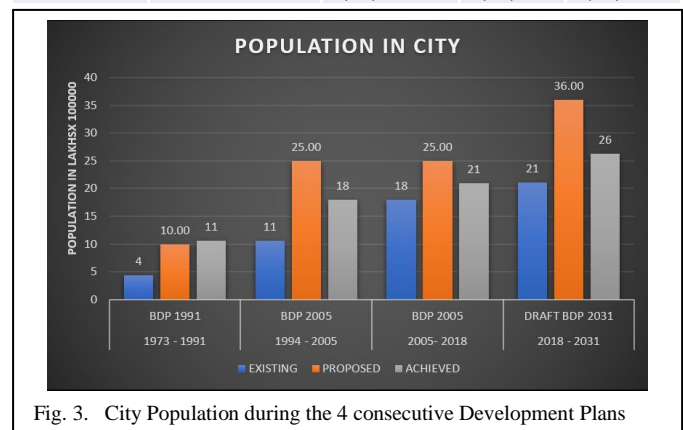


Fig. 3. City Population during the 4 consecutive Development Plans

TABLE II. POPULATION OF THE OLD CITY

Time period	Population of the Old City, Bhopal			
	Development plan	Existing	Planned	Achieved
1973 - 1991	BDP 1991	37800	51000	124800
1994 - 2005	BDP 2005	124800	300000	390900
2005 - 2018	BDP 2005	390900	420000	520000
2018 - 2031	DRAFT BDP 2031	520000	569000	644800

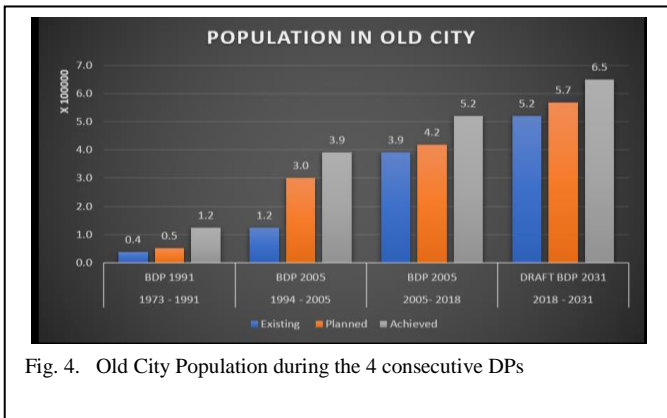


Fig. 4. Old City Population during the 4 consecutive DPs

**Area, Spatial Growth and Sprawl** Despite of declining population growth rate, the spatial expansion of Bhopal is high. The city has expanded almost three times from 1989 to 2012 which is seen in the development plans, which is tremendous and this was the phase during which the population growth rate started declining also indicates that although the rate of spatial expansion in the last decade has shown decline from 89.09% to 34.04 %, it is still high when compared to other cities in the country which are similar to Bhopal in terms of either population or spatial structure. The city as well as the inner city has gone through expansion but the situation is different in both the areas spatially and demographically. This sets an alarming bell to investigate the evolution, rules and regulations applicable in the city by deeply analysing the legal Framework i.e the Development Plan of the City, Bhopal.

TABLE III. AREA OF THE CITY

Time Period	Development Plan	Existing	Planned	Achieved
1973 - 1991	BDP 1991	1534	4050	3660
1994 - 2005	BDP 2005	3660	8190	8190
2005 - 2018	BDP 2005	8190	8190	8190
2018 - 2031	DRAFT BDP 2031	10169	36579	26786

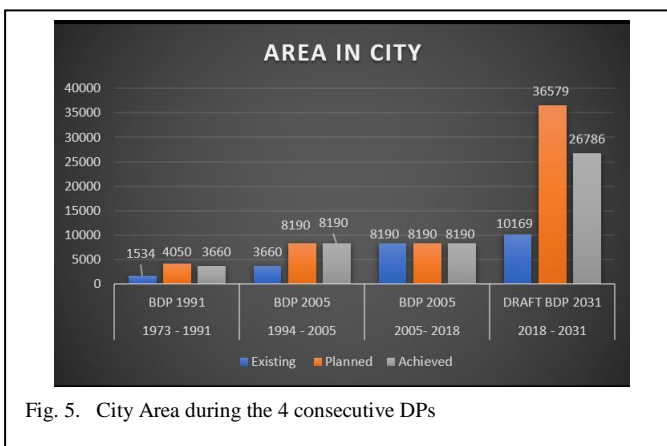


Fig. 5. City Area during the 4 consecutive DPs

Commercial				
Time Period	Development Plan	EXISTING	PLANNED	ACHIEVED
1973 - 1991	BDP 1991	65	405	243
1994 - 2005	BDP 2005	243	650	650
2005 - 2018	BDP 2005	650	650	1263.95
2018 - 2031	DRAFT BDP 2031	1263.95	5081	2,452

TABLE IV. AREA AND SPRAWL OF OLD CITY

Time Period	Development Plan	Existing AREA		Proposed area		Achieved area				
		Walled City	Sprawl	Walled City	Sprawl	Walled City	Sprawl	Total		
1973 - 1991	BDP 1991	86	70	156	86	70	156	86	225	311
1994 - 2005	BDP 2005	86	225	311	86	500	586	86	427	513
2005 - 2018	BDP 2005	86	427	513	86	650	736	86	620	706
2018 - 2031	DRAFT BDP 2031	86	620	706	86	620	706	86	580	666

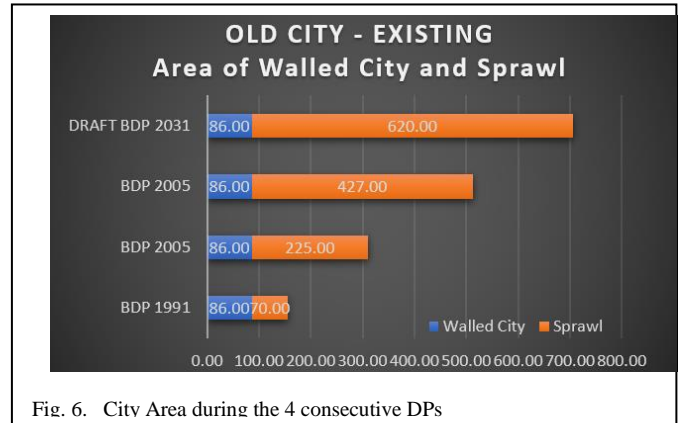


Fig. 6. City Area during the 4 consecutive DPs

**Land use of the city** There are efforts to redensify certain parts of the city, but it is quite insignificant as the proposed area for redensification comprises of only 1.74% of the total proposed residential use. The proposed residential area as per the Master Plan itself is more than double the existing residential area i.e., 36.6 Km<sup>2</sup> to 81.9 Km<sup>2</sup>. Further, the master plan proposes a uniform residential density of 250 PPH (with 25 PPH in areas having physical constraints) in all directions, without considering transit corridors and activity hubs which could have been addressed through TOD concept so as to have varied density and more efficient utilization of land resources.

TABLE V. LAND USE OF THE CITY

	Existing 1973	Planned 1991	Achieved 1994	Planned 2005	Existing 2018	Achieved 2018	Planned 2031
Residential	1543	4050	3660	8190	10169	10169	36579
Commercial	65	405	243	650	1263.95	1263.95	5081
Industrial	348	1135	806	1389	9569	9569	7113
Public & Semi public	542	1495	1178	1773	3060	3060	10160
Recreation	203	1415	902	2925	14226	14226	14225
Transportation	542	1620	1062	2600	2769	2769	12194
Total	3243	10120	7851	17527	41056.95	41056.95	85352

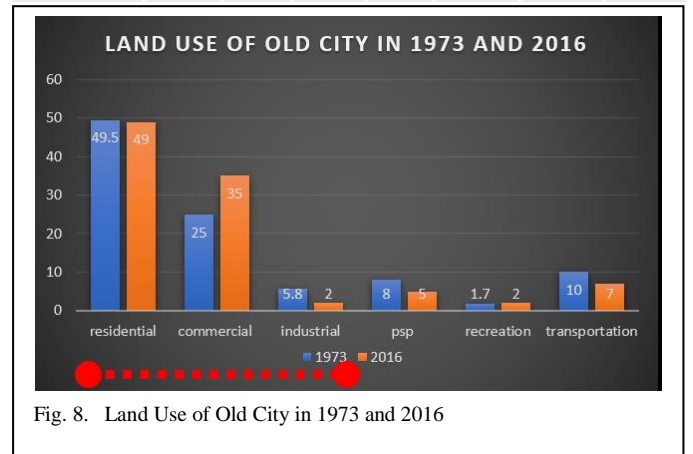


Fig. 8. Land Use of Old City in 1973 and 2016

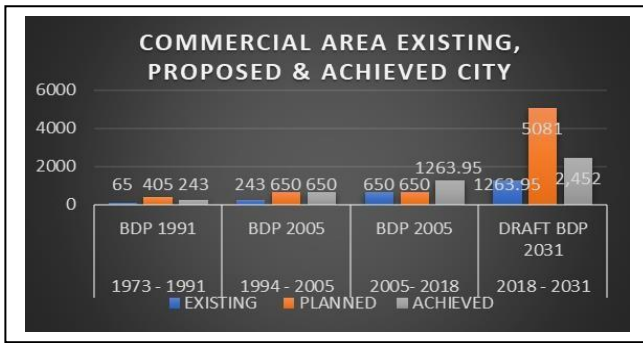


TABLE VI. RESIDENTIAL AREA EXISTING, PROPOSED AND ACHIEVED

Residential				
Time Period	Development Plan	Existing	Planned	Achieved
1973 - 1991	BDP 1991	1543	4050	3660
1994 - 2005	BDP 2005	3660	8190	8190
2005 - 2018	BDP 2005	8190	8190	10169
2018 - 2031	DRAFT BDP 2031	10169	36579	12,610



Fig. 9. Residential Area Existing, Proposed and Achieved

CONCLUSIONS:

In BDP 2005 The city had started to grow as a multi nuclei city. So, the objectives for the plan were undertaken as ‘Multi Nuclei Compact City development’, environmental conservation, conservation of cultural assets, efficient utilization of land, providing infrastructure and facilities and proposal for participation in land allotment and infrastructure development. Although the Bhopal Master Plan 2005 envisaged a ‘Multi- Nuclei Compact City Development’, its vision appears unlikely given the current way the city has expanded. There are efforts to reidentify certain parts of the city, but it is quite insignificant as the proposed area for

redensification comprises of only 1.74% of the total proposed residential use. The proposed residential area as per the Master Plan itself is more than double the existing residential area i.e.,

36.6 sqkm to 81.9 sqkm. The proportion of land un utilised is more than expected as the findings indicated that the need of the changing society which preferred more of community living rather than horizontal expansion leading to sprawl in the city as well as old city. Due to centralisation of commercial activities in and around the city core and also due to topographical factors of the city as well as the core, on the SW and SE side of old city and even due to the land locked and presence of railway line on the eastern side makes the core more densified in these areas leading to less of sprawl of the core and densification increases.

Time to time development plans and Development control rules shall be assessed as per the existing situation in the city and the old city area, as the scenario in old city is entirely opposite than the city area. So, there is a need to work out the planning policies to reduce the violation of buildings existing in old city area as it is deteriorating very fast. The old city area needs attention in the existing situation to overcome the decline situation. In western countries the inner city starts to rejuvenate because the legislation doesn’t all ow the city and the inner city to spread endlessly. The zoning regulations and gentrification is too effective that the inner city maintains its character by keeping the organic open spaces intact and pay attention to the built mass. The definition of mixed use is also proliferated in Indian inner cities. The percentage of increasing commercial areas and reduction in residential has resulted in decline of the inner-city infrastructure. The DCRs need to overthink and come up to the solution of deciding the area distribution of residential and commercial in mixed use areas in inner and the city areas.

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