

Strategies for Improving Urban Fabric in Core Area of Mysore City



Shobha R., Shankar B.

Abstract: *The core of historical cities in India is complex areas; having historical urban fabric symbolizing the origins of the city usually endowed with significant heritage buildings and serving as a place of identity for the entire city. The core of Mysore is one such historical and prime heritage city in India. The city is known as the 'city of palaces'. The City of Mysore originated as a small nucleus with Ambavilas palace as the focal point and has expanded around the palace as when required. The origination point is currently the core area which is the oldest city part having many prevailing heritage buildings. The core of Mysore has historic urban fabric and exhibits unique characteristics that contribute significantly to the good imageability of the city. The core is in the phase of transformation due to rapid urbanization. The disharmonious developments have resulted in the loss historical urban fabric and character, thus tarnishing the image of the city. The methodology for the study is based on field survey adopting visual survey method for data collection by techniques like photography, diagrams or maps and analyzing various literatures to comprehend the elements of urban fabric, historic evolution, growth and development of urban core areas. The paper attempts to analyze the urban fabric of Mysore core, factors affecting and suggest strategies and measures for improving the urban fabric for conserving the character of city core. The paper also intends to emphasize on challenges of core areas undergoing constant pressure of transformation prone to consequential effects of urbanization resulting in loss of character. The proposed strategies are some of the tools and techniques that could be adopted by urban designer, planner, and local planning authorities in improving the urban fabric of core area.*

Key Words: *heritage core, urban fabric, built form, the image of the city*

I. INTRODUCTION

The historic urban fabric is considered as the materialized form of an urban system through its architectural elements that combine to create functional, meaningful and identifiable spaces in relation to society, the time and the place [1]. The urban fabric of a city is shaped since the beginning and it continually evolves in response to various developments [2]. Our cities are made up of a complex underlying structure and fabric that needs to be analyzed.

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The urban form of any area unveils the physical complexities of various scales, from individual buildings, plots, street-blocks, and the street patterns that shape the structure of towns [3]. To effectively plan for the future, an understanding of history is essential. Hence an urban designer, planner, and authorities need to comprehend the ways in which towns have evolved and the nature of urban dynamics.

II. BACKGROUND OF MYSORE

Mysore is popularly known as “The cultural Capital of Karnataka” and is the second-largest city in the state of Karnataka. It had a population of 887,446 as per 2011 census figures. It is located at the base of the Chamundi Hills about 146 km southwest of the state capital Bangalore. The city spreads across an area of 128.42sq.kms. Mysore is located at 12.30°N 76.65°E and has an average altitude of 770 meters (2,526 ft). Mysore has both tangible and intangible heritage and is a major tourist destination in its own right. It is a prime heritage city in Karnataka having the right combination of built and natural heritage.

III. CORE AREA OF MYSORE

The Urban Core of Mysore contributes to its uniqueness and is the city's greatest character defining element. The historic urban fabric has well established urban form having a radiating street pattern with the palace as the focal point at the center. Unique neighbourhoods, gigantic scale and majestic presence of monuments, palaces, and temples, historic buildings, a compact network of streets, parks, all these combine to produce a sense of place that differs from any other area. The wide boulevards radiate from the center accommodating significant public buildings on either side. The core area of the city is dominated by significant heritage buildings. The core covers an area of 300.15 hectares. There are 45 heritage buildings (seen in fig 1) in the core area and 83% are Grade-I buildings. Amba Vilas Palace is a prominent heritage building in the core attracting millions of tourists every year. The other significant heritage buildings are Jaganmohan palace, city corporation office, Town hall, Silver jubilee clock tower, K.R. hospital, palace offices, Chamundi guest house.

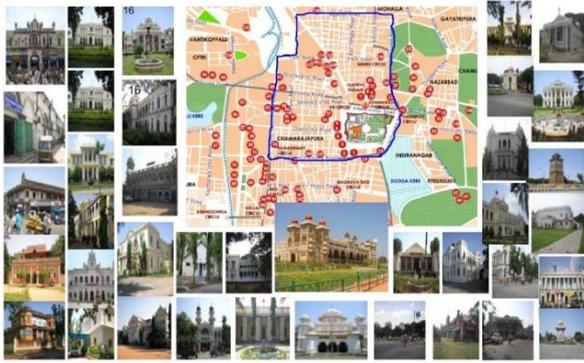


Fig 1: Heritage Buildings in the Core Area of Mysore

IV. DEVELOPMENT OF HISTORIC URBAN FABRIC OF CORE AREA

At the incipient, in the 14th century, the evolution of the core started with mud fort with the temples of Triyanesvara, Somesvara, and Bhairava and the fort was reconstructed under Chamaraja Wodeyar IV during the 16th century. The city then consisted of only one street 1.5 km long towards the north (currently Ashoka Road), the road leading to Srirangapatna. Mysore expanded and moved beyond the walls of the fort during the reign of Krishnaraja Wodeyar III in the 17th century. Along this road, the most of the residences of princes, nobility and high officers of the State (Lashkar Cantonment) were located. The middle and lower classes were located within the walled fort area organized by profession and caste. They were living in whitewashed flat-roofed houses. The construction of the Maharaja's Sanskrit College, the Lansdowne market, the KR Hospital, the Town Hall, during the reign of Krishnaraja Wodeyar IV. The Then Maharaja developed Mysore into a beautiful city with excellent planning with the construction of some symbolic buildings[5]. The development of fabric in the core area and the timeline of the construction of significant buildings is depicted in the fig.2.

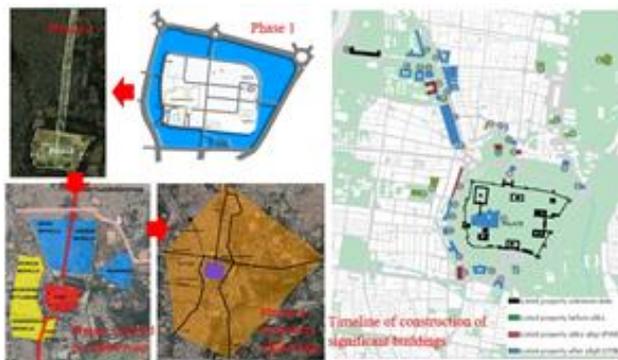


Fig 2: Phases of Development of the Historic Fabric of the Core Area (source: Mysore City corporation)

The development of the city started from the core area which is the oldest part of the city. The core area is where the palace being the focal point all other land-uses are scattered around it. The urban form at the core is the result of a process of development in many phases over the years. The historic fabric of the core area of Mysore was developed in the past with different zones having different activities in each zone. Like palaces or mansions zone, institutions zone, market/ commercial zone, and residential

zone. In the historic urban zoning at the center was the palaces surrounded by the public buildings and offices zone. The next order zone was the commercial zone with the bazaars like Jantha bazaar, Lansdowne bazaar, and Devaraja market. Then the residential zones and institutions zone.

V. LANDUSE OF CORE AREA

The core area contains a mix of diverse uses and possesses a wealth of historical architecture. Compared to other districts the concentration of various uses viz. retail business activities, public and semipublic spaces, tourist attracting places and many recreational activities like Cinema theatres, hotels are more in the core area and residential areas as well. The residential use is 12.72% of the total area. The central area is dominated by a higher order of economic activities. Retail commercial activities, which are predominantly, located in areas namely Shivrampet, Santhepet, Devaraja market, and Ashoka road. The commercial land use is the highest in the district and it constitutes 29.52% of total area. Secondly, the public and semi-public constitute 25% of total area and buildings like Town Hall, Palace offices, institutions and many tourists attracting places viz. Ambavilas palace, Jagnmohana palace are dominating in this area.



Fig.3: Existing Landuse of the Core Area
Table 1: Existing Landuse of the Core Area

PROPOSED LAND USE ANALYSIS			
NOTATION	LAND USE CATEGORY	AREA IN Ha.	% TO TOTAL DEVELOPABLE AREA
	RESIDENTIAL	38.19	12.72
	COMMERCIAL	88.60	29.52
	INDUSTRIAL	0.28	0.09
	PUBLIC & SEMI-PUBLIC	75.03	25.00
	PARKS, PLAY GROUND AND OTHER OPEN SPACES	24.11	8.03
	PUBLIC UTILITY	0.00	0.00
	TRAFFIC & TRANSPORTATION	73.54	24.50
	AGRICULTURE	0.00	0.00
	WATER BODIES	0.40	0.13
TOTAL DEVELOPABLE AREA		300.15	100
	AGRICULTURE	0.00	0.00
	WATER BODIES	0.00	0.00

Source: Mysore Urban Development Authority, 2016

VI. EXISTING URBAN FABRIC IN CORE AREA

The block patterns in the core area reveals irregularly shaped street patterns and urban blocks. As shown in fig 4, The Major typologies of block patterns are



- (a) Blocks with Linearly arranged plots of irregular sizes in the residential areas of Mandi Mohalla and Lashkar Mohalla,
- (b) Blocks with compactly arranged plots of irregular sizes in southwest areas of CBD and Agraharas
- (c) Planned blocks with buildings diffused over large open areas like palaces, institutions, public buildings like Ambavilas palace, KR hospital, and Townhall areas.

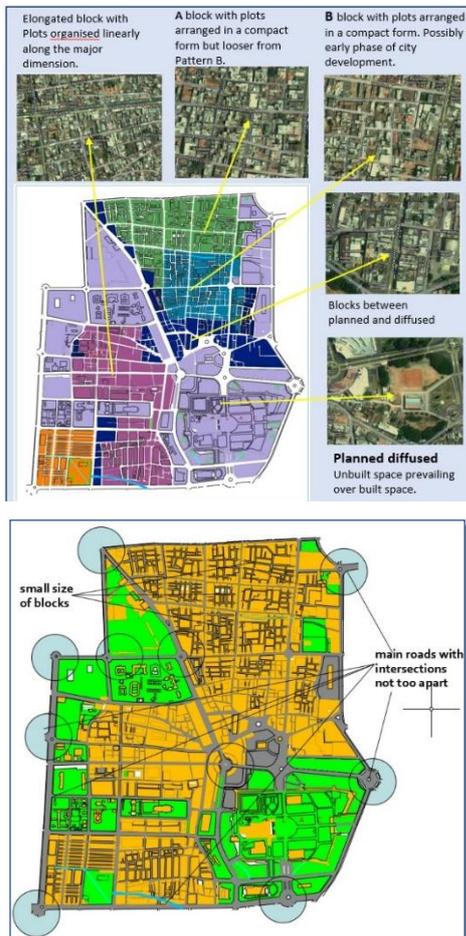


Fig.4 Urban Fabric in core area

There is an amazing amalgamation of planned and unplanned layers of the urban fabric. The characteristics of the urban fabric are the arterial street patterns are easily navigable with small blocks in close proximity and intersections that are not too apart. In the areas between these arterial road networks, the core exhibits fine grain characteristics with a basic network of narrow streets, short blocks, and alleyways. Existence of a rich urban environment with large green areas and parks around the public buildings is typical character of this area.

VII. STREETSCAPE CHARACTERISTICS

In the core of Mysore, there is a hierarchy in the network of roads and streets with arterial roads originating from the center of the city that is from the Palace and run radially leading to towns and cities outside. These boulevards radiating from the center are interconnected and most of them converging to points of focus, at squares or intimate spaces or landmark features. Most of these roads in the core area are broad and straight with regular footpaths on either

side. Albert victor road and Mirza Road are notable examples. These main roads are intersected by several sub arterial and internal streets of varying widths organically. The local internal roads are discontinuous and narrow. More than 80% of the commercial land-use on the main roads in the core area concentrated mainly on a few roads and is because of the previously established activities and the mobility pattern. Much of the interior parts still have residential land-u, but the interior roads are not much integrated with the street network, which makes accessibility difficult. The major commercial activities are concentrated on Irwin Road, Sawday Road, Ashoka Road, Sayyajirao Road, JLB Road, Dewan Road, and Chamraja Double Road

The core exhibits predominantly the following typologies of Streetscape characteristics (fig 8)

- 1) wide boulevard with tree lining on both sides and large building setbacks
- 2) enclosed road with tree lining and building alignment on both sides
- 3) Open areas with major isolated buildings
- 4) Enclosed Green Road with Mature Trees Lining on both sides



Fig.8 Typology of Streetscapes in the City Core

VIII. BUILT FORM CHARACTERISTICS

The built form of the city core is dominated by urban design elements contributing to the character of the city, aesthetics, and architecture. Thus, city core has an urban form that has both architectural and urban design elements namely vistas, focal points, landmarks, nodes and plazas which made it undeniably the prominent heritage city. The combination of different styles is applied to urban design elements like statues, clock towers, and fountains and are very well executed in terms of purity of style. They look unified with the right amount of open spaces located at the right places. The city has quality in its built structures which gives a high possibility of evoking a strong image to the city. The predominant typology of built form in the core areas are palaces, KR hospital complex, town hall, public and institutional buildings. The density of the buildings is less and the height is above 12m in these areas. Traditional Residential areas form the other significant part of the urban fabric having compact development with more ground coverage.

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The buildings are constructed very close to each other, several with shared walls and their heights vary from 2 to 3 floors such as Agraharas located in the core area. The Density of built-form is very high in residences built in the historic context predominantly maximum of 2-3 stories. Currently, the building use has been changed to commercial in these areas.

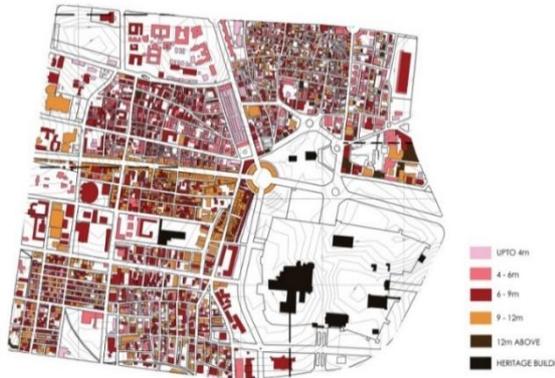
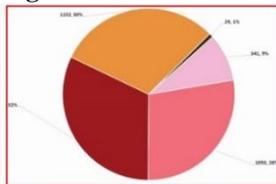


Fig. 5 Height of Buildings in the Core Area.

Table 2: Height of Buildings in the Core Area.

Height of Buildings	No
heritage buildings	45
buildings upto 4m height	341
buildings b/w height	1050
buildings b/w 6m-9m height	1213
buildings b/w 9m-12m height	1152
buildings above 12m height	29
	3830



A. Solids and Voids

The figure-ground analysis represents urban solid typologies (Fig 6) such as larger footprints of Palaces like Ambavilas, Jagamohan, and public buildings like a town hall. The fine grain of residential fabric is predominant in Mandi Mohalla, Lashkar Mohalla, and Agraharas. The residential grain is closely placed, whereas the palaces and public buildings are diffused over a large open space wherein buildings sit within established largely exotic gardens.



Fig .6 Built spaces



Fig. 7 Un-built spaces

The figure-ground analysis represents typologies of urban voids (Fig.7) such as the streets which are narrow and unplanned in residential areas, wide and planned streets such as Sayyaji Rao road, Narayana Sastry road, JLB Road, Devaraja Urs The Road, Albert Victor road around palaces, institutional buildings and public offices. other typology is the large patches of open pockets like parks such as Curzon

Park, Dr.Rajkumar park, open spaces and grounds like freedom fighters park and JK grounds area.

IX. ISSUES AND STRATEGIES FOR IMPROVING THE URBAN FABRIC

1) The historic fabric of the core area of Mysore with different zones having different activities in each zone is currently undergoing transformations (seen in fig. 8) like the palaces zone is presently an important tourist zone with the Ambavilas palace functioning as a museum and the Jaganmohan palace functioning as the art gallery. This attracts a lot of tourists leading to management issues like overcrowding, traffic congestion, parking problems, pressure on services, attracts more street vendors resulting in encroachment of footpaths etc. The public buildings zone has remained the same however the major changes are in residential zones with the change of residential building use to commercial which has further increased congestion. These issues could be addressed by adopting measures like properly organized Public transport system and identification of streets where pedestrianization could be promoted in the core area. At specific locations the entry points to the core along with parking areas have to be planned. The proper network of cycling facilities and tanga the traditional transport system to be developed to control the traffic in historic area.

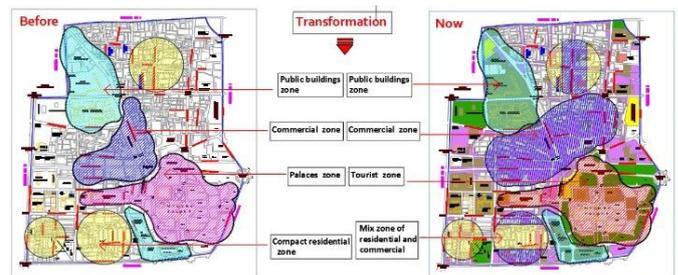


Fig.8 Zoning Transformation

2) Increased demand for commercial activities has triggered enormous land use changes from residential to commercial (Fig.10) resulting in built form transformation of existing buildings in core areas. In terms of recent developments mixing of land uses is taking place indiscriminately. The residential buildings are getting converted to commercial at the ground level and the residence retained at first floor and above levels resulted in emergence of mixed land use (Fig. 9). This incompatibility of land uses has resulted in noticeable changes in built characteristics of the urban fabric and increased congestion of the city's various networks. As a result, the intensity of use is increasing resulting in friction of spaces, all contributing to the loss of character and identity. The approach shall be by delineating the Heritage core with proper boundaries. The heritage core shall be delineated into different heritage zones like primary, secondary, buffer areas, and individual heritage sites. Specific proper heritage regulations regarding zoning, building byelaws, change of building use, have to be formulated for each of the zones to control changing physical fabric in core.



Fig.9 Mixing of Land Uses

3) The old and low-rise buildings in the core were the places of business and commercial activity of the city. Excessive demand for commercial activities has resulted in either the old structures are getting demolished or are subdivided and sold to many owners. The new structures which have come up have no regard for the character or architectural quality of the surrounding buildings. In the subdivided space, the owner renovates without consideration of the style or character of the building as shown in fig. 11 and has resulted in enormous transformations in built forms occurring in the entire core area.

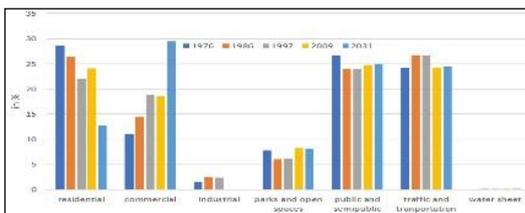


Fig.10 Land use changes in core area



Fig.11 Changing Built Form of Residential Areas



Fig.12 Built Form Transformation

4) Besides, the other noticeable issues of built forms are juxtapositions, Excessive change of scale, massing, and materials unrelated to the context, skyline variations, building alignment and height which are not respected by the new constructions (Fig.12). These developments are incompatible with the existing architecture in the core area tarnishing the identity of the place. It is necessary to introduce the Comprehensive urban design and conservation guidelines for preserving and enhancing the traditional character of the city. The specific guidelines need to be framed addressing the following aspects

A. Site Planning: Orientation of a building to the street, maintaining the line of building fronts, fencing, Windows, their openings, proportions, and treatments should be similar to those seen traditionally. The Building Mass, Scale, Form, and color to be compatible with the main building.

B. New Additions: A new addition should be compatible in mass, scale, and form with the primary building.

C. Street Elements: Benches, railings, Trash receptacles, Signboards, Street Lights, Gateway Elements, Railing Designs, compound wall designs, etc have to be of uniform design within the area to maintain the traditional character.

D. Signage should be developed with the overall context of the building and the area. In commercial areas, a sign should attract business but not detract from the visual appearance of the historic street.

X. CONCLUSIONS

Mysore has historic urban fabric and the historic city center is in the phase of critical transformation. The unique characteristics of the core like heritage buildings, monuments, streetscapes, architectural styles, distinct character areas are destroyed with juxtapositions, excessive change of scale, massing, and materials, thus destroying the identity of the place. The most negative effect of urbanization on historic cities is damaging the historic urban fabric. This irreversible process needs to be timely controlled and mitigated; if not original traditional urban fabric will be lost forever. The historical and the current are not entirely distinct entities and is essential to bridge the gap between them. That underlines, efforts are necessary to preserve those parts of the city that provide us with a link to the past. The physical characteristics of the urban setting are continuously changing according to today's demands, which is inevitable, however, the magnitude of change is required to be controlled in order to safeguard and sustain urban identity. There is a need to identify heritage zones with proper boundaries, formulate specific development control regulations, Comprehensive urban design and conservation guidelines to address the issues of changing urban fabric in core area of Mysore city.

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