

# The Neighborhood Planning: A Case Study of DATTAGALLI in Mysuru City

Manasa S<sup>1</sup>, Bhagyalakshmi T M<sup>2</sup>

*1Senior Grade Lecturer, Department of Civil Engineering,  
Government Polytechnic, Arakere Srirangapatana, Mandya*

*2Senior Grade Lecturer, Department of Civil Engineering,  
Government Polytechnic, Mirle Mysore*

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## Abstract

*This case study examines the social, economic, and physical characteristics of [Dattagalli in Mysuru city], analyzing its strengths and weaknesses in terms of accessibility, community cohesion, housing diversity, and environmental sustainability, with a focus on identifying key challenges and potential interventions to improve the overall quality of life for residents within the neighborhood's unique context.*

**KEYWORDS:** *Neighbourhood Planning, Neighbourhood Unit, Concept of Neighbourhood*

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## I. INTRODUCTION

Neighborhood is an area around a house. It is the particular part of the town and the people who live there. It is a small unit which serves the local community and encouraged them to foster a neighborhood spirit or relationship which seems to have been lost in modern life. Neighbourhood planning is to organize neighborhood residents and seek their input throughout the planning process. Neighborhood planning has generally been accepted as a basis for the development as well as redevelopment of residential areas in towns and cities. In the physical sense a neighbourhood unit is the minimum geographic and planning unit, which contains the basic public utilities, municipal services and community facilities, required by in common by the residents and which provides a physical form conducive to the development of a fuller and richer life of the individual, the family and the community.

## II. EVOLUTION OF NEIGHBOURHOOD PLANNING:

Neighborhood Unit is introduced by Clarence Arthur Perry (1872-1944) Perry's neighborhood unit concept began as a means of insulating the community from the ill-effects of burgeoning sea of vehicular traffic. The 'Neighbourhood Unit' as a planning concept evolved in response to the degenerated environmental and social conditions fostered as a consequence of industrial revolution in the early 1900s.

## III. CONCEPT OF NEIGHBOURHOOD:

Neighbourhood planning is quickly becoming a high priority for the city planning departments, and even human service providers. Neighbourhood planning is effective and provide inspire those creative strategies that can increase the capacity of residents in charting out their shared future. It's a vision of a better future. The concept of neighbourhood unit was evolved due to the advent of industrial revolution and degradation of me city environment caused due to high congestion, heavy traffic movement through the city, insecurity to school going children, distant location of shopping and recreation activities . Hence to create, A safely healthy physical environment in which children will have no traffic streets to cross on their way to school, schools which are within walking distance from home;

- An environment in which women may have an easy walk to a shopping centre where they may get the daily households' goods.
- Employed people may find convenient transportation to and from the work.
- An environment in which a well-equipped playground is located near the house where children may play in safety with their friends for healthy development of their mind and spirit.

With consideration to all the above physical factor's the Neighborhood concept was evolved.

## IV. PURPOSE OF NEIGHBOURHOOD PLANNING:

- To make the people socialize with one and another.
  - To enable the inhabitants to share the public amenities and recreational facilities.
  - To support a safe and healthy environment within the neighborhood.
  - To provide safety and efficiency to road users and pedestrians.
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- To maintain, enhance, and improve area for recreational activities.
- To determine community's prospects for the future.

#### **V. AIM OF THE STUDY:**

To critically appraise the planning concepts (land use, transportation, infrastructure and prospects of ideal neighbourhood) used in Dattagalli 3rd stage at Mysore.

#### **VI. NEED FOR THE STUDY:**

The purpose of the study is to develop a strong sense of community by promoting neighbourhood beautification, gathering places, neighbourhood interaction and crime prevention. And also to study the area critically and observe the main deviations and violations made by the public and how does a neighbourhood change from a proposed layout to existing conditions that strongly support initiatives that improve both the physical and social fabric of the community and promotes a strong sense of community identity and stability through community interaction and mutual aid and also to work toward a safe, vibrant, sustainable mixed-use.

#### **THE PURPOSE OR ESSENTIAL OBJECTIVE OF PHYSICAL PLANNING: -**

- Convenience
- Environment
- Health

The object of convenience includes the various economic, social and recreational amenities to be given to the public. These amenities include water supply, sanitary and electricity, transport, commercial units, etc., where recreational amenities include park, open space, play grounds and community centre, etc.

The object of environment is important in a sense that an environment to bring a better relation between neighbours, community, man and his environment in order to lead a better or peaceful and safety in all respects.

The object of health include to provide health facilities and park, playground which act as place to maintain their health and providing a pollution free environment by maintaining pollution of various forms to lowest possible degree or avoiding them from neighbourhood.

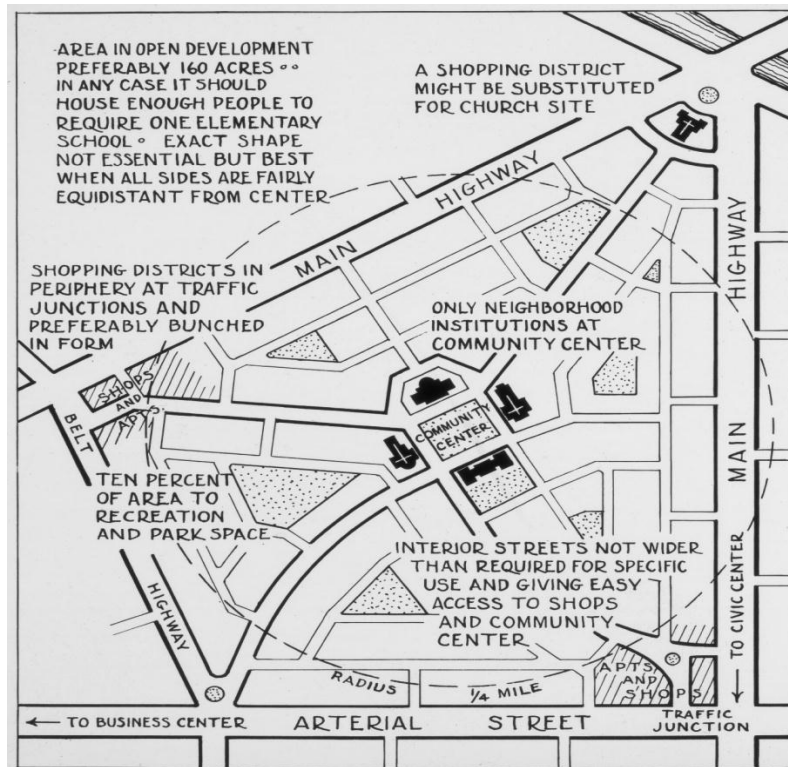
The study area provides to observe the main deviations and violations made by the public, and how does the neighbourhood change from proposed layout to existing conditions which help in improving the physical and social condition of community, and promotes common interest in developing the stable community through interaction and mutual aid to work toward a safe, vibrant, sustainable, mixed- use

#### **VII. CLARENCE A. PERRY'S CONCEPTION OF THE NEIGHBOURHOOD UNIT**

Perry described the neighbourhood unit as that populated area which would require and support an elementary school with an enrollment of between 1,000 and 1,200 pupils. This would mean a population of between 5,000 and 6,000 people. Developed as a low density dwelling district with a population of 10 families per acre, the neighborhood unit would occupy about 160 acres and have a shape which would render it unnecessary for any child to walk a distance of more than one-quarter mile to school. About 10 percent of the area would be allocated to recreation, and through traffic arteries would be confined to the surrounding streets, internal streets being limited to service access for residents of the neighborhood. The unit would be served by shopping facilities, churches, and a library, and a community center, the latter being located in conjunction with the school .

Perry outlined six basic principles of good neighbourhood design. As may be understood, these core principles were organized around several institutional, social and physical design ideals.

1. **SIZE**-A residential unit development should provide housing for the population for which one elementary school is ordinarily required, its actual area depending upon its population density.
2. **BOUNDARIES**-The unit should be bounded on all sides by arterial streets, sufficiently wide to facilitate its bypassing instead of penetration, by through traffic.
3. **OPEN SPACES**-A system of small parks and recreation spaces, planning to meet the needs of particular neighbourhood should be provided.
4. **INSTITUTION SITES**-Sites for school and other institutions having service spheres coinciding with the limits of the unit should be suitably grouped about centrepoint, or common.
5. **LOCAL SHOP**-One or more shopping districts, adequate for the population to be serviced, should be laid out in the circumference of the unit, preferably at traffic junctions and adjacent to similar district of adjoining neighbourhood
6. **INTERNAL STREET SYSTEM**-The unit should be providing with a special street system, each highway being proportioned its probable traffic load, and the street net as a whole being designed to facilitate circulation within the unit and to discourage its use through traffic.



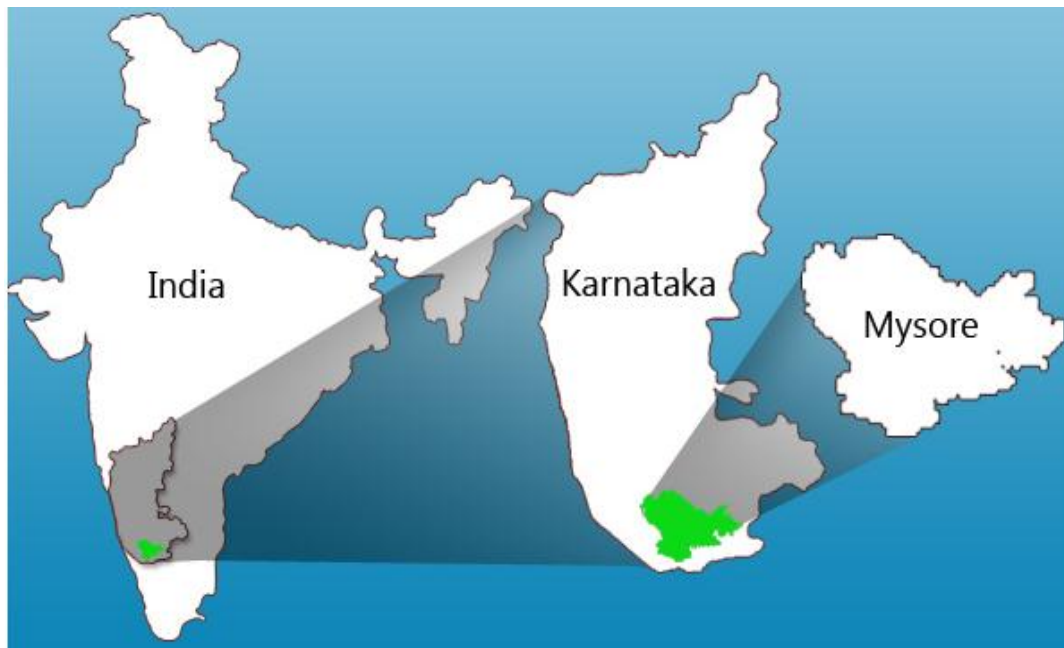
Clarence A. Perry's neighborhood unit of 1929

#### VIII. CHARACTERISTICS OF THE CONCEPT OF NEIGHBOURHOOD DESIGN

- It must have means of identity and safety.
- It must include a perfect landmark, be they physical or cultural.
- It must have a distinct boundary.
- It should have an elementary school.
- Cater to the daily needs which include, education, health, religious and recreational facilities.
- It must have a quiet and clean environment.
- It cannot allow an industry within the neighbourhood limits.
- No through and direct traffic between two neighbourhoods.

#### IX. ABOUT MYSORE CITY:

Mysore is the third largest city in Karnataka, is an important tourist and heritage capital of Karnataka. Mysore is the second most populated city in Karnataka which is 149.9km from state headquarters, Bangalore. The city is well connected to other part of Karnataka and Neighbour states such as Kerala and Tamil Nadu by road as well as rail. Mysore districts cover an area of 6854sq.km. Mysore city is at 770m above sea level, and 12°18' N latitude and 76°39'E longitude the average rain fall is about 760mm.



- Geographic location: 12°15'N to 12°30'N latitude and 76°30' E to 76°45' E longitudes
- Temperature: Maximum 39.4°C on the 4th of April 1917 and Minimum 10.6°C on the 13th of December 1945
- Average rain fall: Annual rainfall in the district was between 600 mm and 900 mm
- Rivers: Kabini, Kaveri, Laxmanathirtha, Suvarnavathi, Gundluhole and Nuguhole.
- Area: 6854sq.km.
- Natural Vegetation: The area covered by forest is 4,126.45 sq km and 3,875.6 sq km, are reserved forest
- District Headquarter: Mysore city
- Taluks: 07
- As per 2011censes Population is 893,062 of which male and female are 446,676 and 446,386 respectively. Population Density= 476 per Sq.km.

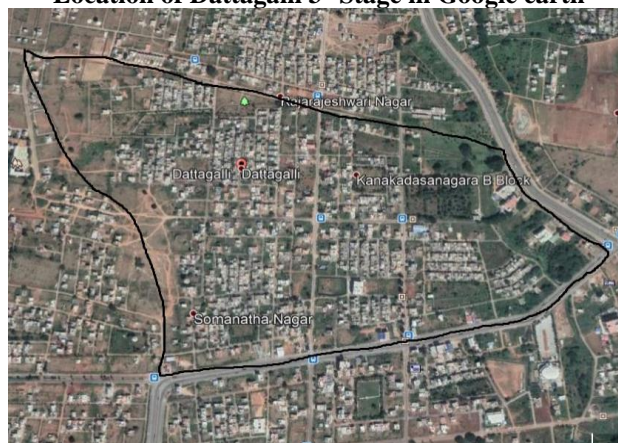
## 10. ABOUT DATTAGALLI

Dattagalli is a small urban area on the southeast of the city of Mysore developed by Mysore urban development authority(MUDA). It is situated approximately 8km from Mysore city. The Neighbourhood of Dattagalli which is the study area under consideration. It measures about 175.66 acres.

### 10.1 CURRENT STATUS OF DATTAGALLI :

- The internal width of the road is 9m and 12m where as arterial road width is 24m.
- The width of major highway i.e. outer ring road is 34m (including divider), adjacent service road width 4.5m.

**Location of Dattagalli 3<sup>rd</sup> Stage in Google earth**



## 10.2 DEVIATIONS

1. There is no commercial land use allocated in the approved plan but residential plots are using for commercial purpose.
2. Few neighbourhood shops and commercial activity have been established.
3. The storm water drain is not provided with buffer zone and proper fencing. The area next it has become waste dumping yard.
4. In park no.16 a building of kanakadasa pattinasahakara sangha & Mahalakshmi temple is built.
5. There is no buffer for the nala and between the plots of 4<sup>th</sup> and 5<sup>th</sup> main D a drain (nala) is provided without buffer.
6. Few sites are amalgamated and used for commercial.
7. Unbuilt land has become Parking area and waste dumping yards.
8. The bus stops are not marked on the map.
9. C.A-20(Community center) and muda ward office has been used for the purpose of school and college.
10. In some of the sites the height of the building is exceeding the permissible limit.
11. As per MUDA, C.A -17 is permitted for library but now it is used for building of Shri Lakshmi Hayagreeva educational institution.
12. In 20'x30' plots there is a violation in height of the building.
13. Set back violation in the plot no 1215 used for commercial.
14. Plot no. 1152 & 1179 are amalgamated and used for commercial, activity is permissible as per zonal regulations. But, set backs are not followed.
15. Plot no 2751 & 2752 are amalgamated and used for car showroom and services.
16. Hospital construction is observed in the C.A-6 which is designated for post office.

## 10.3 AS PER CLARENCE PERRY'S PRINCIPLES:

### 1) Distribution of parks and open spaces for recreation

- 10% of the area is reserved for parks and play grounds.
- Here only 9.72 % of the area has been provided for parks and open spaces.
- Parks are distributed across the neighbored but they are undeveloped.

### 2) Location of schools

- Schools should be situated in such a way that it should be easily accessible to child and women. i.e. schools should be located at a distance of 1/4<sup>th</sup> mile or within 1/2 a mile distance.
- Christ Bethel school and vishwaprajna primary and high school are in the area.

### 3) Commercial shops

- In this area no commercial land use is allotted by MUDA.
- Some residential plots have been converted into commercial plots and some into mixed land use.
- The Residential plots in the neighborhood support certain commercial activities like grocery shops, hair cutting saloons, bakeries, daily need shops, beauty parlour, clinics etc.
- Here the neighborhood is bounded by major arterial roads, but 2 arterial roads are passing through the neighborhood which doesn't satisfy perry principle.

### 3) Circulation ( internal street system)

- Two 24m main roads run along North to South within the neighbourhood. One 18m road main road run along west to east direction.
- The uneven and inadequate distribution of public-semipublic spaces leads to ignoring safe access to these areas.

- 4) Some major shopping centers can be observed at the central part of the neighborhood along the 24m wide road which does not satisfy the C.A. Perry's principle.

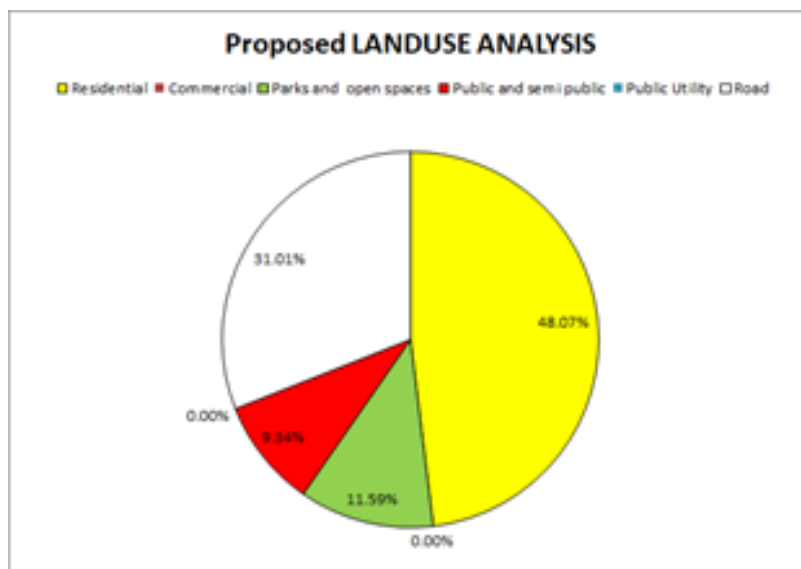
### 5) Density

- A minimum of 160 to 200 acres of land is required for a Neighborhood Unit as per Perry's principles, since the total area is 175.66 acres, this criteria is satisfied.

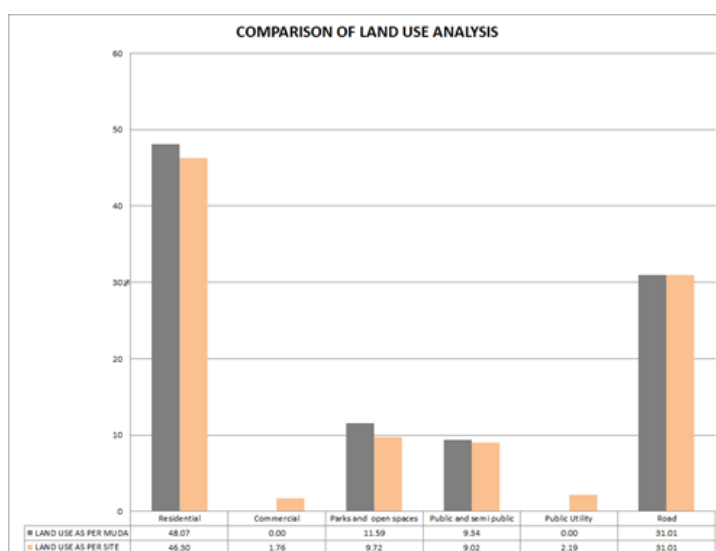
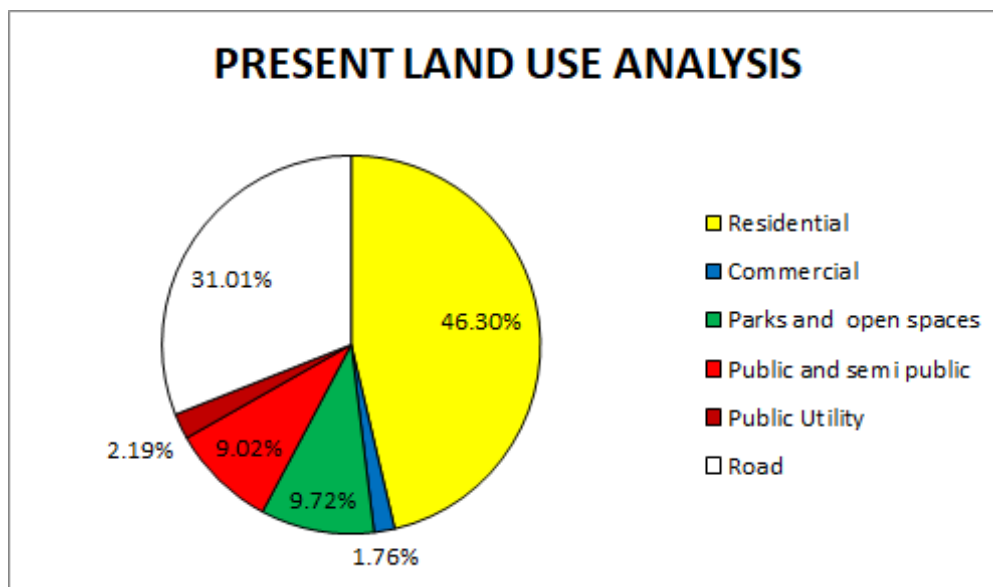
## 11. LAND USE ANALYSIS

Land use analysis				
Sl. No	Land Use	Area (Sqm)	%	% permissible as per ZR provision 1996
1	Residential	341690.05	48.07	50
2	Commercial	0.00	0.00	

3	Parks and open spaces	82367.71	11.59	15
4	Public and semi public	66407.39	9.34	10
5	Public Utility	0.00	0.00	-
6	Road	220422.8	31.01	-
	<b>Total</b>	<b>710887.947</b>	<b>100.00</b>	



Present Land use analysis				
Sl. No	Land Use	Area (Sqm)	%	% permissible as per ZR provision 2016
1	Residential	329155.89	46.30	55
2	Commercial	12534.16	1.76	
3	Parks and open spaces	69081.27	9.72	10
4	Public and semi public	64139.92	9.02	5
5	Public Utility	15553.91	2.19	-
6	Road	220422.797	31.01	-
	<b>Total</b>	<b>710887.947</b>	<b>100.00</b>	



## 12. PLOT ANALYSIS:

Sl. No	Category	Size(m)	No.of plots			Total
			regular	odd	corner	
1	LIG	6x9	874	27	138	1039
2	MIG	9x12	554	102	98	754
3	HIG I	12x18	397	39	92	528
4	HIG II	18x24	104	2	26	132
	Total			170	354	2453

## XI. CONCLUSION

The neighborhood case study revealed that by actively engaging residents, addressing existing infrastructure deficiencies, and prioritizing community-driven initiatives, significant improvements can be achieved in neighborhood quality of life, fostering a stronger sense of belonging and enhancing overall livability, while highlighting the importance of a collaborative approach between residents, local authorities, and stakeholders to tackle complex neighborhood challenges and achieve sustainable development goals.