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## Evaluating the Role of City Improvement Trusts or Boards in Shaping Salutogenic Character of Urban Areas: Case of Bangalore City

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### Abstract:

The city of Bangalore sprawls over 741 sq.mt and is likely to grow consistently in the coming decades with approximately 100 million USD in investments committed in 2022. With climate changes and post Pandemic regulations- the city of 13 Million people is facing a challenging situation where the quality of life-particularly health, needs to be balanced for all its residents. uses Case Study method to understand- the diverse parameters defining the role of City Improvement This paper aims to examine the role and scope of the City's Improvement Trust in shaping its salutogenic character. This paper reviews the framework from which the Trust derives authority, the models of operation, its criticism from the public domain, and its ability to meet future challenges. This research Trust, its limitations, and to develop a matrix for the same. The paper concludes with guidelines for the future of such bodies in metropolitan Indian cities.

**Keywords:** Urban Design; City Improvement Trusts; Post-Covid City; Salutogenic Urban Design; Bye Laws; Climate Change.

### 1. Introduction

Having lived through the recent COVID-19 pandemic that consumed the lives of millions across the globe, the discussions surrounding the role of urban design and planning in making cities Salutogenic, sustainable, and socially inclusive is now gaining momentum. Urban planning and policy which includes land-use planning as well as public health policies, can direct the city towards specific economic, social, political and public safety objectives. However, the relevance of urban planning law in shaping the Salutogenic future of cities is not scrutinized. The legal framework behind urban planning has a perfunctory role to play in determining the spatial growth of a city. It also lays out the boundaries within which urban planning policies and plans continue to develop and operate. While planning law may not directly cause good planning outcomes like sustainability or inclusiveness, it creates the institutions and enables the processes that shape these outcomes (Amen, 2021, Aziz Amen, 2022, Amen et al., 2023, Amen & Nia, 2020). Hence, examining the institutional and legal framework for urban planning is important for understanding the layers that give rise to healthy urban environments.

This article sheds light upon the powers of the urban planning authorities in Bangalore, India and evaluates their role in the shaping of the city's Salutogenic character. The public health realm is particularly the focus since it is of great prevalence since the 2019 Sars Covid-19 pandemic. Proper planning systems in large cities like Bangalore are necessary to follow some fundamental baselines as they have the potential to impact the lives of millions, especially in situations such as contagious diseases which left the city shut down for months at a time. Hence it becomes relevant to examine the policy framework which shapes the spatial configuration of cities like Bangalore and evaluate the role of CITB's or trusts in enabling safe and healthy public spaces.

This paper aims to examine the role and scope of the City's Improvement Trust in shaping its Salutogenic character. This paper reviews the framework from which the Trust derives authority, the models of operation, its criticism from the public domain, and its ability to meet future challenges.

### 2. Literature Review

#### 2.1 Development of Urban planning framework in India

The development of urban planning frameworks in India has evolved over time to address the challenges and opportunities presented by rapid urbanization. Here is a brief overview of the key milestones in the development of urban planning frameworks in India:

The Bombay plague, also known as the Bombay Bubonic Plague or the Third Pandemic, was a severe outbreak of bubonic plague that occurred in Bombay (now Mumbai), India, during the late 19th and early 20th centuries. The outbreak began in 1896 and continued for several years, resulting in a significant number of deaths and a major public health crisis. During this stage efforts were made to control the spread of the disease and improve public health infrastructure by the British colonial government, along with municipal authorities. They implemented various measures such as quarantine, disinfection, and isolation of infected individuals. They also conducted extensive surveys and investigations to identify and eliminate sources of contamination. The result

was the creation of the City Improvement Trusts (CIT) which were established in various cities in India. These trusts were established to address urban issues and carry out urban development projects. The primary aim was to improve the living conditions in cities, particularly in densely populated areas. The trusts focused on initiatives such as slum clearance, sanitation improvements, housing projects, and infrastructure development. In the context of the Bombay plague, City Improvement Trusts played a role in implementing measures to improve public health and sanitation in the city. They were involved in initiatives such as demolishing overcrowded and unsanitary buildings, constructing better housing, widening roads, and improving water supply and drainage systems. The Bombay plague and the establishment of City Improvement Trusts were significant events in the history of public health and urban development in India, particularly during the British colonial period.

**Town Improvement Committees (19th century):** During the colonial era, Town Improvement Committees were established in select cities to address issues of public health, sanitation, and urban infrastructure. These committees marked the early attempts at urban planning and development. The Town Planning Committee, led by Sir Patrick Geddes, was appointed to formulate a comprehensive town planning policy for India. This committee's recommendations emphasized the need for balanced land use, proper infrastructure, and green spaces. **The Bombay Town Planning Act (1915):** The Bombay Town Planning Act was one of the first legislations in India that introduced formal town planning regulations. It aimed to regulate land use, zoning, building controls, and public amenities in the city of Bombay (Mumbai).

**Post-Independence Planning (1950s):** After India gained independence in 1947, urban planning became a significant focus. The First Five-Year Plan (1951-1956) and subsequent plans emphasized the importance of urban development, slum clearance, housing, and basic infrastructure. **The Town and Country Planning Organization (1955):** The Town and Country Planning Organization (TCPO) was established as a central government agency responsible for urban planning and development. It provided technical assistance, formulated policies, and promoted the adoption of planning principles across states. In subsequent years, State and Regional Planning Boards were established to facilitate urban and regional planning at the state and regional levels. These bodies worked in coordination with local governments and the TCPO.

**National Urbanization Policy (1988):** The National Urbanization Policy acknowledged the need for integrated planning, decentralization, citizen participation, and sustainable development in urban areas. It aimed to guide urban development in a more holistic and inclusive manner. **Jawaharlal Nehru National Urban Renewal Mission (JNNURM, 2005; Nia & Suleiman, 2017):** JNNURM was a flagship program launched by the Government of India to address urban infrastructure gaps, promote planned development, and enhance service delivery in cities. It focused on urban governance, basic services, housing, and urban poverty alleviation. **Smart Cities Mission (2015):** The Smart Cities Mission aimed to transform select cities into sustainable and citizen-centric urban centers through the use of technology and innovative solutions. It focused on improving infrastructure, promoting a sustainable environment, and enhancing the quality of life. These are some of the significant milestones in the development of urban planning frameworks in India. Over time, urban planning has become more comprehensive, participatory, and focused on sustainability and inclusive development to address the complex challenges of urbanization in the country.

## **2.2 Bangalore City Improvement Trusts or Boards**

The Bangalore Development Authority (BDA) is a government agency responsible for the planning, development, and infrastructure of the city of Bangalore, now known as Bengaluru. The BDA was established in 1976 to address the rapid urbanization and developmental needs of the city. The growth of Bangalore in the post-independence era led to several urban challenges, including population growth, inadequate infrastructure, and encroachments on public land. To address these issues, the Karnataka Town and Country Planning Act of 1961 was enacted, which provided the legal framework for the establishment of development authorities in the state. The BDA was created as an autonomous body under the provisions of the Karnataka Town and Country Planning Act. Its primary mandate was to undertake comprehensive planning and development of Bangalore and its surrounding areas. The agency was tasked with preparing development plans, acquiring and developing land for residential, commercial, and industrial purposes, and providing essential infrastructure and amenities.

One of the significant projects undertaken by the BDA was the development of residential layouts, commonly known as "BDA layouts." These layouts were planned residential areas developed by the BDA to provide affordable housing to the growing population of Bangalore. The BDA acquired land, designed the layout, and provided basic infrastructure such as roads, parks, water supply, and electricity. These layouts were offered to the public through a lottery system.

Over the years, the BDA has been involved in various infrastructure development projects, including the construction of arterial roads, flyovers, and the development of satellite towns like Nandini Layout,

Banashankari, Koramangala, Rajajinagar and Indiranagar. The agency has also played a crucial role in the development of public amenities such as parks, playgrounds, and shopping complexes. However, the BDA has faced challenges and criticisms along the way. One of the main issues has been the delay in project execution and the slow pace of infrastructure development. Land acquisition has also been a contentious issue, with concerns raised about the displacement of local communities and inadequate compensation. Additionally, there have been allegations of corruption and mismanagement within the BDA.

In recent years, the BDA has been working on revitalizing its operations and addressing these challenges. Efforts are being made to streamline the planning and approval processes, enhance transparency, and improve citizen engagement. The agency is also exploring new approaches to urban development, such as public-private partnerships and sustainable planning practices. The BDA continues to play a vital role in shaping the growth and development of Bangalore. With the city's ongoing expansion and urban challenges, the agency's focus remains on promoting planned development, improving infrastructure, and ensuring the overall well-being of its residents.

### 2.3 Salutogenic Theory

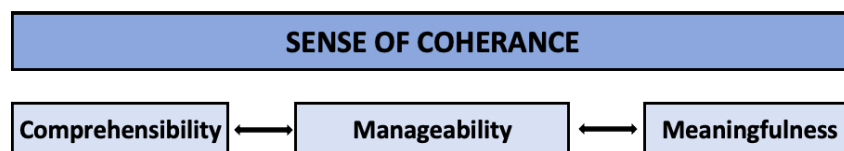
The term "salutogenesis" was coined by medical sociologist Aaron Antonovsky and is derived from the Latin word "salus," meaning health, and the Greek word "genesis," meaning origin or creation. According to Antonovsky health was seen as a movement in a continuum on an axis between total ill health (dis-ease) and total health (ease). The ability to comprehend the whole situation and the capacity to use the resources available was called sense of coherence (SOC). This capacity was a combination of people's ability to assess and understand the situation they were in, to find a meaning to move in a health promoting direction, also having the capacity to do so—that is, comprehensibility, meaningfulness, and the manageability (Antonovsky, A, 1996, et.al). Salutogenic research is based on identifying wellness factors that maintain and promote health, rather than investigating factors that cause disease. The concept of "sense of coherence" (SOC) was developed by sociologist and medical sociologist Aaron Antonovsky. SOC is a theoretical framework that focuses on how individuals perceive and cope with stressful life events and maintain their mental and physical well-being.

According to Antonovsky, sense of coherence consists of three components:

1. **Comprehensibility:** It refers to the extent to which individuals perceive the world as structured, predictable, and understandable. A high level of comprehensibility means that individuals have a clear understanding of their life circumstances, can make sense of their experiences, and perceive events as meaningful and ordered rather than random.
2. **Manageability:** This component relates to the belief that individuals have the necessary resources, skills, and support systems to manage and cope with stressful situations. High manageability implies a sense of personal control and confidence in one's ability to handle challenges effectively.
3. **Meaningfulness:** It refers to the perception that life has meaning, purpose, and significance. When individuals find meaning in their experiences and see value in their goals and aspirations, they are more likely to navigate stressors with a sense of purpose and motivation.

Antonovsky proposed that individuals with a strong sense of coherence are more resilient and better equipped to handle stress, leading to better physical and mental health outcomes. The concept of sense of coherence has been widely used in various fields, including psychology, sociology, and public health, to explore how individuals cope with stress, adapt to challenging circumstances, and maintain well-being.

It's important to note that sense of coherence is a subjective construct and can vary among individuals. Some people naturally have a higher sense of coherence, while others may need to develop and strengthen it through personal growth, supportive relationships, and acquiring resources and coping strategies.



### 2.4 Salutogenic design

Salutogenic design in architecture refers to an approach that promotes health and well-being by creating environments that support and enhance people's well-being. Salutogenic design emphasizes the positive factors and conditions that contribute to health rather than solely focusing on eliminating negative factors or mitigating risks. It recognizes that the built environment can have a significant impact on human health and well-being, and seeks to design spaces that actively promote and support people's physical, mental, and social well-being.

Alan Dilani is an architect and researcher known for his work in the field of salutogenic design and has been actively involved in promoting the integration of health and well-being principles into architectural and urban design. He has emphasized the importance of designing spaces that support physical, mental, and social well-being. He has advocated for incorporating elements such as access to nature, natural light, ergonomic design, social interaction, and environmental sustainability into the built environment. By doing so, the aim is to create environments that enhance human health, productivity, and overall quality of life.

Here are some key principles and features associated with salutogenic design in architecture:

1. **Biophilic Design:** Incorporating natural elements and connections with nature in architectural design, such as incorporating natural light, green spaces, indoor plants, and views of nature. This helps reduce stress, enhance cognitive function, and promote well-being.
2. **Access to Natural Light and Fresh Air:** Maximizing the use of natural light and ventilation to create a healthy and comfortable indoor environment, which positively affects mood, productivity, and overall well-being.
3. **Active Design:** Creating environments that encourage physical activity and movement, such as well-designed staircases, walkways, and bicycle-friendly infrastructure. This promotes physical fitness, reduces sedentary behaviour, and improves cardiovascular health.
4. **Social Interaction Spaces:** Designing spaces that foster social connections and community engagement, such as communal areas, gathering spaces, and multipurpose rooms. These spaces promote social interaction, reduce social isolation, and enhance overall well-being.
5. **Universal Design:** Incorporating principles of accessibility and inclusivity, ensuring that spaces are designed to be usable and beneficial for people of all ages, abilities, and backgrounds.
6. **Thermal Comfort:** Designing spaces that provide thermal comfort through appropriate insulation, shading, and temperature control. This ensures a comfortable indoor environment, which has a positive impact on physical and mental well-being.
7. **Noise Reduction:** Implementing measures to minimize noise pollution within buildings and from the surrounding environment. This helps create a peaceful and stress-free environment that promotes relaxation and concentration.

Overall, salutogenic design in architecture aims to create environments that support and promote health, well-being, and a sense of overall harmony between individuals and their surroundings. It recognizes the interplay between physical, psychological, and social factors, and seeks to design spaces that optimize these factors to enhance the quality of life for occupants.

## **2.5 Salutogenic urban planning**

Salutogenic urban planning refers to an approach that integrates salutogenic principles into the planning and design of cities and urban environments. It aims to create urban spaces that support and promote the health and well-being of residents.

The concept of salutogenesis, originally developed by medical sociologist Aaron Antonovsky, focuses on the factors and conditions that promote health and well-being rather than solely addressing disease or risk factors. Salutogenic urban planning builds upon this concept by recognizing the significant impact that the built environment can have on the physical, mental, and social well-being of individuals and communities.

Key principles and strategies associated with salutogenic urban planning include:

1. **Walkability and Active Transportation:** Creating pedestrian-friendly environments that encourage walking and active transportation. This includes designing well-connected and safe sidewalks, bike lanes, and public spaces, which promote physical activity, reduce reliance on vehicles, and improve overall health.
2. **Access to Nature and Green Spaces:** Incorporating ample green spaces, parks, and gardens within urban areas. These natural environments provide opportunities for physical activity, stress reduction, improved air quality, and enhanced mental well-being.
3. **Social Interaction and Community Spaces:** Designing public spaces, such as community centers, plazas, and parks, that promote social interaction and community engagement. These spaces foster a sense of belonging, social support, and connectedness, which are important for mental and emotional well-being.
4. **Mixed-Use Development:** Encouraging a mix of residential, commercial, and recreational spaces within neighbourhoods. This approach promotes walkability, reduces travel distances, enhances access to amenities and services, and fosters social and economic vitality.
5. **Healthy Housing:** Promoting the design and construction of housing that supports the health and well-being of residents. This includes considerations such as natural lighting, good ventilation, noise reduction, access to green spaces, and proximity to essential services.

6. **Accessible and Inclusive Design:** Ensuring that the built environment is accessible and inclusive for people of all ages, abilities, and backgrounds. This includes designing barrier-free infrastructure, accessible public transportation, and inclusive public spaces that accommodate the needs of diverse populations.
7. **Sustainable and Resilient Design:** Integrating principles of sustainability and resilience into urban planning, such as energy-efficient buildings, green infrastructure, climate adaptation measures, and disaster preparedness. These approaches contribute to both environmental health and community well-being.

Salutogenic urban planning recognizes that the physical, social, and environmental aspects of urban spaces can influence health outcomes and quality of life. By incorporating salutogenic principles into the planning process, cities can create environments that support the well-being of their residents, promote healthy lifestyles, and enhance overall community health.

### 3. Research methodology

This paper aims to examine the role and scope of the City's Improvement Trust in shaping its salutogenic character. It reviews the framework from which the Trust derives authority, the models of operation, its criticism from the public domain, and its ability to meet future challenges. This research Trust, its limitations, and to develop a matrix for the same.

Bangalore was a colonial region of the British government with segregated cantonments and 'native zones'. Due to the loss of lives during the plague the British government decided to establish CIT's which in the early 1900 and some of the neighbourhoods designed back then have stood the test of time and continue to function well in today's urban climate. Therefore we have chosen this city for our study.

Case study research methodology is a qualitative research approach that involves an in-depth and detailed investigation of a specific case or phenomenon within its real-life context. It is commonly used in various fields such as social sciences, psychology, business, and education. The goal of a case study is to gain a comprehensive understanding of the complexities and nuances of the case being studied. Case study research methodology offers a valuable approach for exploring and understanding complex phenomena, gaining insights into unique contexts, and generating in-depth knowledge. It allows researchers to examine real-life situations, uncover rich details, and provide contextually grounded interpretations.

### 3. Discussion

The urban metropolis of Bangalore famously known as the 'Silicon Valley of India' with an area 714 sq. kms, GDP 2021 \$110 billion, Population Density 4,381/km has been chosen for our study.



Figure: Bangalore City in context

#### Case study neighbourhood - Case 1: **Nandini Layout**

Nandini Layout is a residential layout located in the western part of Bangalore (now Bengaluru), Karnataka, India. Here is a brief overview of the history of Nandini Layout:

1. **Development by BDA:** Nandini Layout was developed by the Bangalore Development Authority (BDA), a government agency responsible for the planning and development of Bangalore. The BDA acquired land in the area and designed the layout, offering residential plots for sale to the public.



2. **Planned Residential Layout:** Nandini Layout was planned as a residential area to accommodate the growing population of Bangalore. The layout design included wide roads, parks, and provision for basic infrastructure such as water supply, electricity, and drainage.
3. **Housing Development:** Over the years, Nandini Layout witnessed housing development as people began to settle in the area. The residential plots were developed into houses and apartments, and the population gradually increased.
4. **Connectivity:** Nandini Layout benefits from its proximity to important arterial roads such as the Magadi Road and the Outer Ring Road. This provides good connectivity to other parts of Bangalore and facilitates ease of commuting for the residents.
5. **Facilities and Amenities:** Nandini Layout is equipped with various facilities and amenities to cater to the needs of its residents. These include schools, hospitals, shopping centres, and recreational spaces.
6. **Demographic Mix:** Nandini Layout has a diverse population mix, comprising people from various socio-economic backgrounds and different communities. The area has witnessed the growth of both residential and commercial establishments.
7. **Evolution and Growth:** Like other parts of Bangalore, Nandini Layout has evolved and grown over time. The infrastructure has been improved, and commercial activities have increased, providing residents with a range of services and employment opportunities.

Nandini Layout continues to be a well-established residential area in Bangalore, providing housing options for its residents. As with other neighbourhoods, it has witnessed urban development and changes over time to meet the evolving needs of its residents.



Figure 1: Neighbourhood 1 – Nandini Layout

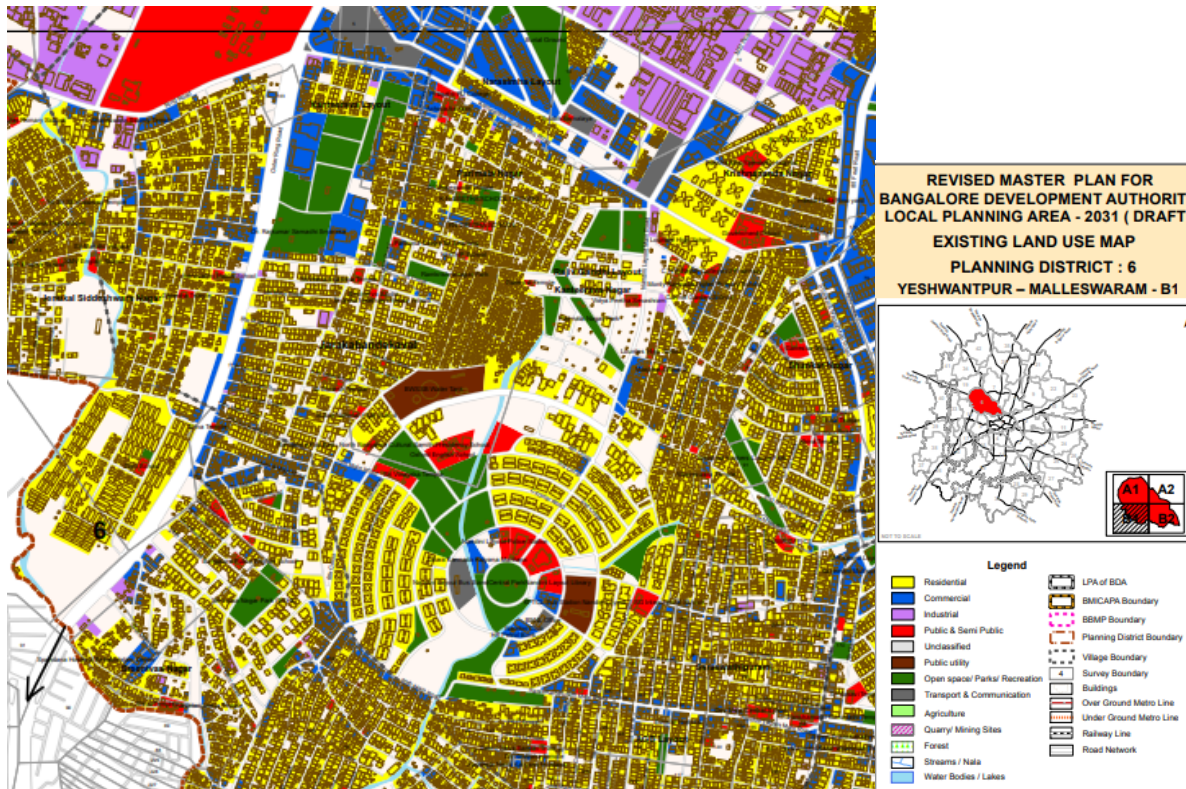


Figure 1.1: Neighbourhood 1 – Land Use map Nandini Layout

#### Case study neighbourhood - Case 2: Rajajinagar

Rajajinagar is a prominent residential and commercial locality in Bangalore (now Bengaluru), Karnataka, India. Named after C. Rajagopalachari, a prominent leader in the Indian independence movement and the first Indian Governor-General of India, Rajajinagar has a rich history. Here is a brief overview of the history of Rajajinagar:

1. **Formation and Development:** Rajajinagar was developed as a planned residential layout by the Bangalore Development Authority (BDA) in the 1960s. The BDA acquired land in the area and designed the layout, providing residential plots for sale to the public.
2. **Landmark Institutions:** Rajajinagar is home to several landmark institutions and organizations. The iconic Dr. Rajkumar Park, named after the renowned actor and singer, is located in this neighbourhood. It also houses the famous ISKCON Temple, which attracts devotees and visitors from across the city.
3. **Industrial and Commercial Growth:** Over time, Rajajinagar witnessed the growth of industrial and commercial establishments. It became a hub for small-scale industries, workshops, and commercial enterprises. The area's strategic location and connectivity contributed to its development as a commercial centre.
4. **Educational Institutions:** Rajajinagar is known for its educational institutions. Several well-established schools and colleges are located in the area, providing quality education to residents.
5. **Residential Hub:** Rajajinagar has evolved into a major residential locality, offering a mix of independent houses, apartments, and gated communities. The availability of residential plots in the initial development phase attracted people from various walks of life to settle in the area.
6. **Cultural Significance:** Rajajinagar has a vibrant cultural scene, with theatres, auditoriums, and cultural centres hosting various events, including music concerts, dance performances, and theatrical shows. These cultural spaces contribute to the overall liveliness and vibrancy of the neighbourhood.
7. **Connectivity:** Rajajinagar enjoys excellent connectivity to other parts of Bangalore. The neighbourhood is well-served by road networks and public transportation, including buses and metro rail, which have improved accessibility and ease of commuting for residents.

Over the years, Rajajinagar has undergone transformations, witnessing both residential and commercial development. It has become a sought-after destination for residents, businesses, and institutions, contributing to its growth and prominence in Bangalore.





Figure 2: Neighbourhood 2 – Rajajinagar.

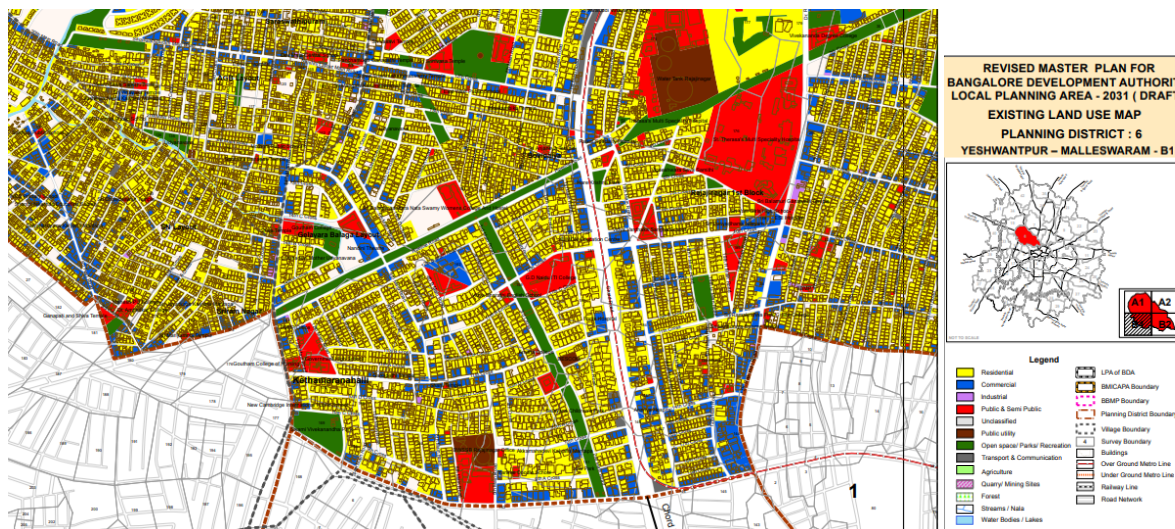


Figure 2.1: Neighbourhood 2 – Rajajinagar

### Case study neighbourhood - Case 2: Koramangala

Koramangala is a neighbourhood located in the south-eastern part of Bangalore (now Bengaluru), Karnataka, India. It has evolved from a primarily residential area to a vibrant commercial and residential hub. Here is a brief history of Koramangala:

1. **Early Settlement:** Koramangala was originally a small village on the outskirts of Bangalore. The area had a mix of agricultural land and sparse settlements.
2. **Development by the Bangalore Development Authority (BDA):** In the 1970s, the Bangalore Development Authority (BDA) initiated the development of Koramangala as a planned residential layout. The BDA acquired land and designed the layout, offering residential plots for sale to the public.
3. **Growth and Urbanization:** Over the years, Koramangala experienced rapid growth and urbanization. The availability of residential plots attracted people from various parts of Bangalore, leading to the establishment of new homes and communities.
4. **Diverse Demographics:** Koramangala is known for its diverse population. It has attracted residents from different socio-economic backgrounds, including students, working professionals, and families. The presence of educational institutions and commercial establishments has contributed to the demographic mix.
5. **Commercialization and IT Hub:** In the 1990s, Koramangala underwent significant commercialization. The establishment of software companies, IT parks, and startups transformed the area into a prominent IT and startup hub. Numerous multinational corporations, technology firms, and business centers have set up their offices in Koramangala.
6. **Retail and Entertainment:** Koramangala is known for its vibrant retail and entertainment scene. It is home to numerous shopping malls, branded outlets, restaurants, cafes, pubs, and cultural centers. The area has become a popular destination for shopping, dining, and socializing.



7. Connectivity: Koramangala's connectivity has improved over time. The neighborhood is well-connected to other parts of Bangalore through major roads like Hosur Road and Sarjapur Road. The presence of public transportation, including buses and metro rail, has further enhanced accessibility.
  8. Residential Development and Real Estate: Alongside commercial development, Koramangala has seen the growth of residential complexes, apartments, and gated communities. The demand for housing in the area has led to the construction of various residential projects catering to different preferences and budgets.
- Today, Koramangala is a bustling neighbourhood known for its vibrant lifestyle, commercial activity, and a mix of residential and commercial spaces. It continues to attract businesses, professionals, and residents seeking a convenient and lively urban environment.

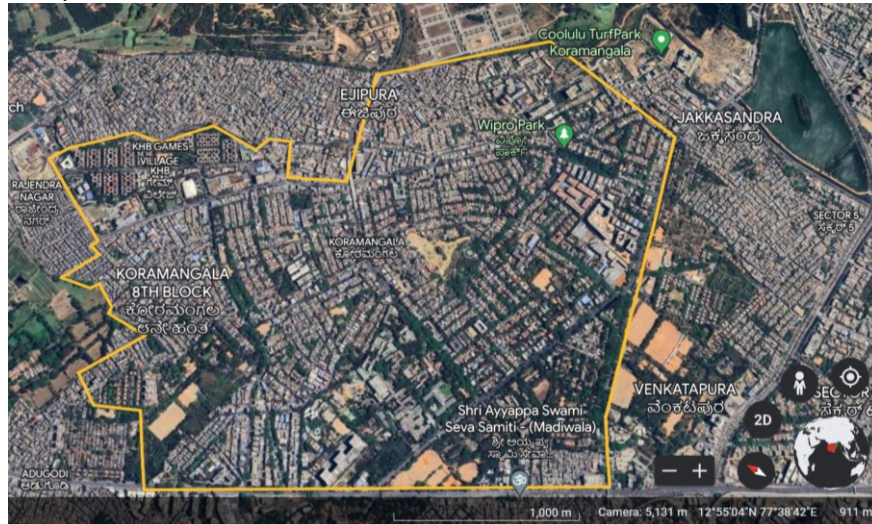


Figure 3: Neighbourhood 3 – Koramangala

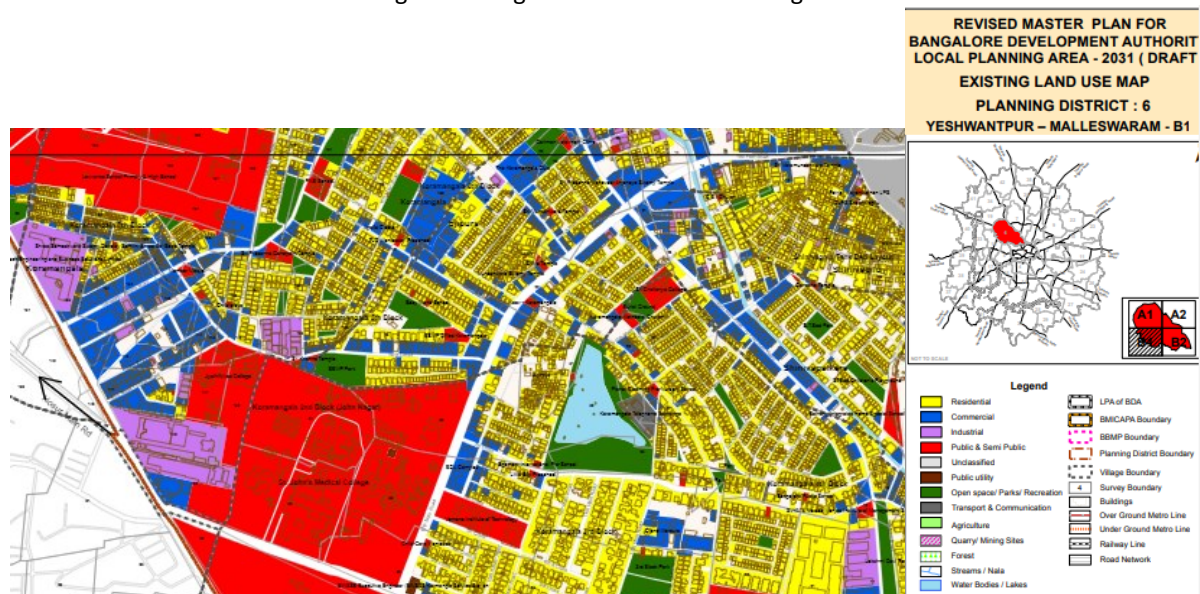


Figure 3.1: Neighbourhood 3 – Koramangala.

#### 4. Findings

Improvement trusts have their genesis in the colonial period. The first CITB came up around the time when urban/metropolitan were facing pandemic situations like the Bombay plague in 1898. The trust or the board was designed to include people from the city, the constitution of these boards was people participation in nature and local in character. The CITB's were dedicated to improve the quality of life in the city, the major aspects it attended were sanitation, planning residential layouts, road widening, public infrastructure such as parks and open spaces.

It is noted through the study that the areas developed through the CIT's have continued to perform over a period of 50 years without creating any issues related to urbanization. They also maintain a strong sense of identity and character and they have continued to perform compared to the unplanned layout which have been absorbed

by the rapid urbanization in it cites like Bombay and Bangalore. The purview of their work enables these bodies to undertake work outside the limits of local authority Eg. Land acquisition. These bodies are instrumental in salutogenically and systematically developing urban areas. These aspects of urban areas have not been developed for the denser areas. Happiness index is higher with respect to the urban life. Ease of which people are able to use these facilities is not related to diseases like plague, cholera but there is a preventive components of prevention of oncoming mental issues such as loneliness, the newer areas how do they fare on the

### **Conclusion**

In our study of the individual neighbourhoods, we came across features that were predominantly present and contributed toward Salutogenic urban design as explained by Antonovsky where we observed a sense of coherence through the principles of walkability and Active Transportation in which pedestrian-friendly environments fostered walking and active transportation. Demonstrated through well-connected and safe sidewalks, bike lanes, and public spaces, which promote physical activity, reduce reliance on vehicles, and improve overall health.

By Incorporating ample green spaces, parks, and gardens within urban areas these natural environments provide opportunities for physical activity, stress reduction, improved air quality, and enhanced mental well-being thereby providing a sense of meaningfulness in one's community. Social Interaction and Community Spaces increased one's social capital through creating spaces where the community could gather and have a chance to interact in their recreational spaces by chance in public spaces, such as community canterers, plazas, and parks that promote social interaction and community engagement. These spaces foster a sense of belonging, social support, and connectedness, which are important for mental and emotional well-being.

A sense of manageability was observed by the creation of Mixed-Use Developments which encourage a mix of residential, commercial, and recreational spaces within neighbourhoods. This approach promotes walkability, reduces travel distances, enhances access to amenities and services, and fosters social and economic vitality. This urban planning model also has great value advantage on the last mile commute since it is punctuated with commercial developments.

Taking inspiration from the colonial age and the bubonic plague the neighbourhoods have strict bye-laws which ensure healthy Housing i.e. promoting the design and construction of housing that supports the health and well-being of residents. This includes considerations such as natural lighting, good ventilation, noise reduction, and access to green spaces, and proximity to essential services. In conclusion this study found that communities designed with these principles perform better longitudinally and can sustain growing populations while not compromising the quality of life for its existing residents. Therefore we suggest that upcoming urban planning policies adapt the Salutogenic urban planning principles as demonstrated in the study neighbourhoods.

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### **5. Conflict of Interests**

The authors declare no conflict of interest.

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