

A review on livable cities in India and its indicators of Assessment

¹ Ajay Raja. R, ^{2*} Neha Bansal,

¹Post Graduate Student, ²Professor,

^{1, 2} Department of Architecture,

^{1, 2} SRM Institute of science and Technology, Kattankulanthur, Chennai, India

^{2*}Corresponding Author

Abstract—

This Today's world is debating, researching, and studying global environmental problems, including air pollution, rising temperatures and their violent fluctuations, loss of vegetation, and biodiversity. Urbanization has been praised and criticized for accelerating economic development while adversely affecting the urban environment. As a result of this phenomenon, Indian cities have experienced similar effects and the most affected aspect is quality of life. Indian city is almost at the bottom of the world-class quality of life ranking. So this paper talks about the concept of livability in urban context and to approach the evolution of indicators of livability.

Index Terms—Component, Quality of life, Livability rating index, Livable city, Urbanization

I. INTRODUCTION

In recent decades, the challenges related to climate change have multiplied. By 2050, it is estimated that 70% of world population will live in urban area. However, today's haphazard urbanization tendencies are causing widespread issues such as urban sprawl, pollution, housing, crime, and catastrophe, among others. While these are expanding rapidly, the city center of India is considered an engine they are also facing huge things in economic growth pressure on civil engineering infrastructure systems such as: water and sewage, solid waste management, mobility, etc. Characteristics of urbanization in India can be defined as a heavy top and a light bottom. City Class I -Tier has shown a higher urbanization rate since then compared to small towns and cities.

Livability has been regarded a crucial feature for any metropolitan metropolis to prosper in its attempts, as it aims to offer a healthy environment for its inhabitants. It is considered as principle of social, economic, and biological urban environment. Livability is concerned with difficulties such as inadequate infrastructural services, diminishing economic prosperity, and growing social unrest among the urban population, which, in turn, causes the people to suffer. Livability is concerned with urban development difficulties such as insufficient infrastructural services, diminishing economic prosperity, and growing social dissatisfaction among the urban population, all of which result in the people suffering. Livability is a key rising issue in developing nations that has gained attention as a result of the low level of living in metropolitan areas. Cities with high livability ratings have reinvented themselves and hand change to offer a lively and living environment for their residents. The livability index is a method that uses carefully selected social, economic, and environmental variables to track the quality of life in a specific location. In the end, these indicators aid in the measurement of many facts of society. According to annual Livable City rankings published by several international organizations, Indian cities score quite low in the global scene. this paper talks about the concept of livability in urban context and to approach the evolution of indicators of livability.

II. CONCEPT OF LIVABILITY

Wherever the idea of livability has been defined in different ways of ways over the years, making it an ambiguous term. The idea began from a desire to preserve the natural and constructed environment, and has recently evolved into a desire to improve the quality of life in urban areas. Since the urban area and urban life have such a complex and multivariable structure, the idea of the quality of urban life has a similarly broad and multifaceted structure. The livability has been classified as Quality of Life and Quality of Urban Life, by the research community. There is not any common definition; however, the researchers usually try to conceptualize the quality of life depending on the various domains of the life (Dissart and Deller 2000; Wish 1986; Shookner 1997; Veenhoven 2000). This topic can be influence according to scale, method and discipline. At the urban scale, most studies of the quality of urban life are based on modelling that combines subjective and objective indices. The next section explains how the idea evolved and how its concepts are applied to the subject of urban planning.

III. METHODOLOGY

With the above background study, a conceptual methodology has been followed as indicated in Figure 1. In the methodology the concept of livability is seen to be evaluated under six major domains, for the assessment of Livability assessment of any city. These domains are- Housing characteristics, Economic Vitality, Safety Situation, Socio- economic characteristics, Neighborhood Facilities and Social Interaction. To evaluate each domain, it is further broken down into measurable indicators as indicated in Figure 1.

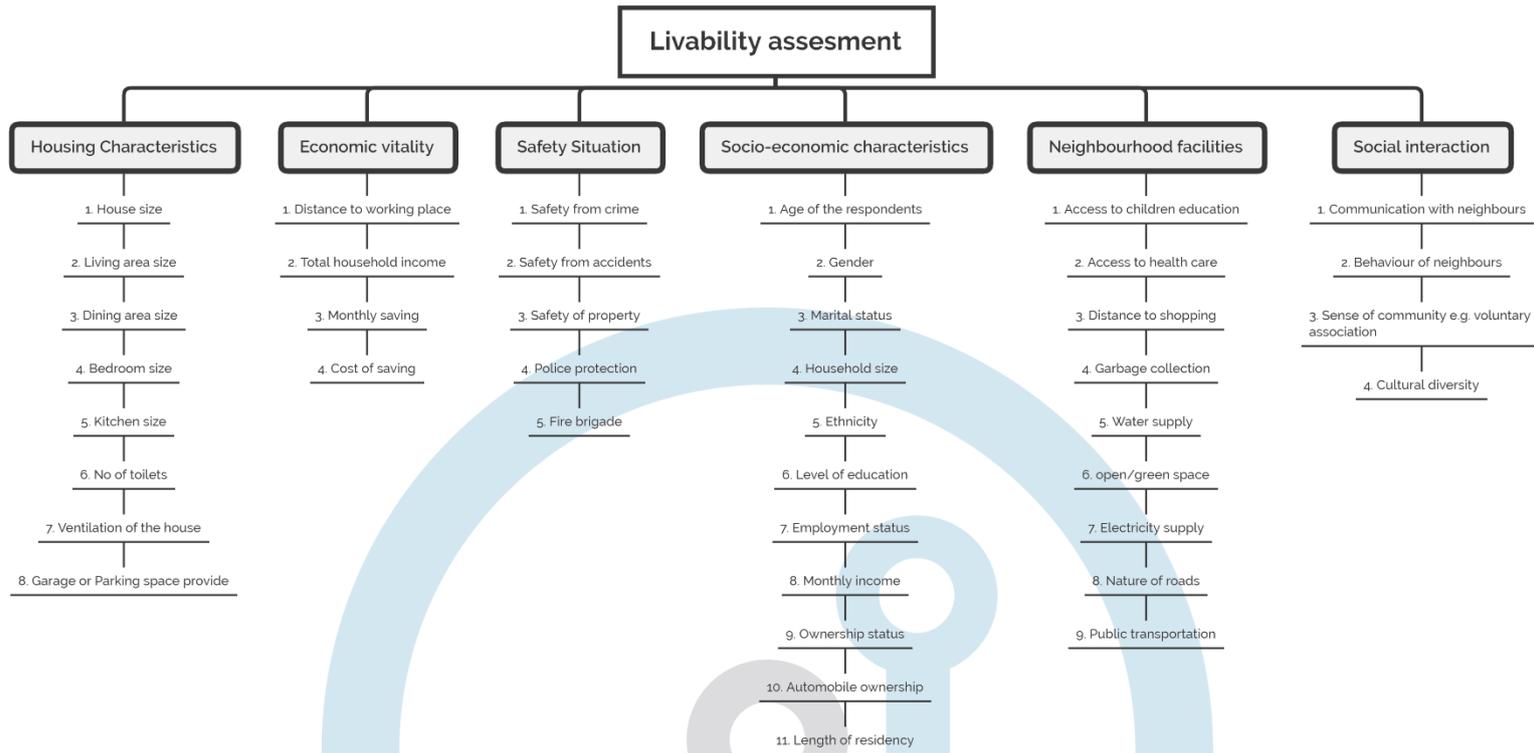


Figure 1: Conceptual framework for this study

IV. WHAT ARE LIVABLE CITIES?

Though the concept started in the late 1980s in the field of urban planning and design, 'livability' as it is now used gained some traction in 1999 with the Gore/Clinton Livability Agenda, a framework for "new tools and resources to preserve green space, ease traffic congestion, and pursue regional "smart growth" strategies". There have been many definitions of livability in the context of cities since then. While the Quality of Living Survey has been used to score cities based on 39 criteria such as political, economic, environmental, personal safety, health, education, transportation, and other public service considerations, Economist Intelligence Unit's (EIU) Global Livability Report, cities were evaluated based on criteria such as broad availability of products and services, low personal hazard, and adequate infrastructure (EIU, 2011).

In India, the Ministry of Housing and Urban Affairs (MoHUA) launched the 'Ease of Living Index' in January 2018 to aid cities in concepts and practices themselves against global and national benchmarks and encouraging them to shift toward a 'outcome-based' approach to urban planning and management. The Ease of Living Index measures the quality of life in cities across four pillars and fifteen categories, employing 78 variables, 56 of which are core indicators and 22 of which are supporting indicators. The 2018 Ease of Living Index evaluated 111 Indian cities based on these parameters. Smart cities, all state/UT capital cities, and population centers were among them. While social, economic, and institutional variables have been incorporated in the Ease of Living Index for evaluating livability on criteria 'beyond infrastructure,' the 2018 Index does not address the question of 'what next?' in terms of improving on these indicators.

V. PREVIOUS RESEARCH

Numerous studies have been conducted worldwide to identify the variables that influence the livability of regions, cities and countries. The livability index is a method that uses social, economic, and environmental variables to track the quality of life in a specific location. A variety of Livability Indices may be used to assess livability. The Economist Intelligence Unit's livability ranking assesses the problems that an individual's lifestyle may face in 140 places throughout the world. Each city is given a score based on over 30 qualitative and quantitative characteristics divided into five major categories: Stability, healthcare, culture and the environment, education, and infrastructure are all important factors.

VI. MEASURING LIVABILITY

What makes a city center a livable place? This question is equally tough to answer as Kevin Lynch's statement. What characteristics distinguish a successful city? Lynch responded to his query with five performance dimensions: vitality, sensibility, fit, access, and control. Although the five Lynch dimensions are not always possible to quantify and may be contradictory, they do give a framework for study of the spatial, physical, social, and political organization of distinct forms of urban development. A busy city center is well considered to be dependent on a variety of retail, entertainment, and commercial activities, which both relies on and helps attract, tourists, employees, and residents. It is an idea that, like quality of life, tends to be understood but is difficult to explain in a way that everyone understands.

A livable place is something that is safe, clean, beautiful, economically vital, affordable to a diverse population, and well-managed, with functional infrastructure, interesting cultural activities and institutions, there are more than enough parks, efficient public transportation, and a huge variety of employment opportunities. It also conveys a sense of connection. The construction of an evaluating instrument is critical for planners and others concerned about the viability of downtown revitalization activities. It is critical for communities to create indicators to track changes in their downtowns. Indicators may be used to illustrate and assess the efficacy of downtown revitalization programs for both the public and private sectors.

VII. URBAN LIVABILITY FOR SUSTAINABLE DEVELOPMENT:

With increasing urbanization and the number of urban centers, the issue of quality of living has (re)surfaced in planning and design, requiring policymakers and scholars to consider. At the moment, improving the living circumstances of the people has become a fundamental goal in city planning and urban development and management programs. As cities have moved to the heart of contemporary development, they have focused providing a healthy environment for their residents. The United Nations (2015) decided to commit and acknowledged that "sustainable urban development and management are important to our people's quality of life." We will work closely with local governments and communities to revitalize and design our cities and human settlements in order to promote community cohesiveness and personal security, as well as to boost innovation and employment." In this perspective, livability is regarded as an important aspect of enhancing the quality of life and ensuring sustainability.

Livability is related to aspects of urban development such as access to and availability of infrastructure facilities, economic options, and social well-being. Though the theory was first constructed around the protection of natural and physical environments, the development of quality of life and well-being in urban settings was subsequently incorporated. At the moment, livability is seen as an integral component of sustainable development. Once cities acquire a high level of livability, the notion of urban sustainability will become a reality. According to Livable Cities, "it is now acknowledged that social, economic, and environmental factors are intimately interrelated."

In the context of cities, this means that sustainable urban development is not an option, but rather a need if cities are to satisfy the requirements of their residents." The most significant factors and sub-criteria used in determining livability are economic, environmental, institutional, social, and governance. Their connection makes cities healthier and more livable. Livability clearly creates chances for all local communities and individuals in metropolitan regions with diverse values, making them better places to work, live, and thrive. The Ministry of Urban Development in India released a set of livability requirements for cities in June 2017. The main goal is to build these criteria in order to generate a livability index and assess cities against the standards in order to encourage a competitive environment among cities and an increase in people's quality of life.

VIII. FINDINGS

To begin, it is clear from the literature that each method tends to define the concept of livability in different ways. The perceptions of cities' livability have developed as a result of various evaluation systems. Secondary and tertiary activities are more prevalent here, and the effects of human activities on the urban environment are more noticeable. From a socioeconomic, cultural, and environmental standpoint, academics are increasingly focusing on urban locations, particularly cities throughout the world, to investigate distinct shades of livability variations and the inherent potential for urban and social growth within them.

Second, it is clear that cities are a key source of appeal in terms of economic potential, communal well-being, and hope for a better standard of living. People desire to live in cities because they value the financial benefits that come with the related facilities and quality of services. Urban government appears to be becoming increasingly preoccupied with the idea of livability and has turned into an innovative instrument for better influencing the future of cities.

IX. CONCLUSION

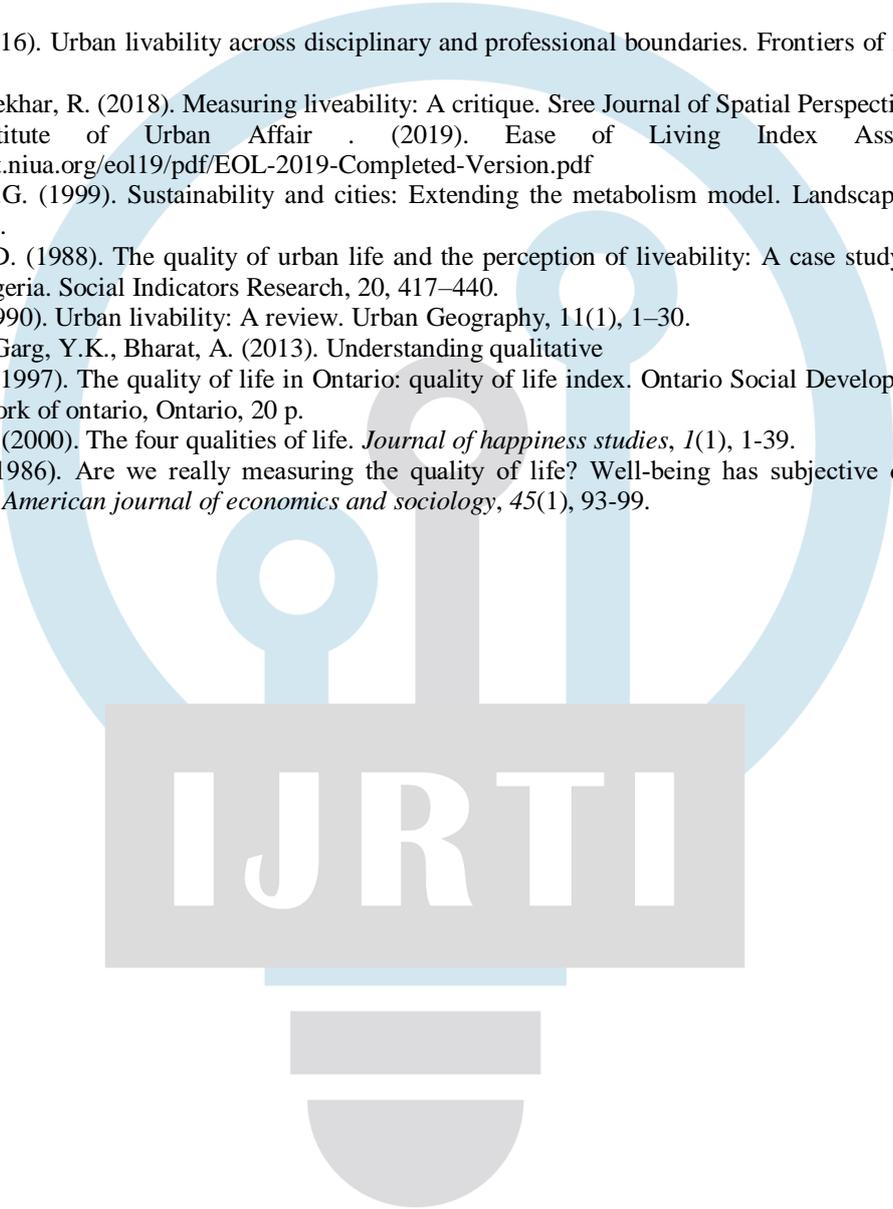
The principles of livability have been explored in this study through selected features of the urban environment. The vast number of basic ideas and integrated socioeconomic, materialistic, environmental, and cultural factors that contribute to the concept of livability certainly adds to its complexity. It is apparent that building a livable urban environment for all persons in a single civilization is impossible. People differ in their views and perspectives, and what one person considers to be a livable environment may not be the same for another. To address this issue, specific aspects representing common concerns for the great majority of users in our case study, as well as others related to urban surroundings, were explored, including accessibility, safety, sustainability, and community involvement. As a consequence of this inquiry, a number of significant discoveries were obtained that will be examined and incorporated in the final urban concept, which is the primary goal of this work. These findings essentially indicate specific aspects related to the idea of livability that may effectively measure the amount of this livability in the urban project to be created.

X. ACKNOWLEDGMENT

This study has been done as a part of Post graduate thesis, under the guidance of Dr. Neha Bansal, Professor and guide for the first Author, in SRM Institute of Science and technology. The authors would like to express their thanks and gratitude for the same.

REFERENCES

- [1] Badland, H., Whitzman, C., Lowe, M., Davern, M., Aye, L., Butterworth, I., Hes, D., Giles-Corti, B. (2014). Urban livability: Emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health. *Social Science & Medicine*, 111, 64–73.
- [2] Balsas, C. J. (2004). Measuring the Livability of an urban center: An exploratory study of key performance indicators. *Planning Practices and Research*, 19(1), 101–110.
- [3] Brook Lyndhurst. (2004). Livability & sustainable development: Bad habits & hard choices. <https://ukerc.rl.ac.uk/pdf/142424.pdf>
- [4] Cave, R.W., Wagner, F. (Eds.). (2018). *Livable Cities from Global Perspective* (1st ed.). Taylor & Francis Group.
- [5] Chaudhury, A. H. (2005). *Urban livability, decentralization and development: A comparative study on Dhaka and Khulna cities*. URP Discipline. Khulna University.
- [6] Dissart, J. C., & Deller, S. C. (2000). Quality of life in the planning literature. *Journal of planning literature*, 15(1), 135-161.
- [7] Kashaf, M. (2016). Urban livability across disciplinary and professional boundaries. *Frontiers of Architectural Research*, 5(2), 239–253.
- [8] Kumari, P., Shekhar, R. (2018). Measuring liveability: A critique. *Sree Journal of Spatial Perspectives*, 2(1), 35–40.
- [9] National Institute of Urban Affairs. (2019). *Ease of Living Index Assessment Framework*. <https://smartnet.niua.org/eol19/pdf/EOL-2019-Completed-Version.pdf>
- [10] Newman, P.W.G. (1999). Sustainability and cities: Extending the metabolism model. *Landscape and Urban Planning*, 44(4), 219–226.
- [11] Omuta, G. E. D. (1988). The quality of urban life and the perception of liveability: A case study of neighbourhoods in Benin City, Nigeria. *Social Indicators Research*, 20, 417–440.
- [12] Pacione, M. (1990). Urban livability: A review. *Urban Geography*, 11(1), 1–30.
- [13] Pandey, R.U., Garg, Y.K., Bharat, A. (2013). *Understanding qualitative*
- [14] Shookner, M. (1997). The quality of life in Ontario: quality of life index. Ontario Social Development Council & Social Planning Network of Ontario, Ontario, 20 p.
- [15] Veenhoven, R. (2000). The four qualities of life. *Journal of happiness studies*, 1(1), 1-39.
- [16] Wish, N. B. (1986). Are we really measuring the quality of life? Well-being has subjective dimensions, as well as objective ones. *American journal of economics and sociology*, 45(1), 93-99.



IJRTI