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PRINCIPLES TO IMPROVE QUALITY OF LIFE IN URBAN AREAS- AN APPROACH TOWARDS LIVEABLE CITY

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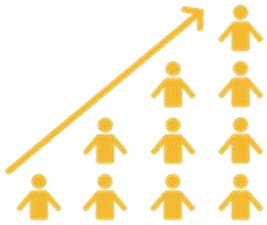
Abstract - *Our living spaces define us be it tangibly and intangibly. The world is urbanizing at a very fast pace, cities are growing out their boundaries every day some more, becoming more dense as the year passes by. Ominous urban constraints are faced by the cities around the globe such as traffic clogging, poor environment, and scarcity of land for development. These challenges form a membrane which inhibits these cities into becoming more accommodating, people friendly along with a decent standard of living. All the planner and the citizens aspire to live in a place which urbanises and grows in such a manner which not only preserves the environ but also uses the resources present in an optimal way, providing its habitants an acceptable lifestyle. A liveable city is the bridge between the past and the future: a liveable city preserves the hallmark of history (our roots) on the places, on the houses, on the architectures of today, and appreciates those who are not yet born (our posterity). Several of these cities have started to shift toward more efficiency and viability in order to increase the standard and output of public infrastructure, minimize costs and use of energy, interact more affectively and positively with their people, and identify the quality of life and the features of communities that render them viable All this gave birth to the idea of research for formulating parameters and getting a very comprehensive understanding of these parameters for improving the quality of life and creation of liveable cities. Through this viewpoint, the study deals with one of the most popular case studies of the "Liveable Cities Program" (Copenhagen) around the world to see how to investigate and appreciate the problems and obstacles of being a thriving and innovative community by examining the parameters, values and methods of a sustainable area. Finally, it proposes a recommendations and suggestions to help the implementation of the concept.*

Poor environment



Increasing population growth

Traffic congestion

***Key Words*: Quality of life, liveability, liveable city and sustainability**

1. INTRODUCTION

One of the very important factors of sustainability is now becoming livability. On the basis of this, livable cities ameliorate the quality of life in cities. These also aim to create city with superior quality pathways, elegant neighborhood to give a boost to bicycling and walking. The transit facilities also help in the creation of public places which are pleasing, well sketched, well sustained making housing more plentiful and affordable.

2. RESEARCH PROBLEM

Spontaneously developing metropolitan clusters across the world can be seen as drivers of economic development, and they often face immense strains on their municipal infrastructure structures and environmental destruction, air contamination, and the growing occurrence of climate-induced disasters and calamities. Such concerns inevitably lead to the pressing need to respond on a range of indices that have reached alarming thresholds, in particular the adverse effect on quality of life, socioeconomic inadequacy and sustainability. To order to achieve so, communities need to follow the idea of a productive environment, because it is vital to the development of a prosperous society.

3. RESEARCH OBJECTIVES

The key purpose of this work is to grasp the idea of living and to know how to make our communities more sustainable. Propose recommendations to render current communities more prosperous and step ahead on the road of living, especially in designations of urban development. So that, the ensuing objectives are considered:

- To understand the concept of liveable cities.
- To identify the liveability standards.
- To identify the parameters those improve urban quality of life.
- To identify the PMF's for liveability

4. THE CITY

City is the whole urban area of the urban region. Cities are seen as tools for improving the economy, creating jobs, developing expertise, delivering quality public care, etc. In the end, communities have grown into these dimensions.

5. LIVEABILITY

Liveability is characterized as the 'quality of life' enjoyed by citizens of a city or area that involves a number of core values: sustainability, affordability, and engagement that add substance to the idea of liveability.

6. LIVEABLE CITY

Liveable cities strive to promote economic growth, poverty elimination and organize cities with larger population concentrations and therefore increased efficiency and improve health. This is also defined as one that involves effective governance, a dynamic market, a high standard of life and environmental protection by good planning, a lively and shielded atmosphere for residents, work and play.

Fig -1: 5 fundamental aspects of liveable cities

Table -1: Principles of a liveable city

Principle	Activation	Application
Governance and Participation Monitoring, Measuring, Learning	A good city offers the public realm as a place of social learning and socialization that is indispensable for children, young people and all inhabitants.	A liveable city engages the active involvement of a diversity of citizens - develops the capability to measure progress towards its goals to adapt strategies in order to take dynamic circumstances respond to opportunities and challenges.
Common Values, a Sense of Identity and Place	cities must meet many functions economic, social, ecological and Cultural.	A liveable city contains an active public realm for reflecting the essence of itself, for creating and reinforcing a common identity, for dialogue about common values, for remembering history.
Complete Communities, Vital Downtown Core, Industrial Clusters, Green Space	The public realm offers many activities, celebrations, festivals that bring all of its inhabitants.	A liveable city contains complete communities with mixed-use and friendly transportation networks.
Natural Resource Flows, Green Corridors, Energy Grids, Communication, Transportation	Friendly communities.	A liveable city is connected through the flow of resources that sustain its activities and energy resources.

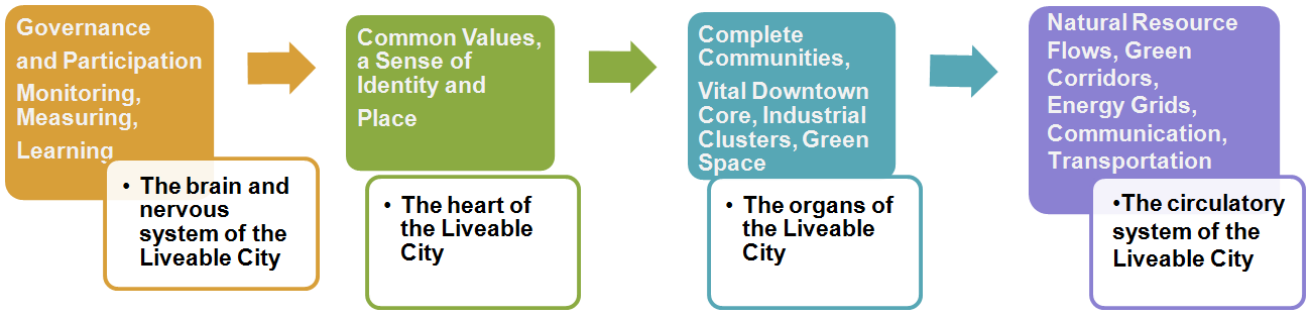


Fig -2: Principles of a liveable city

7. PMF'S (PERFORMANCE MEASUREMENT FRAMEWORKS) FOR LIVEABLE CITY

The key market-based PMFs include the Liveability Ranking, the Economic Intelligence Unit (EIU) and the Mercer Quality of Life Report.

Table -2: Performance Measurement Frameworks for Liveable City

Framework	Agency Involve/ Initiated	Motive / Objective
City Development Index	Intergovernmental agency (Un-Habitat)	Development levels in City
Economist intellegence Unit (EIU)	Media House (The economist)	Hardship Bonus to employees
Mercer Consulting	Consulting (Global Consulting)	Hardship Bonus & helping municipalities to achieve high quality of life

HUMAN DEVELOPMENT INDEX (HDI)

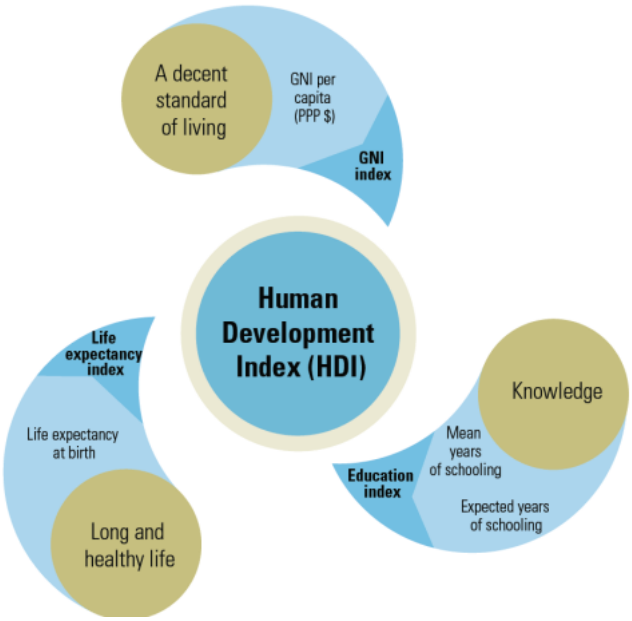


Fig -3: Human Development Index

The HDI was measured using a function of expectancy, per capita income, and health. Countries that score better in this ranking have a higher standard of education, a longer life expectancy, and a higher per capita gross national income than low-ranked countries. The HDI was first launched in 1990. The HDI varies from 0 to 1.0, with the average human growth standard being 1.0. HDI is categorised into four levels: an exceptionally high level of human development (0.8-1.0), a modest level of human development (0.7-0.79), a reasonable level of human development (0.55-.70) and a weak level of human development (below 0.55). The ranking of India according to the UNDP HDI index is 130.

Table -3: HDI of top 10 countries 2019

Country	Human Development Index ▼	Population 2019
Norway	0.953	5,378,857
Switzerland	0.944	8,591,365
Australia	0.939	25,203,198
Ireland	0.938	4,882,495
Germany	0.936	83,517,045
Iceland	0.935	339,031
Sweden	0.933	10,036,379
Hong Kong	0.933	7,436,154
Singapore	0.932	5,804,337
Netherlands	0.931	17,097,130

MERCER'S QUALITY OF RANKING INDEX

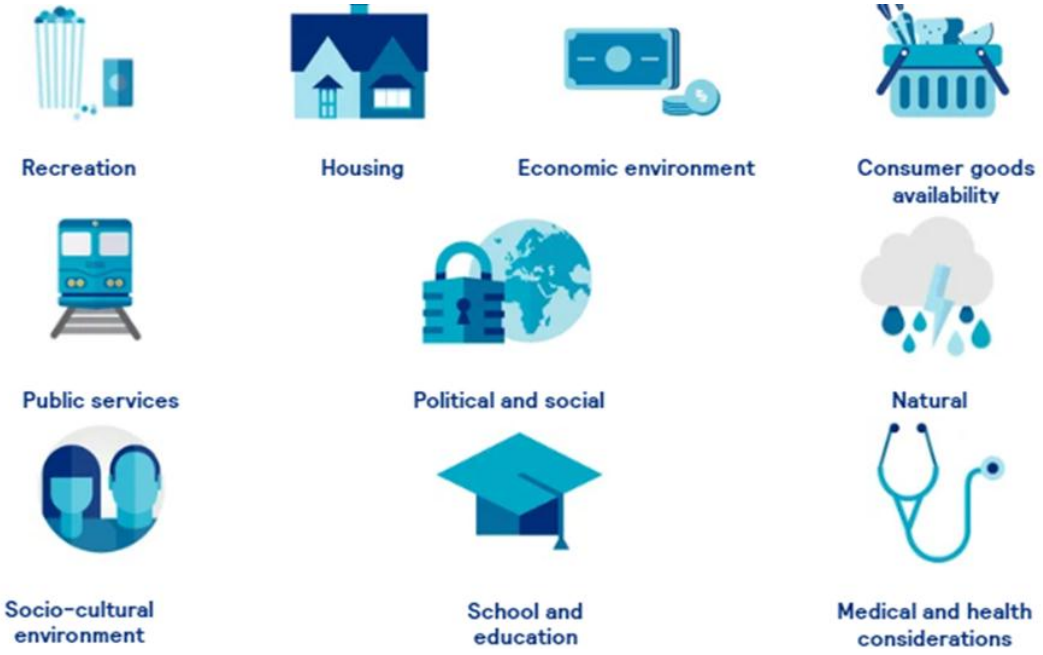


Fig -4: Factors that Determine quality of living

Mercer assesses urban living environments in more than 450 communities studied worldwide. Living environments was evaluated according to 39 variables, grouped into 10 classes: political and social climate (political security, violence, law enforcement, etc).

Liveability Ranking 2019

World Top 10 cities

Rank	City	Country/Region
1	Vienna	Austria
2	Zürich	Switzerland
3	Vancouver	Canada
3	Munich	Germany
3	Auckland	New Zealand
6	Düsseldorf	Germany
7	Frankfurt	Germany
8	Copenhagen	Denmark
9	Geneva	Switzerland
10	Basel	Switzerland

Indian cities

Rank	City	Country/Region
143	Hyderabad	India
143	Pune	India
149	Bangalore	India
151	Chennai	India
154	Mumbai	India
162	New Delhi	India

ECONOMIST INTELLIGENCE UNIT (EIU) GLOBAL LIVEABILITY RANKING INDEX

The Economist Intelligence Unit (EIU) is The Economist Group's division of exploration and analysis. With the aid of certain metrics, the survey lists nations. The index assesses where the best or worst living conditions are provided by locations around the world. Each variable in a city is considered acceptable, tolerable, unpleasant, unwelcome or unacceptable.

Table -4: Categories under EIU liveability ranking

S.no	Stability	Healthcare	Culture & Environment	Education	Infrastructure
1	Prevalence of small crime	Private healthcare availability	Mugginess/tem-perature rating	Private education availability	road network quality
2	Violent crime frequency	Private healthcare quality	Climate comfort for travellers	excellence of private education	public transport quality
3	Threat of terror	Private healthcare Presence	Corruption level	Indicators of public education	Qualitative multinational links
4	Hazard of military conflict	Public healthcare quality	Social and religious limitations	-	Access good quality housing
5	Danger of civil unrest/conflict	Over the counter drugs availability	Censorship level	-	energy provision trait
6	-	Indicators for general health insurance	Availability of sport	-	water provision trait
7	-	-	Cultural presence	-	excellence of telecommuni-cations
8	-	-	Food and drink	-	-
9	-	-	Consumer goods and services	-	-

The world's top 10 liveable cities and their 2019 Global liveability ranking. The weighted score are given between 1 and 100. Amongst the 140 countries included, Mumbai and Delhi (only Indian cities to be included) are raked 119th and 118th respectively, according to the economist intelligence unit's (EIU) global liveability index 2019.

EIU Global Liveability Index 2019: Top 10 cities

World Top 10 cities

Rank	City	Country/ Region
1	Vienna	Austria
2	Zürich	Switzerland
3	Vancouver	Canada
3	Munich	Germany
3	Auckland	New Zealand
6	Düsseldorf	Germany
7	Frankfurt	Germany
8	Copenhagen	Denmark
9	Geneva	Switzerland
10	Basel	Switzerland

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154	Mumbai	India
162	New Delhi	India

Liveability Rankings

8. LIVEABILITY IN INDIAN CONTEXT

Improving citizens 'quality of life is also an important goal of Indian cities' current urban missions, such as the Smart Cities Mission and AMRUT. However, adapting this global concept to the Indian context and placing it in the urban policy and planning framework of the cities was a relevant challenge.

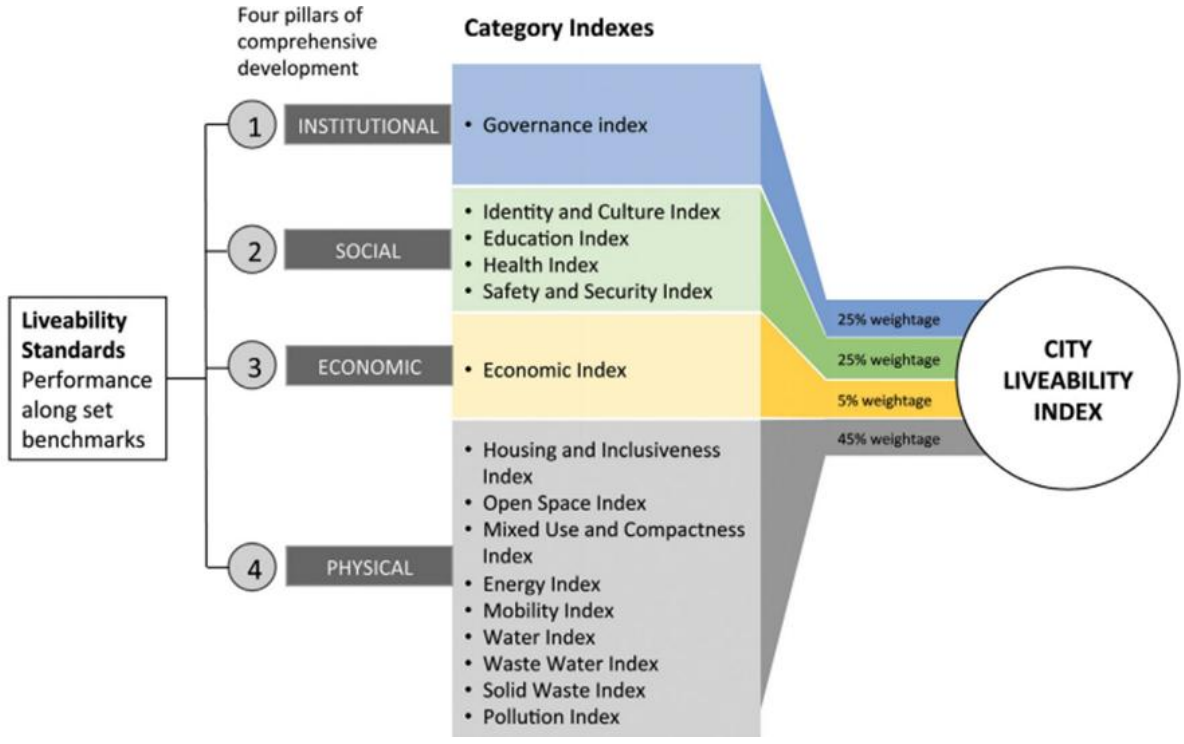

Fig -5: Liveability Standards Performance along set benchmarks

Via programs such as the ministry of housing and urban affairs: '2018 ease of living index (MoHUA), urban professionals and policy makers along with India's government are now actively working towards the goal of improving Indian cities' liveability.

Three approaches followed in India for urban planning and development:-

1. Master plans and municipal planning schemes.
2. Centrally funded regional urban development projects, such as the Smart Cities Projects.
3. International collaborations and support, including grants from international agencies and networks like the Worl d Bank and the European Union.

9. COPENHAGEN, DENMARK: ONE OF THE MOST LIVEABLE CITY IN THE WORLD (CASE STUDY)

Copenhagen City

Denmark's capital Copenhagen is situated on the eastern of island of Zealand and the other relatively smaller part on amager. Copenhagen is sprawled on 179 square kilometer with the population about 14 lakhs. It is a city where urban planning has being taken up very sophistically. Cycling swarms, broad leisure areas, pedestrian streets, safe harbor water and world-class sustainable public transport have been created in Copenhagen by careful urban design and a tradition of environmental ambition.

CYCLING: THE FAST WAY FORWARD

The city is very well incorporated with the cycle infrastructure. Cycles are incorporated into the broader network of transport shifting between cycling and public convince is easy for passengers. Train carriages are being upgraded to allow bikes. Ample of parking spaces along with greenways and separate lanes have been created. This not only helped in the reduction of air, noise pollution but ensured that its residents enjoy an activity lifestyle.

CLEANED HARBOUR

A decade and a half ago swimming in the harbour of Copenhagen would have been out of question. But the harbour has become a clean blue community space by Modernization of the sewage system as well as the adoption of a cleaning program, Local rainwater diversion, and Strong urban plan in order to make a fun space. An extensive sewage treatment regime along with rain water harvesting is followed in order to ensure the sustainability of the city.

Cooperation between collaborators, including scientists, scholars, designers, developers, technicians, local and private sector organization has culminated in a groundbreaking harbour bath remedies.

WIND POWER

In order to ensure the reduction of the carbon emissions of the city around 22 percent of the total city's energy consumption comes from renewable energy. This gives a boost to the green economy. Renewable energy infrastructure was established in Copenhagen through a unique local ownership partnership.

RECYCLING WASTE IN THE CITY

In order ensure a high sense of liveability to its citizens; a city must have a very efficient waste recycling system. Recycling helps in Saving of scant assets, Creation of recyclable materials in a closed loop, Recyclable components are sold on the market. They make greater use of waste in order to reuse as many assets as possible and to incinerate as little as possible.

COOLING UP THE CITY

Increased demand for air conditioning and ventilation in several cities has resulted in increased use of energy. The design of the first two district cooling networks to ensure low carbon cooling was focused on the free cooling of the deposition of seawater and the processing of surplus electricity.

CARBON NEUTRAL COPENHAGEN BY 2025

An ideal city not only plans for today but also for tomorrow and for day after tomorrow. With the CPH 2025 climate plan, Copenhagen presumes its share of climate change responsibility. And Copenhagen will be a carbon neutral city in the world by 2025, the first city to achieve so.

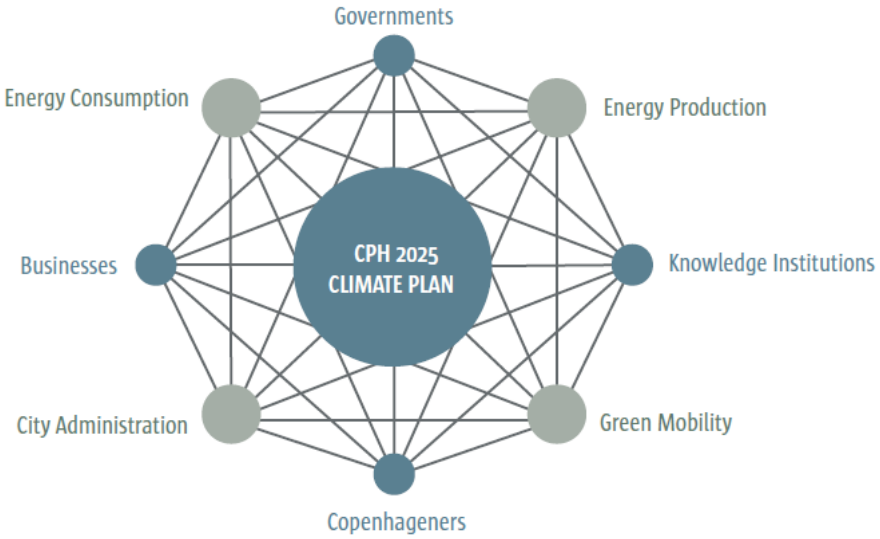

Fig -6: CPH 2025 Climate Plan

STRATEGIC URBAN PLANNING COPENHAGEN

Urban design promotes environmental sustainability, such as adequate cycling infrastructure, green spaces and the relation of the community to the water system.

Table -5: Strategic planning

Planning Tools	Financing urban development	Dialogue
FINGERPLAN The growth of Copenhagen has been set along five designated 'fingers' following train and major road routes, with open between. TRANSIT ORIENTED DEVELOPMENT Regulations allow for higher densities close to stations and ensure that large office can only be located within 500 meters of a station.	STRATEGIC SITE PREPARATION Investment in attractive urban qualities, as infrastructure and blue and green spots increase the land value. This is a way to finance urban development In a sustainable way. PARTNERSHIPS Partnerships between the city of Copenhagen and stakeholder in different sectors ensure innovative solutions, sustainability and urban qualities.	CITIZEN'S DIALOGUE Dialogue with citizens and qualitative analysis of their needs is important to get the strategy right and ensure a high quality of life and user friendly solution.

CONCLUSION

At the end of the day, all cities should aspire into becoming sustainable cities. As a liveable city is one form of sustainable community, the paper concentrated on this concept and aimed at identifying the conditions for liveable cities, by means of theoretical and quantitative analyzes centred on one of the most viable city in our universe, then extrapolate the framework for a liveable city, after which it suggested a set of recommendations that would help to enforce the concept of a liveable city. Ultimately, it concluded that; the liveable community relates to the characteristics of the environment and the infrastructure that the town will provide, which would enhance the standard of life of the people. Further emphasis is paid to the existing standard of living and prosperity. The recommended guidelines are mainly targeted at encouraging healthy travel, creating desirable and accessible public and green areas, leveraging alternative energy technologies, increasing economic performance and fostering civic participation.

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