RESIDENT'S PERCEPTION OF LIVABILITY INDICATORS IN HYDERABAD, PAKISTAN

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ABSTRACT: *This paper is purely based on the relationship of livability indicators between people & places in their daily lives, making comfortable living conditions for the overall well-being of the residents. The word 'livability' is used in this research as decent living conditions for the inhabitants of regions, cities, communities, & neighborhoods in terms of physical & mental well-being. Unfortunately, there is a limited concept of livable neighborhood planning in Pakistan. This research was carried out in the city of Hyderabad-Pakistan, specifically in the neighborhood of Qasimabad. The research focuses on the study of various global indices of livability; the methods include data collection; case studies, questionnaire surveys, interviews with residents, and perception-based analysis together to identify livability at Qasimabad. This research was intended to identify current livability standards at two residential settlements at Qasimabad, with respect to livability indicators, to figure out how people perceive livability in their neighborhood, a perception-based assessment was made via questionnaire survey, & a comparison assessment & analysis of two residential schemes in terms of livability indicators to gain the current livable standard based on the perception of the researcher. This research accesses the four-dimension assessment framework of livability such as; amenity, convenience, health & safety, the following parameters of livability such as; environment, social, economic, health & safety, are the base of this research, by which forty two indicators were extracted such as; security/crime, traffic safety, pedestrian & child, good lighting, active building, shared street concept, cctv, cycling lanes, sidewalks, crossings, paving materials, building height, street furniture/benches, wheelchair/ramp, architectural style, easy accessed, parking, face to face meeting areas/socialize, recreational, play spaces, sunlight, shading elements, noise pollution, air pollution, landscape, hardscape, green/open space, cleanliness & maintenance, mix land use, clean water, overall wellbeing, disease prevention, population/density, walk ability, and lastly emergency facilities nearby, & were set to determine livability standard at two residential schemes at Qasimabad neighborhood 'Green Homes' & 'GMB', through comparison assessment analysis, the indicators were closely examined to measure livability standard, to have the best results a focused group discussion was held in which 50 residents from each selected residential projects participated, majority of the participants were males, belonged frommiddle income group, age group participation was 15 years youngest & 70 years oldest, a household survey was conducted in December 2021 where 120 residents were interviewed in each selected residential projects, a questionnaire survey was conducted to achieve the perception of residents, the residents perception based was measured on the scale from "very poor" to "very good", the residents were asked to evaluate their neighborhood characteristics based on safety, health, environment, economy & social.*

In general, there were few differences in ratings of physical & social assets between both housing schemes; living satisfaction was found similar in both, whereas environment attributed majorly to the residents' quality of life. This research revealed, about 90% of the residents were found unsatisfied. Although the findings are specific to two residential schemes at Qasimabad, the research is broadly applicable to other housing schemes & future policy forming as well. With this kind of research in the coming times, the authorities like HDA (Hyderabad Development Authority) can use it for future housing projects to make livable neighborhoods.

Keywords: livability, well-being, neighborhood, parameters, indicators, quality of life.

1. INTRODUCTION:

Before the COVID-19 pandemic, the relationship between buildings and health wasn't like this; it is a very popular topic in general. Now, after the worldwide spread of airborne diseases, more people understand how air circulation preventsdisease and how buildings do this, making us sick. Planners and designers who have long believed that mutual use is best practice in an environment built to promote good physical health respond with established responses and design a strategy for healthy places. But the pandemic has revealed much of a worthy phenomenon – The impact of the built environment on mental health and well-being. Years of socialisolation and physical distancing, to curb the spread of the disease have led to renewed interest in how to live together inharmony & have led to the focus on the quality of life & well-being of the habitants in the urban spaces.

Both neighborhood satisfaction and neighborhood happiness are associated with overall subjective well-being, according to relevant studies [1]. Emerging cities have a variety of urban challenges, including poor quality of life that has focused urban planners towards livability measures.

Pakistani cities are facing similar challenges, like the provision of adequate infrastructural facilities and amenities, due to which cities are losing their livability standards. The trends of livability in Pakistan vary from urban to urban, urban to rural, and province to province [2].

In developing countries like Pakistan, it is a great challenge to achieve a quality of life, Hyderabad being the second largest city of Sindh province is a populated city, and the satisfaction level of the residents in recent years has changed. Once the city of Hyderabad was famous for its open spaces, and greenery & it was considered distance friendly as most ofthe important places were near, but in the past decade the urban sprawl & poor urban planning has made the city suffocate. The city has become more congested, the roads are jam-packed at peak hours, & unfortunately, it has more vehicles than streets. Day by day the city is becoming more populated. 'Green homes' & 'GMB' are two famous residential colonies

at Qasimabad where the precise research took place. The colonies have 95% of people from professional & educated backgrounds; such as doctors, engineers, teachers & other official professionals. The parameters of livability were set to examine & compare the livability standard in these residential projects. The assessment was done to achieve residents' level of satisfaction considering environmental, health, social, safety & economic factors, forty two indicators were set to determine the exact level of livability in these housing societies.

The term Livability means the degree to which a place is suitable or good for living in. (Cambridge Dictionary). Livability means good quality of life and the standard of the well-being of inhabitants in a region or a city [2].

Livability, as it is used today, first appeared in the 1950s. The concept of livability began as a powerful tool in Vancouver by the Electors Action Movement (TEAM). A livable community is one that combines affordable and suitable housing, supportive community facilities and services, and reasonable mobility options to promote individual self-reliance and the civic and social engagement of its residents. Livability is a concept that has various dimensions and isused to measure the Quality of Life (QOL) [3].

While most of us would say we want to live and work in livable places, we rarely try to dissect and understand the precise meaning of the term. Donald Appleyard was the first urban theorist to use the term 'livability' in the 1970s and 1980s, and he specifically referenced the term with regard to the quality of neighborhood streets. Appleyard (1980, 1982) stipulated that livable neighborhood streets should be places of sanctuary and comfort, places that were healthy and protected from noise, places that were free from pollution andtraffic intrusions, and places with a defined neighborhood territory, a sense of community, and neighborhood identity. With this simple, universal description, Appleyard set the basic parameters for defining livable places [4].

The Author has come to understand the definition as comfortably meeting a resident's daily and long-term needs and desires. Livability can be defined as a bunch of parameters that together add to upgrade the quality of life & experiences of urban spaces. In the simplest understanding, the term means to provide health, protection, and comfort to people. The term first appeared in the 1950s in Vancouver Canada; later many countries followed the path including Melbourne Australia. Livability & quality of life in urban areas are a challenge in developing countries. Environmental & overall well-being is the main concern to motivate livable neighborhoods.

Quality of life is the standard of health, comfort & happiness experienced by an individual or group, (Oxford Dictionary). It is constructed of shared components of residents' experience in places for example water bodies, air quality, traffic, open spaces, recreational & the evaluations residents make of these conditions. The term refers to satisfaction in life, in terms of safety, health & comfort.

Aristotle wrote about "the good life" and "living well" and how public policy can help promote it. In recent years, there has been a demand for the term livability in urban spaces around the world. Due to the population sprawl in urban areas, the quality of life is compromised. Achieving livability is an important component of a sustainable environment through livable neighborhoods.

Enhancing Quality of life (QoL) in cities through achieving a livable and sustainable environment has become one of the imperatives of modern planning and of increasing concern to the public; this term nowadays is linked to the rapid urbanization process in cities, especially among the less developing nations. Livability is a concept related to human well-being [5].

Livability can be improved if road networks are made efficient and recreational activities are increased as livable neighborhoods can help to improve the QOL of residents, which is one of the determining factors in achieving liveability in general and QOL as a whole [3].

Adopting a healthier lifestyle, for example by walking or cycling to work, can increase daily physical activity levels. In general, transportation has been shown to affect the majority of livability factors and the quality of life [6].

Walking-related studies in the past define walkability as, the extent to which the built environment attracts people by showing friendliness to shopping, visiting a different destination, and enjoying or spending quality time in an area [7].

Focusing in 1983, Appleyard raised a question, "What could a residential street -a street on which our children are brought up, adults live, and elders spend their last days- be like?". And suggested the street residents' rights in which residential street could serve through its design are represented as follows;

1. The street as a sanctuary: streets should be safe from traffic and speed; pedestrians and children should be able to walk safely through the neighborhood streets.
2. The street is a livable, healthy environment: streets shouldn't be subjected to noise, vibrations, fumes, and soot from traffic, which stress their daily life indoors and outdoors.
3. The street as a community: street should encourage activities and social life between neighbors, and be provided with suitable sidewalks, street furniture, and play places for children
4. The street is a neighborly territory: residents have to feel that the street belongs to them, a sense of responsibility in which they maintain cleanness and trees.
5. The street as a place for play and learning: in several cities, the street is the only available public space for children, so it should be an adequate and safe place for them to play.
6. The street with green and pleasant land: trees, plants, and landscape are most desired in big cities; they provide relief from pollution, shade, and a pleasant visual natural environment.
7. The street as a unique historic place: identity and unique quality of the street through history, culture, or certain details and features that give a sense of place rather than a moving channel [5].

Urban planning is a key component of livability and plays a significant role in making cities more livable [8].

Urban planners must ensure that urban public spaces are enjoyable to use to create a lively city that expresses their

culture and traditions and welcomes social diversity [9]. Public spaces are the basis and content for the public life of cities; thus, the livability of spaces is crucial for boosting and promoting the social life of cities and improving their qualityof life. Today's cities are struggling to cope with the changes that are depleting urban life. Streets are overcrowded with vehicles, scarifying pedestrians on streets and open areas thatare gradually being replaced by parking lots. In general,urban open space is becoming increasingly disconnected from sustainability, accessibility, and pedestrian friendliness,all of which are important criteria for making a city livable[10].

2. METHODOLOGY:

2.1 Study Area

Uncontrolled urbanization is a global phenomenon, currently sweeping through developing countries like Pakistan. Being the 6th most populous country, its strategic urban locations receive a humongous migrant influx. A prime victim is Hyderabad, Pakistan, Sindh's second-largest urban settlementafter Karachi which experiences enormous urban problems due to immense urbanization [11].

Hyderabad, the second largest city of Sindh-Province-Pakistan was selected as the study area. It is located at 25.24°N and 68.20°E [12]. According to

the 2017 census, Hyderabad's population is 1.733 million, making it the second most urbanized city of

Sindh after Karachi [12]. Hyderabad is facing an immense urbanization problem due to which it is facing a varying level of problems related to the quality of life [13].

To narrow down the research on a neighborhood level, Qasimabad was selected as the precise study area. The population of Qasimabad neighborhood is 304,779 (2017) - Census. Qasimabad is located in the western outskirts of Hyderabad, Sindh. The map of Qasimabad is shown in Fig. 2.1 Selected study area.

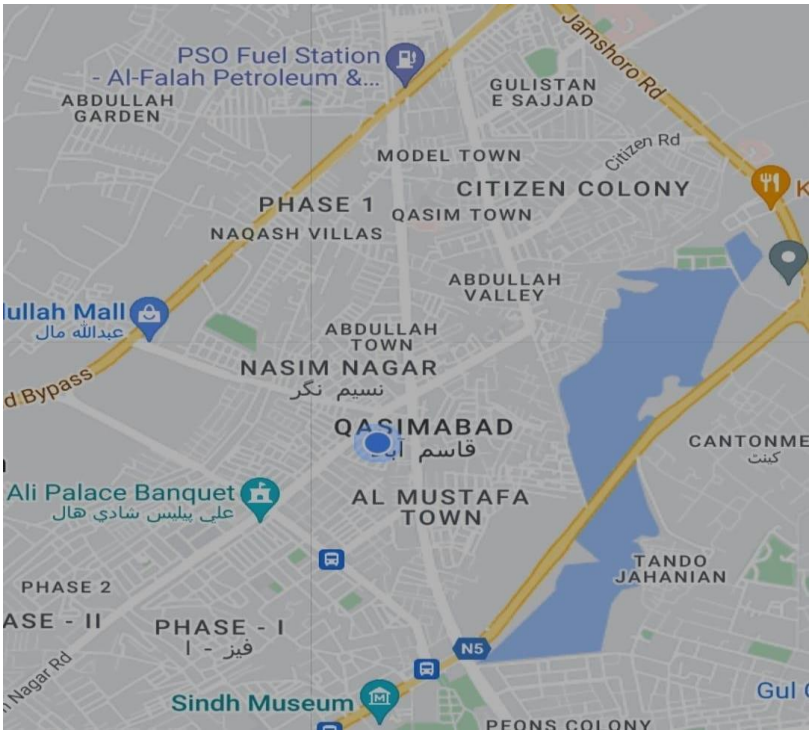

Fig. 2.1 Study area, Map of Qasimabad, Hyderabad, Sources Google Map

2.1.1 Problems of Qasimabad

In recent years Qasimabad density has increased. Wah-du-wah was once a clean water wah, which in recent years has been misused & now being used as an open drainage. Qasimabad is facing difficulties due to its poor drainage system. Due to the drainage issue most of the internal streets of the housing colonies are drowned in drainage water. Narrow streets towards the housing allow onecar at a time. Due to its population density, eventually, there are more vehicles on the streets. The busy roads & streets make walking an unpleasant experience. Lack of walking paths & no discipline at all makes difficult conditions for every age group.

The drainage lines are above the street level, in monsoon season rainwater & dirty water is mixed & overflowing inside the houses makes more difficult conditions. The dirty water bodies spread more viruses & health is compromised ofthe inhabitants. During the fall season of 2021, the dengue & malaria virus was a matter of concern, as there was an emergency state; the hospitals had dengue wards designated. The sewage & drainage system failure contributes to the growth of other viruses spread epidemics as well for example typhoid & diarrhea. The main naseem nagar road is always blocked due to the heavy traffic & auto rickshaw. No proper lane is defined for bikes, cars, autos & cyclists. Naseem nagar

main road which has widened in the past years,& still some construction is going on is miss used by fruit carts & car parking. No proper auto stand or bus stand is defined. Local chai/tea hotels have taken over the footpath area to seat their customers.Encroachment is made on the footpaths, outside the houses, and being used as a car park or garden area, the setback area is being misused as well.

Ill house planning has made the Qasimabad area suffocated. There is no beautification or plantation to improve air quality.The garbage from shops & residential areas is being thrown on streets, & no proper area is defined or authorities take action against it. Electricity wires & polls are spread over the plazas,shops & residential areas, which is also a matter of concern. Car showrooms have covered most of the area at Wah-du-Wah road, which authorities should take action against, to stop them from encroachment. Residential schemes look more like boxes above a box. Lack of green & open spaces, unfortunately, the list is too long; the quality of life is badly compromised.

2.2 Field Research

Neighborhood well-being can be used as a concept (and variable) to describe emotional experiences in a neighborhood environment. It is a measure that directly assesses the emotions experienced in the neighborhood and istherefore distinct from measuring general well-being and analyzing its relationship with environmental characteristics.

2.3 Theoretical Framework

When people look for a neighborhood to live in, there are a lot of factors that they might consider, such as; home affordability, proximity to work, and quality of the nearby natural environment. These factors influence the perception of livability, which can be as important in the home search as the actual features of the home itself.

This research focuses on investigating livability parameters inthe two housing schemes at the heart of Qasimabad, "Green homes" & "GMB" colonies to measure the livability as perceived by the residents. Livability is an important component of a sustainable urban environment, especially in residential neighborhoods. The study focuses on residents' level of satisfaction, their social interaction & level of community engagement, their health, & safety.

The researcher's personal observation, perception-based questionnaire survey, perception-based group discussions with the residents of the two societies, and door-to-door & face to face interview sessions were recorded in written notes to determine what factors are most important & neglected in these settlements. Forty-two indicators were set to determine the livability of these urban settlements, these indicators were examined closely to understand the current livability conditions, and the research revealed interesting facts about residents' satisfaction, why they chose to live there & identifying the needs & potential that can be implemented.

Although the findings are specific to two residential projects at Qasimabad, the research broadly is applicable to other residential projects, areas & future policy forming as well.

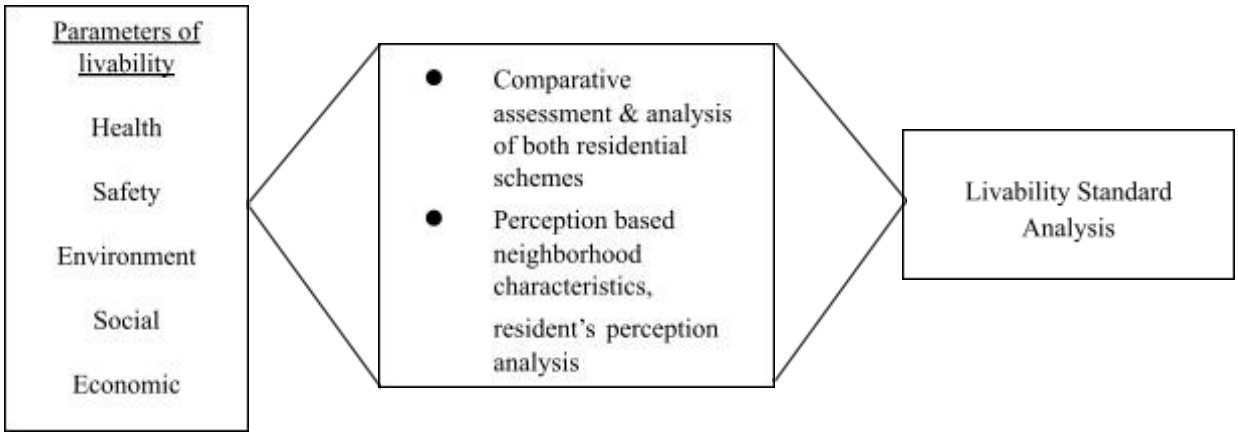

Fig. 2.2 shows the theoretical framework

2.4 Conceptual Framework

□ The first objective was to map fundamental characteristics of livability parameters to achieve livable neighborhoods, to achieve this objective parameters of livability, principals, & livability index were studied by exploring the literature, to gain indicators & apply them to examine the livability condition in the chosen neighborhood.

□ The second objective was to identify the gap between the fundamental characteristics of livability parameters with existing scenarios, personal observations, surveys were recorded, discussions & interviews were conducted to know residents' perceptions of neighborhoods of past & present, for which the livability parameters were the basic theme.

□ Further to achieve the third objective, which was to focus on achieving a livable neighborhood at Qasimabad, the indicators of livability were set to figure out what is lacking in the existing neighborhood & how it can be achieved, the indicators were applied to both residential schemes in a comparison table to know the actual livability standard.

2.5 Data Collection

At the start of the research project, relevant data was gathered to determine the current situation. All the necessary information about the research was taken from primary and secondary sources. Primary sources are self-administered

surveys, interviews with the residents of the residential schemes & with the authority officials, group discussions & field observation. Secondary sources were literature reviews, websites, case studies, and questionnaire surveys & government records.

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For three different objectives, different methods were required to achieve the best results, in total six methods were employed, and each method gave a piece of new information leading toward accurate analysis.

2.5.1 Field/Personal Observation

The researcher's personal observation was gathered & penned down to analyze the data through a comparative analysis of both residential schemes. The comparative assessment was done to achieve the actual standard of the residential schemesin terms of livability indicators.

2.5.2 Interviews

For the evaluation of the subjective attributes, a household interview survey was conducted in selected residential projects. Interviews of the HDA officials were also conducted.

2.5.3 Focused Group Discussions

The focused group discussion was held at a GMB colony & Green Homes. To gather data on the bases of residents' perceptions

2.5.4 Self-Administered Surveys

Surveys were conducted, by personally visiting the research sites, during the Pandemic & Monsoon, to figure out basic issues & problems. These attributes were categorized under cultural, environmental, social, health, infrastructure, and economic dimensions.

2.5.5 Case Study

The case studies were reviewed in order to achieve maximum ideas to build an effective methodology; this was achieved through a literature review.

2.5.6 Questionnaire Survey Based on Resident's Perception

Perception-based neighborhood characteristics were assessed via survey, by asking residents to evaluate the overall qualities of their neighborhood area in terms of livability & Quality of Life.

3. DATA ANALYSIS:

Data Analysis is done on the bases of information gathered, to figure out the data analysis; data collection was done priorto this process by the author; field/personal observation, interviews, focused group discussions, self-administered surveys, case studies, & questionnaire surveys based on resident's perception.

3.1 Field/personal observation

The researcher is a resident of Green Homes & has been livingthere since 2015, the researcher's personal observation was penned down in notes by visiting both residential schemes again & again, by observing the residential structure forms, cultural aspects, privacy issues, street sizes and patterns, safety, recreational, environmental & encroachment issues, drainage & maintenance, from every aspect, from neighbor's chat, from the eye of resident & personally being an ear to listen to residents their issues & problems. Further, this information was applied in the comparison table to access thelivability standards at both residential schemes by making a comparison on the bases of livability parameters & indicators. For each parameter criteria were drawn from human & social factors, to further narrow down to indicators set by the author to assess the study area on the bases of literature review & methods achieved from case studies. The parameters are as follows; health, social, environmental, physical, and economic. The criteria set for the assessment are as follows; comfort/safety, design, accessibility, livability, comfort/weather, use-mixed-use, & well-being. To further narrow down the analysis a set of forty-two indicators were employed, such as; security/crime, traffic safety, pedestrian & child, good lighting, active building, shared street concept, cctv, cycling lanes, sidewalks, crossings, paving materials, building height, street furniture/benches, wheelchair/ramp, architectural style, easy access, parking, face to face meeting areas/socialize, recreational, play spaces, sunlight, shading elements, noise pollution, air pollution, landscape, hardscape, green/open space, cleanliness & maintenance, mixland use, clean water, overall wellbeing, disease prevention, population/density, walkability, and lastly emergency facilities nearby.

3.1.1 COMPARISON ASSESSMENT & ANALYSIS OF LIVABILITY INDICATORS IN RESIDENTIAL SCHEMES AT QASIMABAD

Table 3.1 Comparison assessment & analysis of livability indicators in residential schemes at Qasimabad

Table 3.1 Comparison assessment & analysis of livability indicators in residential schemes at Qasimabad						
Aspects	**Criteria**	**Indicators**	**Analysis of Green Homes**	**Findings**	**Analysis of GMB**	**Findings**
1. Physical	Comfort & Safety	Security/crime	Street watchers & gated	Very good	Gated	Good
		Traffic safety	Low traffic with low speed	Fair	Low traffic with low speed	Fair
		Pedestrian & child	safe for none	Very poor	Safe for none	Very poor
		Good lighting	Not well lit at night	Poor	Lit at night	Fair
		Active building	Mosque open 24/7	Good	Mosque open	Good
		Shared street concept	Loose grid	Good	Grid	Good
		CCTV	Installed but not working	Poor	Not present	Very poor
	Design	Cycling lanes	streets are not safe for bicycle	Very poor	streets are not safe for bicycle	Very poor
	(street/roadway/side walks)	Sidewalks	not present	very poor	not present	very poor
		Crossings	no pedestrian crossing	very poor	no pedestrian crossing	very poor
		Paving materials	bricks	Very good	cemented	Good
	(form/scale)	Building height	2-3 story maximum, bungalows	fair	2-story maximum, bungalows	Fair
	(amenities/ furniture)	Benches	not present	very poor	not present	very poor
		Wheelchair/ramp	not present	very poor	not present	very poor
	(Visual qualities)	Architectural style	traditional style	fair	traditional style	Fair
	Accessibility	Easy accessed	by walking & car	good	by walking & car	Good
	(Access points)	Parking	most cars are parked on streets	poor	most cars are parked on streets	Poor
		Permeability	Permeable	fair	Permeable	Fair
	(connectivity)	Connected to transit	yes	fair	yes	Fair
		Connected street system	well connected	good	connected	Fair
2. Social	Livability	Sidewalks	not present	very poor	not present	very poor
	(Gathering space)	Gathering nodes	not present	very poor	not present	very poor
		Sitting areas	not present	very poor	not present	very poor
	(Social interaction)	Public spaces	just streets & mosque	fair	just streets & mosque	fair
		Face-to-face communications	yes	very good	yes	good
	(activities)sense of place	Recreational	no facilities	very poor	no facilities	very poor

		Play spaces	no facilities	very poor	no facilities	very poor
3. Environmental	Comfort	Sunlight	adequate	good	adequate	good
	(Weather conditions)	Shading elements	just trees	good	no shade	very poor
		noise pollution	less noise	good	less noise	fair
		air pollution	windows were open	good	heavy curtain & close window	Poor
	(Visual)	Landscape	trees only	good	not many trees	poor
	(Excellence)	Hard cape	none	very poor	none	very poor
		Green open space	small triangle park	poor	not present	very poor
		cleanliness & maintenance	clean & maintained	good	clean	fair
4. Economic	Use (Mixed use)	mix land use	residential & commercial use	good	residential use	Fair
5. Health	Wellbeing	clean water	available	good	available	Good
		overall wellbeing	moderate level	good	moderate level	Good
		disease prevention	no precautions	fair	no precautions	Fair
		population/density	not so dense	good	moderately dense	Fair
		walkability	no facility	very poor	no facility	very poor
		Emergency nearby	Available 300m radius, Another 1.2 km	fair	Available 300m radius, another 1.2 km	Fair

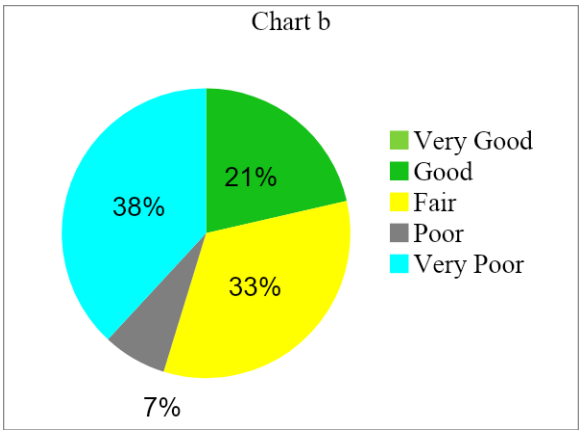

Fig. 3.1 (a) shows the Percentage analysis of livable criteriafound at Green Homes

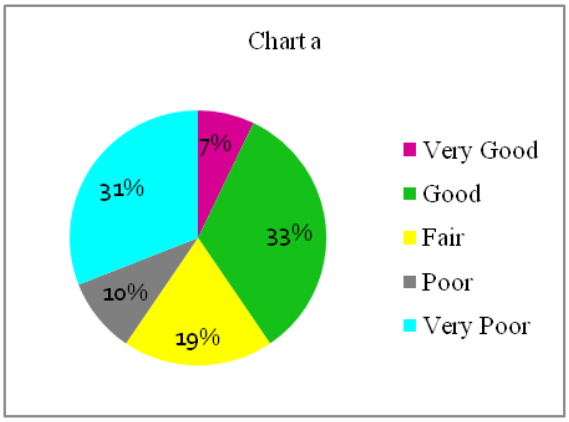

Fig. 3.1 (b) shows the Percentage analysis of livable criteriafound at GMB

According to chart (a) referring to Green homes & chart (b) referring to GMB colony proves that both housing colonies are found to be lacking in livable criteria set for the livable neighborhood, still, there is room for improvements &solutions. Fig. 3.1 (a) shows findings from analysis in percentage for Green homes & Fig. 3.1 (b) shows percentage analysis for GMB.

3.2 Interviews

For the evaluation of the subjective attributes, a household survey was conducted in December 2021, 120 residents were interviewed, in selected residential projects, interviews were conducted face-to-face in both residential schemes with different age groups & income groups, the interviews were door to door in which the majority respondents were males. The interviews were a maximum of 10 minutes long, & they

wererecorded in written notes, the pattern of the questions was randomly based on livable neighborhoods, indicators & overall experience in the existing scenarios. Interviews of the HDA officials were also conducted to achieve existing policies & their framework, & their concept of livable neighborhoods at a Government level, these interviews were recorded in written notes during the interviews.

Sample Size:

Due to lack of resident cooperation & awareness towards research goals, & not wanting to share exact numbers of family members, the exact population living in these residential areas remains unknown, on the bases of assumptions this sample size is framed as under;

$$N = \frac{1.96^2 \sigma^2}{E^2}$$

After putting the values, the following sample size was found: This means 92 or more measurements/surveys are needed to have a confidence level of 95% that the real value is within ±5% of the measured/surveyed value.

3.3 Focused Group Discussions

The group discussion was held at a GMB colony Community Centre for the residents of GMB, while at Green Homes the discussion was held at Society's Park. The basic theme of the discussion was stated as past & present conditions of the neighborhood & perception-based questions were asked.

- What is your perception of livable neighborhoods?
- What changes need to be made to achieve a livable neighborhood?

The invitation for the group discussion was sent to all the households of each residential scheme via WhatsApp group message, 50 people from each housing scheme participated, the majority of residents were male residents belonging to the middle-income group, age group participation youngest 15 years & oldest 70 years.

3.4 Self-Administered Surveys

Surveys were conducted, by personally visiting the research sites, in the Pandemic & Monsoon, to figure out basic issues & problems. These attributes were categorized under cultural, environmental, social, health, infrastructure, and economic dimensions.

Pandemic Survey Report of Qasimabad

A survey was conducted by personally visiting Qasimabad neighborhood again & again, to know the actual situation during the Pandemic. The purpose of this survey was to measure the health, safety, social, economic & environment of the residents in the selected study area. The survey was done by interviewing the residents, & personal observation was recorded afterward in written notes. The basic theme of the survey was to get a clear picture of livability standards. The survey was conducted at Qasimabad Hyderabad, during the ongoing Pandemic, which made a clear & quick view of the current situation. In recent times, due to the Pandemic, it has been witnessed that most countries & major cities were in lockdown situations to help decrease the spread of coronavirus; unfortunately, the harsh reality has opened the eyes of the authorities & planners. As the sudden lockdown took place, people had to stay back at home, restricted to stay indoors. The lack of open spaces, green spaces, wide streets, & healthy environment made it more difficult for the inhabitants of Hyderabad city. They hadto face damage to their economic growth & the inhabitant's health was compromised. The city was severely lacking open spaces, parks, and green spaces & the quality of life was affected. When the lockdown was uplifted, many people moved to better living options. More than a dozen families moved to Bahria Town, for a better quality of life. Bahria Town attracted people with its openness, wide street planning, & cluster planning ideas made things easier & people maintained social distance even when outdoors. According to the news officials, due to the poor planning, drainage system, air quality, & lack of a livable environment, the virus spread ratio was witnessed higher in the 3rd wave of coronavirus in the city of Hyderabad; the spread percentage was higher as compared to other cities of Sindh. According toSindh Health, Hyderabad was put under stiff lockdown till April 2021, when the provincial administration was directed to observe the strict implementation of Sops. According to health specialists, overall well-being & mental health was compromised, and mental illness like depression is found in youngsters & children in recent time due to the ongoing pandemic. In Pakistan, 35 percent Population is 10 years & older example approximately 55.74 million were working before the onset of COVID-19. However, due to the closure of activities after the implementation of the lockdown, It is observed that this declined to 22 percent (35.04 Million Population approx). The most affected province was Sindh for which the working population has reduced to 23 percent during Covid-19 Period (April-July) as compared to 38 percent before.(Pakistan Bureau of Statistics)- 2020.

Monsoon Survey Report of Qasimabad

The monsoon survey was conducted to figure out the comfort level of the residents of the neighborhood of Qasimabad. Climate change around the world has become an issue of concern; the harsh climatic changes are the cause of infrastructure damage, & health compromise in general. The city of Hyderabad being the second largest city of Sindh & economic hub for interior Sindh is the passage corridor for small villages, towns & cities connecting to small & large businesses around Sindh. In monsoon season 2022 from July to the end of August, Hyderabad recorded heavy rainfall. Heavy monsoon rains have hit the Hyderabad district hard, flooding low-lying roads, streets, and homes. According to the PakistanMeteorological Department, 31.25 mm of rain was recorded in the Hyderabad district on 16 August, followed by 81.05 mm on 17 August, followed by 92 mm by the evening of 18 August. Recorded and rained in total 204 & 75 millimeters in 60 hours. The chairman of the Hyderabad Petty Chamber of Commerce, Muhammad Altaf Memon, called on the Sindh government to declare Hyderabad and Karachi disaster-hit cities. He called on both cities to declare a state of emergencyand protect the lives and property of their citizens. Due to the heavy monsoon spell, all the parts of Hyderabad Sindh were under water. Main roads & linked roads in Qasimabad were all drawn, which damaged the roads badly & the infrastructure. The rainwater was there for several days & weeks, on the internal streets of the commercial & residential areas of Qasimabad. Qasimabad being the shallow area was

expected to be hit by the flood as well. Rainwater was everywhere, there was no space for stormwater treatment, and drainage was difficult in many places. Residents' daily lives were severely paralyzed; the small & large businesses were affected. Approximately 3 feet of rainwater was seen on the roads creating a difficult situation, for every income group & for all age group people. Green homes were also flooded by rainwater, flooding many homes. The GMB colony was also flooded, mixing rainwater and wastewater. Both residential schemes, considered up-market in the area, were flooded and most of the roads were damaged. There was no place to drain the water or save it for the future. The overall impact of the rains damaged Hyderabad city & the whole Sindh province faced a flood situation, these issues brought many villages & towns affected people to relocate, making more difficult conditions around the province of Sindh. Many temporary homes & tents were installed in cities to save the flood-affected people, which brought skin diseases, food poisoning, diarrhea, & other health hazards to the entire province. There was an emergency situation in the Hyderabadhospitals, as most of the flood-affected people were broughtto Hyderabad. There were tents installed on the river banks &dry land areas to facilitate the affected people. For several days the daily life of people was affected & it took a while to come back to normal life again. Due to ill planning & undeveloped approach, & wrong choices people are facing so much trouble. This harsh reality opened the eyes of the public about political parties & authorities, the province of Sindh & the City of Hyderabad is lacking in so many waysthat it needs to be worked out for humanity not just for poweror money.

3.5 Case Studies

Global & national case studies were reviewed to achieve a better understanding of the concept of livability parameters &livability indicators, further to gain more understanding for similar research, case studies were reviewed to understand the framework, assessment patterns, application of indicators, & the understanding of case studies review a methodologywas sketched.

3.6 Resident's Perception-Based Survey

Perception-based neighborhood characteristics were assessed via survey, by asking residents to evaluate the overall qualities of their neighborhood area in terms of livability & Quality of Life. Respondents were asked to evaluate the safety, health, environment, economy & social characteristics of their neighborhood on a scale from "very poor" to "very good".

Table 3.2: Shows Resident's Perception Based Neighborhoods Characteristics Analysis

Table 3.2: Perception-based neighborhood characteristics

Parameters of livability	Green Homes Residents Perception	GMB Colony Residents Perception
1. Safety	Very Good	Very Good
2. Health	Good	Fair
3. Environment	Fair	Fair
4. Economy	Poor	Poor
5. Social	Good	Fair

Perception-based Chart

Chart (a) refers to Green Homes-Perception of Respondents were found to be moderately satisfied whereas, chart (b) refers to GMB Colony-Perception of Respondents were found to be less satisfied.

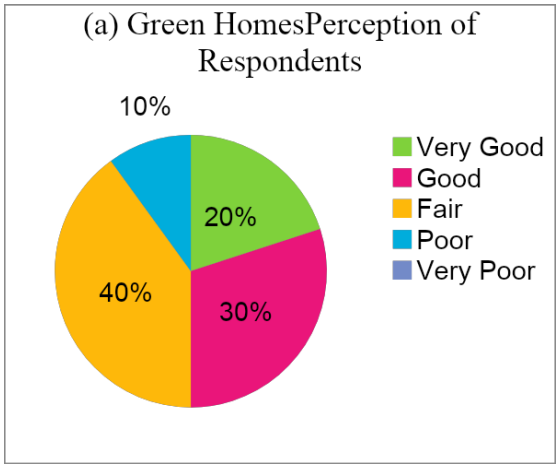

Fig. 3.2: (a) Shows the percentage results of the analysis ofresident's perception of their neighborhood qualities at Green Homes

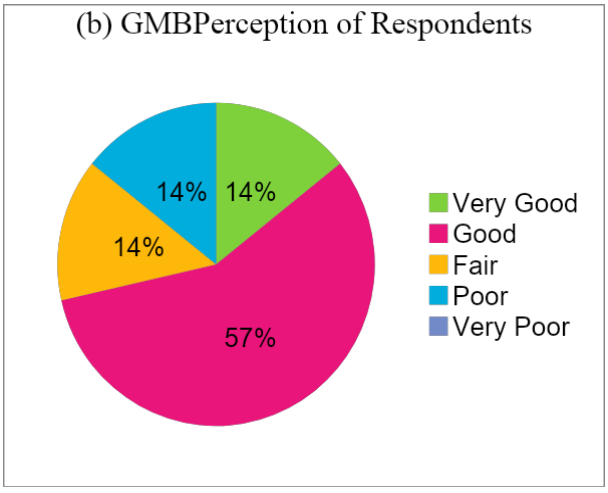

Fig. 3.2: (b) Shows the percentage results of the analysis of residents' perception about their neighborhood qualities at GMB

3.3 Improvements & Suggestions

The required improvements for both settlements would be different. The common problem found with both was the lack

of public space, for leisure activities or multi-functional space for the residents. Increasing the ratio of public space needs to be increased; the target can also be achieved by transforming low or unused private spaces into functional public spaces.One of the major findings of my research is to recommend, the architecture & urban design of new residential development can be interesting & green, and it has to be livable & functional for its residents. As planners & designers, it behooves us to continually reconsider & re-evaluate the spaces, & a variety of factors need to be assessed over the life cycle of any society, in order to build spaces to be more meaningful, comfortable, safe & functionalfor its users. On the whole, livability plays an important role in the design of any residential settlement. The rights of wayfor pedestrians should not be neglected. Greenery should be made mandatory to incorporate views of nature, to improve air quality & trees can also help to create shade & for privacy. The streets are being misused as they are being used to park cars. The drainage holes should be made on the road level & not above. The streets need to be fixed as they are above the level of houses. Maintenance of streets & drainage should be made mandatory on a monthly basis.

4. RESULTS & DISCUSSIONS:

After investigating various factors, such as literature review, applying different methodologies & reviewing global & national case studies, this research finds its results. The results are based on various factors employed by the author toachieve accurate results.

In general, there were few differences in ratings of physical & social assets between both housing schemes; living satisfaction was found similar in both, whereas environment attributed majorly to the quality of life of the residents.

The survey revealed interesting facts about residents' perceptions of their neighborhood experience. Due to the lack of various livability factors about 90% claimed they are unsatisfied & wish to see changes or switch to other cities or areas. Comparatively residents of the Green Homes were found active in community engagement, & were less unhappythan the GMB residents.

There are no rules or regulations to achieve livability standards. The results of this study show low levels of satisfaction with various livability indicators. The main problems experienced by residents were inadequate open spaces & recreational spaces, deteriorating road conditions, overcrowded neighborhoods with no traffic rules, vehicle emissions causing air pollution, overall poor drainage system, and poor law enforcement. Main naseem nagar road which is connected by residential schemes is always overcrowded resulting in poor environmental conditions. Health services should be improved and parks/recreation areas should be maintained to improve the quality of life in the neighborhood. It is therefore recommended that all parameters of livability & livability indicators should be considered by governing authorities when planning housing projects/neighborhoods.

Creating livable neighborhoods in large cities around the world is a constant challenge.

To build neighborhoods for the future, building better neighborhoods is the prime task. Shaping cities in the right way can help have a better environment to live in. The antidote to this is developing cities within cities, for developing more livable places.

For livable neighborhoods, mixed land use and compact planning may be the solution to promote walking and cycling in a healthy and safe environment. A combination of land use, walkability, and interesting planning is the key.

Difficult environmental conditions continue around the world, including irreversible climate change. Many of these challenges stem from cities, intense urban lifestyles, & ill planning decisions. To stop this a collective effort is required from every individual, all genders, & every age group, to save the planet & their neighborhoods.

The results of this study provide new insights for policymaking to build livable cities in Pakistan. Most studies have been conducted at the city level, or have analyzed the livability of metropolitan Pakistan in terms of meeting the biological needs associated with residential land use, or have analyzed some aspects of the livability index. However, this study takes a comprehensive perspective and evaluates it in relation to livability parameters & livability indicators. Therefore, the results of this study can provide important information to municipal authorities on livability parameters. The study also suggests that in order to improve urban livability in Pakistan, it is necessary to overcome livability-related deficiencies in multiple aspects such as urban safety, environmental sanitation, and transport facilities. Special efforts are also required to address specific issues such as various types of pollution, parking, traffic, lack of oldage care facilities, and the expansion of urban green spaces. Urban management policy (multi-use development,conservation of environmental resources, preservation of historic landscapes, investment, provision of opportunities forcivic participation), economic efficiency (sustainable employment and income), housing improvement, and provision of diverse services should pay more attention to opportunities inthis regard

5. CONCLUSION:

These conclusions are based on various factors analyzed in this research. Understanding the concept of livability is important in any discussion. Livability research is unique in recognizing that social factors are as important as economic and environmental factors in shaping planning policy and designing built environments. The concept of urban quality of life is complex and includes multiple dimensions. Focused on the analysis of the two environments that make up urban systems: the built environment and the natural environment. The satisfaction of people in terms of health, safety, environment, economic & social factors, makes a healthy & livable neighborhood. The overall satisfaction in all aspects of livability parameters makes a neighborhood standard analysis.

The pandemic has taught a new perspective on neighborhood satisfaction, in general people understand the benefits of livable neighborhoods after facing the difficult situation of covid-19, & a general perspective to see the world has changed post-pandemic. The selected study area was assessed during the pandemic-2019 & also during the monsoon-2022 to analyze the living standards in selected study areas. The quality of life was badly affected as per the self-administered

survey conducted by the author. The researcher's personal observation, resident's perception, interviews, and focus group discussion were the methods applied to assess the study area in terms of livability parameters & indicators.

The literature in this area assumes that populations of people positively influence certain aspects such as spending capacity, employment, and economic activity. The social dimension provides a supportive network that enables city dwellers to communicate with each other and participate in community life. The physical environment supports coexistence and provides a framework for urban dwellers. The aim of investigating livability dimensions and measurement methods was achieved through studies of livability criteria together with global case studies. The ultimate goal of identifying parameters for Hyderabad was achieved through an extensivedata collection process.

Environment contributed majorly to the quality of life of the residents. A sense of community and safety is highly desirable for the perceived quality of life in Hyderabad, followed by health, environment, housing, transportation, and education. Key livability parameters are generalized acrossall regions, and the same approach can be applied to all regions.

The study supports growing evidence that both architects and city planners can plan and design neighborhoods that promotequality of life. To prevent endless urban sprawl, developers, planners, and designers must draw suburban dwellers backinto the city's core areas and corridors.

This study may contribute to sustainable development in Pakistan on a neighborhood scale. The study may give conclusive findings to develop a master plan of cities by considering livability parameters. Livability itself is a new approach that is rarely used in Pakistan. This study may be used to awareness of the livable neighborhood approach in Pakistani cities.

6. RECOMMENDATIONS:

A. First of all, the implementation of livability parameters should be made mandatory before approving any residential scheme.

B. It is recommended that all parameters of livability &livability indicators should be considered by governing authorities when planning housing projects/neighborhoods.

C. Investing in healthy, safe, and walkable neighborhoods, whether rural, urban, or suburban, promotes the unique characteristics of every community.

D. Expand energy-efficient housing options for people of all ages, income levels, races, and ethnicities to increase mobility and reduce housing and transportation costs.

E. Green spaces and parks: public open spaces act as the 'lungs of the city' and, together with recreational facilities, provide significant social, environmental, and economic benefits. In densely populated areas, creating open spaces, parks, and other green spaces can reduce congestion.

F. The master plan of cities should be drawn by consideringlivability parameters.

G. Legal authorities should take serious action against encroachments.

H. The residential schemes should be planned according to the livability parameters to make neighborhoods livable not only for today but also for the future.

I. Every neighborhood should be self-sufficient in terms of sustainability & livability.

J. The residential schemes should be watched closely even after it is occupied by residents to control encroachment & for maintenance.

K. The Wah-du-Wah which is clean water Wah should be used for beautification, and plantation, spotted with lights at night time to make it look attractive, as it is the corridor for the residents of Hyderabad.

L. The authorities should not allow car showrooms to occupy road & footpath areas.

M. The rights of pedestrians & children should not be neglected. Sign boards should be installed on all main & connecting roads.

N. On the main naseem nagar road fruit, vegetable & other such carts should be banned completely.

O. Proper space should be defined for auto stands & buses.

P. The drainage system should be maintained on weekly bases.

Q. The use of plastic bags should be banned permanently to avoid drainage blockages & for a clean environment.

R. Trash cans should be made mandatory in every neighborhood, road, and street for plastic, glass & other garbagea separate can with different colors.

S. Planting more & more trees for the greener neighborhoods.

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