# SOCIAL SUSTAINABILITY IN THE INDIAN TRADITIONAL URBAN NEIGHBORHOODS

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**Abstract—**
Sustainability is fulfilling the needs of present generations without compromising the needs of future generations. Urban social sustainability is one of the important aspects of neighborhoods. Out of the three pillars of sustainability, the social aspect has been neglected and the main focus has been on the two other pillars of environmental and economic aspects.

Traditional Indian urban neighbourhoods are socially active and intrusive communities, are losing their qualities due to Western influences. In toto copying of the western concepts of neighborhood planning has eroded the traditional values of Indian neighborhoods. The interactions between people and their surroundings strengthen community building and social bonding. This paper aims to understand the social sustainability of the Indian traditional neighborhoods by evaluating the social spaces (Formal and informal public places) traditional neighborhoods of Jaipur**,** and Hyderabad, to find out how the traditional neighborhoods are positioned in social sustainability. The methods such as physical observation of selected neighbourhoods, and conducting surveys by residents structured questionnaire survey. A combined analysis found that social spaces are abundantly available in traditional neighbourhoods and are socially more sustainable. The quality of traditional neighbourhoods is interactions that aim toward the formation of social capital.

**Keywords**—Indian Neighbourhoods, Neighbourhood Planning, Social Spaces, Social sustainability, Traditional Neighbourhoods.

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# I. INTRODUCTION

IN recent times, high-end residential areas have become a trend in India offering high returns to the builders, which are class-segregated communities car-oriented, highly socially unsustainable, and do not support the traditional vigour and spirit of urban life (Meenakshi, 2011). These neighbourhoods segregate rather than integrate a diverse mix of social groups (Vallance et al., 2011). The nature of such neighbourhoods is often low-density, single-family, and highly car-dependent. The traditional neighbourhoods have social spaces which are pedestrian friendly, enhancing not only the walkability but also interactions for all age groups at the junctions that are crucial meeting places.

## II. LITERATURE STUDY

### A. *Sustainability and Social sustainability in a neighborhood*

Sustainability in the 'Brundtland Report' as it is commonly known, (Our Common Future) (Vallance et al., 2011), marked a profound change in our attempts to connect bio-physical environmental, social and economic policy goals. Some researchers claim that social sustainability is not science based and cannot be formally understood and also challenging. Social sustainability contributes to well-being of the community in a neighborhood. "Social sustainability is an urban process of achieving life enhancing state by the community, by harmonious social activities, aiming to achieve social cohesion and in-turn improving living conditions" (Shrivastava & Singh, 2019).The important aspects of social sustainability are pride, attachment to the neighborhood, safety, environmental satisfaction, participation in collective group activity ( Elshater, 2016) social cohesion, interaction and mixing, equity, neighbourhood quality are some common themes, discussed in literature (Shrivastava & Singh, 2019). Social sustainability in the built environment rely on 4 aspects such as amenities and infrastructure, interactions, socio-cultural life and an opportunity to grow ( Hemani et al., 2017). It can be argued that the social capital, social cohesion, social inclusive community and social equity, are the main goals of social sustainability in a neighborhood while addressing the diverse needs of the people residing in the place.

### B. *Social sustainability in Indian traditional neighborhood:*

Neighbourhood making is a process where the physical social economic political processes interact with each other, whose urban forms are a result of experiences whose roots form culture and society (Dhingra & Chattopadhyay, 2016).

Recently, Western influence and lifestyle are on trend, in both housing and neighbourhood planning. The blind adoption of the Western neighbourhood concepts does not suit Indian neighbourhoods. The traditional neighbourhoods have social spaces which are pedestrian friendly, enhancing not only the walkability but also interactions for all age groups at the junctions that are crucial meeting places. The traditional neighborhoods are socially active communities. Indians are warm-hearted and vibrant, where relationships matter and social bonding is at its peak. The traditional Indian neighbourhoods have their own characteristics and are evolved over time, and have stood test of time and are sustainable (Kamble, 2017), where people are residing since they want to (Raju & Soraswati, 2016). The traditional social characteristics of "Mohalla", (Indian counterpart to a neighbourhood), is rich in social interaction, and intuitiveness having an adverse mix of people and professions with diverse activities (Gulati, 2019; Raju & Soraswati, 2016) more walkable and have less auto dependency. These areas have work and home located in the same place, usually the houses are above or behind with shops in the front.

These traditional areas have on-street economic activity, with wholesalers, retailers, the informal sector, artisans, and tiny factories, occupying the locality. The physical layouts are compact in an urban form, characterised by the clusters of buildings, each juxtaposed with the other, and the balconies overlooking the streets. The narrow and shallow streets allow public interactions with closed private spaces away from busy public life (Dhingra & Chattopadhyay, 2016). These streets have chowks with a platform for community use. The religious places often have wells, a tree with a platform around near the chowk (Dhingra & Chattopadhyay, 2016). The courtyards provide a meeting place within the house, and a row of terraces. The houses having public and private spaces, such as platforms chowks,act as spaces for the interaction of all age groups. These traditional neighbourhoods are characterised by tight-knit social bonds, mixed populations in terms of class and ethnicity, and vibrant street life. The crime rates are negligible in terms of its form as there is minimum intrusion of public to private life of the community. These maintain optimum mix of open spaces for elders to interact and children to play in the watchful eyes of the elders.

## III. RESEARCH PROBLEM

The Indian traditional neighbourhoods have unique social characteristics, which are being ignored and are slowly disappearing in the event of copying

Western lifestyles. One needs to inspect the values of social sustainability available in these traditional neighborhoods. This research will enable planners to use traditional concepts into modern planning to make new neighborhoods more socially sustainable in nature.

## IV. LITERATURE

### A. Neighbourhood planning

Neighbourhoods are sub-units of urban or rural settlements (Meenakshi, 2011), with the spatial attributes of residences having their affiliation to the land uses, (housing, schools, parks, shops, and other civic facilities) (Dutta & Bardhan, 2017). These neighbourhoods have self-contained places rather than just limited to housing, having wide range of social relations (Dutta & Bardhan, 2017; Raju & Soraswati, 2016). These neighborhoods have their own form and spatial attributes neighborhoods, having different sizes, boundaries densities, social aspects, which is unique to them. Since these are having their own history, culture, socio-economic, political and admirative characteristics, one cannot compare one with the other (Strassmann, 1986). Among the various parameters used to assess the neighbourhood planning, social spaces whether informal or formal are an important attribute, that define the quality of life in a neighbourhood. The literature on neighbourhood planning is more elaborate in the developed world, while there is thin research in the Indian context especially on the traditional (Baffoe, 2019; Chitrakar, 2016) neighborhoods. When it comes to social sustainability angle, the research is thin in the Indian neighborhoods..

### B.Proximity and connectivity

**Proximity** is the distance travelled by an individual to neighborhood amenities from the particular house for his daily needs, (Solá & Vilhelmson, 2018). **Connectivity** is associated with his walking, usually measured from the centre, ('walkability'). The satisfaction and liveability in a neighbourhood is high if the facilities are proximate (Alshuwaikhat, 1993; Solá & Vilhelmson, 2018). Amenities are guiding factors of the quality of life, making the place satisfactory to live and work. Neighborhood satisfaction increases if the availability of and proximity of amenities meets the demand of population densities. (Pinkster, 2001). The more proximate are amenities more will be social interactions (Pinkster, 2001). The traditional neighborhoods offer more social support, with informal social structures where the residents feel at home with shared and diversified backgrounds (Pinkster, 2001).

### C.Traditional Indian neighbourhood

The traditional Indian neighbourhoods have people of different occupations grouped together staying for longer durations having facilities like community stores, small business establishments, religious spaces (temples, mosques, churches etc.), informal community spaces, to serve the neighborhood within. The neighbourhoods have pedestrian in scale, encouraging people to interact with each other (Byahut, 2017; Pinkster, 2001). The traditional Indian neighborhoods have spaces suitably planned for harsh climates having compact form, with projected balconies, and shaded streets. These neighborhoods are highly dense, mostly low-rise having narrow streets, vernacular in their design, and are built with locally available sustainable building material which are cost effective. These neighbourhoods have enhanced social cohesion in the community (Raju, 1980). The streets are not just for transport but are also used for processions, festivities such as Ganesh, Durga (Indian god and goddess) called 'pandals' (a stage for idol placement) (Fig. 1), and religious gatherings.



**Fig. 1** A Lord Ganesh Pandal during the Diwali festival
**Source:** Author

The streets remain vibrant having these activities, where people interact and celebrate (Mishra et al., 2017; Shaw, 2014). The traditional neighborhood of Jaipur, has facades called 'Gokhdas' (platforms in front of houses), (Fig. 2), which are a series of sitting spaces near the entrances for socialising.



**Fig. 2** Gokhdas (Sitting Place) near a house
**Source:** Author

The residents have a strong attachment to religious systems and structures. The traditional crafts and trades, food stalls, prevalent in the area offering an identity to the place. The streets and areas are named after the tradesmen present in that area, giving them an identity (Byahut, 2017; S. Raman & Dempsey, 2012) the mixed land use is seen with small business establishments such as tea shops, and snack stalls with residences within making them places for socialising (Byahut, 2020; B. Raman et al., 2015) informal sitting and meeting areas and business in the morning, with elders interacting, children playing in the evening. These places are often called '*chowks*' as found in Jaipur, offering at most watch and ward with their compactness. People watch the strangers and residents and children as the business and residents are in same place for longer durations. One can find social interactions at various neighbourhood points of informal public spaces.

## V. RESEARCH GAP

There is limited research on what the unique qualities of Indian traditional Neighbourhoods. The social sustainability is still explorable by studying in-depth, to arrive at neighbourhood values are to be retained, and what values should we embrace in future planning of neighborhoods.

Though some Indian scholars have tried to incorporate Indian neighbourhood values in neighbourhood design, in-depth studies on how traditional Indian neighbourhoods are positioned in terms of social sustainability is still explorable

There have been some works on well-designed neighbourhood spaces in India, however, their primary task was to focus on neighbourhood spaces, and not on social spaces (chowks, informal sitting, eating, meeting places, and religious places) which enhance interactions. This research aims to meet this gap, by evaluating the sustainable social spaces of neighbourhoods of Hyderabad and Jaipur.

## VI. RESEARCH QUESTION

What are the qualities of Indian traditional neighbourhoods, in the aspect of social sustainability?

## VII. RESEARCH METHODOLOGY AND METHOD
### A. Research methodology
The research methodology used is a mixed method. Even though it is qualitative in its approach, some aspects of distances are quantitative supporting the qualitative approach.

### B. Research method
To answer the above research question and meet the research objective, this research evaluates the

informal social spaces based on proximity and availability, in the traditional neighourhoods of Hyderabad and Jaipur (Fig. 3, 4), The parameters under the study are Informal public spaces such as chowks, informal eating and sitting places, religious places, (temples gurudwaras, mosques or churches), informal markets (Hatt Bazaars or open farmer's markets), informal enterprises such as informal trades (cobbler, tailor, chat Bandi (Indian fast-food vehicle), along with the availability of specialist trades (bag makers, brass working shops, goldsmiths) which offer identity.

The physical observations and structured random surveys of residents of the traditional *Esamia Bazar* neighborhood of Hyderabad (Fig 3) and *Modi khana Chowkri* (Fig. 4) neighbourhood of Jaipur, assessing the sustainable qualities of a traditional neighbourhood in terms of social space availability and proximity.

### C. Selected neighbourhoods
The method includes the physical observations of selected neighbourhoods and conducting structured surveys of residents in both traditional planned cities.

The Traditional city of Hyderabad has colonial and Islamic characteristics, in which *Esamia Bazar* neighborhood has been selected for study (established in the colonial era). (Fig. 3). The traditional city of Jaipur has the distinction of best planned Indian city under the principles of Vastu Shastra (Indian treatise traditional of planning principles) in which *Modikhana Chowkri* neighbourhood is being selected for study (Fig. 4).
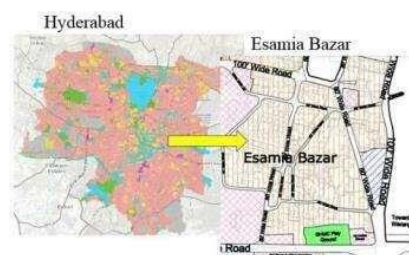


**Fig. 3** Esamia Bazar Neighbourhood.
**Source:** Municipal corporation of Hyderabad map annotated by the author
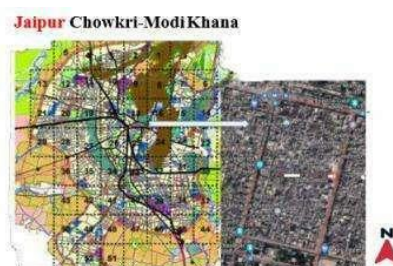


**Fig. 4** Jaipur-Modi khana chowki neighbourhood.
**Source:** Jaipur development Authority map annotated by the author

## D. Parameters for physical observation and resident survey

Important parameters include informal social spaces (chowks) for informal social interactions, informal sitting and eating places, religious spaces weekly or occasional Haat Bazaars (specialized markets), informal enterprises and specialist trades along with formal spaces such as parks, playgrounds and market plazas.

## E. Structured random survey of residents

This qualitative research carried out a structured survey of randomly selected 30 available residents at the time of the survey, in each of the selected neighbourhood. The residents' selection is by selecting 6 from the four quadrants, and 6 from the centre of the neighbourhood, adjusting the numbers based on physical observation of the layout depending on the density of residential land use (Fig. 5).
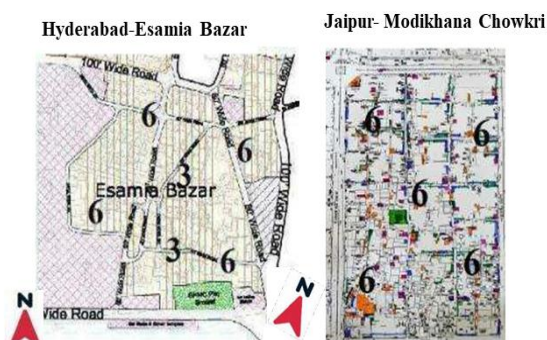


**Fig. 5** Selections of residents for the survey (From four quadrants and centre adjusted as per density of residents)
**Source:** Author, JDA, CDA.

## VIII. LIMITATIONS OF THE STUDY:

This qualitative study is based on physical observation of traditional neighborhoods, along with a resident's structured survey of 30 residents in each neighbourhood. The purpose of this study is to identify social spaces which offer sustainability in the Indian neighbourhoods keeping in mind the neighbourhood literature, theories, and principles of the Western world.

## IX. RESULTS-FINDINGS FROM SURVEYS

### a. Findings from field observation of neighbourhoods:

Jaipur's Modikhana chowkri neighbourhood has informal public spaces spread out evenly throughout the neighbourhood, with a hierarchy of meeting places, such as platforms ('Gokhdas') (Fig 6) near houses and shop frontages, chowks near the junctions of streets, and platforms near religious places, which act as informal meeting and sitting places (Fig. 6). These junctions of streets have open spaces (chowks) used generally for informal meetings, informal eating places, (Fig. 7, 8). Informal traders such as food vendors, cobblers, clothes ironing, tailors, etc., are seen along the road, attracting lively interactions. These spaces are for people to eat, meet and interact with residents and visitors, making them lively and adding to the safety of the residents.

Hyderabad is also haven sitting platforms near houses and street edges. There are temples and other religious places evenly spread out within the neighborhood with trees platforms and sitting benches for interaction. On street eating places as seen in Hyderabad are the places of interaction (Fig.10) offering socially sustainable spaces with intense interactions. The special trades such as cobbler, tailor, bag making and puja items are part of the neighborhood, which offer places for social interactions. There are informal spaces near junctions and streets acting as chowks which are used for day and night activities such as elders interacting, youngsters playing and overnight parking places. As these places are with in enclosed areas of houses, they offer utmost safety, watch and ward by elders and also keeps a check in strangers. These places become interaction areas and since these are being used by all age groups since longer duration of their existence, they attain sustainable social environment.



**Fig. 6** Gokhdas or platforms near houses
**Source:** Author

The informal market is available in Hyderabad and Jaipur has a daily market, selling vegetables and groceries and daily needs. These informal markets offer goods at lower prices to residents and also act as places of interaction that enhance social cohesion and sustainability.

Jaipur and Hyderabad have religious places acting as important interaction places, often with a tree and a platform, a well, and a fountain to serve the residents and visitors, using them as meeting and greeting places by the residents, where people meet

and greet in a neighborhood resulting in more interactions and socially active neighborhood. (Fig 9). The open spaces are used in multiple ways i.e., children cycling, playing, elders interacting, and also used as pandals (Stages) during festivities making them social interaction places during all times.



**Fig. 7** Social spaces in Jaipur.
**Source:** Author.



**Fig. 8** Informal interaction places in Jaipur.
**Source:** Author.



**Fig. 9** Temple with tree and platform in Jaipur.
**Source:** Author.



**Fig. 10** on street informal eateries of Hyderabad.
**Source:** Author.

### b. Findings from the residents' questionnaire survey:

Hyderabad and Jaipur have small informal public places such as chowks (97% of residents responded that these are available within walkable distance) (Fig.11, 16), at junctions and streets, where the street widens. These chowks have benches for informal seating. Informal sitting and eating places are conveniently located within a walkable distance of 1-5 minutes,(More than 90% of residents responded for availability of these places within neighborhood) (Fig 12,13), spread out evenly in the neighbourhood such as tea stalls, samosa and kachori (Indian street food) stalls, traditional sweets special savouries stalls, tiffin centres, bakery products, etc. The chowks are used as Informal sitting, meeting and eating places. The streets are used by children for cycling and elders to interact and sometimes used for overnight parking of vehicles. Sitting places include Gokhdas, chowks, and platforms near religious places, around trees, and shops with platforms outside. Religious places are evenly spread out in the neighbourhood, having a tree with a platform a well, etc. Farmer's informal markets are found in Jaipur as daily markets, selling exclusive goods (87% in Hyderabad responded for weekly market availability, where as in Jaipur its being wholesale market this is available on daily basis) (Fig. 14). Traditional neighbourhoods have provisions for the weekly market or farmer's market within the neighbourhoods which make them sustainable socially as these offers social cohesion. (Table. 1)
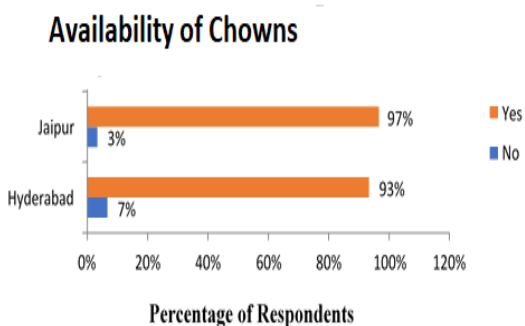
**Availability of Chowns**



**Fig. 11** Availability of chowks.
**Source:** Author.

**Availability of Eating Places**



**Fig. 13** Availability of informal eating places.
**Source:** Author.

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**Availability of sitting Places**
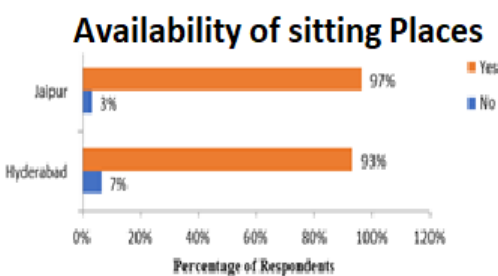


**Fig. 12** Availability of informal sitting places.
**Source:** Author.
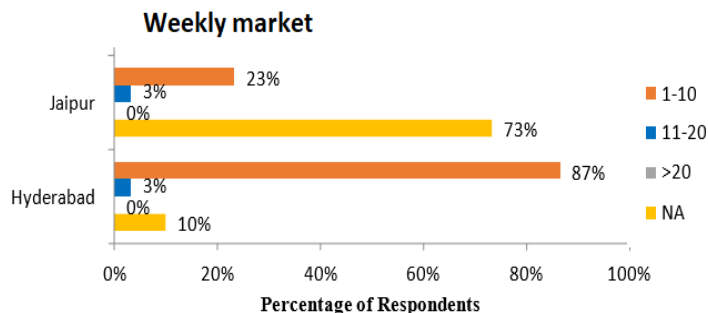
**Weekly market**



**Fig. 14** Availability of weekly market.
**Source:** Author.

| Social spaces | Field Observation | Residents' Questionnaire survey |
|---|---|---|
| **Informal Public places** | | |
| **Chowks** | Convenient – within 1-5-minute walkable distance | Convenient - within 1-5-minute walkable distance |
| **Informal sitting places** | Convenient- within 1-5-minute walkable distance | Convenient - within 1-5-minute walkable distance |
| **Informal Eating places** | Convenient- within 1-5-minute walkable distance | Convenient- within 1-5 minute walkable distance |
| **Religious Places** | Convenient- within 1-5-minute walkable distance | Convenient - within 1-5-minute walkable distance |
| **Weekly Market** | Convenient- within 1-5-minute walkable distance | Convenient- within 1-5-minute walkable distance |
| **Formal Public Places** | | |
| **Parks and market Plazas** | Not convenient | Not convenient |
| **Informal enterprise and special trades** | Part of Neighborhood | Part of Neighborhood |

**Table 1** Results.
Table showing the availability and proximity to Informal and formal public places
**Source:** Author.

## X. CONCLUSION

Combined observation reflects that social spaces are more convenient in traditional neighbourhoods offering intense interactions during day and night which in turn a way to attain social sustainability in a neighborhood. Informal public spaces are convenient in the traditional neighbourhoods of Jaipur (Table 1) and Hyderabad used for informal meetings, sitting, and eating.

Informal sitting and eating spaces, spiritual spaces, and informal markets are abundant in traditional neighbourhoods which helps to create interactive, social, and lively neighbourhoods. The traditional neighborhoods have small formal traders, such as tailors, cobblers, ironing services, beauticians etc., within the neighbourhood encouraging informal trades will offer identity of the place (Fig. 15).



**Fig.15** Specialty trades -An artisan working with brass- in Jaipur.
**Source:** Author.



**Fig. 16** Chowk being developed in Jaipur.
**Source:** Author.

## XI. RECOMMENDATIONS

Planners should consider promoting informal social spaces as found in traditional neighborhoods, allow informal enterprise and trades within the neighbourhood, (such as a space for a tailor, a barber, a food cart etc), in a planned way. These informal spaces by way of their location and proximity promote interactions between residents making neighborhoods more socially sustainable. The newer neighbourhood planning should incorporate planned informal social spaces within the neighbourhoods. The chowks and sitting and eating and meeting places, are public spaces which provide vibrancy and watch and ward to a neighbourhood.

The provision for weekly farmer's markets or Haat Bazaar in a planned way will benefit residents by offering goods at a lower price and add to social cohesion. The religious places, (small and big) are to be introduced within the neighbourhood in a planned way since it is a way of life in Indian neighbourhoods. Planners should encourage informal trades and specialist trades to provide identity to the neighbourhood.

Planners should not create neighborhoods with facilities just at the centre, but should plan for mixed-use, spread-out facilities and activities which offer interactive social communities. They should plan to promote identity by allowing special trades and with better transport facilities. The main focus is to be on the formation of socially sustainable neighborhoods, rather than just places of stay.

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*Eur. Chem. Bull.* **2023**, *12(Special Issue 5), 5908 – 5916*

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