



Enhancing Social Sustainability in a Social Housing Project in India

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Article History	Abstract
Received: 17 June 2023 Revised: 07 Sept 2023 Accepted: 24 Oct 2023	<i>This paper assesses the social environment required for enhancing social sustainability in a social housing project in India, with a case study of Ajith Singh nagar, social housing project of Vijayawada of Andhra Pradesh, India. Social sustainability is less thought off out of Three pillars of sustainability (Environment, social and economic). Social sustainability is quality of life in a neighborhood with its social environment. This paper studies the Informal social spaces such as informal meeting places, eating, sitting places, religious places and other activities of informal enterprise and trades which add to sustainable neighborhood environment. These spaces generate psychological comfort, enable to establish social relationships, that creates opportunity for informal interactions and social cohesion. Provision of these places in a neighborhood will address the social sustainability. This research arrives at what social spaces and activities required in a neighborhood by analysing existing housing layout which is otherwise just series of buildings and roads. The interactions between people and their surroundings strengthen community building and social bonding. This paper finds out that adding these places and activities enhance the social interactions and in turn establish social Capital.</i>
CC License CC-BY-NC-SA 4.0	Keywords: Informal social spaces, Social Housing, Social sustainability

1. Introduction

Sustainable development is meeting the needs of the present generations without a compromise on the ability to meet the needs of the future generations (Aghamolaei, 2018). There are three pillars of sustainability namely Environment, social and economic aspects of a society (Komeily & Srinivasan, 2015). Social sustainability is a required feature in a neighborhood which has a strong sense of social cohesion, and equal of access to important services. Some of the indicators such as sense of future, community belonging, community access, economic viability, employment opportunities define social sustainability (Mckenzie, 2004). The social sustainability dimension is exhaustive and is qualitative in its approach. Numerous studies suggest that the design elements of a neighborhood such as accessibility, and satisfaction can be enhanced by certain design elements which induce social cohesion and improves wellbeing of an individual in a neighborhood (Shrivastava & Singh, 2019).

The provision of informal spaces in a neighborhood creates interactive social spaces which enhance these interactions. The social spaces which are necessary in a neighborhood which are often informal such as meeting places, sitting places, eating places, and religious places which are from time immemorial are part of Indian traditional neighborhoods. These spaces induce community strength and social bonding (Ravi & Veluru, 2023). The objective of this research is to identify those spaces and activities that are needed to induce social sustainability in a Neighborhood.

Research Problem

The Indian social housing neighborhoods lack, emphasis on the social spaces, and are merely buildings and roads. Adding these informal social spaces is a must to have socially sustainable neighborhoods, attaining

enhanced social cohesion. This paper aims to address these spaces which planners should incorporate while planning the newer neighborhoods as well as redesigning the existing neighborhoods.

2. Literature Review

Neighborhood Social Sustainability

The social sustainability is linked with formal and informal processes and systems of a built environment which support present day needs without compromising on needs of future generations which will be equitable, diverse and democratic (Komeily & Srinivasan, 2015). The social sustainability focusses on inclusion, social cohesion and improving interactions and opportunities. The physical design will not be the only factor that is needed for sustainability but also the social dimension with inclusive spaces whether they are formal or informal with their easily accessible facilities (Such as school, convenience stores health centre, transport station). The social interaction spaces add to social cohesion (Bahadure, 2012). Social sustainability is a quality of being in a place and its surrounding environment, psychological comfort, which creates opportunities for informal encounters and social cohesion (Ziaesaeidi, 2018).

Indicators for Social sustainability

The social sustainability is an extensive subject and some authors feel they are non-scientific in its base. Some authors tried to find indicators which are important for assessing social dimension. There are various indicators, but important ones being social equity, social attachment, social capital safety of place community spirit etc. The other indicators as suggested by one of the authors of social interaction are, friends in a neighborhood, frequency of visits of friends and relatives, Nature of exchanges between neighbours and ability to discuss personal problems with neighbours (Farida, 2013) (Table 1).

Table 1: Social sustainability indicators

Aspects of Social Sustainability	List of Indicators	Determined by
Social equity	Attachment to the neighborhood; Social interaction; Safety; Knowing the neighborhood; Access to services and opportunities	Pincetl, 2003; Partridge, 2005; Bramley, 2009; Power, 2009; Teriman, 2010; Dave, 2011
Social cohesion	Opportunities for formal and informal social gathering; Equal access to services and welfare benefits; Sense of morality and common purpose and codes of behavior	Coleman, 1988; Bramley, 2009; Dave, 2011; Forrest & Kearns, 2011
Social capital	Open space; Social networks and the associated norms of reciprocity; Participation in local and community activities	Coleman, 1988; Putnam, 2000; Bramley, 2009; Power, 2009
Sense of attachment	Satisfaction with the neighborhood; Image of neighborhood; Quality of life; Neighborhood as a place to live in; Perceived neighborhood in terms of attractiveness; Architectural character; Well-maintained buildings; Outdoors; Parking facilities; Quality of environment; Cleanliness; General appearance; Feeling the strongly attached to the neighborhood	Relf, 1976; Hamik, 2003; Suminski <i>et al.</i> , 2006; Dempsey, 2009; Brown, 2009; Power, 2009; Bramley, 2009; Dave, 2011
Social inclusion	Interaction between personal and environment; Belong to the social network; Amenities in the neighborhood and attitudes of neighbors	Partridge, 2005; Bramley, 2009; Power, 2009; Cobigo, 2012
Sense of safety	Self-reporting of any outdoor private space; Self-reporting of health of resident in terms of number of family members; Security against crimes	Burton, 2000a; Wurpole, 2003; Mitchell, 2006
Community spirit and Social interaction	Perceived number of social contacts (knowing people) within the neighborhood; Perceived number of informal chats with neighbors	Forrest & Kearns, 2001; Hamik, 2003; Dave, 2011; Karuppannan & Sivam, 2011

Source: (Ziaesaeidi, 2018)

Informal Spaces

Informal spaces are defined as the places used by people who do not own the particular land. The socio-economic status and the social activity happening for particular function of an individual or a group in an informal way is linked to the socio-economic status and social activity of the individual (Rice, 2015). Kothari (2008) defines informal space as a space used socially where informal worker or activity happens. In the Indian traditional neighborhoods these spaces act as meeting and other interaction places. The informal recreation and social activity space adds to the social interactions (Ezennia et al., 2017; Rice, 2015). There are numerous informal places namely, Informal meeting (Chowks), sitting, eating and religious places. In the Indian neighborhoods the informal market plays a great role in these social interactions, since India has agriculture as one of the major economies, the informal farmer's markets offer goods and vegetables at a lower price and is commonly seen in the traditional neighborhoods. People in India are used to buy fresh vegetables, fruits which are sold on carts and on floor directly from farms in an informal way where people meet and greet each other. No matter what ever we do the Informal activities happen in these neighborhoods, hence we better incorporate them in a planned way will be a better solution. Planning for these spaces enhances the Social activities

(Mikkilineni, 2018). The understanding of these informal public spaces which residents prefer develop is very important (Solá & Vilhelmson, 2018). Some attempts made by Municipalities to integrate these informal activities with formal parts of cities and economies (Erode Municipal Corporation, 2015).

Informal meeting places (Chowks)

Chowks are some form of meeting places for residents and visitors which are formed at junctions of streets as seen in traditional neighborhoods (Fig. 1) having a temple and a place for seating and interactions where people gather for daily prayers, meeting friends, having food in the informal eateries etc making them live places of community assemblage.



Fig 1: A chowk and a religious place in Jaipur.

Source: Author

Informal Sitting places

These places are areas where people sit in an informal way near street edges, chowks and near house frontages (Fig.2).



Fig 2: An informal sitting place near a house

Source: Author

Informal eating places

These are places in a traditional neighborhood usually at chowks, street corners and junctions being set up by informal traders. The mobile carts, with temporary seating benches and stalls are part of the Indian traditional neighborhoods (Fig 3). These places are used for a particular time of the day and offer food at cheaper prices.



Fig 3: Informal eating place
Source: Author

Religious places

The religious places often found within the interiors of traditional neighborhoods in small in scale for daily prayers which are part of Indian neighborhoods (Fig 4) often small in size and located within the interiors of the neighborhood.



Fig4: A religious place in a neighborhood
Source: Author

Farmer's Informal Market (Weekly market)

The farmers informal market usually found in neighborhoods are happen on certain fixed timings such as weekly. The vegetables and fruits and other commodities are sold directly by farmers which offer fresh and reasonable rates (Fig 5).



Fig 5: Farmer's Informal market
Source: Google

Informal trades and enterprise

These are activities which are added by individuals to serve as cobbler, tailor, Cloth's ironing etc in a neighborhood in an informal way which is an added facility and employment generator. (Fig 6)



Fig 6: A cobbler on the street

Source: Author

Informal enterprises and special trades happen in some neighborhoods where persons with special skills such as brass, bag, sculpture making etc add their unit within neighborhood adds special identity to the place (Fig 7).



Fig 7: Brass maker in a neighborhood

Source: Author, (Ravi & Veluru, 2023)

Social Housing and PMAY

Social housing is aimed to provide affordable houses to the residents by government agencies. The PMAY-U (Prime Minister Awas Yojana- Urban) launched in 2015 is an initiative by Govt. of India addressing urban housing shortage for the EWS/MIG/LIG categories including slum dwellers by ensuring a pucca house by 2022. Valmiki Ambedkar Awas Yojana (VAMBAY) is an initiative by Prime minister of India in 2001. Availability of infrastructure such as schools, hospitals and transport station along with parks are to provide in these housing layouts. The Ajith sing nagar urban affordable housing in Vijayawada city of the State of Andhra Pradesh is one of such layouts developed for Urban housing (Fig 8).



Fig 8: Ajith Singh nagar Housing colony- Vijayawada

Source: VMC

Research GAP

There is limited research on what they are the neighborhood spaces required to enhance social sustainability in the neighborhoods in India and what places if introduced induces more sustainability. This paper identifies few important informal places and activities which if introduced will benefit in enhancing the social cohesion.

3. Materials and Methods

Research Method

To enhance social sustainability in the neighborhood this paper studied an urban housing project initiated by Vijayawada Municipal Corporation in the city of Vijayawada of the state of Andhra Pradesh, India as study area.

By evaluating existing layout and its social spaces the identified social spaces and activities with design interventions have been proposed for better social environment. 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).

Existing Layout

Ajith Singh Nagar is located in the city of Vijayawada city is presently near to completion (Fig. 9,10)



Fig 9 Location Map
Source: VMC, Google maps



Fig 3: Ajith Singh Nagar layout
Source: VMC

Existing layout is Ground plus 3 floors and have access roads around the blocks cut across by main artery between two sectors. The lay out has no parking provision yet and have to be planned with facilities such as school health centre etc.

4. Results and Discussion

Proposed Interventions

Physical layout and structure

The Existing layout is in a grid iron pattern with buildings surrounded by roads. The buildings have G+3 structures where the ground floor residents opt to change some of the rooms into Shops. The road network is road for each block on all four sides. The planning should often have personal transport vehicles such as goods trolley, cart, small truck, a three-wheeler where they usually park Infront of the house in the nights. By planning Stilt and 4 floors the stilt can be used for Parking of these vehicles and also do not allow modifications of the units. The planning with a central open area and blocks and roads around will give the area for traffic free interactions in a neighborhood.

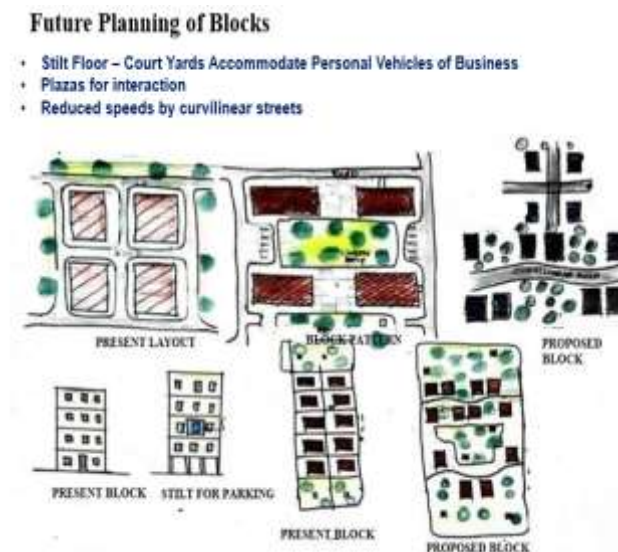


Fig. 9 Proposed Street pattern placement of Blocks

Source: Author

Social spaces and Activities

The planning of these social places which will spread-out evenly in a neighborhood will enhance interactions and convenience the facilities and spaces are to be within walkable distance and should be spread-out depending on the plan to serve the residents (Fig10,11).



Fig 10: Proposed Social Spaces

Source: Author



Fig 11: Social spaces
Source: Author

Chowks and meeting places

Number of chowks at junctions with a platform or a bench act as sitting places, eating places as well as meeting places in the neighborhoods to be planned depending on the layout serving the residents. These small areas act as meeting greeting which usually at junctions and between blocks.

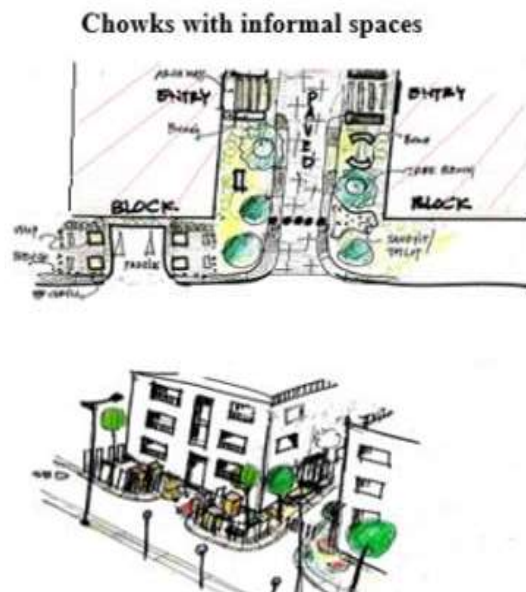


Fig 12: Chowks and sitting and meeting places with convenience stores part of them
Source: Author

Religious Places

Religious places usually small in size for different religions with in walkable distances add to the convenience and social interactions apart from large formal religious places (Fig.10)

Farmer's Informal Market (Weekly bazar)

The farmers get their produce directly from farm and sell them weekly occupying specific place so that the residents get fresh and cheaper farm goods and vegetables. If provided in a planned way will add to social interactions since people meet each other at these places on a regular basis.



Fig 13: Farmers Market
Source: Author

Informal trades and Enterprise

All the above places can also act as places for informal traders to serve the residents such as a tailor, Cobbler, a Cloths ironing person, etc occupying the place for better convenient service. The special trades if provided in a skill development centre will add as a specific place of employment as well as place to display and sell the goods prepared by them (Fig. 14).

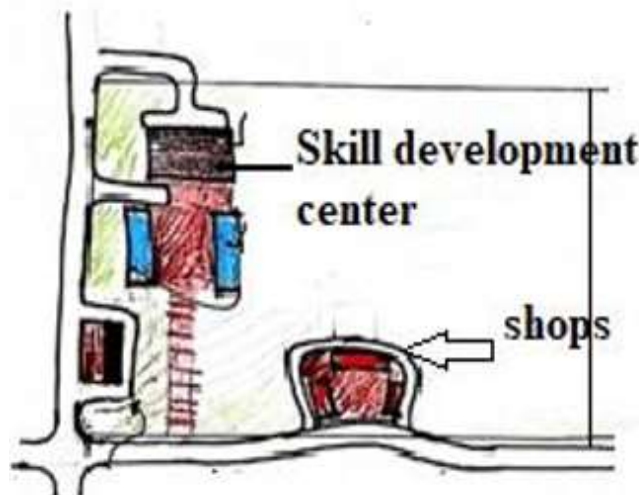


Fig 14: Skill development Centre
Source: Author

The special trades and enterprise can be accommodated in this centre in a planned way to employ these people in an organized way. The planned social spaces will enhance social sustainability and also do not allow these informal activities happen in an unorganised way.

5. Conclusion

Recommendations

While planning the housing neighborhoods Planners need to add Informal Social spaces such as Chowks, Informal meeting places, informal sitting places, informal eating places and small religious places with in the neighborhood in a planned way. Planning of these neighborhoods should allow informal activities such as farmer's informal markets, informal trades and enterprise in a planned way. This study of Ajith Singh Nagar will be useful in future design interventions by Planners and Architects. Planners should consider promoting informal enterprise and trades within the neighbourhood, such as a space for a tailor, a barber, a food cart etc, promoting interactions between residents and attaining the best convenience. The social spaces become vital

part of social sustainability and the more thought given on this will add to more social cohesion and adds to the social capital formation. Planners need to rethink on allowing these activities in a planned way by allocating places for these activities rather than residents themselves occupy these places in a haphazard unplanned way. Need for better planned facilities along with the additional informal social places will add to Enhanced Social sustainability.

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