

Changing Urban Housing Pattern of Ahmedabad: A Study of Indian Knowledge System and Sociological Perspective

Mayank K. Patel¹, Dr. Amarjeet Kumar²

¹Department of Sociology, Madhav University, Abu road, Sirohi, Rajasthan, India

²Assistant Professor, Department of Sociology, Madhav University, Abu road, Sirohi, Rajasthan, India

ARTICLE INFO

Article History:

Accepted : 13 March 2025

Published: 16 March 2025

Publication Issue :

Volume 12, Issue 2

March-April-2025

Page Number :

295-304

ABSTRACT

The geographical location of Ahmedabad is 23.03°N 72.58°E and is the fifth most populated city of India. The city has a population of 5,633,927 as per 2011 population census. It is located on the banks of the Sabarmati River. Political authorities and affluent merchants deliberately founded the walled city of Ahmedabad. The Pol houses are situated in the walled city of Ahmedabad. UNESCO declared the walled city of Ahmedabad as Heritage city in 2017. The present Pol houses are similar to rural houses of Gujarat but identify themselves as Pol houses in the walled city of Ahmedabad only. Locals design the houses, and these houses share the same principles of design throughout the walled city of Ahmedabad.

In 1990 the new economic policy of modernisation had led to proliferation. Economic integration causing global norms, ideas, and practices to dilute local cultures. Apartments or contemporary houses without a courtyard have replaced local traditional architecture as these can fit anywhere irrespective of climate, social, cultural background. Due to an increase in population and less land availability, it is collective thinking that high rise high-density apartments are required, which leads to no need for local traditional residential architecture. Ahmedabad residential market saw 3 BHK apartments constitute a notable 47 percent of the total units sold in Q3 2023. In modern times we take the help of the professionals who can build a good house with a solid foundation, strong walls, a proper structural balance with the right weight and pressure distribution, proper plumbing, electricity, air light etc. This branch of modern knowledge is called architecture, or civil engineering. The ancient seers of India knew not only the above, but quite a few other things beyond. Hence their house building principles included: the North-South flow of magnetic forces: the East-West earth motion and Solar energy

forces: and with Divine Spiritual Perception, they also knew the various Deities who rule the different sections of the house and based on the Nature of the Deities, what type of room/function is ideal in that part of the house. This branch of ancient Indian knowledge is called Vastu Sastra, or Vastu Shilpa sastra, or Vastu Nirmana sastra. It was employed to build not just houses but to plan and build entire towns and cities and temples.

Keywords:-Vernacular, Traditional, Vastu shastra, Pol houses, Apartments, High rise etc.

INTRODUCTION

Very early in recorded time the house became more than shelter for primitive man, and almost from the beginning "function" was much more than a physical or utilitarian concept. Religious ceremonial has almost always preceded and accompanied its foundation, erection, and occupation. If provision of shelter is the passive function of the house, then its positive purpose is the creation of an environment best suited to the way of life of a people—in other words, a social unit of space. Once the identity and character of a culture has been grasped, and some insight gained into its values, its choices among possible dwelling responses to both physical and cultural variables become much clearer.

Housing has many social, economic and political dimensions. Indian society comprises of great diversities. The patterns of social organisations vary across the country. There had always been a distinct imprint on the nature of housing settlement structure in the past. Traditional spatial patterns and settlement structure are governed by social requirements. Both at the settlement level as well as within the dwelling unit, space is organised in conformity with the social considerations. Economic factors also govern housing patterns. It is obvious that the rich people have huge mansions, while the middle income families have more modest homes and those at the bottom of the pyramid struggle to live in small spaces. Further, to the national economy as a whole, housing is a major

contributor. Investments in housing have many tangible and intangible benefits. The ancient seers of India knew house building principles included: the North-South flow of magnetic forces: the East-West earth motion and Solar energy forces: and with Divine Spiritual Perception, they also knew the various Deities who rule the different sections of the house and based on the Nature of the Deities, what type of room/function is ideal in that part of the house. This branch of ancient Indian knowledge is called Vastu Sastra, or Vastu Shilpa sastra, or Vastu Nirmana sastra. It was employed to build not just houses but to plan and build entire towns and cities and temples.

1.1 Origin and Evolution of Urban Housing at Ahmedabad

Ahmedabad city is almost crescentic and surrounded by a fortified wall. There were 12 gates in the wall. Six more gates were added to the city later. There were 360 -380 paras in that period. There were micro-neighbourhoods within paras known as Pols. Pol settlement pattern has its origin from the rural villages of Northern Gujarat. The present Pol houses are similar to rural houses of North Gujarat but identify themselves as Pol houses in the walled city of Ahmedabad only. Locals design the houses, and these houses share the same principles of design throughout the walled city of Ahmedabad.

After a period under the Maratha rule, the destiny of Ahmedabad were set to change under the British rule.

The British rule had brought moderate peace to the city and such an environment facilitated and encouraged trade and commerce. Late 19th century & early 20th century. The introduction of Mills in Ahmedabad provided enormous employment opportunities and the city saw an inflow of migrants looking for employment in the Mills. The large inflow of migrants were accommodated in shanty settlements. The government set up new housing clusters known as chawls which provided accommodation at affordable prices. Early 20th century: Another major shift in housing was the chawls where people were themselves not building their houses but a built product was being offered for habitation to the mill workers. The chawls saw an attempt to maximize the use of space. It is an initial attempt of mass housing. The passages are doubly loaded for space optimization. There is a variation which can be seen today owing to the alterations done by the residents, such as addition of floors, staircases, toilets, otas etc. These housing typologies came up after the last quarter of the nineteenth century. In the early 20th century. The community slowly expanded as more immigrant entered the city. Areas such as Juna Vada house such community. The single room saw additions over time and new rooms were added to the house, thus there is a peculiar character to these houses. The British had been in the city for more than a century and thus ideas of western planning and arrangement seem to have seeped in. This phase is a phase of transition, where the lifestyles of the people are experiencing changes owing to the influences on the idea of planning.

1960s: Ahmedabad houses a number of important academic institutions. This era of institution building also marked the expansion of the city towards the west. The 1960's saw the activities of the Gujarat housing board. This was a time where the newly formed Gujarat state built a number of housing schemes, one such is the Baapu Nagar. It consists of houses for the lower income group. The model was a

very efficient economically for the government to build. The housing board was also engaged in the construction of houses for the middle income group. In one such colony built in the late 1960's, four tenements have been clubbed together, there is a series of parallel roads and a common open space. It is important to note the provision of amenities in the colony. There is an open air theater and a badminton court in the colony. This phase seems to have a lot of experimentation by the Gujarat housing board. During the late 1960's and early 1970's, the intermediary and high rise building start being built in Ahmedabad. Other reasons such as the riots also served as an incentive for the people to move out of the old city of Ahmedabad. Apartments such as the Firdaus Apartments and Royal Apartments were built during this time. These were G+9, G+10 buildings.

Today the housing schemes in the city are quite typical in the sense that the apartments are similar in nature to any other apartments being built elsewhere. Most of the residential development in the city today is in the hands of private builders. The amenities of the buildings keeps on adding though. Today, the city houses multiple layers of history and continues to evolve after six hundred years of its existence.

1.2 Aims and Objective

- To analyse the urban design and design of houses of traditional Pol houses and new apartment building of Ahmedabad through literature review to understand Ahmedabad urban housing.
- To know the urban settlement pattern of Pol houses and to understand the context of Pol houses design.
- To addresses the socio cultural dimension in a way to capture the cultural layers that are related to housing design process and practice.
- To differentiate between old tradition of house form and related changes in new modern house form.

1.3 Methodology

Secondary data collected from architecture books to study sociological analysis of house form pattern of Ahmedabad, impact of sociology on formation of house form of cities and research papers and article. With insights gained from both data types you can critically assess how traditional architectural practices have been adapted to modern needs and challenges.

ANALYSIS AND DISCUSSION OF AHMEDABAD URBAN HOUSING

2.1. Ahmedabad Pol's Houses

Pol settlement pattern has its emergence from the rural villages of Northern Gujarat. Pol houses locality have one of the highest population densities. Initially, there was no provision of market and other facilities within the gate of pols. However, these markets later developed along with the main street due to people's needs. The community within Pol is an administrator by one statue of Pol assembly known as "Pol Panch" in Gujarati. The residents of Pol are supposed to follow the rules and regulations made by this Pol assembly.

*** The main components of the plan of the traditional pol house with a courtyard are as follows.

1. **Otla (a veranda):** The otla is a transition space between the street and the house. It demarcates the extent of the house and creates the plinth for the house with steps to enter into it. It is a semi-covered space, shaded by the projections of the upper floor balcony.
2. **Khadki/Baithak (a living space):** The khadki/baithak is the front portion of the house, and it is usually a reception space and a formal social space. It is a sitting space for guests, and many times, it is equipped with a traditional swing called a Gujarathi swing.
3. **Chowk (a courtyard):** The khadki leads into the chowk, which is the most important element of the Pol house; it is interiorly adjacent to the khadki. It is the central open-air part of the house and holds all other spaces together; it also acts as the activity hub in a house. All the activities take place in and around the chowk. The narrow proportion of the chowk acts as an aperture in a compact layout and serves as the climate regulator of the built form.
4. **Osri (a semi-open family space):** The osri is a small veranda near the chowk. It is a semi-open space and accommodates the spill-over activities of the chowk. On the upper floors, the space is known as the revasha.
5. **Parsal (a family space):** The parsal is multifunctional space deep inside the house behind chowk and is considered a private space for family members. It is also used as a dining room or an extension of the kitchen.
6. **Ordo (a bedroom):** The ordo is the inner most space of the house, deep inside from the street; essentially, it is a private space used for sleeping and storage.
7. **Resodu (a kitchen):** The resodu is the kitchen of the house that is adjacent to the osri, chowk, or parsal and is near the traditional water-storage system known as the tanka. Domestic activities are usually extended from the resodu to the osri, chowk or parsal.
8. **Utility areas (water closet, bathroom, wash area, storage):** The water closet is generally placed in front and is attached to the otla or khadki rather than to the private spaces in the traditional house. With the changing lifestyles of modern residents, however, it is now placed in private areas of the Pol house. Other utility spaces, such as the wash area for washing clothes and utensils and bathing, are attached to a common wall. Storage is a narrow space attached to other activity areas and acts as a multifunctional space.
9. **Passage:** The passage is a transition space connecting one room to another. Generally, on the ground floor, the passage is a narrow space

around the chowk and is attached to activity spaces for circulation.

2.2. New Apartment Houses

There are many reasons that apartments are getting popular. The idea of a more group style of living can appeal to people who have small families, or to those who like to make friends and want to have interactions with others. There are more nuclear families now and therefore the need to connect with neighbors is higher. Another reason that apartment buildings are becoming even more popular today is due to the idea that not everyone wants to have a house where they have to worry about maintenance. In an apartment complex, maintenance and cleaning needs are limited to the inside of the apartment. That makes it easier for people who may not be able to care for the exteriors easily. Another factor which plays an important role in people choosing apartments is locational advantage. Most of the prime areas have been allocated for high rise apartments as per the master plans of various cities, and therefore, an independent house will typically be far off from the city center. Now with a much smaller budget, one could afford an apartment close to the place of employment.

*** Apartment houses are advantageous because it possesses.

Spacious and Open Floor Plans

Walk into most homes today, and be amazed with the creative and efficient use of space, there is a huge free-flowing space without walls and boundaries that pulls the family together into one social area. In this “undivided” home, there is increased interaction with family members and guests. And open floor plans provide unobstructed views of outdoor living spaces.

Higher Ceilings

A typical Modern home may feature anywhere from 10-foot to 12-foot ceilings, which enhance the sense of spaciousness in the home. High ceilings also give the home an airy and breezy feel and add to the overall brightness.

More natural light

Natural light suffuses the Modern house plan. With the basic design including glass doors and floor-to-ceiling glass windows, an abundance of natural sunlight filters into the home and reduces energy costs in cold weather due to solar gain

Big size Master Bathrooms

The bathroom is now one of the most renovated and modernized space in a home. Gone are the dark, cramped, functional bathrooms of old. Instead, we have designer baths that are bright, roomy, and contemporary, and come with trendy features for a “spa-like” experience. Walk-in showers and stand-alone tubs are in.

Energy Efficient / Non polluting

From materials used for insulation to heating and cooling systems and optimal positioning of rooms in relationship to the sun, the Modern home is designed to maximize energy efficiency and reduce the use of fuel. As we become more aware of preserving our surroundings and natural resources, designers and builders are constructing homes that are environmentally friendly. They use steel studs, engineered lumber products that utilize materials that would otherwise be waste, composite decking made of recycled plastics, and more.

Lower Maintenance cost

Most new homes built within the past five to seven years have lower maintenance costs. They are well insulated and have plenty of windows that allow natural sunlight to warm the interior. Appliances installed in the home are more energy efficient and will reduce water, electricity, and heating and cooling costs.

Flexible Design for Expansion Possibilities

With the open floor plan, extra space can be utilized for the so-called functional rooms – home office, hobby/play/reading rooms, and more. The unfinished square footage can also be designated for an in-law suite, guest room, or room for an adult child who has returned to the family home.

Smart Technology/ Demotics Home Options

Today's Modern home may be equipped with automation technology to give homeowners remote access to their various home systems. You can install centralized audio-video, security systems with cameras that link to a security firm, voice activation, access from your smart phones, and other 21st century home automation technology.

Universal Accessible

With wider hallways and open floor plans, a Modern home has all the flexibility of being wheelchair accessible. Look around your neighborhood at especially constructed ramps that provide wheelchair access to porches and home entryways.

Pleasurable Design

Another benefit to modern-style homes is that they have an aesthetically appealing design. A lot of the home's structure is incredibly functional and efficient. Many elements in the home are made of wood, metal, glass, and stone, with simple and clean lines. Modern homes have little to no flourishes since everything in the house can speak for itself.

INDIAN KNOWLEDGE SYSTEM- VASTU SHASTRA

This branch of ancient Indian knowledge is called Vastu Sastra, or Vastu Shilpa sastra, or Vastu Nirmana sastra. It was employed to build not just houses but to plan and build entire towns and cities and temples.

3.1. Vastu for plot

Shape and size of the plot: The best shapes for plots of land are square or rectangular, facing squarely on the four cardinal directions. It is good if the plot is narrower at the entrance and wider at its rear, but the opposite is not good. Round, oval, and triangular plots should be avoided. The house should not be built in the shape of a diamond, with the corner facing north. L-shaped plots are also inauspicious and should not be purchased. If the land is cut in the corner this is not good.

3.2. Vastu for entrance and main door

The main door of the house should be larger than the other doors entering the house. The main door should have two shutters and open to the inside of the building. Teak is a good material for the entrance door. Some Vastu authorities say that to figure out where to place a main door, divide the house into nine parts. The door should be in the fourth section of the house from the left hand side. From the right side of the house, the entrance is in the sixth division from the right.

3.3. Vastu for garden, trees and plants

It is always good to grow a Tulasi plant on one's property. Tulasi should be located on the north, northeast, or east sides of the house, or in front of the house. Trees should not be planted directly in front of the house's main entrance. There should be an even number of trees on one's property, not an odd number. Trees should be planted on the south or west sides of the house. A list of good trees to plant: coconut, neem, betal, sandalwood, lemon, pineapple, bilva, almond, jackfruit, pomegranate, mango, amla, and katha.

3.4. Parking

Cars should be parked facing east or north. A car should never be parked facing south. If a car is parked facing west or northwest, the owner will spend a long time traveling. The parking lot should be in the northwest corner of the property. It should not be located to the southwest or northeast. Parking can also be located in the basement, on the north or east side. A parking garage should not be connected to the compound wall or the main building. The parking garage should be painted a light color, not a dark color.

3.5. Vastu for bedroom

The main bedroom should be on the southwest or northwest side of the house. If there is an upper story in the house, the master bedroom should be on this floor, in the southwest corner. Adult married children can also use this room. The children's bedrooms

should be in the northwest or west. The younger children's bedroom can also be on the east side of the house. Newly married couples should not use a bedroom on the east side. Guest bedrooms are best located in the northwest corner, but can also be located in the northeast corner. Bedroom walls should be painted a light rose, dark blue, dark green, gray, etc. Some authorities say that the walls should not be painted white or a light yellow. The wardrobe should be located on the northwest or southwest side of the bedroom. TV, heaters, and air conditioners should be located in the southeast corner. The southwest corner of the room should not be vacant. An attached bathroom could be built on the west or north sides of the room.

3.6. Vastu dining room

Dining Room: The dining room should be located on the west side of the house, or on the east or north side of the building. The house's main entrance door should not face the dining room's door. The dining table should not be round or oval but either square or rectangular. It should not fold from the wall or be attached to the wall.

3.7. Vastu Toilet and bath room

Bathroom & Toilet: Bathrooms can be on the west or north west sides of the building, but not on the eastern or north eastern sides. The toilet room should also not be located on the south east, the south west, or in the center of the building. The morning sun falling on the body after bathing is good, so windows should be set in the north or east sides of the room. Sinks should be placed on the northeast, north, or east sides of the room. Bathtubs should be located on the northeast, west, or east sides. Bathroom walls should be painted white, sky blue, or another light shade. Do not use black or dark red.

3.8. Vastu Study room or reading room

The library or study should be located on the west side of the building, but should not be located in the corners of the house. When using a library or study, it is best to sit facing east or north.

3.9. Vastu for living or sitting room

Living (Sitting) Room: The living room should be on the north side of the house. Furniture should be square or rectangular, not round or oval. It is good if the ceiling slopes down toward the northeast direction. The air-conditioner should be in the west, not the southeast. Furniture should mainly be in the west and south section of the room. The walls should be painted white, yellow, green, or blue, never red or black. Depressing paintings should not be placed on the walls.

3.10. Vastu for Pooja room / temple / worship place

Puja (Temple) Room: Worship should be done in the north east, north, or east sides of the house. It is best that the temple room is in the northeast corner of the house. The worship room should not be to the south. The place of worship should be on the ground floor and not upstairs. The door to the temple room should have two shutters. Toilets should never be above or below the place of worship. White, light yellow, or light blue are good colors for a temple room. It is good if the worship room is shaped like a pyramid.

3.11. Vastu for stairs or staircase stairway:

Best to build stairways on the southwest, or if necessary, on the south or west sides of the house. The staircase should go up from east to west or north to south. The same stairway that goes to the upper floor should not also go down to the basement. Stairways should be built with an odd number of stairs—9, 11, or 15 steps, for example. The number of stairs should not end with a zero if you must build an even number—there should not be 10 or 20 steps—because it is best to begin climbing steps with the right foot and also to end the climb on the right foot. This is not possible when there is an even number of stairs. The worship room, safe, or toilet should not be located under a staircase.

3.12. Vastu for basement

Basements should ideally not be built under the entire house. If that is impossible, use only the northeast section. Since sunrays do not enter basements, this

highly reduces the basement's positive effect on the persons living in them. Therefore, a basement should not be used for living as far as possible. Basements are also not good places to conduct business. The basement's effects will be improved if one-fourth of the basement is above ground.

3.13. Vastu for water tank

Overhead Water Tank: The overhead water tank should be in the southwest (best) or west corners of the building. The tank should be elevated at least 1m (2 or 3 ft) above the roof, on a platform. A dark water tank while absorbing sun for heat doesn't encourage microbial growth as quickly as a light-colored tank would do. If possible, there should be different tanks for the kitchen and bathrooms.

3.14. Vastu for first floor and upper floors

There should be fewer windows and doors on the upper floors than on the lower ones. It is also said that the number of doors and windows on the upper floor should not equal the amount of doors and windows on the ground floor. The ceiling height of the rooms on the upper floor should be less than the ceiling height of the rooms on the ground floor. If only part of the upper floor is used, this part should be built in the southwest area. The balcony should be on the north, east, or northeast side. Bedrooms and studies should be located on the upper floor. A storage area for heavy items should be located on the lower floor.

3.15. Kitchen

Kitchen is placed at the place ruled by Agni the god of fire, the Southeast side and kitchen store should be at south. In kitchen, grinder, fridge, shelf and other heavy items should be towards South and West wall.

3.16. Other important points of vastu shastra keep in mind

When sleeping, the head should be placed towards the South or West, but never to the North, and stairs should be constructed in a clockwise direction. Mirrors on the South or West walls are considered inauspicious, so they should be avoided. While cooking, it's best to face East, though West is

acceptable if necessary, but facing South should be avoided. Doors should always open inward, not outward, and in bedrooms, it's important to use a four-legged bed instead of a box-type bed, as the latter hinders air circulation, which is detrimental to health. Additionally, rooms should never be built under stairs.

The building's length-to-breadth ratio should ideally be 1:1, 1:1.5, or a maximum of 1:2, and the dimensions should not exceed a 1:2 ratio. The building should also be longer in the North-South direction and shorter in the East-West direction, with cupboards placed on the Southern or Western side of the house and the mezzanine floor located on the West or South side of the building.

For optimal energy, the best place for an underground water tank or reservoir is in the North-East, representing the Supreme God, with the next best option being the East Zone on the Northern side. The North-East corner is also the ideal location for a swimming pool, while gates placed in the North, North-East, and East directions are considered auspicious. The height of the building should be consistent and uniform, with projections and elevations following the same pattern.

Clocks should be positioned on the West, North, or East walls, while clothes should be washed in the Southeast corner of the house, and medicines should be stored in the Northeast corner. Lastly, the house should contain an even number of columns and beams, never odd.

One final word. At the time of entering a new house if you get a vastu shanti pooja done, which is part of the Griha Pravesh pooja, it takes care of the Vastu doshas. Vastu cannot adversely affect the house where God is regularly worshiped with pooja, stotra path or mantra japa. In modern times, especially in cities, only a multi-millionaire can follow all the Vastu rules. The rest 99%, especially the flat dwellers can only do the best adjustments.

SOCIOLOGICAL ANALYSIS

4.1. Sociological Implications on Urban Housing Patterns of Ahmedabad.

The sociological implications on formation of housing patterns in Ahmedabad are profound, reflecting broader shifts in social structure, family dynamics, and community cohesion. The transition from traditional joint-family homes to nuclear housing, especially in urban areas, has facilitated greater individual autonomy. Ahmedabad offer a diverse range of occupational opportunities, from traditional industries to emerging sectors such as information technology, finance, and services. The type of occupation individuals engage in often affect their social status, income levels, and access to resources, contributing to social stratification within urban communities.

4.2. Positive Impacts on Society

Urban areas surrounding Ahmedabad city have experienced rapid growth due to factors such as better infrastructure, availability of affordable housing, and proximity to economic hubs. They have become alternative centers of lucrative activities, reducing the burden on the primary cities and creating new opportunities for employment and investment. In gated communities, shared amenities and organized events provide a sense of belonging, encouraging residents to form social bonds despite being geographically separated from extended families.

4.3. Negative Impacts on Society

However, these evolving housing patterns also bring challenges. People give primary importance to material possessions. They live and are known for their status symbols, bank balances, assets, salaries, buildings with modern furnishings etc. People become more individualistic, self-centred, and selfish and so on. They give primary emphasis to their own interests and personal happiness; they develop the attitude towards competition, conflict in relation to economic goods and social position. People move from one job to another, from one locality to another.

The residential mobility tends to weaken ties to the local group. High-rise apartments, while efficient, often restrict spontaneous social interactions, contributing to a sense of anonymity and reducing communal bonds. Gated communities, designed to offer safety and exclusivity, can inadvertently create socio-economic and cultural barriers, limiting interactions across different social classes and contributing to social stratification.

CONCLUSION

There are many differences between modern and traditional homes: space utilization, amenities, windows, lighting, the materials used for construction, even the floor plan are all differentiators that separate these two styles of homes. There are many issues persist living in Pol houses, and people have started migrating from the walled city to New Ahmedabad. The walled city's present population is around 3, 75, 000 as opposed to 5, 00,000 in 1991. People have also started demolishing the heritage buildings in the last two decades, and therefore, it is imperative to study Pol houses' present situation and propose interventions to conserve these heritage buildings for future generations. Like any other ancient sastra, Vastu must also be understood, interpreted and implemented based on the changed socio-economic conditions.

REFERENCES

- [1]. Amdavadi Pols: The Doors That Still Welcome You. " GoUNESCO | GoUNESCO. September 21, 2017. Accessed April 02, 2018. <https://www.gounesco.com/polsofahmedabad/>
- [2]. Ahmedabad Walled City – The Root and Organic Evolution of Its Pols and Houses.2008. Online available from <http://indiahistoryspeaks.blogspot.com/2008/07/ahmedabad-walled-city-root-and-organic.html>

- [3]. Bhatt, M., Joglekar, P., & Pandya, Y. (1997). Jethabhai ni Pol, Khadia, Ahmedabad; A Documentation of the living environment. Vastu shilpa Foundation, Ahmedabad, India.
- [4]. dokumen.tips_house-form-and-culture
- [5]. Dasgupta, A. (2016). The housing question in India: Changing paradigms. Indian Journal of Human Development, 10(1), 1-22.
- [6]. Enabling market to supply affordable housing through Inclusionary Housing Policies: Learnings from Ahmedabad. First published in June, 2022
- [7]. Gillion, Kenneth, Ahmedabad : a study in Indian Urban History, 1968
- [8]. Gupta, S. (2015). Socio-economic status and housing condition in urban India. Urban Studies, 52(10), 1824-1844.
- [9]. <https://timesproperty.com/>
- [10]. Mahadevia, D. (2013). Urban housing and housing policy in India. Journal of Urban Affairs, 35(4), 515-535.
- [11]. Nayak, Debashish. "Getting the City Back to the People Municipal Initiative in Heritage Conservation - The Case of Ahmedabad."
- [12]. Pandya, Y. (2022) . Courtyard Houses of India. Mapin Publishing, ISBN- 13 978- 9385360091. Ahmedabad.
- [13]. Puri, K., & Sood, R. (2016). Urbanization and housing in India: Issues and policies. Urban Policy and Research, 34(4), 371-386.
- [14]. Rao, M.S.A. (ed.) 1991. A Reader in Urban Sociology Orient Longman: New Delhi.
- [15]. Yadav, A., & Tiwari, R. (2014). Socio-economic challenges in urban housing in India: A case study. Indian Journal of Human Development, 8(1), 77-95.