

Urban Regeneration for Historic Commercial Centers

Anjana Mary Jacob¹,

¹(Department of Architecture and Planning, College of Engineering Trivandrum, India)
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Abstract: In the process of urbanization, cities are getting overgrown globally. There are various policies and techniques put forward to repair the issues of urbanization. Urban regeneration is an approach to city planning to repair the social and economic problems of an urban area, improving the physical and environmental aspects of the city, as well as the buildings. It aims to transform obsolete or blighted areas into economically productive areas of a community.

Historically, the commercial centers has played a major role in the emergence of cities. Many a times traditional commercial spaces lose their identity in various layers due to various projects and schemes. There is loss of character and heritage of a place at the same time challenging the livability conditions of the population as well. These urban regeneration policies occur at an unregulated manner. The idea behind this research is to investigate the changes caused by various urban regeneration policies and to develop a framework of urban design strategies for implementing urban regeneration strategies in a historic commercial center while understanding and analyzing Chalai market in Trivandrum, Kerala which is a historic commercial center.

Background: Historic commercial centers are a major part of an area. With urbanization and its effects these historic commercial centers have slowly degraded and become dilapidated in terms of social, economic and spatial matter. Due to the new developments these centers are slowly losing its character and importance and there is a need to revive them.

Materials and Methods: Site Study and Literature study are used as main tools for the study along with understanding of Urban Regeneration and Historic Commercial Centers.

Results: Urban design strategies for urban regeneration of historic commercial centers is developed.

Conclusion: Urban regeneration is a city planning strategy that aims to fix the social and economic issues in urban areas while also enhancing the city's physical and natural features, as well as its structures. Urban renewal tries to turn abandoned or neglected portions of a community into ones that are economically viable. Every city has sections of underused land or urban neighbourhoods that are in disrepair and degradation. The reputation, livability, and production of the city are harmed by these areas of unutilized land. Typically, they are the outcome of modifications to urban growth and productivity patterns. Urban regeneration focuses on reviving urban areas and figuring out what makes great cities outstanding. These projects often involve massive, mixed-use redevelopments of inner-city locales, including the addition of residences, workplaces, shops, and public areas. There are various urban regeneration policies at various levels. The experience of urban renewal in India is still relatively young, although a number of cities, notably metropolises, have been making sporadic efforts to address the issue of decay and dilapidation. Due to the various and complicated character of Indian society, each city and town would require a different set of policies and programs to address its own challenges, situations, and requirements. The historic commercial centers are areas which showcase the past of an area. They are needed to be conserved and preserved with proper regeneration processes. The different regeneration policies affect these commercial centers in different ways and there is a need to understand the extent of impacts by these policies and projects. This research was done based on the inferences and analysis from a case example. From these, a comprehensive framework for urban regeneration for historic commercial centers was developed.

Key Word: historic commercial centers, urban regeneration, market, urban

I. Introduction

Urban regeneration is a city planning strategy that aims to fix the social and economic issues in urban areas while also enhancing the city's physical and natural features, as well as its structures. Urban renewal tries to turn abandoned or neglected portions of a community into ones that are economically viable. Every city has sections of underused land or urban neighbourhoods that are in disrepair and degradation. These areas of undeveloped land harm the city's reputation, quality of life, and productivity. Typically, they are the outcome of modifications to urban growth and productivity patterns. Urban regeneration focuses on revitalizing urban areas and discovering what makes truly outstanding cities outstanding. These projects often involve massive, mixed-use redevelopments of inner-city locales, including the addition of residences, workplaces, shops, and public areas. There are various urban regeneration policies at various levels.

Indian cities in the past had two main characteristics: first, a large population density condensed in a small area; and second, a predominance of non-agricultural activities, in particular no farming occupations of these people (Amos and Hawley, 1971). Indians have historically been more focused on the outdoors than the city. The National Commission on Urbanization Reports Volume II, 1988, presented admirable suggestions to alter the paradigm of urban planning in order to make it more relevant to the current urban condition, but they were unsuccessful. The experience of urban renewal in India is still relatively young, although a number of cities, notably metropolises, have been making sporadic efforts to address the issue of decay and dilapidation. Due to the various and complicated character of Indian society, each city and town would require a different set of policies and programs to address its own challenges, situations, and requirements. For instance, Jaipur's urban regeneration would involve preserving and restoring its cultural legacy as a pink city, whereas Delhi's would involve making good use of the city's historic core districts. Basically, depending on the nature or problems of a town or a city, it can be at a macro level like the reconstruction of the inner city core or at a micro scale like a traffic operation plan, conservation of old structures, and up gradation of services.

In order to take advantage of the opportunities and effectively address the challenges of rapid urbanization, the Government of India launched one of the most comprehensive suites of urban revitalization programs anywhere in the world in 2015. This was done under the leadership of the Prime Minister. The overarching guiding idea of "Sab ka Saath, Sab ka Vikas" was used to launch a comprehensive strategy with a three-tiered structure of programs, signaling a spirit of partnership and engagement. Smart Cities Mission (SCM), Swachh Bharat Mission-Urban (SBM-U), Pradhan Mantri Awas Yojana-Urban (PMAY-U), Deendayal Antyodaya Yojana National Urban Livelihoods Mission (DAY- NULM), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Heritage City Development and Augmentation Yojana (HRIDAY), and Urban Transport are the key programs. Various policies and projects are brought in to redevelop and revitalize old traditional spaces.

Chalai Market, the largest wholesale market in Trivandrum which is more than 200 years old. Due to the uncontrolled growth of the market, over the years, the left out crevices within the market area, especially environmentally degraded low lying lands, were occupied by squatters which gave shelter to casual labourers and other workers who depended on the market. Also over the years due to various policies and projects the activities have changed and the spaces have become more congested in nature. All these can be seen as an outcome of new urban development trends.

This study aims to investigate the transformation caused by various Urban Regeneration policies and to develop urban design strategies for implementing Urban Regeneration in a traditional marketplace.

II. Urban Regeneration

Urban regeneration is a city planning strategy that aims to fix the social and economic issues in urban areas while also enhancing the city's physical and natural features, as well as its structures. Urban renewal tries to turn abandoned or neglected portions of a community into ones that are economically viable. Every city has sections of underused land or urban neighborhoods that are in disrepair and degradation. The reputation, livability, and production of the city are harmed by these areas of unutilized land. Typically, they are the outcome of modifications to urban growth and productivity patterns. Urban regeneration focuses on reviving urban areas and figuring out what makes great cities outstanding. These projects often involve massive, mixed-use redevelopments of inner-city locales, including the addition of residences, workplaces, shops, and public areas. There are various urban regeneration policies at various levels.

Types of Urban Regeneration: The different types of urban regeneration are:

- Economic
- Social/Cultural
- Environmental

Impacts of Urban Regeneration: Some impacts include:

- Welfare and community development
- Housing Policy
- Environmental sustainability
- Infrastructure development
- Economic development
- Economic Inequality
- Displacement of locals
- Threat to local business

III. Historic Commercial Centers

The city's historical commercial districts serve as physical proof of its heritage and are consistent with all necessary environmental elements while also having historical significance and architectural and urban character. A variety of activities that make up a society's basic life and reflect its culture and values include commercial activity in significant amounts.

Characteristics of Historic Commercial Centers: The characteristics of historical commercial spaces as an urban heritage includes:-

- The importance of a continuous cultural memory, which provides the primary background in which to comprehend history as a part of a community's life.
- The position of the commercial core and its surroundings give the commercial center a character.
- Value of their Eco diversity by using traditional building and finishing materials, ventilation systems, shading, thermal insulation, and natural lighting.
- Aesthetic value, in the simplicity of their form, richness of their goods, diversity of their crafts, human scale, harmony of colours, openings, and proportions, variety of their facades, and unique architectural character.
- The importance of their ecological diversity, which is preserved through the use of conventional building and finishing materials, ventilation systems, shading, thermal insulation, and natural lighting.
- The value of architectural diversity and its contribution to the urban context, stemming from a strong visual image that combines individual and personal in a unity of harmonious interior spaces.
- The value of functional diversity is illustrated by the compatibility between different uses of the commercial center and diversity in the placement and ages of buildings.
- The economic and commercial value, representing the fundamental policies of preservation and rehabilitation, where the preservation of architectural character, traditional crafts, and products embodies significant economic and commercial value for local communities and governments at the same time. This is demonstrated by the compatibility between different uses of the commercial center and diversity in the placement and ages of buildings.

Traditional Marketplaces: A marketplace, sometimes known as a market place, is an area where people frequently congregate to buy and sell food, animals, and other items. The term "market" refers to a wide range of commerce, including food halls, market squares, and market halls in all of its various forms. Therefore, markets can be found both inside and outside, as well as online in the present era. The International Council on Monuments and Sites (ICOMOS) defines heritage city centers as the historical characteristics of the city expressed in the collection of material and immaterial components that make up the urban pattern and image, including the street system, zoning, and related relationships. The legacy markets, which symbolize the regions that contain signs of urban civilization, have a wide range of spiritual, symbolic, and artistic qualities and also express the character of the city. Additionally, they serve as the hub for several residential, commercial, and cultural activities. Both settlements that have adapted to the rest of the cities and those that, as a result of the city's growth, are now a part of a bigger structure should be included in these centers. They contain all of the social facets of life as well as the cultural history of the cities. These spaces are therefore a component of a comprehensive response to the built environment's nature and are rich in historical values that enhance the people's daily lives.

IV. Urban regeneration of Historic Commercial Centers

When the historical centers came under the pressure of modern urban development, which has led to many changes in these centers physical structures as well as changes in their social composition and economic structure, the city's urban center, or its historic heart, started to lose its value as a memory of the city's history. These modifications have not, in any way, been included into the historical framework. Some urban development initiatives have altered land use, but this change in purpose also affects the urban structure's fabric where the old-fashioned fabric can no longer handle contemporary movement patterns. In regions where development has replaced significant portions of the urban fabric with structural patterns and architectural styles that are incompatible with the significance of the location and its history while ignoring the historical content, the look has also changed.

Redevelopment, rehabilitation, conservation, and urban infill have been considered the most crucial processes in urban renewal operations. But frequently, the historical center's physical surroundings are taken into account without taking into account how the social and economic climate impacted these centers. In order to balance social and economic concerns with environmental concerns, both urban and natural, urban development processes in historical centers must be geared towards preserving the urban character of the region, protecting the existing heritage and its originality, with a focus on people. They should also focus on buildings of heritage value. The four major statin beneficiary groups have already been defined by NCEP 2013 report.

Methods of dealing with historic commercial centers: Some methods for policies for dealing with historic centers.

- Urban regeneration initiatives enhance or reconstruct the urban fabric of a city or a town. Additionally, they enhance living conditions by preserving and reviving historical values and cultural assets to withstand the strain of social and economic factors. Redevelopment, conservation, rehabilitation, urban infill, and revitalization techniques should all be used in urban renewal projects.
- Redevelopment involves rearranging the urban, functional, and population structure of an existing urban area by demolishing the neighborhoods and dilapidated buildings that make up the majority of the existing urban fabric, with the exception of those with historical significance, and then rebuilding them in accordance with a new plan that specifies how the land will be used and how the population will be distributed.
- Conservation describes the actions made to prolong the lives of historic structures by halting erosion and destruction. It takes into account all the labour done to preserve the physical proof of both natural phenomena and human civilization, and it permits additions and adjustments without altering the original meaning. In addition to buildings, the urban fabric, and character, conservation also refers to the urban, social, and economic environment. By regulating the dynamic changes linked to the processes of urban and social development, maintenance and protection are thus integrated.
- The major objective of rehabilitation is to restore a community's internal strength so that it can renew itself by forging a unique connection to its past, which is a necessary component of such rebirth. This approach focuses on enhancing an entire neighborhood and elevating its economic and social level through the reuse of old structures and the blending of historic and contemporary urban areas.
- Urban infill strives to achieve visual integration by filling in the gaps in an old urban fabric that have distinctive urban characteristics and that are visually integrated and united to produce a functional and visually coherent fabric. In terms of altitude, skyline, mass, size, scale, measurements, treatment of the facades, colours, building materials, and rehabilitation, this addition should be harmonious.

By restoring urban areas in a way that maintains their urban character, revitalization addresses damaged urban regions. By splitting the treatment of the urban fabric into three components, it strikes a balance between urban renewal strategies and methodologies. In the first, what needs to be maintained is taken into account, and it is modified or restored to fulfil its purpose. In the second, something that has lost its economic and historical worth must be completely rebuilt. In the third, everything needs to be revitalized.

Parameters for understanding historic commercial centers: The parameters include:

- Form, Structure and Buildings

The form and structure of a historic commercial center should be understood and also the market may have many existing buildings which are a sign of the past history. These are heritage structures and they need to be conserved.

- Activities

Activity is an important aspect of the commercial center. There will be wide range of activities. The changes in the activity pattern due to urban regeneration policies must be understood.

- Traffic Movement

In a commercial sector, there must be adequate automobile access for loading and unloading goods. Reducing the number of automobiles on the business street or banning all traffic are two options that might be used to deal with the anticipated increase in traffic on the nearby streets. Parking needs to be met close to the commercial area, and the street's service requirements shouldn't be disregarded. Therefore, whenever a marketplace is being renovated or developed, traffic flow needs to be taken into account.

- Pedestrian Movement

Daily and sporadic purchases of commodities are made by people at markets. Any market renovation must consider how we will address the problems with pedestrian traffic. Considering a stroll of no more than 1.5 km and about 20 minutes, it is important to understand the purpose of walking along the Commercial Stretch and pedestrian activities inside it. Furthermore, a parking place should only be 800 meters away from a destination (10 min walking). In order to promote a feeling of safety and comfort, it is important to investigate the interaction between street traffic and pedestrian mobility.

- Infrastructure

In order to comprehend the effects of a redevelopment in a market, one must first grasp changes in any infrastructure provision caused by any policy or redevelopment. More infrastructure facilities are added to meet the needs as redevelopments take place.

- Community

One of the advantages of commercial centers is that they unite a variety of people. To analyze the effects of any urban regeneration policy, any changes in the social structure of markets must be studied.

- Economy

Redevelopment strategies are implemented to boost a location's economy as well. A commercial center's economic changes should be evaluated to determine whether they had a positive or negative effect. If consumers do not like the changes, they will stop visiting the markets, which will have an impact on the economy.

- Visual Aspects

A market's visual appeal could draw in more customers. Making judgments that will intelligently develop these structures will be aided by their status, architectural character, and historical importance, as well as the study of heights and skyline, facades and details, finishing materials and texture, construction processes, etc.

V. Site Study

Chalai is located at the CBD of Trivandrum city and is a historic commercial center of around 200 years old. Near the East Fort central bus stop, where all city buses arrive and depart, is Chalai Market. At the intersection of Gandhi Park and the KSRTC bus garage is where there is the main entrance. Access to the main shopping district, the Chalai market road, through this gateway. At a distance of around 1.5 kilometers, this route ends at the Kanyakumari highway (formerly known as NH-47 and currently known as NH-66). The Chalai bazaar was formed as a linear strip of land, oriented along the east-west direction, aligning axially to the Padmanabhaswamy temple, during the 18th century. During the 19th century, the shifting of capital from Padmanabhapuram and formation of the modern kingdom of Travancore led to the expansion of Chalai towards the temple along the west. This growth happened with the formation of Fort complex around the temple.



Fig. 1: Location of Chalai market; (Source: Google Images)

The colonial period of 19th and 20th century, led to an increase of trade and commerce in the region. Chalai bazaar extended gradually towards the north and south, acquiring a larger area. Chalai was characterised to be a mixed use zone, consisting of commercial, residential, religious and institutional functions. Formation of major roadways, major schools, railway station and other institutions in the outer precincts of Chalai, during the 20th century, acted as an enclosure which restricted further expansion of Chalai market. The site falls mainly under three wards with a total population of around 25000, and an average density of 600 pph. Ward is 45 Chalai. Settlement of trader communities who engage in special trades migrated from neighbouring states engaged in wholesale business within the market, income levels medium and low. 60% of the area occupied by squatter settlements, 3 distinct colonies that depend on the market entirely for livelihood mainly engaged in, head load works construction labours, informal markets and vegetables vendors and no permanent land ownership to any of the household. Occupied by very low income group, people with permanent land ownership titles, engaged in construction work and class IV government employment. Very crowded and congested with improper infrastructure facilities. The main street of Chalai market acts as an axis connecting Padmanabhaswami temple and Killipalam, oriented in east-west direction. The western end of Chalai terminates at the Gandhi Park and eastern end terminates at Killipalam junction, stretching about 1.5 km.

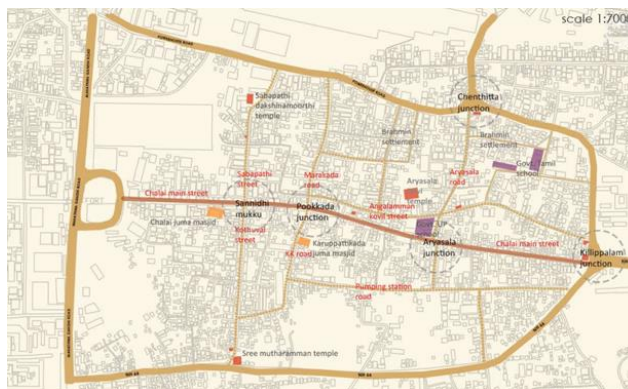


Fig. 2 Map showing the main streets of Chalai Market; (Source: *Integration of Heritage in Urban precinct- A study on Chalai Thiruvananthapuram – B.Arch. Dissertation 2018 by Nilofer. J*)

Need for Regeneration: There are many issues faced by the Chalai market. Some of them includes:-

- Negligence of heritage structures
- Streets of Chalai are choked with trucks and private vehicles which lacks a pedestrian friendly atmosphere
- Frequent fire accidents
- Improper drainage which creates huge difficulties during monsoon
- No proper waste disposal systems

Regeneration of Chalai Market: There were many attempts to regenerate Chalai market under the government initiatives. They are discussed below.

- DTP Scheme

The regeneration of Chalai market could be seen dated back to 1975 with the DTP Scheme for Chalai area. The area according to DTP scheme was to be developed as a commercial center, with areas to be taken for further development marked in the scheme. Regulations for commercial spaces, public spaces and industrial areas were provided in the scheme.

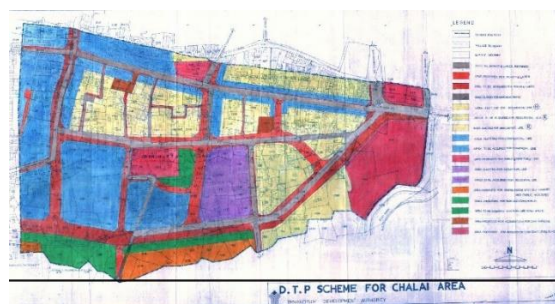


Fig. 3 DTP Scheme for Chalai Area; Source: *DTP Scheme, Trivandrum Town Planning Trust*

- Master Plan 1971

The first Master Plan implemented in 1971, worked out on the basis of the Delhi master plan, focused on the redevelopment of the congested Chalai market area by developing Palayam, envisaging hierarchy of trade centers at regional and city level importance. The redevelopment scheme also reflected the need for housing the economically weaker section within the development plan area. Most of them were multi-storeyed structures, unsuitable for the living pattern of the people, hence these flats were either sold/rented out or left unoccupied and the beneficiaries continue living in the slum under constant threat of eviction. Hence a need for a comprehensive development strategy and design approach to regenerate the urban fabric in a way which would benefit the marginalized communities and integrate them with the city fabric.

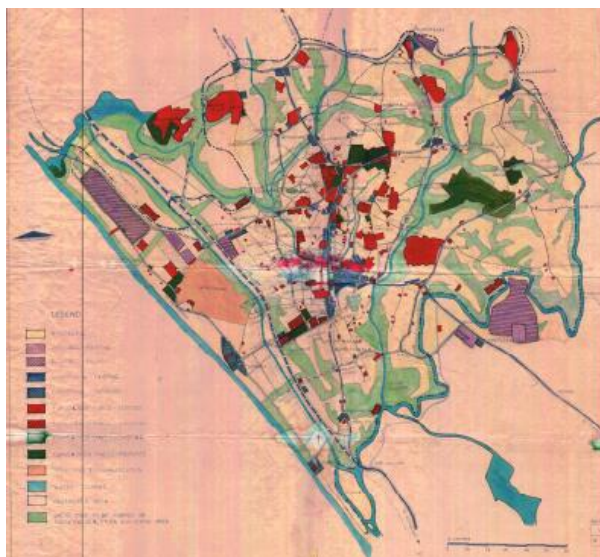


Fig. 4 Broad Land use of Trivandrum city, Development Plan for Trivandrum 2021; Source: Master Plan Trivandrum

○ Master Plan Proposals 2001- 2021

According to the Master Plan for Trivandrum, the CBD of the city was to be developed giving thrust to increasing trade and commercial activities. The Redevelopment of Chalai market is emphasized in the Master Plan. Chalai area falls under the Central Zone of the Master Plan:

- Central Zone identified as the focal point of all major urban activities (Administrative / Commercial and Organized Recreational)
- Forms 4% of Functional Urban Area.
- 12% of city's total population resides in this area.
- Number of job opportunities in the central area is 228 % of the actual work force residing in this area hence attracts major floating population.
- Major markets in the Central Zone Chalai and Palayam to be redeveloped.
- Vacant Government Lands to be made commercial to meet the growing need of commercial space.
- Service Roads to be provided behind commercial development along both sides of major arterial roads and the depth of shopping areas provided along major arterial roads shall not be more than 50.

Uses Permitted include:

- Activities
- Commercial
- Residential
- Local State Central Govt. Offices, Institutions, Infrastructure Facilities, Parks, Gardens, Exhibition Grounds, Libraries and Clubs
- Light Manufacturing Industries with less than 10 workers using 10 HP power and 20 workers without using electricity

Uses restricted include:

- Higher Education Institutions
- Industries with more than 20 workers
- Whole Sale Business Establishments, Truck Terminals and Go downs

According to the Master Plan 2001-2021, the old market areas such as Palayam and Chalai was to be developed as First Order commercial centers to serve the whole city.



Fig. 5 Compact City as per proposed Master Plan 2001-2021; Source: Master Plan Trivandrum

○ Heritage Street Project

A heritage street was proposed in the Chalai market. The proposed heritage street, by Kerala Gov. and Habitat Technology Group, will cover a distance of 3 km from East Fort junction to Killipalam. Underground electric lines, well-planned drainage system and under- ground passages will make the marketplace look compact and clean. A tiled roof foot- path, park benches and garden are also proposed. Apart from the heritage street, bio mining of waste at Chalai market and warehouse at Chalai market was also proposed.



Fig. 6 Existing scenario of the market; Source: Author

○ Initiatives by Trivandrum Development Authority

TRIDA planned to develop a Commercial Complex at Chalai market in the land owned by TRIDA. It had about 5.5 acres of land in Chalai area. Construction of multi-level Parking Plaza, rehabilitation block for traders, internal roads, Auditorium and commercial complexes are the components of the proposed project. Total project estimate was Rs.100Cr.



Fig. 7 Commercial Complex at Chalai by TRIDA; Source: Author

VI. Findings

Form, Structure and Buildings: With the projects proposed by TRIDA and Smart City Thiruvananthapuram, both projects tried to bring the heritage character of the market by providing sloping roofs and other traditional features. The TRIDA project showcased multiple character typologies in the structure. The three storied commercial complex stands as an alien structure within the Chalai precinct. The market buildings which was developed as a part of the Heritage Street is seen as a failure. The spaces developed for selling of the commodities is now used as a parking space as well as a storage space for the vegetables. The market activity is seen around the buildings. This was because the buyers did not come inside the building. To invite the crowd, the people moved outside the building and selling occurs there.



Fig. 8 Market activity occurring outside the built market; Source: Author

Activity: Chalai Bazaar works 24 hrs. a day, the active time is morning 8 am to evening 8 pm and the peak time is evening 4 pm to 7 pm. The presence of the transit interchanges, bus stand and railway station is a major catalyst. The flower merchants majorly occupying the corner shops works 24 hrs. a day. The projects are located at the innermost areas within the precinct and its location proves a major drawback for the activity in the area. The market is mostly active during evenings around 4 pm. The loading and unloading activities occur mostly in early mornings.

Traffic Movement: The traffic is controlled within the main road stretches. No proper parking spaces is provided inside the market. People park on either side of the road. This creates traffic congestion.

Pedestrian Movement: The pedestrian inflow in the market is very high and its peak time is around 4 pm - 7 pm. No proper pedestrian amenities such as sidewalks were provided as part of the project. The Heritage Street proposes a heritage walkway from Gandhi Park to Killipalam junction, but this work has not yet been started. The pedestrians suffer from high vehicular traffic. There are holes and irregular pavements laid at intervals.



Fig. 9 No pedestrian walkway provided to the Heritage Street market; Source: Author

Infrastructure: Both the regeneration projects did not emphasize on the need for basic amenities for the users in the market. No proper toilet or drinking water facilities are provided as a part of regeneration. The waste from the market is stacked up in piles and is later taken by the Corporation. There are dump yards next to the projects. The poor condition of the area can lead to dangerous health issues.

Community: There are different communities present in the Chalayi area. Brahmin community are a major settlement here. As a community development, no initiatives were proposed or developed by any regeneration policy or project. And so no such community upliftment is visible.

Economy: The urban regeneration projects were developed to revive the declining economy of the market as people today depended on mall and commercial complexes for buying commodities. Thus, a heritage market was to be developed based on the policies. But due to its failure, no change in economy was noticed by the traders. Many people sell their shops and move to other places. A major decline in economy was seen after COVID-19.

Visual Aspects: The vegetable market developed as a part of the Heritage Street had a traditional character. The single storied structure was found appealing by the users although it was not successful regarding the functional aspect. The commercial complex developed by TRIDA stands as an alien structure within the precinct.

VII. Strategies

The following strategies are framed for urban regeneration of a historic commercial center.

Form, Structure and Buildings

- The new policy must be in accordance with the heritage and historic character of the commercial center.
- The urban regeneration strategy should only be developed with proper and detailed study of the historic and cultural elements and features of the commercial center.
- Emphasis is to be given on preservation, restoration and reconstruction of the historic structural features and elements.
- Mapping of heritage structures should be done and conserved.
- The height, width, enclosure, special quality etc. should be considered while developing any regeneration project in the commercial center.
- Reorganization of the functional structure of the existing area could be generated.
- All the legislation that obliges users to maintain the distinctive architectural character of the region should be activated and enforced.

Activity

- The activity of the commercial center could be controlled with proper guidelines.
- The street vendors is a major factor in any commercial center and they could be controlled in certain areas.
- Different activity could be provided in different zones to reduce chaos in the commercial center.

Traffic Movement

- Providing proper vehicular access and parking spaces should be a major component of any regeneration policy especially for a commercial center.
- Creating a no traffic zone could attract more people to use the spaces actively and efficiently.
- The width for traffic of the historic commercial center should be considered for any development to occur.
- Proper pathways for loading and unloading should be proposed for the effective working of the commercial center.

Pedestrian Movement

- Pedestrians are a major aspect of the commercial center, hence importance must be provided for providing pedestrian amenities in the regeneration.
- The regeneration could propose to use the commercial center as “pedestrian friendly zones”.
- Time based “no traffic zone” could be provided for efficient pedestrian activity.
- Based on the width of the streets pedestrian facilities such as walkways and pause points could be provided.
- Elements such as street and landscape furniture for shading, lighting and other needs of pedestrians should be provided. They should be connected to local traditions and visually and functionally appropriate to their setting.

Infrastructure

- Urban regeneration polices must give emphasis to providing basic infrastructure facilities by first understanding the needs and requirements of the user groups.
- Providing proper toilet facilities, drinking water, waste management, security, electricity etc. should be considered.
- Zone based development could be promoted with providing amenities in each zone.
- Certain units could be given the responsibility of maintenance of the infrastructure services.
- Previous breakouts of disasters in the historic commercial center must be noted and methods for its preventions must be considered.

Community

- The public could be involved for the regeneration process. A people centric regeneration process could be developed.
- The interventions put forward should contribute to community and social life.
- The community groups in the regeneration area could be identified and their requirements should be understood, thus their revival could also be considered.
- Community upliftment should be considered rather than a tourism development approach.

Economy

- The resources to maintain the longevity of a historical zone's appearance are functional activities and the economy. It revives up the economy and increases activity.
- The functioning activities of historic sites in urban areas must be revitalized through rehabilitation and adaptive use.
- The economy could be revived by providing basic infrastructure facilities which attract people to the commercial centers.
- Small scale business could be promoted via funding's and initiatives from the government as a part of economic regeneration.

Visual Aspects

- The commercial centers should be regenerated maintain the historic character and typology.
- Its visual aspects should be considered in terms of its character, design, colour etc.
- Controls and guidelines could be provided for its aesthetic appearance.

- Visual aspects apart from its rich heritage and history is a major factor which draws in people especially tourists to a place so this must be given much importance and its maintenance should be done.
- Certain units could be developed for its overlooking and maintenance.

VIII. Conclusion

Urban regeneration is a city planning strategy that aims to fix the social and economic issues in urban areas while also enhancing the city's physical and natural features, as well as its structures. Urban renewal tries to turn abandoned or neglected portions of a community into ones that are economically viable. Every city has sections of underused land or urban neighbourhoods that are in disrepair and degradation. The reputation, livability, and production of the city are harmed by these areas of unutilized land. Typically, they are the outcome of modifications to urban growth and productivity patterns. Urban regeneration focuses on reviving urban areas and figuring out what makes great cities outstanding. These projects often involve massive, mixed-use redevelopments of inner-city locals, including the addition of residences, workplaces, shops, and public areas. There are various urban regeneration policies at various levels. The experience of urban renewal in India is still relatively young, although a number of cities, notably metropolises, have been making sporadic efforts to address the issue of decay and dilapidation. Due to the various and complicated character of Indian society, each city and town would require a different set of policies and programs to address its own challenges, situations, and requirements.

The historic commercial centers are areas which showcase the past of an area. They are needed to be conserved and preserved with proper regeneration processes. The different regeneration policies affect these commercial centers in different ways and there is a need to understand the extent of impacts by these policies and projects. This research was done based on the inferences and analysis from a case example. From these, a comprehensive framework for urban regeneration for historic commercial centers was developed.

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