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Resilience of a Historic Native Town: Case Study Kalbadevi, Bohra Bazaar, Mumbai

Vikram Pawar, KR VIA

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Contact:

[Kamla Raheja Vidyanidhi Institute of Architecture Mumbai]

Email: [vikram.pawar@krvia.ac.in]

Website: [<http://www.krvia.ac.in/>]

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Vikram Pawar, KRVI

Abstract: Resilience amidst communities is a function of its ability to negotiate and overcome chronic stresses and shocks. Historic urban spaces in a rapidly urbanising economy like India are extremely contested and exhibit social as well as spatial stresses. Coupled with these 'stresses', the state developed tools/mechanisms fail to protect the urban fabric or actively abets a biased/unreal development model. In this context, methods to develop/study proposals aimed towards safeguarding the cultural identity embedded in built heritage of the historic town is very much required both in people's imagination as well as the state vision.

In Mumbai, the recent World Heritage tag for the Gothic Architecture and the Art Deco Ensemble prompts one to relook at the status of the communities, their livelihood and their housing within the Inner Fort Precincts as well as the Native Town.

The paper identifies the inherent resiliences of the historic urban communities and develops models to further strengthen them based on the values, interests and aspirations of various stakeholders.

1 Resilience- Ideas, Theory, Practices

The primary discourse on resilience in the anthropocene relates to the human ability to negotiate with the climatic and geo-hydrological shocks and stresses. Yet, there are more immediate concerns and threats especially in the global South related to equitable livelihood opportunities, concerns of safety, health, hygiene, well being and efficiency.

The chronic stresses related to marginalisation, loss of livelihood opportunities, built habitat neglect, decay and dilapidation, private vehicle mobility excesses and faulty development

trajectories are also realities that cannot be ignored in the resilience discourse.

Within and along the peripheries of historic native towns in India, that are facing urbanisation pressures, the disproportionate and unsustainable private vehicle centric aspirations of mobility, high rise typologies without adequate infrastructure, amenities and fire preparedness have also resulted in the deterioration of quality of life, congestion of spaces, abuse of the urban space. Together, these provide the much needed impetus to carry detailed studies and develop strategies to build or enhance resilience in the historic native towns of India.



Figure 1. Residential Heritage Precinct in Native Town, Mumbai Credit: KR VIA M Arch III, 2019

Congestion in the historic native cores and poor upkeep of the built form contribute to the vulnerabilities of these historic cores. The real estate development pressures exacerbate stressed community- livelihood, built form- infrastructure relationships making them less resilient to shock events like fires, floods and extreme situations of law and order.

If vulnerabilities are understood as either shocks or chronic stresses, resilience is the ability of the community to gather itself after the shock event or identify and ameliorate the causes of the chronic stresses. The case study has sought to explore the kinds of vulnerabilities within the historic native core and develop strategies to build or strengthen resilience in these towns.

The case study of Historic Native town of Mumbai has not considered, within its present

scope, the perceived long-term conditions of sea water rise since confirming these scenarios was beyond our present capacity.

2 Case Selection

2.1 Need and Inquiry

Many of the historic core towns in India are found to be crumbling under pressures, lifestyle changes, stagnation, decay and outmigration towards new developments in the peripheries and new towns. With so much of built asset already available, capacity build-up in retrofitting these assets to the new age requirements will save lot of energy wasted in demolition and new construction and on natural

resources like mountains being quarried for concrete and forests that are denuded for mining iron ores. Retrofitting these built forms to the contemporary needs will also help retain the identity of the place and communities, carefully and incrementally built by generations before them in a highly globalised world.

At the same time, contemporary Urban Development and modern engineering methods have virtually obliterated wood and masonry building crafts from the urban architecture scenario in favour of Industrial Age products like Steel, Concrete and Glass. While sustainable forest management practices, engineered timber, bamboo and mud architecture have proved to be more environment friendly and pragmatic ways of construction, the industrial market supported construction and development are using steel and concrete riding on the myth that concrete and steel are permanent solutions to urban housing needs.

This study is driven by following research questions:

Can conservation of vernacular architecture with an emphasis on materials and craft be promoted to arrest decay of historic native town architecture?

Can resilience amongst the communities be enhanced within the context of high urban development pressures and increasing ecological footprint of urbanisation?

Is there inherent resilience which a community acquires over a historical timeline that may provide cues towards its long-term sustenance-livelihood, growth opportunities and quality of life?

2.2 Contextualising the Case Study

The recent World Heritage tag for the Gothic Architecture and the Art Deco Ensemble of Mumbai prompts one to examine the status of the communities geographically located within the Fort Precincts as well as the Native Town on its periphery, their livelihood patterns and housing.

The once vibrant and boastful native towns within the Fort and Kalbadevi precincts in the city now wears a decrepit look. The crumbling historic built stock juxtaposed with the slick high rises is reflective of a 'fait accompli' attitude of the city determined to change its skyline and further densify its built stock. Also responsible are the originally well intentioned policies that have failed over time and are now found to be difficult to revoke. Inadvertently, this has led to a gradual erasure of the architectural identity incrementally built by generations who were able to put Bombay on the global map earning it an epithet of The City of Gold, also the title of Gillian Tindall's book (1992). The new developments are also oblivious to the problems of gentrification as well as the imminent ecological impact on this coastal city in the context of the Climate Change risks.

In the last two decades, multiple attempts at redevelopment of historic core has led to a situation where the real estate market forces coupled with lack of political will to overhaul archaic and failed policies have created a notion of the inevitability of redevelopment. Aggressive urban growth projections coupled with the Infrastructure development have been able to manufacture consent amidst the popular imagination towards erasure of old and replacing it with new development. Thus we have Bhandi Bazaar Redevelopment, the Eastern Waterfront Development, the Mill Land Development and

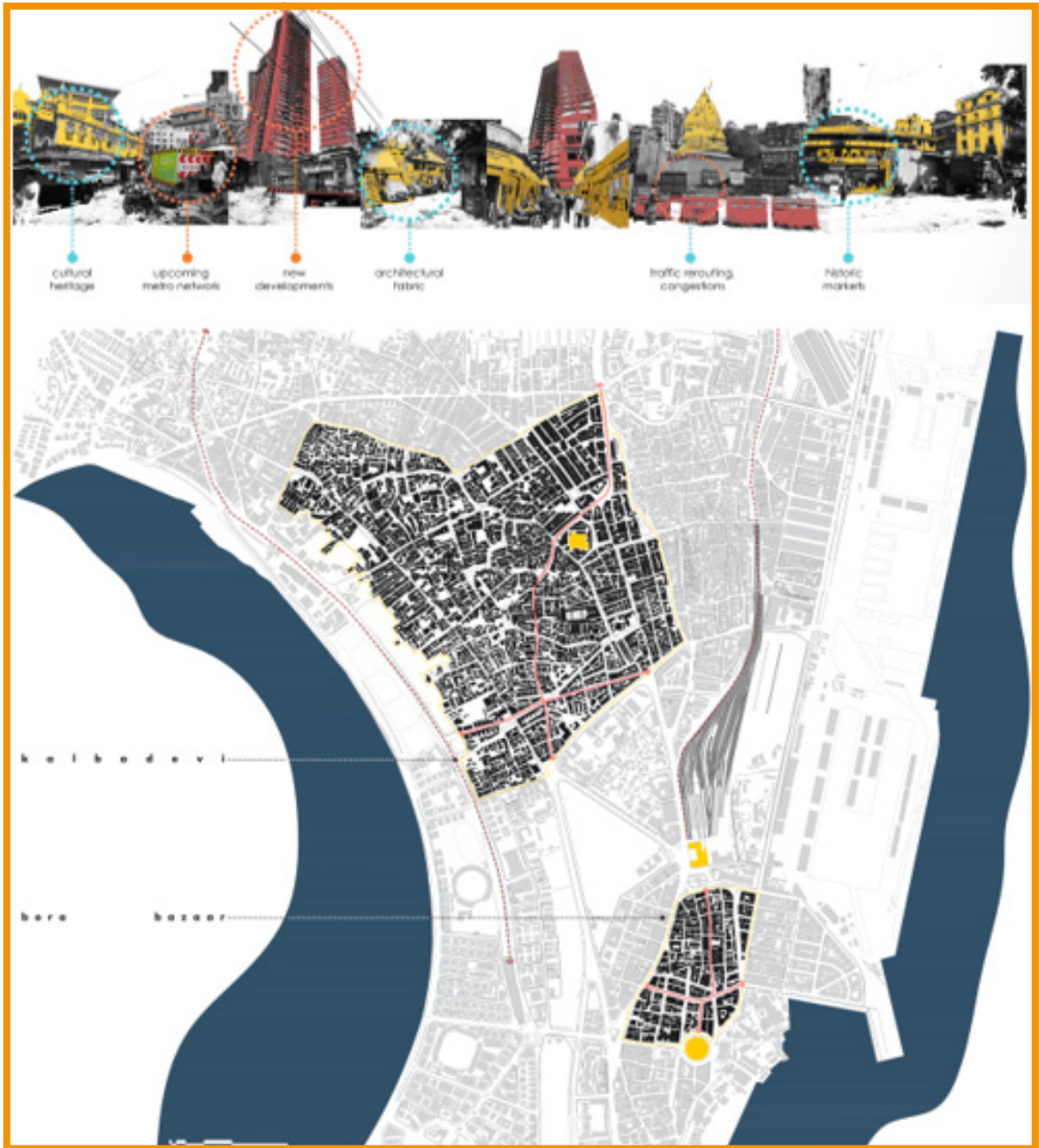


Figure 2. Collage outline the changing character and skyline and Map Showing locations and Extent of Study Areas. Marked in Yellow are significant heritage markers- from top-Mumba Devi Temple, CST Station and Horniman Circle. Credit: KRVA M Arch III, 2019

the Coastal Road & Nhava Sheva Connectivity. Some of these are challenged and have been taken up in judicial deliberations, however they are still acceptable in the public imagination. The Infrastructure projects like the underground Metro if implemented with due earnest and ring about much required last mile connectivity, could be a boon and an alternative to the private

vehicle intensive mobility. However, the manner of its implementation has forced many citizen groups for judicial intervention and remedies.

While the 'development' lobby continues unabated in its zest, there exist discernible voices of caution amidst this clamour, aware that what we will lose in the city's over enthusiasm

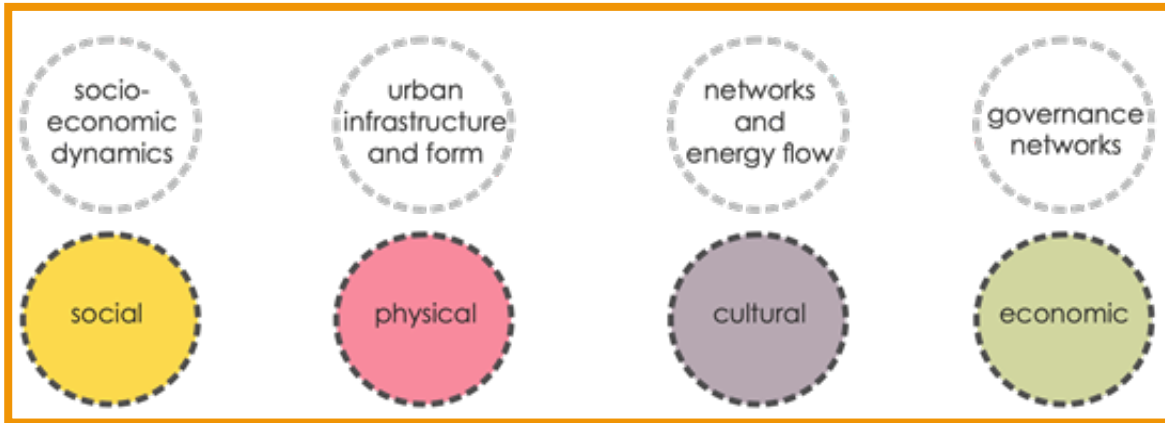


Figure 3. Four Parameters for investigation

is irrevocable. These voices coming from the affected communities, conservationists and historians, however, are being looked down as being regressive and stuck in the past. Apart from these two diverse stances, there are possibilities of innovative ideas which works towards a more sustainable and culturally richer urban environment.

3 Framework of the study

Resilience of the historic native town was gauged using four parameters - Ecology, Livelihood, Infrastructure and Built stock. Ecology and Livelihood being the drivers while Infrastructure and Built stock are the material manifestation.

Ecology is often pitched against development and livelihood interest of the community and therein lies a pitfall. The case study explored these relationships and attempted to arrive at a balanced approach wherein livelihood interests and ecologies complement each other. For example, the elimination of flood inundation and better waste and environment management would lead to a healthier environments and hence more productivity.

Infrastructure includes water, sanitation, solid waste, transport, social spaces and civic

amenities. Built stock deals with those used for or once were used for residential, commercial and Institutional purposes. The study explored the negotiations between the two, one vying with the other for space and in the process tilting the balance towards a disturbed urban space and compromising its resilience capacities.

3.1 Context

Hydrological aspect of ecology is studied to argue for inundation resilience of the native town. The northern periphery of the historic core is reclaimed from being mud flats while the hills of the seven Islands were mostly flattened by mid 19th century. The erstwhile mudflats upon which mills and chawls were constructed, still get inundated during heavy monsoons and the frequency of the extreme events has increased in the past two decades.

The decentralisation of the markets and central business districts towards the north and the mainland; the subsequent coming up of Bhendi Bazaar; Mill lands redevelopments and the anticipation of Eastern Waterfront and the digitalisation of the wholesale and retail markets has affected the economies of these neighbourhoods. The spaces which once

accommodated living and working, have now been reduced to ware houses making the built stock further vulnerable to collapses and fire.

The historic core is connected by robust road and rail network including the recent Eastern Express Freeway. Upcoming infrastructure additions include an underground metro connection, planned sea links on the western edge as well as on the east side to the mainland. These projects are set to further the development pressures on the historic cores. The drainage and sewerage networks will resultantly succumb to infrastructure pressures.

The neglect of the built stock is a result of combination of following factors:

The Rent Control Act- 1948, in spite of its good intentions of protecting the tenants from over exploitation by the landlords could not keep pace with the market realities and inflations. This resulted in landlords inability to maintain the premises and tenants not being able to afford to or being inclined towards its upkeep.

Inadequacy of the state to repair the buildings through mechanisms like Repair board, Housing and Development Authority set up for the purpose and the instruments like cess¹.

The shifting of Industries and formation of Santacruz Electronics Export Processing Zone (SEEPZ) in the 70's in the suburbs and city peripheries and the resultant economic impact on the residents and hence housing in the island city

Expansion of port activities on the mainland and lesser dependence on the City Port. The shifting of whole sale markets central business districts towards Navi Mumbai and Bandra Kurla Complex.

4 Research Methods

In line with treating the city as a Laboratory, the KRVI Semester III M Arch Urban Conservation Studio as part of BReUCom undertook a study of the historic native towns using the primary lens of cultural resilience. To understand the ecology and livelihood relationships, historical maps showing topography and drainage patterns were studied to trace the probable causes of present conditions. The timelines extended as possible future scenario build-ups and probabilities of these future scenarios materialising were discussed so that the responses could preempt the vulnerabilities and build upon the strength of diversities of communities and their livelihood options. The Infrastructure and Built stock studies entailed site documentation and mapping and simultaneously explored the vulnerabilities and perceptions of these threats amongst the stakeholders.

Pedagogical methods included site studies, review of literature. Quantitative surveys were time intensive and had limited application, so they were supplemented with qualitative observations and inferences gathered as part of intensive interactions with key stakeholders in the inner fort precinct and the native town. The studio further developed strategies which utilised conservation as an approach for a culturally richer development of the site.

Speculations were undertaken to build possible scenarios for the native town based on the understanding of historical timeline as well as the contemporary growth trajectories

Case Study / Best Practices of parallel examples have not been undertaken as part of the studio.

1 Cess

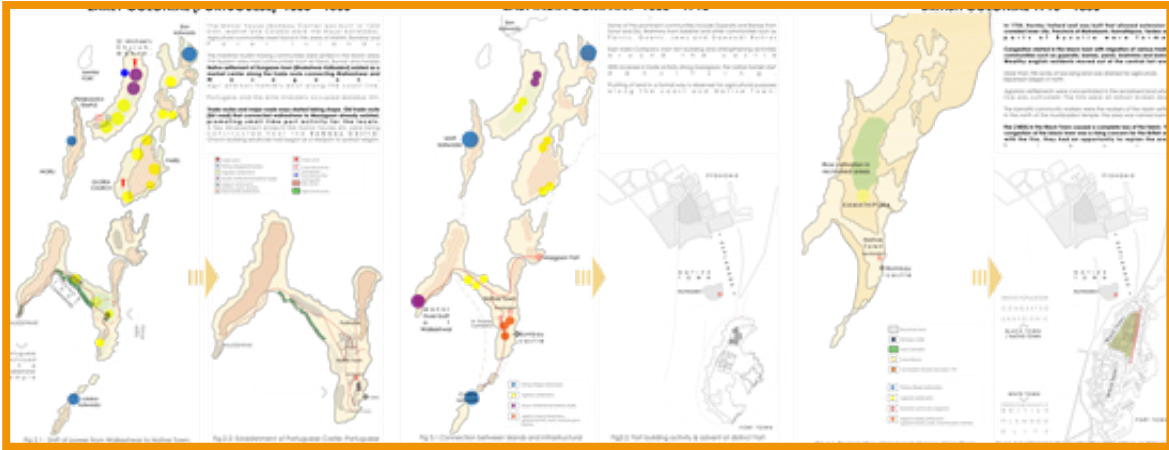


Figure 4. Critical Timeline- Colonial Period when most of the Island City Reclamation and Development took place . Credit: KRVIA M Arch III, 2019

5 Analysis & Discussion

5.1 Evolution of Urban Condition and Development Timeline

While the spurt of urban growth in the native town was during British colonial rule in India, the settlement also has a pre-colonial existence. Situated midway along the axis of Walkeshwar, a settlement more than millennium old and the harbour which came into prominence during the colonial period, settlers at Kalbadevi have been serving the Island city of Mumbai, starting with the Manual labourers at Kamathipura (Narayan, 1863) and with time getting populated with diverse communities with patches of gardens around their houses called wadis. The native town thus comprised hamlets within wadis, an idyllic coastal agrarian settlement.

The Portuguese period (1534-1661) further consolidated the forms of these settlements resulting in more robust but sporadic built forms especially nearer the Bombay castle and at Mazgaon which is towards the North along the Eastern coast. The link between Mazgaon and Bombay Castle passed along Kalbadevi. When

the fort wall was constructed by the British, the Mumbadevi temple located near the Bazaar gate was shifted nearer to the heart of native town. (Rodriguez, 1994)

Later, a stepped water body towards the south of the Kalbadevi was granted by a benevolent Parsi to the Muslim community. A Friday prayer mosque was built over the tank without reclaiming it. Over time, owing to its locational advantage of being on the axis of Residential Quarters of Malabar Hill on its west and Docks towards the East and Mazgaon towards the North to Castle towards south, Kaladevi grew into prominence as a market. Cotton trade, pivotal in the fortunes of the city, was conducted at the Bombay Green or Horniman Circle at the heart of the Fort area and South of the Bohra Bazaar. (Dwivedi et al, 2001)

The textile Industries established towards the North led to a spurt in housing and settlement closer to the native town and was called Girangaon (the village of Mills). Simultaneously the native part of the fort precinct occupied by the trading communities of Parsis and the Bohras densified with businesses flourishing in both- Bohra bazaar and Kalbadevi precincts. The period of textile Mills also saw the emergence of wholesale markets like Muljee Jetha and

Swadeshi around Kalbadevi. (Kosambi, 1986)

In the late 19th and early 20th century trams connected the Island city north- south through planned areas done by City Improvement Trust, running parallel to the historic axial road on the west side of the native town and the railways connecting the Apollo Bunder to Thane and later to Karachi bound the east extent of the native town.

The post-Independence period (post 1947) experienced well-intentioned policies going wrong. Rent control and the subsequent compulsion of the state intervening to address the housing issue is, in retrospect seen as having led to the landlords citing inability on their part to maintain the built form, tenants unwilling to contribute towards the houses they were occupying. Over time, the state realised that it is beyond its capacity to address this issue. Further the moving of the Industries in the 1970s and the liberalisation of economy in the 1990s and the present wholesale and retail trends of online transaction has changed the form of market spaces- mixed use of retail outlets, offices and residences getting converted to godowns. Studies taken as part of the KRVIA M Arch resilience studio in 2019, have revealed a scenario of obliteration of the native town built forms especially along the transit Infrastructure growth corridors and community neighbourhoods are succumbing to development pressures en masse.

5.2 Process

The site was studied morphologically for its flood drainage situation, built form for its safety and capacities to be retrofitted to accommodate the contemporary lifestyles, the changes in livelihood opportunities, and the demographic changes. Given the time and resource constraints, the study was qualitative

and not quantitative. Stakeholders interviewed included community members, office bearers, traders, residents, labourers to gather diverse perceptions about the present state of their neighbourhood and its future. Their resilience was inferred by comparing these perceptions with the future trajectories drawn on the basis of projects ongoing and in the pipeline.

The site observations were questioned in the studio and juxtaposed with the evolution studies and current development trends. Future scenarios were discussed considering the projected linkages with the main land and the island city as well as the in- the-pipeline project of Eastern water front. The holistic understanding of the study area in the context of the regional development was deliberated upon before the micro-level vulnerabilities were identified. Methods included deriving inferences from patterns emerging from the morphological studies, building conditions and the potentials were identified from locating the listed heritage structures within the study area as well as identifying characteristics and values including associational to arrive at a more meaningful understanding of the potential resilience of the community and further build upon it.

Interacting with stakeholders- interviewing some of the residents, shopkeepers, daily wage earners, understanding their perceptions and concerns. Study of literature included Gazettes, books, published articles and papers as well as the unpublished material from the studios previously conducted at KRVIA and Design Cell were further built upon to generate timelines. Existing Land Use and Development Plans along with computer aided drawing (.dwg) and Geographical System GIS shape (.shp) files were used together with the satellite image and on site documentation to generate the morphology study. Modified heritage list 2012 available on the Mumbai Metropolitan Region Heritage Conservation Society (MMRHCS) website was

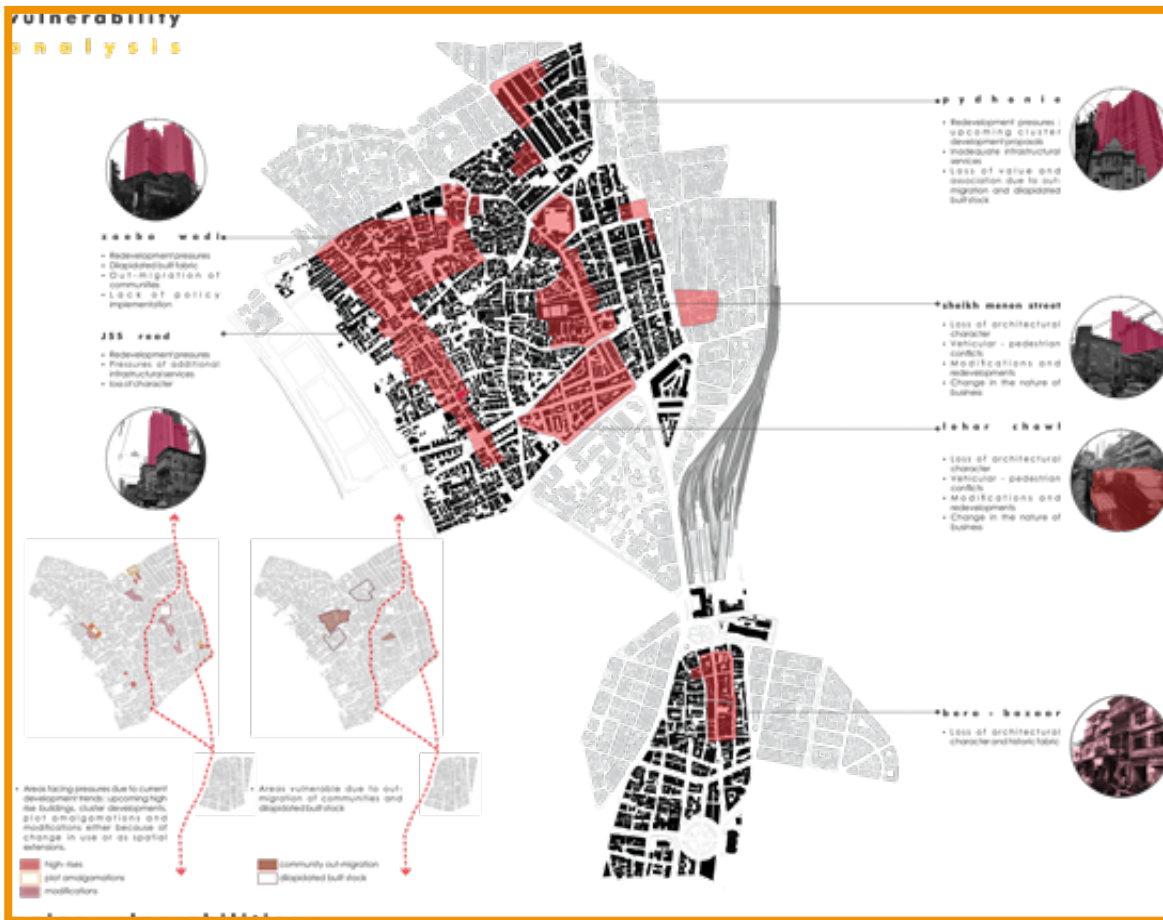


Figure5. Vulnerability Map pf Kalbadevi and Bohra Bazaar. Credit: KRVI M Arch III, 20199

used to generate the map showing heritage buildings and Cess building map was used from the M Arch studio works on C ward undertaken at KRVI over last decade at checked with Mumbai Building Repairs & Reconstruction Board (MBRRB) website.

Emphasis was laid on articulation of the argument for resilience using the data available as well by generating new data.

The study incorporated the following:

1. Understanding the morphology of the native town.
2. Build a timeline of the native town highlighting the demographic dynamics

and correlating urban growth with the topographical and hydrological alterations.

3. Interacting with the stakeholders using interviews.
4. Mapping of activities, demographics and economies
5. Comparisons with newer forms of goods market economies
6. Understanding and establishing the inter-relationship of mixed-use activities
7. Identifying community networks and potentials

8. Developing strategies to engage the community in drafting the idea of better quality of life.
9. Drafting frameworks to build community resilience and strengthen networks.

Twice-a-week monitoring of the studio and regular feedback helped in evolving an understanding of the vulnerabilities and resilience considering the parameters laid above.

6 Conclusion

6.1 Findings of the study

The site is full of rich community network across religious, regional identities and includes food and cultural diversities.

Spirit of entrepreneurship is reflected in the livelihood activities and has the potential to be tapped for strengthening resilience of the native town.

Unreal estate driven speculative development pressures are not sustainable and resilient solutions. The new high-rise typologies are leading to poor quality of urban spaces.

Lack of empathy towards heritage and myopic vision for a holistic development reflected in the development plan is leading to relatively rapid erasure of the identity of the place.

Lastly, the preliminary interactions with stakeholders elicit mixed responses ranging from despondency to voices of hope.

6.2 Learnings

There is a need for an alternate vision and strategy to singular development model which is leading to erasure of old fabric and new construction.

Factors contributing to community living and sense of place and identity is under threat of gradual erosion. This requires strategies of renewal or restoration.

Dynamic and systematic data collection, updating and analysis is required which will help in framing policy decisions to reduce disaster risks like fire and build resilience.

Comprehensive framework and methodology for periodic review of the Urban Resilience in historic native towns is lacking and needs to be part of community programs as well as civic administration.

6.3 Way forward

The strategies utilising conservation as an approach for a culturally richer development of the site is proposed to be articulated to develop dynamic models of interaction between various stakeholder groups based on their values, interests and aspirations. An elective or a studio will further seek to enrich the base data of the housing and livelihood conditions and represent in an easy to understand infographic format. Short courses will be developed for advanced programs related to the interest which will then be offered to the administrators and interested experts and stakeholders. With coordination from non- government organisation partners, simplified workshop kit will be developed for citizens including young adults and children.

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