Gamdevi: Lessons from Mumbai's past that could help it create a better future

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WITH ITS THOUGHTFUL, COMMUNITY-ORIENTED URBAN DESIGN PRINCIPLES, GAMDEVI OFFERS MORE THAN MERE NOSTALGIA.

IMAGE CREDIT: AARAN PATEL

Throughout history, cities have been defined by how they have adapted and responded to crises. Over the last few months, Mumbai has been battling the Covid-19 pandemic and widespread flooding due to the increasingly intense monsoon and longstanding planning failures. In an era of rapid climate change, these challenges will only increase. Mumbai's ability to provide all of its residents access to decent housing, mobility, and security will have important social, economic and environmental implications.

At a surface level, the city's older neighbourhoods, such as Gamdevi, near Grant Road in South Mumbai, offer charm and heritage. But digging deeper to investigate the origins of these areas and the principles that informed their development offers lessons from the past that could help frame equitable and energy-efficient plans for the future.

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The Gamdevi neighbourhood grew out of colonial Bombay's need for affordable, well-planned housing at the turn of the twentieth century. From the 1860s, many of Bombay's wealthy residents had moved into spacious and airy neighbourhoods like Byculla and Malabar Hill. Poor and middle-class Indians remained largely concentrated in squalid conditions on the northern periphery of the Fort precinct. The growing metropolis's need for improvements in sanitation, housing and living conditions was brought into clear focus by the deadly plague of 1896.

After the plague, the Bombay City Improvement Trust was created in December 1898 with a name that encapsulated its mandate. It set about developing large plots of its northern landholdings to reduce overcrowding in the south. Between 1898 and 1930, it worked on several housing developments in cooperation with the Bombay Municipal Corporation. From Gamdevi to the Parsi and Hindu housing colonies in Dadar, the middle-class neighbourhoods built under the Improvement Trust's direction were well-planned and community-minded.

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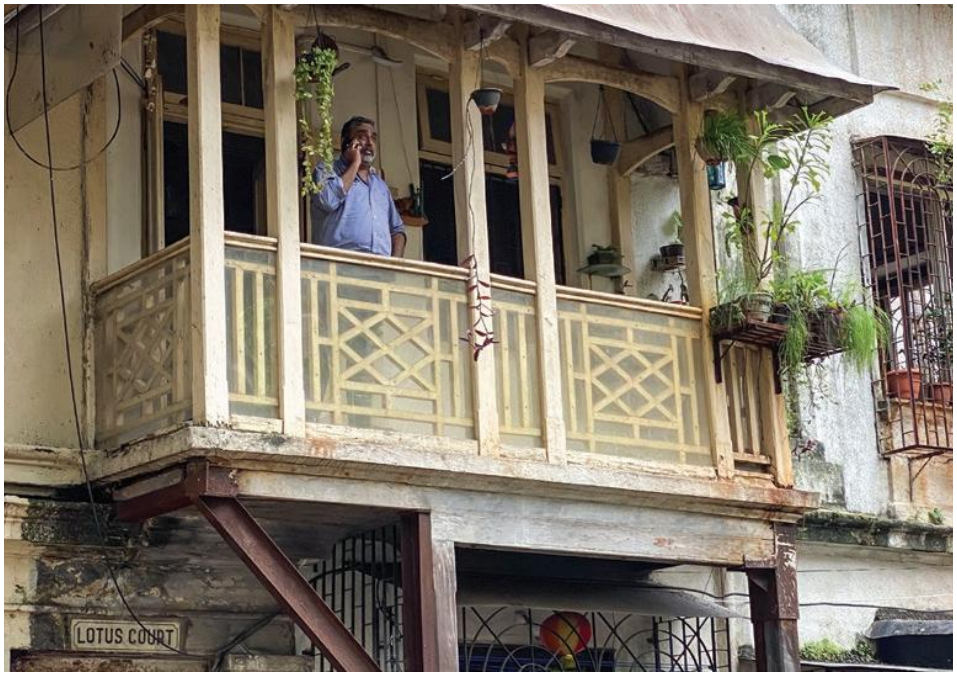

GAMDEVI'S OLD BUILDINGS ARE ADORNED WITH BALCONIES THAT SERVE RECREATIONAL AND SOCIAL FUNCTIONS.

IMAGE CREDIT: AARAN PATEL

Gamdevi attracted people who wished to live in single-family homes as well as those who wanted to own flats in colonies. Gujaratis, like the diamond merchant Revashankar Jagjeevan Jhaveri, built mansions like Mani Bhavan, which was Gandhi's headquarters between 1917 and 1934. Communities such as the Konkani-speaking Brahmins from Chitrapur built the Saraswat Co-operative Housing Society, which was founded in 1915 and is the oldest such society in Asia.

Regardless of whether these were private homes or affordable flats for middle-class families, Gamdevi's buildings were unified by sound design and development principles. The effect of a well-laid out ensemble was created by standard plot sizes, regulation of 'height of buildings in relation to the adjoining open spaces as well as concern for common open spaces between buildings to ensure good ventilation', as Sharada Dwivedi and Rahul Mehrotra note in *Bombay: The Cities Within*.

Gamdevi is defined by its scale, which is achieved through a combination of low-rise buildings and high-density development without compromising on people's mobility and access to open spaces.

'To supplement housing and institutional land for which the city was in short supply, the layouts combined a mix of uses within a pre-determined master plan', Dwivedi and Mehrotra write. These contextual regulations emanated from an understanding of the city's needs and trust between authorities and citizens. Together, this combination of attention to form and function led to urban cohesiveness and a sense of community.

Gamdevi is a self-contained neighbourhood and has a range of public spaces and institutions such as the adjoining municipal market, Gowalia Tank Maidan (which later came to be known as August Kranti Maidan, after Gandhi launched the Quit India Movement there in August 1942), and institutions of learning like Saint Columba High

School, Bhartiya Vidya Bhavan and Wilson College.

The neighbourhood also includes historic temples, a police station, fire brigade post, post offices and banks like the Shamrao Vithal Cooperative Bank. With the Grant Road railway station within walking distance, Gamdevi is well-connected with the rest of the city. Additionally, there are numerous bus stops on adjoining arterial roads, each not more than 5 minutes on foot from the centre of the precinct.

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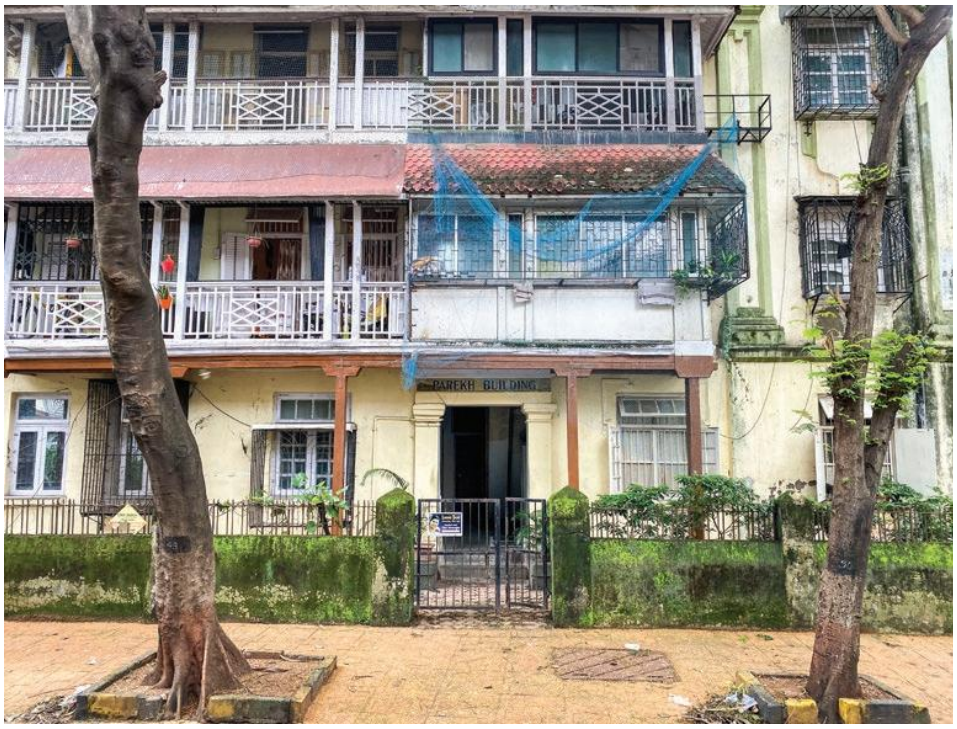

ARTERIAL ROADS AND BYLANES HAVE WIDE FOOTPATHS WITH LARGE BASINS FOR OLD TREES.

IMAGE CREDIT: AARAN PATEL

Walking around Gamdevi today, in contrast to other parts of the city, we can appreciate the primacy given to pedestrians. This is of great consequence in Mumbai, where one out of four people walks to work, and many citizens walk from their homes to taxi or rickshaw stands, bus stops and train stations.[i] While safe and well-shaded streets benefit everyone, they are especially important for women and children.

Along Gamdevi's main roads and inner lanes, there are wide footpaths on both sides of the street with planters for old chanothi, mango and laburnum trees. These trees provide respite from direct sunlight, air purification and habitat to birds. They also play a key function in reducing the effects of urban heat islands being created by excessive concretisation.

As Indian cities rapidly lose their green cover, it is worth dwelling for a moment on Gamdevi's trees. When Mumbai experienced unprecedented rainfall, and high velocity winds up to 100 kmph in August 2020, on the Saraswat Housing Colony side of Gamdevi, a few trees did lose their branches, but none were uprooted. (Similarly, on Mumbai's iconic Marine Drive, even though the trees on the promenade bore the full force of the south-west winds, only four trees were lost of around 130 trees between the Princess Street Flyover at its midpoint and its southern tip were lost. This was because of the thoughtful, wide basins and choice of hardy badam trees.)

Unfortunately, in the other half of Gamdevi that is home to Mani Bhavan, a number of trees were uprooted. Across the city, hundreds of trees fell in areas where footpaths have been concretised or overrun by road-widening efforts.[ii]

For each tree lost, citizens bear serious social and economic costs. These include injury or loss of life when trees fall on pedestrians and property damage when trees collapse on cars and compound walls. In the aftermath of disasters, in addition to working on pressing matters such as fixing overflowing drainage systems and maintaining the supply of electricity and water, public departments also have to dedicate further labour and resources to cleaning up and restoring damage from uprooted trees. Finally, when old trees fall, citizens lose their immense ecological and health benefits, which are difficult to quantify.

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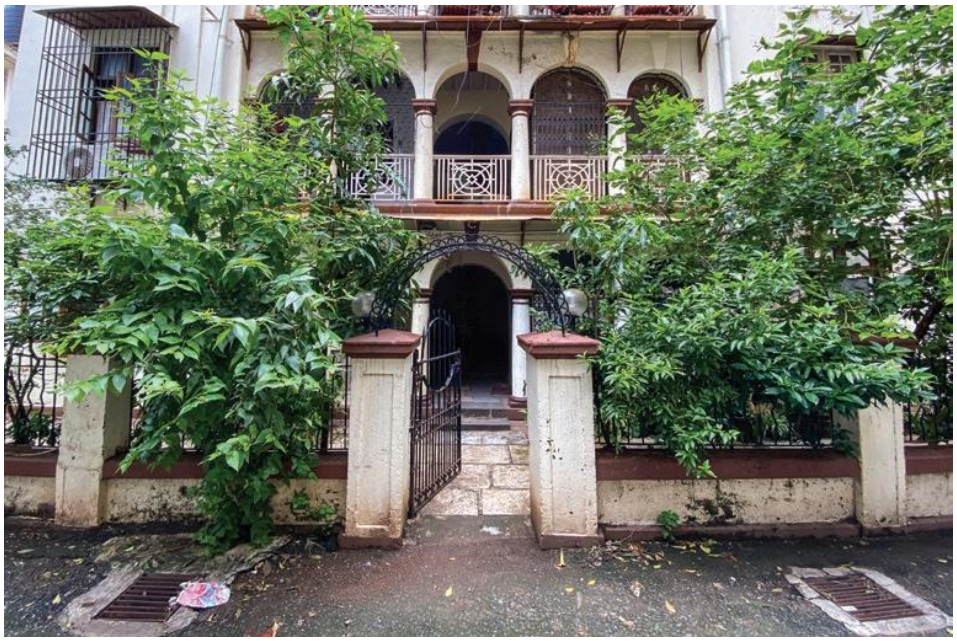
The integrity of Gamdevi's remaining green cover is no coincidence but reflects attention from residents and public authorities. Prashant Gaikwad, the assistant commissioner of the Mumbai municipality's D ward in which the precinct falls, has been leading an effort to plant more laburnum trees and widen the basins for old trees in Gamdevi to protect and nurture their roots.[iii]

This is a reflection of practical and thoughtful policy implementation.



LANES BETWEEN PLOTS OF LAND PROVIDE DRAINAGE NETWORKS AND ACCESS FOR EMERGENCY SERVICES.

IMAGE CREDIT: AARAN PATEL

Gamdevi's residents not only benefit from these sensible policy interventions but also cultivate their own pockets of greenery. Open spaces between buildings and pavements have native flowering shrubs like tagar (crepe jasmine), which attract a range of pollinating insects and have a beautiful fragrance. Instead of impermeable separations of private and public space, as found in gated communities, Gamdevi's buildings have low-compound walls with decorative elements along the periphery.

Balconies, adorned by wooden grilles or columns, offer interfaces between buildings and life on the streets, allowing

residents to interact with people passing by and also keep a watchful eye on the road. These architectural choices are oriented towards creating community and influence the attitudes and relationships between residents of a neighbourhood.

As cities prepare to face an onslaught of challenges over the coming decades, relationships between their people will contribute to their resilience. 'Strengthening and extending networks within and between cities will make urban regions more resilient to future pandemics and other crises such as climate change,' noted a recent article in Nature, the leading weekly science journal.[iv] The authors argue that alongside improving governance and public health services, city planners ought to prioritise urban ecology and fostering connections between citizens.

However, recent developments in Gamdevi have not only changed its aesthetic character but also the community's relationships. Several chawls -- residential quarters that housed street vendors and domestic workers -- have been demolished and given way to high-rise buildings.

'The new developments have no interface with the street at all,' according to Anish Shah, an architect and longtime resident of Gamdevi. 'The changing face of architecture is emblematic of less openness and transparency, and an increasing divide between the old and new residents.'

Unfortunately, these issues are not unique to Gamdevi but stem from Mumbai's diluted regulatory environment and piecemeal and rapacious approach to building. Mumbai's Development Plan 2034 has watered down several important construction regulations, such as by allowing Layout Open Spaces on elevated podiums instead of at ground level.

RECENT DEVELOPMENTS HAVE ALTERED THE CHARACTER OF THE NEIGHBOURHOOD.

IMAGE CREDIT: AARAN PATEL

This presents several problems, according to Cyrus Guzder, trustee of the Urban Design Research Institute. 'If buildings consume Layout Open Spaces with hard construction, then there is no porous ground left between plots in the city,' he noted. As a result, water will not drain into the ground. During heavy downpours (which are becoming more frequent), if buildings are constructed on raised plinths instead of at street level, water flows directly onto the streets.

The shortcomings of such cheek-by-jowl development are evident in areas such as Lower Parel and Prabhadevi, which have experienced construction booms in the last decade. Rather than demonstrating any cohesiveness or integration with neighbourhoods, buildings climb on top of each other while competing for views of green spaces such as the Race Course. These areas suffer from near-permanent gridlock and experience acute flooding each monsoon.

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Mumbaikars have fewer interactions with people on the street and fewer reasons to experience public services, they have begun to support initiatives to privatise the commons. This extends to policy choices that undermine the importance of public spaces and gardens, pedestrian access and public transportation, which are key to the city's environmental resilience.

WITHOUT THOUGHTFUL POLICY INTERVENTIONS, ISSUES AROUND WATER -- TOO LITTLE ACCESS OR TOO MUCH THROUGH FLOODING -- COULD DEEPEN DIVIDES BETWEEN COMMUNITIES.

IMAGE CREDIT: AARAN PATEL

Successive policy decisions that have put privileged citizens first have made street vendors, migrant workers, and domestic and office workers who live in sprawling low-income communities largely invisible. Even though they have been neglected and underserved, essential service personnel from sweepers to municipal labourers to delivery workers have been brave and tireless through the course of the pandemic. The city's streets and sewers have been routinely cleaned, and water and electricity services have been consistent apart from momentary challenges during disasters.

But in the coming years, as the city battles the pandemic and grapples with an economic crisis, it may face a shortage of people

in essential services. This was the case after the plague of 1896 as the poor citizens, fearing unsanitary conditions in the city, fled to their homes in villages. While lauding municipal interventions to mitigate the spread of Covid-19 in communities like Dharavi, we must also remember the decades-long failure to address the spread of communicable diseases such as tuberculosis.

'The incidence of tuberculosis is much higher in Slum Rehabilitation Authority buildings than surrounding areas,' according to Guzder of UDRI. According to Mumbai's latest development plan, open spaces for slum rehabilitation buildings have been reduced to 1.5 metres between buildings. 'While that could be feasible if buildings were three or four storeys high, the Development Plan 2034 makes exceptions for them to be 20 storeys-plus,' Guzder said.

As a result, the lower floors become breeding grounds for tuberculosis as the narrow alleys between buildings turn into dumping grounds, and residents are permanently deprived of sunlight and close their windows to avoid the rotting stench of detritus. The intervals between SRA buildings leave no room for nature, recreation or the provision of emergency services.

For Mumbai to emerge stronger on the other side of this crisis, there is a moral and economic imperative to address the issue of providing affordable, well-designed and sanitary housing for all of its residents. The inequitable conditions of contemporary Mumbai are not sustainable and eclipse the city's more egalitarian past.

Of course, Mumbai faces many more constraints today than it did a century ago. When planning the city's recovery, the Improvement Trust had access to several large plots of land and had to design guidelines for a population that was just under 1 million people, according to the 1911 census. Today, Dharavi alone is estimated to have 1 million people, and the population of the

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Mumbai Metropolitan Region is likely over 20 million people.

Building new neighbourhoods for the city's middle class and disadvantaged residents in the wake of Covid-19 presents an opportunity to get things right. 'Urban form -- with its networks of buildings, transport and streets, which are some of the longest-lasting components of the economy -- once built, will sustain its spatial patterns for decades,' as explained by Navroz Dubash and Radhika Khosla of the Centre for Policy Research. 'These spatial patterns, in turn, will lead to corresponding patterns of energy consumption, on the order of similarly long timescales.'[v]

Particularly during the summer months, Indian cities are already experiencing the impact of heat stress and resultant demands for cooling in the residential sector, according to a study by the Centre for Science and Environment, a public interest research and advocacy organisation based in Delhi.[vi] Poor urban design that doesn't account for thermal comfort results in high dependency on air conditioners, which are energy-intensive. Although Indian manufacturers are increasingly investing in energy-efficient appliances, there is a need for financial incentives from the government and efforts to boost consumer awareness about these products. Acting in concert with these initiatives, cities can play an important role in reversing an energy-intensive trend by opting away from 'carbon lock-in' modes of infrastructure and transport.

Gamdevi's thoughtful approaches to ventilation between buildings, access to public transportation and incorporation of nature reflect how community-oriented regulations for the urban form can create not only aesthetic ensembles but also influence patterns of energy usage across electricity and transportation sectors. This is particularly important because 'city-level interventions can greatly mitigate the effects of heat stress,' according to the United Nations.[vii]

Planners often look to international examples when thinking about how to make Indian cities 'world-class', but these comparative frameworks understandably lack context. Fortunately, in Gamdevi, we have the opportunity to learn from a neighbourhood that emanated from a crisis and took into account local needs. Its equitable and sensitive principles could inform Mumbai's planning framework for future development. The question is whether we have the imagination and will to create a more inclusive, sustainable city.

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