Redeveloping Dharavi: The case of slum redevelopment in Mumbai

Introduction

“Instead of a neighbourhood characterised by misery, I find a bustling and enterprising place, packed with small-scale industries defying their circumstances to flourish amidst squalor. Rather than pity, I am inspired by man’s alchemic ability to thrive when the chips are down.”

- Simon Crerar

Figure 1 - Mumbai’s Dharavi slum. Source: Dharavi Slum, accessed October 7, 2017, Retrieved from: https://dharavislumindia.weebly.com/dharavi-problems.html

The Dharavi slum in Mumbai is a sprawling 525-acre mosaic of matchbox houses with rickety roofs and questionable sanitation housing over one million residents in the centre of India’s glitzy financial capital of Mumbai. Dharavi’s residents, like most slum dwellers around the world, live in illegal housing units lacking basic amenities and suffer from social exclusion. A lack of recognized land titles relinquishes the government from its responsibility of providing the residents with basic public services like water and sanitation.

3 By unofficial estimates, the population density of Dharavi is 10 times that of other parts of Mumbai, i.e., as high as 1200 people per acre.
leaving its residents at the mercy of the local mafia for the provision of goods. In the burgeoning, glamorous city of Mumbai, Dharavi is often perceived as a shameful eyesore for the city’s inhabitants.

Despite the poor living conditions in the Dharavi slum, it is an urban space unlike any other, with truly unique characteristics. While the slum is essentially a collection of cramped shanties, the land on which it sits has an estimated value of over $1.3 billion due to its prime location\(^4\) at the intersection of two major railway lines and proximity to Mumbai’s central business district.

![Figure 2 - Dharavi is located in the centre of the city, surrounded by wealthy neighbourhoods. Source: India Net Zone, 2016, Accessed October 7, 2017, retrieved from: http://www.indianetzone.com/7/dharavi_maharashtra.htm.](image)

This fact has not gone unnoticed by real estate sharks, who have been lobbying to take over a piece of Dharavi land for private real estate development. But what truly makes Dharavi iconic is that the slum is a thriving microcosm of small industries like pottery, leather products, recycled products, baked items and knock-off apparel, which generate an annual turnover of over $650 million.\(^5\) Amidst the poor living conditions, constant political tugs-of-war and neglect, Dharavi has emerged as a shining example of human enterprise.

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The slum also contains 28 temples, 11 mosques, 6 churches, 50 banks and 60 government schools. It even hosts its own mobile design museum, where residents showcase items produced in the slum, emphasizing the fact that Dharavi’s residents have been able to create a good community life for themselves despite neglect from the local government.

![Figure 3 - Dharavi design museum set up by residents. Source: Design Museum Dharavi, accessed January 10, 2018, retrieved from: https://www.domusweb.it/en/interviews/2016/12/22/design_museum_dharavi.html.](image)

The state government of Maharashtra has long recognized the issue of overcrowded living conditions in Dharavi as well as the added complexities of high land value and deeply entrenched communities, most of whom are second generation residents in Dharavi. The government’s attempts at redevelopment have been ongoing since 1971. However, even after years of drafting and redrafting plans, only one small sector of five of the slum has been redeveloped, with no sign of further developments in the area. With this five-decade long impasse, will the government and residents ever reach a mutually agreeable plan?

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6 Dharavi resident and tour guide from Be The Local Tours in discussion with the author, December 2017.
7 Data on Dharavi’s population and housing rentals are unofficial estimates, and hence most likely grossly underestimated.
8 Mumbai is located in the state of Maharashtra
9 Discussion with Dharavi resident December 2017
Background

By the turn of the century, nearly 32% of the world’s urban population—one billion people—were living in slums.10 While slums are generally associated with being symbols of abject poverty, in reality, their pervasiveness stems from a combination of rapid urbanization, urban poverty and a shortage of affordable housing.

The desire to pull their families out of poverty brings swaths of people moving from rural to urban areas in search of gainful employment. This effect has been seen in Mumbai since the 1980s, with large numbers of migrants settling in the Mumbai Metropolitan Region (MMR).

<table>
<thead>
<tr>
<th>MMR/components</th>
<th>Core</th>
<th>Inner Zone</th>
<th>Outer Zone Urban</th>
<th>MMR (Urban)</th>
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<tr>
<td>Pop. increase (in millions)</td>
<td>2.05</td>
<td>1.72</td>
<td>1.17</td>
<td>4.94</td>
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<tr>
<td>Nat. increase (in millions)</td>
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<td>0.45</td>
<td>0.17</td>
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<tr>
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<td>% contrib. of migration</td>
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<td>73.8</td>
<td>62.3</td>
<td>56.6</td>
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</tbody>
</table>

Table 1 - Size of population increase and contribution of migration to population increase in MMR. Source: Ram B. Bhagat, Gavin W. Jones, “Population Change and Migration in Mumbai Metropolitan Region: Implications for Planning and Governance”, Asia Research Institute, Working Paper Series No. 201 (May 2013) p.20

Current Dharavi residents migrated to Mumbai from different parts of the country around 1958, when several factories were set up in the area.11 Traders and craftsmen set up small residential colonies by trade—potters, leather workers, tanners and embroidery workers. These settlement patterns persist to this day in the slum.

While residents run lucrative businesses within the slums, they still continue to live in very small makeshift houses due to unaffordable rental prices in Mumbai. Rental prices can be as high as Rs. 25,000 ($380) per month for a one bedroom apartment in localities close to Dharavi, compared to Rs. 5,000 ($80) per month rental for a 100 square feet shanty in Dharavi.12 Dharavi residents also find that the circumstances of their upbringing often lead to social stigma, especially when the current generation looks for employment opportunities outside Dharavi. However, residents are unwilling to move out of the city due

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12 Dharavi resident and tour guide from Be The Local Tours in discussion with the author, December 2017
to the high concentration of economic and commercial activities in Mumbai, particularly in Dharavi.


This issue of unaffordable rental housing and distortions in the Mumbai land market began with the introduction of the Maharashtra Rent Control Act of 1999. The rent control significantly reduced the incentives for landlords to maintain rental properties as they would receive minimal returns for doing so. The law exacerbated the problem of inadequate housing and the immobility of tenants, and also produced a mismatch between prices and household incomes. In such a highly regulated market, developers have no incentive to provide affordable housing, and thus only develop luxury or semi-luxury apartments that cater to a small segment of the population.

Poor sanitation is also a major problem in slums. Many of Dharavi’s residents live in the highly industrial parts of the slums where waste water from leather tanning and cloth dyes flows in the streets, exposing the residents to health hazards like diarrhoea, cholera, malaria and parasitic infections. Residents are often excluded from a clean water supply, which both increases their risk of contracting diarrheal diseases and also poses a serious threat of cross-

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contamination due to illegal tapping of the city’s water pipes. Some efforts have been made by the government in the last five years to provide tap water, electricity and pipe gas connections to households. A lack of clean toilets still remains an issue: because many houses do not have attached bathrooms, roughly ten houses share one ill-maintained communal bathroom. The practice of open defecation is common and presents health and safety issues like diarrhoea, enteropathy and even death.

The question of redevelopment

Policy failure has been a recurring theme in the story of Dharavi’s decades old slum redevelopment efforts.

The state government of Maharashtra first recognized the importance of redeveloping Dharavi in 1971. The Slum Improvement Programme (SIP) of 1972 was intended to provide basic amenities to the slum like water, electricity, latrines and sewage disposal, but could not implement these plans as there was no comprehensive census on the slums of Mumbai. 46 years later, no such census exists.

In 1976, the government attempted to give slum dwellers “legitimate status”. Residents received photo identities and were required to pay a small sum of money, of which a fraction was paid to the government as land rent. This scheme allowed some of the dilapidated housing to be reconstructed, and tenants were allowed to build lofts over the existing housing structures. Water and electricity were also provided. However, the scheme ended by 1991 due to administrative difficulties that arose from a lack of accurate records of the number of residents and houses. Further augmenting these complexities was the fact that the part of the slum that was not owned by the government was under the de facto control of slum lords, who did not want to cede control by allowing redevelopment. This allowed the government control over only the land that they owned.

The World Bank funded the Slum Upgradation Programme (SUP) of 1985. Under this programme, existing slum land was leased out to cooperative groups of slum dwellers at affordable rates, and loans were granted for environmental and housing improvements. However, the conflicts over land value remained as asset distribution to families was unequal, leading to discontent among certain populations in the slum who did not receive the programme’s benefits. This program was also unable to overcome a key hurdle in slum redevelopment, which was that a large portion of the slum was situated on private land that had been encroached and thus the land could not be easily acquired for slum redevelopment. Slum dwellers and private land owners worked on a “don’t ask don’t tell” basis with each other and the municipal government.

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18 Ibid
19 Ibid, p. 204
20 Rohit Jagdale, “An overview of slum rehabilitation schemes in Mumbai, India” (Report, University of Texas, 2014)
The same year saw the rollout of the Prime Minister Grant Project, under which Rs. 30 crores were sanctioned for the redevelopment of Dharavi. Under this scheme, housing societies were granted autonomy in choosing their own architects, while the government would hire building contractors. Plans were made to widen roads in the slum to make it more accessible for vehicles. However, this project could not be successfully implemented as the planners had not accounted for the tremendous population density of the slum, which made it difficult to relocate residents to allow for development work.

In 1995, the government set up the Slum Rehabilitation Authority (SRA) under the Maharashtra Housing and Area Development Authority (MHADA) to address the issue of slums in the state through a Slum Rehabilitation Scheme (SRS). This scheme appeared to have ironed out many of the previous schemes’ shortcomings. Under the SRS, every slum dweller accounted for in the 1995 electoral vote was eligible for benefits. To attract private developers, the scheme introduced the concept of Transferable Development Rights (TDR), which would enable developers to transfer part of the surplus rights generated under SRS to other parts of the city. A central monitoring and clearing agency was also set up.21

The plan was not successfully implemented, however. It required, but could not obtain, the consent of three quarters of the slum, and by 2000, only 3,486 units of approximately 100,000 were redeveloped.22 Several residents who received these redeveloped units simply rented them out for an additional source of income and continued to stay in their makeshift shanties.23 The scheme was also viewed as being geared towards benefiting private developers instead of focusing on redevelopment, as it authorised the transfer of freed up land to private developers despite there already being a high population density in Dharavi.24

In 2004, the government proposed a Dharavi Redevelopment Project in which developers would rehouse Dharavi’s residents in 300 square feet apartments built in high rise tower blocks, thus freeing up space for their own development projects. While the tower blocks resolve the issue of hygiene and sanitation that previously plagued the slum, it has encountered major resistance from its residents. Residents feel that a tower structure destroys the community sentiment that has allowed Dharavi’s micro industries to thrive for so many years, and drastically increases the already alarming population density of the area.25

The state government also commissioned architects to develop plans for the redevelopment, but the ever-growing population and close proximity of the slum to the business district in the heart of the city, always meant that plans would be formulated and then eventually fall through due to implementation challenges.

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21 ibid
22 ibid
23 Dharavi resident and tour guide from Be The Local Tours in discussion with the author, December 2017
24 Only those who could prove residency as of 1995.
## Table 2 - Summary of various Dharavi redevelopment plans

Two positive spillovers for the Dharavi community emerged from the redevelopment challenges, however. First, the regular breakdown of redevelopment plans led to the creation of the Alliance, a consortium of organizations that includes the National Slum Dwellers Federation of India (NSDF), the International Slum Dwellers (ISD), Mahila Milan and the Society for Promoting Resource Centers (SPARC). Second, the Slum Upgradation Programme of 1985 required slum dwellers to organize themselves into housing cooperatives that would be given secure tenure rights at a small rental fee per month.26 These cooperatives exist to this day and are growing in strength.27 But while these cooperatives exist within the slum, they are not always effective in achieving their goals in collaboration with municipal and state government officials. Third, though the redevelopment has not taken place, “squatters” are counted as “residents of a notified

26 ibid
27 Dharavi resident and tour guide from Be The Local Tours in discussion with the author, December 2017
slum” in the census during the preparatory stage when the slum is mapped and surveyed. This official recording brings advantages to squatters such as the government provision of ration cards, which make the residents eligible for welfare schemes such as food distribution.

Stakeholders

**Dharavi residents**

Dharavi’s residents can be broadly divided in two: residents who live and work in Dharavi, and slum lords, who have clout within the slum. Many families have been living in Dharavi for generations and have created a thriving life for themselves despite neglect from the government. These residents have been able to use the overcrowded, sprawling structure of the slum to their benefit for business, and are thus unwilling to compromise on the structure for the sake of redevelopment. Additionally, businesses in Dharavi are able to obtain massive profits due to virtually no regulations on business.

As is the case with most aspects of Dharavi, residents have their own informal system of governance and politics. This system is dominated by the slumlords, who have everything to lose if Dharavi is completely redeveloped and formalized. Thus, these slumlords use their influence to bribe officials and block redevelopment plans.

**Local municipal government**

The MHADA is responsible for redeveloping Dharavi, but has been wary of taking any drastic action towards redevelopment such as demolishing the slums and rehabilitating slum dwellers into tower blocks out of fear of backlash. Some residents of the city have made demands for redevelopment. MHADA has yet to put a sustainable plan in place, however.

**Other residents of the city**

A large portion of Mumbai’s population belongs to the middle class, who consider the urban poor and the slum dwellings they live in an eye sore. Their impression of the slum dwellers is that they make the city dirty, thus preventing it from becoming a truly global city. The residents are also cognisant of the fact that there is a lack of political will to do much about the slum dwellers, due to the political clout of some of the slum lords and community leaders to whom politicians pander for favours.

**Private real estate developers**

Real estate developers’ importance as key stakeholders is primarily derived from their economic and political power. These developers are in possession of vast plots of vacant

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28 Slum colonies on state government land are called “surveyed slums”, and slums on private land are referred to as “notified slums”. The land on which the Dharavi slum is located, is partly owned by the BMC, partly private and partly by the central government.


land, on which they have more incentive to develop multi-storey luxury apartments than affordable housing.\footnote{A previous Act which is now repealed, the Urban Land (Ceiling and Regulation) Act, 1976 actually gave the government the power to take vacant land and develop it to house lower and lower-middle income families.}

**Civic society**
In the last few years, civic society, particularly the Alliance, has been increasingly active in its promotion of in-situ redevelopment for the residents. But being aware of the reality that actual redevelopment might take many more years, they have engaged in successful rebranding efforts for Dharavi in the meantime. The Dharavi Design Museum was started in 2016 to showcase the products that are designed and manufactured within the slum. Additionally, several Dharavi tours are organised by companies like Be The Local and Reality Tours to display to the public the productive and thriving nature of Dharavi.

**Lessons learnt from slum redevelopment in other countries**
Slums are ubiquitous throughout the world. Below are some examples of how governments in other countries have been able to deal with redevelopment of their slums and rehabilitation of their residents.

**Singapore**
Singapore’s Housing Development Board’s (HDB) affordable housing policy has been widely lauded for successful housing policies. In the 1960s, the Singapore government cleared out all slum settlements to make way for affordable public housing, primarily high-rise tower blocks. Flats could also be purchased through the Central Provident Fund, a mandatory savings scheme. The proportion of Singaporean residents living in affordable, clean public housing has gone from 9% to 80% since the implementation of the policy.\footnote{S\footnote{S}\footnote{S}\footnote{S}ingapore Housing Development Board, “HDB History and Towns”, accessed December 14, 2017, \url{http://www.hdb.gov.sg/cs/infoweb/about-us/history}}

Some of the principles that inspired Singapore’s public housing policy may not apply to the political, social or economic conditions of Mumbai today, however. Dharavi has a very vibrant social structure that has developed organically over decades, which might make a community-centric approach more effective than a top-down one like that of Singapore’s public housing policy. Further, Dharavi’s residents have always opposed the proposal for high-rise tower construction, believing that such construction would jeopardize their communal business structures.

**Colombia**
Colombia’s capital Bogota had many illegal settlements previously, but the situation has improved since the 1990s when the government took an interest in the installation of public services and construction of roads with participation from residents.\footnote{United Nations Human Settlements Programme, “Global Report on Human Settlements”, 2003, p.88} Additionally, the municipal government bought the land around the slum from private developers and
capped the sale price to residents at $15,000 to make it affordable.\textsuperscript{34} Bogota’s strategy for slum redevelopment took a ground-up approach and placed the onus on the government to provide basic public services. Such a strategy could work in Dharavi.

\textit{Thailand}

The Baan Mankong (or “secure housing”) project in Thailand, which was launched in 2003, has been extremely successful in addressing the housing problems of Bangkok’s poorest urban citizens. The plan has improved living conditions of over 90,000 households in 1,546 communities across Thailand from 2003 to 2011 at a low cost of approximately $570 per family.\textsuperscript{35} The success of this program has been largely credited to putting the city’s slum dwellers at the centre of the policy making process. Slum residents initiated the survey and development of settlement plans and also developed budgets and a plan for secure tenure housing. They then worked with NGOs and consulting organizations on implementing these plans.\textsuperscript{36} The Thai government also set up the Urban Community Development Fund (UCDF) to provide low interest rate loans to self-organized urban poor groups.\textsuperscript{37} The goal of this fund was not only to provide loans to slum dwellers, but to develop the community holistically by empowering them to save and raise credit on their own.

This model, with its redevelopment conducted through coordination between the government and the slum community, may be a feasible example for Dharavi. It may be difficult to rally community leaders and ensure that the government is willing to hear their ideas, however. The establishment of a fund might also work for Dharavi, since it would strengthen the slum community through wholesale loans and empower them through credit facilities for their businesses.

\textbf{The neoliberal argument}

Neoliberalism is relevant to slum redevelopment in several key ways, according to slum redevelopment literature. First, slum redevelopment involves a shift from government intervention to reliance on the free market, such as when strategies involve private developers, builders and financial institutions.\textsuperscript{38} Second, the literature argues for a shift of responsibility from government to civil society, as previous failures of top-down approaches are generally attributed to governments’ lack of knowledge of community issues and preferences. Third, some argue that decision making should be rescaled from state to local governments, which are better positioned to engage with the local communities.

These arguments could be used to inform Dharavi’s redevelopment as well. Since the Slum Rehabilitation Scheme of 1995, the government has attempted to be involved in

\textsuperscript{34} Maureen Nandini Mitra & Ravleen Kaur, “Dharavi’s Real Estate Threat”, \textit{Down To Earth}, accessed December 15, 2017, \url{http://www.downtoearth.org.in/coverage/dharavis-real-estate-threat-6911}

\textsuperscript{35} Emily Norford and Terra Virsilas, “What Can We Learn from Thailand’s Inclusive Approach to Upgrading Informal Settlements?”, World Resources Institute, accessed December 14, 2017, \url{http://www.wri.org/blog/2016/05/what-can-we-learn-thailands-inclusive-approach-upgrading-informal-settlements}

\textsuperscript{36} ibid


\textsuperscript{38} Mukhija, V., “squatters as redevelopers”, in Jan Nijman, “Against the Odds: Slum Rehabilitation in Neoliberal Mumbai”, \textit{Cities} 25 (2008), pp. 73-85, p.74
redevelopment efforts as facilitators rather than being directly invested in these efforts. The introduction of Transferable Development Rights demonstrates the government’s market orientation. The clout of the community leaders in Dharavi is strong, and can be leveraged for redevelopment efforts. At the time of writing, no private developer has come forward to bid on the latest iteration of the Dharavi redevelopment project. When a similar situation presented itself to another slum in the city, the slum’s cooperative society Ganesh Nagar D took it upon itself to drive the redevelopment with the help of an NGO situated in the slum as well as financing raised through a private national bank. Finally, the municipal government’s housing body, MHADA, rather than the State government of Maharashtra, has been involved in redevelopment talks.

Epilogue

Over the past two years, proposals have been called for new redevelopment plans for Dharavi, with an emphasis on those that account for community views. One such proposal calls for the government to purchase the land in Dharavi from private developers and place it in a community trust governed by former landowners, community members and neighbourhood associations. In this plan, the land will not be owned by private developers or the government, but by the people who are most vested in the redevelopment’s success. These proposals call for the government and community leaders to create a plan for redevelopment that is conducive to the slum’s thriving business, accounting for the provision of clean water and sanitation services and secure land tenure. Funding for redevelopment from the central government could be utilized to this end. There are also suggestions that the government should enable access to finance for Dharavi residents to support the thriving businesses. The government would thus formalise and regulate Dharavi’s massive informal economy, provide public goods and grant of property rights to its citizens.

There are numerous hurdles to tackle in implementing these ideas, however. Many private companies and real estate developers may be opposed to the idea of prime real estate land being legally occupied by slum dwellers through the establishment of a communal trust. They may threaten to withdraw support for the local government. Further, the plans assume that the Dharavi community will be able to be proactive in its participation in redevelopment plans. Many residents, understandably, consider “redevelopment” to mean a loss of their livelihoods and homes. As such, the residents’ designated community leaders will have to rally the whole community behind a common redevelopment plan. Further, any suggestion to bring Dharavi’s large and thriving informal economy into the formal fold may also be met with a lot of resistance by the slum dwellers, since these business do not follow any regulations and are thus able to significantly drive down their production costs. And finally, land issues in Mumbai are always mired by systemic corruption, which creeps in at every stage of policy planning and requires careful navigation.

Further questions:

1. Should the municipal government compromise on the community and spirit of Dharavi for the sake of development?
2. If you were the leader of a cooperative in Dharavi, how would you put forth your community’s views to redevelopers to get the most realistic outcome?
3. As the head of the Maharashtra Housing and Area Development Authority, how would you manage the political interests of local politicians with the need to successfully redevelop the slum?


Annex
Exhibit B - A generalised profile of Mumbai slum dwellers⁴⁰

✓ Most are first and second generation migrants, mostly from Maharashtra
✓ Most migrated to the city for economic opportunities
✓ Most heads of households are wage earners, some self-employed, some in the informal sector, but most face job insecurity
✓ Most work in close proximity to the slums
✓ About 85% of households report that they “own” their dwelling, though many do not hold title
✓ In most slums, there are 75-246 persons per public toilet
✓ About 75% of the slums consist of one room and cover an average area of 200 square feet
✓ Average household income was Rs. 3,500 in 2001


⁴⁰ Deshpande (2004) in Jan Nijman “Against the Odds”, p. 76