

Think Bottom-up: Can You Use that in Mumbai Slum Upgrade?

Uday Athavankar

Emeritus Fellow, Industrial Design Centre, Indian Institute of Technology (IIT Bombay), Mumbai, India

The paper deals with housing projects involving upgrading and redevelopment of large informal settlements (slums) occupying what has now become a costly urban real estate. It focuses on problems peculiar to Mumbai. The first section reports the current understanding of in-situ upgrading of informal settlements and its financing. The second section argues that peculiar Mumbai context requires that we change our understanding of upgrade to include in-situ rehabilitation, where free tiny apartments for the dwellers are financed through incentive regulation and cross-subsidy. It then goes on to elaborate current deterrents to in-situ rehabilitation like development financing, delays and cost overruns due to conflicts. Considering that the state will never have resources to provide houses to its poor, section three discusses the role an enabler of housing. Later, it argues that as an enabler it cannot restrict its activities only to policymaking and lists what more it can potentially do. It also suggests that policies cannot treat all slums as equal and find one grand solution that fits all. The fourth section summarizes the discussion and pleads that along with taking short-term view, it is important to see slum redevelopment in the context of the future growth and development of the city and the region.

1 The problem of not so affordable ‘affordable housing’

In developing economies, considering the income and savings of the urban poor, even affordable housing is an expensive proposition. Slums exist as the only affordable alternatives. The problem is even more acute in large metropolises with high cost of living and needs a special focus. In Mumbai slum dwellers have already ‘settled’, their dwellings and occupy relatively large parcels of land that have over time, become costly urban real estate. (See figure 1) Besides, these dwellers have the power of numbers with them and insist that they should be rehabilitated in the same place. So, the paper treats housing alternatives to Mumbai slums as a special class of the housing upgrade problem. The problem in itself is complex and compounded further by severe space constraints. The problem is not only complex, but is more urgent and politicized besides being challenging due to severe space constraints.



Figure 1: Densely packed houses occupy almost the entire plot leaving little room for upgrade

Most slums in Mumbai are an outcome of a slow, incremental, internally driven bottom-up process that mixes residential, commercial and industrial units. The logic of the decision to build is based as reactions to what already exist and what can be immediately built contiguous to it. As the opportunities grow, more are ‘accommodated’ within the available space. Small bottom-up decisions somehow add up to a whole. Top down approaches (like proposing a master plan) often devalues what was developed organically over time (Patel & Paul, 2010: 6). Imposing such an approach to regulate the development on an existing settlement is completely inconsistent with existing processes and is often a violent disruption to on-going activities. How do we then control, regulate and upgrade what was never formally regulated, particularly when it is a functioning habitat? How can we ensure that it is least disruptive to the community? In answering these questions, in-situ upgrading of housing is often shown as a way forward.

1.1 In-situ slum upgrading and bottom-up approach

In-situ upgrading of slum housing is supported by an increasing number of urbanists, experts and NGOs. They firmly believe in the idea of a bottom-up approach to development (Mukhija, 2000: 67; Grima, 2012). There are several merits in this argument. Experience has shown that such a people's action-centred approach ensures continuation of their current diversity, retains the existing community networks as well as economic activities intact. The decisions in such a bottom-up process are demand driven and so, incremental. Involvement of dwellers in the development process ensures that they identify with the outcome and this emotional attachment can lead to better maintenance of the new housing. Conceptually, upgrading is cheaper and easier to implement.

The popular slum upgrading strategy is to enable dwellers by legal transfer of property rights to them (Mukhija, 2000: 174). Tenure security encourages residents to invest in improvements. Often, dwellers themselves implement such projects with some help of NGOs, building contractors and experts. Because small independent property development can be cumbersome, groups of dwellers often get together to collectively upgrade their own houses. So, in practice, the area development approach is a preferred option.¹ Mukhija shows that though in-situ slum upgrading is used successfully elsewhere, literature on this topic is based on squatters on larger open lots that allow enough room to add to the existing houses (Mukhija, 2000: 99). How valid is this approach for Mumbai's densely packed slums?

2 Densely packed Mumbai slums: Redefining upgrade

Mumbai has been grappling with the slum problem for the past four decades. Implementation of various slum improvement schemes and policies over four decades shows that after initial experiments with modest slum improvement/upgrade schemes, it has now come around to accept the idea of in-situ redevelopment as a viable option.² Taking Dharavi slum improvement in Mumbai as a context Mukhija shows that, though upgrade is a viable proposition elsewhere, it is not necessarily suitable for densely packed slums on high value lands in Mumbai, where each hut almost occupies the entire plot. His well-researched case study shows that when the cost of the land is high as in Mumbai, the only way to realise the potentials is by combining incentive Floor Space Index (called FSI and refers to the amount of floor space that you can build on a plot) with in-situ redevelopment, where the dwellers get to own a small but free apartment of 180 to 225 sq. ft. (18 to 22 M²) in a new in-situ construction. Though such apartments belong to middle class building typology alien to the slum dwellers, they get more valuable housing and social respectability by staying in an apartment. He suggests that in order to cash-in on potentially high land value, three things must happen. 1] Lots have to be aggregated into bigger units. 2] Additional incentive FSI must be claimed by the dwellers by acting collectively to redevelop the property and 3] Construction must be cross-subsidized by selling balance FSI in the market (Mukhija, 2000: 175). His documented Mumbai experience offers compelling evidence that the idea of in-situ upgrade must become inclusive to accept in-situ redevelopment.

2.1 New incentive regulations: FSI as a tool

Mumbai handles slum rehabilitation by tweaking development control regulations so that more housing units can be vertically packed in a smaller footprint. This has created high-density pockets with problems of access to light and ventilation. These compromises are justified as it frees substantial ground space for creating new housing stock for the rich whose money cross-subsidises the free apartments. The new slum redevelopment programme had an overwhelming support of the dwellers (Mukhija, 2000: 173). In spite of these problems, the scheme was projected as a win-win situation. Note that each new scheme offered a better deal to the dwellers and was expected to create a major spurt in creating housing stock for the poor. The actual picture on the ground is different.³

¹ In Mumbai, NGOs like SPARC are involved in efforts to organizing the current residents into activist groups and in giving them a voice. In fact, SPARC has gone a step further. They have been supporting the concept of people generating ideas and then getting the authorities to accept them as development precedents, thus getting some form of acceptance from the authorities (Appadurai, 2001). They have gone and created their own ideas of home and sanitary facilities that they run as business models.

² Slum improvement programme was launched in 1971 with little success. In 1985 it was replaced by World Bank assisted in-situ slum upgrading but was abandoned, partly because another scheme introduced in 1987, with special grant from prime minister. New Slum Redevelopment scheme (SRD) was introduced in 1991, which offered almost free in-situ apartments. It allowed high densities (FSI 2.5) so that extra units built can be sold and thus cross-subsidize the construction and ensure profit for the developer. It continues to be in force with minor revisions, like developer claiming Transfer of Development Right (TDR refers to floor area that you can transfer and build elsewhere).

³ Though in the short-term it looked like a good alternative, nobody thought that city might be losing in the process. We will return to it later in section four.

2.2 Conflicts and delays cost money

Slum improvement projects on the ground are actually pegged with delays, because there are too many different agencies involved in sanctioning, financing and construction, approval of building design as well as later changes and sanction of housing loans. When larger groups are involved, act of completing legal formalities and consenting to legal agreements delays progress. A lot of time is also wasted in negotiations and sometimes litigations between multiple agencies, each trying to rightfully protect their institutional interests. Interestingly, cross subsidizing also brings in new conflicts that delay the construction, particularly when incentives increase with every new state scheme. For instance where there is a chance of additional gains through extra FSI, all the stakeholders claim larger shares of the gain. Splitting of the gains from the surplus FSI for sale becomes the bone of contention. This also means taking new sanctions, new agreements, retiring earlier financial commitments and so on. Decision-making often leads to conflicts based on claims to high value assets (Mukhija, 2000: 176). In an inflationary economy, delays always increased the holding cost of the project leading to unaffordable cost overruns.

Policy formulations based on incentives is a tough task, because the incentive FSI should be proportionately higher when the real estate value of the area is lower. Besides, stakeholders' agreeing to the quantum of incentives is always a problem. Newspaper reports show that in Dharavi redevelopment, there were large differences in the calculations of incentive FSI by the developer's lobby and the NGOs, both accusing each other. Such resultant delays are inevitable.

2.3 Sourcing finance for upgrade and development

Self Help Groups (SHGs) have been supporting the idea of depending on savings by women for upgrading. But, in reality in India these savings are often restricted to their own small extra earnings and can contribute in a small way. So, complementary finance as loans is required. Housing finance institutions under the government (like HUDCO in India) have mandate to help low-income groups and give them low interest loans. But it has conditions of institutional guarantee for the loans that are not easy to fulfil. Besides, the loan amounts are small so you need other sources. Commercial financial institutes give loans to salaried and not to self-employed individuals. They also demand tax returns and land documents as a collateral for loans. This is currently a major bottleneck.

Unlike upgrade, redevelopment is capital intensive and needs a smooth cash flow. As we saw earlier, in Mumbai, state policies since 90s have encouraged slum redevelopment to attract private finance. In fact, a similar approach has also been adopted for redevelopment of old buildings. Mukhija has analyzed the role played by public and private actors. He showed that lack of legal framework for development finance forces developers to borrow from private sources, making it difficult for them to participate in slum development projects. Unable to depend on conventional development finance⁴ developers are forced to borrow from private sources, with high cost of credit and the high debt-servicing rate. Recognizing the weak link in the chain, state had floated a separate company to offer development finance. It was expected to borrow from capital market and from international development agencies. It is unfortunate that with the change in the government, the focus shifted away from this idea.

Redevelopment projects tend to be large enough to potentially attract other avenues of funding. NGOs, if involved in getting people together and forming a group, can attract some international funding from development agencies and trusts that offer low interest loans. It is also possible to finance projects from Corporate Social Responsibility (called CSR) funds or by committing to eco-friendly construction, claiming carbon credits and trading them to reduce the costs. This is administratively cumbersome but collectively, as a society together with NGOs, it is a viable option for subsidising costs. Besides the initial payment, alternate avenues of revenues are required to protect dwellers from defaulting.⁵ They are not discussed here.

2.4 Upgrade vs. redevelopment: A Critique

In-situ upgrades maintain the built form precedents set by dwellers through cultural practices and actions tend to look more 'human'. They reflect their notions of 'home and good living'. Such a pragmatic approach limits local resistance and so, it is seen as a more workable housing improvement strategy by dwellers. The security of tenure is considered a critical precondition for this approach to succeed. But it is difficult to claim that in-situ upgrade is without any problems. There are four points that should be noted. First, the approach is unlikely to work in densely populated Mumbai slums. Second, getting stakeholders to

⁴ The conventional development finance generated by substantial contribution coming from pre-sell as well as from investors, who sell apartments at higher rate later, cannot be used. Considering the uncertainties, conflicts and delays that plague such projects these avenues are harder. Though formal development finance is cheaper, the developers cannot use the land as collateral as it is given to the societies of the dwellers in SRA schemes. Due to risks, it is difficult to use this route.

⁵ The chances of defaulting on repayments are high unless opportunities are created for generating income through formal and informal involvements in economic activities. Upgrading is of limited use, if it fails to maintain and in fact increase the economic vibrancy of the slums. So, regulations should permit commercial use of spaces to support small businesses by dwellers.

agree to the framework/changes particularly when overlapping interests are involved and when the consequences of decisions are likely to affect their current living style and conditions. Third, all tenants do not necessarily benefit from tenure legalisation. Interventions tend to increase property value and lead to danger of gentrification. There is also a chance of them getting displaced due to increased rents (Mukhija, 2000: 100). Forth and the most worrisome, a major reorganization in layout as a part of larger vision of the city, even if functionally justified and essential for larger good of the community, is not easy to implement.

Unlike in upgrades, cross-subsidy and incentive regulations are used as strategies to redevelop slum housing in Mumbai. Unfortunately, it is not an alternative that can be used for all affordable housing situations across Mumbai. Redevelopment is feasible when the property values are high enough to pay for the construction cost of the rehabilitation as well as the free sale area. Besides, the sale component should also pay for the procedure related expenditure, debt-servicing as well as generate corpus for future maintenance cost (Mukhija, 2000: 165). It is also difficult to use this strategy in un-buildable locations (hilly areas), Coastal Regulation Zone (called CRZ and refers to area along the coastline regulated by special development laws. A substantial part of Mumbai land and also slums are in this zone). Problems will be encountered where existing dwellings are larger than 225 sq. ft. (22 M²) or the site is small or where free FSI will not adequately subsidise. Any policy that relies on market mechanism would also depend on the market conditions that prevail from time to time. So, to view redevelopment projects based on cross-subsidy and incentive regulations, as panacea for all would be a mistake.

The World Bank recommends that the state and particularly local elected bodies should become 'enablers' and limit their involvement to creating new and conducive policies to facilitate financing by private agents. Can state involvement be really limited to only housing policy formulation? If yes, how do we ensure that the key elements of bottom-up people friendly approach are maintained? Would this role differ for upgrade and redevelopment?

3 Defining the enabling role of the state

In slum upgrading the state's role is limited, but not insignificant. It must transfer land rights to motivate dwellers to upgrade or up-cycle their settlements. Besides, it needs to create new development regulations and financial bodies to give low interest loans and encourage NGOs to organize dwellers to make collective efforts. However, the experience of slum redevelopment in high value property markets like Mumbai reveals the difficulties that private funding creates and that the state cannot do without giving institutional support. The discussion now tries to redefine the role of the state, partly based on what has been reported earlier by Mukhija and other authors.

3.1 Create policy options and not a policy

The development potentials of housing in each slum pocket in Mumbai differ considerably. Factors like current density, incentive FSI, proximity to lucrative locations, access and cost of development (terrain, topography) change the actual costs involved in land development and construction. Policies must be flexible enough to account for these contextual issues. Mukhija advocates differentiated property right approach that accounts for the variations in location and value (Mukhija, 2000: 133). It will be unwise to look for one grand idea, when what is called for are several alternative policy options to meet diverse local conditions. The state has shown this flexibility to facilitate housing for the poor. For example, the 'Rajiv Awas Yojana'⁶ offers several schemes that account for building on the state as well as private lands and encourages different combinations of public private partnerships.

➔ *State policies should allow flexibility to account for contextual issues like land value.*

3.2 Encourage a bottom-up voice to ensure balance

Studies show that the efforts to manage projects through dwellers initiatives get stalled by problems of development finance. On the other hand, once private finance is sourced and the investors, the private sector and non-profit sector come in, the chances are that they will control the project and dwellers will lose control. With many new stakeholders in the project, ideas cannot remain completely bottom-up. However, as Mukhija argues, a balance is possible, if the land title is transferred by the state to the dwellers/societies beforehand. Forming a society gives dwellers a bigger voice and allows them to bargain more effectively with private developers to balance the benefits. Mukhija claims that the policy has a chance of success if it embraces both demand driven and supply driven development, thus enabling affordable housing (Mukhija, 2000: 137).

⁶ Rajiv Awas Yojana: Guidelines for Slum-free City Planning, Ministry of Housing and Urban Poverty Alleviation, Government of India, New Delhi

- *State policies should facilitate a collective voice by forming housing societies and transferring land titles to them. The policies should also recognise the role the NGOs play in getting people to form societies.*

3.3 Create balanced and transparent incentive regulations

Policies should also deal with creating incentives through changes in legal framework and regulations that account for difference in the value of the slum land. Compensatory FSI cannot be uniform to all slum pockets. Flexibility and element of subjectivity in judging the value of the property require that the process to be completely transparent. SPARC also talks of need for transparency (Patel & Paul, 2010: 50). In developing incentives, there has to be an element of fairness towards dwellers as well as the city, else it can lead to pockets of vertical slums.

- *State should promote balanced and transparent incentive regulation.*

3.4 Remove barriers that create delays

In an inflationary economy, any delay can potentially out-price a housing project. Delays are common when multiple agencies are involved each enforcing its procedures and red tape. They can raise the costs of reconstruction and need to be tackled quickly. Cutting delays requires structural changes in the way the redevelopment process is administered.

- *State should create single window clearances in all institutions involved.*

Most critical is a dedicated local conflict resolution authority with a power to take quick decisions. It should ensure that the progress is not hampered.

- *State could create a conflict resolution authority with a structure to quickly resolve issues.*

There are also typical and repetitive disputes between developers, financing agencies and dwellers. State recommended standard legal contracts can help avoid disputes and if they arise, help solve them quickly.

- *State could create 'model' legal agreements to avoid litigation.*

3.5 Promote development finance institutions

Development finance is a major hurdle in smooth progress of construction activity. There is a need to create financial institutions that specialise in development finance. Also, additional support by way of development insurance schemes is needed (Mukhija, 2000: 163).

- *State should encourage formation of development finance institutes.*

3.6 Promote housing as a social cause

If gains or profits become secondary, conflicts are likely to reduce. Such situations are best handled by alternate structures like social business. Muhammad Yunus developed the idea of social business as an alternate structure for delivery of social good. From the two types that he mentions, the first type is worth considering. It is based on no loss, non-dividend company owned by investors who plough the gains back into the company (Yunus, 2010: 1-31). When CSR funds are used, such projects are best taken care of by specially created corporate social enterprises. These institutions could undertake turnkey design, approval and construction activities using rules and legal agreements standardised by the government.

- *State could consider tax concessions if such social institutions exclusively take up affordable housing redevelopment projects.*

The paper began by reporting the advantages of that the bottom-up voice and need for legal transfer of land rights to ensure participation of the community in upgrading housing. Later, based on developments in slum upgrade in Mumbai, it was argued that in dense settlements on high value lands demand that we include in-situ redevelopment, where the dweller gets to own a tiny apartment through cross-subsidy. In the next section, attempt will be made to show that policies and solutions that solve local problems with local quick fixes do not consider their impact on larger issues. It is planned to explore some answers to questions, 'should we accept upgrade/ redevelopment as a way forward or should it be only a part of the housing policy due to the current exigencies?'

4 From quick fixes to larger planning goals

In most cases, slums are already in place and it is imperative to act quickly, but it will be incorrect to treat slum redevelopment strategies as a panacea. It should be a part of broader housing provision strategies as well as address larger planning issues. Let us understand the larger perspective. First, slums accommodate 52 percent of Mumbai's population. But to treat them as autonomous units for the purpose of policy making would be unfair to other city inhabitants. For example, there is large lower and lower middleclass that resides in tiny houses in densely populated old and now dilapidated cessed buildings. These building need

urgent redevelopment. In being fair to this group, Mumbai is trying to grapple with the problem with similar incentive regulations. But what are its larger implications? What are the negative effects of such policies on rest of the city?

Take the case of granting incentive FSI. The transfer of development rights (TDR), that is part of the cross-subsidy for redevelopment, is used within the city. It is further adding to the population density and congestion. The city is grappling with connectivity with monstrous interventions like expressways; monorails and metros planned on congested existing narrow access corridors. Is it possible to provide additional services and infrastructure as population densities go on increasing? Could the idea of incentive FSI be repeated 50 years down the line? If so, what will be the state of the city and its infrastructure then? The city is likely crumble under the weight of its own growth. Can redevelopment decongest the city, improve infrastructure and give the city a human scale?

4.1 Balancing regional distribution

Currently all development regulations are city specific. What if this constraint is relaxed? TDR between cities can help siphon off congestion and ensure development of the regions around. It is worth considering multiplying the incentive TDR quantum and converting them into mix-use applications (residential/commercial/industrial) if TDR is transferred to smaller cities. There is also a need to build incentives for the smaller cities to accept this FSI. It could include more commercial and industrial activities to create jobs and generate revenues. Industries moving out of Mumbai can use this FSI to set up their industries and worker/staff housing in these regions.

Any delay in upgrade and redevelopment can be critical in Mumbai context. But at the same time short-term quick fixes are bound to create problems for the city and its future. Equally important is the necessity to develop processes for anticipating development of 'slums in the making'. There is sufficient knowledge available on where and when the slums may emerge. We should question if current policies really offer win-win solutions. Regulations that link overall objectives of decentralization of dense urban settlements with slum redevelopment efforts could offer the much talked about win-win.

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