

# The Hidden Costs of “In-Situ” Slum Redevelopment in Mumbai

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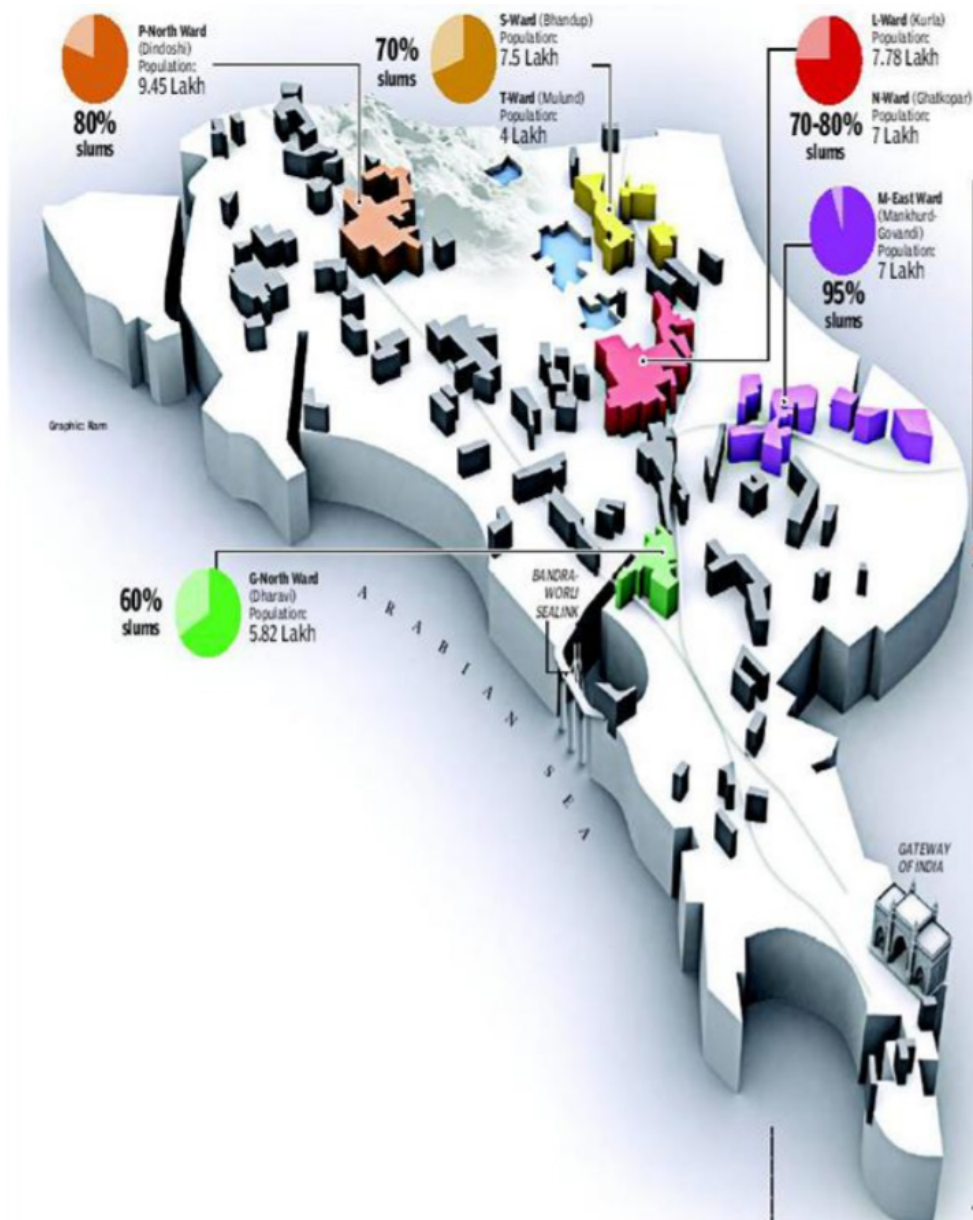
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## INTRODUCTION

India has a population of 1.3 billion out of which 9% live in slums (Census, 2011). The construction industry constitutes of 8% of the GDP and the capital expenditure spent on infrastructure is 45% (Kumar, 2017). Mumbai is India's financial and commercial capital, housing a total of 12.4 million in greater Mumbai, 41% of which live in slums cramped in about 8% of the city's land area (Census, 2011). This is believed to be the largest proportion and absolute number of slum dwellers in the world. With demand accelerating and supply restricted because of regulatory, institutional and other constraints, slum areas have persisted and grown, and a large informal housing market has emerged (Deshmukh, 2013).

FIGURE 1:

*Major slum pockets in Greater Mumbai - 2011 (Deshmukh, 2013)*



## SLUMS

A Slum has been defined as a residential area where dwellings are unfit for human habitation due to reasons of dilapidation, overcrowding, faulty arrangements and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light, or sanitation facilities or any combination of these factors which are detrimental to the safety and health (Census of India, 2011). Slums in Mumbai proliferate due to the high in-migration, income inequality, and lack of economic growth. This has resulted in the formation of excessive, obsolete regulation by the government, which has failed to mitigate the lack of affordable housing (UN-HSP, 2003).

## INDIA HAS A DOMINANT BLACK ECONOMY. WHAT IS A BLACK ECONOMY?

Every economy produces goods and services. These are produced, distributed, and financed to reach the consumer. There is also the sale of property which leads to the transfer of assets from one person to the other. Thus, two kinds of incomes are generated in an economy. The first kind is linked to production and distribution and is called 'factor' income. The second kind is called 'transfer' income—this is generated through the sale and purchase of assets. No production is associated with these activities (except for a tiny amount of brokerage). India's black economy is estimated to be 62% of GDP generating (at 2016–2017 prices) about \$1.7 trillion. The size of the black economy was estimated to be 4–5% of GDP in 1955, 7% in 1970, 18% in 1980–1981, and 40% in 1995–1996. This last estimate (2013) included 8% contributed by illegal activities like drugs, extortion, and smuggling. A further 32% is generated from legal activities like manufacturing, finance, trade, and construction. According to Dr. Arun Kumar an estimate of the black economy in 2012–2013 was 62% of GDP. That percentage remaining constant for 2016–2017, it works out to be \$1.7 trillion.

Cash is usually used as working capital to pay wages to workers or to purchase things needed to carry on business. Essentially, a black economy consists of activities through which black incomes are earned (Kumar, 2017). Black and white incomes are intertwined, for example; when one buys real estate, one has to pay a black component first (say 30%) and then the remaining white component. So, the seller earns a black and white income simultaneously. Similarly, if cement producers under-invoice production by a certain percentage then they generate a black income from the undeclared production and a white income from the declared production. The two incomes are simultaneously generated (Kumar, 2017).

The income of any business is the revenue minus the incurred cost. So,  $Profit = Revenue - Cost$ . This profit is split into two parts. One is declared in the balance sheet of the enterprise and the other is not declared and is called the off-balance sheet profit. Many businesses maintain two books of accounts, one for income tax purposes and another for themselves. So,  $White Profit = Declared Revenue - Declared Cost$ . Not only are the black and the white incomes generated through the same activity, but one can also convert one's black income into white and vice versa. One can obtain from a broker a book entry in, say, the share market. By registering a profit one can convert one's black to white. Similarly, by taking a loss, one can convert white into black. So, someone's black becomes white and another's white becomes black (Kumar, 2017).

## CORRUPTION IN INDIA

Every government that has been elected to power has been corrupt and has fostered corruption for its own benefit. For the public, illegality, corruption, and bribes are a constant feature of their lives and they are helpless in rectifying the situation. People in their day-to-day dealings with the government or private organizations that provide basic services like justice, electricity, phone and gas connections, healthcare, housing, etc. face constant harassment (Kumar, 2017). In India, the elites appear to be lawless. Being in power allows them to enforce rules

but also gives them the capacity to bestow favors, often involving quid pro quo. People exploit their positions, avoid duties, and accept bribes. From the lowest to the highest, the elite tend to flout rules. These infractions could range from running traffic lights to bigger ones like violating environmental regulations, building by-laws, or zoning by-laws. In India, cities are characterized by the breakdown of urban infrastructure, unhygienic conditions, disease, and large-scale pollution. Even where the private sector has set up posh townships, adequate facilities are lacking because the developer has flouted rules to make an extra buck. Those who buy property from such developers then suffer the consequences for a long time (Kumar, 2017).

### **HOW DOES THE BLACK ECONOMY AFFECT POLICY, IMPLEMENTATION, AND GROWTH OF THE COUNTRY?**

Due to the black economy, government policy fails, and society is unable to achieve its goals, especially in critical areas like literacy, health, and basic infrastructure. There is failure in government spending and implementation of policy. Assets are not created commensurate with the activity or the expenditures. For example, sub-standard material is used for the construction of roads; they get damaged and potholed with the first spell of rain and must be repaired. Consequently, a large part of the road budget is spent on repair work rather than building new roads. The net result is that there is "social waste" and the impact of investment in the economy is lowered. So, effectively, it is like having less investment than shown on paper (Kumar, 2017).

The black economy results in loss of revenue of about 25% of GDP at current rates of taxes. In comparison, the fiscal deficit is currently around 4% of GDP (2016) for the Central Government. Had the black economy not existed, the revenue deficit which underlies the fiscal deficit and rising debt in the budget would have been wiped out so that the fiscal health of the government would have been better. If the black economy had been white, there would have been a surplus in the budget and there would be much greater investments in infrastructure and poverty mitigation. Also, with less corruption, expenditures would be more effective (Kumar, 2017).

There is a shortage of resources for plans, capital expenditure, and essentials like education and health. Indirect taxes are high and borrowing rates are higher than they need be. The latter results in higher interest; over time it has increased to such a high level that it has become the largest component of the revenue budget. So, businesses essentially borrow money with one hand and return it with the other. Due to inflation of costs, prevailing black margins, and higher indirect taxes, the rate of inflation is higher than it needs to be. The quality of production is poor, and this leads to the waste of resources and lower competitiveness in the export markets (Kumar, 2017).

Businessmen and traders belonging to the triad are the biggest culprits where tax evasion is concerned, in connivance with the executive and the political class. It is this nexus that enables the country's controls and regulations to be violated systematically. The common man is helpless in the face of this powerful nexus. Its existence is the single biggest reason why the development of India is stunted (Kumar, 2017).

### **HOUSING SCHEMES IN INDIA**

Housing is a basic social aspiration and indicator of living quality. Affordable Housing is socio-political agenda in any democratic country which ensures every family has shelter (Mukherjee et al. 2016). India intensified its search for alternate options to affordable housing as around 1.77 million people live without a roof over their heads (Jha, 2013), approximately 10 million houses are in a dilapidated state, and approximately 7 million are living in unlivable conditions (MHA, 2011).

Since independence in 1947, the Government of India has devised several housing policies that address the Economically Weaker Section (EWS) and the Low-Income Group (LIG) (Hingorani, 2011). Table 1 critically reviews these policies:

**TABLE 1:**
*List of Housing Policy Initiatives in India since Independence (Mukherjee et al. 2016)*

Period	Settings	Initiatives	Outcome
<b>1950s and 1960s</b>	<p>During this period government was the Primary policy driver. Housing was considered more a welfare job than economic growth contributor.</p> <p>Private sector intervention was limited to HIG housing section. There was lack of coordination among different programs due to absence of strong housing policy. Development funds were majorly coming from central government subsidies.</p> <p>In the latter part state governments shared responsibilities other than funding. Construction of institutional buildings and affordable housing for poor were considered as government's responsibility. Major emphasis was on cost reduction, whereas there were shortcoming in master planning and land assembly for the poor</p>	<p>1952: Subsidised Housing Scheme for Industrial Workers and Economically Weaker Sections</p> <p>1954: Low Income Housing Scheme</p> <p>1956: Subsidised Housing Scheme for Plantation Workers</p> <p>1956: Slum Clearance and Improvement Scheme</p> <p>1959: Middle Income Group (MIG) Housing Scheme</p> <p>1959: Rental Housing for State Government Employees</p> <p>1959: Village Housing Projects Scheme</p> <p>1959: Land Acquisition and development by State government</p> <p>1961: Rent control Act</p>	<p>Due to lack of funds, targets were not achieved, on the contrary existing housing stock was reduced in the process of dismantling of depleted units, meant to reconstruct/ relocate.</p> <p>Public housing was out of reach both in terms of economic affordability and physical location from workplace. This resulted in the growth of informal illegal private housing, which was affordable and well-connected, but of low quality built environment.</p> <p>State governments were failed to assemble land for housing for urban poor. Growth in HIG/MIG housing stock was appreciable in proportion to demand.</p>
<b>1970s and 1980s</b>	<p>Housing in this period was considered more than just a shelter. High subsidies were replaced by cross-subsidization and cost recovery.</p> <p>In-situ slum upgrading and site and services programs were introduced instead of shifting of slum-dwellers.</p> <p>Formal housing finance organizations like HUDCO, HDFC, NHB were formed.</p> <p>State governments started sharing more financial responsibility. Central Government's role was changed to facilitator to state government and private sector instead of direct actor.</p> <p>Importance of community participation was encouraged. Housing stock in urban sector had better growth in-comparison to rural section</p>	<p>1970: Housing and Urban Development Corporation (HUDCO) established</p> <p>1971: Provision of House Sites of Houseless Workers in Rural Areas 1972: Environmental Improvement of Urban Slums</p> <p>1977: Housing Development Finance Corporation (HDFC) established</p> <p>1980: Sites and Services Scheme 1981: Scheme of Urban Low-Cost Sanitation for Liberation of Scavengers</p> <p>1980: Sites and Services Scheme</p> <p>1981 &amp; 89: Scheme of Urban Low-Cost Sanitation for Liberation of Scavengers</p> <p>1985: Indira Awas Yojana</p> <p>1986: Urban Basic Services Scheme (UBS)</p> <p>1987: National Housing Bank (NHB) established</p> <p>1988: National Housing Policy (NHP)</p>	<p>HIG/ MIG benefited most from housing finance organizations.</p> <p>Government employees were the main beneficiaries of public housing schemes.</p> <p>Despite efforts, there were lag in community participation and growth was slow in weaker sections' housing.</p> <p>Rapid changes to institutional frameworks of programs and their structure slowed the process further.</p>
<b>1990s and 2000s</b>	<p>Urban Local Bodies came to the driving seat with more powers and responsibilities with 74th Constitutional Amendment Act.</p> <p>Central government's role was that of an enabler and participation from private sector was encouraged.</p> <p>Still it was the MIG and HIG group who took maximum advantage of housing finance institutes.</p> <p>Focus was given on research of building material and affordable construction technology. Housing was integrated with urban services and public transportation under JnNURM.</p>	<p>1990: Building Materials and Technology Promotion Council (BMTPC) replaces NBO</p> <p>1990: Night Shelter Scheme for Pavement Dwellers</p> <p>1990: Nehru Rozgar Yojana's Scheme of Housing and Shelter Upgradation (SHASHU)</p> <p>1990-01: Urban Basic Services for the Poor (UBSP)</p> <p>1996: National Slum Development Program (NSDP)</p> <p>1998: 2 Million Housing Program 2001: Valmiki Ambedkar Aawas Yojana</p> <p>2005: Jawaharlal Nehru National Urban Renewal Mission, JnNURM</p> <p>2007: National Urban Housing and Habitat Policy (NUHHP)</p>	<p>Shortage of housing continued in LIG/ EWS sectors. Land assembling was still an issue. UBLs were seem to lack in capacity to cope up with the targets.</p> <p>Community participation and Policy approach under JNNURM had limitations and thus resulted in inappropriate usages of funds.</p>
<b>2010 onwards</b>	<p>The shortage of housing units meant for LIG/ EWS is the target to reduce; contribution from government, private sector and beneficiaries are identified.</p>	<p>2013: Rajiv Awas Yojana</p> <p>2015: PMAY- Housing for all</p>	<p>Private participation in affordable housing was encouraged under RAY</p> <p>Private sector Investment increased in AH, as is considered as Infrastructure projects.</p>

This paper takes a closer look at the schemes that relate to in-situ slum redevelopment in Mumbai, such as the Pradhan Mantri Awas Yojana (PMAY) by the Government of India (GoI) and the Slum Redevelopment Scheme (SRS) by the Slum Redevelopment Authority (SRA) of Mumbai. The GoI has set a scheme on the national level and the SRA is responsible for its implementation at a local level—that of the City of Mumbai.

## PRADHAN MANTRI AWAS YOJANA (PMAY)

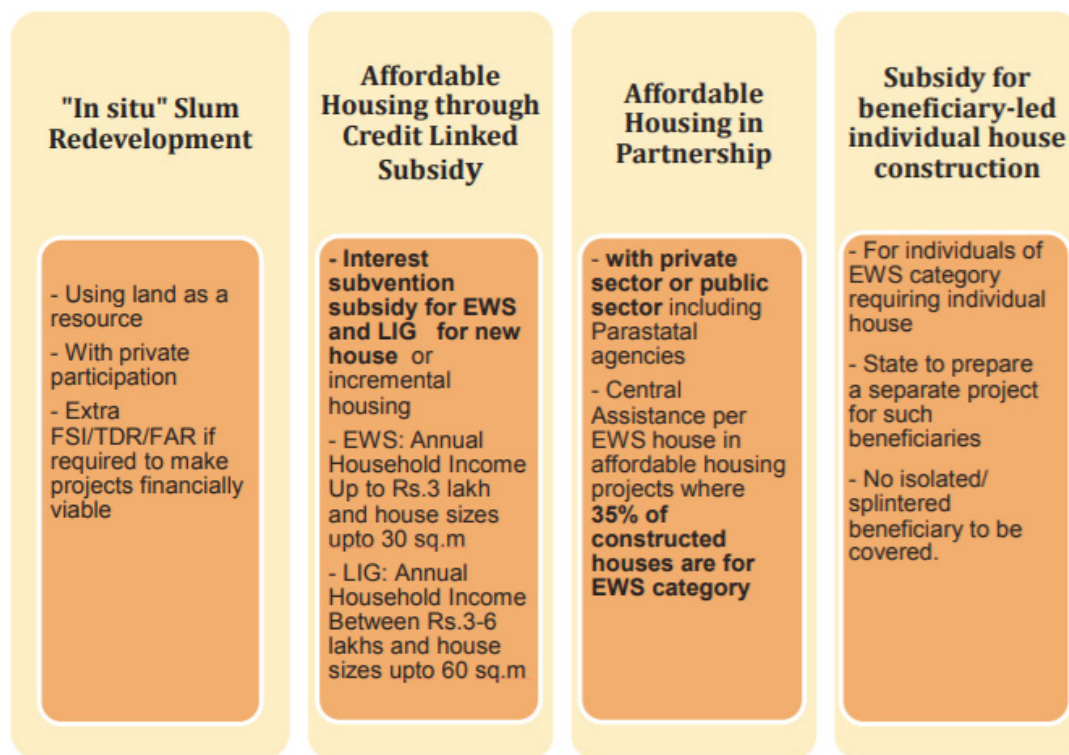
The Government of India, Ministry for Housing and Urban Poverty Alleviation devised a scheme in 2015,

Pradhan Mantri Awas Yojana (PMAY), with a mission statement that said, "Housing for All (Urban)." This aimed to provide a "pucca" house with water connection, toilet facilities, and 24/7 electricity supply and access. The mission seeks to address the housing requirement of urban poor including slum dwellers through the following program goals (Figure 2):

1. Slum rehabilitation of slum dwellers with participation of private developers using land as a resource
2. Promotion of affordable housing for weaker section through credit-linked subsidy
3. Affordable housing in partnership with public and private sectors
4. Subsidy for beneficiary-led individual house construction

FIGURE 2:

*The four goals under the Pradhan Mantri Awas Yojana (PMAY) (MHUPA GOI 2015, 2)*

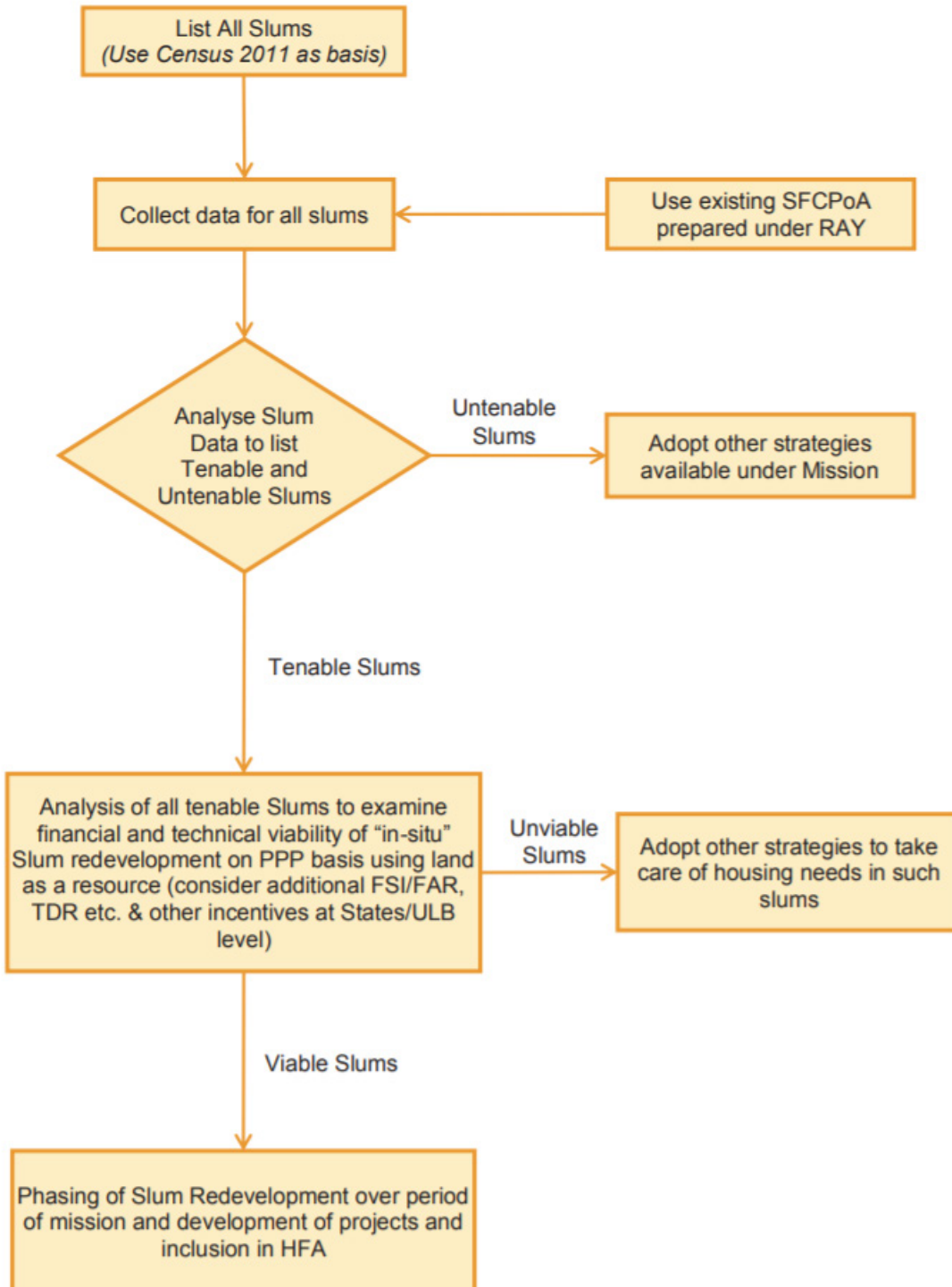


#### "IN SITU" SLUM REDEVELOPMENT

The "in-situ" slum rehabilitation approach aims to leverage the locked potential of land under slums to provide houses to eligible slum dwellers to bring them into the formal urban settlement. Under this scheme, slums which are located on central government land, state government land, ULB land, or private land are permissible for "in-situ" redevelopment. Private partners for slum redevelopment are selected through an open bidding process. State governments and cities, if required, provide additional floor area ratio (FAR)/floor space index (FSI)/transferable development rights (TDR) for making slum redevelopment projects financially viable. A slum rehabilitation grant of \$1,430 (Rs. 1 lakh per house), on average, would be admissible for all houses built for eligible slum dwellers in all such projects. States/UTs will have the flexibility to deploy this central grant for other slums being redeveloped for providing houses to eligible slum dwellers with private participation, except

FIGURE 3:

Guidelines for cities to analyze which slums are eligible for "in-situ" slum redevelopment (MHUPA GOI 2015, 5)





slums on private land. This means that states/UTs can utilize more than \$1,430 per house in some projects and less in other projects but within an overall average of \$1,430 per house calculated across the state/UT (MHUPA GOI 2015, 2-3).

Each state/UT's implementing authorities are supposed to decide whether a particular slum can be redeveloped with private participation or not using land as a resource and to provide houses to eligible slum dwellers. This is based on analysis of slums by the city (Figure 3). For making projects financially viable, states and cities might have to provide additional FAR/FSI or TDR and relax density and other planning norms. States/UTs may also allow commercial usage for part of the land/FAR as mixed usage of the land. A viable slum rehabilitation project would have two components, i.e. a "slum rehabilitation component" which provides housing along with basic civic infrastructure to eligible slum dwellers, and a "free sale component" which will be available to developers for selling in the market to cross subsidize the project.

Slum dwellers through their association or other suitable means must be consulted while formulating redevelopment projects, especially for designing the slum rehabilitation component. The private developers who will execute the slum redevelopment project should be selected through an open, transparent bidding process. The eligibility criteria for prospective developers can be decided by states/UTs and ULBs. The scope of work of the prospective developers should be to conceive and to execute the project as mandated by the implementing agency using its financial and technical resources. The project developers would also be responsible for providing transit accommodation to the eligible slum dwellers during the construction period.

The slum rehabilitation component should be handed over to the implementing agency to make allotments to eligible slum dwellers through a transparent process. Slum rehabilitation projects would require various approvals from different agencies as per prevailing rules and procedures in the state/UT. Project development may also require changes in various development control rules (MHUPA GOI 2015, 3-6).

## **SLUM REDEVELOPMENT SCHEME (SRS) IN MUMBAI**

The 2016 Draft Development Plan under Section 33(10) states the right of the hutment dweller in a slum is eligible for a free-of-cost residential tenement with a carpet area of 25 sq. m/270 sq. ft, including a balcony, bath, and water closet, but excluding common areas (MCGM 2016, 140). A slum rehabilitation project shall be considered preferable when submitted through a proposed or registered co-operative housing society of hutment dwellers on site. The said society shall include all the eligible hutment on site while submitting the SRS and give an undertaking to that effect to the SRA. Where 70 percent or more of the eligible hutment-dwellers in a slum and stretch of road or pavement contiguous to it at one place agree to join a rehabilitation scheme, it may be considered for approval, subject to submission of irrecoverable written agreements of eligible hutment-dwellers before LOI (MCGM 2016, 142).

## **BUILDING PERMISSIONS FOR SLUM REHABILITATION PROJECT**

The proposal for each Slum Rehabilitation Project shall be submitted to the SRA with all the necessary documents, no-objection certificates, and the plans as may be decided by the SRA from time to time (MCGM 2016, 143).

## **REHABILITATION AND FREE-SALE COMPONENT**

FSI for rehabilitation of eligible slum/pavement-dwellers includes the FSI for the rehab component, and for the free-sale component.

In Mumbai City district (Island City), if the rehab component is 108 sq. ft (10 sq. m) of built-up area, then an additional 80 sq. ft (7.5 sq. m) of built-up area will be permitted so that this additional 80 sq. ft (7.5 sq. m) can be utilized for disposal in the open market and the rehab component subsidized.

In Mumbai Suburban district, if the rehab component is 108 sq. ft (10 sq. m) of built-up area, then an additional 108 sq. ft (10 sq. m) of built-up area will be permitted so that this additional 108 sq. ft (10 sq. m) can be utilized for disposal in the open market and the rehab component subsidized.

In difficult areas as may be notified by the SRA hereafter, if the rehab component is 108 sq. ft (10 sq. m) of built-up area, then an additional 145 sq. ft (13.33 sq. m) of built-up area will be permitted and this area of additional 145 sq. ft (13.33 sq. m) can be utilized for disposal in the open market and the rehab component subsidized.

The table below summarizes the division between the rehab component and the open market component. The ratio indicates the number of square feet of the rehab you need to build 1 square foot of open market; i.e. in the Island City of Mumbai a developer needs to build 1.33 sq. ft of rehab/subsidized housing to build 1 sq. ft of market rate housing.

	Rehab Component (sq. ft)	Open Market Component (sq. ft)	Ratio of RC/OMC
Island City	108	80	1.33
Suburbs & Extended Suburbs	108	108	1
Difficult Areas	108	145	0.75

For slum rehabilitation schemes that attempt larger agglomerated development allowing enhanced planning and quality of life, the following additional build-up-area incentive will be admissible under the free sale component of SRSs as shown in table below:

Area of the S.R. Scheme	Additional built-up area admissible under free sale component
5 acre up to 10 acres	5 %
above 10 acre up to 20 acres	10 %
above 20 acre up to 40 acres	15 %
above 40 acres	20%

(Source: MCGM 2016, 143-147)

### TEMPORARY TRANSIT CAMPS

A multistory temporary transit camp must be provided on the site itself or outside the SRA project site, or else rent compensation (of an amount mutually decided between the proposed society and the developer) should be provided to the dwellers through the construction period (MCGM 2016, 148 - 149).

### RESEARCH METHODOLOGY

The next part of my paper focuses on my individual research to understand the process of in-situ slum redevelopment in Mumbai. All the information mentioned below is based on various interviews conducted

with stakeholders from the private market—slum redevelopment developers, developers, real-estate brokers, bankers, and money lenders (names are not mentioned to uphold anonymity due to the sensitivity of the subject). The idea was to understand the incentives that drive the private market players to participate in the above-mentioned in-situ slum redevelopment scheme.

### STYLIZED EXAMPLE

I have devised a stylized example of the costs incurred by a slum redeveloper under the SRS 33(10) of the Development Control Regulations (DCR) of Mumbai. This looks at a site located in the Island city of Mumbai where a developer needs to build 1.33 sq. ft of rehab/subsidized housing to build 1 sq. ft of market rate housing. Developers usually build two separate buildings, one housing the subsidized units (SUs) and the other the market rate units (MRUs). Once the development receives the occupation certificate the developer hands over the two buildings to different cooperatives, the SUs to the SRA and the MRUs to a housing cooperative society. All figures mentioned are approximate amounts, derived from interviews with developers, and vary with every project.

		Subsidized Unit (SU) 300 sq.ft.	Market Rate Unit (MRU) 300 sq.ft.
Land Acquisition	Incentive to 'Slum' dwellers to gain 70% consensus	\$3,000	\$0
	Official Construction Permits	\$300	\$300
	Bribes for Permits - to expediate the process	\$4,400	\$0
	Rent to 'slum' household for alternative housing during construction phase (3 years)	\$5,800	\$0
Hard Costs	Construction Costs (SU: \$30/sq.ft. MRU: \$45/sq.ft.)	\$9,000	\$13,500
	Site clearance, Grading, Landscaping, Parking	\$200	\$500
Soft Costs	Architectural Fees, Legal Fees, Permits, Contingencies	\$1,500	\$1,500
	Bribes for Legal Work & Permits	\$1,000	\$0
Total Cost:		\$25,200	\$15,800
Total Cost for 1 MRU = 1.33*SU + MRU Costs		\$34,020	\$15,800
Total Cost for MRU			\$49,820
Costs at Sale	Sale Price MRU (\$250/sq.ft.)		\$75,000
	Total Costs for MRU		-\$49,820
	Brokerage (1% of Sale) + other costs at sale		-\$1,500
	Profit (Sale Price - Total Costs)		\$23,680

This table breaks down the costs incurred by the developer—land acquisition, hard costs, and soft costs to construct one subsidized unit of 300 sq. ft and one market rate unit of 300 sq. ft.

### LAND ACQUISITION

To acquire the land the developer must have a 70% consensus amongst the slum dwellers in order to start the redevelopment process. In order to gain the consensus, the developer usually has to incentivize the proposition for the slum dwellers and this is mainly done by bribing each household. The \$3,000 mentioned is an approximate bribe paid to a household to get them to agree to the redevelopment process. The MRU has no cost attached to this.

The official construction permits cost about \$300 per unit for both a SU and a MRU. In India, as mentioned earlier in the black economy section, bribes to officials are a cost most business incur. In the construction sector such bribes are prevalent to get the required permits. These bribes expedite the process which would otherwise take much longer and additionally allow the developers to fudge certain building/zoning codes. This amount of \$4,400 is almost 15 times the amount of the official permits.

Further as mentioned in the SRS the developer must provide temporary transit camps during the development process for all the slum dwelling units. The approximate estimated time period is assumed to be 3 years and rent per unit per month is approximately \$160, resulting in \$5,800 to be paid as rent.

### HARD COSTS

Developers invest more money in constructing MRUs than the SU. The quality of construction and finishing varies for the respective units. Construction costs per square foot are extremely low, ranging from \$30/sq. ft for the SU and \$45/sq. ft. for the MRU. This is reflected in the overall poor quality of the building and early deterioration of the structure and its services. There is a further lack of investment in the SU when it comes to the site planning, landscaping amenities, and parking.

		Subsidized Unit (SU) 300 sq.ft.
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	Rent to 'slum' household for alternative housing during construction phase (3 years)	\$5,800
Hard Costs	Construction Costs (SU: \$30/sq.ft. MRU: \$45/sq.ft.)	\$9,000
	Site clearance, Grading, Landscaping, Parking	\$200
Soft Costs	Architectral Fees, Legal Fees, Permits, Contingencies	\$1,500
	Bribes for Legal Work & Permits	\$1,000
Total Cost:		\$25,200

1 Subsidized Unit (SU)		
	Amount	Ratio
Actual Costs (\$56/sq.ft)	\$16,800	2
Bribes Paid (\$28/sq.ft)	\$8,400	1
Total Costs (\$84/sq.ft)	\$25,200	



### SOFT COSTS

Architectural fees, legal fees, permits, and other contingencies are estimated at about \$1,500 per unit. Additional permits and legal work towards the end of the project require more bribes to be paid estimated at about \$1,000.

### TOTAL COST

Adding the above-mentioned estimates, it costs approximately \$25,200 to build one SU and \$15,800 to build one MRU of 300 sq. ft each. But in order to sell one MRU you need to build a multiple of 1.33 SU which amounts to \$49,820.

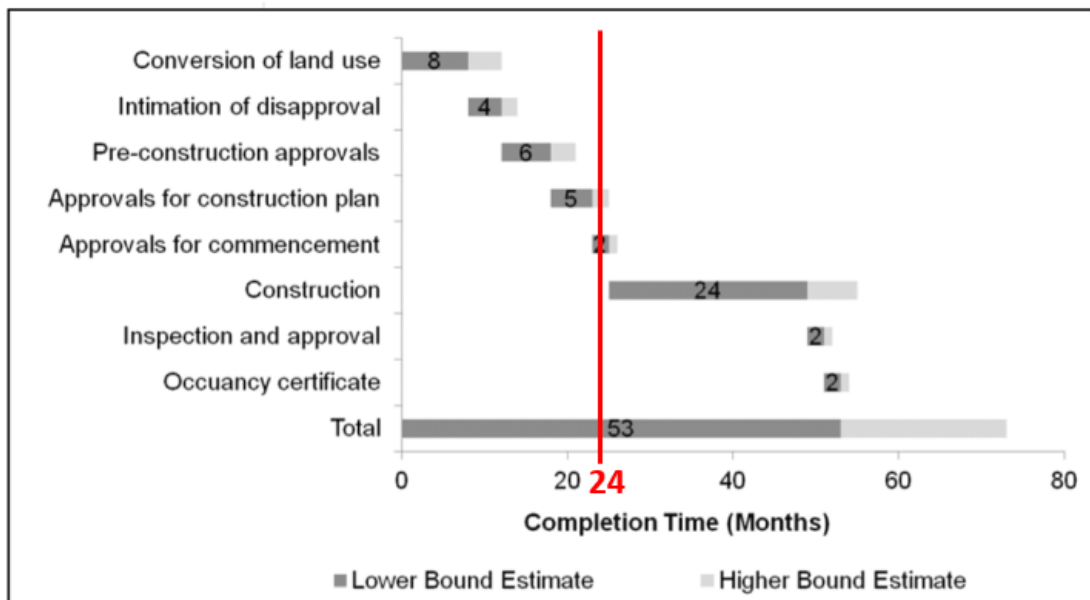
### COSTS AT SALE

Additional costs at sale like brokerage and paper work amount to \$1,500. The rate per sq. ft is \$250 which amounts to \$75,000. This gives the developer a profit of \$23,680 which amounts to a return on investment of 39% which at the first glance seems high.

### BRIBES

The tables above highlight the bribes paid in the development process of one SU. Almost one-third of the construction costs are paid in bribes. If this amount was invested in the development instead of paid out to officials the quality of development would be much better.

### PROJECT TIME PERIOD



(Source: CREDAI, 2011)

The ideal time for a development project is 24 months or 2 years. However, the estimated time to construct affordable housing in India is observed to have a lower-bound time estimate of 53 months and a higher-bound estimate of 75 months. In fact, India is ranked 183 out of 189 economies in dealing with construction

permits by the World Bank. In Mumbai, there are countless delays and there are projects that have been in the pipeline for over 10 years. Statutory approvals add approximately 18 – 24 months to the pre-construction process. This results in rising development costs which are absorbed by the purchaser. This is mainly due to corruption, inefficiency, and lack of transparency within the agencies. Various stakeholders using their influence and connections stall projects for their personal gain. This ranges from politicians, public employees, and competitive builders to slum dwellers, resulting in countless delays, wastage of resources, and a real-estate industry that is considered a high-risk industry. The said return of 39% no longer seems too enticing.

## CONSTRUCTION LENDING

The real-estate industry in India is considered a high-risk industry because of the above-mentioned issues. There are four major sources of construction lending:

### 1. Banks

- a. Only offer loans to well established builders that are A+ rated companies at rates that range from 12% – 14%
- b. Below A-rated established builders are offered rates of 14% - 16%
- c. New developers are offered rates as high as 20% – 21%

However, these loans are offered against collateral/security which is required to be 1.5 – 2 times the loan amount, which is usually impractical for most developers.

### 2. Non-Banking Financial Companies (NBFC)

- a. Offer loans to A-rated companies and the offered rate ranges from 12% – 24 % depending on the risk of the project undertaken.

### 3. Private Equity

- a. Flexible terms offered; take on high-risk but command high returns

### 4. Unorganized Cash Lenders

- a. As this industry requires high amounts of working capital in the form of cash the unorganized cash lenders are a prominent source of lending.
- b. Mainly deal with black money
- c. Help with land acquisition
- d. Rates as high as 22% – 36%

The banks and NBFC's only lend money for the construction of the building, i.e. the hard costs (usually less than 55% of total development costs); all the other costs like land acquisition, soft costs, bribes, and additional permits are not covered under these construction loans. This leaves the developers with two options, investing their personal money or borrowing money from the unorganized cash lenders who quote exorbitant rates. This further reduces the said return on investment, making projects extremely risky and developers having high rate of default.



## **CURRENT SCENARIO—RESULT OF CORRUPTION, TIME DELAYS AND HIGH BORROWING RATES**

This has caused reputed developers to steer clear of in-situ slum redevelopment as they are unable to traditionally finance them and the land acquisition is lengthy, cumbersome, and usually involves bribes and other illegal activities. This has resulted in patronage; people in power with black money (like politicians, business men, etc.) use these schemes to convert their black money into white. This results in poor-quality development and further social inequity.

## **REAL ESTATE (REGULATION AND DEVELOPMENT) ACT 2016**

In May 2016 the Parliament of India passed an act which is designed to protect home-buyers, help speed up dispute resolution, increase transparency, and help boost investment in the real estate industry. Every state was required to form a real estate regulatory authority (RERA) which overlooked the provisions in this act. The act made it mandatory for all commercial and residential real estate properties over 5,380 sq. ft or 8 apartments to register with the RERA before launching a project. This has helped improve transparency in project execution and marketing. It also prohibits unaccounted/black money from being pumped into the real-estate sector, and currently 70% of the money received from home buyers needs to be deposited in bank accounts through checks. Additionally, it has regulated transactions in residential and commercial projects so as to ensure timely completion and handover to the occupants.

Maharashtra was the first state to implement the RERA in 2017 (MahaRERA); within a year it has approximately 16,000 projects registered which comprises approximately 80% of the real estate projects in the state. Mumbai and its extended suburbs contributed to the highest proportion of RERA-compliant projects (Chintis, 2018). MahaRERA has continued to meet the requirements. Any individual can view projects online to know their status and their expected date of completion. The search result will give you the project type, project status (ongoing or completed), proposed date of completion, whether subject to litigation, project type (residential or commercial), address of the project, proposed and sanctioned buildings, FSI details, and the number of flats booked. Since MahaRERA has also transitioned the process of registration and fee payment online, you can see the number of projects registered and the permissions granted along with complaints registered and resolved in the website (KS, 2018). This act has moved this industry in a positive direction; however, there is still a lot of corruption, bribes, and black money involved that is not reported.

## **CONCLUSION AND RECOMMENDATIONS**

One of the biggest hurdles with in-situ slum redevelopment is the acquisition of land. Currently most developers are shying away from in-situ slum redevelopment as the land acquisition is cumbersome and not their main expertise. If the government could analyze, determine (which slums), acquire the land from the slum dwellers, and provide them with temporary government housing it would pique interest within the real-estate developers to come in and develop the project. This would also allow the government to reduce the current subsidy and incentives given to developers as projects would naturally meet the required hurdle rate.

Currently, projects are assigned to developers in an open auction—that is, the first developer to gain the 70% consensus is allowed to develop the project. If the government acquires the land by gaining the consensus it could award these projects based on the merit of the development proposal similar to how Low-Income Housing Tax Credits are awarded in the United States. There are no set development guidelines/requirements for the proposed redevelopment except for the minimum required area of the unit to be provided. Providing guidelines would help the development to be of higher quality. Each proposal could be reviewed by a board and selected based on the one that provides quality construction that matches market rate projects,

provides maximum social benefit, provides jobs, and is proposed by a reputed builder. This process should be transparent; the slum dwellers association to be rehoused should participate in this process, making sure there is no political patronage.

The real-estate industry lacks an industry status due to the high risk associated with it, which has resulted in extremely high lending rates that are unsustainable when the project time period is taken into account. Banks in the United States award subsidized rates for projects that help the local economy, as a way to give back to the community. A similar approach could be used for in-situ slum redevelopment projects allowing subsidized borrowing rates for subsidized housing.

The RERA Act has been successful in counteracting existing issues that deal with the protection of home/commercial buyers. These are the initial years of the RERA, and in the future the body could work towards increasing transparency in the development process. This could be done by further streamlining the permit process and reporting bribes. Digitalization of the permits at various stages of development could also help in making the system efficient and holding officials accountable. Promoting nonprofit organizations to undertake in-situ redevelopment could also help counteract the lack of adequate housing in urban areas.

## DEFINITIONS FOR THE PURPOSE OF THIS PAPER (MHUPA GOI 2015, III)

<b>Affordable Housing Project:</b>	Housing projects where 35% of the houses are constructed for EWS category
<b>Beneficiary</b>	A beneficiary family will comprise husband, wife and unmarried children. The beneficiary family should not own a pucca house (an all weather dwelling unit) either in his/her name or in the name of any member of his/her family in any part of India.
<b>Carpet Area</b>	Area enclosed within the walls, actual area to lay the carpet. This area does not include the thickness of the inner walls
<b>Central Nodal Agencies</b>	Nodal Agencies identified by Ministry for the purposes of implementation of Credit linked subsidy component of the mission
<b>Economically Weaker Section (EWS):</b>	EWS households are defined as households having an annual income up to Rs.3,00,000 (Rupees Three Lakhs). States/UTs shall have the flexibility to re-define the annual income criteria as per local conditions in consultation with the Centre.
<b>EWS House</b>	An all weather single unit or a unit in a multi-storeyed super structure having carpet area of upto 30 sq. m. with adequate basic civic services and infrastructure services like toilet, water, electricity etc. States can determine the area of EWS as per their local needs with information to Ministry
<b>"Floor Area Ratio" (FAR)/FSI</b>	<p>The quotient obtained by dividing the total covered area (plinth area) on all the floors by the area of the plot:</p> $\text{FAR} = \frac{\text{Total covered area on all the floors} \times 100}{\text{Plot area}}$ <p>If States/Cities have some variations in this definition, State/City definitions will be accepted under the mission</p>
<b>Implementing Agencies</b>	Implementing agencies are the agencies such as Urban Local Bodies, Development Authorities, Housing Boards etc. which are selected by State Government/SLSMC for implementing Housing for All Mission.
<b>Low Income Group (LIG):</b>	LIG households are defined as households having an annual income between Rs.3,00,001 (Rupees Three Lakhs One) up to Rs.6,00,000 (Rupees Six Lakhs). States/UTs shall have the flexibility to re-define the annual income criteria as per local conditions in consultation with the Centre.
<b>Primary Lending Institutions (PLI)</b>	Scheduled Commercial Banks, Housing Finance Companies, Regional Rural Banks (RRBs), State Cooperative Banks, Urban Cooperative Banks or any other institutions as may be identified by the Ministry
<b>Slum</b>	A compact area of at least 300 population or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities.
<b>State Land Nodal Agencies (SLNAs)</b>	Nodal Agency designated by the State Governments for implementing the Mission
<b>Transfer of Development Rights (TDR)</b>	TDR means making available certain amount of additional built up area in lieu of the area relinquished or surrendered by the owner of the land, so that he can use extra built up area himself in some other land.

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