

## WHITE PAPER

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# Report on The State of Affordable Housing in Mumbai November 2014

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# Foreword

Praja through its 'Praja Dialogue' project has been engaging with the Citizens, the Elected Representatives and the Government on issues that concern the citizens of Mumbai. Education, Health, Crime, Civic Issues and Working of the Elected Representatives are the topics on which we engage with them. This year we are adding 'Affordable Housing' to this list.

**AFFORDABLE HOUSING** is one of the most important issues for Mumbai and Mumbaikars and it is also the most complex and challenging problem of this city.

Nearly 52 lakh people in Mumbai live in slums, in conditions that lack security, peace and dignity. Almost 42% of Mumbai's housing comprises of slums.

Rs.28 lakhs is the average price<sup>1</sup> of a 269 square foot dwelling in Mumbai. At this high price, a vast majority of Mumbaikars whose (median) annual income is Rs. 2.4 lakhs cannot afford this house. Considering the accepted norm while financing homes is up to 4 times the annual income, this is nearly 12 times that, thus making even this basic house way out of reach for a vast majority of Mumbaikars. Governments in the past including the current government have all come to power promising the citizens of Mumbai solutions to this problem. The Special Township Policy, Cluster Redevelopment, Slum Rehabilitation Scheme among others are all projects which the government has put forward but which have unfortunately not delivered much for the citizens of Mumbai. Since 1995, about 2 lakh public housing units have been added to the stock, whereas we need atleast 11.36 lakh houses as of today. This estimate does not even take into account Mumbai's future requirements.

The general debate and discussion on this problem in the public sphere has also been very limited. There are mainly two points of view, one is about 'free' housing and the second is increasing FSI (Floor Space Index) in the city. These solutions are being bandied about without realizing their consequences. We are already seeing the consequences of some of these ill-conceived ideas in the city. Mumbai is already one of the most densely populated cities in the world; it is also one of the most expensive cities in the world as far as real estate is concerned. Our infrastructure is already stretched to the limit, and is now collapsing.

There is an urgent need to relook at the solutions which are not giving the desired result for this problem. Starting with this White Paper, Praja along with a team led by Mr. Shirish B Patel will be putting forward a series of Booklets, Papers, Notes and possible solutions to this complex and challenging problem. We are releasing today the first in the series of Booklets which discusses basic issues such as Housing, FSI, Crowding and Densities. This booklet in a user friendly manner explains to the citizens of Mumbai these Concepts.

What we hope to achieve is to develop a road map for this problem along with all the stakeholders, for the betterment of the city we all love so much.

**- NITAI MEHTA, Managing Trustee, Praja Foundation**

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<sup>1</sup> The average price is derived from the median minimum ready reckoner price of a residential property in Mumbai as on 1<sup>st</sup> January 2014.

# Acknowledgements

This research paper has been made possible by the efforts of several individuals and we would like to take this opportunity to express our sincere gratitude to them.

We would like to particularly thank Mr. Shirish B Patel for giving direction to our research, being a source of constant guidance and providing feedback on the various drafts of this paper. Mr. Patel is a vastly experienced civil engineer and urban planner, one of the three authors who originally suggested the idea of Navi Mumbai (New Bombay). We would also like to thank Mr. K.G. Krishnamurthy- Managing Director & CEO of HDFC Property Fund, Mr. Aditya Somani- Chairman of Everest Industries, Dr. Abhay Pethe- Head of the Department of Economics at Mumbai University and his Doctoral students Ms. Vaidehi Tandel and Mr. Sahil Gandhi, Mr. Ashok Datar- Chairman of Mumbai Environmental Social Network, Dr. Amita Bhide – Chairperson of the Center of Urban Planning, Policy and Governance at Tata Institute of Social Sciences, Ms. Sheela Patel- Director of the Society for the Promotion of Area Resource Centers, and urban planner Ms. Neera Adarkar for valuable insights and comments which contributed significantly to our research. We would also like to thank Ms. Amy Beth Schoenecker for volunteering with the research on slums in Mumbai. Lastly, we would like to acknowledge the contributions of the entire Praja Foundation team and thank them for their support and cooperation.

# Acronyms

- BSUP**- Basic Services for Urban Poor
- DCR**- Development Control Regulations
- ER**- Elected Representatives
- EWS**- Economically Weaker Sections
- FAR**- Floor Area Ratio
- FSI**- Floor Space Index
- HIG**- High Income Group
- IHSDP**- Integrated Housing & Slum Development Programme
- ISHUP**- Interest Subsidy Scheme for Housing the Urban Poor
- JNNURM**- Jawaharlal Nehru National Urban Renewal Mission
- LIG**- Low-income Group
- MBRRB**- Mumbai Building Repair and Reconstruction Board
- MCGM**- Municipal Corporation of Greater Mumbai
- MHUPA** - Ministry of Housing & Urban Poverty Alleviation
- MIG**- Middle-income Group
- NSSO**- National Sample Statistics Organisation
- PAPs**- Project Affected Persons
- R&R**- Rehabilitation and Resettlement
- RAY**- Rajiv Awas Yojana
- RGI**- Registrar General of India
- RR**- Ready Reckoner
- S&S**- Sites and Services
- SRA**- Slum Rehabilitation Authority
- TDR**- Transferable Development Rights
- ULB**- Urban Local Bodies

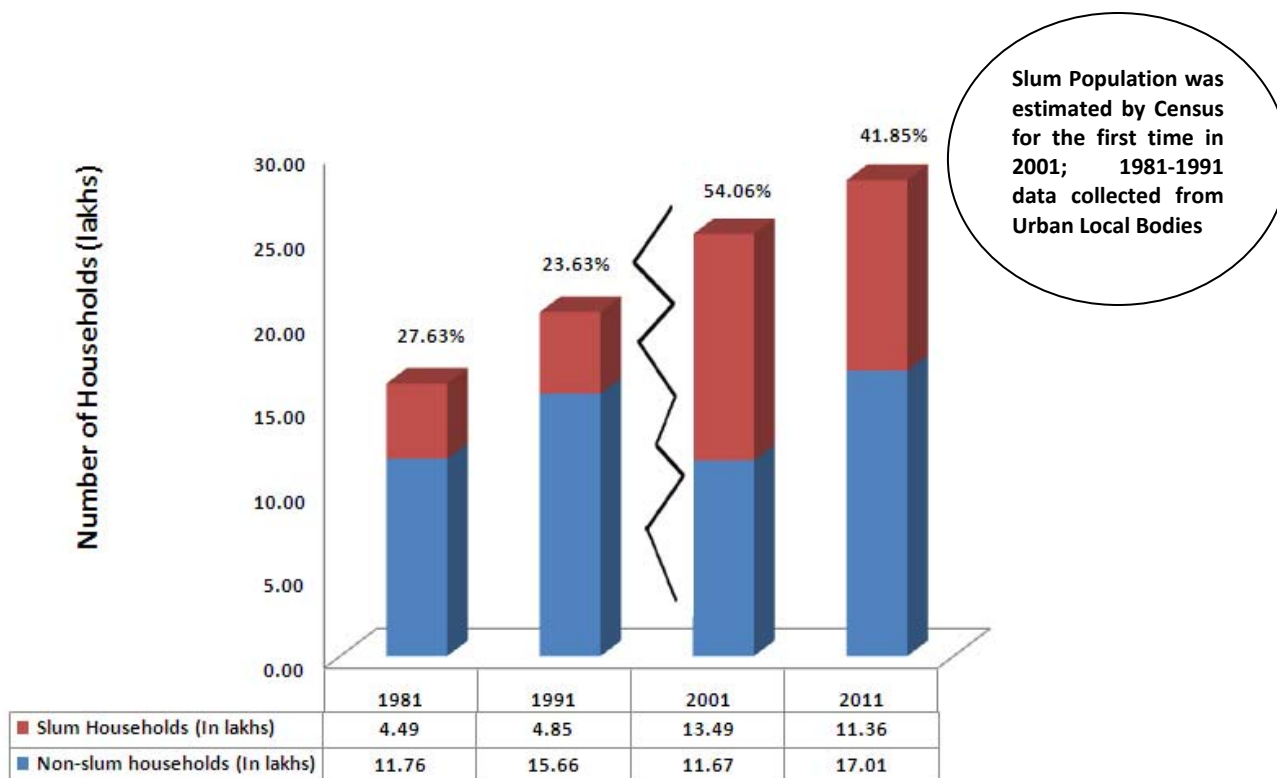
## I. Housing Shortage in Mumbai

### Highlights

- **41.9% people in Mumbai live in slums**
- **57% households live in one room dwellings**
- **In nine out of 24 wards, more than 50% of population lives in slums**

## 1.1 Slum Census

Chart 1: Number of slum and non-slum households in Mumbai 1981-2011<sup>2</sup>



For the first time in 2001, slum population in India was estimated on full count basis i.e. through surveys at the household level<sup>3</sup>, by the Office of the Registrar General & Census Commissioner of India (RGI). This data was collected for both notified and non-notified slums. Prior to 2001, data on slums in the 1981 and 1991 population census was taken from town directories maintained by the urban local bodies which had data on notified slums only. Non-notified and unrecognised slums were enumerated for the first time in 2001, which could possibly account for the sharp rise in slum population in this period.

It can be seen from Chart 1 that there is a significant variation in Mumbai's slum population across the four decades. The variation can in part be explained by the evolution of enumeration methodologies in subsequent censuses. The enumeration methodology used in the 1981 and 1991 census differs from that used in the 2001 census. The definition and method adopted in 2001 have been retained for the 2011 census. Thus, the 1981 and 1991 data is comparable with each other, while the 2001 and 2011 data is comparable with each other. The percentages in Chart 1 represent percentage share of slum population in Mumbai.

<sup>2</sup> Source: Population Enumeration Data, 2011 Census, Office of the Registrar General & Census Commissioner, Government of India

<sup>3</sup> *Data Discrepancies*, Debolina Kundu (2014)

<http://infochangeindia.org/agenda/urban-poverty/data-discrepancies.html>

### Slum City

Chart 1 shows the growth in Mumbai's slum and non-slum households from 1981 to 2011, based on the Census of India data for the respective decades.

- **Of 28.3 lakh households in Greater Mumbai, 11.36 lakh households reside in slums.**
- **Census 2011 data reveals a marked fall in the percentage share of slum population, from 54% in 2001 to 42% in 2011. While the share of slum population may have fallen between 2001 and 2011, 42% households continue to live in 'inhuman' conditions.**
- **In addition to households living in slums, there are 15,274 houseless households in the city, living in the open or roadside, pavements, in hume pipes, under fly-overs and staircases, or in open places of worship, mandaps, railway platforms, etc.**

**Thus, at least 11.57 lakh formal dwelling units are required in Mumbai to house the existing slum and houseless population. With population expected to touch 1.5 crore<sup>4</sup> in the next 20 years, what is the State Government's plan to address this acute housing shortage for the economically weaker segments?**

#### Definition of Slums:

There are significant differences in the various definitions of slums used internationally and in India. In India, the Office of the Registrar General of India (Census), the National Sample Survey Organisation (NSSO), and State governments have adopted different definitions of slums. The definition of slum areas adopted by the State Governments is based on Slum Acts of the respective States i.e. based on legal stipulations. In this paper, we have restricted ourselves to the slum data available from the Census of India.

*"A Slum, for the purpose of Census, has been defined as residential areas where dwellings are unfit for human habitation by reasons of dilapidation, overcrowding, faulty arrangements and design of such buildings, narrowness or faulty arrangement of street, lack of ventilation, light, or sanitation facilities or any combination of these factors which are detrimental to the safety and health. "*

- Office of the Registrar General, Census of India, 2011

Slums have thus been categorized and defined of the following three types<sup>5</sup>:

- **Notified Slums-** All notified areas in a town or city notified as 'Slum' by State, Union Territory Administration or Local Government under any Act including a 'Slum Act'.
- **Recognized Slums-** All areas recognised as 'Slum' by State, Union Territory Administration or Local Government, Housing and Slum Boards, which may have not been formally notified as slum under any Act.

<sup>4</sup> Pg. 241, Preparatory Studies for Development Plan of Mumbai 2014-34

<sup>5</sup> Primary Census Abstract for Slum, 2011, <http://www.censusindia.gov.in/2011-Documents/Slum-26-09-13.pdf>



- **Identified Slums**- A compact area of at least 300 populations 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.

The Census definition of 'Identified Slums' is narrowed down by the condition that a slum must be a compact area of atleast 300 people or 60-70 households. Thus, a collection of poorly built/serviced tenements that do not satisfy this condition are not counted as a slum enumeration block in the Census, resulting in possible underestimation of the slum population.

A 'Committee on Slum Statistics/Census'<sup>6</sup> (2010) set up by the Government of India to look into the methodology for slum estimation recommended that '**compact settlements of atleast 20-25 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions**' be enumerated as slums. This definition was considered broad enough to encompass all other existing definitions as the condition for number of households was brought down from 60-70 to 20-25. However, this recommendation was not adopted by the Office of the Registrar General of India while conducting the 2011 Census and it continued to adopt the same definition as in 2001<sup>7</sup>. With increasing urbanization and migration in the decade between 2001 and 2011 and the lack of space for large settlements, it is possible that slums have fragmented into smaller clusters, which have been left out of the 2011 Census enumeration.

The UN-Habitat defines slums as "contiguous settlements where the inhabitants are characterized as having inadequate housing and basic services. A slum is often not recognized and addressed by the public authorities as an integral or equal part of the city." Slum households are a group of individuals living under the same roof that include one or more of the conditions listed below:

- i. Insecure residential status;
- ii. Inadequate access to safe water;
- iii. Inadequate access to sanitation and other infrastructure;
- iv. Poor structural quality of housing;
- v. Overcrowding.

**The UN-Habitat definition does not insist on any cut-offs for slum enumeration such as number of households.** The definitions used by State agencies in the enumeration of slums play a crucial role in achieving the goals of public policies and schemes directed towards slum rehabilitation and improvement. A comprehensive database on slums is essential for the formulation of an effective and coordinated policy for improvement/rehabilitation of slum dwellers, the absence of which can undermine state efforts in this regard.

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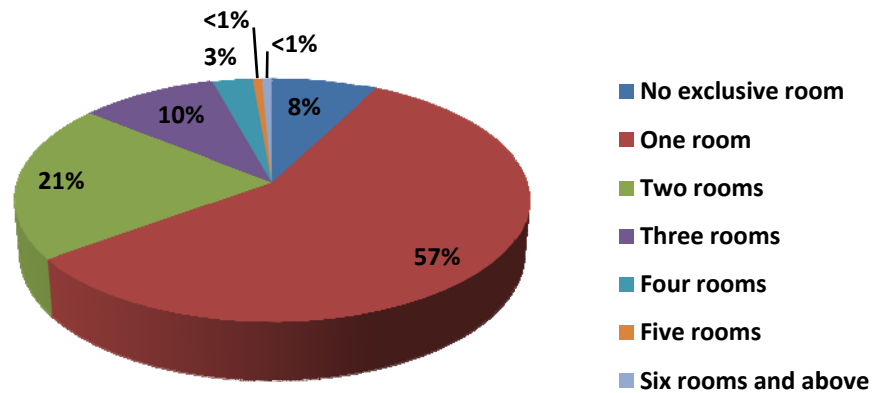
<sup>6</sup> Committee on Slum Statistics/CENSUS (2010),  
[http://www.nbo.nic.in/Images/PDF/REPORT\\_OF\\_SLUM\\_COMMITTEE.pdf](http://www.nbo.nic.in/Images/PDF/REPORT_OF_SLUM_COMMITTEE.pdf)

<sup>7</sup> Formation and Identification of Slum Enumeration Blocks for Slum Demography, Circular No.8, (2010)  
<http://www.censusindia.gov.in/2011-Circulars/Circulars/Circular-08.pdf>

## 1.2 Living Conditions in Households

Lack of affordable housing solutions compels families to reside in congested dwellings. Living conditions in households can be gauged through the following indicator - the number of habitable dwelling rooms available to a particular household.

**Chart 2: Households by Number of Dwelling Rooms (2011)<sup>8</sup>**



- **57% households live in one room dwellings**
- **8% households do not have an exclusive dwelling room i.e. one dwelling room is shared by more than one household**

### Notes

According to the Census of India:

A **dwelling room** may include a living room, bedroom, dining room, drawing room, study room, servant's room and other habitable rooms provided they satisfy the criterion of their dimensions. However, dwelling rooms do not include kitchen, bathroom, latrine, store room, passageway and verandah which are not normally usable for living. A dwelling room shared by more than one household is not counted for any of them. For instance, if two households share a single dwelling room, then number of exclusive dwellings for each is zero. A '**household**' is usually a group of persons who normally live together and take their meals from a common kitchen unless the exigencies of work prevent any of them from doing so. The persons in a household may be related, unrelated or a mix of both.

<sup>8</sup> Source: Houselisting and Housing data, 2011 Census, Office of the Registrar General & Census Commissioner, Government of India

### 1.3 Ward-wise Distribution of Slum Population across Mumbai

Table 1: Ward-wise slum population 2011<sup>9</sup>

Region	Ward	Slum Population 2011	% Slum Population 2011
Island City	A	63,400	34.3
	B	14,400	11.3
	C <sup>10</sup>	-	-
	D	33,000	9.5
	E	77,800	19.8
	F/N	308,400	58.3
	F/S	95,200	26.4
	G/N	189,600	31.7
	G/S	78,300	20.7
Western Suburbs	H/E	234,800	42.1
	H/W	118,500	38.5
	K/E	403,800	49.0
	K/W	108,800	14.5
	P/N	504,500	53.6
	P/S	264,000	57.0
	R/C	104,300	18.6
	R/N	221,500	51.4
	R/S	399,200	57.8
Eastern Suburbs	L	490,400	54.4
	M/E	245,300	30.4
	M/W	217,200	52.7
	N	385,600	61.9
	S	537,900	72.3
	T	111,800	32.7
Greater Mumbai		52,07,700	41.9

More than 50% of the population in wards F/N, P/N, P/S, R/N, R/S, L, M/W, N, and S lives in slums as of 2011.

<sup>9</sup> Primary Census Abstract Data for Slum (India & States/UTs - Town Level), Census 2011

<sup>10</sup> There are no slums in 'C' ward

## **II. Public Housing Stock created in Mumbai 1995-2014**

### **Highlights**

- **1995 to 2014: Only two lakh dwelling units have been constructed under State and Central Government schemes**
- **Of the 4.6 lakh dwelling units approved for construction by the Slum Rehabilitation Authority, only 33.7% have received Occupation Certificates**
- **No projects have taken off under Rajiv Awas Yojana in Mumbai as of September 2014**

## 2.1 Policy Initiatives

In section II, we review various government schemes and policy initiatives for addressing affordable housing shortage and slum redevelopment and their progress in Mumbai.

Under the federal structure of the Constitution of India, matters pertaining to housing and urban development have been assigned to State Governments. The 74<sup>th</sup> Amendment of the Constitution of India's Act has further delegated many of these functions to urban local bodies. However, the Government of India plays a role in shaping the policies and programmes of the country as a whole and also allocates resources to the State Governments through various Centrally Sponsored schemes, provides finances through national financial institutions and supports various external assistance programmes for housing and urban development in the country as a whole.

### Initiatives by Government of Maharashtra<sup>11</sup>

Affordable Housing schemes in Maharashtra focus on incentivizing projects through higher Floor Space Index and redevelopment of old buildings and slums. Briefly, the current policy initiatives include:

#### ***Special Township Policy***

Under the Policy, a contiguous minimum area of 40 hectares can be developed as a township and 33.3% of the tenements or 20% of the total built up area is to be used for EWS/LIG houses. The developers are provided additional 20% FSI over the Zonal FSI/FAR allowed in the Special Township.

#### ***Cluster Redevelopment***

A cluster of old, dilapidated buildings or slums can be clubbed in a cluster for redevelopment, to be defined as 'Urban Renewal Cluster' of a minimum Size of 4,000 Sq.m to 10,000 Sq.m. Redevelopment can be done by MHADA, MCGM, Developers, or Societies themselves.

#### ***Development/Redevelopment on MHADA land***

In all Urban Areas, the FSI for development on MHADA land has been increased to 2.5; 60% tenements are to be kept aside for EWS/LIG/MIG housing. For redevelopment of old MHADA colonies in Mumbai, FSI of 3 has been granted. Societies have the option to redevelop their buildings either through Private Developers, or through MHADA.

#### ***Redevelopment of old and dilapidated buildings***

In the Island City of Mumbai, the buildings are very old and many of them are in dilapidated condition. Under the DCR 33(7), FSI/FAR of 3 is allowed for Redevelopment of these Cess Buildings.

#### ***Inclusive housing in layouts***

Any development of a layout exceeding an area of 4,000 Sq.m will require reservation of 20% of the Built up Area for EWS and LIG households. Incentive FSI of 20% will be provided to the developer and tenements will be handed over to MHADA at the ready reckoner rate.

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<sup>11</sup> [http://mhupa.gov.in/W\\_new/Annexure\\_10\\_Sudhanshu\\_Affordable\\_Housing\\_in\\_Maharashtra.pdf](http://mhupa.gov.in/W_new/Annexure_10_Sudhanshu_Affordable_Housing_in_Maharashtra.pdf), accessed 17<sup>th</sup> October 2014

### ***Slum Rehabilitation Scheme***

In-situ, transit and Project Affected Person (PAP) Schemes for slum rehabilitation undertaken by Slum Rehabilitation Authority, MHADA and MMRDA.

### ***Affordable Housing in Mumbai Metropolitan Region***

MMRDA's rental housing scheme (2008) has been modified into an Affordable Housing scheme in November 2013. The private sector is offered incentive FSI in return for providing self-contained tenements of 160 sq.ft carpet area along with the appurtenant land to MMRDA free of cost which shall be allotted to eligible low income group households.

The three main state agencies responsible for implementation of these schemes are MHADA, Slum Rehabilitation Authority (SRA) and MMRDA. Particulars of the above initiatives and schemes are detailed in Annexure I.

### **Initiatives by Government of India**

Housing schemes by the Central Government are implemented by the Ministry of Housing & Urban Poverty Alleviation (MHUPA). The policies of urban development and housing in India have come a long way since the 1950s. In the First Five Year Plan (1951-56), emphasis was given on institution building and on construction of houses for Government employees and weaker sections. Subsequent plans focused on provision of services along with shelter, and mobilising private sector efforts for low-cost housing. The National Housing and Habitat Policy unveiled in 1988 aimed at ensuring "shelter for all" and better quality of life to all citizens by using the unused potential in public, private and household sectors. Subsequent programmes include the National Slum Development Programme (NSDP), night Shelter for urban shelterless, and Valmiki Ambedkar Awas Yojana (VAMBAY). Currently, the MHUPA is running the following schemes to address urban housing shortages under the aegis of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM):

#### ***1. Rajiv Awas Yojana (RAY) 2013-2022***

The Scheme provides financial support to States/Union Territories/Urban Local Bodies (ULBs)/Central Government Agencies for providing housing and improvement of basic civic infrastructure and social amenities in selected slums. RAY will also extend financial support to States for creation of affordable housing stock through public-private partnership under the Affordable Housing in Partnership (AHP) component of the scheme.

#### ***2. Rajiv Rinn Yojana (Interest Subsidy Scheme for Housing the Urban Poor)***

Rajiv Rinn Yojana (RRY) is an instrument to address the housing needs of the economically weaker/low-income segments in urban areas, through enhanced credit flow. RRY has been formulated by modifying the Interest Subsidy Scheme for Housing the Urban Poor (ISHUP) piloted in the 11<sup>th</sup> Plan period with enhanced scope and coverage. Fresh guidelines for the scheme were issued in October 2013; hence it is still too early to comment on the progress of the scheme thus far.

#### ***3. Basic Services to Urban Poor (BSUP, 2009)***

Provision of Basic Services to Urban Poor including security of tenure at affordable prices, improved housing, water supply, sanitation and ensuring delivery through convergence of other already existing universal services of the Government for education, health and social security. Care will be taken to see

that the urban poor are provided housing near their place of occupation. MHADA is the nodal implementing agency for BSUP in Maharashtra.

#### ***4. Affordable Housing in Partnership***

The scheme of Affordable Housing in Partnership aims to encourage private sector participation in creation of affordable housing stock, recognising that mere efforts of the Government would be insufficient to address the housing shortage. It was earlier introduced in 2009 as part of BSUP component of JNNURM and subsequently, Affordable Housing in Partnership was dovetailed with Rajiv Awas Yojana (RAY) in 2011. Central Government has now approved implementation of RAY for the period of 2013-2022. Central government will assist in construction of houses for EWS/LIG as part of group housing schemes of the States/UTs. These housing schemes will be implemented by the States/UTs through partnership with private sector or public sector including Parastatal bodies such as MHADA.

**Table 2: (Public) Housing stock created in Mumbai since 1995<sup>12</sup>**

Agency/Scheme	Completed Units <sup>13</sup>	Units under Construction	Status as on Date
<b>Government of Maharashtra</b>			
MHADA <sup>14</sup>	20,121	19,267	October 2014
SRA	1,57,402 <sup>15</sup>	86,069 <sup>16</sup>	April 2014
MMRDA (SRA cell)	26,101	3,565	October 2014
<b>Government of India</b>			
Rajiv Awas Yojana	0	0	September 2014
Affordable Housing in Partnership	0	0	September 2014
<b>Total</b>	<b>2,03,624</b>	<b>1,08,901</b>	

**1995-2014:**

- 2.03 lakh dwelling units have been built in all in Mumbai by State Government agencies
- Another 1.08 lakh units are currently under construction
- 1,57,402 units have been built under SRA's schemes in this period
- No projects have taken off in Mumbai under MMRDA's Rental Housing Scheme (2008)<sup>17</sup>
- No projects have taken off under the Rajiv Awas Yojana and Affordable Housing in Partnership Schemes of the Government of India, in Mumbai, as of September 2014<sup>18</sup>

<sup>12</sup> Sources: RTI applications; [www.mhada.maharashtra.gov.in](http://www.mhada.maharashtra.gov.in); [www.mmrda.maharashtra.gov.in](http://www.mmrda.maharashtra.gov.in)

<sup>13</sup> As per project status on MHADA and MMRDA's websites, as of October 2014

<sup>14</sup> Units constructed by Mumbai Board of MHADA

<sup>15</sup> Tenements issued Occupation Certificate (O.C.) as of 30<sup>th</sup> April 2014

<sup>16</sup> Tenements for which Commencement Certificate has been issued as of 30<sup>th</sup> April 2014

<sup>17</sup> Source: Information received from MMRDA under Right to Information Act

<sup>18</sup> [http://mhupa.gov.in/ray/Ray\\_State\\_Wise.pdf](http://mhupa.gov.in/ray/Ray_State_Wise.pdf), accessed on 16<sup>th</sup> October 2014



**Notes:**

Our focus in this paper is on the progress of Government housing schemes undertaken within the municipal limits of Mumbai. Data presented in the above table pertains to housing projects undertaken in Greater Mumbai i.e. from Colaba in the South to Mulund, Mankhurd and Dahisar in the north. In the above table we have presented dwelling units constructed by MHADA, SRA and MMRDA within the administrative limits of Greater Mumbai since 1995, and progress of MHUPA's Rajiv Awas Yojana and Affordable Housing in Partnership schemes since their inception.

The 26,101 units built by MMRDA have been constructed under its resettlement & rehabilitation schemes for project affected persons who have been displaced due to large-scale infrastructure projects. Dwelling units under construction as part of the Basic Services for Urban Poor scheme of the MHUPA have been included in the MHADA total, as MHADA is the nodal implementing agency for the scheme in Maharashtra.<sup>19</sup>

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<sup>19</sup> <https://mhada.maharashtra.gov.in/?q=jnnurm>, accessed on 16<sup>th</sup> October 2014

## 2.2 Progress of Slum Rehabilitation Authority's (SRA) Slum Rehabilitation Schemes

Table 3: Summary of all proposals received by SRA since inception till 30.04.2014<sup>20</sup>

<b>Proposals</b>		
<b>Proposals Received</b>	<b>2,622</b>	<b>100%</b>
<b>Proposals Approved</b>	<b>1,344</b>	<b>51.2%</b>
<b>Tenements</b>		
<b>Number of Tenements in Approved Proposals</b>	<b>4,67,673</b>	<b>100%</b>
<b>Number Of Tenements issued Commencement Certificates</b>	<b>2, 43,471</b>	<b>52%</b>
<b>Number of tenements issued Occupation Certificates</b>	<b>1, 57,402</b>	<b>33.7%</b>

- When the Slum Rehabilitation Authority was set up in 1995, there were more than 4.9 lakh households in the city living in slums (Census 1991)
- Between 1995-2014, a little over 1.5 lakh households have been built under SRA's schemes, which amounts to less than a third of the number of slum households in 1991
- As of April 2014, occupation certificates have been issued for only 33.7% of the total tenements that have received approval for construction
- Commencement certificates have been issued for only 52% of the total tenements that have received approval for construction

<sup>20</sup> Information obtained from SRA under Right to Information Act

## Notes

The Government of Maharashtra amended the Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971 to provide for the creation of Slum Rehabilitation Authority. SRA came into being with effect from December 1995.

### **Salient features of the Slum Rehabilitation Scheme:**

Every slum structure existing prior to 1<sup>st</sup> January 2000 is treated as a protected structure. All slum dwellers residing on a plot prior to 1<sup>st</sup> January 2000 and are in use of the structure are eligible for rehabilitation under the SRA scheme. Every eligible residential slum structure is provided with an alternative tenement admeasuring 269 sq. ft. preferably at the same site, irrespective of the area of slum structure. The underlying land is used as a resource for the SRS. The developer puts in resources in the form of money, men and material for construction of free houses for the slum dwellers and is allowed to construct tenements for sale in the open market. The area allowed for sale in the open market is 1:0.75 for City Area and 1:1 for suburbs area of tenements constructed for Rehabilitation of slum dwellers. Detailed stages of the Slum Rehabilitation Scheme are enclosed as Annexure II.

**Approved Proposals:** A proposal enclosing requisite plans, annexures and documents is submitted by the appointed project architect to SRA for approval. Initial scrutiny of the proposal is carried out by an SRA sub-engineer. If the documents pass the scrutinising process, they are forwarded to the competent sub-engineers within SRA for certification.

**Commencement Certificate:** A commencement certificate is issued for a project after its proposal and documents are certified by competent authorities within SRA. The commencement certificate gives permission for the construction of the first building up to the plinth level.

**Occupation Certificate:** After checking the building and compliance of all the conditions, SRA issues an Occupation Certificate (OC) to the building. The slum residents are then given possession of the tenements.

## III. Affordable Housing: Concepts

### Highlights

- **50% of Mumbai's households earn less than Rs.20,000 per month**
- **Starting price of a MHADA dwelling is Rs.14.7 lakhs**
- **A household with median level of income will need 12 years of income to buy a house in Mumbai at the ready reckoner rates**

‘Affordability’ is a relative concept and has a different meaning for different people. What may be affordable to one section of the population is out of reach for another. Hence, for a large and diverse city like Mumbai, no one size can fit all.

### 3.1 Factors affecting Affordability

- **Cost of land:** If that was excluded from the price, housing would be affordable for many more people.
- **Demand for up-front payment:** If the down payment was quite small, and payment could be in instalments, many more would be able to afford the same cost house. The availability of long-term finance is thus critical to expanding affordability.
- **Incremental Construction:** If the house could be built not in one go, but *incrementally*, over a period of years or decades, expanding and improving in step with the growing income of the family, affordability could be dramatically improved.

A High Level Task Force on ‘Affordable Housing for All’<sup>21</sup> (2008) set up by the Ministry of Housing & Urban Poverty Alleviation, Government of India, has suggested that the following parameters be used to define affordability:

**Table 4: Defining Affordability across Income Groups**

Income Group	Economically Weaker Sections (EWS)/Low-income Group (LIG)	Middle-income Group (MIG)
Size	300-600 sq ft carpet area	Not exceeding 1,200 sq ft carpet area
Cost	Not exceeding 4 times household gross annual income	Not exceeding 5 times household gross annual income
EMI/Rent	Not exceeding 30% of gross monthly income	Not exceeding 40% of gross monthly income

This means that a semi-skilled worker, like a motor car driver, who typically earns Rs.10,000 a month, should be able to rent a place for about Rs.2,500 a month, or buy a house for about Rs.4 lakh.

There is also a sharp variation in the definition of income groups used by the State and Central Governments:

#### State Government

- EWS= monthly household income limit of Rs. 16,000 per month
- LIG= monthly household income limit of Rs. 16,000-40,000

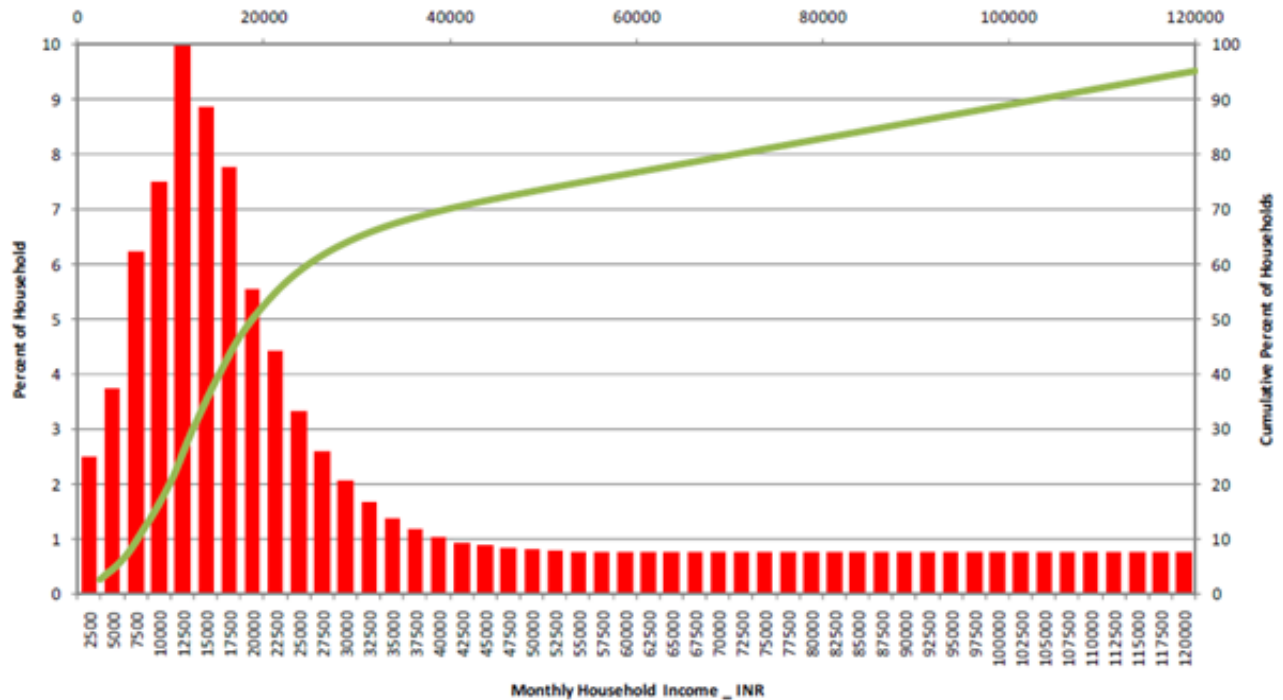
#### Central Government (Ministry of Housing & Urban Poverty Alleviation)

- EWS= monthly household income upto Rs.8,000
- LIG= monthly household income between Rs.8,000-16,000

<sup>21</sup> Report of the High Level Task Force on Affordable Housing for All (2008), Ministry of Housing & Urban Poverty Alleviation <http://www.naredco.in/pdfs/report-high-level-task.pdf>

### 3.2 Income vs. Affordability in Mumbai

Chart 3: Household Income Distribution in Mumbai (2010)



**Source:** Annez, P. C., Bertaud, A., Patel, B., & V.k., P. (2010). *Working with the Market, Approach to Reducing Urban Slums in India*

According to the World Bank Working Paper, *Working with the Market, Approach to Reducing Urban Slums in India, November (2010)*:

- **Median Household Income per month in Mumbai: Rs.20,000, i.e. 50% of Mumbai’s households earn less than Rs.20,000 per month**
- **Mean Household Income per month in Mumbai: Rs.41,000, i.e. on an average a household in Mumbai earns Rs.41,000 per month**

In the above chart, 95% of households in Mumbai fall within the income range plotted on the horizontal axis, i.e. households earning upto Rs. 1,20,000 per month. The remaining households with monthly income exceeding Rs. 1,20,000 per month have been left out of the analysis.

Applying the definition of affordability set by the Task Force (Table 4, page 21) in theory, the cost of an affordable house in Mumbai is shown in Table 5:

**Table 5: Ideal cost of an Affordable House**

Monthly Household income (Rs.)	Annual Household income (Rs.)	Ideal Cost of an affordable house (Rs.)
20,000	2,40,000	9,60,000 (4 x annual income)
40,000	4,80,000	19,20,000 (4 x annual income)

### 3.3 What does a MHADA home cost in Mumbai?

**Table 6: Cost of a MHADA dwelling in Mumbai as of 2014**

Income Group	Monthly Household Income Limit for various Income Groups <sup>22</sup> (Rs.)	% of Households in Income range (to be added) <sup>23</sup>	Ideal Cost of an affordable house (Rs.)	Average price of MHADA dwelling <sup>24</sup> (Rs.)
Economically Weak	≤ 16,000	38.8 %	≤ 7.68 lakhs	14.77 lakhs
Low-income	16,001- 40,000	31.1 %	7.68- 19.2 lakhs	19.3 lakhs
Middle-income	40,001- 70,000	9.8 %	19.2- 33.6 lakhs	39 lakhs
High-income	≥ 70,001	20.3 %	Not defined	76 lakhs

- As can be seen from Table 6, a MHADA dwelling is 'unaffordable' for nearly 80% of Mumbai's households, which belong to the Economically Weak, Low-income and Middle-income categories

<sup>22</sup> As per Government of Maharashtra's Resolution dated 24<sup>th</sup> March 2014

<sup>23</sup> Data on Income Distribution estimated from Chart 3: Household Income Distribution in Mumbai

<sup>24</sup> The prices have been averaged based on MHADA's latest lottery draw (as of 31.04.2014) for the sale of 814 dwelling units across various locations and income groups in Mumbai.

### 3.4 Ready Reckoner Rates (RR)

Table 7: Ready Reckoner Rates for residential properties in Mumbai, as of 1<sup>st</sup> January 2014<sup>25</sup>

Area	Minimum Ready Reckoner	Ready Reckoner for 269 sq.ft	Price/income ratio 269 sq. ft
Units	(Rs/sq. ft)	in lakhs	Median RR divided by median annual income
<b>Western Suburbs</b>			
Dahisar	2,703	7.3	3
Kandivali-Borivali	6,652	17.9	7
Malad	5,834	15.7	7
Goregaon	5,556	14.9	6
Andheri West	9,903	26.6	11
Vile Parle West	13,220	35.6	15
Bandra	7,934	21.3	9
<b>Eastern Suburbs</b>			
Kurla	3,670	9.9	4
Powai-Chandivali	12,161	32.7	4
Ghatkopar	4,599	12.4	14
Chembur	4,116	11.1	5
Bhandup	4,181	11.2	5
Mulund West	7,860	21.1	5
<b>Island City</b>			
Dharavi	5,407	14.5	9
Sion Division	9,876	26.6	6
Parel Sewree	5,277	14.2	11
Lower Parel	11,799	31.7	6
Worli	14,818	39.9	6
Girgaum	13,174	35.4	13
Colaba	17,642	47.5	17
Malabar and Cumballa Hill	26,050	70.1	15

<sup>25</sup> Source: Department of Registration & Stamps, Government of Maharashtra <http://igmaharashtra.gov.in/eASR/eASRCommon.aspx?hDistName=Bombaymains> (Numbers rounded off to level of dependable precision)



In the above table, we use the ready reckoner rates to arrive at an index of affordability for different suburbs within Greater Mumbai. We assume that median monthly household income in Mumbai is Rs.20, 000 per month. The minimum ready reckoner rate per sq.ft for each area in Table 7 is the median of the minimum rates of the sub-divisions in that area. Thus, this only represents the best case scenario of the likely rates prevailing in each area. Generally, market prices are higher than the RR rate set by the State Government.

- **At the current ready reckoner rates, only a 269 sq.ft apartment in Dahisar, Kurla and Powai-Chandivali fits the accepted definition of affordability, i.e. within four times annual household income.**
- **A household at median level of income will need 12 years of income to buy a house in Mumbai at the current ready reckoner rates.**

## Notes

**Ready Reckoner (RR):** Is an annual statement of rates by the Department of Registration & Stamps Maharashtra, which includes rates prevalent in different areas, based on which, the market value is calculated and the stamp duty collected from property buyers. Ready Reckoner values are revised on January 1<sup>st</sup> <sup>26</sup> each year and are applicable for the entire calendar year. An upward revision in RR rate results in residential prices moving higher as developers pass on the increased burden to property buyers. For instance, if the Ready Reckoner value of a flat in Bandra in 2013 was Rs.5 crore, in 2014, the 20 per cent hike would raise the cost of that flat to Rs.6 crore. This would, accordingly, translate into a 20 per cent higher stamp duty payment in many cases, where stamp duty is normally borne by the purchaser.

The Price-Income ratio has been calculated as follows:

**Price-Income ratio= Median Ready Reckoner rate/ Median annual household income**

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<sup>26</sup> Source: Department of Registration & Stamps, Government of Maharashtra  
<http://igmaharashtra.gov.in/eASR/eASRCommon.aspx?hDistName=Bombaymains>

## IV. From FSI to ‘Crowding’ and ‘Densities’

Floor-space index or FSI is a commonly used and often misunderstood term in Urban Planning. What is FSI and what does an increase or decrease in FSI mean for a city like Mumbai? Is increasing FSI the solution to Mumbai’s affordable housing shortage? Here is an excerpt on the subject from our Handbook ‘*Housing, FSI, Crowding & Densities*’<sup>27</sup> that tries to demystify some of the concepts around FSI.

Over the years, FSI has come to be the dominant building regulation in Mumbai. FSI is the ratio of the built-up area of a building to the ground area of the plot on which it is built.

Mumbai’s sheer density of population and high influx of migrants often begets the question - where is the land to accommodate this influx? Is higher FSI not an imperative to cope with this influx?

- This is a very common misunderstanding. Accommodating more people on a plot (by raising its FSI) means that you must also provide more road space for these people, more area for parks, and more area for schools and hospitals. **The higher the FSI the higher the proportion of land you need for public use.**
- If you want to accommodate more people, there is no escape: you have to provide more land. And most importantly, you have to extend your transport systems so that they bring this land within easy reach of the rest of the city.
- We should choose an optimum density for the city, not too crowded and comfortable to live in. Our focus thereafter should not be on increasing FSI to make the city less livable, but on extending transport networks.
- **Increasing FSI alone, without enlarging road systems and public facilities, will only diminish facilities for everyone.**

Societies at different levels of prosperity have different standards of consumption. This applies not only to commodities but also to something like floor space. Poorer societies manage with floor areas per person that would not be tolerated in a wealthier society. In Mumbai you will find families of five or even ten sharing a 269 sq ft. apartment. This would be unheard of in Manhattan (New York). There every child expects to have his/her own room. How do we measure and compare this variation in floor space consumption from one city to another?

One suggestion is that we adopt a new metric called “**Crowding**”. Instead of saying that in Mumbai people live in 5 Sq.m per capita, and in Manhattan occupy 55 Sq.m per capita, we can say that in Mumbai Residential Crowding is 2,000 persons per hectare (a hectare is 10,000 Sq.m), and in Manhattan Residential Crowding is 182 persons per hectare of built-up residential area. Therefore, crowding is an inversion of the residential space taken up per capita.

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<sup>27</sup> *Housing, FSI, Crowding & Densities*, Handbook Vol. I, (2014), Praja Foundation;  
[http://www.praja.org/praja\\_downloads/Handbook\\_on\\_Housing\\_FSI\\_Crowding\\_Densities.pdf](http://www.praja.org/praja_downloads/Handbook_on_Housing_FSI_Crowding_Densities.pdf)

The advantage of “Crowding” as a metric is:

- It can be applied to a range of other needs in an urban area, apart from residential floor space.
- we can have “Job Crowding”, which means the number of jobs per hectare of commercial area;
- “Park Crowding”, which means the number of people per hectare of public park area;
- “Amenity Crowding”, which is the number of people per hectare of amenity area (schools, medical facilities and so on)
- We can measure “Street Crowding”, which is the number of people in the locality per hectare of street area. This would be an important measure in indicating how crowded your street life is likely to be.

For more information on Crowding and Densities, refer to our Handbook **‘Housing, FSI, Crowding & Densities’** – [http://www.praja.org/praja\\_downloads/Handbook on Housing\\_FSI\\_Crowding\\_Densities.pdf](http://www.praja.org/praja_downloads/Handbook on Housing_FSI_Crowding_Densities.pdf)

## FSI of 4: Why it is not workable in Mumbai

Floor Space Index (FSI) in Mumbai is often compared to other cities in India and abroad. The standard argument put forth for solving Mumbai’s spatial crunch is that FSI in Manhattan (New York) goes upto 15, and upto 13 in Shanghai. To simplify the concepts of FSI, crowding and densities further and understand the impact of a hike in FSI in Mumbai we look at the case of **FSI 3 and FSI 4** in Mumbai.

The National Building Code of India<sup>28</sup> 2005 (NBC) is a national instrument providing guidelines for regulating building construction activities across the country. The NBC 2005 lays down provisions intended to serve as a model for adoption by Public Works Departments and other government construction departments, local bodies and other construction agencies. The Code serves as a useful guideline to establish per capita requirements for different kinds of spaces in cities. E.g. Institutional area, open areas etc.

**Table 8: Case of FSI 4 with 25 Sq.m and 100 Sq.m apartments<sup>29</sup>**

	Case 1: FSI 4 and 25 Sq.m apartments		Case 2: FSI 4 and 100 Sq.m apartments	
<b>Buildable area</b>	1 ha <sup>30</sup>	14%	1 ha	38%
• <b>FSI</b>	4		4	
• <b>Built-up area</b>	4 ha		4ha	
• <b>Sq.m/capita</b>	5		20	
• <b>Residents</b>	8,000		2,000	
<b>Institutional area @ 2 Sq. m/capita</b>	1.6 ha	22%	0.4ha	15%
<b>Open Area @ 3 Sq.m/capita</b>	2.4 ha	32%	0.6ha	23%
<b>Street Area @ 3 Sq.m/capita</b>	2.4 ha	32%	0.6ha	23%
<b>Total Area</b>	7.4 ha	100%	2.6ha	100%
<b>Gross density</b>	1,081 p/ha		769 p/ha	

In Tables 8 and 9, the values assumed for Institutional and Open areas per capita are below the norms given in the National Building Code. The value for Street space per capita is below the worst case among Mumbai’s existing Wards.

**It will be seen from Case 1 that if we give a builder FSI 4 on his one hectare plot, we will need a further 6.4 hectares of area for institutions, open spaces and streets to service the population housed on his one hectare plot. Who is going to provide area which is 6.4 times the area of the developer’s plot?**

<sup>28</sup> National Building Code of India (2005), <https://law.resource.org/pub/in/bis/S03/is.sp.7.2005.pdf>

<sup>29</sup> Source: Calculations by Mr. Shirish Patel

<sup>30</sup> Ha= Hectare

**Table 9: Case of FSI 3 with 25 Sq.m and 100 Sq.m apartments**

	Case 3: FSI 3 and 25 Sq.m apartments		Case 4: FSI 3 and 100 Sq.m apartments	
<b>Buildable area</b>	<b>1 ha</b>	<b>17%</b>	<b>1 ha</b>	<b>45%</b>
• <b>FSI</b>	<b>3</b>		<b>3</b>	
• <b>Built-up area</b>	<b>3 ha</b>		<b>3 ha</b>	
• <b>Sq.m/capita</b>	<b>5</b>		<b>20</b>	
• <b>Residents</b>	<b>6,000</b>		<b>1,500</b>	
<b>Institutional area @ 2 Sq.m/capita</b>	<b>1.2 ha</b>	<b>21%</b>	<b>0.3ha</b>	<b>15%</b>
<b>Open Area @ 3 Sq.m/capita</b>	<b>1.8 ha</b>	<b>31%</b>	<b>0.45 ha</b>	<b>20%</b>
<b>Street Area @ 3 Sq.m/capita</b>	<b>1.8 ha</b>	<b>31%</b>	<b>0.45 ha</b>	<b>20%</b>
<b>Total Area</b>	<b>5.8 ha</b>	<b>100%</b>	<b>2.2 ha</b>	<b>100%</b>
<b>Gross density</b>	<b>1,034 p/ha</b>		<b>682 p/ha</b>	

Even with FSI 3, we find that with 25 sq m apartments we will need someone else to provide 4.8 hectares of land area for each hectare of the developer's plot.

## V. Deliberation by Elected Representatives

Under the Seventh Schedule of the Constitution of India, land, housing and urban development are State subjects. The State Government is empowered to enforce and enact necessary laws and frame policies that support its governing functions. Members of Legislative Assembly (MLA) are duty-bound to deliberate on issues in the above areas, to scrutinize the actions of the Government. Thus, in a Democracy it is crucial that policies affecting the people are debated rigorously.

Bearing these functions of an MLA in mind, we analyze the performance of the MLAs elected to Maharashtra’s 12<sup>th</sup> Assembly (November 2009-October 2014) from the 32 Assembly Constituencies of Mumbai. Four MLAs who held ministerial posts in the Chief Minister’s Cabinet have been left out of the analysis, (as being part of the Government their role is not to ask questions in the House but answer them). Hence, data has been presented for 32 instead of 36 Assembly Constituencies.

Data on questions asked/issues raised by MLAs in the Tables 10 and 11 has been sourced from the Maharashtra State Legislature through the Right to Information Act. The data is for 14 Assembly Sessions held in the 12<sup>th</sup> Assembly for the period November 2009 to October 2014.

All types of devices used for asking questions/raising issues that have been taken into consideration for the analysis, namely, Starred questions, Calling attention to matters of urgent public importance, Half an hour discussion, Non-official bills (private members bills), Motion of adjournment for purpose of debates, Resolution/non-official resolution, and Short notice questions.

**Table 10: Deliberation on Housing in Maharashtra’s 12<sup>th</sup> Assembly (2009-14)<sup>31</sup>**

<b>Total Number of Questions asked in 12<sup>th</sup> Assembly</b>	<b>40,520</b>
<b>Questions asked on the Subject of Housing and related issues<sup>32</sup></b>	<b>5,970</b>

The 32 MLAs have in all asked 5,970 questions on the subject of Housing and related issues.

<sup>31</sup> Source: Data obtained from Legislative Assembly of Maharashtra under Right to Information Act

<sup>32</sup> Source: Praja classifies all questions asked/issues raised by MLAs into different categories such as civic, health, crime, housing and so on.

**Table 11: Issue-wise deliberation on Housing and related subjects in Maharashtra's 12<sup>th</sup> Assembly**

Sr. No	Issue-wise questions asked on subject	Number of questions
1	Slum Development	345
2	Slum Rehabilitation Authority	244
3	Housing issues (affordable housing, housing for economically weaker sections etc.)	228
4	MHADA	515
5	Displacement/Rehabilitation/Compensation	328
6	Cheat/fraud cases	220
7	Scams/corruption	280
8	Unauthorized Construction/Development	683
9	Repairs and reconstruction of old buildings	394
10	Miscellaneous issues	2,733
	<b>Total</b>	<b>5,970</b>

Questions asked on the subject of housing and related issues have further been categorized into sub-classes based on the issue raised in the question. Table 11 gives the issue-wise breakup of the deliberation on Housing and related subjects.

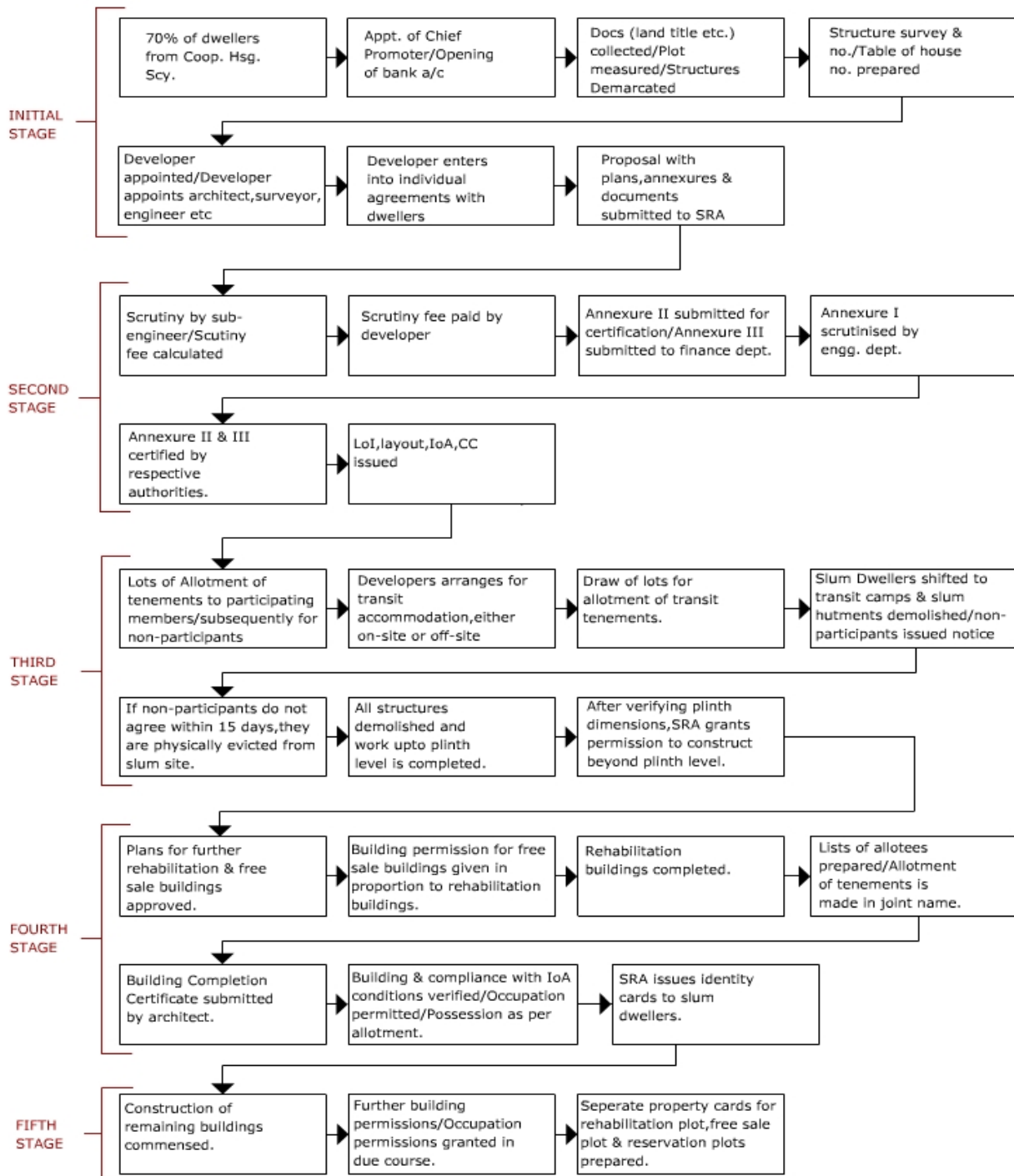
**While 5,970 questions have been asked on the subject in all, only 566 questions have been asked on the pertinent issues of slum development and workings of the Slum Rehabilitation Authority in the Assembly in five years.**

# Annexure I: Schemes by Government of Maharashtra

Agency	Scheme	Period of Introduction
MHADA	Development of sick/closed mill land allocated to MHADA under amended DCR 58 for mill workers housing and transit	1991
	Housing schemes on clear plots handed over by MBRRB with emphasis on housing for Economically Weaker Sections and Low-income groups under DCRs: DCR 33 (5) – Redevelopment of existing MHADA colonies  DCR 33(7) – Redevelopment of cessed buildings	1991
	Affordable Housing in Joint Partnership with Private land owners/Developers	
SRA	Under provisions of DCR 33(10) also called in-situ scheme	1995
	Under provisions of section 3.11 also called Project Affected Persons (PAPs) Scheme	
	Under provisions of DCR 33(14) also called transit scheme	
MMRDA	SRS/PAP Slum Rehabilitation Schemes undertaken for the persons affected by MMRDA projects	
	Rehabilitation and Resettlement (R&R) of residential and non-residential Project Affected Persons	
	Rental Housing Scheme in MMR region	2009
MHADA/ MCGM/ Developers/ Societies	Cluster Redevelopment under DCR 33(9)	



# Annexure II: Lifecycle of an SRA Project<sup>33</sup>



<sup>33</sup> <http://sra.gov.in/pgeFlowchartStage.aspx>, 27<sup>th</sup> October 2014