PUBLIC HOUSING MODELS IN MAHARASHTRA

TABLE OF CONTENTS

ABBREVIATIONS

BLC	Beneficiary Led Construction		**MRTP**	Maharashtra Regional & Town Planning
CIDCO	City and Industrial Development Corporation		**NIT**	Nagpur Improvement Trust
CITU	Centre of Indian Trade Unions		**NMMC**	Navi Mumbai Municipal Corporation
DCPR	Development Control and Planning Regulations		**NTDA**	New Town Development Authority
DCR	Development Control Regulations		**PMAY**	Pradhan Mantri Awas Yojana
EWS	Economically Weaker Section		**SPA**	Special Planning Authority
FSI	Floor Space Index		**SRA**	Slum Rehabilitation Authority
GR	Government Resolution		**SRD**	Slum Redevelopment Scheme
HIG	High Income Group		**SRS**	Slum Rehabilitation Scheme
LIG	Low Income Group		**SVM**	Shehar Vikas Manch
MHADA	Maharashtra Housing and Area Development Authority		**TDR**	Transfer of Development Rights
MIG	Middle Income Group		**URDPFI**	Urban and Regional Development Plans Formulation and Implementation
MMRDA	Mumbai Metropolitan Region Development Authority			

ABSTRACT

India faces an urgent housing challenge, particularly in providing adequate and affordable housing for the urban poor. This includes the creation of a new affordable housing stock, as well as engaging with the existing informal housing stock that has emerged as an affordable yet often inadequate alternative.

Over the past seven decades post-independence, a diverse array of housing approaches that imagine different roles for the state, the private sector and people themselves have been implemented. These models form a unique portfolio to review approaches, to inform housing models of the future. This paper, therefore, looks at six public housing initiatives in the state of Maharashtra, with the purpose of reviewing its intention, impact and gaps in housing for the poor, which is in effect a state subject.

In order to do so, the paper reviews the Maharashtra Housing and Area Development Authority (MHADA) model for economically weaker section (EWS) and low-income group (LIG) housing in Mumbai, the City and Industrial Development Corporation (CIDCO) model in Navi Mumbai and Sites and Services Model in Greater Mumbai, as demonstrations of models that add to the housing stock. To review methods of intervening in the informal housing stock, the paper reviews the Slum Rehabilitation Scheme (SRS) in Mumbai, which has become a premise for the housing model of Pradhan Mantri Awas Yojana (PMAY), as well as alternative models of Cooperative Housing in Solapur, and incremental upgrading through *malki patta* (land ownership title) rights in Nagpur.

The array of housing models depict a range of housing processes—from top-down imaginations of the role of the state and the private sector, to bottom-up processes that recognise the agency of the urban poor themselves. The cases discuss the model of housing provision with its intent, and review the current situation and present findings and challenges of each model. The discussion that follows opens a range of models for review, that include finance and cross subsidy, land and regulatory frameworks, and the varying role of various actors—state, private sector and people, in housing—to inform a discussion on housing models for the future.

PUBLIC HOUSING AND ITS PHASES IN INDIA

India faces an urban housing challenge where 95 per cent of the shortage[1] is housing for the urban poor (See Fig 1) (Government of India, 2012). The housing gap in India is a deficit of adequacy in a skewed housing market (Bhan, Deb, & Harish, 2016), a function of land value and global capital, (YUVA, 2019) such that the housing that is produced as 'affordable' is actually out of the financial means of those who really need it. The 2008 Deepak Parekh committee calculates affordability as a cost that is not more than four–five times an annual income, or 30–40 per cent of monthly income for rent (Bhan, 2018). However, in 2014 the average price of a 269 sq. ft. apartment on the affordable housing market, which is the same size mandated by the Slum Rehabilitation Authority (Maharashtra) was INR 28 lakh. This is nearly 12 times the actual cost that the target demography could actually afford (Praja, 2014). Given the dearth of a portfolio of formal affordable housing options, self-built informal settlements are often the only affordable housing option.
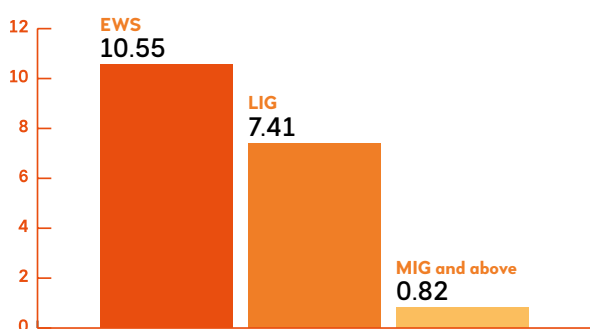
Adequate housing has several dimensions, beyond the immediate spatial unit of four walls. It includes security of tenure, availability of services, materials, facilities and infrastructure, affordability, habitability, accessibility, location and cultural adequacy. The Right to Adequate Housing has been recognised as central to other human rights, embedded within the Right to an Adequate Standard of Living, Article 25 of the UN Declaration of Human Rights (1948), and the International Covenant of Economic, Social and Cultural Rights (1966). It includes a) Protection against forced evictions and arbitrary destruction, b) The right to be free from arbitrary interference with one's home, privacy and family, c) The right to choose one's residence, to determine where to live and to freedom of movement. The Right to Adequate Housing also includes entitlements; a) security of tenure, b) housing, land and property restitution, c) equal and non-discriminatory access to adequate housing, d) participation in housing-related decision-making at the national and community levels.

Fig 1 | *Housing shortage in crore units for 2012–17 as per the Technical Group on Housing Shortage TG-12*

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1 | *In 2012, the Technical Group on Urban Housing Shortage (TG-12), constituted by the erstwhile Ministry of Housing and Urban Poverty Alleviation (MoHUPA) stated that there was a shortage of 1.88 crore housing units over the period 2012–2017. Of these, the EWS alone accounts for 1.06 crore units or 56 per cent of the total shortage.*

Affordability however, does not translate to adequacy of housing. It is only one component of housing. In India, the Right to Adequate Housing has been interpreted as an extension of Article 21 of the Constitution, through the right to life and personal liberty, right to livelihood and right to dignified shelter. In effect, shelter and housing are state subjects (YUVA and IHF, 2018). While the central government defines guidelines, the state governments are responsible for addressing 'adequate housing' through their respective housing programmes. This is possible through institutional arrangements such as housing boards, development authorities and state agencies at the state and city level, as well as through devolution of responsibility to the local urban body, through the 74th Constitutional Amendment Act[2].

Public housing is understood as housing provided by the state, that is able to meet the requirements of affordability and adequacy in housing. Overall, housing programmes in India have seen a significant shift in approach over the years, further elaborated in this section. While the policies post-independence originate from a welfare centric imagination of housing provision, the current approach within a neoliberal landscape looks at the market for housing solutions (Tiwari & Rao, 2016). Significant to this shift in the housing policy and programme landscape is the changing mandate of the role of the government and an imagination of the capabilities of the urban poor themselves.

PHASE I

The housing approach post-independence focussed on a welfare-centric top-down approach, with a central vision of constructing mass housing. As a result, the first two decades after independence saw the establishment of state housing boards, with a mandate for the state to acquire land, build houses and allocate them to the public, through categories defined according to income groups and affordability, such as the low-, middle- and high-income group (LIG, MIG and HIG) and the economically weaker section (EWS). This phase saw very little involvement of the people themselves

in the design of these projects. As the states were unable to produce housing required at the scale of the demand, housing constructed for the poor was bought by higher-income groups. In the absence of formal affordable housing options, informal settlements emerged as a housing alternative for the urban poor, even at the risk of eviction.

PHASE II

The 1970s saw a shift in perspective on housing for the urban poor. There was a global shift in how informality was perceived, and the approach in India as well moved away from looking at the 'slum' as a problem to be 'removed' through 'clearance'[3] , to a 'condition' for improvement, by working on more localised interventions. Housing programmes moved away from a centrally directed vision to a more local approach through environmental improvement or upgrading, and sites and services schemes that recognised the state's inability to build housing for the poor at scale, and also the existing capability of the urban poor to contribute to housing themselves.

PHASE III

The early 1990s further saw a shift in housing models. While this phase also saw the introduction of the 74th Constitutional Amendment Act for localised governance, in effect this autonomy was supported without effectively increasing the financial capacity of the urban local body. This phase saw an increasing influence of the private sector, aligned with the economic and structural transformations of the time, and the introduction of housing models along with market finance.

PHASE IV

In the current housing paradigm, in a post 2000 post globalised economy the involvement of the private sector in the production of urban space has deepened. Further, at a central directive level, the housing model has shifted back to a central vision of building mass housing. This time, however, the shift has been from the government as a provider of public housing to an enabler, while creating incentive for the private sector to construct houses.

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2 | *The 74th Constitutional Amendment Act, also known as the Nagarpalika Act of 1992 recognises the constitutional status of urban local bodies, to empower local self-governance. After the adoption of this Act 'Slum Improvement and Housing' was included in the list of functions of Municipal Corporations and Municipal Councils, (Burte, Bhide, Singh, & Waigankar, 2014)*
3 | *The Central Slum Act was enacted in 1956. Maharashtra's Slum Clearance and Improvement Act drew from this, and came into existence in 1971.*

The housing models over the last seven decades, could be argued to have come full circle over time. While moving away from centrally envisioned mass public housing, to localised approaches of improvement and sites and services, the current approach has shifted back towards mass housing with the government's vision in Pradhan Mantri Awas Yojana (PMAY) of twelve million urban houses by 2022 (Makkar, 2018, 18 May)[4]. Yet, within this cycle there are three significant observations. First, the role of the government in public housing has seen a perceptible shift – from that of a 'provider' to an 'enabler' of housing. Second, while this shift was seen as early as in the 70s and included the participation of people in housing models, in the last few decades this shift has been embedded in a neoliberal perception of the government's inability and the private sector's efficiency, within the global context of financialisation of housing (YUVA, 2019). This withdrawal of the state, and increased reliance on the market for housing for the poor has been critiqued on many accounts. There is, therefore, much need to reflect on alternative public housing approaches. This brings us to the third observation. Within the past decades, there exists a diverse array of housing models that have been tried and tested with varying results. These provide a unique portfolio of models to learn from, to holistically inform public housing programmes of the future. It is with this aim that these have been further discussed in the paper.

4 | PMAY is structured to be implemented under four verticals, (1)In situ slum redevelopment, (2)Affordable housing through credit linked subsidy, (3)Affordable housing through partnership, and (4) Subsidy for beneficiary led individual house construction (MoHUA, 2015)

METHODOLOGY

This paper aims to look at an array of public housing models introduced over all four phases of the shifting approach to housing in the state of Maharashtra (see Table 1), with the objective to compare approaches and highlight learnings from each. The paper reviews secondary literature from the reports of non-governmental organisations, academic journals and news articles to look at models of both the provision of new housing, as well as interventions within existing informal settlements.

In order to compare public housing models for creation of new housing stock, the paper reviews the approach of Maharashtra Housing and Area Development Authority (MHADA), Sites and Services Scheme and City and Industrial Development Corporation (CIDCO) housing. The paper then reviews the approach of the Slum Rehabilitation Authority (SRA) in Mumbai, the Centre of Indian Trade Unions (CITU) cooperative movement for housing in Solapur, and the provision of *malki patta* (land ownership titles) in Nagpur as interventions with existing informal settlements.

Timeframe			Case	
Phase i	1950s and 60s	Central, top-down approach introduced State as a 'provider'	MHADA LIG/EWS Model	Case I
Phase ii	1970s & 80s	Local, incremental approach introduced State as an 'enabler'	Sites and Services Scheme	Case II
			CIDCO Navi Mumbai Model	Case III
Phase iii	1980s & 90s	Local approach, State as an 'enabler', Introducing the private sector	Slum Rehabilitation Scheme	Case IV
			CITU Cooperative Movement	Case V
Phase iv	Post 2000	Central approach, State as a 'facilitator'	*Malki Patta*	Case VI

Table 1 | *An overview of housing phases and cases discussed in the paper*

PUBLIC HOUSING IN MAHARASHTRA

Public housing models in Maharashtra are conceptualised and implemented through a variety of State actors with scope for collaboration with other stakeholders—communities, people's groups, and the private sector. State actors in Maharashtra that have been looked at in this paper include:

· Maharashtra Housing and Area Development Authority (MHADA)

· City and Industrial Development Corporation (CIDCO)

· Slum Rehabilitation Authority (SRA)

· Mumbai Metropolitan Region Development Authority (MMRDA)

· Municipal Corporations

· State Departments

This paper looks at various housing models conceived by State actors in Maharashtra, at different points of time to address:

1) Provision of housing for the urban poor through new housing stock, and

2) Engage with existing informal settlements that provide housing for the urban poor

Regarding the creation of new housing stock in the city, to address a gap in housing for the urban poor, increasing urbanisation, and density of the city, the models further discussed in the paper are:

Case I	MHADA LIG/EWS Model of Housing
Case II	Sites and Services Model of Housing
Case III	CIDCO Model of Housing, Navi Mumbai

Regarding engagement with the existing informal housing, the paper looks at different approaches with the involvement of different actors through:

Case IV	SRA Model of Housing, Mumbai
Case V	CITU Cooperative Housing, Solapur
Case VI	*Malki Patta* (land titling), Nagpur

I
MHADA MODEL OF EWS AND LIG HOUSING

WHAT IS THE MODEL?

Maharashtra Housing and Area Development Authority (MHADA) was formed in 1977 through the MHADA Act of 1976, that brought all state housing boards in Maharashtra under a single umbrella. As the apex housing board in Maharashtra, MHADA coordinates the functions of the seven regional housing boards in Maharashtra—Mumbai, Konkan, Pune, Nashik, Nagpur, Amravati and Aurangabad—as well as the activities of two special boards—the Mumbai Slum Improvement Board, and the Mumbai Repairs and Reconstruction Board (MHADA, 2018).

The MHADA mandate for public housing has its roots in the post-independence model of provision of housing where the state housing board would acquire land, design, build and allocate housing, for a mix of income groups, including housing for the urban poor. This consisted of housing for different income groups classified as low-, middle-, and high-income group (LIG, MIG and HIG) and the economically weaker section (EWS). The design and layout of each housing type varied in size and specifications according to affordability. The MHADA model for public housing is based on a subsidy model for EWS–LIG housing through a viable price for MIG and HIG categories. The subsidy is the difference between the market price and the price paid by the allotted (Wadhwa, 2009).

SITUATION TODAY

MHADA owns approximately 2,000 ha of land in Greater Mumbai and is one of Maharashtra's biggest landowning agencies in Mumbai (Das, Singh, Dewan, & Agarwal, 2018). According to the authority's own data, MHADA has provided over 2.5 lakh affordable houses in Mumbai (MHADA, 2018). However, like several state housing agencies of its time, MHADA has struggled with meeting its targets. For example, a review of land procurement for MHADA housing from 1985–95 shows how a greater proportion of units were allocated to the urban poor in EWS and LIG categories. Yet, while the need for housing units has been in the range of 40,000 units per year, MHADA at its best has only been able to match 20,000 units per year. Further, there has been a decline in the construction of EWS units in the 1990s, along with an increase in the construction of HIG dwellings (UIRF, 2011).

Despite the intention of affordability, MHADA housing is unaffordable for 80 per cent of the population, i.e., for the EWS–LIG–MIG housing categories. For example, the starting price of a MHADA house in 2014 was INR 14.7 lakh (See Table 2), which a target household with an average income would need 12 years to buy. In order to enable further construction of housing units, the floor space index (FSI) has been increased on MHADA land in all urban areas for development or redevelopment. Of this, 60 per cent of the apartments are reserved for EWS, LIG and MIG housing. The FSI for old MHADA colonies has also been increased to 3 for redevelopment, while cooperative societies may opt for redevelopment through the private sector or MHADA (Praja, 2014).

Unit type	Carpet area*	Average cost of a MHADA dwelling**
EWS	Upto 300 sq. ft.	INR 14.77 lakh
LIG	Upto 484 sq. ft.	INR 19.3 lakh
MIG	Upto 861 sq. ft.	INR 39 lakh
HIG	Above 861 sq. ft.	INR 76 lakh
* Data Source (Das, Singh, Dewan, & Agarwal, 2018) ** Data Source (Praja, 2014)		

Table 2 | *MHADA unit sizes and costs*

FINDINGS

While the MHADA public housing model has several positive takeaways in terms of a proactive role of the state in housing for all income groups in principle, and an approach that looks at a composite mix of income levels through cross subsidy, the model has been unsuccessful on several counts.

First, MHADA has been unable to keep up with the demand of units at the pace required, and at the costs of construction. Over the years, the construction of HIG units was prioritised over the units for the LIG or EWS groups. Secondly, the design of cross subsidy within the model has been instrumental in pushing the housing stock out of the reach of the poor. This is because since the demand for EWS–LIG units is higher, the cumulative cross subsidy required is quite high, increasing the cost of the MIG and HIG units.

As the MIG–HIG units reach unaffordable rates, the EWS–LIG categories of housing are often bought out by other income groups. As a result, the scheme is unable to effectively address the housing needs of the urban poor. Further, other factors have affected affordability in MHADA schemes. These include the cost of the land, the need for upfront payment, and no scope for incremental construction, as well as discrepancies in how the state and central government define the category of EWS and LIG (Wadhwa, 2009).

In the absence of a truly affordable housing model, and with the lack of public or community participation in the MHADA model, it has not been able to compete with people-built informal settlements, such that 42 per cent (Census 2011) of Mumbai's population lives in areas described as 'slums'.

II
SITES AND SERVICES MODEL

WHAT IS THE MODEL?

The Sites and Services Model enabled incremental housing for the urban poor through the provision of plots of land, on ownership or lease, with access to the minimum infrastructure required for habitation. In this housing model, the government prepares land parcels with access to infrastructure such as roads, drainage, sanitation, electricity, and water supply. People use their own resources, of finance and labour, to build the structure of the house. This enables people to build their own housing incrementally over a flexible timeframe as per phases that match their own resources (Srinivas, n.d.). This model was strongly supported by the World Bank during the 1980s with several global variations[1]. In India, the World Bank funded Sites and Services projects in 27 cities, from 1977 to 1997 (Gulyani, 2016).

The Sites and Services scheme was introduced in the Mumbai Metropolitan Region in five regions[2] over 13 sites under the initiative of Maharashtra Housing and Area Development Authority (MHADA), City and Industrial Development Corporation (CIDCO) and Mumbai Metropolitan Region Development Authority (MMRDA)—agencies that already had 70 per cent of the land ownership of the entire scheme of 700 hectares. The land was to be parcelled to provide 85,000 serviced residential plots and included 1,460 plots for housing cooperative societies (Patel, 2015). The entire scheme catered to 1,00,000 households and consisted of a range of green field projects—from smaller 7 ha infill[3] sites, to standalone 180 ha sites. Of these, some were well connected to transport networks, while others needed investment for trunk infrastructure (Owens, Gulyani, & Rizvi, 2016).

The Sites and Services scheme in North West Mumbai, at Charkop, was one of the densest schemes in Mumbai and presents several insights. It accommodated over 25,000 households at 171 hh/ha (which included roads and amenities). It presents a novel model for provision of new housing stock, keeping in mind people's capabilities. It marks a shift in the Maharashtra state government's role from a 'provider' of housing, to an 'enabler', while creating systems for mixed neighbourhoods (Patel, 2015).

The layout consists of mixed-income neighbourhoods, with a repeating cluster of 33 houses of 24 sq. m. plots[4] arranged around a courtyard. Since the demand for the new plots was ten times the available plots, in Charkop, a lottery determined the allotment of plots, and every cluster of houses formed a single cooperative society. The clusters repeat to form a module for a hierarchical system of streets, such that outside the courtyard bigger plots of 40 sq. m. with commercial and residential activity (mixed use) open onto a 9 m. street. The largest street within this system includes apartments and row houses, which integrates incomes alongside the Sites and Services scheme for the urban poor (Patel, 2015). The range of plot sizes attracts different income groups, along with spatially efficient site planning norms. Along with mixed communities, the scheme aims for mixed use, including commercial areas, and educational and healthcare facilities, at a neighbourhood scale (Gulyani, 2016).

1 | In some models globally, the government provided a core with a toilet or a kitchen, in others access to a utility wall with access to water connections, and in another model the government built the foundation and plinth.
2 | North-western Bombay, north-eastern Bombay, Thane Municipal Corporation, Kalyan Municipal Corporation, and New Bombay
3 | Empty or unused sites within an existing urban fabric of the city
4 | These were plot sizes that were lower than the 'standard' plot size at the time. Smaller plot sizes were introduced to enable poorer households to enter the housing market.
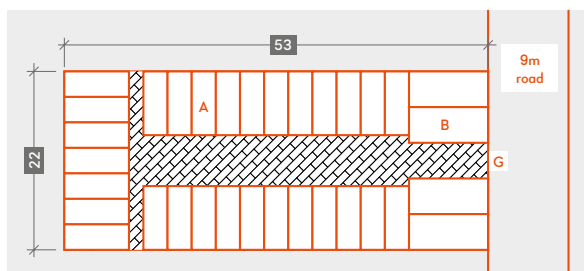
Pic 1 | *Typical layout of a Sites and Services society in Charkop (Patel, 2015)*
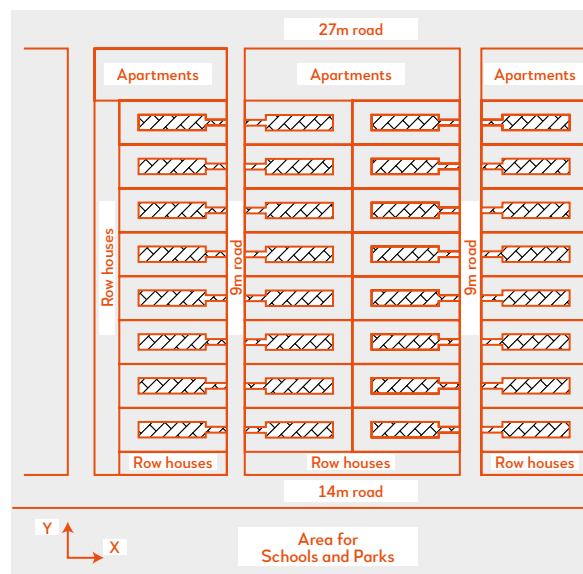
Pic 2 | *Typical neighbourhood layout in Charkop (Patel, 2015)*

SITUATION TODAY

While in most of the Sites and Services locations there was no significant occupancy at the time of introduction of the scheme, an evaluation of the project highlights 'success' in the scheme over time. A recent report states 'in 2015, nearly all individual plot owners had invested enough capital in their houses that the majority of project neighbourhoods were extensively built out and densely occupied' (Owens, Gulyani, & Rizvi, 2016).

The increase in density points to an incremental growth over time, in a few different ways. Apart from contributing to the new housing stock, the Sites and Services model has also contributed to the rental

stock in the city. Also, several households have formed cooperatives to jointly develop rental floors on upper floors, while holding individual tenure on their respective ground floors. Contrary to several concerns raised of the scheme, documentation shows that there are very few cases where the scheme was co-opted by real estate developers for plot consolidation for profit.

In terms of cost recovery, the Sites and Services Scheme in Mumbai had a surplus. The plots were paid for using a revolving fund that was started for the project. The project closed with INR 320 million expected to fund future such housing schemes (Owens, Gulyani, & Rizvi, 2016).

FINDINGS

The Sites and Services scheme in Mumbai is an approach of providing new housing such that the state is an enabler of an incremental housing process, where people build as per their resources. Such a model recognises people's own role within the housing process, to build incrementally as per their own capabilities and resources, according to their own timeline.

The scheme in Mumbai also demonstrates how size is not an inhibitor of a successful housing programme, and is applicable across site sizes (Owens, Gulyani, & Rizvi, 2016).

At the neighbourhood scale, the scheme in Charkop presents a model of integrating uses and mixing income groups, and has been used further as a basis to further advocate for a cross subsidised model for housing. By cross subsidising the cost of land for housing of the urban poor, with the other uses, commercial or housing for income groups, 'there is no need for external subsidies, provided land and infrastructure can be made available within cost limits determined by the income profile of the city or town in which it is taken up' (Patel, 2015).

III
CIDCO MODEL

WHAT IS THE MODEL?

City and Industrial Development Corporation (CIDCO) was formed in 1970 notified by the Maharashtra State Government as a New Town Development Authority (NTDA) and later as a Special Planning Authority (SPA).

At the time, a team with a background in urban planning, engineering and political activism—Charles Correa, Shrish Patel and Pravina Mehta—put forward a plan for a new city, which was formative to the conception of Navi Mumbai. The city of Navi Mumbai was conceptualised as a new city to the east of Bombay, to address its growth and congestion, with the objective of developing self-sufficient urban settlements with necessary infrastructure for the future. The city was conceived as an integrated system of 20 nodes over 300 sq. km., with the objective to accommodate 20 million people. The provision of affordable housing was central to this vision in its Draft Development Plan, to address the increasing number of informal settlements in the city. Each node was expected to accommodate housing for all income groups, and was strategically located as per transport infrastructure, with open space between

each other. Floor space index (FSI) was distributed in the scheme as per the proximity to the node, with higher FSI closer to the transport node and plots with lower FSI away (Choudhary, 2017) (Dore, 2016).

Almost half the land was acquired from farmers, apart from other government bodies. CIDCO was the public agency with the mandate to acquire[1] the land, further develop it through a mix of uses for value capture, and to further lease the land to cross subsidise the affordable housing component. After developing the nodes, CIDCO was to hand over administration to the Navi Mumbai Municipal Corporation (NMMC) (Choudhary, 2017).

A significant concept in the CIDCO model is one of the Reserve Price or Average Development Cost. According to this model, the developed land's value is evaluated periodically through a differential pricing mechanism as per land use, and distance from the transport node. This model cross subsidises land use patterns, such that the land reserve price for housing for the poor is 25 per cent of the land reserve price of that of the higher income groups (Choudhary, 2017).

SITUATION TODAY

Between 1970 and 1990, CIDCO was the prime supplier of fully constructed affordable houses in Navi Mumbai, through the conventional approach of servicing the economically weaker section (EWS), lower- and middle-income groups (LIG and MIG) and, to some extent, the high income group (HIG). The emphasis was on providing affordable housing for the EWS/LIG. CIDCO has constructed about 1,23,577 housing units, out of which 51 per cent of housing is

for the EWS/LIG, while 26 per cent was reserved for the MIG and 23 per cent for the HIG (CIDCO, 2015).

However, this housing was only accessible to salaried, formal sector employees due to a variety of reasons. Navi Mumbai's vision coincided and competed with the reclamation of South Mumbai for a business district at Nariman Point. However, the transport network was not implemented as envisioned. The new city provided

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1 | The CIDCO model of acquisition later also saw a revision through introduction of the 12.5 per cent scheme and 22.5 per cent scheme—which ensured that a percentage of the land developed was returned to the farmers along with compensation, so that they may also profit from the value capture of the development of infrastructure.

more opportunity to the MIG or HIG demography, that may not have been as dependent on mass transport (Dore, 2016).

Further, while housing remained a core investment of the scheme, over the years there has been a shift in CIDCO's approach as a public body, to that of a profit-making body in the 90s, and the introduction of the private sector in building housing. The development of infrastructure on the land by CIDCO has resulted in opportunities for value capture. This was channelised into multiple components, of which almost 15 per cent has been further invested in housing for all income groups. CIDCO initially conceived of a model of affordable housing through

cross subsidy, using the land as a resource from the HIG, to build housing for the poor. However, with the shift in markets, and the introduction of private developers, the development of LIG/EWS housing is at a declining pace, in comparison to other income groups. The private developers do not have a mandatory role in developing housing for the poor, and CIDCO has retained that mandate for itself. However, CIDCO has also reduced its work in construction, and thus the distribution of housing reflects inequalities. The introduction of the private sector has also increased land value. This financialisation has also made housing unaffordable for the poor, leading to almost one-fifth[2] of Navi Mumbai's population residing in informal settlements. (Choudhary, 2017)

FINDINGS

The CIDCO model of housing presents a useful model of cross subsidising housing for the poor through value capture and differential pricing, by integrating incomes and uses.

Significantly, it also demonstrates how this model, while well-conceived, requires the framework of the

public agency for its success. And how, the retreat of CIDCO from its role, and the simultaneous financialisaton of the model for profit has adversely affected the provision of adequate housing for the urban poor.

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2 | According to the Census 2011 the population of Navi Mumbai is 11,20,547 of which 18.5 per cent live in 47 slums (informal settlements). In slums, 64 per cent owned their houses, 33 per cent rented homes and 3 per cent household residents are staying at their premises of work or on the street (mostly floating migration population).

IV
SLUM REHABILITATION SCHEME

WHAT IS THE MODEL?

The Slum Rehabilitation Authority (SRA) was established by the government of Maharashtra in 1995 under section 3A of the Maharashtra Slum Areas (Improvement, Clearance and Redevelopment) Act, 1971. Accordingly, amendments were made to the Maharashtra Regional & Town Planning (MRTP) Act that allowed for the SRA to overpower Development Plans and gave the SRA the right as a Special Planning Authority for slums, to address housing for the urban poor through the Slum Rehabilitation Scheme (SRS). The SRS has three schemes i) In situ rehabilitation scheme as per Development Control Regulations (DCR) 33(10) ii)PAP tenement scheme as per DCR 33(10) clause 3.11 and iii)Permanent Transit Tenement Scheme as per DCR 33(14)D.

The 'in-situ' component of the SRS is based on a principle of public-private partnership to incentivise the development of housing units for slum rehabilitation by the private sector. This is commonly understood as a cross subsidy model where `incentive FSI' is provided to the developer who can make profit by selling the surplus Floor Space Index (FSI) as tenements or in the form of Transfer of Development Rights (TDR) in the open market. This scheme opens commercially viable land in the city for private development—such that the builder is entitled to develop additional housing units on the open market, which can be in a ratio of 1:0.75 in the city area, and a ratio of 1:1 in the suburbs of Mumbai. The scheme thus actually accelerates the provision of housing for middle and high income groups in the city (Nainan, 2008).

While the developer builds the houses as rehabilitation for the residents of the slums 'for free'[1] there is also a permissible relaxation of development controls and density norms. While a maximum permissible density of 250 dwelling units per hectare at an FSI of 1.00 was a spatial regulating parameter in both the DP 1967 and DP 1991, this is not the case in the Developmental Control and Planning Regulations (DCPRs) of 2018. Densities as high as 500–650 units per hectare—at four or five times the density specified in Urban and Regional Development Plans Formulation and Implementation (URDPFI) guidelines—are permitted, with increasing FSI incentivisation. The SRS modified the Slum Redevelopment Scheme (SRD[2]) of 1991, which had capped the FSI for slum redevelopment at 2.5, to increase the FSI for slum redevelopment to 3 in 1995. The current DCPRs 2018 permit an FSI as high as 4. These higher FSIs lead to a default model of rehabilitation in high rise and high density typologies of housing (MCGM, 2013).

There have also been modifications in the provision of the 'cut-off date' for eligibility, and as per the scheme every electoral voter residing in a 'slum' in 1995 was considered eligible for a 269 sq. ft. apartment, preferably on the same site, through the scheme. Unlike the SRD scheme there is no cap on the profit margin of the developer. The scheme was later revised such that every slum that exists prior to 1 January 2000 is protected from eviction, and its residents are eligible within the scheme (Praja, 2014).

1 | Complete subsidy with an additional INR 20,000 for a corpus for a maintenance fund
2 | The SRD scheme relaxed development control regulations and FSI as incentives to developers. The developers could sell the additional units constructed at market price, and the rest was to be built as 'free housing' for slum dwellers.

In order to implement the scheme, a consent of 75 per cent of the residents of the settlement is required to be documented. The SRA model supersedes all previous schemes[3] of slum rehabilitation in Greater Mumbai. (Jagdale, 2014).

SITUATION NOW

While the SRA promises rehabilitation for ten times the number, 18 lakh slum dwellers in the State's future plans (Ashar, 2018) in the last two decades the SRA has constructed only 1.8 lakh houses. The scheme has fallen short, even while incentivising construction of units by the private sector. Until 2014, less than a third of the tenements that received approval for the scheme have received occupation certificates. Similarly, only one-third of the slum population of 1991 have benefitted from the scheme, while the 'slum' population has only increased in the city (Praja, 2014).

This disparity has been attributed to many reasons, (1) the inappropriateness of the housing typology produced through vertical housing and 'relaxed' development norms, (2) the process of collating consent and difficulty in execution (3) the increase in density on land, on an already dense settlement. The effectiveness of SRA as a scheme of housing for the urban poor is thus debatable. It has also been critiqued for its contribution to the creation of a builder–politician nexus in the city.

FINDINGS

Findings in Mumbai reveal several concerns within the city about the appropriateness of the SRA model.

While the SRA model of housing incentivises action by the market for slum redevelopment, it has been critiqued for its bias towards the developers, and its role in the formation of a political–builder nexus in the city of Mumbai. Case studies on the SRA in Mumbai document corruption, failure to follow due process, manipulation of data of eligibility and the exclusion of several households, and inappropriate transit accommodation, the creation of displacement, fear and anxiety among the urban poor, while unduly benefitting the interest of powerful lobbies.

Further, the scheme uses spatial planning tools such as FSI and density, as financial tools for target TDRs. As

a result, the housing that is produced is sub-standard and the 'free' housing has been critiqued on account of being a vertical slum. The housing in high-rise apartment has issues of use, typology—reduced to an ownership driven model, with no scope for rentals, no access to public amenities and infrastructure, and no design understanding of the intersection between housing and livelihood (Suresh, Suradkar, Bhide, Deshpande, & Singh, 2013).

While the SRA model has been exported out of Maharashtra as the 'Mumbai Model', forming a basis for an imagination of the slum redevelopment component in Pradhan Mantri Awas Yojana (PMAY), these findings reveal serious concerns on its blanket applicability in Mumbai and in other parts of the country.

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3 | Previous schemes include the Slum Areas Improvement and Clearance Act 1956, the Slum Improvement Programme 1971, the Slum Upgrading Programme 1985, and the Slum Redevelopment Scheme 1991

V
CITU COOPERATIVE HOUSING MODEL

WHAT IS THE MODEL?

The housing initiative through Centre of Indian Trade Unions (CITU) is a model of Cooperative Housing. This model demonstrates rehabilitation of informal women workers living in existing informal settlements, linking livelihood and housing, through people's mobilisation and a collaboration between actors in government and people's collectives. This model is demonstrated through the mobilisation of the Women Beedi Worker's Cooperative, spread over 182 hectares in Solapur through cooperative housing societies formed for over 15,000 beedi workers.

This scheme was introduced following a process of people's mobilisation, after the introduction of an earlier housing scheme that created debt through monthly instalments that were unaffordable. As the initial project failed, CITU intensified its movement for worker's housing through a long struggle by workers that included mass mobilisations, protests, and campaigns. CITU initially worked with the beedi workers on local issues such as livelihood, and paperwork to access government schemes. The housing projects are a result of long struggles by the beedi workers movement from the early 90s.

SITUATION TODAY

As a result of people's movements and mobilisation, the State and Central Government addressed the living conditions of the workers and allotted funds to finance the construction of houses, through three housing projects in Kumbhari, 6km from Solapur city.

1) Godavari Parulekar Housing Project—10,000 houses, completed in 2006

2) Meenakshi Sane Housing Project—5,100 houses, completed in 2015

3) Cooperative Federation Housing project started in 2018—30,000 houses, to be completed in 2021.

Through the CITU housing model, financing was split three ways between Centre, State Government, and women beedi workers. For example, in the Godavaari Parulekar Housing Project each house costs approximately INR 60,000, of which each household pays one-third, in instalments that are deducted from their personal savings and social security. The central government finances its one-third contribution through the Beedi Workers Welfare Fund, which consist of tax collections of beedi manufacturing.

The housing design consists of a typical unit size of 50 sq. m., and the project includes open space, public amenities, healthcare and educational facilities. The state and federal governments are to enable access for electrical services and water tanks. The municipal corporation of Solapur provides water supply (Dennis, 2018).

A significant feature of the projects is the mobilisation of people through cooperatives. For example, in the most recent and largest scheme in 2018 costing over INR 1,800 crore, communities are organised into five cooperatives under a common federation called the Rajiv Awaas Yojna Nagar Cooperative Housing Federation. These five cooperatives consist of women's collectives from (1) religious minorities, (2) the cobbler community, (3) power loom workers, (4) beedi workers, and (5) ready-made and tailored clothing workers. The housing layout also includes shed for manufacturing for rent, and links the housing and livelihood needs for informal manufacturing, recognising the informal connections between home to the workplace.

FINDINGS

The housing model links housing to people's collectives and livelihood itself, recognising the inherent resource and agency of people themselves. As a result, the housing layouts conceive of housing beyond the housing unit itself and recognise the connections between the home and the workplace. Associated powerloom and beedi manufacturing industries have also moved closer to the cooperative housing projects. Further, addressing transport and mobility issues linked to industry and livelihood, CITU has also persuaded Solapur Municipality to establish transport linkages to Kumbhari via bus to address issues of mobility (Dennis, 2018).

VI
MALKI PATTA

WHAT IS THE MODEL?

Since the early 2000s, a series of Government Resolutions (GRs) in Maharashtra have granted land titles (*malki pattas*) to informal settlements (*bastis*) on government land in Maharashtra. This is significant as the security of tenure and removal of threat of eviction enables people to invest in their existing housing, to upgrade as per their own resources. A study conducted among more than 3,000 slum households in Nagpur also found 91 per cent of residents wanting to upgrade their existing homes (YUVA & IHF, 2018).

Further, the provision of title potentially connects people to various schemes of housing for the urban poor such as Pradhan Mantri Awas Yojana (PMAY) which requires a defined tenure status. One of the four verticals of PMAY is subsidy for beneficiary led construction (BLC) of individual houses. According to this, families falling in the economically weaker section (EWS) category[1] are eligible for central financial assistance of INR 1.5 lakh for the construction of a new house. A clear prerequisite of availing this component of PMAY is however adequate documentation of land ownership (MoHUA, 2015). While this is often a barrier for most informal settlements, in the case of Nagpur the *malki patta* provision enables households in 'slums' to connect to the assistance possible through PMAY.

SITUATION TODAY

Malki patta was introduced in Nagpur through a series of 4 landmark GRs by the Urban Development Department of the State Government of Maharashtra, to recognise the tenure status of *bastis*. In 2002, the GR declared eligibility of *patta* (title) for households with the individual's name on the voter's list on or before 1 January 1995. In order to avail the tenure status, people needed to form cooperatives, and the title would be granted in the name of the cooperative society.

A GR in July 2016 extended the eligibility to 1 January 2000, which enabled linking the BLC component of PMAY to households. Later, in August 2016, a GR declared that households in *bastis* on Nagpur Improvement Trust (NIT) land, would be eligible to access tenure rights through a 30-year joint ownership on the basis of tenure. Through this resolution, 52 settlements on NIT land were eligible

for title. For scheduled castes (SCs), scheduled tribes (STs) and other backward class (OBC) households, the tenure rights that would be provided for the first 500 sq. ft. would be free of cost, except in Mumbai, Thane, Pune and Pimpri Chinchwad. There were certain conditions to the title that included forming a cooperative society within two years of receiving the title, distribution of land title to be in accordance with the Maharashtra Regional and Town Planning Act 1996 and associated development control regulation (DCR). This implied that *bastis* on land designated for non-residential use could not avail this scheme. Further, any modifications to the DCR needed to be channelled to the state government via the NIT Chairman—a process that takes a lot of time. The resolution also included a provision that residents needed to pay a land cost for the ownership title and a component of ground rent. This ground rent differs as per the market rate in various areas, on an average

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1 | *As per PMAY guidelines, this refers to households having an annual income up to INR 3,00,000 as per the central guidelines. States/UTs may modify this figure in consultation with the centre.*

ranging between INR 4,000–INR 8,000 annually. The decision to charge a 2 per cent lease on the premium by NIT was met with resistance by people (yuvaonline, 2018, 2 July).

In 2017, a GR granted land title for all *bastis* on government owned land in Nagpur. This included land owned by the NMC, Collector, as well as the NIT. This is significant as nearly 40 per cent of the city's population lives in 446 *bastis*, of which only 287 have been notified so far (yuvaonline, 2018, 15 June).

FINDINGS

The process of land titling involves the collaboration of people, non-governmental organisations and state actors. The past years of the process of land titling in Nagpur has included advocacy and follow-ups with the state government by Youth for Unity and Voluntary Action (YUVA) and Shehar Vikas Manch (SVM), raising awareness through *mohalla sabhas* (community meetings), sharing information about data and updates of the survey determining the area of the settlement, to enact the 74th Constitutional Amendment Act, enabling decentralised decision making. The organisations also held workshops with community leaders to build capacities on tenure rights, and details on documentation required for title, provisions of ground rent and ownership title certificates.

While the Slum Rehabilitation Scheme (SRS) has had a poor response in Nagpur, *malki patta* has the potential to enable people-led upgrading, linking housing to livelihood and people's existing resources, while also connecting them to the macro-policies.

Key attention needs to be paid to the details of the process, as seen in documented case studies of the situation of implementation in various settlements. This includes revising an affordable ground rent, addressing challenges of implementation including bureaucratic delays, addressing unclear land records of the government, coping with land transfers between government bodies, addressing the conflict of land use categorisation and exclusion of non-notified slums from the survey (YUVA, 2018).

DISCUSSION

The cases discussed in the paper demonstrate that over the past few decades, the state of Maharashtra has implemented diverse approaches to housing—models in which the role of the state, the people themselves, and the private sector has changed over time.

While the post-independence phase of housing models initially saw a state dominated approach with the set up of the Maharashtra Housing Area Development Authority (MHADA) and direct provision of housing, the 70s saw a departure from this model and opened an understanding of the capacities of people within an incremental housing process through the Sites and Services approach that was anchored by the MHADA and City and Industrial Development Corporation (CIDCO) in Mumbai and Navi Mumbai respectively. The CIDCO model, for the development of Navi Mumbai in particular, was another attempt at creating new housing stock, by integrating incomes and uses, and subsidising housing through other uses. The CIDCO model also reflects how the changing market shaped the housing model in Navi Mumbai and limited its success, with the withdrawal of the public agency in housing for the urban poor.

Similarly, the models of housing that engage with existing *bastis*—Slum Rehabilitation Scheme (SRS), cooperative housing and *malki patta*—all demonstrate the different role of actors in the housing process. While the SRS incentivises the private sector to build units for the urban poor, it fails on several accounts. The cooperative housing model, in contrast, provides an alternative linking livelihood to housing and people's needs and aspirations. Similarly, the provision of *malki patta* in Nagpur demonstrates an alternative attempt by the state to engage with people's existing processes to enable upgrading, and to link existing housing policies to the lived reality.

The cases discussed demonstrate a significant opportunity in relooking public housing for a cross evaluation on the impact of different approaches.

Three clear approaches are outlined as follows:
i. Finance and Cross Subsidy Approaches
ii. Land and Regulatory Frameworks
iii. Processes within Housing Models

- **Finance and Cross Subsidy Approaches**

    While the MHADA model demonstrates a method of cross subsidy between income groups, the CIDCO model demonstrates a similar approach that builds on the concept of value capture of the development of the land in Navi Mumbai. The Sites and Services model, on the other hand focusses on incremental housing and the capacity of people to self-finance their housing as per their resources and growing family requirements. The cooperative model also demonstrates how welfare funds of the state can be channelled into people focussed housing initiatives. All these cases offer a variety of financing alternatives to the SRA model of 'free' housing that is incentivised for private developers.

- **Land and Regulatory Frameworks**

    In the context of the increasing role of land markets in affecting affordability of housing, the cases demonstrate different ways in which the state acts as a land holding agency and regulates the market to diverse ends. While MHADA is one of the largest land holding state agencies in Mumbai, the cross-subsidy model is not nuanced enough to address this reservation towards truly affordable housing. While the CIDCO model demonstrates an attempt to build on the value capture of land, it also demonstrates that in order for the model to be successful its principle

of a public agency needs to be upheld. The SRS demonstrates how opening up viable land for the private sector has various challenges to deliver quality and adequate housing for the poor, due to a misbalance in prioritisation. The Cooperative housing model in Solapur, Sites and Services in Charkop and *malki patta* in Nagpur, on the other hand, demonstrate how land rights of the urban poor may be addressed directly, while recognising people's agency.

- **Processes within Housing Models**

   The cases demonstrate differing imaginations of processes within housing creation and the changing roles of the state, private sector and people themselves. The cases demonstrate how while models such as MHADA, CIDCO or the SRA may be well intentioned, they are unable to produce housing at scale. The cases also demonstrate a diverse imagination of the role of the state—with the state as a provider of housing in MHADA, to an 'enabler' of housing through land value capture in CIDCO and the SRA, to an enabler of people-driven housing alternatives that show greater effectiveness over time, enabling bottom-up processes that are integrated with the city and livelihoods of people. For example, the *malki patta* model enables incremental housing in the city, while the cooperative housing model in Solapur demonstrates a process for cooperatives linked to livelihood and industry.

From these cases and the trends they highlight, it is evident that public housing in Maharashtra has been most successful when people have been involved in the creation of housing. The role of the state, while extremely important in housing the poor, must be one that enables housing in partnership with people. Most importantly, these models show that housing provision is context-specific and must respond to an ecosystem within a city. A state-wide one-size-fits-all model cannot do justice to the diversity in the needs and capacities of people with regard to housing.

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ABOUT YUVA

Youth for Unity and Voluntary Action (YUVA) is a non-profit development organisation committed to enabling vulnerable groups to access their rights. YUVA encourages the formation of people's collectives that engage in the discourse on development, thereby ensuring self-determined and sustained collective action in communities. This work is complemented with advocacy and policy recommendations. Founded in Mumbai in 1984, currently YUVA operates in the states of Maharashtra, Madhya Pradesh, Odisha, Assam and New Delhi.

At the community-level, through an integrated 360-degree approach, YUVA delivers solutions on issues of housing, livelihood, environment and governance. Through research, YUVA creates knowledge that enhances capacity building. Through partnerships in campaigns, YUVA provides solidarity and builds strong alliances to drive change.