

Response to the MCGM's Preparatory Studies Report for the Development Plan 2014-34

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In November 2013 the MCGM released the Preparatory Studies Report. The Preparatory Studies Report is aimed to be a well researched document that informs the creation of the Development Plan (DP). It is one of the most important steps towards creating a well informed DP; through detailed information provision on the existing situation, possible growth scenarios over the next three decades and suggestions on amenity/land provisions based on these projections.

*As a city wide campaign **Hamara Shehar, Hamara Vikas, Hamara Niyojan, Abhiyan Mumbai** welcomes the initiative of MCGM towards public participation in the Development Plan of Mumbai. This response to the MCGM Preparatory Studies Report is based on collective views of the campaign. It is meant to inform the ongoing consultation process and raise critical concerns that the report seems to have brushed through or overlooked. A deeper analysis of the issues raised needs to be taken up seriously by the MCGM in order to prepare a Development Plan that is in tune with its stated vision.*

Physical planning is an instrument of social policy. Restricting the discussion on the Development Plan (DP) to land use and Development Control Regulations (DCRs) is a refusal to undertake planning in a holistic way and an attempt to restrict the discussion to modalities where the policies have already been determined.

The Preparatory Studies Report largely makes the case for urban renewal and redevelopment for “increasing space demand” and “creating land for public use” that can be achieved by switching to “a non-restrictive regulatory regime,” mainly focused on *relaxing FSI restrictions*. A call for an increase in FSI goes against earlier approaches of planning in the city that recognized the relationships between population densities, FSI and other regulations, economic activity and population growth. There have been technical arguments against the immediate and indiscriminate increase of FSI levels by other planners,¹ and the Preparatory Report looks like an attempt to systematically counter all of those arguments. Unlike the Report, we agree with the view that densities, FSI and population growth are correlated, but we also recognize that abstract debates about densities, amenities, standards and FSI values, though important, are very limited as tools for analysis, and conceal the more serious issues of access and affordability in our cities. The shift to a “non-restrictive regulatory regime” and incentivising market driven redevelopment of the city as a way to address its problems, delinking the role of the state is dangerous to the concept of a welfare state which is bound to provide and ensure justice and access to the most vulnerable sections of the city. This line of thinking is contrary to the stated vision of the Development Plan, which seeks to make Mumbai not just world class but also a liveable, inclusive city.

Rather than aiming at the well-being of all its citizens and enhancing their capabilities to function and contribute to their own development, it seeks to give free reign to and facilitate an investor and developer driven transformation of the city that is largely responsible for the most urgent problems facing it today. In short, we argue that the Preparatory Report is flawed in both its diagnosis and its prescription, and a plan made on this basis

will enrich and improve the so called “quality of life” for some. This enhancement of the quality of lives of a few will be at the cost of sacrificing the interests of the large majority of the citizens.

The argument made by the Preparatory Report is briefly put forth:

population growth of the city has stabilized. By 2034 the city will add not more than 2 million people. Per capita incomes of the city are growing, and are expected to continue. The average “household size” is declining, indicating an increasing demand for homes. The demand for office space is also increasing with the growing tertiary sector economy. Presently, homes are unaffordable for a majority of citizens due to FSI regulations that restrict development, and due to artificial scarcity and high demand these restrictions create, real estate prices are very high. Therefore, the approach of a plan, considering all these factors and indicators, must be to increase the supply of build-able space (by relaxing FSI and other restrictions), and allow for the creation of housing and office space in the city. Also, it has been observed that land reservations for providing amenities has not worked, and the only way to provide amenities will be to incentivise redevelopment and renewal through which some land may be extracted for amenities. Since the population is unlikely to rise too much and per capita incomes are increasing, new space created will be consumed by existing residents, improving their overall quality of life.

This argument is simplistic, built on loose foundations and fails to consider and study many important facts about the city that might demand a different interpretation and approach to plan making. In what follows, we attempt to explain what we think are some of the major shortfalls of the Preparatory Studies and possible corrections that need to be incorporated.

Planning Sectors

The MCGM has adopted the concept of “planning sectors” for the revision of the DP to have “basic workable spatial units” for the provision of social amenities “at the smallest level of disaggregation appropriate to be addressed in the Development Plan.” The planning sectors do not correspond to the Corporator ward boundaries, but do correspond to the administrative ward boundaries. The rationale for conforming to the administrative ward boundaries is not the existing framework for governance, but because it “ensures optimal use of secondary data.” Infrastructural boundaries, physical features and areas that are “largely homogeneous in character” have determined the delineation of these boundaries. Why is the disaggregation of a Corporator ward not viewed as an appropriate or basic workable spatial unit for the DP? The problems of planning, it seems, are completely distinct from the needs and priorities of people who will be affected by those plans.

The 74th Amendment to the Constitution calls for the decentralization of governance to institutionalize citizen participation in municipal functions. As an innovative step, the DP should work with Corporator wards as planning units, and set up processes that might have initiated and encouraged people's participation in planning. The argument that electoral ward boundaries change with population increase is true for administrative ward boundaries as well. This delineation of planning across electoral wards will result in better governance as well with citizens being able to demand accountability from the elected representatives rather than leaving it to the bureaucracy to deal with issues of governance. It will link the planning exercise with resources as Corporators have huge funds at their disposal for provision of civic amenities. The UN Declaration of the Right to

Development emphasizes the role and agency of people in shaping their own lives: the “human person is the central subject of development and should be the active participant and beneficiary of the right to development.”ⁱⁱ

For the allocation of amenities, the Preparatory Report suggests participation as a method. Would then the Corporator wards not provide the ideal framework for debating priorities and making decisions over allocation of amenities?

Per Capita Built Up Space Consumption by Income Levels

The preparatory study document needed to make note of per capita *consumption* of built space (residential and commercial) especially per capita consumption of built space based on incomes.

The Preparatory Report does not indicate income distribution as well as per capita space consumption - and analyze the relation between the two. By not counting these, it glosses over the more difficult questions of inequalities in the city.

Aggregate per capita income conceals inequities of incomes: The document does not have any data to measure to inequities. In the absence of this important data, how does the DP aim to understand and address the problem of inequities?

Factors Affecting Population Growth or Stagnation

Assuming that there is a decline in the rate of growth of population, as the Preparatory Report states, citing the 2011 census, what are the reasons for the decrease in the rate of population growth in the city? The report makes population projections, but does not get into an analysis of *why* there is a decline. Is it due to high living costs within city limits? poor employment opportunities? lack of housing? low per capita built up space availability? Will not greater opportunities generated due to availability of residential and commercial space as a result of increases in FSI impact population growth? Unless the reasons for the stabilization / decline of growth are understood, does one assume that the situation in the city will remain static for the population to remain stable or that population growth has no relationship with the development activities in the city?

2011 Census, Slum Data and Human Development Index

It is poverty, deprivation and vulnerability that require policy and planning intervention, and slums are not the only expressions of these. If slums are considered as 'targeted' areas for the delivery of urban welfare programs, ambiguity regarding what constitutes slum areas and underestimates of the number of households that fall in this category might leave out many; also, the failure to address similar conditions that exist in areas that might not be considered “slums” is also a problem. The Development Plan uses the 2011 census for its population data but uses ‘provisional data’ for slums, which seems to be a massive underestimate of slum households and people living in them. According to the Mumbai Human Development Report (which uses the 2001 census data), there were 6,475,440 people living in slums in 2001. The 2011 Census reports 5,207,700 people living in slums, an absolute decline in slum population, despite an increase in the overall population of the city in the same decade. The

Preparatory Studies states 41.3% as slum population in the city, while the Census 2001 had Mumbai's slum population at 54.06%. Even more surprising is the fact that the *MCGM has based its entire report on these figures*, without considering alternative population growth scenarios.

The table below compares the slum data on M/East Ward and L Ward from different MCGM documents:

M/E Ward	Total Population	Slum Population	Slum Population (%)
MCGM's Preparatory Studies 2013 (based on 2011 Census)	807,720	245,300	30%
Mumbai Human Development Report 2009 (Based on 2001 Census)	674,850	523,324	77.5%
MCGM Manual Number 1 - Particulars of office, its functions and duties (M East Ward)2006 ⁱⁱⁱ	-	1,009,869	-
L Ward	Total Population	Slum Population	Slum Population (%)
MCGM's Preparatory Studies 2013 (based on 2011 Census 'provisional data')	9,02,225	4,90,400	54.35%
Mumbai Human Development Report 2009 (Based on 2001 Census)	7,78,218	6,58,972	84.68%

As per the Human Development Index (2009)^{iv}, M East Ward and L Ward ranked the lowest among all 24 municipal wards. The Development Plan has the power to significantly alter human development in the city as services that augment human development can be provided for through reservations in the DP; only however, if population is well estimated and projected.

Furthermore, what are the implications of the under-counting of slum households? Since "household size" is the average number of people living in a house as opposed to the size of the family, and since slum households have on average more number of people per house, the reduction of household size could be a result of the under counting of slum homes. This underestimation of slum population is repeating what previous Development Plans did – underestimating population growth and thus not providing for necessary services. While the Preparatory Studies accepts this as a shortfall of earlier Development Plans, it seems to repeating the same when it comes to slums that support more than half the city and require a focus in terms of provision of basic amenities.

Planning Standards and Benchmarks

The UDPFI guidelines state that social amenities and infrastructure are "the basic requirement of urban life and its adequacy and accessibility are two important ingredients and key contributors in the upgradation and enrichment of quality of urban life which is the primary objective of any planned development effort." It further adds that these amenities "fall under the social welfare objectives of the urban development programme, as distinct from economic development objectives and especially in context of the rapidly developing liberalized and competitive

economic scenario.”^v Urban managers and administrators are “required to make special efforts to devise innovative strategies in order to ensure their wider coverage and equitable distribution for the society as a whole and the vulnerable sections of the urban society in specific.” Notice that social amenities and infrastructure in the city are both “inadequate and inaccessible” especially to the “vulnerable sections of the urban society,” but despite this, their provision is nowhere close to being the “primary objective” of the development planning effort. Planning standards have been reduced in the preparatory studies to being almost half of the lowest amongst the various norms enumerated by different planning agencies and authorities in the country. Compare the MCGM's 2014-34 DP's total per capita amenity and open space benchmarks at a Planning Sector level (2.154) with UDPFI norms (18+), Delhi Development Authority (5.7+), National Building Code (16.34+), CIDCO (4.42), 1991 Mumbai DP (5.36+), Committee on Planning Standards (4.14+). It must be noted that minimum benchmarks for every Planning Sector (PS) is lower than even the existing amenity areas at the city level according to the ELU.

But most crucially, all these norms expressed in per capita terms do not accurately represent the realities on the ground. A better way to do such mapping would be separate public and private amenities, and to tabulate per capita amenity areas and units *based on income levels* for a given area to give a more accurate picture of *access* to amenities.

Faced with amenity shortfalls, what are the ways in which amenities can be provided? More important than areas are number and distances of amenities, and there can be no justification for fewer number of dispensaries or schools. Amenity provision norms, instead of being diluted across the board can be prioritized, such that the most essential ones (health, education and some social amenities) can be provided based on national area norms, and others (open spaces and some social amenities) may be built by utilizing less land or by intensive use of land. Contrary to the notion that land is in short supply in the city, land that is currently lying vacant (1.83 sqm per person) and vacant but under construction (0.90 sqm per person) combined with unclassified land (1.47 sqm per person)^{vi} is potentially 4 sqm of land per person for public amenities. Unused industrial land and industrial land that is currently being recycled for luxury housing could have been used for amenities if not for creating formal employment. Lands areas classified as transport (BPT) land could be utilized for amenities, and a transportation strategy that depends more on public transport and less on the private automobile will free up land for public purposes. It seems that at least 5 sqm of land per person is available for the creation of amenities. The MCGM must plan to provide municipal amenities for the entire population, and privately developed and run amenities must be considered an addition and not a substitute. It is essential that a population that is predominantly low income have access to public health, education, social and recreational facilities, and physical planning must make provisions for such facilities.

Three approaches can be undertaken for the creation of amenities on lands that are currently being used for residential purposes. The first one, is through *readjustment*: change the use of land currently used for residential purposes to an amenity (in some cases, an exiting building may be simply re-adapted to become an amenity without demolition and reconstruction). The second approach is *reorganization*: A few plots or a block can be demolished and rebuilt such that some land is freed for amenities and all the residents are rehoused in the same plot of land (in order to maintain existing densities, no new people are accommodated there). The third approach is *renewal*: a large piece of land is redeveloped, people living there are rehoused in the same area, amenities are created for them and for new residents who will move into that area (densities are increased). The first approach is

least disruptive and inexpensive; it is also likely to be most effective. The second is more disruptive and expensive. Renewal is most disruptive, least sensitive and most expensive; amenities created through this process are also likely to be least accessible. The MCGM, through the preparatory studies makes a strong case for renewal but suggests that the first has not been effective historically and must be done away with.

Mapping Social Realities and Environmental Conditions

The term “slum” suggests a combination of insanitary conditions, inadequate access to services, poor quality construction and so on. These might vary in scale and intensity for different areas. Rather than simply mapping areas perceived or recognized as “slums,” it might be more useful for policy and planning, to produce maps based on specific social indicators. Mapping slums does not imply denying their growth potential or their dynamism but rather a socio-spatial mapping of neighborhoods and precincts based on literacy levels, health coverage, mortality rates, average age, income levels, sanitation conditions (toilet seats per capita), accessible and usable open space, per capita residential space, male-female sex ratios, occupations (formal / informal, primary, secondary, tertiary), access to infrastructure, etc. This will provide a clearer picture of the socio-economic geography of the city. Such maps might turn out to be better guides in the making of plans and social policy than the meticulous mapping of FSI values.

Mapping Access to Amenities

The Report seems to focus only on amenities in terms of per capita areas, and mapping locations. Simply achieving planning benchmarks does not achieve any purpose in the absence of addressing issues of inequalities of *access* to amenities. The approach to calculating amenity space is counting the number of people in an area, and dividing up the total floor area of an amenity among them. But not all people have equal opportunities to enjoy a given amenity. What needs to be mapped instead is the per capita amenity areas for different income groups and a gendered approach to the same.

Inequities of access can be mapped, and one way could be as follows: first segregate public and private amenity spaces. The areas for public amenities can be simply divided up between the population in the given area. Then, for private amenities, instead of beginning with the population and dividing up the amenity space among them, we must begin with the number of people who generally use the amenity, and determine their average household incomes. The amenity can then be considered accessible to people belonging to that income level. The built up area of the amenity must now be divided up between the total number of people who belong to that income level in a given area. A table can then be prepared indicating and comparing the per capita amenity areas based on income levels.

Mapping Access to Open Spaces

As the preparatory studies itself mentions, many of the open spaces in the city are public in name but private in use. Barricaded, policed and restricted in use, to name a few. These are made to become suited to certain classes and their lifestyles. But while computing the available open spaces in the city and setting benchmarks, the

assumption is that every square meter of open space in the city can be enjoyed by every member. This is misleading.

Can a method be devised to measure access to open spaces based on income levels, or inequities in open space consumption? Very simply, the higher the income, the greater the possibility to enjoy open spaces - the wealthy have access to pay and use open spaces as well as public open spaces. The poor have access only to public ones which are shut for most part of the day. One way could be to separate privately owned open spaces for exclusive use (including open spaces belonging to building societies, beach fronts of private residential neighborhoods), open spaces predominantly used by higher income groups (commercial enterprises, clubs, gymkhanas, specialized parks, golf courses, race courses, and other 'pay to use' facilities) and public open spaces. The first can simply be calculated by dividing up area of open spaces by the number of owners and users. The second can be calculated by dividing up the ground areas of these spaces with the number of people who can afford them. The public spaces will be divided up among all the people that reside in the neighborhood (including upper and middle income groups).

Supply and Demand in the Housing Market / Affordable Housing

The report makes the supply-demand argument to explain the high costs of land and housing in the city, without undertaking an honest assessment of the disequilibrium of forces operating in the housing market, and on other markets that are connected to the housing market. The document ascribes speculation in the housing market to state regulations, making the case for doing away with them altogether. What is needed is a thorough study of the kind of housing stock being made available by private builders, the costs of these dwellings and their affordability to the larger population including women and other economically disadvantaged groups. As stated earlier, a more comprehensive picture on the economic disparities among the population groups would help arrive at the affordability criteria.

If housing is left entirely to the private sector, the focus will remain on creating high end and luxury apartments, which cater to a limited population and affordability will be restricted to the peripheral areas of the city or in extreme high density accommodation with less than minimum or zero urban development standards (which is evident in many slum redevelopment projects in the city) or relegating the poor to the peripheries, even outside municipal limits. The consequences of this is that the poor end up bearing the net costs of development, and the city will become even more polarized, with the wealthy few enjoying much more public and private spaces, while low income communities will be forced to share what remains.

Unoccupied dwelling units

The census survey and research studies have brought out the worrying picture of unoccupied dwellings with studies revealing lakhs of sq mts of space lying unused. Data about total housing stock in the city, their prices and their occupancy status will provide a good understanding of the scale of speculation in housing which has implications for policy and planning.

Per Capita Land Area for Residential Development?

The per capita land mapped as residential areas as per the ELU is highly suspect at 8 sqm per person. Some commentators have pointed out that the per capita consumption of built up residential space in Mumbai is as less as 4.5 sqm.^{vii}

As pointed out by the UDRI, The ELU has missed out 1878 Ha of mangrove areas, 932 Ha of salt-pan lands, 1446 Ha of salt marshes and mudflats, a total of 4256 Ha of land area. How much of all this land has now become residential? Is the ELU erroneous in this regard or have all these natural areas *in fact* been lost?

The Tertiary Sector and Employment

The Preparatory Studies is rather cheerful about the possibilities offered by the service (tertiary) sector, without an analysis of its performance over twenty years. How many formal and informal jobs has this sector generated versus the formal jobs it has lost to the industrial sector? How have incomes been distributed within the tertiary sector? The report refuses to ask these questions.

It says in its summary, that assuming the “present trend of decline in primary and secondary sector...the share of the tertiary sector would increase to 80.5%.” Even if one were to accept this assumption, the inference is astonishing: “this indicates that *there would be an increase in the share of formal employment* in Greater Mumbai, thereby increasing the demand for floor space for formal economic activity.” Apart from being empirically false, is a classic *non-sequitur*. Growth in the service sector in Mumbai has been accompanied by a “virtual stagnation” in formal sector employment according to the Planning Commission. As it states in its 2006 report, “growth of formal sector jobs in the services sector has not been adequate to fill the void created by the decline in manufacturing jobs,” and as a result “of bringing so-called labour flexibility...[has seen] the erosion of many benefits... accompanied by increase in casualisation, contract labour, subcontracting and lengthening of working hours, etc.”^{viii} Furthermore, employment creation in the service sector has been dualistic, with a relatively small number of high-skill high-income jobs, and a large pool of low-skill low-income precarious and informal jobs. Providing infrastructure for the service sector in the Development Plan suggests a willingness to promote the continuing financialization of the city's economy, disregarding the harsh consequences on working people and the cultural core of the city over two decades.

A refusal to look at secondary and primary employment results in a lesser need to provide for informal market spaces and mixed used slums that house a majority of the primary and secondary sector activities.

Also, under public amenities space reservations have been kept for Municipal Markets and Wholesale Markets – there has been no reference to hawkers and informal markets. Identification of streets and areas where informal markets occur and facilitating these by provision of space and supporting amenities, ensuring that redevelopment of slums does not take away the livelihoods of home based workers needs to be intrinsic to the Planning exercise for the City.

FSI, Density and Gentrification

Increasing FSI in different places leads to different effects: In rich contexts, an increase may result in increase of

per capita space consumption. In poor contexts, it often results in increases in density.^{ix}

If per capita consumption of built up space is held constant, increase in FSI will increase density ; Assuming that all the built up space produced as a result of higher FSI will be consumed, and assuming that per capita consumption is constant, won't population growth (and hence density) increase as a result of availability of built up space? How will the subsequent increase in requirement for amenity and open spaces be satisfied?

If however, let us provisionally accept the argument of the preparatory report that densities will not be affected by increases in FSI, and that per capita consumption of built up space will increase. But with rising disparities of income due to poor labour protections and casualization of the workforce, most of the additional built space created will be consumed by upper income groups, forcing poorer residents to move out and find more affordable accommodations, usually towards the peripheries. Either way, the results of increased FSI is almost certainly going to be disastrous: gentrification or overcrowding, or an unhealthy combination of both.

Dispossession and Exclusion Through “Development”

The DP makes a case for “renewal and redevelopment” as the only means of providing amenities and fulfilling perceived growth in space demand. This must happen, it insists, by providing incentives to developers who will deliver the goods. The record of this form of delivery of public amenities through private means has a poor record and insistence that this is the only possible way forward is frightening.

Private sector led development in recent times has produced typologies in the city such as podium type buildings and gated communities, that have completely turned inwards and detached themselves from the public sphere of the city. This is as much a result of the policies and economic models (cluster redevelopment, change in land use reservations, etc) that generate these projects as the choices of the professionals who design them and preferences of those who live in them. These typologies have created environments that are exclusive both in material and symbolic ways, and are disturbing trends for any city. Simultaneously, Public Private Partnership (PPP) models for the creation of projects that are aimed at being revenue generating through user charges have made infrastructure and services inaccessible to the urban poor. FSI and other Incentives to the private sector for “development” projects has spawned various modes of socio-spatial exclusion in the city, and a continuation of such an approach in the development plan is a cause for serious concern.

Evidence for production of land for “public use” through redevelopment?

Before proposing redevelopment as an answer to the city's woes related to land scarcity, it is important to study the impact of redevelopment in the past. Is there evidence that redevelopment has been able to produce land for public use? On the contrary there is evidence that it does not work – DCRs for creating public parking for example have not created usable public parking. Redevelopment policies have created gated communities that provide for the resident communities but provide little or no truly public spaces. Incentivising redevelopment through the private sector is more likely to lead to gentrification and polarization of the city.

No Concrete Goals, Little Data and No Situation Analysis or Projections for the Vision of Making Mumbai

a “Sustainable City”

The report uses technology to precisely map and measure FSI consumption and potential in every neighborhood of the city. It also has clear goals in terms of space requirements for residential, commercial and amenity spaces for a growing population over 20 years. In doing so, it exhibits clarity in articulating goals and a commitment to objective analysis that is praiseworthy. However, it provides no clear goals or objectives for its purported ambition of making a “sustainable city.”

When it comes to data or analyses that might be needed to establish sustainability as a goal and objective, it provides not even an overview of the existing situation or a framework for analysis. Wouldn't environmental sustainability as an objective require an assessment of the city's carbon emissions, pollution levels, waste production, recycling capabilities, energy consumption, biodiversity, and so on, projections for the each of these and strategies and plans for them? What should be the reductions in Mumbai's carbon emissions by 2024 and by 2034? What are the measures to reduce dependence on fossil fuels and switch to renewal energy? Is there any thinking about making the city produce its own food and energy, or manage all its waste? Unless this data and analyses are a part of the report, the claims of making a “sustainable city” can be considered as no more than empty rhetoric.

No Concrete Goals, Little Data and No Situation Analysis or Projections for the Vision of Making Mumbai an “Inclusive City”

MCGM's report gives itself the challenge of making the city inclusive. In a highly unequal city, such an ambition ought to be the primary concern of any planner. Towards achieving this vision, the Preparatory Studies Document, needed to elaborate on various forms of inequities and exclusions in the city with data

The situation analysis report has almost no analysis of the various forms of exclusion in the city, the causes and consequences of exclusion, or of means and measures to alleviate them. As a consequence, it has not articulated any clear goals or targets except rather vague suggestions about reducing slums. Most of the data (such as incomes, built up areas, amenity areas, open spaces, etc) is based on per capita aggregates which completely misses out on inequities of distribution in all of these measures.

How does the Development Plan propose to address income, gender, caste, inequities and inequities on account of disability or age in the city? How can a diversity and mix of urban environments be fostered and sustained, while disparities of opportunities be reduced? Why cannot clear commitments regarding universal access to health, education, sanitation be made? Can every urban dweller be guaranteed a safe shelter and access to safe, accessible and affordable public transportation in the city? There no policies or support structures for housing and transport for low income communities or women or the disabled, and why does the DP offer nothing more than market mechanisms?

The lack of gender-disaggregated data has meant that the Preparatory Studies document is a gender blind document. The needs of the disabled are limited to access to streets in the Preparatory Studies document. Provisioning for women is limited to maternity hospitals, when the Document should have presented data towards making a case for the creation of a safe city for women and a disabled friendly city.

Inclusivity has been very narrowly defined in the Vision of the Preparatory Studies document and hence the document fails to address the concerns of exclusion of a vast majority of the citizens. If the aim of “inclusivity” is serious, the report will undertake a thorough assessment of the conditions of various communities in the city, and plan towards the welfare of all its residents and workers.

Existing Land Use Distribution

The percentage of developed areas dedicated to different urban functions according to the MCGM's ELU can be compared to UDPFI's guidelines. The guidelines suggest 35-40 % developed area for residential functions (Mumbai presently is 38%), 4-5% for commercial and offices (Mumbai is 4.6%), 12-14% for industrial (8.27%), 14-16% for utilities and amenities (5.19%), 20-25% for openspaces (5.67%), 15-18% for transport & communication (19.57%). UDPFI is extremely generous in its open space norms, and there is a strong case to relax these, especially since streets and other informal spaces are already used as public spaces in our cities. Though the report has emphasized that these norms are unachievable in Mumbai, the comparison shows that the functions that are deficient in terms of land area are recreational facilities and amenities. If the “shortage of land” argument is employed here, one might accept a reduction of the openspace requirement by 10-15% points, but what is more disturbing is the shortfall in amenity spaces (though here the ratio also includes utilities). Functioning health, education and social amenities determine the general wellbeing in a city, in ensuring a healthy and literate population and workforce, and a vibrant cultural sphere. The preparatory studies makes the case for a rising demand for homes, but does not sufficiently recognize and address the the inadequacies in amenities, instead, it dilutes the amenity norms to make more room for residential, commercial and transport functions.

Transport infrastructure

In its transport section, the MCGM blames the problems of mobility and poor efficiency of traffic flow on the “inadequate road density and...several missing road links in the overall road network infrastructure...particularly so in the Western Suburbs.” It abdicates its authority over major “arterials and highways” that are “addressed comprehensively at the larger scale” but will pass over its territory (such as the coastal road, that appears as “proposed road” in the preparatory report's maps). This is odd, as the Coastal Road has been claimed by the current Municipal Commissioner as one of his three major achievements, which he is “pushing for...in the larger interest of the city.”^x The effort to create more road space in a city that is supposed to be starved of land is difficult to understand. If the enormous costs in terms of livelihoods to coastal communities, and environmental impacts due to reclamation are considered, it becomes impossible to defend. This, especially, when every amateur transportation planner understands that increasing road space *induces* private vehicle travel and *generates* traffic, and what is needed is containment and management of private vehicle demand.

The *Comprehensive Transport Plan for Bombay Metropolitan Region* authored by WS Atkins International (Atkins Report) in 1994 made this its core strategy. What is interesting is that the Atkins Report was working with a projected population of 22 million by 2011, but it still suggested alternatives to many of the major arterial roads constructed or proposed today (MHTL, Coastal Road, and even the link from Fort to Uran demanded by MTSU's *Concept Plan*). Its message was clear: “available road capacity will have to be rationed either through congestion

as currently happens, or through pricing.” The emphasis, it continued, “should be on “optimising the existing main road network capacity,” “major investment in rail transport systems, coupled with demand management measures for road traffic in the Island City and road investments concentrated in Bombay suburbs and in the region” to restrict the “growth of traffic and partial mitigation of the increase in air pollution.”^{xi} It also called for cordon pricing on-street and off-street parking charges as a revenue source to finance additional transport facilities and “capital projects for public transport improvements.” The MCGM on the other hand, seems to be working with the World Bank initiated Comprehensive Transport Study (CTS) of 2005 that recommends expanding the existing road networks to accommodate increasing private vehicle demand (and hence creating additional demand), for a much lower population projection for Greater Mumbai.

Land Pooling vs Reservations

The Report observes that land reservations as a tool for providing amenities has not worked in the city, as land acquisition has not been always successful, and scarcity of land has limited possibilities for more reservations. To overcome these limitations, it suggests a different strategy for accumulating land for public use and a alternative approach for the provision of amenities. Through redevelopment, a small amount of land can be extracted, this land will be “pooled,” and through a participatory process, the amenities needed will be provided.

But has extraction of land in this manner succeeded so far? The failure of reservations as a tool has more to do with governance, and these might persist even if the methods are altered. So for instance, what will be the enforcement mechanisms that ensure that accessible and affordable amenities are provided? Or that vulnerable groups will be allowed to participate in their provision and use?

Infrastructure and Services

The Preparatory Studies points out that a comprehensive mapping of the drainage network interlinked with other municipal services is essential. Mapping the adequacy, quality and delivery of municipal services (water supply, sanitation, flooding areas) and overlaying this map with infrastructure networks can be an effective way of understanding shortfalls in municipal infrastructure and services.

Comprehensive Area Development plans

The MCGM suggests a “two tier planning strategy” and the DP report will indicate the “Areas for Comprehensive Development’ and also...the priorities for undertaking the preparations of such plans.” Comprehensive “redevelopment plans” will be made for large slum or resettlement areas such as Shivaji Nagar, Malwani, Golibar, Asalfa, etc. Urban renewal plans for areas such as Null Bazaar, and plans for areas “undergoing land use changes” and transit oriented development. There seems to be a great deal of ambiguity about this: who is going to be the Planning Authority for these areas? Will the MCGM appoint an agency / organization for the making and implementation of plans for these areas?

Under the MR&TP act, there is very little possibility of public influence on plans made by a Planning Authority. The MCGM is the only elected planning authority in the city, and handing over planning functions to special

agencies is a way of reducing public influence on plan making. Also, what are the criteria that make an area fit for comprehensive planning? Why can these areas not be planned at the planning sector level like other areas?

While the report clearly mentions the flaws of the SRA policy and (detrimental) high FSI in resettlement areas; it falls short of mentioning the Rajeev Awas Yojana and how the policy will be rolled out in the city. There needs to be study and assessment of the possibilities offered by various housing policies and the applicability of these in Mumbai.

Health and Education

As an instrument of social policy, the planning process is a crucial tool for human development and the fulfillment of social goals. The present approach of the MCGM has reduced planning to become an exercise in space provision and formulating guidelines for reconstruction. The preparatory report should have mapped the amenities in terms of areas, distances and number of facilities, types (public and private) and determined the existing standards and benchmarks for each of these criteria.

The Preparatory Studies state that healthcare is central to citizen welfare and needs to be augmented to at least achieve DP 1991 norms. It further states NUHM guidelines on population and health care services, but its ultimate recommendation is intensification of existing amenities. Medical amenities need to take into consideration the fact that our hospitals (such as Tata Memorial and KEM) are accessed not just by residents but also people from the State which has not been taken into account in the Preparatory Studies document. Similar to educational amenities, the health amenities mentioned in the Preparatory Studies document is limited to service deliveries of doctors to patients. Domestic violence and rape crisis shelters, shelters for relatives of out of Mumbai patients are required to be provisioned for.

The report clearly mentions the under availability of space as compared to DP 1991 standards and addresses accessibility in spatial terms alone, accepting that it leaves out population density from the concept of accessibility. The maps that follow this section in the Preparatory Studies clearly show that the worst serviced areas are low income neighborhoods – slums & resettlement colonies. Methods of including factors such as economic inequities in the calculation of amenity space and accessibility based on gender and ability / disability needs to be assessed and provided for.

A document, which in its vision states competitiveness as the first principle, needs to ensure that its citizens are educated and accordingly makes provisions for the same.

Instead recommendations for space provision with regards to educational amenities state “diminished need for land availability” due to RTE norm of 25% reservation of seats as free for low income students. This statement is shocking as even if RTE norms are enforced, 25% of seats are barely enough to service the density of low income areas. It further approaches the provision of educational amenities through intensification, integration and combining of existing schools. The amenities under education are limited to educational institutions, not including hostels which are also requirements for educational attainment. It should also have compared the literacy levels, students and teachers in these facilities, with the spatial and distance norms to evaluate how effective amenity

provision has been in terms of providing education.

Amenities for vulnerable groups

Under social /public amenities, there is no mention of creation of shelter homes under MGPKY. A metropolis like Mumbai should necessarily provide for the needs of the homeless. Shelters are needed also for women who face violence and street children.

'Place making': emphasis on Physical form rather than social aspects.

The DP report recognizes various “character based built assets and precincts,” places that attribute value to greater Mumbai and need to be maintained for the future, and adopts “place making” as a strategy by “capitalizing on the community's assets, inspiration and potential,” to create “places that promote a local quality of life.” The DP 2014 acknowledges these areas as spaces desirous of planned transformation, making a case for holistic renewal and area specific development. It rightly sets out to transcend statutory requirements and adopts a cultural geography approach to map various places in Greater Mumbai that harness their “special and peculiar characteristics” (chapter on urban form).

But despite all these claims about creating a deeper understanding of social ecology of historic urban neighborhoods, when it comes to the actual situation analysis of urban fabrics it is grossly inadequate, as it focuses mainly on the physical character of urban form but completely misses out important demographic and sociocultural aspects of these areas such as community structure, local practices and livelihoods that have *determined* its the physical form. Why are only bazaars areas and planned layouts studied as examples of urban form? Are urban villages and other kinds of informal settlements not “places”? Why does the MCGM think that these need “comprehensive development” as opposed to conservative approaches? Do they not have something in them that is worthy of being conserved?

“Facilitating the market” as a Strategy for creation of Inclusive housing

On Pg 271 in the section on inclusive housing the report explains how surplus vacant lands were exempted from acquisition under the Urban Land (ceiling and regulation) act 1976, if the land owners agreed to develop smaller dwelling units less than 40 sqm in area.” This strategy, it says, did not achieve its intended goal of generating affordable housing as in many cases “they were combined into bigger units and allotted to higher income households” as the market “is tightly constrained and there is an unmet demand of higher income groups.” But rather surprisingly, lower down in the same section the report articulates its new strategy for providing affordable housing in which “all developers are required to devote a certain proportion of total floor space proposed to smaller dwelling units.” The report states that the new FSI strategy, with varied and increased FSI, will facilitate supply of affordable built spaces in the city and, thus, promote “inclusionary housing.” The suggestion is that smaller units made will be taken over by the state and allotted as affordable housing. There are a few problems with this: for one, it assumes redevelopment through FSI incentives as the only strategy for creating affordable housing. Second, it will lead to extremely high densities that can only be achieved by a drastic reduction in

amenity standards. Third, a large part of the informal employment in the city is made possible in squatter settlements, that will be lost as a result of the typologies that will emerge from large scale redevelopment.

One logical approach to the problem of unaffordable homes is taking lands that are currently occupied by slums off the land market by reserving them for public housing. Planned, incremental and conservative surgery approaches to develop these areas could provide the necessary services and amenities with limited public spending, and such an approach would be sensitive to the efforts of the urban poor to house themselves in the city.

Water Supply

The Preparatory Studies assessment of water is only a description of the existing physical infrastructure (water systems) and ongoing water supply proposals. There is no assessment of existing infrastructure in view of development and improvement of this infrastructure. Moreover, there is no elaborate discussion or proposal for improvement and development - only bullet points of improvements and challenges are noted. Norms, criteria and basis for improvement and development are not discussed. While there is emphasis on the augmentation and resource side development, no points are made about demand or distribution side development.

The claim that 268 lpcd water is supplied is misleading. It does not give actual domestic use per capita. Also, the report claims that this quantity is higher than the general Indian standard and also higher than the BMC rules of water supply. If it is so, the proposal for augmentation of water supply in the same report seems irrelevant. Also, on what basis is it stated that 4,000 mld is the present requirement?

The post 95 slum population of approximately 30 lakh, slum population on railway land of approximately 3 lakh and population of homeless and footpath dwellers of around 1 lakh are not supplied water officially. A total of nearly 34 lakh people are not supplied with water officially. Hence, only 10 million population is supplied water at present. This indicates that 340 lpcd water is supplied to Mumbai's population – this should be reconsidered with the claim of 268lpcd.

There is no break up of existing commercial use, industrial use and domestic use of water. There is no mention of criteria for commercial use and industrial use (in terms of lpcd or otherwise) hence future projections of this use cannot be ascertained.

With regards to water supply, the Development Plan is not only about making provisions of adequate land parcels and reservations it is also about creating infrastructure for satisfying the future demands in water sector.

It seems that the Preparatory Studies Report has been created without synchronization with the Planning Section of the Dept. of Hydraulic Engineers or Dept. of Water Supply Project.

Open spaces, natural areas and commons, use, access and control

There is ambiguity and confusion over certain Land use categories in the Development plan. The DP needs to make a clear distinction between natural areas, open spaces and commons. The preparatory studies report argues for the consideration of natural areas in the calculation of open spaces. The argument is that per capita open space of 1.24 sqm indicates a severe shortfall, since what is included is only provided open spaces (parks, gardens, playgrounds, promenades and beaches) and not natural areas or layout open spaces. If the National park is included in the calculation, the area will jump to 4.83 sqm. If all natural areas are included, it will increase to

10.32 sqm. of open spaces per capita. This is absurd. Natural areas and open spaces are two separate, distinct categories and should not be confused: natural areas include ecological or environmental systems, while open spaces are specially designed or designated areas for public use and recreation. Thinking of open spaces as natural areas easily leads to the more serious problem of assuming that all natural areas are open spaces. Natural areas need to be protected and are protected under various regulations, as they are important to preserve biodiversity and sensitive ecosystems that these areas support. For example areas such as mudflats, mangroves and water bodies are not accessible to the public. Mangroves, designated as CRZ1 and under the jurisdiction of the forest department are ecologically sensitive areas where any kind of construction activity is prohibited under present legislations. Similarly forest lands and National parks do not have unrestricted public access. To include these areas in the calculation of open spaces would achieve standards on paper, but be of little use to residents. Ecologically sensitive and natural assets like mangroves, wetlands, salt-pans, creeks, water bodies, forests, beaches, rivers, hillocks etc. need to be demarcated clearly as “natural areas” or “protected spaces” in the ELU survey and the PLU. Although beaches also have public access and are used for active and passive recreation, they are essentially natural areas. They are geo-morphic features formed due to processes of coastal erosion and deposition and support a range of terrestrial ecosystems such as sand dunes and rocky habitats. Beaches also have a natural gradient and the inter-tidal zone on beaches is designated as CRZ 1. Only certain activities related to passive recreation and those required for the livelihoods of coastal communities are permitted here. The preparatory studies report has erroneously incorporated beaches in the open space category. Though these areas have public access and are used for various activities, they are essentially natural areas. Including them in the open space category might open these areas up for construction activities such as promenades and other structures. To avoid this, beaches should be categorized under natural areas, which can be sub-classified as “natural areas with public access”, “natural areas with controlled public access.” and “natural areas without public access.”

Apart from open spaces and natural areas, there are also areas that are sometimes mapped as areas of primary activity, which in the case of urban village communities constitute their “commons.” Commons are a form of community ownership and control, and support productive activities. Boat parking on beaches, fish drying and plantations of advasi communities are examples. These areas are distinct from public spaces. Though the commons are threatened by privatization, in many cases, the drive to make “public spaces” have also encroached upon these commons and altered their productive functions, depriving communities of their means of livelihood. Many “open spaces” in the city are public in name but exclusive in fact. Barricaded, policed and restricted in use, these are made to become suited to certain classes and their lifestyles. For example, building promenades or gardens on beaches might threaten the common activities on beaches. The city needs all three types of areas: natural, public open spaces and commons, and all three must be regulated and safeguards must be provided.

No Development Zones NDZs that are sometimes referred to as “green zones” are not necessarily protected natural areas (like forests) but are places where development activity is severely restricted or prevented. Aarey Milk Colony area is an NDZ, but due to deregulation, all kinds of activities for recreation and leisure have been permitted in this area. Activities such as golf courses and resorts which require artificial landscaping and construction are justified simply because they are “green” and “open” despite the fact that to create them requires deforestation and occasionally extensive construction. There is no reason why NDZs must be converted into parks for the affluent. The opposite trap of making NDZs “no build able zones” are also not a good solution – for

instance in Aarey Colony there are 150 Adivasi Padas and commons, and these might require low intensity development for their amenities and other urban infrastructure and services. NDZs are areas that allow low intensity construction, and can host a range of supportive and productive functions such as plantations, agriculture, grazing, and other primary activities. They also act as buffer areas to protect natural areas. These need to be retained and regulated in the Development plan.

Specific guidelines and regulations (DCR) for the protection of natural areas, open spaces and commons need to be incorporated in the DP specifying the nature of activities and type of development permissible in these areas. This will prevent inappropriate environmental improvement and beautification measures such as channelization of natural drainage channels and the concreting of the bank's rivers and nallahs, construction of promenades and parks in natural areas and areas having primary activities.

Green and blue networks

The DP 2014- 2034 demarcates all major water courses (4 rivers – Oshiwara, Poisar, Dahisar and Mithi and all major creeks like Mahul creek, Irla creek, Versova- Malad creek and Manori-Goral creek as part of a 'blue network' to be rejuvenated and accompanied by a green buffer zone to be created along its length. This would form a “green grid”- a green corridor that will run alongside the “blue grid” of watercourses. The green grid would provide much needed additional open space in the city.

Many of these “buffer zones” have informal settlements on them, and beautification measures under the garb of creating “green and blue networks” might end up displacing people or gentrifying these areas. Rather than having a blanket approach, the concept of blue and green networks could be incorporated as a guideline, but not a necessity. Complex and diverse conditions and uses along these natural features need to be understood and responses to local needs must be found. Moreover, why should open spaces in the city be contiguous or connected? It is more important for these open spaces to connect with and integrate with their neighborhoods and surroundings than with each other. It is better to have open spaces that function as a component of a neighborhood system rather than as citywide network that does not respond to it. The People's Vision Document recommends a hierarchy of open spaces at various urban scales of neighborhood, ward and city levels.

Environmental and social impacts of proposed projects

The report refers to some proposed large infrastructural projects without absolutely no mention of environmental or social impact assessments. For example the Coastal Road which is being promoted as an alternative to sealinks as “both a feasible and economically...attractive option,” appears as a 'proposed road' in the preparatory studies report. This road which is planned along the western coastline of the city will require massive reclamation of land from the sea, shifting the present edge of the coast offshore by about 100 meters. This project will have massive impacts on the environment and existing social ecologies along the coast, and completely obliterate natural features such as rocky headlands, bays with sandy beaches, estuaries, coastal wetlands, marshes, mudflats, all of which offer a diversity of habitats forming a fragile coastal ecosystem. The Joint Technical Committee report for the coastal road explains that some of these diverse geomorphic features of the coast (it calls them “sharp kinks”) which will be replaced by smoothed curves courtesy the freeway will do much to “improve the erosion

protection” of the coast. It is surprising that the environmental and social impacts of this controversial project which will completely transform the geography of the city and is faced with massive opposition from coastal communities and environmentalists alike have been completely ignored in the situation analysis report.

Furthermore there is no assessment of urban biodiversity and Impacts of proposed development or redevelopment projects on local biodiversity and thus its environmental impact on natural and semi-natural habitats.

Opening up NDZ areas which are not ecologically sensitive for development

In section 18.5 'Increasing supply of land for public purpose it is mentioned that mentions “opening up vacant or under developed lands in the City, which are not environmentally sensitive, and creating a pool of land for public purpose. It states that DP 1991 had zoned 116.56 sqkm under No Development Zones. Majority of lands under NDZ, DP 1991 are environmentally sensitive. However some areas which are not environmentally sensitive can be made available for development.

It is not mentioned in the preparatory studies report, which of these NDZ lands are being considered as not ecologically sensitive. Do these include the salt pan lands? Or the Aarey Milk colony lands? This needs to be clearly specified in the report. These lands may not be pristine natural areas but are part of the larger environmental system, having supportive ecological functions. Opening these up for indiscriminate development will have severe environmental impacts. There is also a possibility that these areas consist of commons, and productive landscapes such as agricultural lands used and controlled by local adivasi communities. Productive landscapes and commons in the city have value and need to be protected and can also serve as buffer zones to natural systems.

Gaothans, Koliwadas and Adivasipadas

Though “urban village” has been included as a land use category in the ELU survey many of the urban villages have not been mapped in the ELU. There is no mention of koliwadas, gaothans and adivasipadas in the preparatory studies report. The report contains no socio-economic data or existing situation analysis of koliwadas, gaothans and adivasipadas. There are about 200 adivasipadas in the city and none of these have been mapped. These urban fabrics support existing livelihoods and socio-cultural patterns. In order to prevent complete transformation and erasure of these precincts due to large scale comprehensive redevelopment policies and ensure cultural continuity within these urban neighborhoods area specific sensitive development guidelines for these areas will need to be formulated in the development plan.

Demarcation of the Coastal Regulation Zone and integration of ICZMP's in DP

Furthermore Koliwadas have been designated as CRZ III as per the CRZ notification 2011 in order to protect the coastal community's right to livelihood and housing. CRZ boundaries, especially the areas to be designated as CRZ III including public areas amenities and commons within these fishing villages, need to be demarcated with community participation and included in the development plan. Recommendations of the Integrated Coastal Area Management plans also need to be integrated in the DP

Indication of Land use sub categories in the ELU

There is ambiguity in Land use categories in the ELU survey. For example in the ELU survey, areas demarcated as primary activity include diverse activities such as Fishing/drying yards, plantation, dairy, buffalo stables, cattlepounds, quarry, dhobi Ghat and salt pan lands. Clubbing of distinct sub categories under a single land use makes this classification and mapping ambiguous and may lead to misinterpretation and conflicts as these areas may have different designations or protection under present legislations. The land use subcategories indicated in the Preparatory studies report need to be separately and clearly demarcated in the ELU maps and this information should be made public.

Incorrect Demarcation of existing natural features

The ELU does not accurately map several natural features which have been shown either as vacant lands or some other land use. All these errors on the ELU maps which have been pointed out earlier should be rectified and made public before the PLU maps are made.

This critique is part of the larger debate with the MCGM regarding formulating the Development Plan 2014-20134. The points mentioned are not all encompassing but highlight certain main issues and are interlinked to one another.

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 - ii UN Declaration of the Right to Development, Article 2 (1)
 - iii [http://www.mcgm.gov.in/irj/go/km/docs/documents/MCGM%20Department%20List/Wards/Assistant%20Commissioner%20\(MEast-Ward\)/RTI%20Manuals/Asst_Comm_ME_RTI_E02.pdf](http://www.mcgm.gov.in/irj/go/km/docs/documents/MCGM%20Department%20List/Wards/Assistant%20Commissioner%20(MEast-Ward)/RTI%20Manuals/Asst_Comm_ME_RTI_E02.pdf)
 - iv Mumbai Human Development Report 2009
 - v Ministry of Urban Affairs and Employment, *Urban Development Plans Formulation & Implementation (UDPFI) Guidelines*, Govt. of India, 1996
 - vi MCGM, Preparatory Studies Report Part 2, 2013. p.74
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 - viii Planning Commission, "Employment Generation in Post Globalization Era in Greater Mumbai," 2006. p.25
 - ix Shirish Patel, Alpa Sheth, and Neha Panchal, "Urban Layouts, Densities and the Quality of Urban Life." *Economic and Political Weekly*, 2007
 - x S Balakrishnan. 2013. "BMC Chief Aims for Corruption-Free Civic Body, World-Class Mumbai." *DNA*, August 13
 - xi WS Atkins International, *Comprehensive Transport Plan For Bombay Metropolitan Region*, 1994