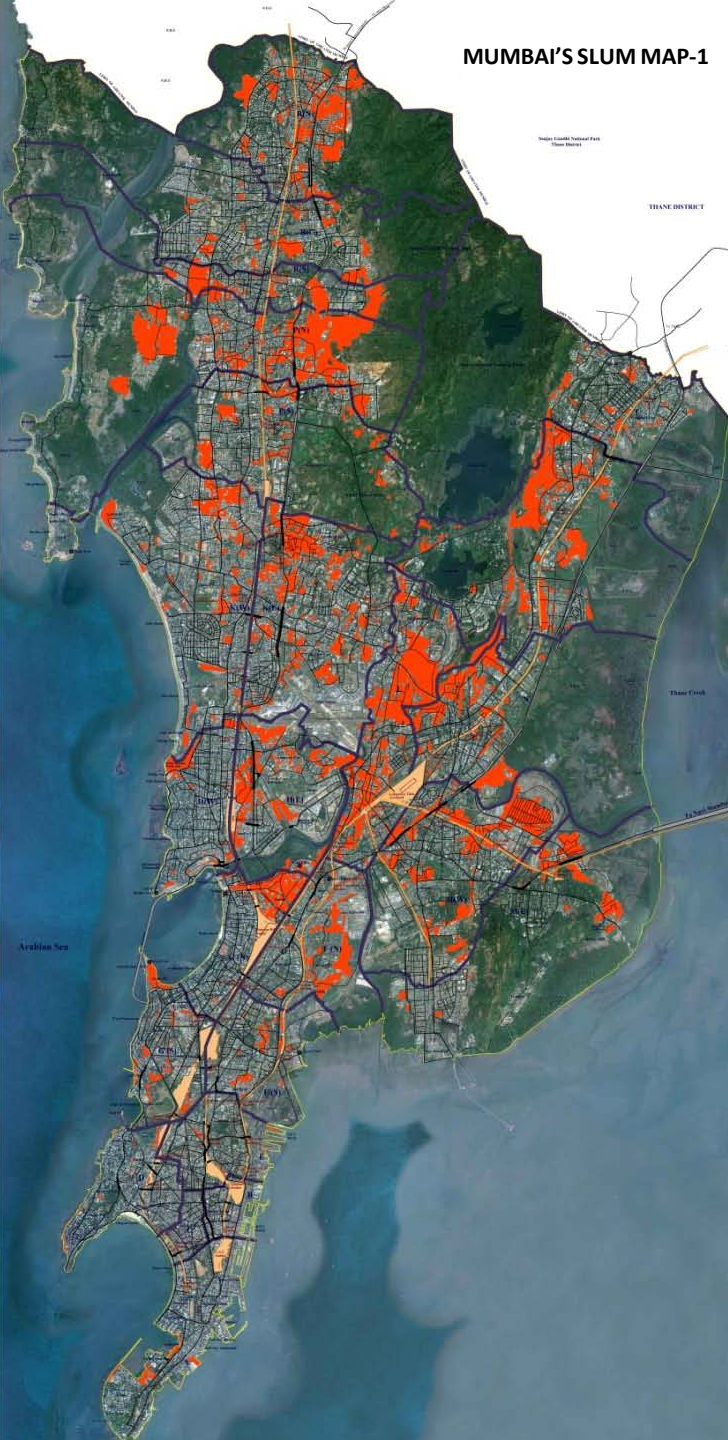




MUMBAI'S SLUM MAP-1

SLUMS REDEVELOPMENT AND AFFORDABLE HOUSING INTEGRATION

THE CASE OF MUMBAI PART - 2

Presentation to Shri. Prithviraj Chauhan
Honorable Chief Minister of Maharashtra

NIVARA HAKK
&

P K DAS
..... &
ASSOCIATES

31st AUGUST 2012

Part-1 was presented in May 2011

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Exclusive Land Reservation for Affordable Housing

Slums Redevelopment

**Affordable Social Amenities
& Work Places**

Accessible Open Spaces

Integrated Mobility Plan

WAY FORWARD

CENTRAL OBJECTIVE

1

**To Undertake Master Planning of
Slums land
along with a modified SRA Scheme**

2

**Promote Affordable Housing stock by
restricting sales unit areas**

3

**Notify slums land reserved for
Affordable Housing**



MASTER PLANNING AIMS & OBJECTIVES

Preparing A Master Plan for the Slums Occupied Land

Formulating a modified SRA Scheme

Generating additional affordable housing stock

Restricting heights

Limiting density

Providing social amenities, conveniences & Open Spaces

Achieving planned infrastructure

Undertaking DP integration

Facilitating People+ Govt. collaboration

PRESENT DEVELOPMENT ANARCHY

Mumbai has been expanding without Planning.

Introducing new schemes merely through the DCR route & modifying it time & again has been the way of regulating the various developments.

Absence of planning has created skewed development conditions and peculiar short term demands.

An Example- Demand for higher and higher F.S.I. is in response to such conditions, otherwise often shortsighted and counter productive.

Similarly is the demand for High-rise buildings.

‘DEVELOPMENT’ FALLOUT

Cheek by Jowl buildings

15 + floors for EWS

No Amenities

No Open Spaces

Undesirable Density

Further Slumification

Causing Congestion Trauma

Defacing the City Landscape

‘DEVELOPMENT’ ANARCHY

Present SRD policy is leading to further Slumification of the City

33(10) Project



HANUMAN NAGAR, KANDIVALI

33(11) Projects



MUTP Rehab, MANKHURD



CHEMBUR

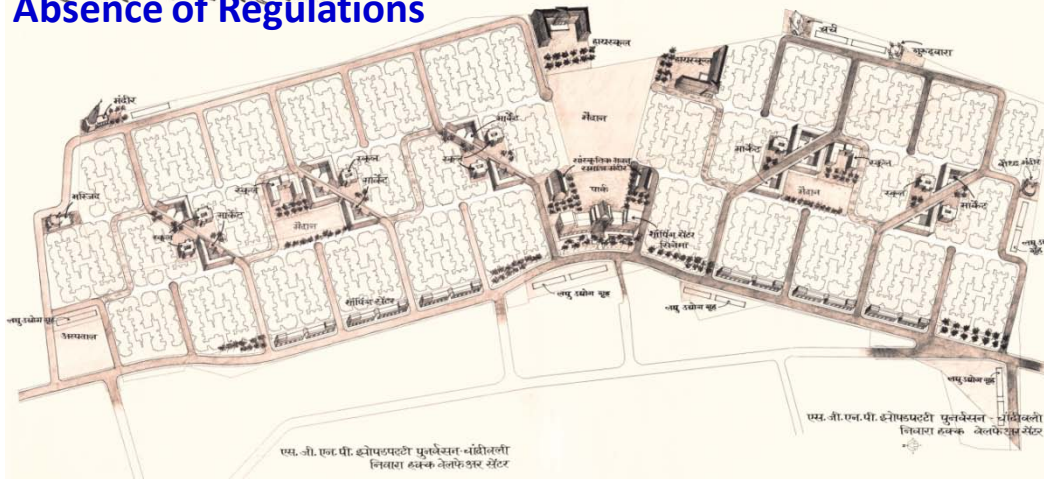


INDIABULLS, PRABHADEVI

'DEVELOPMENT' ANARCHY

AREA PLANNING SCHEME TO ANARCHY

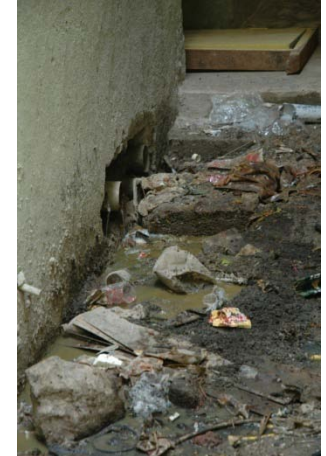
Absence of Regulations



Density (Tenement / ha) = 560
No. of floors = G+7

Ground Coverage = 40%
F.S.I. = 2.5

ANARCHY



'DEVELOPMENT' ANARCHY

Projects under 33(7) & 33(9) D.C. Regulations too are causing similar damage to the city as the SRD projects



MUMBAI SLUMS LAND

Excluding Dharavi and Airport Slums

Slums occupied land area = 37.46 sq. kms

**i.e. 7.76 % of total area of Greater
Mumbai of 482.74 sq.kms.**

**or 15.32 % of total tenable land area of
244.50 sq. kms**

**Slum-dwellers Population is 52.5% i.e. 6.53 million
Slum-dwellers Rehab Population as on date is 4.67 million**

Average Slums Density is 300.05 Ten./Ha



Refer Annexure: 1 & 9

MUMBAI SLUMS LAND DATA

MUMBAI'S SLUM MAP-2
D.P. RESERVATIONS ON SLUMS LAND

Slums area on Housing reservation (MH, PH, H, HD & R)	18.34 sq kms.	47.29%
Slums area on Industrial reservation	2.55 sq kms.	6.58%
Slums area on Commercial reservation	0.72 sq kms.	1.86%
Slums area on services reservation	1.02 sq kms.	2.63%
Slums area on amenity reservation	2.37 sq kms.	6.11%
Slums area on RG, PG, P, & G	7.47 sq kms.	19.26%
Slums on NDZ	4.22 sq kms.	10.88%
Slums on Natural assets (hills, forests, mangroves, wetlands)	0.32 sq kms.	0.83%
Slums on Airports, railways, ports & defense	0.44 sq kms.	1.13%
Slums on DP Road Reservation	3.08 sq kms.	7.94%
Total Slums land area	38.78 sq kms.	8.03%

Tenable land will reduce by 28.03% i.e from 38.78 to 27.91 sq. km.
on account of the above reservations marked red.

**Net Tenable land area excluding Dharavi (1.32 sq.km.),
= 26.59 sq.kms.**

Refer Annexure : 6 & 7

MUMBAI'S LANDUSE PROFILE

Land use Category	% of land areas as per UDPFI (Urban Development Plans Formulation & Implementation, GOI)	% of areas on gross land area	% of areas on net buildable land area
		482.74 sq. km.	244.50 sq. km
Residential	35-40	21.17	42.07
Commercial	4-5	2.3	4.53
Industrial	12-14	7.92	15.84
Amenities	14-16	2.85	5.64
Recreational incld. RG & PG	20-25	4.06	7.76
Transport & Communication	15-18	6.21	12.27
NDZ & Natural/ Eco Assets	Balance (0)	39.16	
Others- Airports, Rail, Ports, Defense and various Services etc.	-	16.20	11.89

There is no shortage of land for housing but its unavailability for Affordable Housing is the real issue to address.

Reference: Mapping of Open Spaces Map by P.K. Das & Associates

Refer Annexure: 2 - 5

WAY FORWARD

COMPREHENSIVE PLANNING & INTEGRATION

MASTER PLANNING- ZONING

- Master Planning will facilitate cohesive urban development.
- Zoning based on Ward/ Assembly Constituency.
- Substantial land for other developments will be cleared.
- Re-distribution & re-location of DP reservations for its achievement will be possible.
- Zoning will facilitate phased implementation & minimize locational displacement.

	Sr no	Assembly Constituency no	Area (Sq. M.)	Sq. km.	Population
	1	152	702,327	0.70	109,637
	2	153	1,616,814	1.62	154,020
	3	154	2,449,900	2.45	340,361
	4	155	722,090	0.72	256,483
	5	156	1,292,202	1.29	130,496
	6	157	2,582,601	2.58	244,527
	7	158	2,021,645	2.02	302,875
	8	159	1,670,369	1.67	227,932
	9	160	2,134,817	2.13	217,674
	10	161	1,537,962	1.54	224,701
	11	162	1,706,737	1.71	130,737
	12	163	1,093,341	1.09	156,190
	13	164	860,839	0.86	119,409
	14	165	572,769	0.57	80,104
	15	166	940,218	0.94	158,622
	16	167	1,295,422	1.30	198,594
	17	168	3,506,680	3.51	476,453
	18	169	155,345	0.16	162,556

	Sr no	Assembly Constituency no	Area in Sq. M.	Sq. km.	Population
	19	170	371,035	0.37	36,858
	20	171	1,247,827	1.25	198,596
	21	172	1,816,421	1.82	476,629
	22	173	2,088,784	2.09	130,284
	23	174	1,100,119	1.10	132,726
	24	175	1,280,640	1.28	224,055
	25	176	1,087,675	1.09	202,680
	26	177	522,859	0.52	82,488
	27	178	1,274,460	1.27	500,000
	28	179	923,225	0.92	139,192
	29	180	500,873	0.50	85,050
	30	181	200,764	0.20	47,552
	31	182	361,601	0.36	119,211
	32	183	426,529	0.43	146,990
	33	184	121,797	0.12	124,099
	34	185	104,631	0.10	283,047
	35	186	4,566	0.00	0
	36	187	244,817	0.24	22,265

Note: Population based on 2011 Census on pro-rata basis.

M.P. ZONE - 6 – D.P. RESERVATIONS

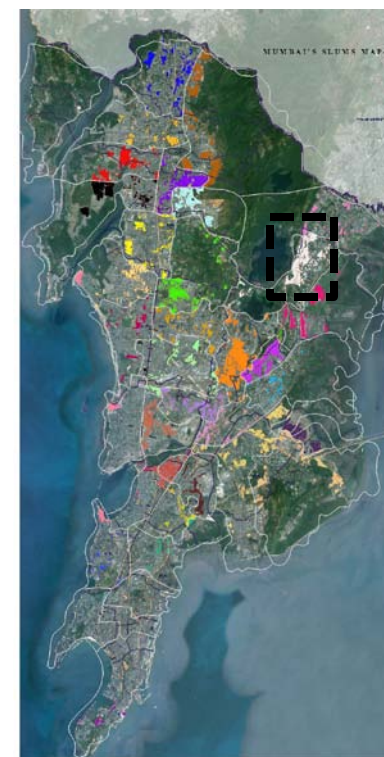
Gross Zone land area = 2,582,601 sq.m. = 258.26 ha

Excluding DP road reservations, RG, PG. & eco- assets,
Net tenable land area reduces to 176 ha.

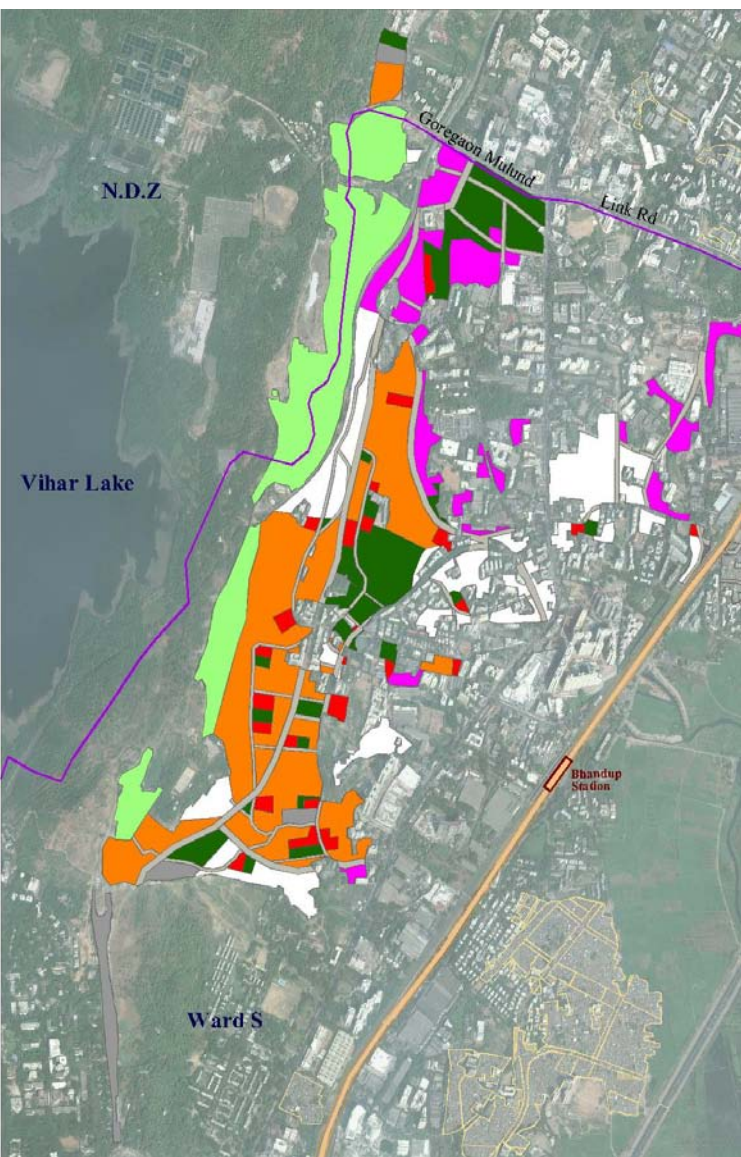
Rehab Population = 2.44 lakhs

Legend

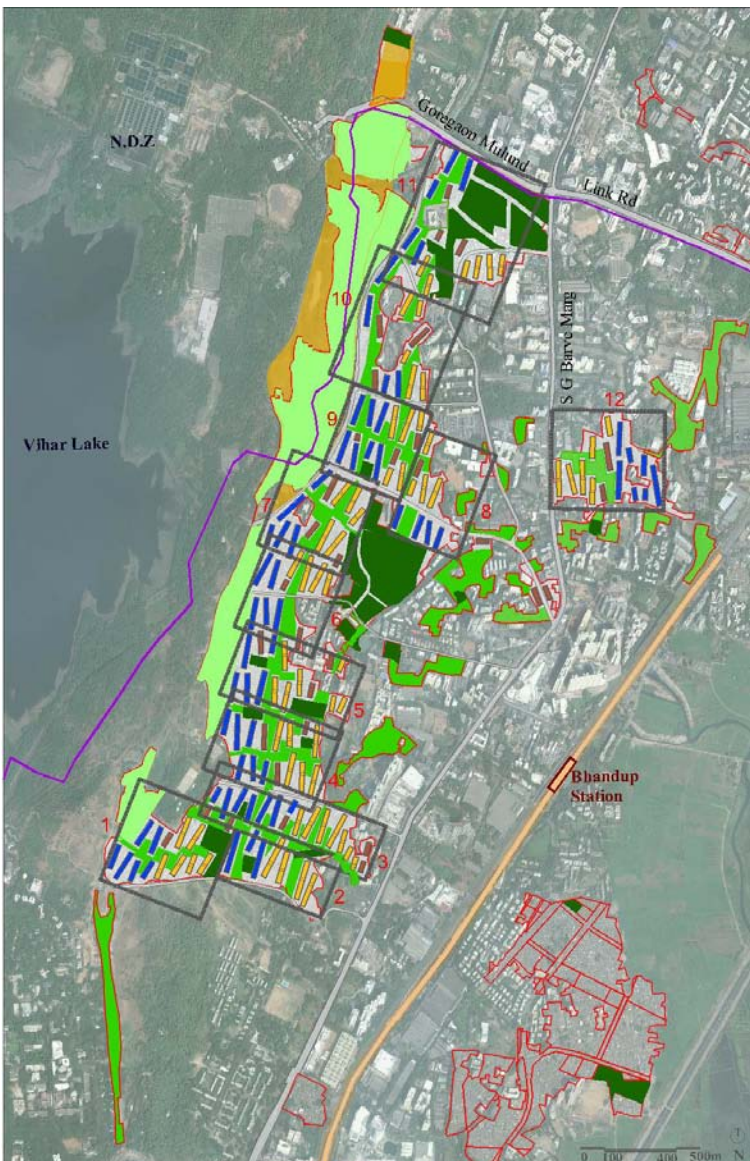
- Slums on Amenity reservation
- Slums on Commercial reservation
- Slums on Housing reservation
- Slums on Industries reservation
- Slums on Natural Assets (beaches, mangroves, etc)
- Slums on NDZ Reservation
- Slums on Open space reservation (RG, PG, G, P)
- Slums on Railways, Airport and Ports reservation
- Slums on Residential reservation
- Slums on Services reservation
(Depots, Substations etc.)
- Slums on DP Road reservation



Key Plan



M.P. ZONE – 6 BLOCK PLANNING



Block Nos.	Block Area (sq.m.)	Block Area (ha)	Rehab Units	Sales Units	Rehab Population	Sales Population	Population	Density (pph)	Tenements per ha
1	156,393	16	5650	2421	28,248	12,106	40,355	2580	516
2	135,336	14	3715	1592	18,573	7,960	26,533	2580	516
3	158,827	16	5738	2459	28,688	12,295	40,983	2580	516
4	150,193	15	5426	2325	27,129	11,627	38,755	2580	516
5	135,336	14	4889	2095	24,445	10,476	34,922	2580	516
6	120,899	12	4367	1872	21,837	9,359	31,196	2580	516
7	160,469	16	5557	2382	27,785	11,908	39,693	2580	516
8	76,162	8	2751	1179	13,757	5,896	19,653	2580	516
9	138,018	14	4986	2137	24,930	10,684	35,614	2580	516
10	146,877	15	4485	1922	22,426	9,611	32,037	2580	516
11	258,609	26	5385	2308	26,923	11,538	38,462	2580	516
12	125,646	13	4539	1945	22,695	9,726	32,421	2580	516
		176			287,436	123,187	410,623		

Note: Population based on 2011 Slum Population Census.

Legend

 Rehab	 Layout RG
 Sales	 NDZ Reservation
 Amenities	 Open Space Reservation (RG, PG, G, P)

M.P. ZONE – 6 TYPICAL UNIT DEVELOPMENT SKETCH



Planning Assumptions

F.S.I.	– 3.0
Ground Coverage	– 40%
Layout RG	– 15%
Amenities	– 10% (included in Ground Coverage)
Work places	– 5% (Buildable reservation)
Transportation	– 15%
Services & utilities	– 10%
Setbacks	– 20%
	<u>100%</u>



Block size - 353m x 391m

■	Open Spaces – 35 % - 48,034 sq.m. = 4.8 ha
■	No. of Rehab Units - 4986
■	No. of Sales Units - 2137 (includes 15% amenities & work places)
■	BUA of Amenities & work places - 52,792 sq. m.
	Rehab Unit area - 25 sq.m. (BUA = 30 sq. m.)
	Sales Unit area - 60 sq.m. (avg. BUA = 70 sq. m.)
	Population - 35,614 persons
	Density - 2580 persons per ha
	- 516 tenements per ha

M.P. ZONE - 9 – D.P. RESERVATIONS

Gross Zone land area = 2,119,964.56 sq.m. = 212 ha

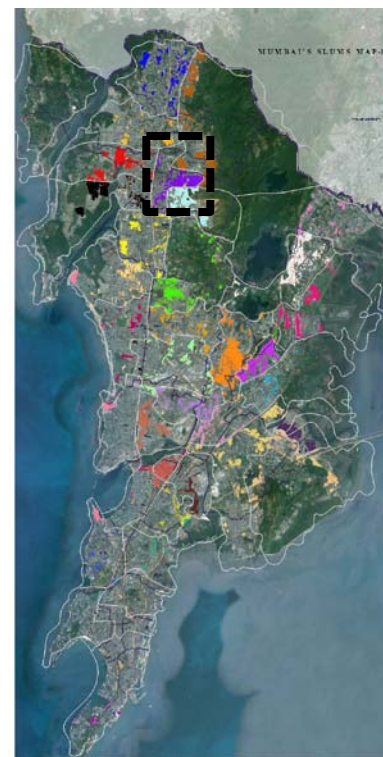
Excluding DP road reservations, RG, PG. & eco-assets,

Net tenable land area reduces to 150 ha.

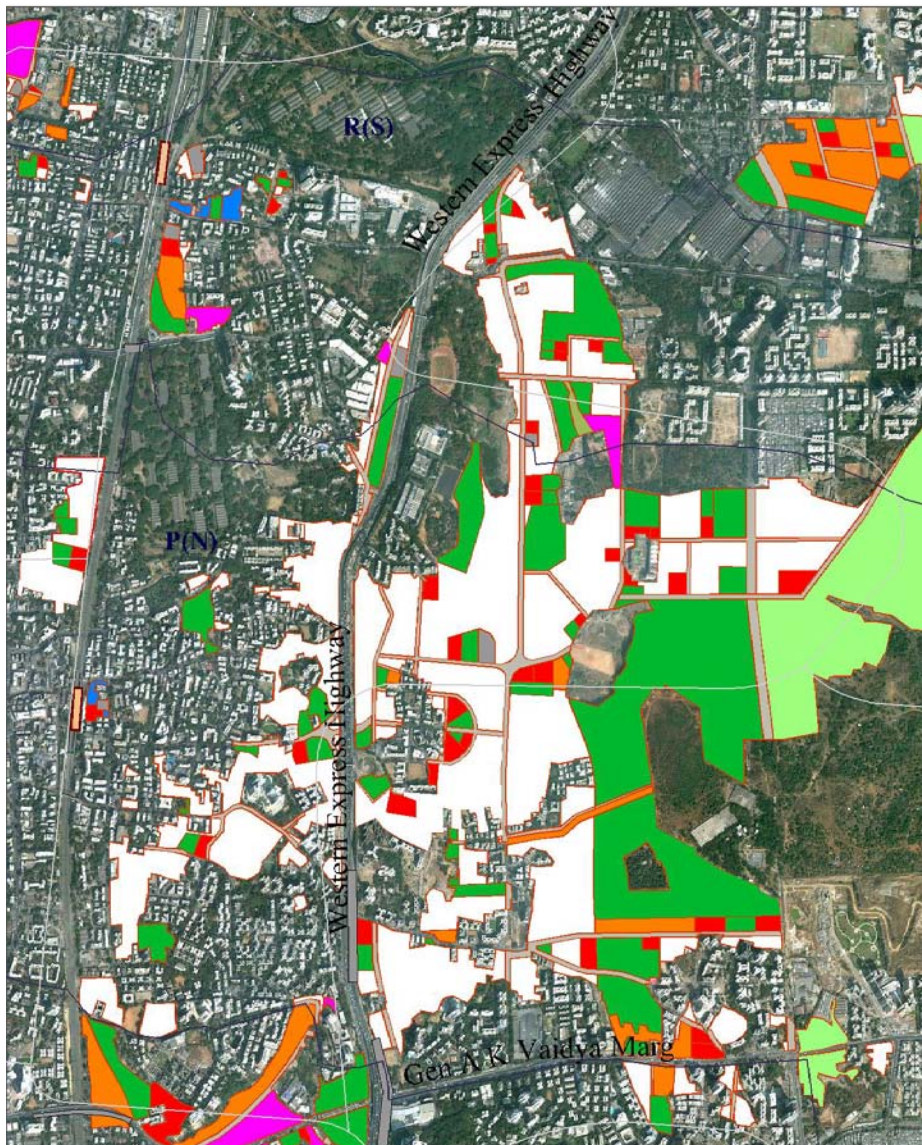
Rehab Population = 2.17 lakhs

Legend

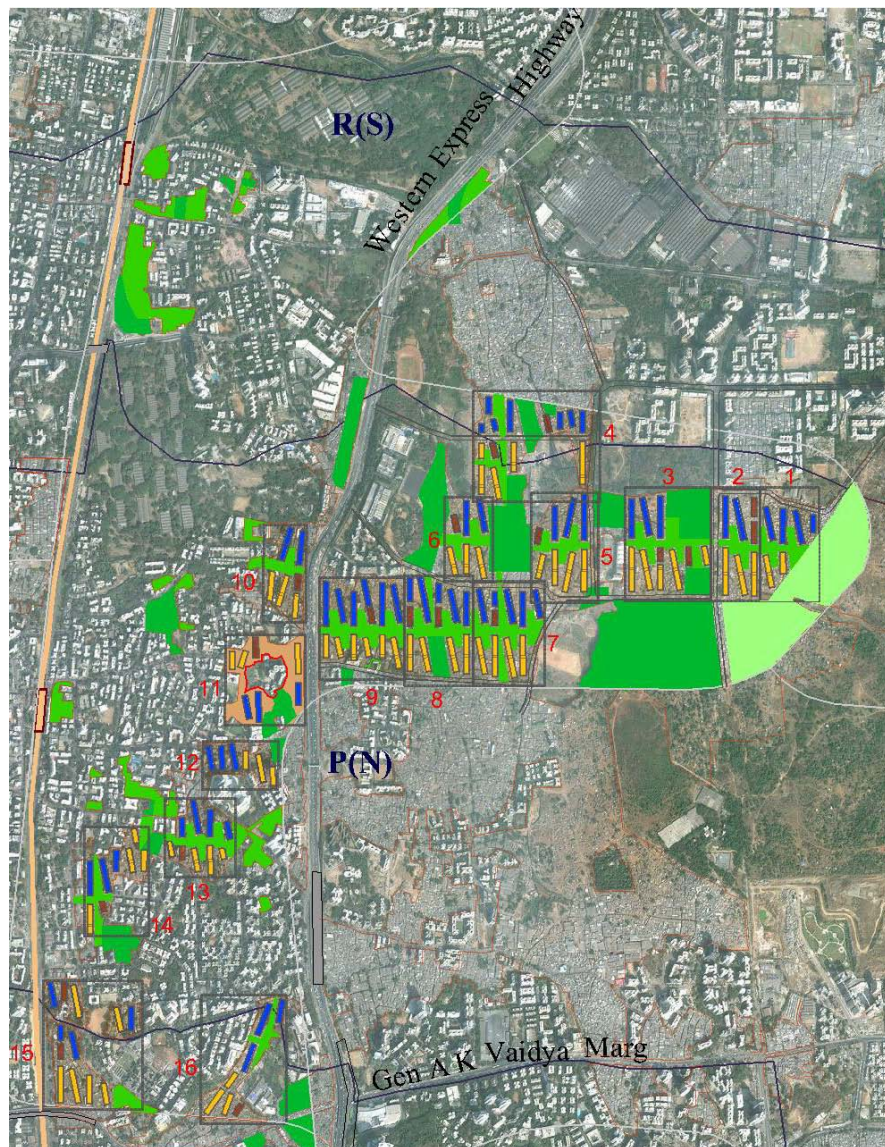
- Slums on Amenity reservation ■
- Slums on Commercial reservation ■
- Slums on Industries reservation ■
- Slums on Housing reservation ■
- Slums on Natural Assets (beaches, mangroves, etc) ■
- Slums on NDZ Reservation ■
- Slums on Open space reservation (RG, PG, G, P) ■
- Slums on Railways, Airport and Ports reservation ■
- Slums on Residential reservation ■
- Slums on Services reservation (Depots, Substations etc.) ■
- Slums on DP Road reservation ■



Key Plan



M.P. ZONE- 9 BLOCK PLANNING



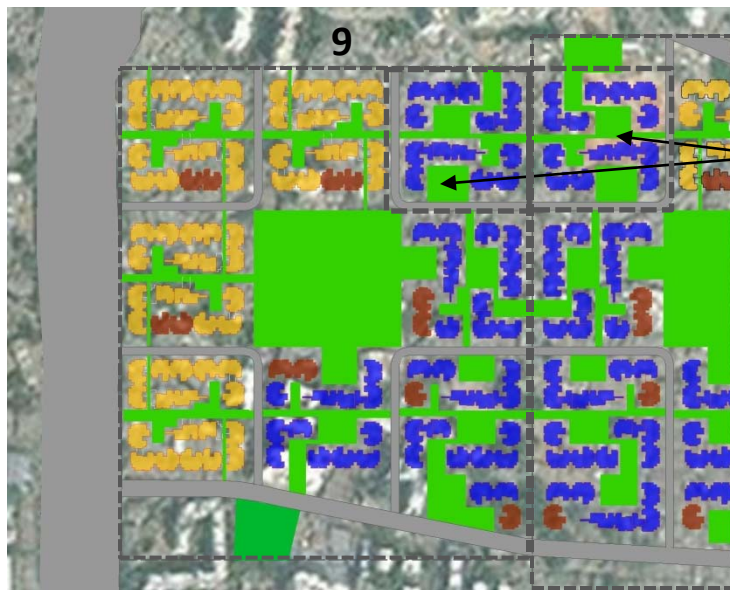
Block Nos.	Block Area (sq.m.)	Block Area (ha)	Rehab Units	Sales Units	Rehab Population	Sales Population	Population	Density (pph)	Tenements per ha
1	58,197	6	2102	901	10,512	4,505	15,017	2580	516
2	73,429	7	2653	1137	13,263	5,684	18,947	2580	516
3	158,827	16	4586	1965	22,930	9,827	32,757	2580	516
4	150,193	15	4290	1838	21,448	9,192	30,639	2471	494
5	135,336	14	3195	1369	15,977	6,847	22,824	2471	494
6	120,899	12	1980	848	9,899	4,242	14,141	2471	494
7	95,067	10	3434	1472	17,171	7,359	24,531	2471	494
8	76,162	8	3548	1521	17,741	7,603	25,344	2471	494
9	138,018	14	3636	1558	18,181	7,792	25,973	2471	494
10	48,410	5	1749	749	8,744	3,747	12,491	2580	516
11	52,038	5	1880	806	9,399	4,028	13,428	2580	516
12	125,646	13	1343	576	6,717	2,879	9,596	2580	516
13	57,587	6	2080	892	10,402	4,458	14,859	2580	516
14	56,360	6	2036	873	10,180	4,363	14,543	2580	516
15	88,660	9	3203	1373	16,014	6,863	22,877	2580	516
16	46,939	5	1696	727	8,478	3,634	12,112	2580	516
		123			217,056	93,024	245,688		

Note: Population based on 2011 Slum Population Census.

Legend

 Rehab	 Layout RG
 Sales	 NDZ Reservation
 Amenities	 Open Space Reservation (RG, PG, G, P)

M.P. ZONE – 9 TYPICAL UNIT DEVELOPMENT SKETCH



Option - 1



Option - 2

Typical 1 ha.

Block size -
300m x 350m

Planning Assumptions

F.S.I.	– 3.0
Ground Coverage	– 40%
Layout RG	– 15%
Amenities	– 10% (included in Ground Coverage)
Work places	– 5% (Buildable reservation)
Transportation	– 15%
Services & utilities	– 10%
Setbacks	– 20%
	<u>100%</u>

Open Spaces - 35%	- 34,585 sq.m. = 3.46 ha
No. of Rehab Units	- 3569
No. of Sales Units	- 1530 (includes 15% amenities & work places)
BUA of Amenities & work places	- 37,796.57 sq. m.
Rehab Unit area	- 25 sq.m. (BUA = 30 sq. m.)
Sales Unit area	- 60 sq.m. (avg. BUA = 70 sq. m.)
Population	- 25,495 persons
Density	- 2601 persons per ha - 520 tenements per ha

CONCLUSION

ACHIEVEMENT

- Gross tenable land = 26.59 sq. km
- Net tenable land area (less 15% Layout RG) = 22.60 sq. km
- Ground Coverage on Net land area = 40% = 9.04 sq. km

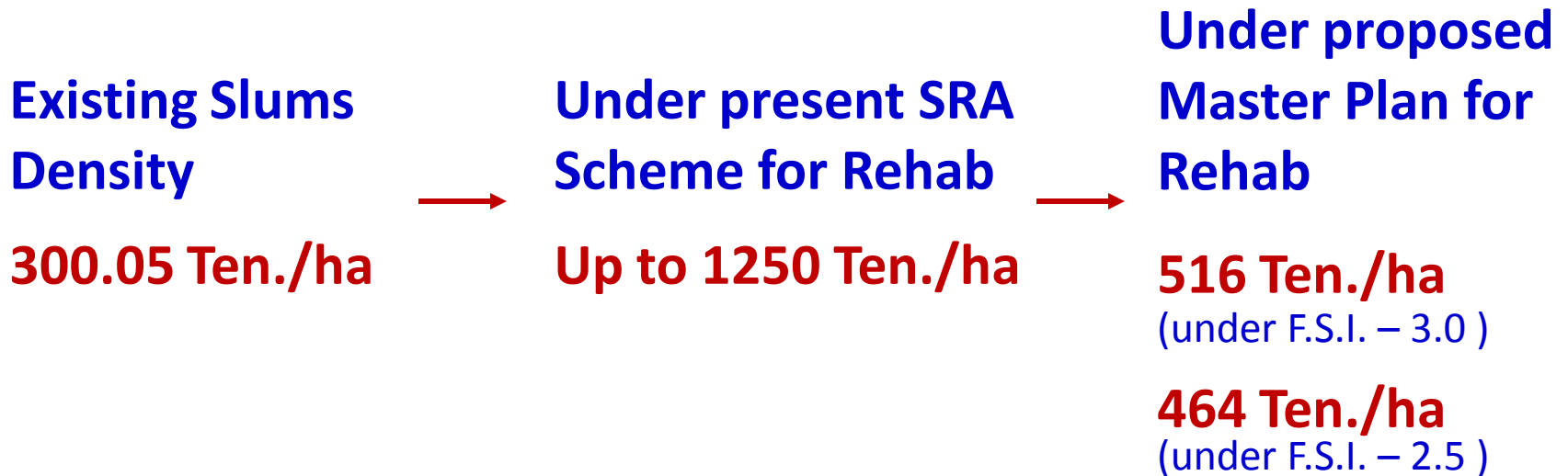
F.S.I. - 3.0 Total B. U. Area = 67.80 sq km Number of Floors = S/G+6.38					
Less 15% amenities and workplaces, B.U. Area (Rehab+Sales) = 57.63 sq km					
1	Rehab : Sales ratio	60 : 40		50 : 50	
	• B.U. Area- sq. m	34,578,000	23,052,000	28,815,000	28,815,000
	• No. of Units (@30m ² , 70 m ²)	1,152,600	329,314	960,500	411,643
	• Population	5,763,000	1,646,571	4,802,500	2,058,214
2	Total Units	1,481,914		1,372,143	
3	Total Population	7,409,571		6,860,714	
4	Density - Ten./ha.	557		516	

F.S.I. - 2.5 Total B. U. Area = 56.50 sq km Number of Floors = S/G+5.31					
Less 15% amenities and workplaces, B.U. Area (Rehab+Sales) = 48.02 sq km					
1	Rehab : Sales ratio	60 : 40		50 : 50	
	• B.U. Area- sq. m	28,815,000	19,210,000	24,012,500	24,012,500
	• No. of Units (@30m ² , 70 m ²)	960,500	274,429	800,417	343,036
	• Population	4,802,500	1,372,143	4,002,083	1,715,179
2	Total Units	1,234,929		1,143,452	
3	Total Population	6,174,643		5,717,262	
4	Density - Ten./ha.	464		430	

Refer Annexure : 09

SLUMS REDEVELOPMENT DENSITY

Excluding Dharavi and Airport Slums



Under the Present SRA Scheme
Slum dwellers presently occupying 15.32% of the tenable
land area get squeezed to approx 1/3rd the
area, i.e to 5.1% of the total tenable land area,
subjecting them to oppressive and undesirable conditions.

A COMPARATIVE

NOW – PRESENT SRA SCHEME



33(11)



33(10)

**Systematic
Destruction &
Slumification
Of the city.
Lack of light,
Ventilation, privacy,
& Open space,
Ugly jostling cityscape,
No amenities &
conveniences.**

AFTER – MASTER PLANNING & A MODIFIED SRA SCHEME



**Option – 1
Slums Improvement Scheme**



**Option – 2
Demolition & Reconstruction Scheme
Illustrations**

Demolition & Reconstruction Option

**G+7 buildings, open
Spaces, desirable
Set-backs, amenities,
Work places,
Conveniences,
a Sustainable Cityscape**

KEY DECISIONS

A. RECOGNITION

1. Recognize all slums dwellers for rehabilitation.
2. Regularize Slums Redevelopment on GOI land.
3. Scrap free houses concept along with builder driven approach.

B. LAND

1. Notify slums land as reserved for affordable housing.

C. DEVELOPMENT

1. Reformulate present SRA scheme to respond to Master Planning guidelines.
2. Prioritize Government driven Slums Redevelopment with slum dwellers participatory approach.
3. Stop varying FSI policy for slums redevelopment.

Continued...

KEY DECISIONS

4. Divide land for rehab and sales on built- up area basis.
5. Restrict rehabilitation building heights to G + 7 floors.
6. Assign a certain proportion of sales units towards rental housing.
7. Empanel Architects, Planners & PMCs.
8. Appoint agencies for undertaking quality audit.

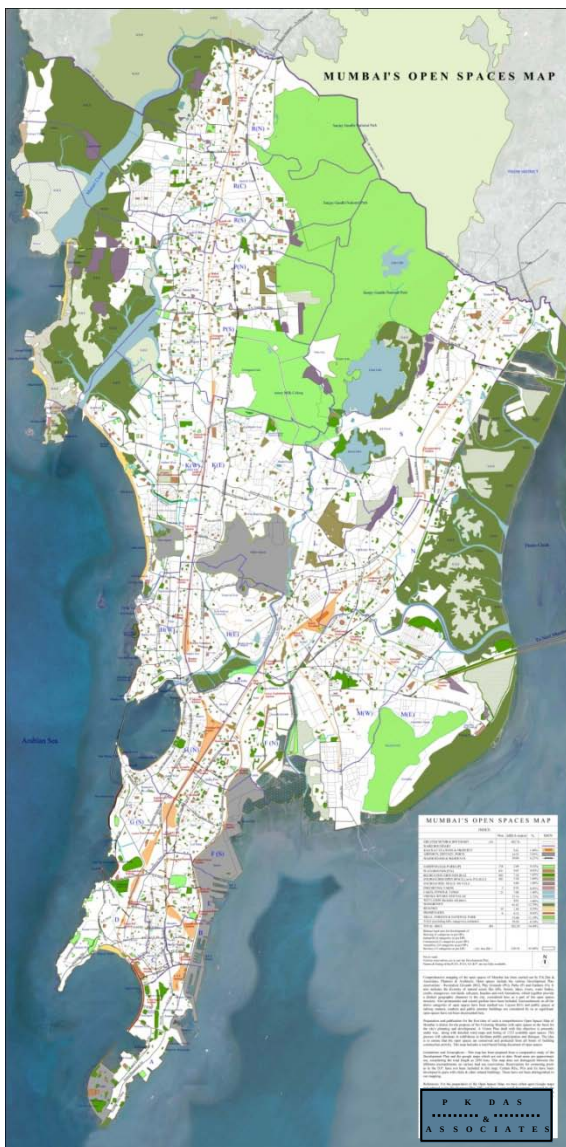
D. FINANCE

1. Introduce slum dwellers contribution ranging from 10- 20% of the development cost on BPL to EWS basis.
2. Finance Redevelopment in 3 ways-
 - i] Infrastructure by State Government
 - ii] Cost of Rehab construction from Central Government Schemes – JNNURM, RAY, etc.
 - iii] Slum dwellers contribution.

REFERENCES

ANNEXURES

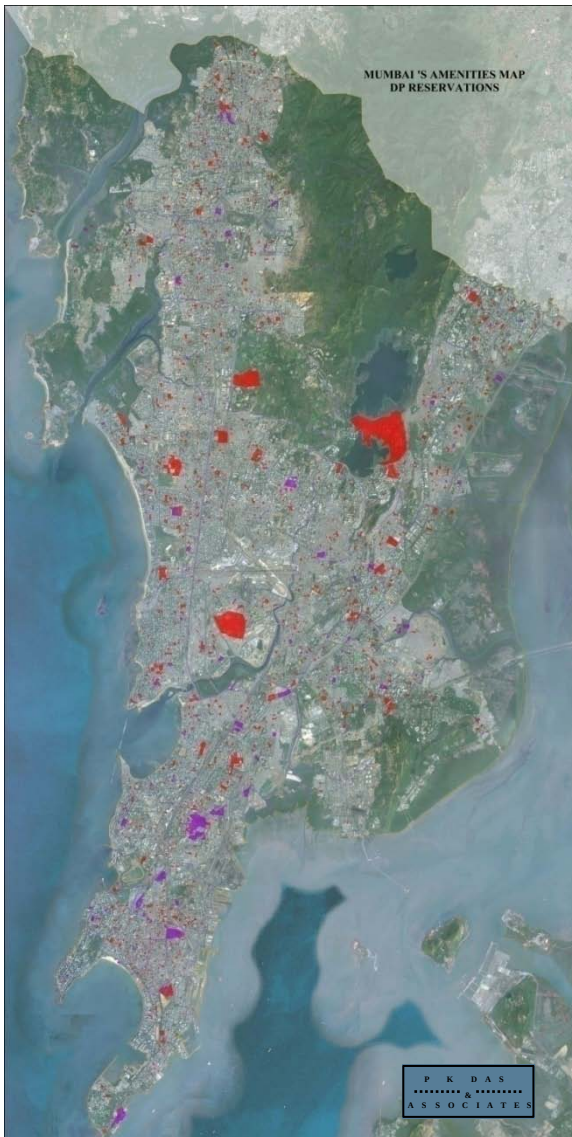
OPEN SPACES MAP



	Nos.	AREA-SQKM	%	SIGN
GREATER MUMBAI BOUNDARY (A)		482.74		—
WARD BOUNDARY				—
MAJOR ROADS & HIGHWAYS		30.00	6.21%	—
GARDENS [G] & PARKS [P]	318	2.49	0.52%	■
PLAYGROUNDS [P.G]	631	4.01	0.83%	■
RECREATION GROUNDS [R.G]	603	7.18	1.62%	■
ENCROACHED OPEN SPACE [on G, P.G.,R.G]	501	5.30	1.09%	■
ENCROACHED SPACE ON N.D.Z.		4.80	1.00%	■
FISH DRYING YARDS	5	0.16	0.03%	■
LAKES, PONDS & TANKS	23	7.06	1.46%	■
CREEKS, RIVERS AND NALAS		13.14	2.72%	■
WET LANDS [Includes salt pans]		8.01	1.66%	■
MANGROVES		61.42	12.70%	■
BEACHES	10	1.44	0.29%	■
PROMENADES	6	0.12	0.02%	■
HILLS , FORESTS & NATIONAL PARK		53.60	11.10%	■
N.D.Z [excluding hills, mangroves,wetlands]		39.50	8.18%	■
TOTAL OPEN AREAS (B)		238.24	49.45%	
Balance land area for development of Housing (5 categories as per DP), Industrial (6 categories as per DP), Commercial (2 categories as per DP), Amenities (34 categories as per DP), Services (15 categories as per DP) & Defense, Airports, Ports & Railways (23.96 sq.km) -(A) less (B) =		244.50	50.55%	■

Annexure - 01

AMENITY RESERVATION MAP



Objective: Impose Additional Amenity Reservation in every Construction and Development Project to fulfill the shortfall.

	AREA-SQKM	%	SIGN
GREATER MUMBAI BOUNDARY	482.74 (A)	100%	
RESERVATION FOR AMENITIES			
EDUCATION (Municipal Primary School, Private Primary School, Secondary School & College)	10.95	2.25%	
HEALTH (Hospital/ Sanatorium, Muncipal Hospital, Government Hospital, Municipal/ Private Maternity Home, Municipal Health Center/ Clinic, Municipal Dispensary& Veterinary Hospital)	2.78	0.57%	
RECREATION (Swimming Pool & Gymnasium)	0.05	0.01%	
TOTAL RESERVATION FOR AMENITIES	13.78	2.85%	

Annexure: 02

COMMERCIAL AND INDUSTRIAL MAP

Conversion to Residential is Permitted in the present D.P. & DCR.



	AREA-SQKM	%	SIGN
GREATER MUMBAI BOUNDARY	482.74 (A)	100%	—
RESERVATION FOR COMMERCIAL & INDUSTRIAL ACTIVITY			
RESERVATION FOR COMMERCIAL ACTIVITY Municipal/ Private/ Retail Market, Municipal Open Market, Cinema Theatre, Drama Theatre, Shopping Center, Municipal Semi Wholesale Market, Children's Theatre & museum, Government Offices, Commercial Zone, Shop Line & District Centre/ Commercial Complex	11.07	2.3%	■
RESERVATION FOR INDUSTRIAL ACTIVITY Industrial Estate/ Fishing Industries, Service Industrail Estate/ Rly. Siding, Municipal Laundry/ Workshop/ Store, Municipal/ Private Dhobi Ghat, Service Industrail Zone, General Industrial Zone, Special Industrial Zone & Retention Activity	38.72	7.92%	■
TOTAL RESERVATION FOR COMMERCIAL & INDUSTRIAL ACTIVITY	49.79	10.22%	

Annexure: 03

HOUSING RESERVATION MAP

Objective: Reserve Land Exclusively for Affordable Housing. Stop Conversion of Residential land to Commercial.

	AREA-SQKM	%	SIGN
GREATER MUMBAI BOUNDARY	482.74 (A)	100%	—
WARD BOUNDARY			—
TOTAL OPEN SPACES AREA *	238.24 (B)	49.45%	
BALANCE LAND AREA FOR DEVELOPMENT OF Housing (5 categories as per DP), Industrial (6 categories as per DP), Commercial (2 categories as per DP), Amenities (34 categories as per DP), Services (15 categories as per DP) & Defense, Airports, Ports & Railways -(A) less (B) =	244.50	50.55%	
RESERVATION FOR PUBLIC HOUSING/DHOBI HOUSING	10.86	2.25%	
RESERVATION FOR HOUSING FOR DISHOUSED	2.01	0.41%	
RESERVATION FOR MUNICIPAL HOUSING	2.95	0.61%	
RESERVATION FOR KOLI / FISHERMEN'S HOUSING	0.09	0.02%	
MISCELLANEOUS RESERVATION for MPL Quarters, BPT Housing, Govt. Housing, Orphanage, M'RAL Staff Quarters, PMGP For Slum Dwellers, BIT Chawls, BEST Housing, Telephone Exchange Housing	0.66	0.14%	
RESERVATION FOR RESIDENTIAL ZONE	86.30	17.87%	
TOTAL HOUSING RESERVATION LAND	102.86	21.30%	
Not to scale Various reservations are as per the Development Plan. This map must be read together with 'Mumbai's Slums Map- Land Reservation'. * Open spaces area is based on 'Mumbai's Housing Reservation Map' prepared by P K Das & Associates			N

Annexure: 04

HOUSING LANDUSE PROFILE

	POPULATION	HOUSING LAND AREA	DENSITY	TENEMENTS
		(Ha)	pph	Per ha
CITY	3,106,514	1875	1657	331
SUBURBS	9,326,316	8411	1109	221
TOTAL	12,432,830	10,286	1209	241

Total Land Reserved for Housing= 102.86 Sq.Kms i.e 21.30 % of 482.74 Sq.Kms
or 42.07 % of 244.50 Sq.Kms

Densities are likely to rise due to various schemes with higher F.S.I.
MHADA layouts cover approximately 1500 ha. land area.

As per UDPFI norms, Average density for Metro Cities = 125- 175 pph

Reference: Mapping of Housing Reservations by P.K. Das & Associates

Annexure : 05

SLUMS MAP - 1



	AREA-SQKM	%	SIGN
GREATER MUMBAI BOUNDARY	482.74	100.00%	—
WARD BOUNDARY			—
LAND AREA RESERVED FOR HOUSING (as per D.P.)	102.17	21.17%	
TOTAL SLUMS LAND AREA	42.28	8.75%	■
MUMBAI'S POPULATION (as per 2011 census)	12.43 mn	100.00%	
SLUM- DWELLERS POPULATION (as per 2011 census)	06.53 mn	52.50%	

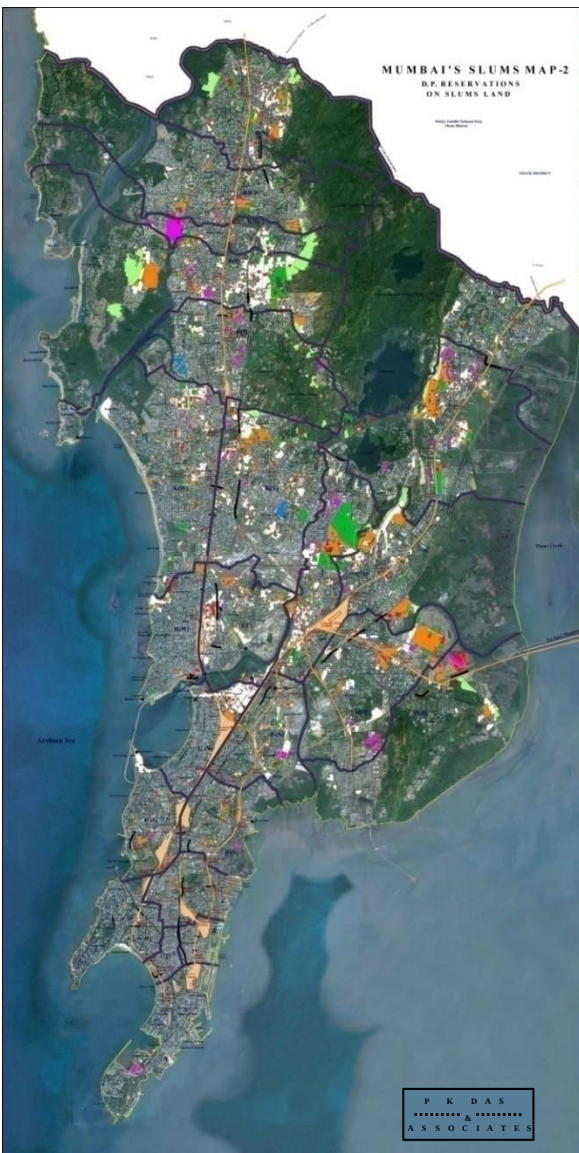
Not to scale. Various reservations are as per the Development Plan. Population figures are approximate.

This map to be read together with 'Mumbai's Slums Map -2 D.P. Reservations'



Annexure : 06

SLUMS MAP - 2



	AREA-SQKM	%	SIGN
GREATER MUMBAI BOUNDARY	482.74	100.00%	—
WARD BOUNDARY			—
LAND AREA RESERVED FOR HOUSING	102.17	21.20%	
SLUMS ON HOUSING RESERVATION	6.07	14.36%	
SLUMS ON RESIDENTIAL RESERVATION	14.02	33.16%	
SLUMS ON COMMERCIAL RESERVATION	0.72	1.70%	
SLUMS ON INDUSTRIES RESERVATION	2.55	6.03%	
SLUMS ON AMENITY RESERVATION	2.37	5.61%	
SLUMS ON OPEN SPACE RESERVATION (RG,PG,G,P)	7.47	17.67%	
SLUMS ON NATURAL ASSETS (beaches, mangroves, etc.)	0.32	0.76%	
SLUMS ON NDZ RESERVATION	4.22	9.98%	
SLUMS ON RAILWAYS, AIRPORT AND PORTS	0.44	1.04%	
SLUMS ON SERVICES RESERVATION(Depots, Substations etc.)	1.02	2.41%	
SLUMS ON DP ROAD RESERVATION	3.08	7.28%	
TOTAL SLUMS LAND AREA	42.28	8.75%	
MUMBAI'S POPULATION (as per 2011 census)	12.43 mn	100.00%	
SLUM- DWELLERS POPULATION (as per 2011 census)	6.53mn	52.50%	

Annexure : 07

SLUMS LAND OWNERSHIP PATTERN

SLUM AREA- LAND OWNERSHIP	%
Private	48.30
State Government	23.20
Municipal	20.10
Central Government	5.40
Other Mixed Ownership	3.00
Total	100.00

Source : M.C., BMC

Annexure : 08

SLUM REHAB POPULATION PROFILE

Slum population
As per 2011 census

- 6.53 million

Less Dharavi population

- 0.50 million

Less Airport population

- 0.41 million

Less National Park slums

- 0.10 million

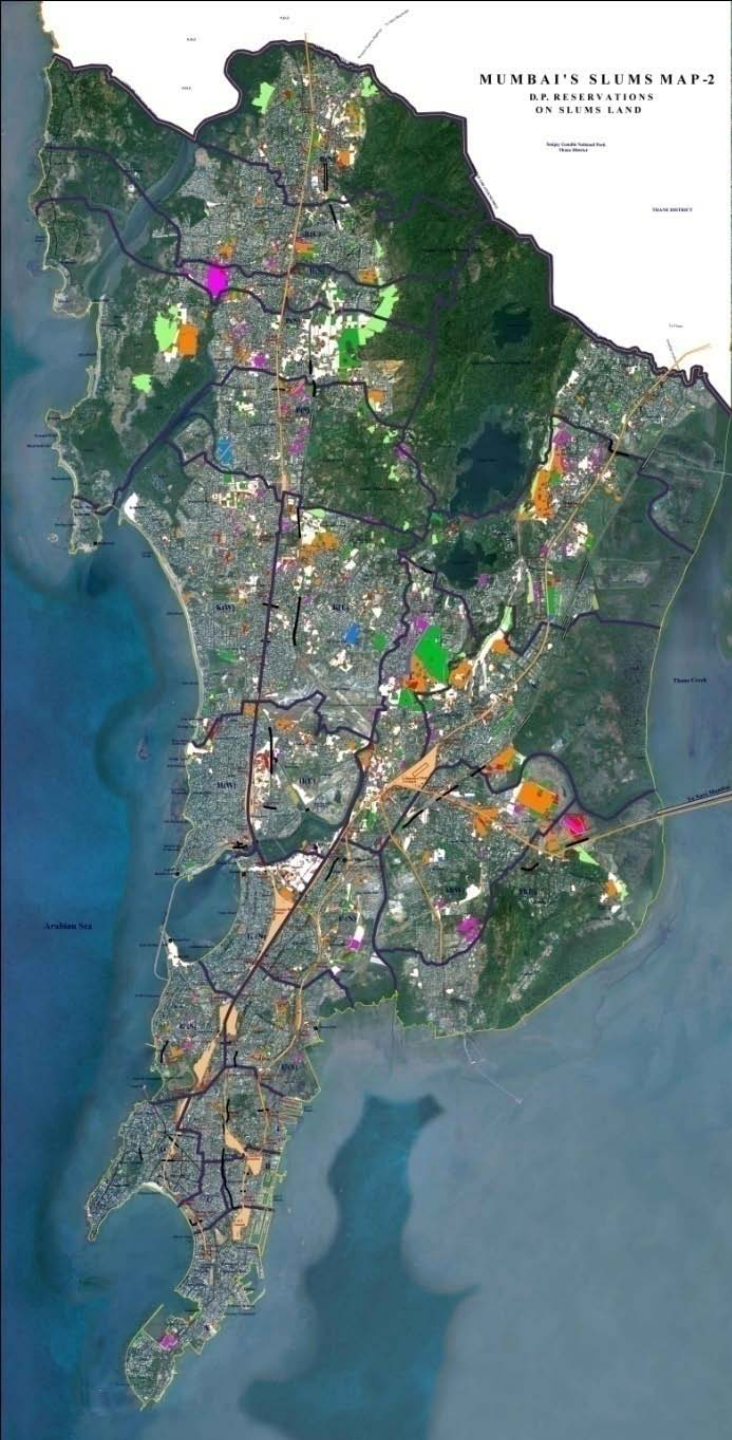
Less Already rehabilitated
under SRA Scheme

- 0.85 million

Thus, Total Population
for rehabilitation under the
proposed new scheme

4.67 million

Annexure : 09



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&**

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