

SUGGESTIONS FOR THE REVISED DRAFT OF MUMBAI'S DEVELOPMENT PLAN: 2014 - 2034



GULMOHAR RESIDENTS ASSOCIATION

MUMBAI WATERFRONTS CENTRE

BANDRA WEST RESIDENTS ASSOCIATION

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Amidst a wide array of Development Plan issues and concerns, we restrict in this document to a handful of issues that our various organisations are most familiar with, having engaged in protracted movements over the years for building an equal and just city, Mumbai. Our idea here is to put forward certain ideas and objectives along with specific alternatives, to public scrutiny and response and importantly, for consideration by the authorities who are in the process of preparing the second draft of DP-2014-2034.

These few issues and objectives include,

1. Sustainable Environment & Open Spaces,
2. Affordable housing
3. Accessible amenities- health care and education
4. Built form & Aesthetics

As the city expands, it's public spaces are shrinking. This phenomenon is reflected in the constantly reducing open spaces and space for democratic engagement. Our objective is not only to conserve and protect the existing meagre open spaces but also to evolve ways by which we can increase them, through a participatory process. It is abundantly clear that we cannot just adopt development plans and policies that threaten the quality of life and environment. Accordingly, special status to all the natural assets to ensure their protection and conservation is mandatory for our survival and the achievement of environmental justice.

Over 75% of the cities population are adversely affected by not having access to affordable

housing options, for a dignified individual, family and community life. It is not just a matter of concern for the poor, majority of whom live in slums, but also for the middle class. Absence of affordable housing supply has led to the proliferation of slums in the city and deteriorating conditions of living in other areas too. Mumbai cannot be considered as a developed city if majority people here live in marginalised and undignified conditions.

The omnipresent real estate industry that controls land and dictates construction, caters to merely 12-15% of the city's population as it builds bigger size and high cost houses. The question is, how can the new DP ensure availability of land exclusively for affordable housing and regulate density in order to achieve sustainable development. Merely leaving it to the market to take care of slums redevelopment and supply of affordable housing is a myth and must therefore be checked. Shockingly, the draft DP does not have a separate section on housing, leave aside the recognition slums and allocation of land for affordable housing. This clearly exposes the skewed discriminatory priorities of the authorities, while shirking its fundamental responsibility of responding to these crying needs and demands.

However big or financially powerful a city be, it will be considered underdeveloped and poor, as in the case of Mumbai, if large sections of its people are insufficiently educated and un-healthy or sick, lacking access to affordable education and health care. The first draft DP has substantially reduced the amenity allocation standards. Exclusivity in the investment and growth of both these fundamental amenities has spurned inaccessibility of most people to these benefits. Increasing accessible amenity standards is vital to human development need, making its achievement through land and development allocation an important challenge in

the making of our DP.

Commoditising the city and various development goals at the cost of social development is oppressive and discriminatory. This phenomenon is reflected in the manner in which we mindlessly keep increasing FSI and various tricks associated with it merely for business interest, as solutions to our housing and amenity shortfalls, ignoring the adverse impact of the emerging built form has had and will continue to have on density, built environment and quality of life. Understanding FSI merely in financial terms is counter-productive to relevant and sustainable development objectives. Also, merely increasing volumes of construction does not solve fulfilling the shortfall in housing and amenities. Our continuing build-more syndrome has led to anarchic growth of the city, that must be checked by a comprehensive DP view.

DP is the mother of all plans, defining paths and frameworks for individual and specific sectoral plans and policies. It is one plan that comprehends the overall character- built form and aesthetics, of the city. It is not simply a 2-D plan but goes hand in hand with profiling building forms, density and sustainability, as being integral aspects of physical planning. The intrinsic relationship between physical conditions and human development in all its diverse aspects, is well known. Our review of the few issues in this document keeps

MUMBAIKAR'S KEY CONCERNS

2

**PROTECTING ENVIRONMENT
& OPEN SPACES**

1

**AFFORDABLE HOUSING
& SOCIAL AMENITIES**

3

**BUILT FORM
& AESTHETICS**

1

**AFFORDABLE HOUSING
& SOCIAL AMENITIES**

AFFORDABLE HOUSING

Construction potential in existing schemes will take over 100 years to build.

Slum redevelopment, cessed buildings reconstruction, cluster redevelopment, industrial lands conversion, MHADA colonies redevelopment.....

Real estate industry builds for merely 12-15% of Mumbai's Population

Nearly 1 million poor and middle-class are marginalised
Today, shortfall in affordable housing is 1.1 million units

There is no affordable housing supply
Therefore slums proliferate

0.13 million houses vacant

57,000 flats unsold in Oct-Dec 2014

TIMES NEWS NETWORK
Mumbai: Yet another research report released on Wednesday
the scope for correction," said Kapoor.
In the larger Mumbai Metropolitan Region (MMR), the



AFFORDABLE HOUSING

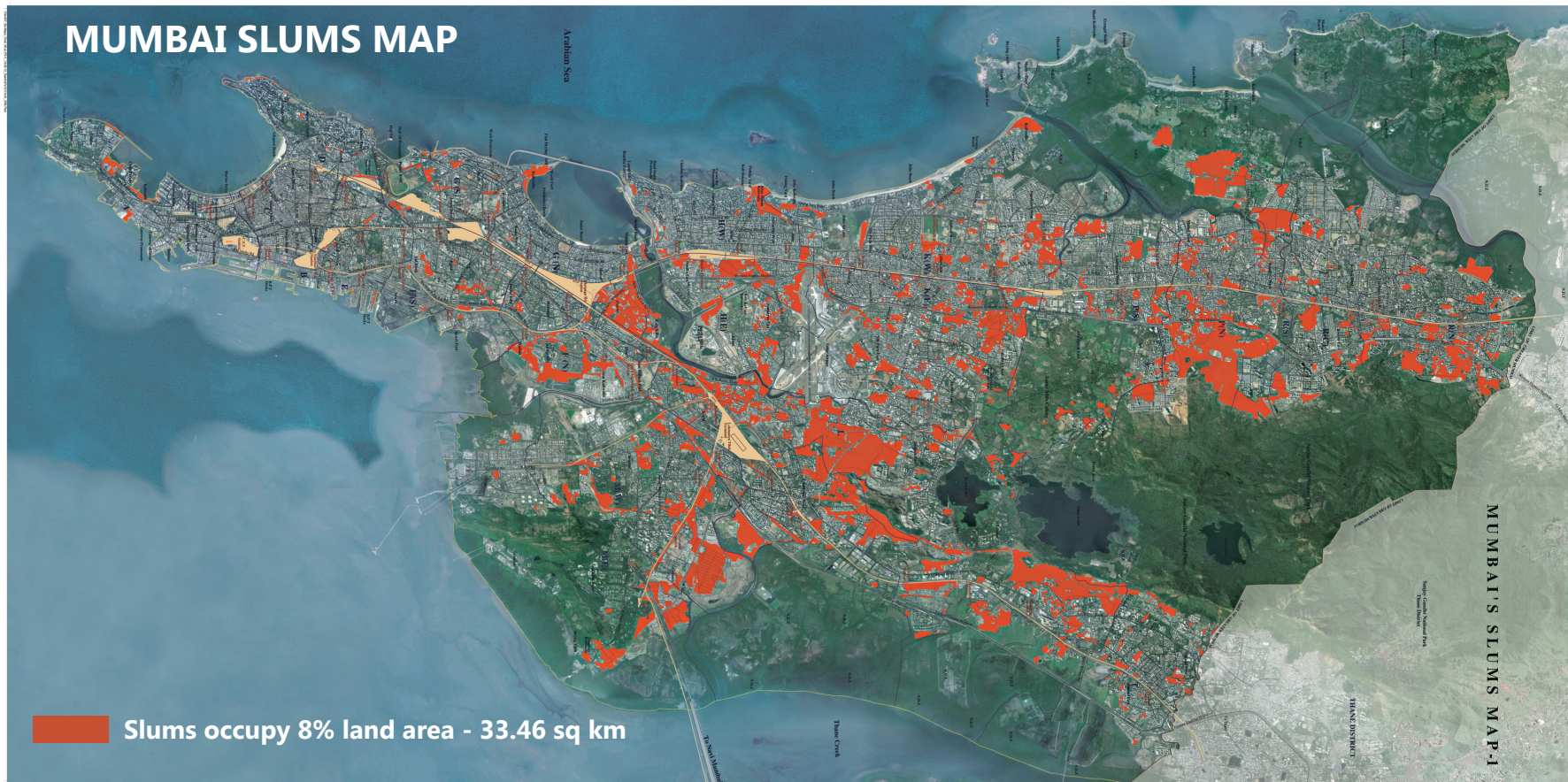
1st DRAFT DP 2034

Affordable Housing

At the mercy of the Market

**DP proposes to reserve 20% of all buildings
for Affordable Housing**

Mired in speculation and uncertainty



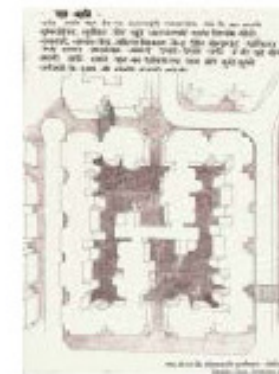
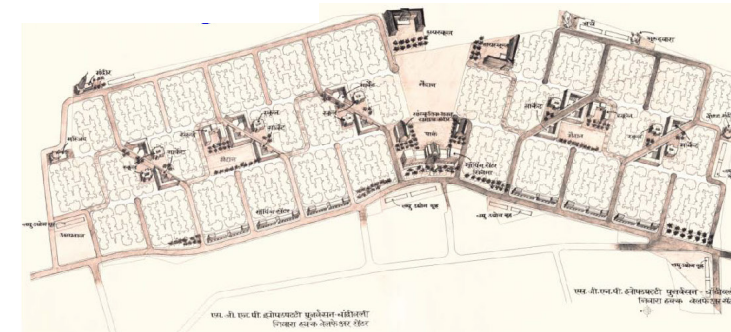
Published By: P K Das & Associates; Link: pkdas.com/openmumbai

SOLUTIONS

1 REDEVELOPMENT OF SLUMS

Reserve Slum occupied land entirely for
affordable housing

This will generate 1 million affordable homes along
with amenities and infrastructure.



AN EXAMPLE : SANGHARSH NAGAR, CHANDIVALI

25,000 houses

FSI- 3.0

600 ten./ha

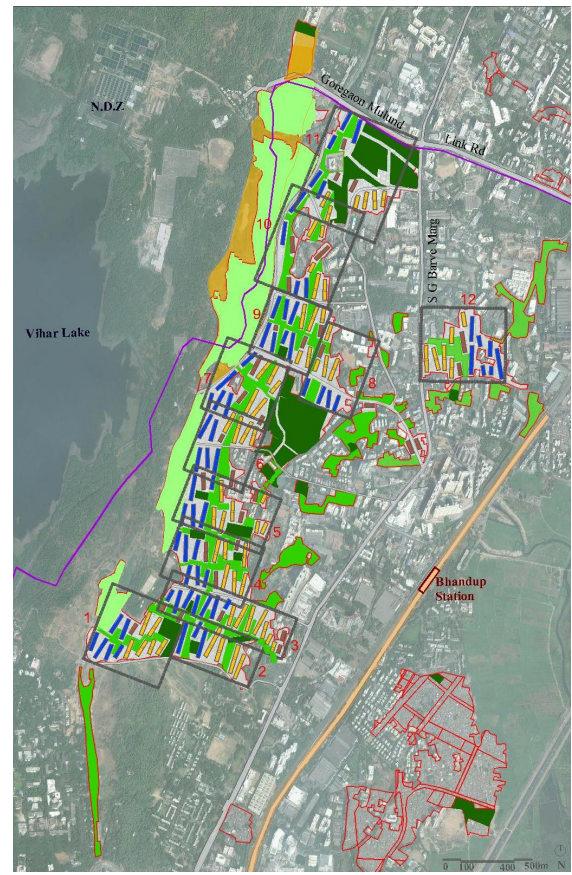
SOLUTIONS

2

REDEVELOPMENT OF MHADA COLONIES 2000 HA.

This will generate 0.5 million affordable houses along with amenities and infrastructure

Together with slum redevelopment we could build 1.5 million affordable houses



1

REDEVELOPMENT OF SLUMS

Comprehensive Planning of Slums Land as per Town Planning (T.P.) Norms

Slums Redevelopment Density
(excluding Dharavi and airport slums)

Existing Slums Density	Under present SRA Scheme for Rehab	Under proposed Master Plan for Rehab
300.05 Ten./ha	Up to 1250 Ten./ha	516 Ten./ha (under F.S.I. – 3.0) 464 Ten./ha (under F.S.I. – 2.5)

Eg: Part plan of a slum area with comprehensive planning

1

Regulating density to maximum 600 tenements/ ha.

Control building heights to maximum G+8 to G+10

Enables freeing of land reserved for amenities and open spaces

Creates additional amenities and open spaces as per T.P. norms

**ACCESSIBLE EDUCATION
& HEALTH CARE**

1 st DRAFT DP 2034	SHORTFALL	DEMAND
Land Pooling & Built-up area reservation	TP & UDPFI Standards Education – 3.58 sq m pp Healthcare – 1.28 sq m pp	Well Distributed
	Existing Land Use 2012 Education – 0.64 sq m pp Healthcare – 0.17 sq m pp	Affordable
‘..there is a diminished need now for land reservations for educational needs, considering that there are a large number of private primary and secondary schools in Greater Mumbai..... Increasingly lesser role being played by Government’ : DP	Shortfall Education – 2.69 sq m pp Healthcare – 1.11 sq m pp	Accessible
*UDPFI: Urban Development Plans Formulation and Implementation Ministry of Urban Affairs and Employment, GOI (1996)		

SOLUTIONS

1.

SLUM REDEVELOPMENT

As per T.P. norms

Existing population- 6.5 million
Upon redevelopment- +2.5 million
Total population- say 9.0 million

Slum land area - 3878 ha
Social amenities @15% - 582 ha
Open Spaces @15% - 970 ha

2.

MHADA COLONIES REDEVELOPMENT

As per T.P. norms

Population - 4.8 million

MHADA lands area - 2000 ha
Social Amenities @15% - 300 ha
Open Spaces @15% - 300 ha

A SUMMARY

SRA

MHADA

Land for Social Amenities
Population
Open Space

582 Ha
9.0 million
697 Ha

300 Ha
4.8 million
300 Ha

Note: Other redevelopment schemes such as cluster redevelopment and plot layouts will generate additional amenities.

2

**PROTECTING ENVIRONMENT
& OPEN SPACES**



BANDRA BANDSTAND



WORLI FORT



JUHU CHOWPATTY



MAHIM BEACH

INCREDIBLE MUMBAI !

What we don't see and realize as our public spaces assets:

149 km of coastline

16 km of beaches

41 km of 5 rivers

48 km of 'nullahs'

9 sq km of creeks

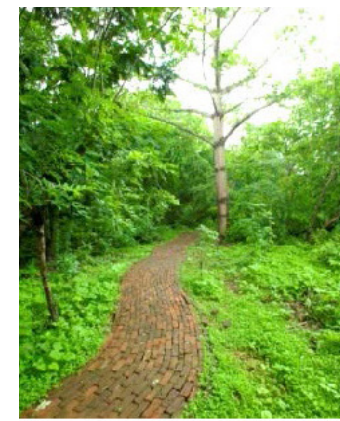
64 sq km of forests and hills



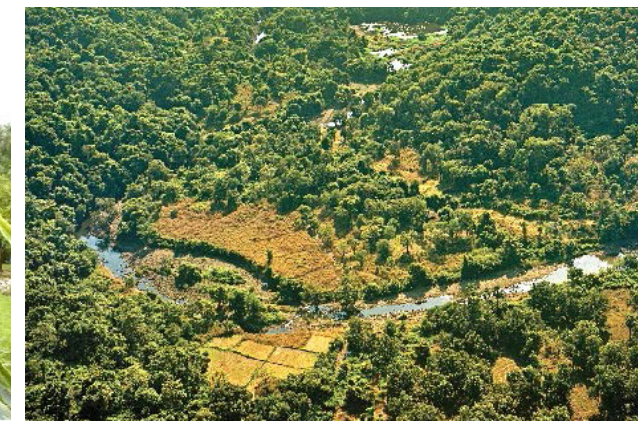
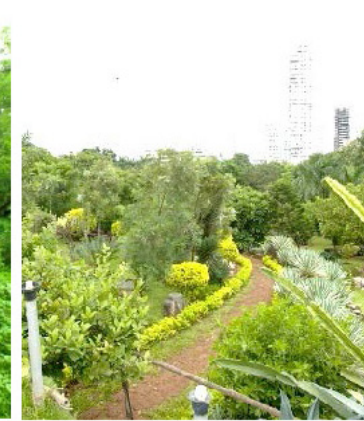
B.K.C. & MITHI RIVER



MALAD WETLANDS

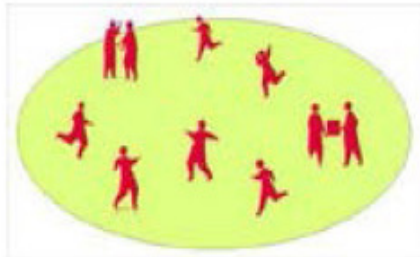


MAHIM NATURE PARK & B.P.T PARK COLABA

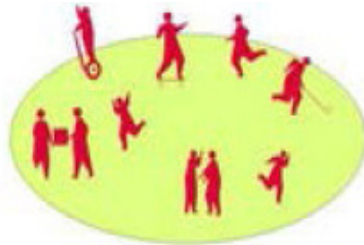


BORIVALI NATIONAL PARK

COMPARISON OF OPEN SPACE



London
32 sq.m. per person



New York
26 sq.m. per person



Tokyo
4 sq.m. per person



Mumbai
1.24 sq.m. per person

OPEN SPACES

DP 1991
Island city = 2 sq.m. per person
Suburbs = 6 sq.m. per person

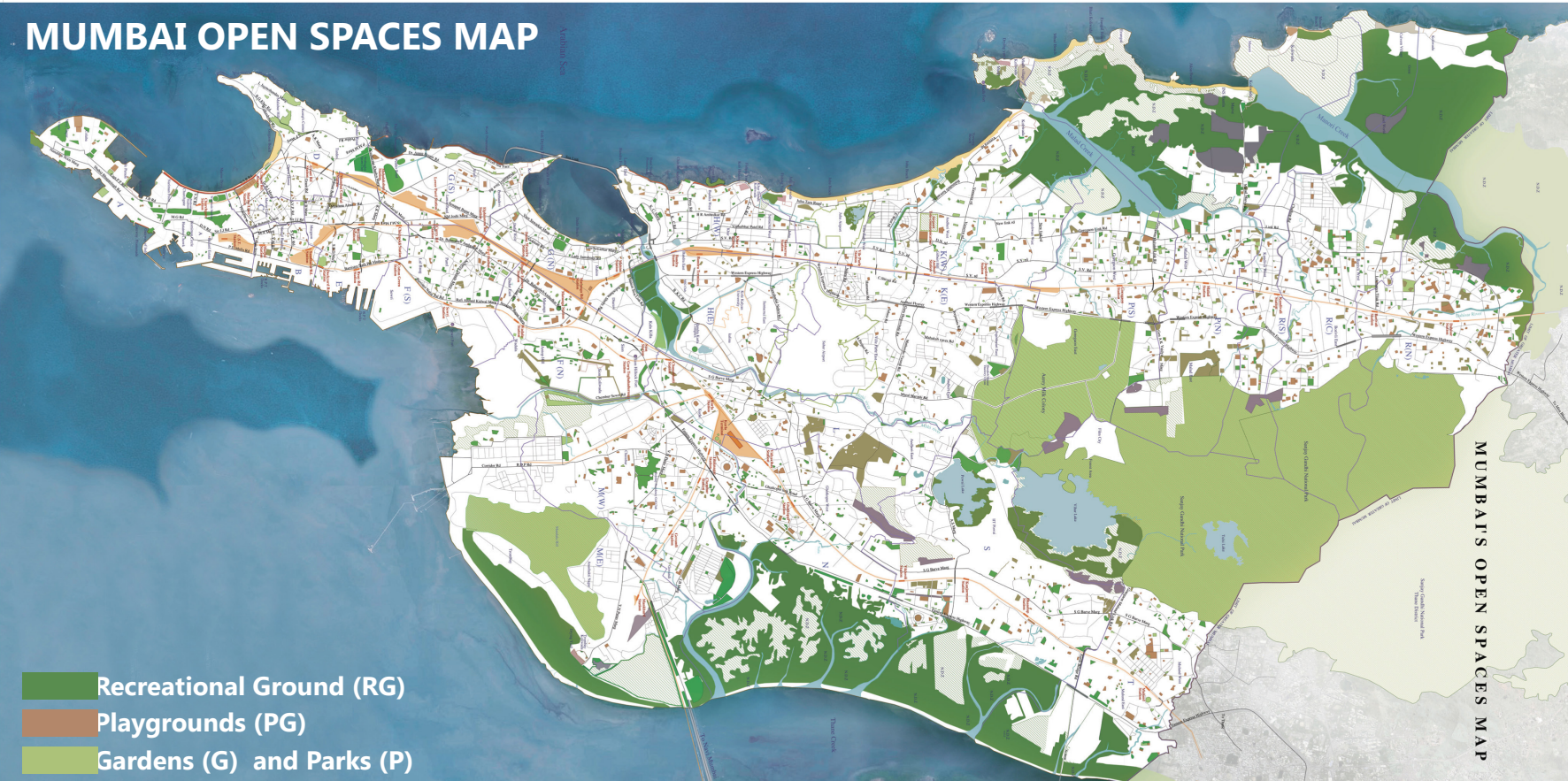
Existing Land Use 2012
Island city = 1.51 sq.m. per person
Suburbs = 2.27 sq.m. per person

1st DRAFT DP 2034
City & Suburbs = 2 sq.m. per person

G.O.I. TOWN PLANNING & UDPFI* STANDARDS
Open Space - 10-12 sq. m. per person

MUMBAI NOW
Open Space - 1.24 sq. m. per person

*Urban Development Plans Formulation and Implementation
Ministry of Urban Affairs and Employment, GOI (1996)



MUMBAI'S OPEN SPACES

	AREA (SQ KM)	%
GREATER MUMBAI AREA	482.74	
GARDEN (G), PARKS (P), PLAY GROUNDS(PG), RECREATIONAL GROUNDS (RG)	13.70	3.0
ENCROACHED OPEN SPACE	5.30	1.1
NATURAL AREAS	144.80	32.90
NO DEVELOPMENT ZONE	44.30	9.20
TOTAL OPEN SPACES	262.20	54.40
THUS, LEAVING FOR DEVELOPMENT	220.50	45.60

SOLUTIONS

1.

DOUBLING OPEN SPACES

Recognizing and integrating
layout Recreational Grounds

DOUBLES OPEN SPACES

2 sq. m. per person to 4 sq. m. per person

**Ironically, 1st DRAFT DP 2034 reduces layout RG reservation
from 15-25% to 10%**



LAYOUT R.G. - JUHU



TYPICAL LAYOUT R.G. EXAMPLE

SOLUTIONS NATURAL AREAS 2.

TRIPLING OPEN SPACES

Further, adding buffer zones along natural areas
&
Open spaces achieved through slum redevelopment

Triples Open Space

From **2 sq.m.** per person to **6 sq.m.** per person

**Ironically, 1ST DP 2034 not only reduces layout open spaces,
but leaves out buffer* areas in Mumbai**

*Buffer areas are referred to the mandatory open spaces to be left
along edges of natural areas



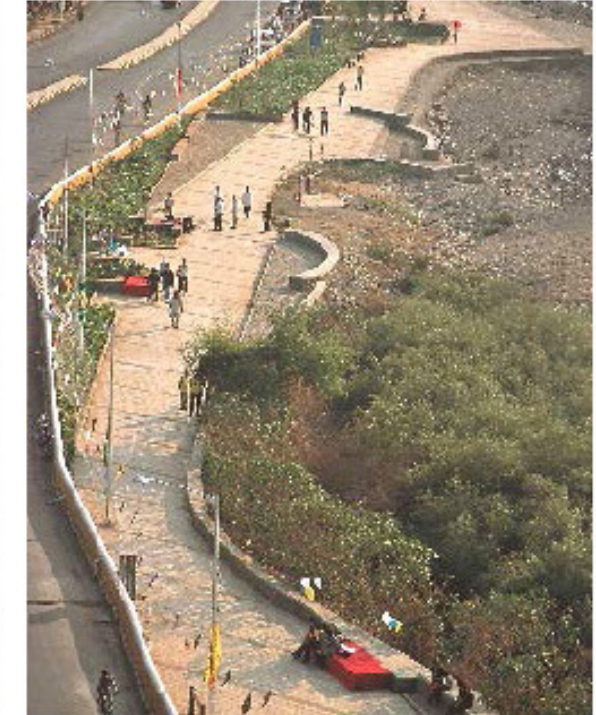
BANDRA BANDSTAND



LAND'S END



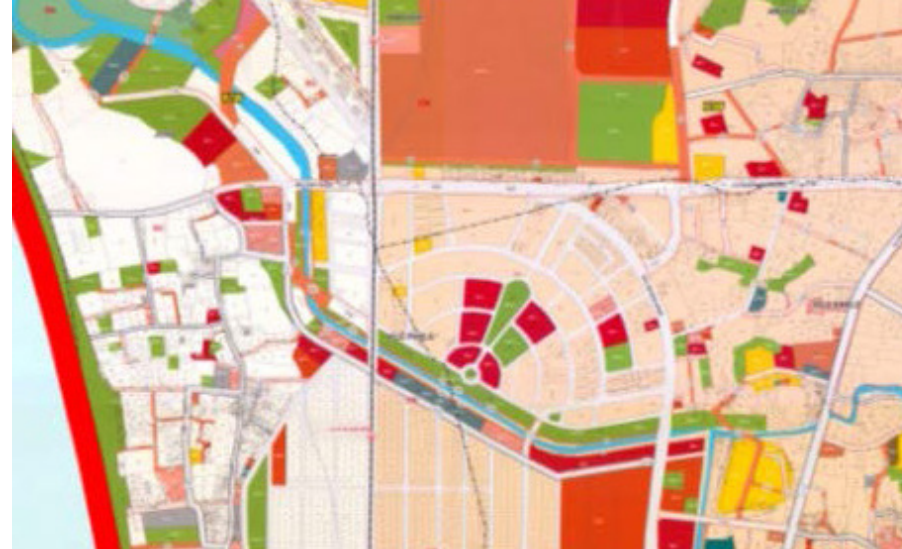
SEWRI WETLANDS



CARTER ROAD

SOLUTIONS

1st DRAFT DP 2034



OPEN SPACE ALONG NULLAH IS RESERVED AS ROAD



IRLA NULLAH RESERVED FOR WALKING & CYCLING PLAN



IRLA NULLAH - WALKING & CYCLING

OPEN SPACES

1st DRAFT DP 2034



Open Spaces have been marked on Natural Areas
Near Ruthumbhara College, Juhu, K(W) Ward

OPEN SPACES

1st DRAFT DP 2034



Certain internal layout RGs are marked as
DP open spaces
IAS and IPS colony, K(W) Ward

OPEN SPACES

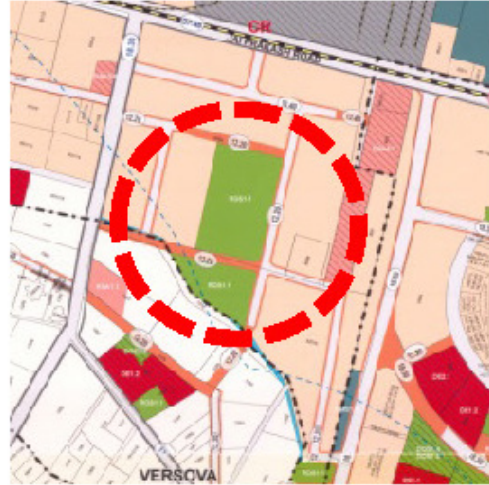
1st DRAFT DP 2034



Open Spaces in 1991 DP are redesignated
for other landuse
BMC's Nakshatra Udyan Near Ruthambhara College

OPEN SPACES

1st DRAFT DP 2034

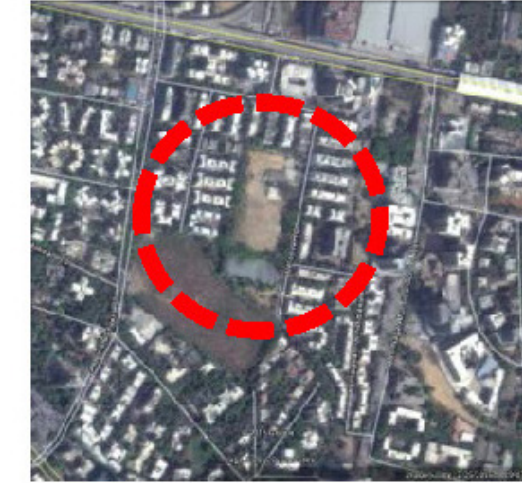
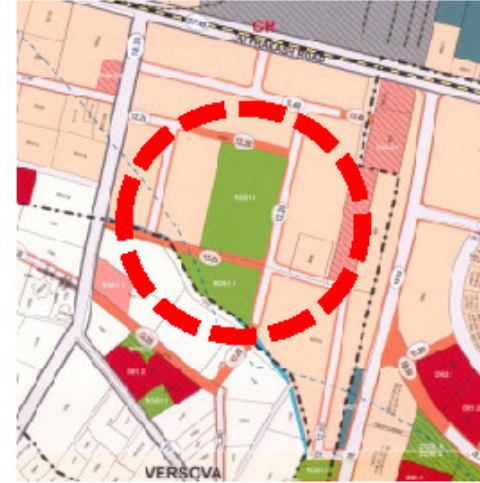


Certain heritage structures designated as Open Space

Gilbert Hill in Andheri

OPEN SPACES

1st DRAFT DP 2034



Roads proposed through existing open spaces

Manish Nagar, K(W) Ward

OPEN SPACES

1st DRAFT DP 2034



Open Space reservation partly converted to Residential Commercial (RC) Zone

Mankhurd

OPEN SPACES

1st DRAFT DP 2034

F.S.I. MAP

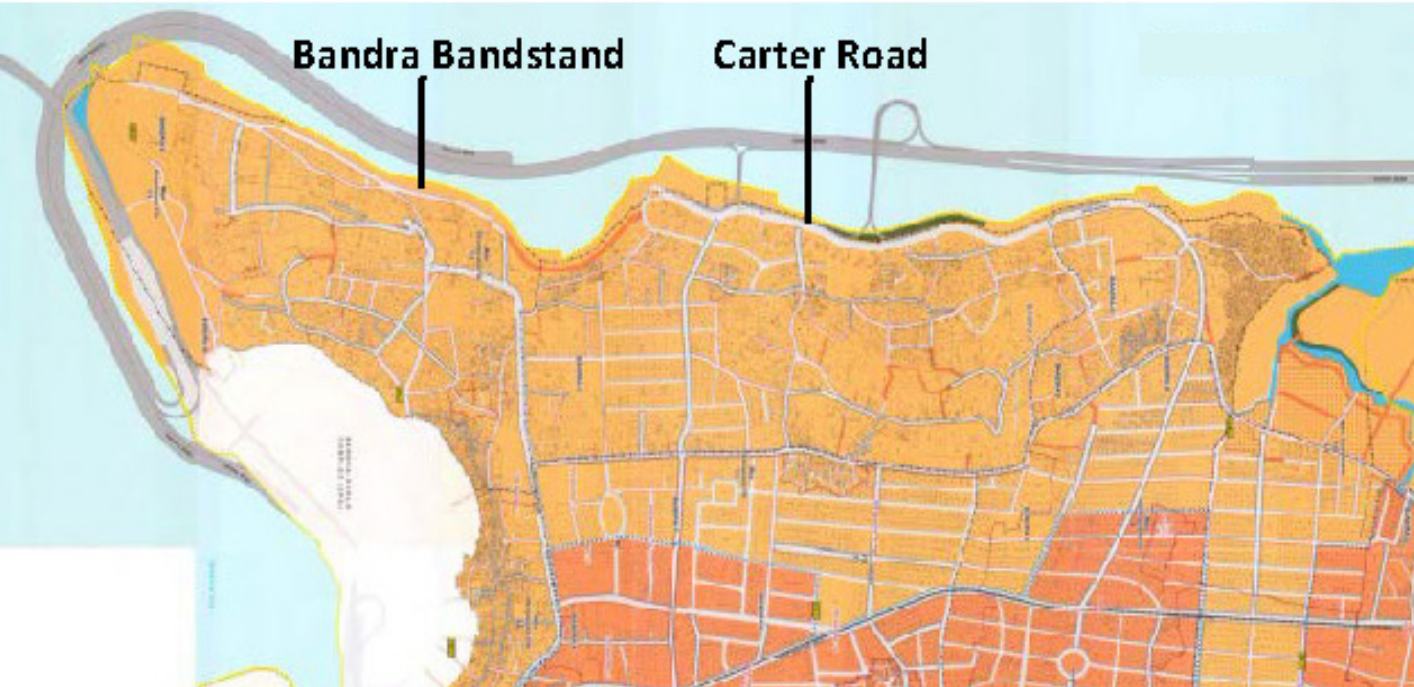


ANDHERI WEST WARD

Open Spaces given FSI

- Juhu Beach
- Versova Beach
- Bandra Promenade

F.S.I. MAP



BANDRA BANDSTAND & CARTER ROAD

OPEN SPACES

1st DRAFT DP 2034

Versova Beach

Juhu Beach

ANDHERI WEST WARD

**Ground (G), Park (P),
Recreational Ground (RG),
Playground (PG)
and beaches are not
differentiated**

Bandra Bandstand

Carter Road

PLU MAP

BANDRA BANDSTAND & CARTER ROAD

**1st DRAFT DP 2034
DEPLETING OPEN SPACES**



**GORAI NDZ- 43 sq km
Tourism Development Zone - Special Planning Authority**



**ILLEGAL LANDFILL, OSHIWARA: 2.20 sq km
Regularized to Residential Commercial (RC) Zone**



**AAREY NDZ - 12 sq km
Now a designated growth centre**

1st DRAFT DP 2034
OSHIWARA ILLEGAL LAND FILL: 2.2 sq.km

Depletes mangroves
and wetlands

Loses Potential Open
Space

Promotes land grab

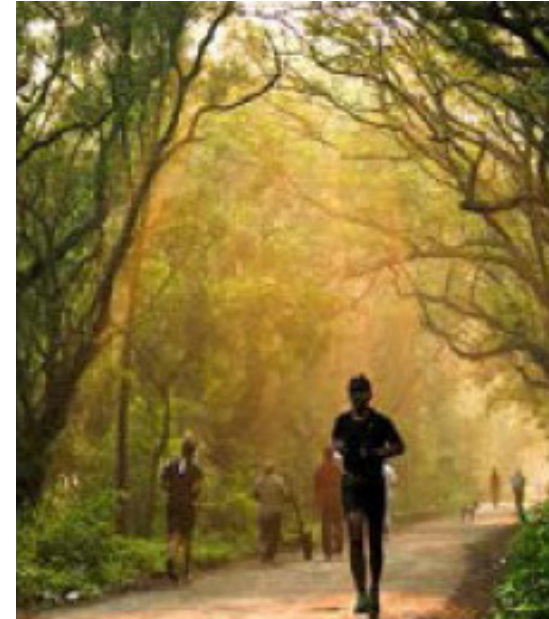


**DP 1991
NDZ Zone**

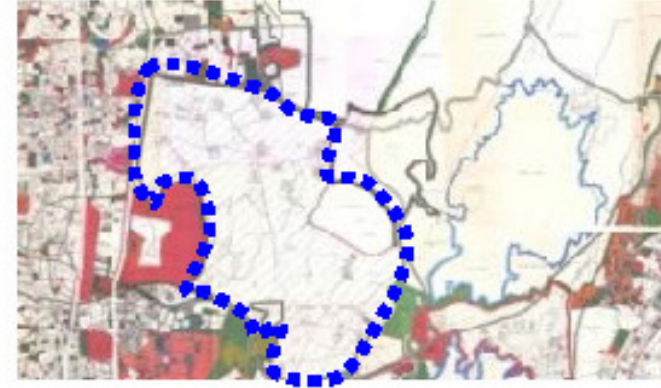


1st DRAFT DP 2034
Declared as RC zone with 3.5 FSI

AAREY - 12 sq km (1200 HECTARE)



AAREY



DP 1991
NDZ Zone



1st DRAFT DP 2034
Declared as Residential
Commercial (RC) zone with
minimum green cover

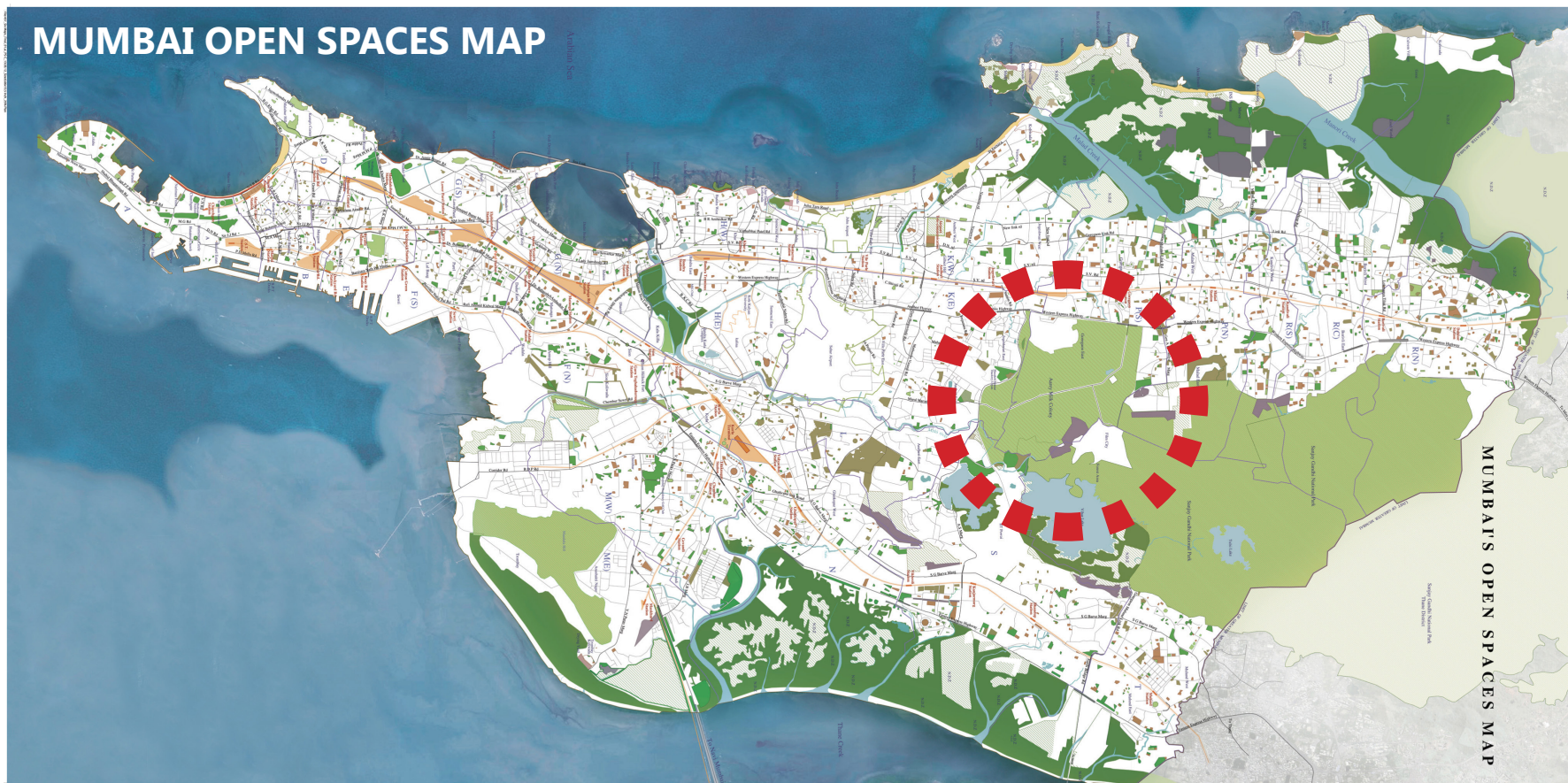
1st DRAFT DRAFT DP 2034

Aarey as a growth centre and educational node

ACTIVITIES THAT WILL BE PERMITTED IN AAREY

- Sports centre**
- Medical, educational & research institute**
- Cultural centre**
- Stadium, Housing**
- Commercial**
- Theme Parks**
- International Zoo**
- Metro III coach depot**

AAREY VIDEO DOCUMENTARY WEB LINK-
Oshiwara Lokhandwala - Revival of 500 acres of Wetlands and Mangroves
<http://www.youtube.com/watch?v=gHrrrMzKpwY>



Published By: P K Das & Associates; Link: pkdas.com/openmumbai

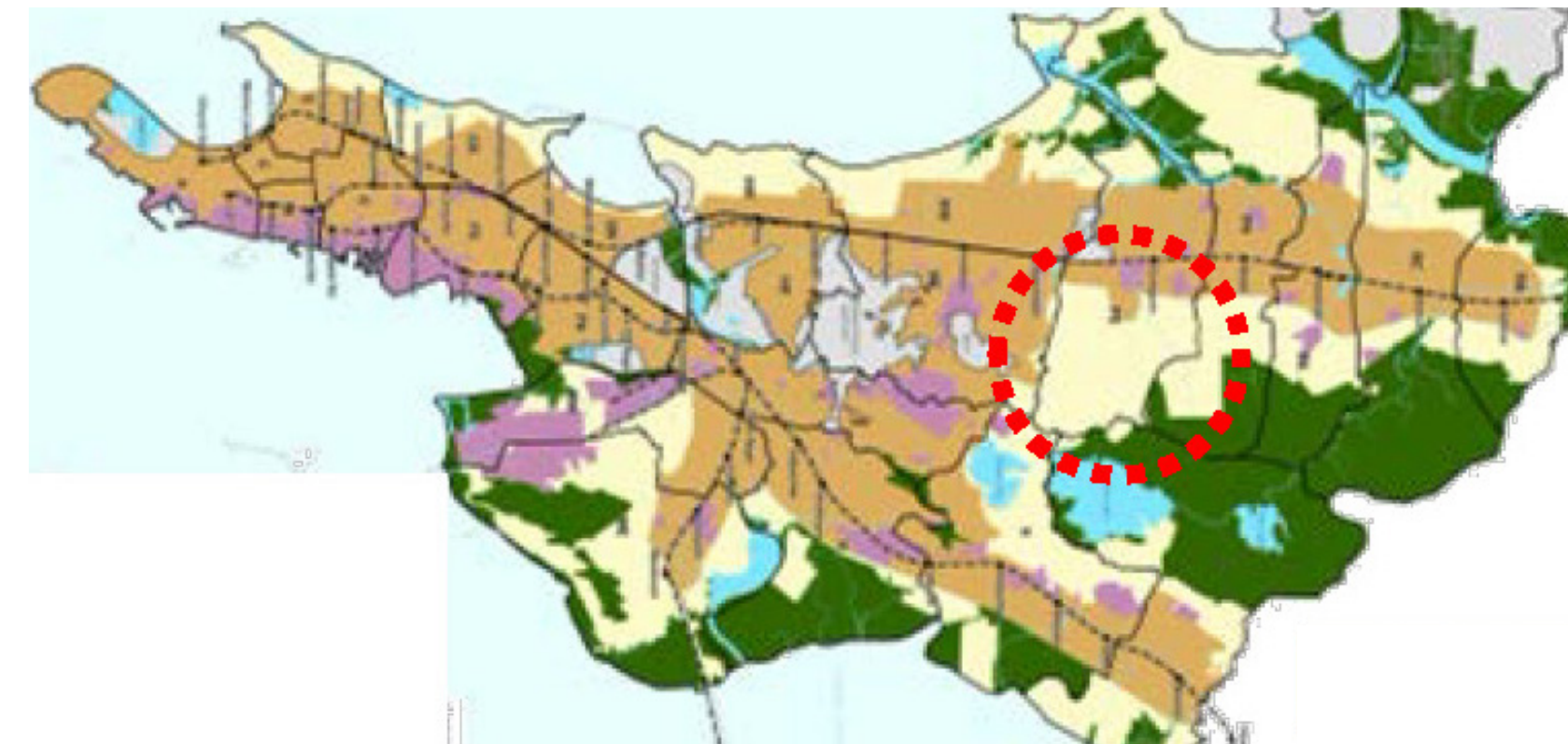
AAREY

1st DRAFT DP 2034

Deletes Aarey as a Natural Area

**Instead, converts it to
Residential Commercial (RC) zone**

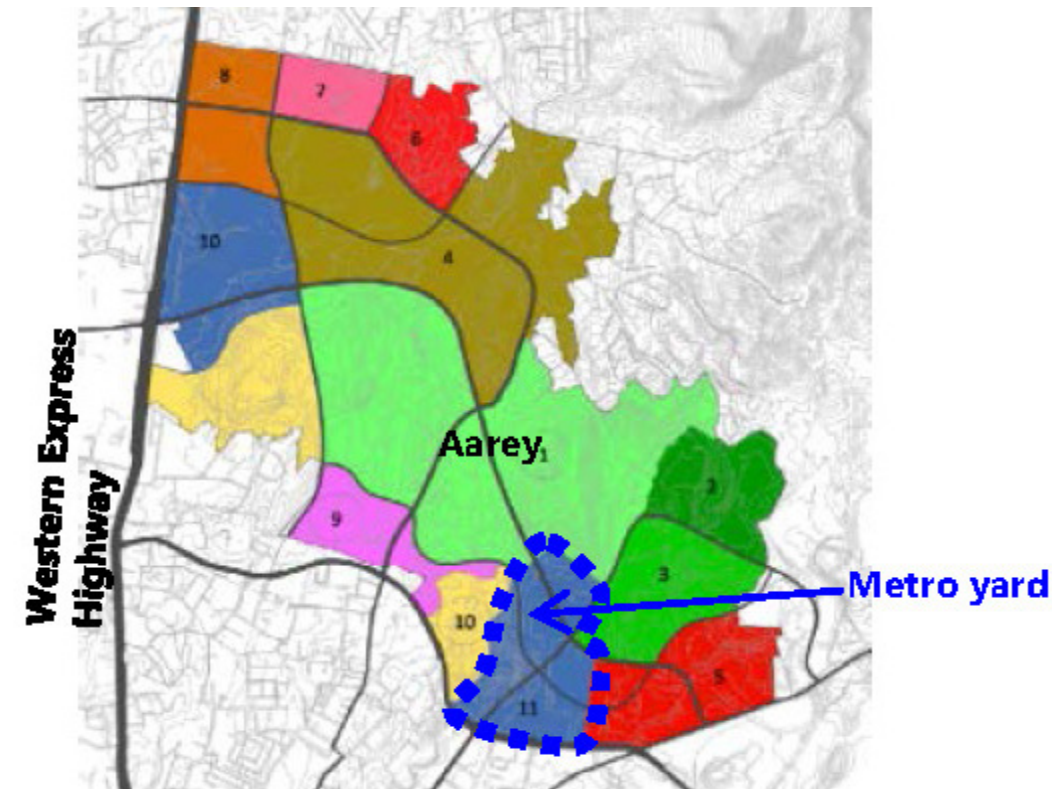
DP 2034



SOLUTIONS

**ADOPT report by
Maharashtra Government
to G.O.I.
declaring Aarey an
ECO-SENSITIVE ZONE**

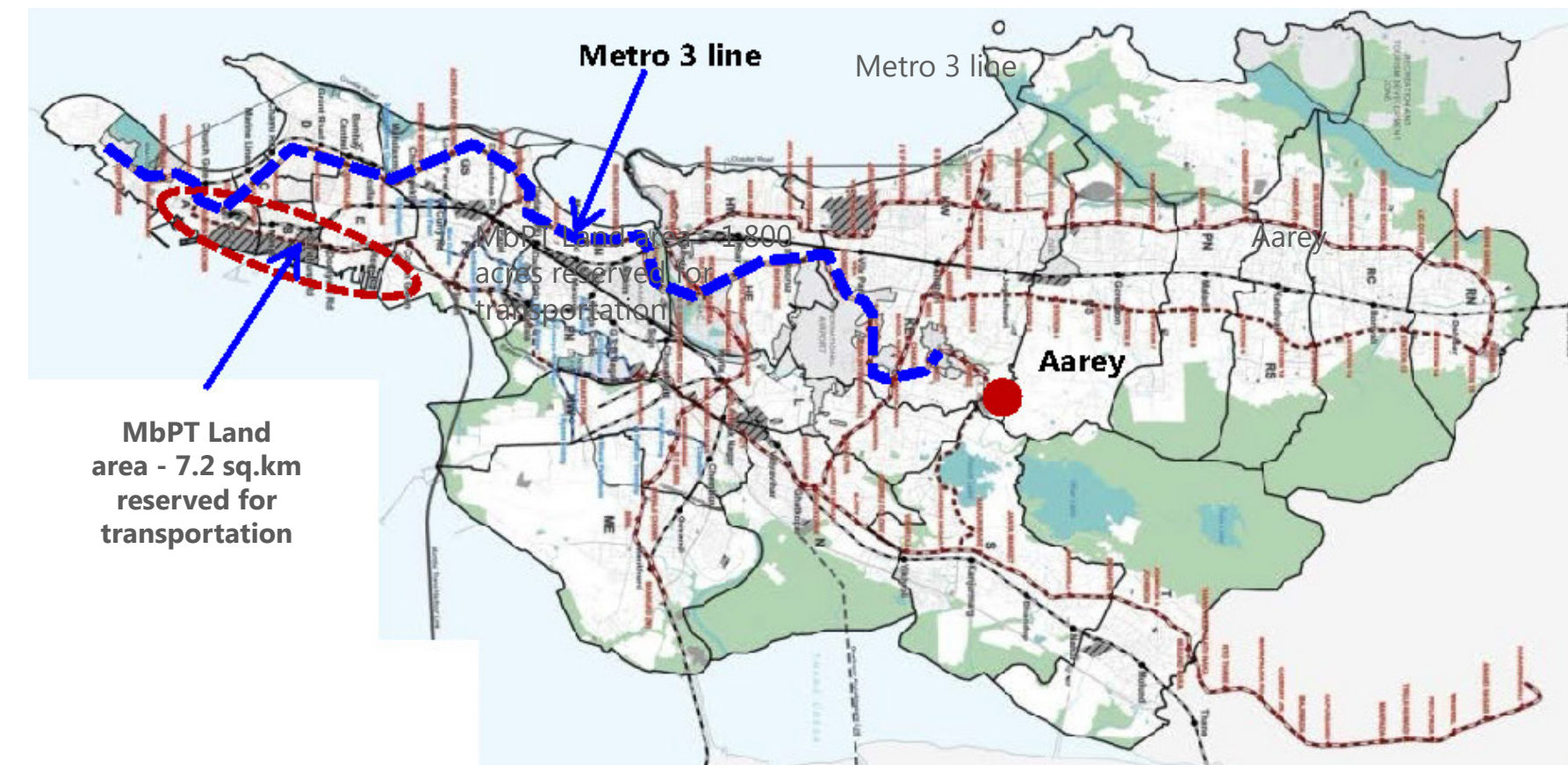
**Conserve and protect natural and cultural heritage
Protect green cover
Improve wildlife habitat
Promote Eco-tourism**



**AAREY MAP WITH PROPOSED
METRO YARD AREA - 0.11 sq km**

METRO-3 YARD ALTERNATE SITE

**Metro yard from Aarey be shifted
to Mumbai Port Trust (MbPT) land**



3

**BUILT FORM
& AESTHETICS**

FSI & Transit Oriented Development (TOD)

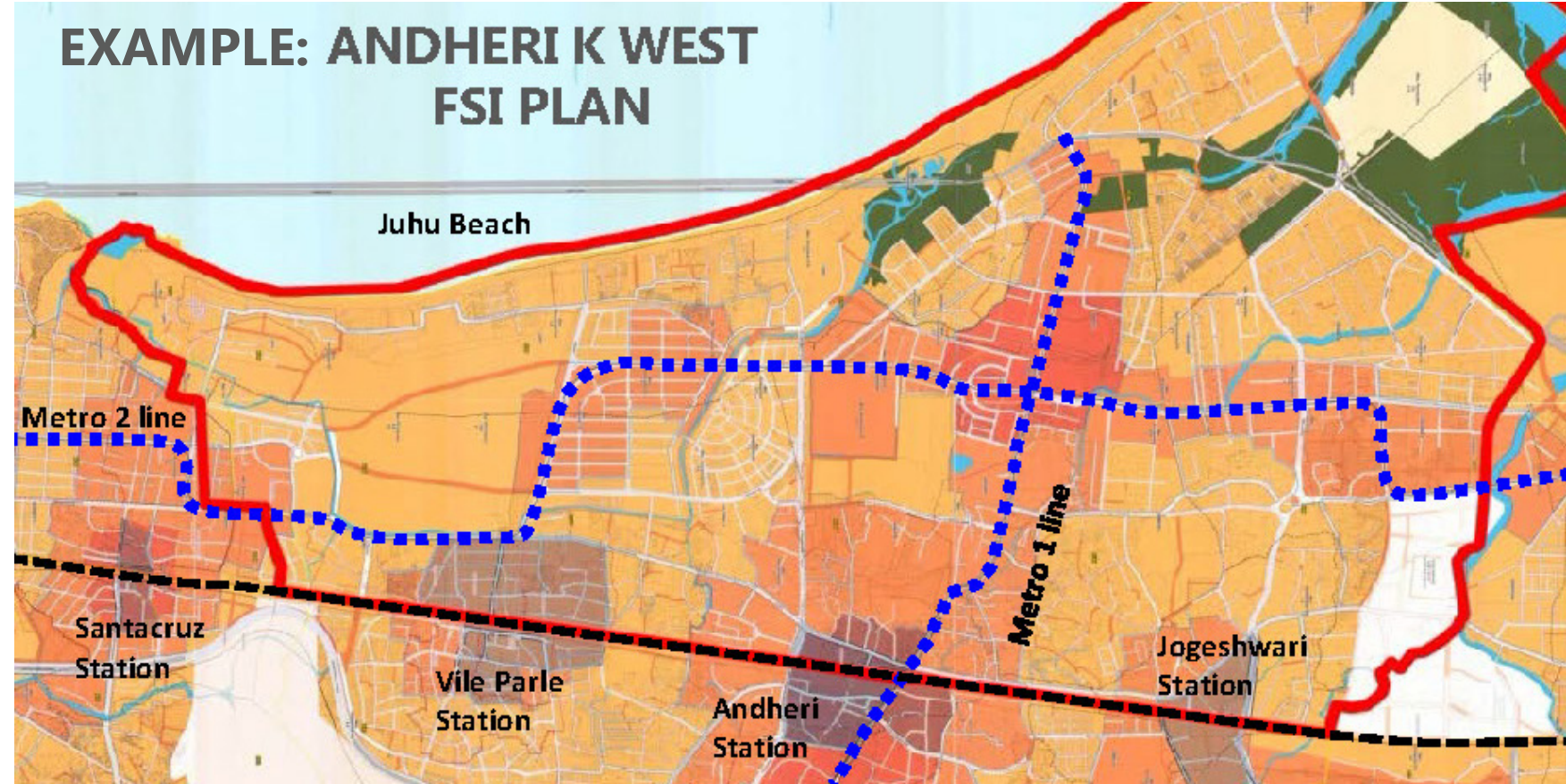
INCREDIBLE MUMBAI ?



DEVELOPMENT ANARCHY

Of 482 sq. km. total area, 240 sq. km. developable (49.80%)

EXAMPLE: ANDHERI K WEST FSI PLAN



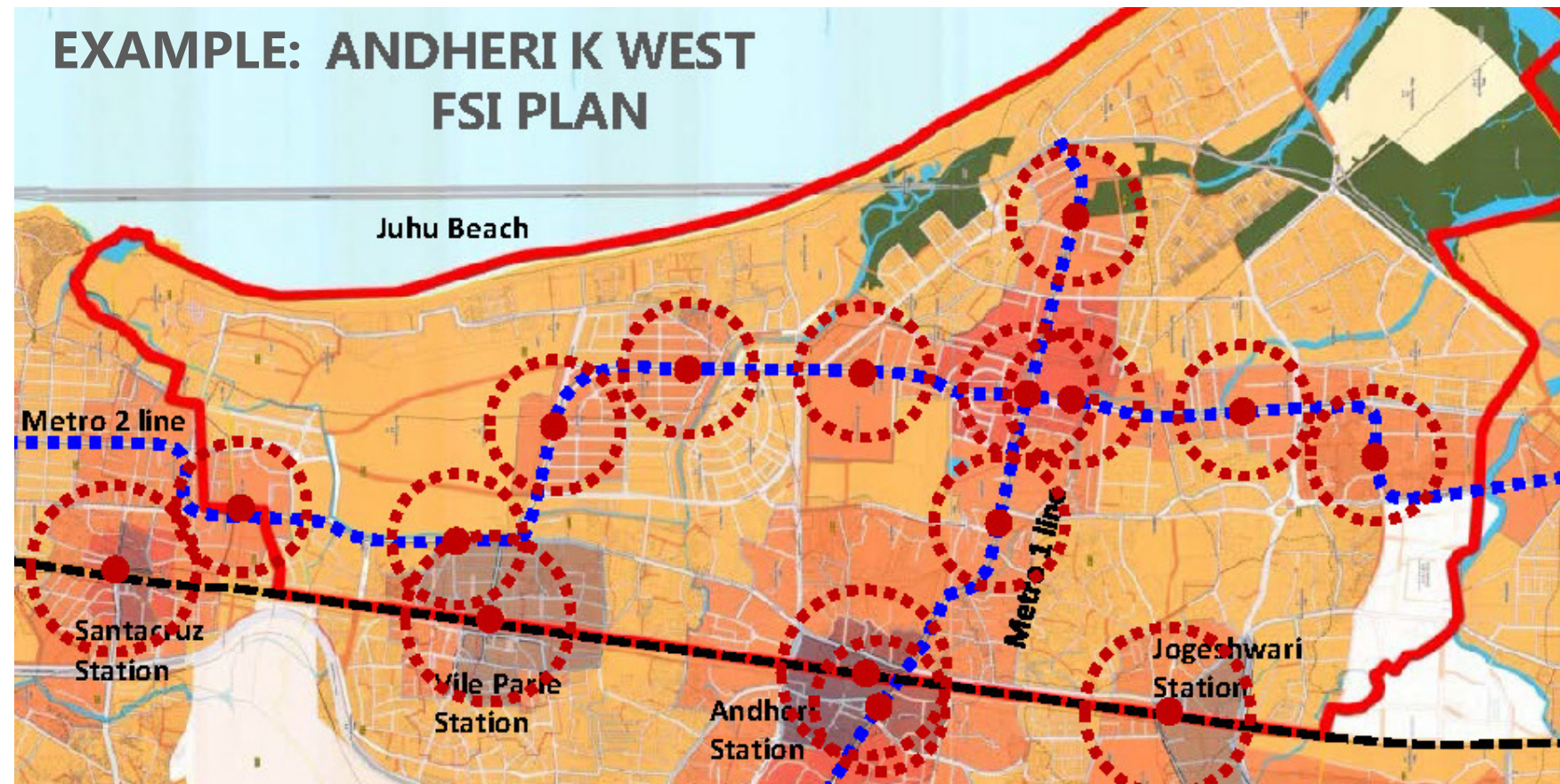
FSI 1st DRAFT DP 2034

- Monetizes FSI
- Facilitates trading by Government
- Inflates Building Prices
- Excludes poor and middle class

Legend	Range of Zonal FSI				
	TOTAL	BASE	PREMIUM A	TDR	PREMIUM B
	0.15	0.15	-	-	-
	2.00	1.50	0.50	-	-
	3.50	2.00	0.50	0.50	0.50
	5.00	2.50	0.50	0.50	1.50
	6.50	2.50	1.50	0.50	2.00
	8.00	2.50	2.50	0.50	2.50

SALE OF FSI ON PAYMENT OF PREMIUM

EXAMPLE: ANDHERI K WEST FSI PLAN



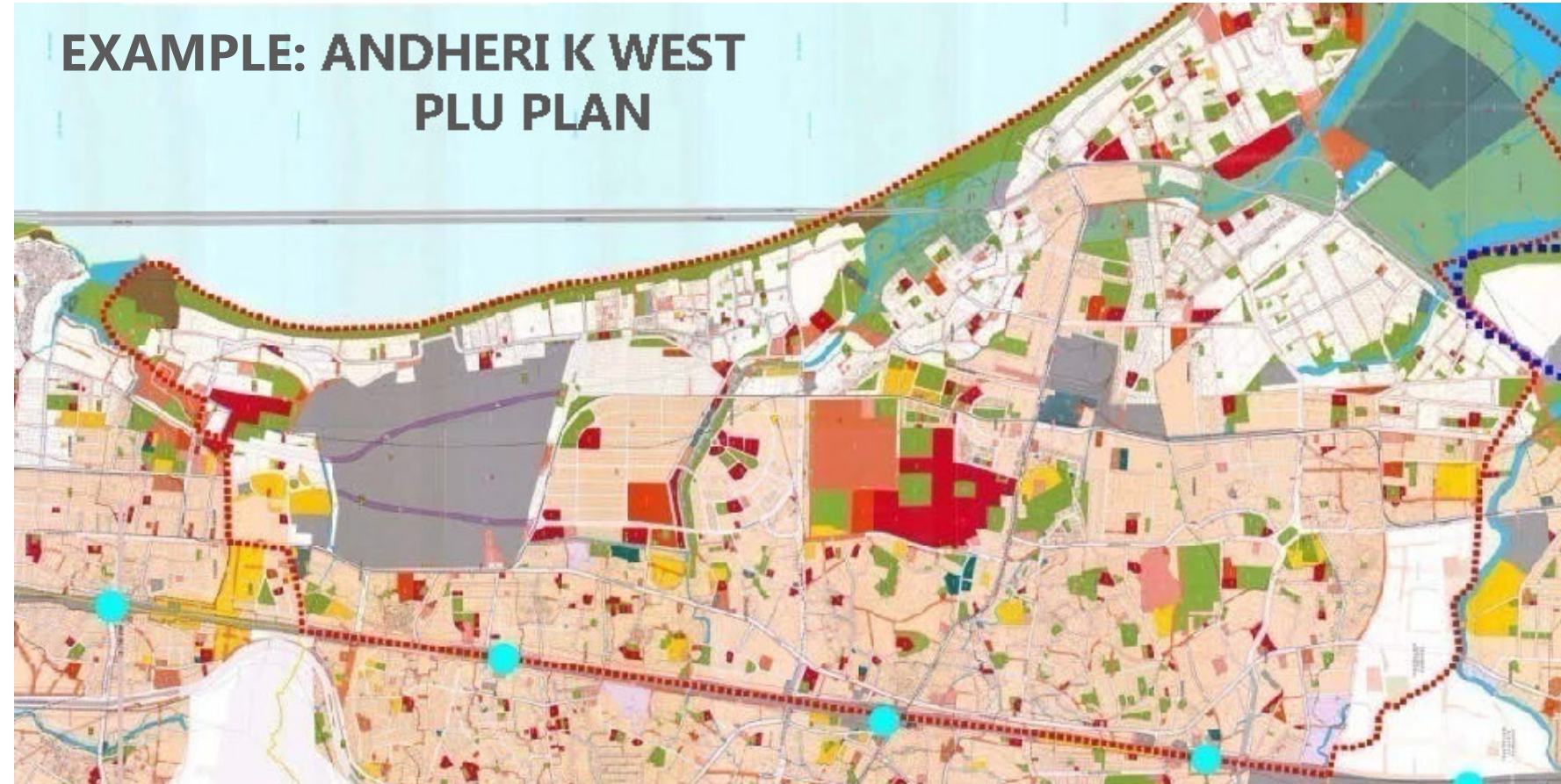
TOD 1st DRAFT DP 2034

TOD will further densify & congest
railway & metro transit corridors,
station precincts and arterial roads.



DADAR STATION

EXAMPLE: ANDHERI K WEST PLU PLAN



R/C & C/R Zones

Railway stations

PLU- Proposed Land Use

Turns Mumbai into a faceless city by destroying
its historical, social and environmental features:

Beaches
Koliwadass
Gaothans
Open spaces
Heritage precincts & buildings

Converting purely residential to C/R & R/C



MALABAR HILL SLOPES SHOWN AS RG



HAJI ALI DARGAH SHOWN AS R/C

WAY FORWARD

ENHANCE QUALITY OF LIFE AND ENVIRONMENT

Conserve Environment

Double and Triple Open Spaces

1st DRAFT DP 2034

Undermines Development Interest

Divides and Fragments the City

Undermines inclusive development

Raises FSI Mindlessly

WAY FORWARD

PROMOTE INCLUSIVE GROWTH

Build 1.5 million Affordable Houses

Gain Land for Social Amenities
& Open Spaces as per T.P. norms

THANK YOU

