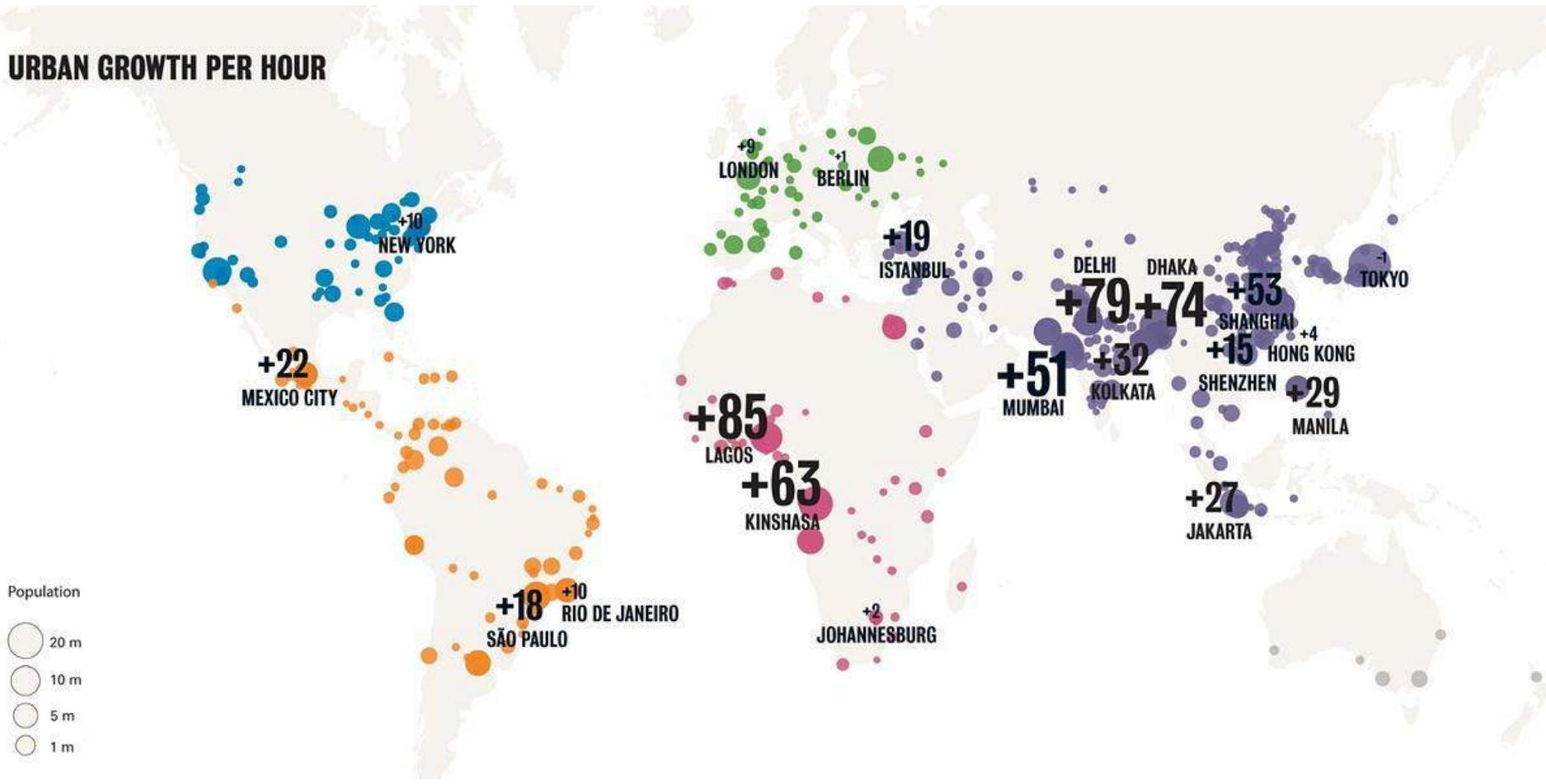# TRANSFORMATION OF
URBAN PLANING CULTURE IN INDIA- THE PROMISE OF MOHUA SUBSCHEME ON LAP AND TPS

Dr. SASWAT BANDYOPADHYAY
PROFESSOR

NOVEMBER 26, 2018

CEPT
UNIVERSITY

The land cover of most Indian cities will at least double or triple over the next three to four decades

URBAN GROWTH PER HOUR

+9 LONDON

+1 BERLIN

+10 NEW YORK

+19 ISTANBUL

+22 MEXICO CITY

DELHI +79

DHAKA +74

SHANGHAI +53

-1 TOKYO

+4 HONG KONG

+15 SHENZHEN

+32 KOLKATA

+51 MUMBAI

+29 MANILA

+85 LAGOS

+63 KINSHASA

+27 JAKARTA

+18 SÃO PAULO

+10 RIO DE JANEIRO

+2 JOHANNESBURG

Population
20 m
10 m
5 m
1 m

Source, LSE Cities, 2017

It is costly and difficult to upgrade haphazard sprawl that lacks a basic grid of streets

Unfortunately, Indians cities appear to be headed in the direction of many Latin American and African cities..
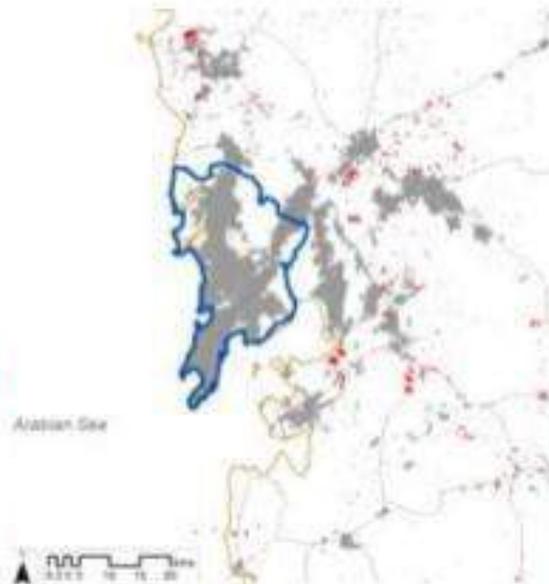
This is leading to:

1. Expansion of cities in their peripheries
2. Redevelopment of already built-up areas in towns and cities

For Sustainable Urban Habitats in India -Both Peripheral expansion and in-city redvelopment both need to be well-managed
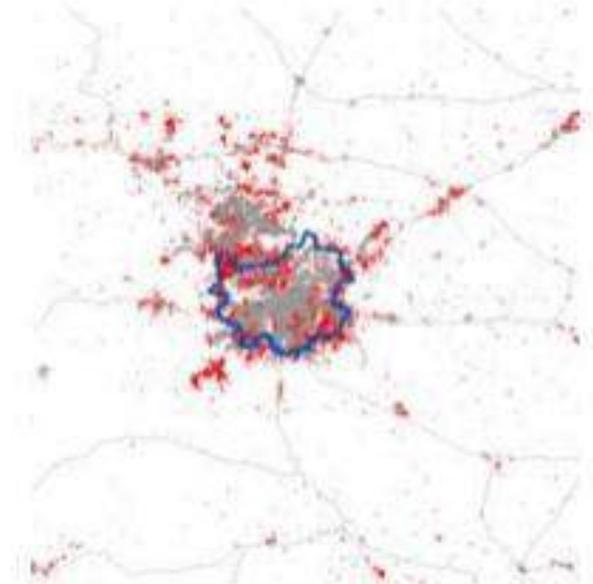
Inevitable **Urban Expansion** in Indian Cities...
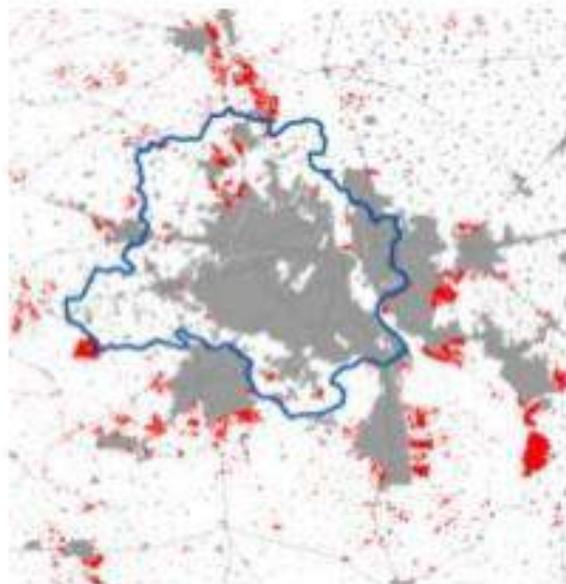
Delhi NCR
54 sqkm/ year

Mumbai
5 sqkm/ year

**Pune**
42 sqkm/year

Municipal Boundary
Urban Area (2005-06)
Urban Area (2011-12)

WRI INDIA

- Rapid growth in satellite towns of Delhi (Gurgaon, Noida, Grt Noida, Faridabad etc)
- Mumbai, little movement in peripheries, but witnessing inner city redevelopment
- Pune capitalising on Mumbai's slow down; attracting new economies like IT/ ITES

Source: Generated by WRI India using data from Bhuvan NRSC

Source: World Resources Institute (WRI)
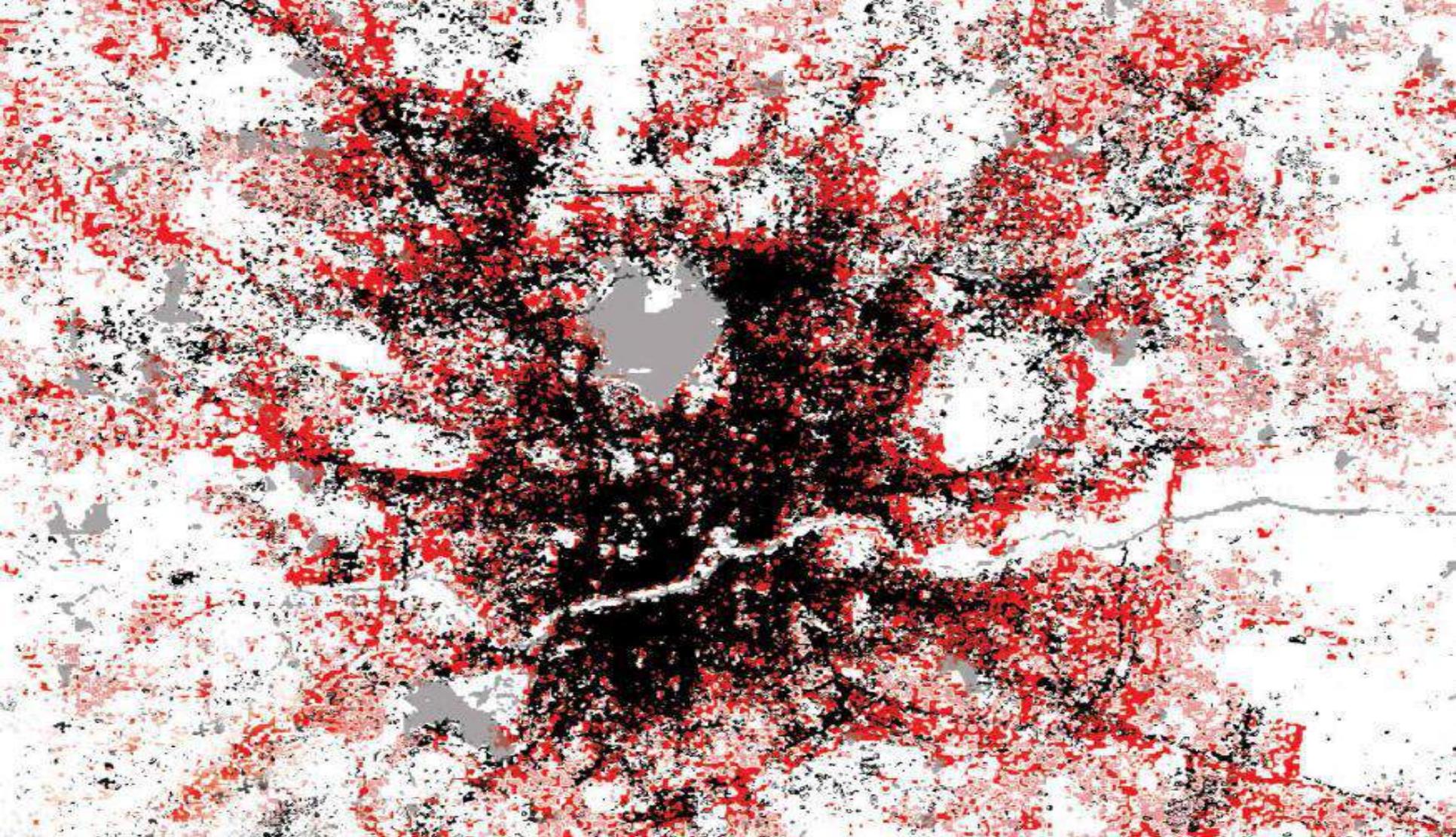
Hyderabad Urban Complex. Source: LUPM, GIZ- India, 2018
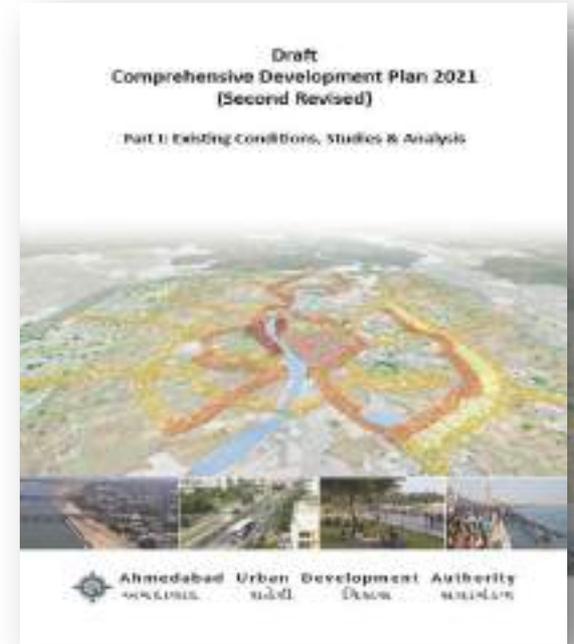
Kolkata

Chandigarh

Nagpur

Lucknow

Managing Peripheral Expansion
The Promise of Gujarat TP Schemes
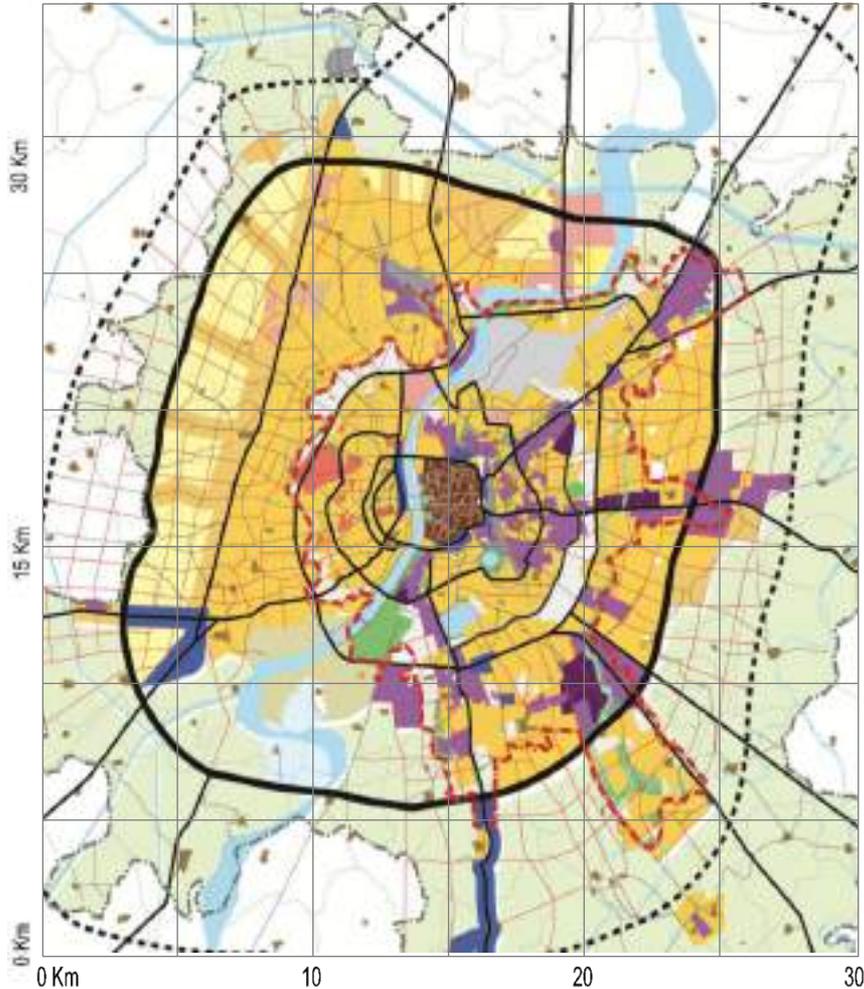
AUDA Revised Development Plan 2021

Part I : Existing Conditions, Studies and Analysis

Part II : Planning Proposals and Recommendations

Part III: General Development Regulations

Draft

Step 1: Preparing a Development Plan

Key features

- strategic city-wide plan
- delineation of new growth areas
- delineation of city level infrastructure
    - roads
    - water supply
    - drainage
    - ….
- development control regulations

Ahmedabad, 2002
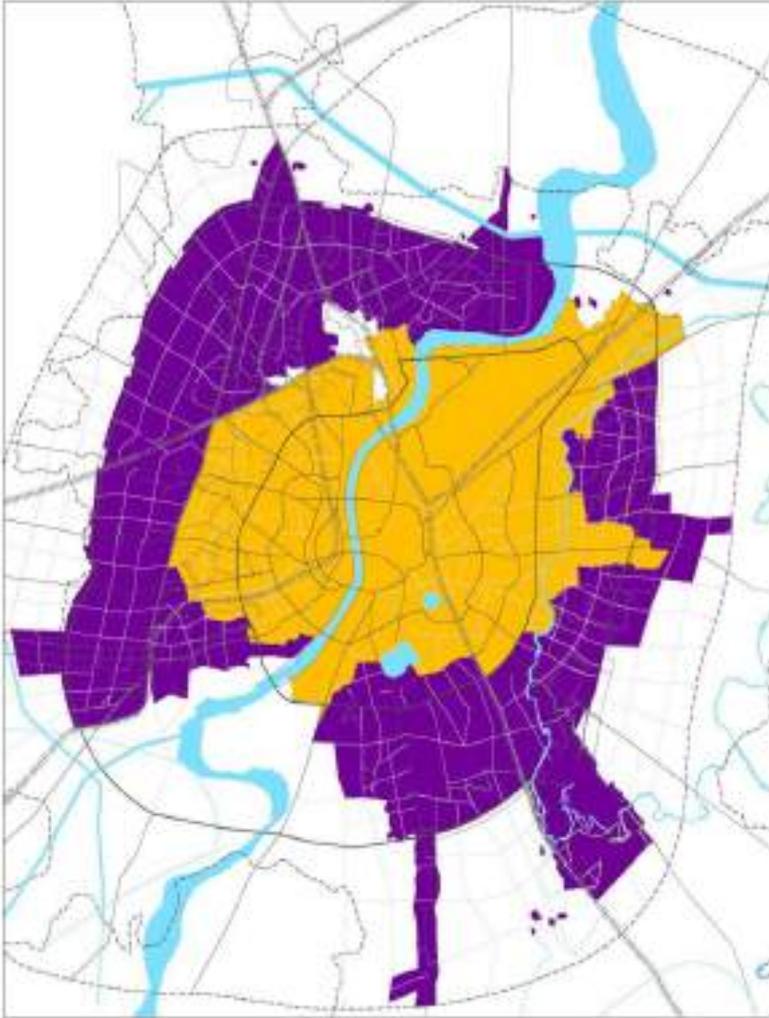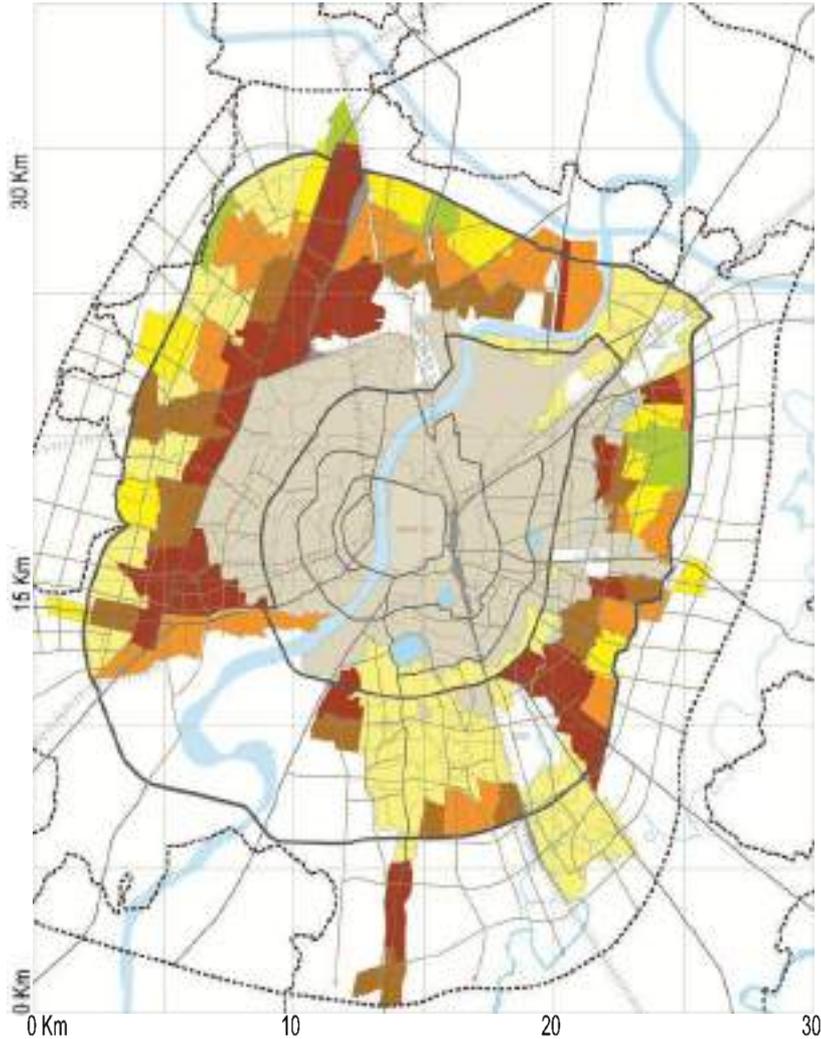
Step 1: Preparing a Development Plan

Key features

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- delineation of city level infrastructure
    - roads
    - water supply
    - drainage
    - ….
- development control regulations

Ahmedabad, 2002

Step 1: Preparing a Development Plan

Source: Environment Planning Collaborative

Key features

- strategic city-wide plan
- **delineation of new growth areas**
  (delineation and sequencing of T P Schemes)
- delineation of city level infrastructure
  - roads
  - water supply
  - drainage
  - ….
- development control regulations

Ahmedabad, 2002

2000

5 km

3 km
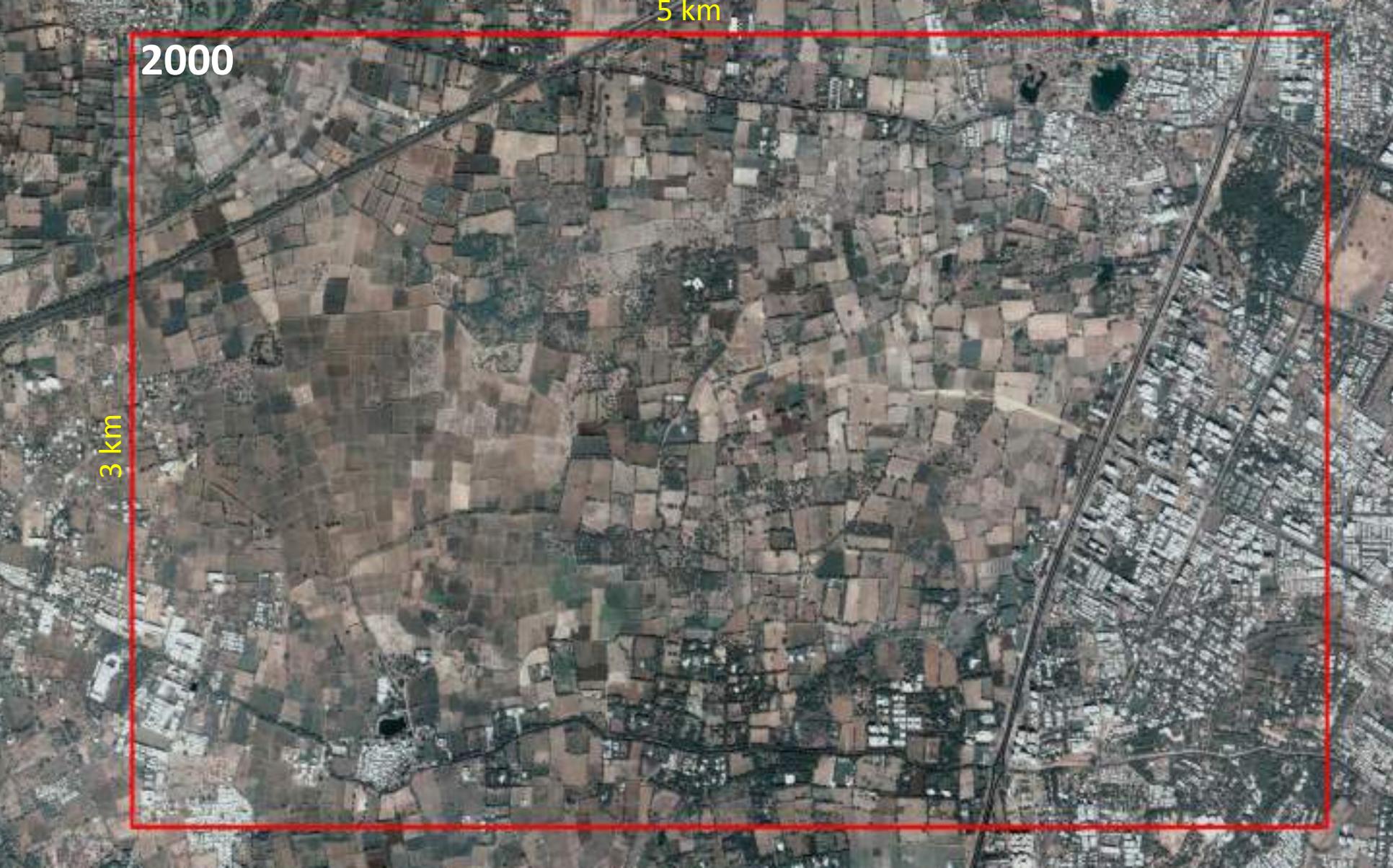
2001

Development Plan

2001

T.P 53/A

T.P 53/B

T.P.S: NO 37

T.P.S NO 38

THALTEJ
N.S. NO

T.P 216

T.P.S 37/B

T.P.S 214

T.P.S 215

BODAKDEV NO.1/B

T.P.S. 213

T.P.S. NO.50

T.P.S. 212

VEJALPUR 6

T.P.S NO.3

T.P.S. 52

T.P.S. NO.51
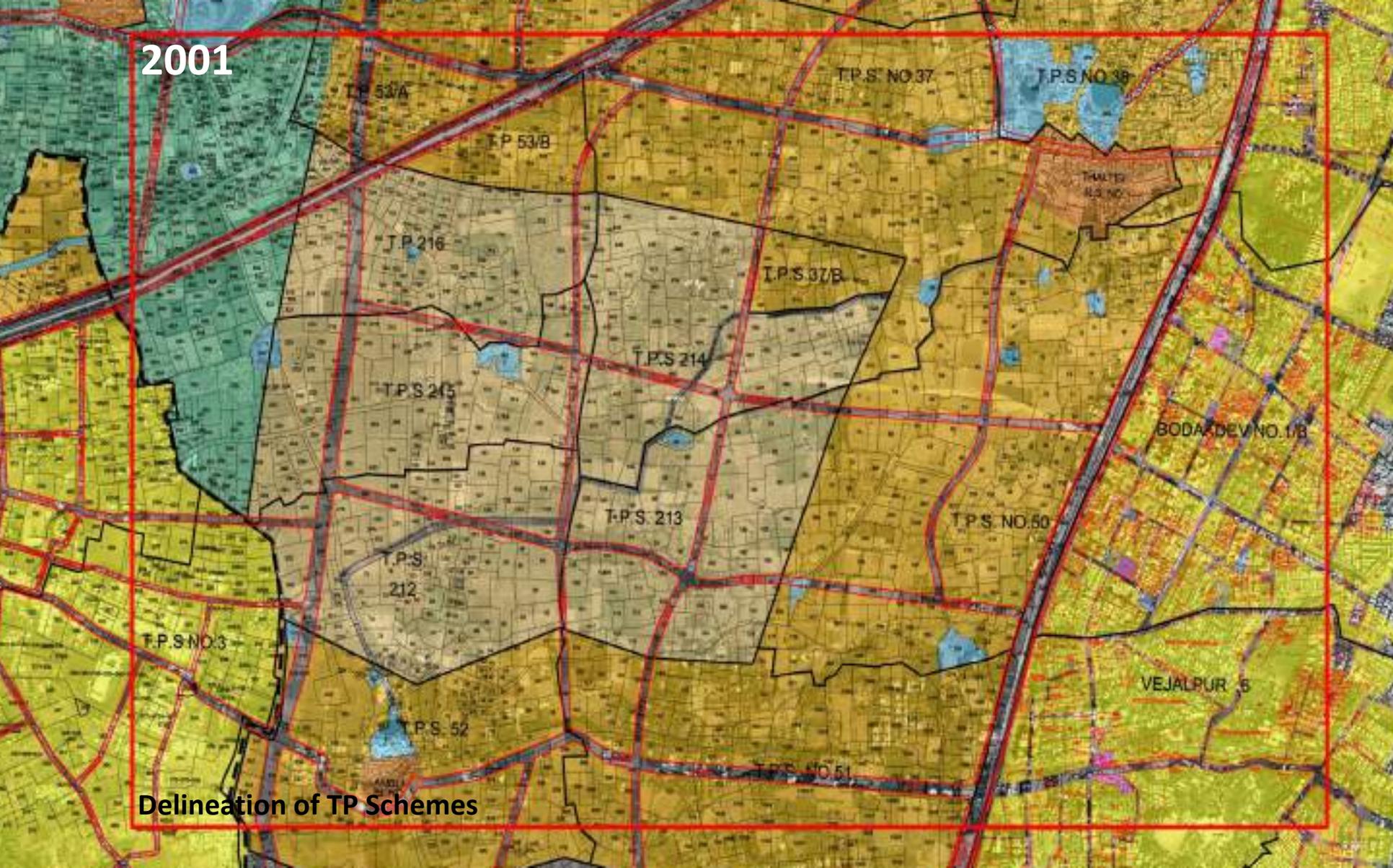
Delineation of TP Schemes

2000

2003

TP Scheme 37, 39, 50, 51 and 52

2005

TP Scheme 216

2007

TP Scheme 212, 213, 214 and 215

2010

TP Scheme 53 A, 53 B and 47 A

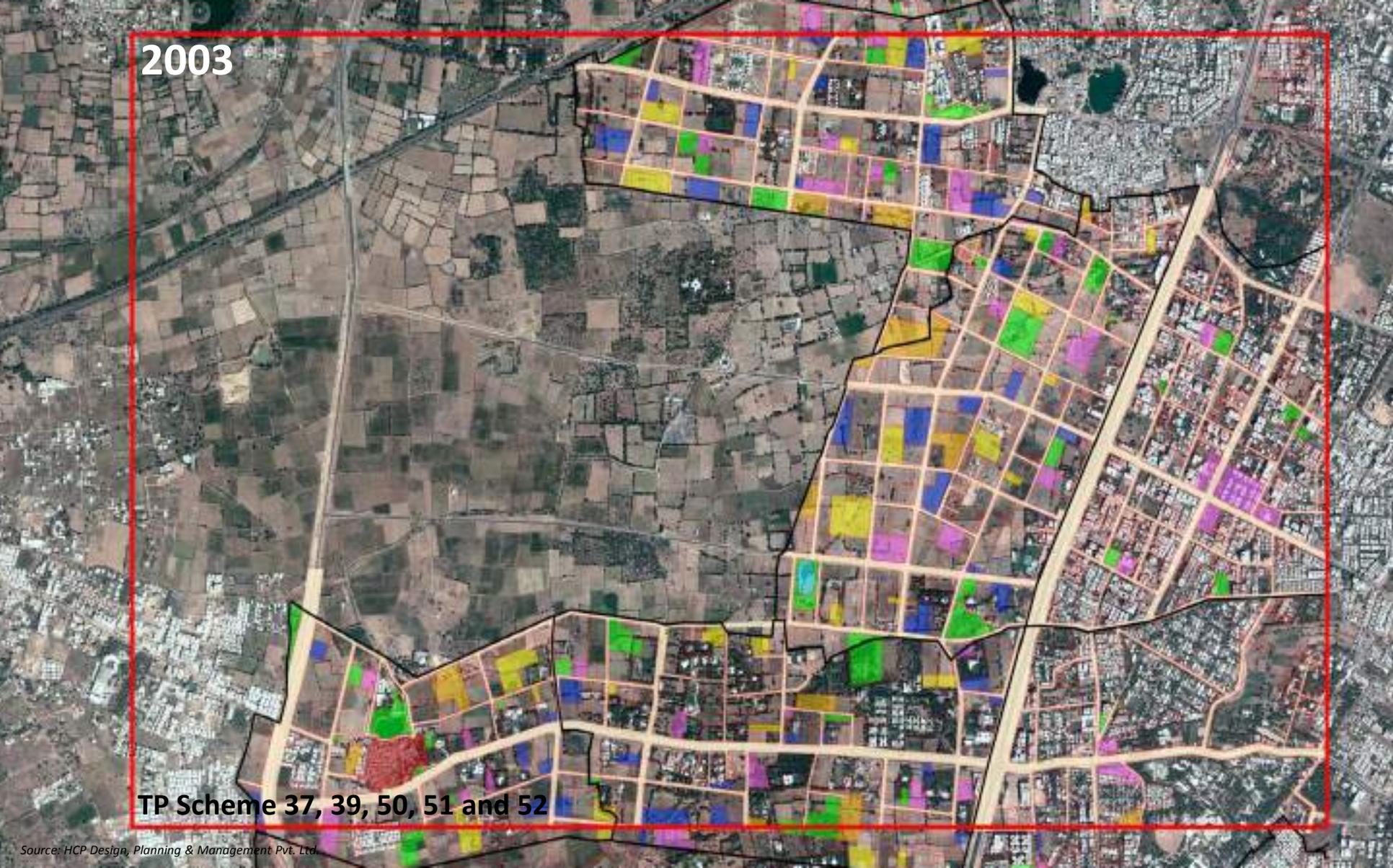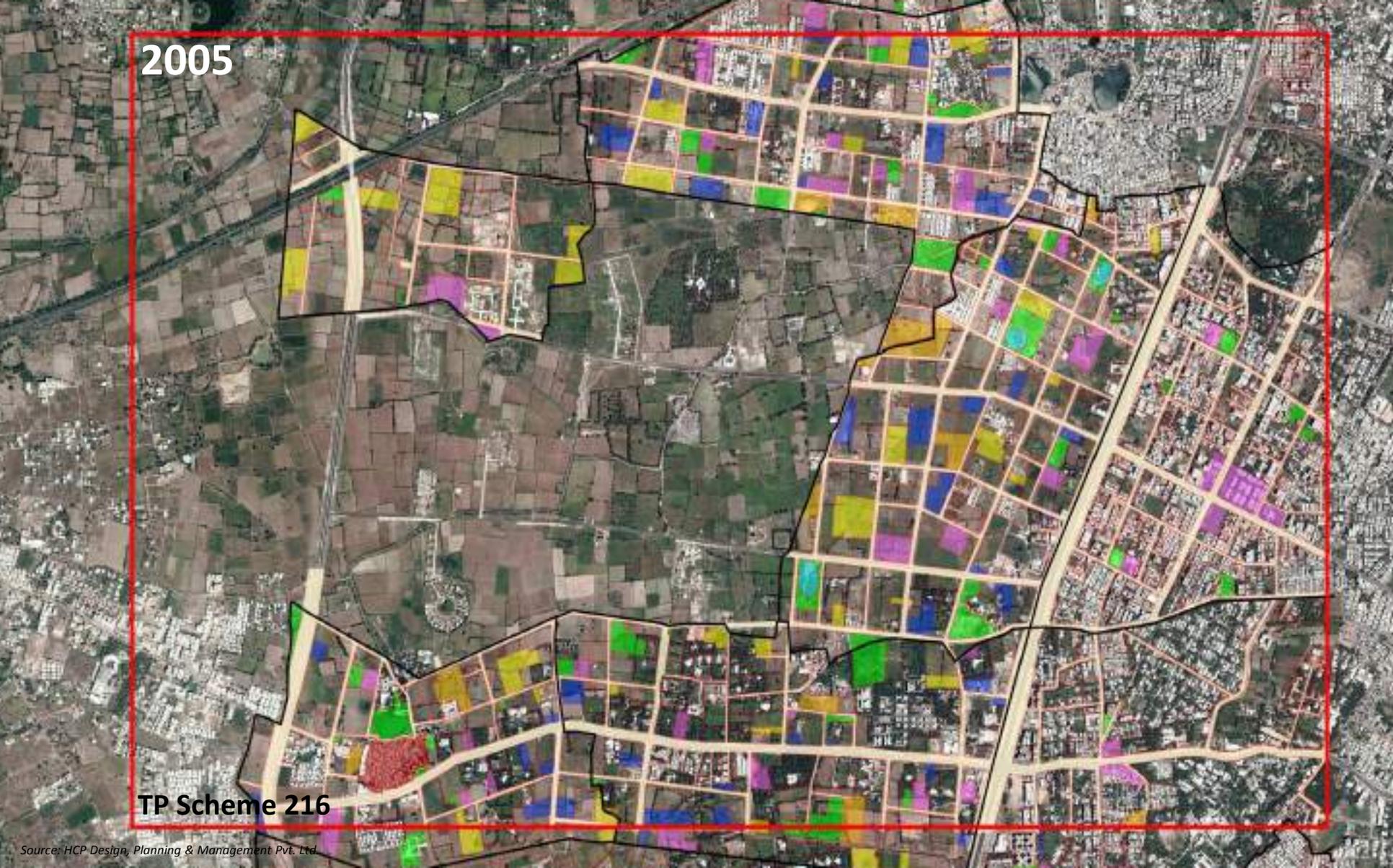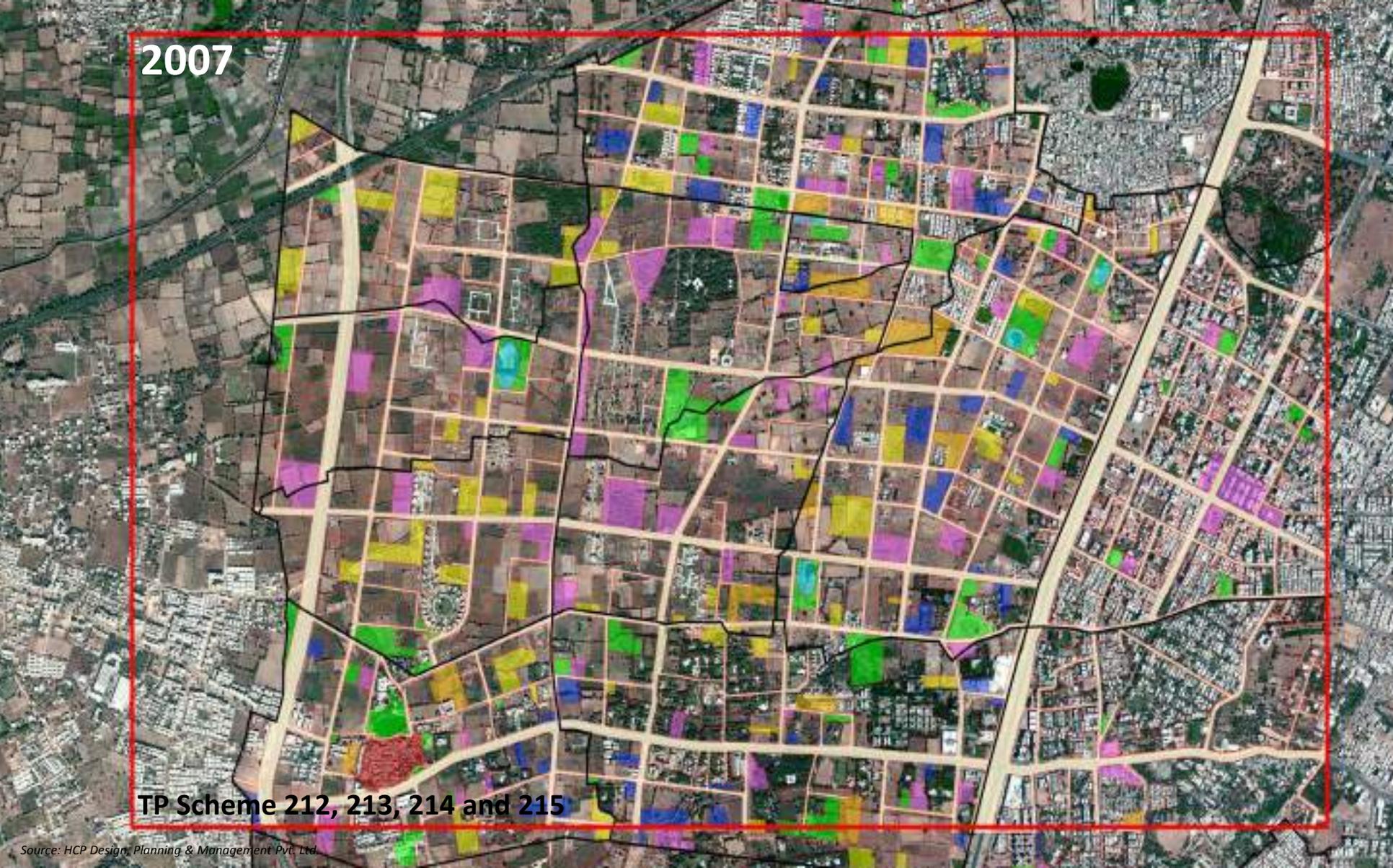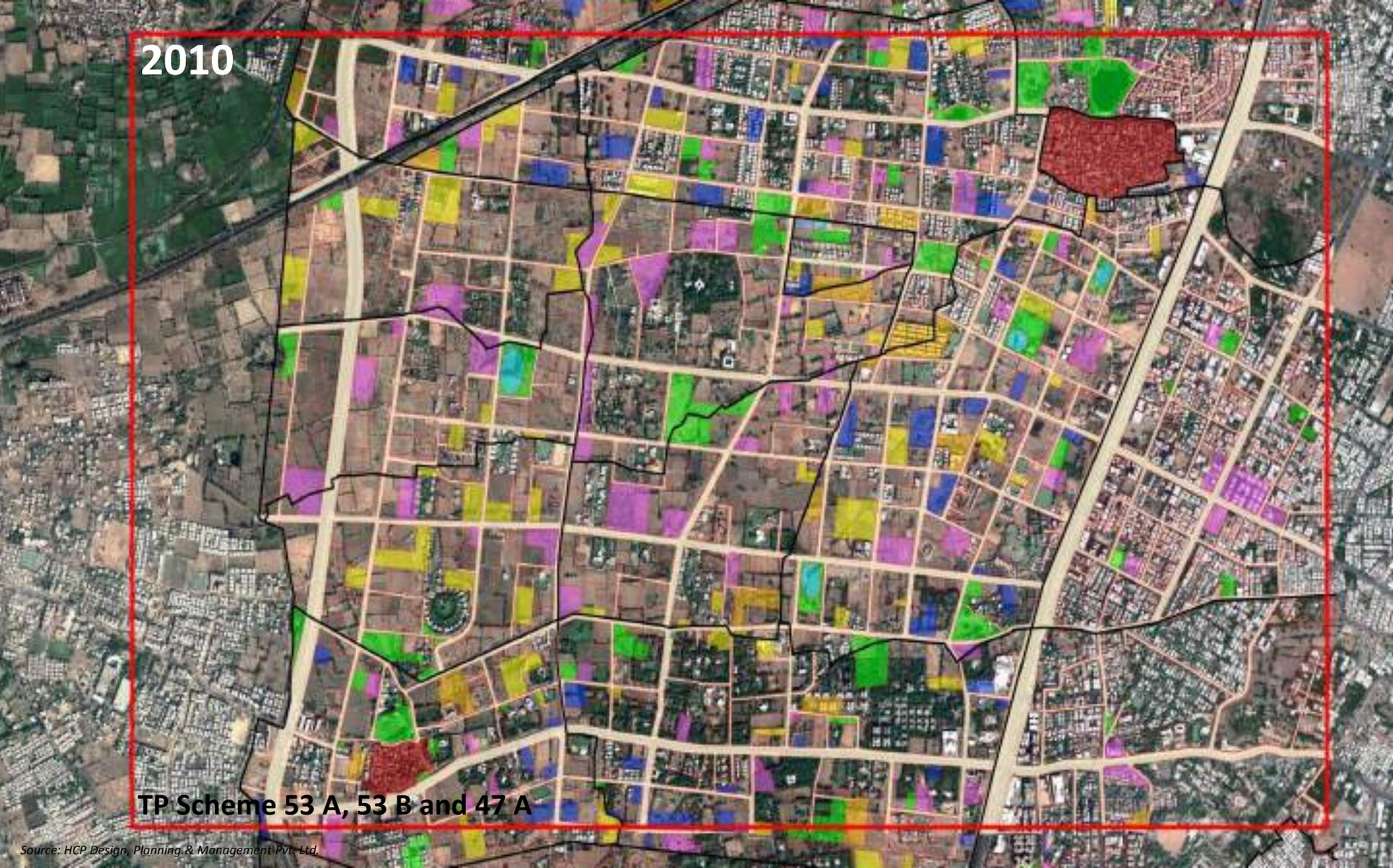**2011**

Development continues............

2013

Development continues.............

Source: HCP Design, Planning & Management Pvt. Ltd.

2014

Development continues…………

2015

Development continues…………

2016

Development continues…………

Using the DP-TP Mechanism, the Ahmedabad Development Authority was able to appropriate 22% of the land for public uses and 5% for financing infrastructure development

S. No.	Use		Area in Ha.	%	%
1	Public Use	Proposed Road	217	14.5	**22.4**
2		Garden / Open Space	47	3.1	
3		EWS Housing	19	1.3	
4		Amenities	52	3.5	
5	Saleable	Saleable Plots	71	4.7	**4.7**
6	Return to Owners	Gamtal	19	1.3	72.9
7		Private Final Plots	1075	71.6	
		Total	**1500**	**100.0**	**100.0**

Why does the DP-TP Mechanism work?

It works because it is perceived to be fair!

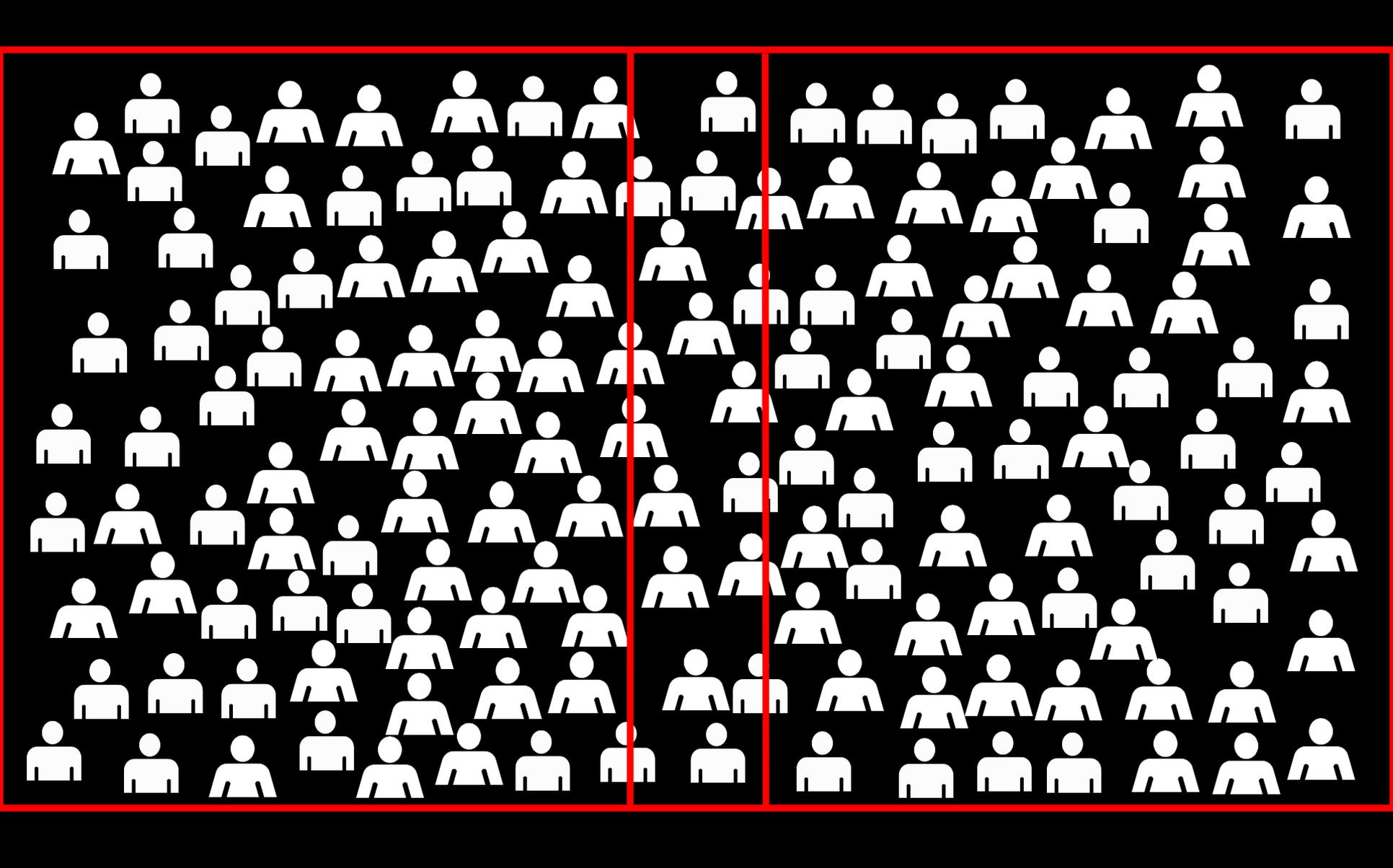# LAW OF LAND ACQUISITION AND COMPENSATION
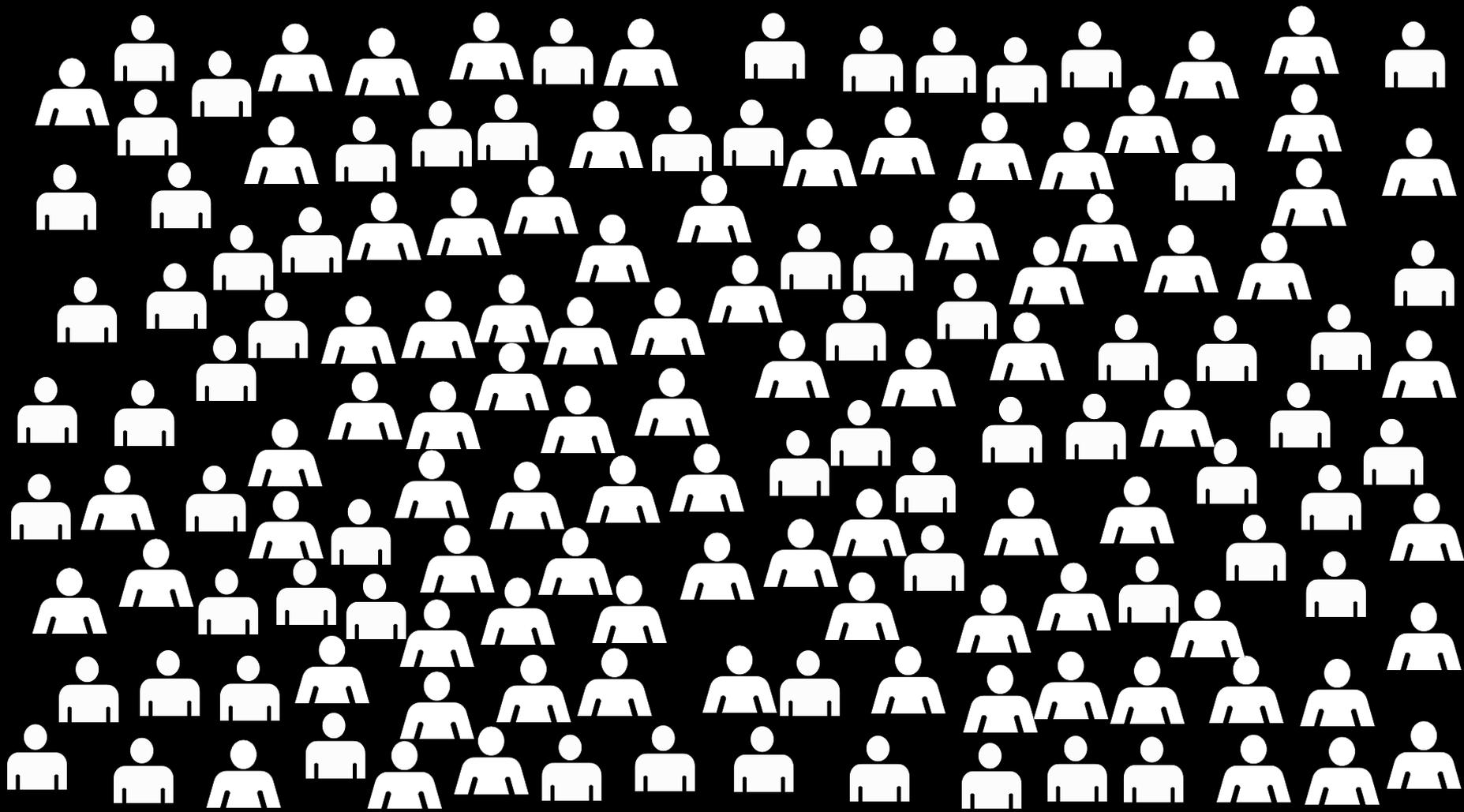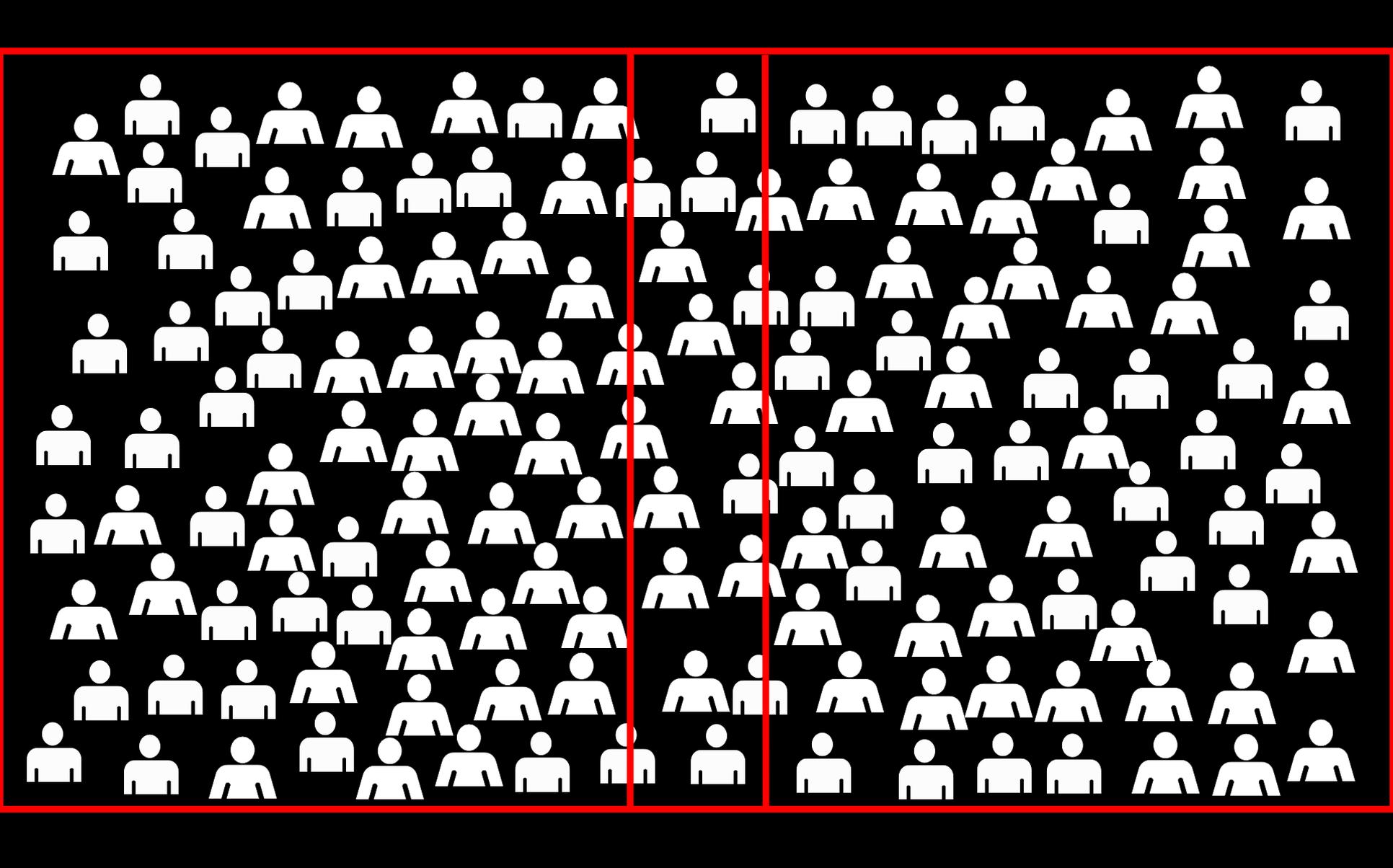
Why does the Land Pooling and Land Reconstitution (T P Scheme) Mechanism Work?

1. The mechanism is specified in a single robust enabling legislation

2. It is simultaneously a technical and legal mechanism

3. The mechanism provides a well defined structure that nonetheless has ample space for the exercise of professional judgment

4. It is a mechanism that interweaves planning, plan financing and plan implementation

5. It addresses details and allows micro level planning

6. It provides considerable flexibility – costs and benefits can be valued and allocated in the form of land, location, or money

7. It focuses on an area and takes a comprehensive approach – roads, infrastructure, buildings etc. are dealt with together

8. The mechanism is based on a profoundly pragmatic approach

   - Property rights are respected

   - Costs are distributed - all owners loose same amount in the form of land or money

   - Benefits are shared – all owners keep substantial portion of developed land and increment in land value

   - Here urban planning uses the land market not against it

   - Public inputs are sought; grievances are redressed

09. The mechanism is perceived to be fair and equitable
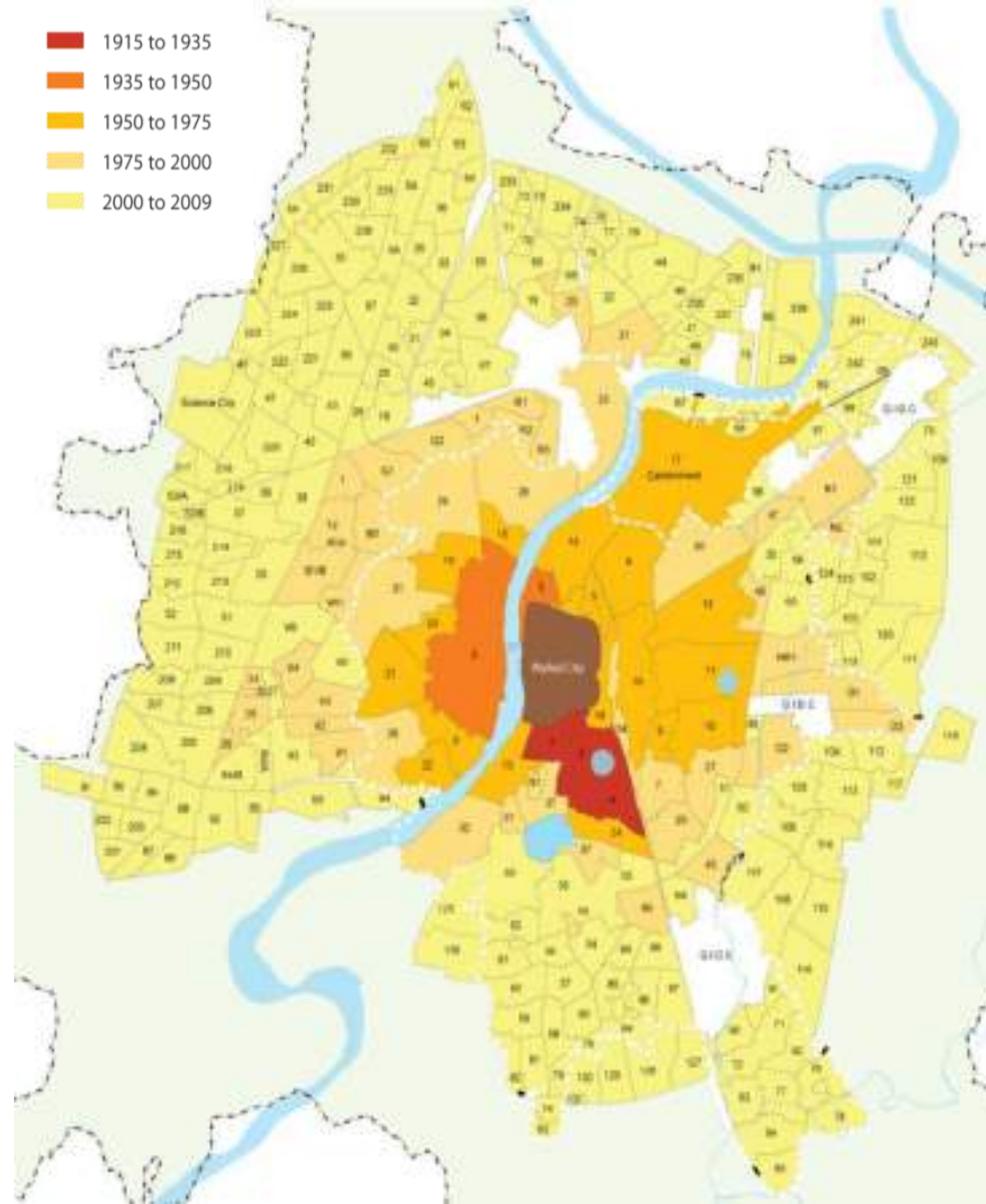
The DP-TP mechanism has been used since decades to manage Ahmedabad's growth

New Urban Mission is spearheading :

1. **GIS Based Urban Planning in AMRUT Cities**
2. **Area Based Development (ABD) in Smart Cities**
3. **Affordable Housing**
4. **Land Value Capturing in Infrastructure development**

MOHUA Sub-Scheme on LAP and TPS will be core for all the above missions
And Initiatives

MOHUA SUB SCHEME :

OPPORTUNITY TO TRANSFORM
THE CULTURE OF URBAN PLANNING IN INDIA
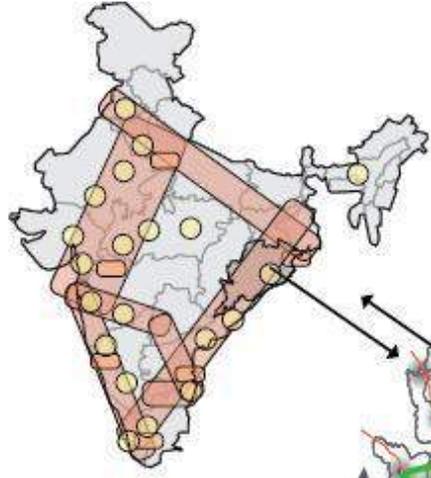
INDIA — National Territorial Planning

STATE — State Land Use Strategy

DISTRICT

(URBAN) MASTERPLAN — Detailed Land Use Plan

Overall Land Use Plan

CONSTRUCTION PLAN — concrete project approval

Source, LUPM, GIZ, 2018
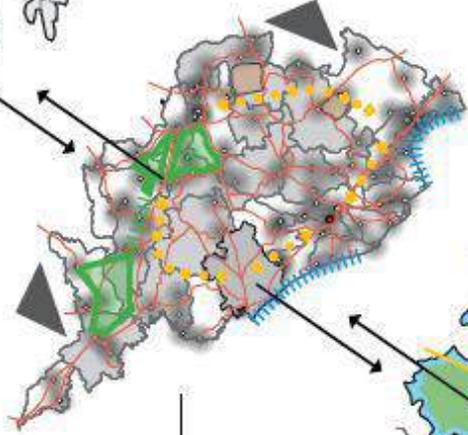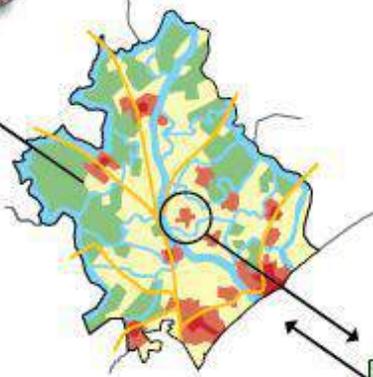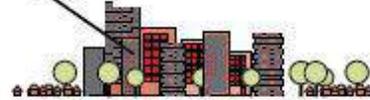
CULTURE OF SPATIAL PLANNING IN INDIA
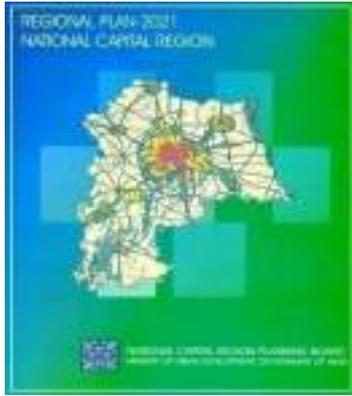
REGIONAL PLAN
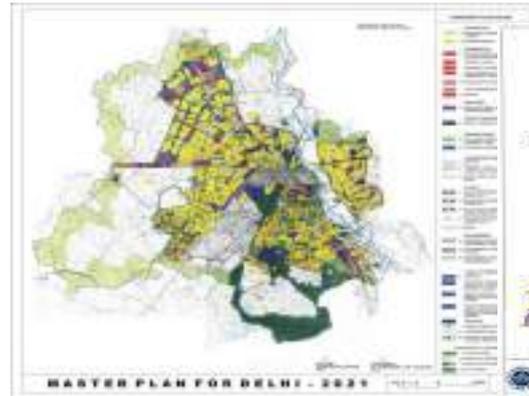
MASTER PLANS

ZONAL PLANS

TOWN PLANNING SCHEME PLANS
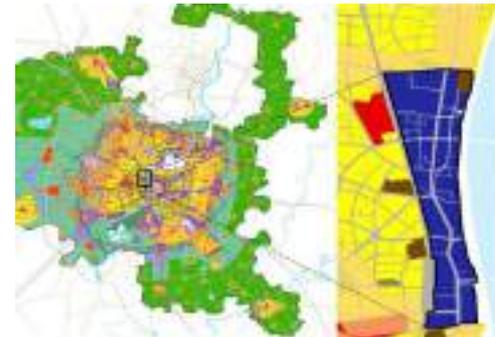
LOCAL AREA PLAN
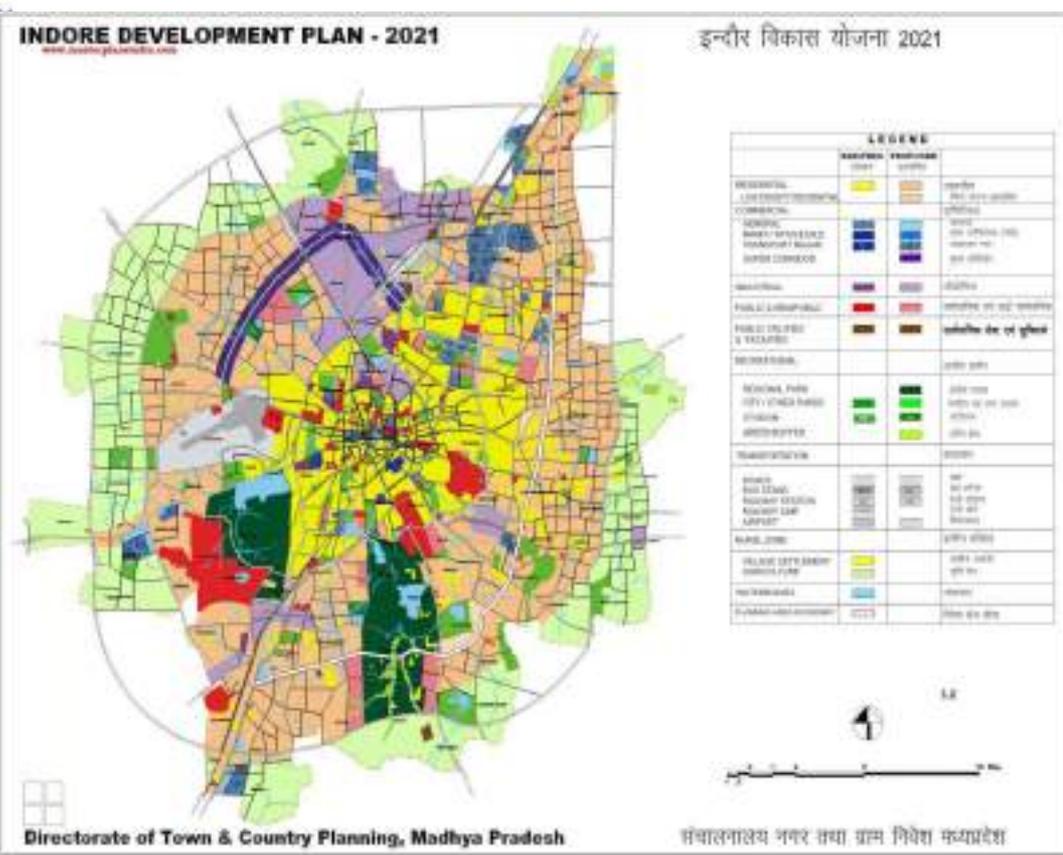
Summary of Issues

1. Urban Planning Hierarchy and Scope of Plans

2. Evidence based planning approaches – Absence of data on Urban Economy, jobs, consumption of built space and many others

3. Planning Standards, Protocols and Code of Practices- Whats Beyond URDPFI?

4. Linkages between Plan, Projects and Finance

5. Existing Capacity for Plan preparation

CULTURE OF URBAN PLANNING IN ASIA-

Cases of Singapore and Seoul

Concept Plan

1971 1991 2001 2011

Residential
Commercial/White
Industry/Business
Agriculture
Open Space/Recreation
Infrastructure
Institution
Special Use
Reserve Site
Possible Future Reclamation
Road
Rail

N
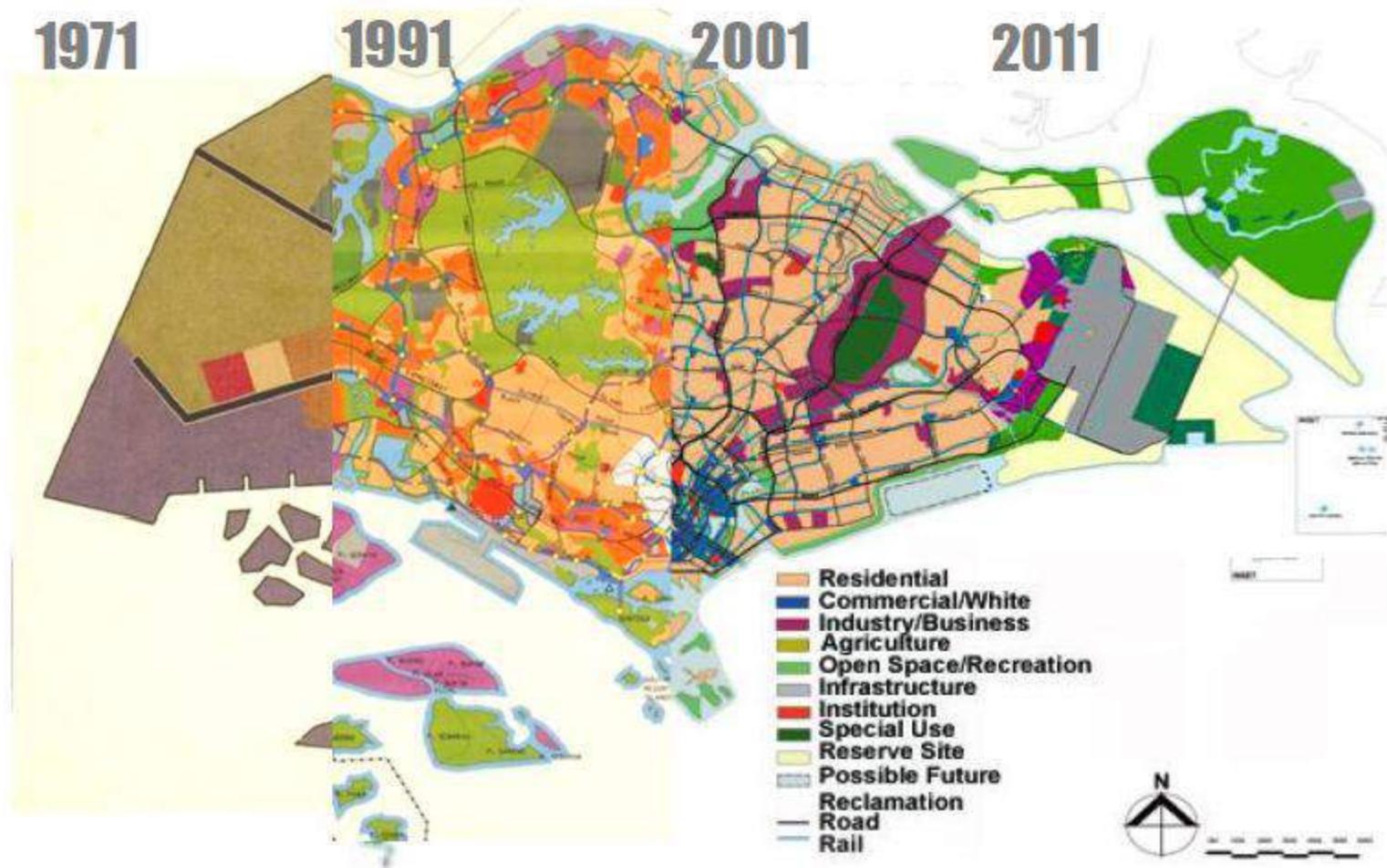
Planning and Development Framework

CONCEPT PLAN
Maps out vision for Singapore in the next 40-50 years

MASTER PLAN
Guides development over the next 10-15 years

LAND SALES & DEVELOPMENT COORDINATION

DEVELOPMENT CONTROL

Master Plan 2014

- Statutory land use plan
- Reviewed every 5 years

URBAN REDEVELOPMENT AUTHORITY

Master Plan - 6 Key Focuses

Housing
Good living environments with a variety of housing options

Economy
Vibrant economy with good jobs and multiple growth opportunities

Community
Building shared spaces and communities

Recreation
Wide variety of recreational options

Transport
Greater mobility with enhanced transport connectivity

Identity
An Endearing Home

HOUSING
ECONOMY
PUBLIC SPACES
DMP2013
6 KEY FOCUSES
RECREATION
TRANSPORT
IDENTITY

URBAN REDEVELOPMENT AUTHORITY

Seoul Master Plan and Downtown Development Plan

2020 Seoul Master Plan

According to the construction of a new administrative city in Chungcheong province, relocating many central government functions from Seoul, the 2020 Seoul Master Plan was established to reflect the changes in spatial structure in the Seoul metropolitan region and to suggest a development direction. It also includes the shift in urban management policies for the appeasement of Development Restriction Areas.

The 2020 Seoul Master Plan is a long-term plan to present the vision and spatial structure of Seoul and the divisional development directions for the next 20 years.

It is a comprehensive plan containing not only physical aspects but also socio-economic aspects based on citizens' participation. The Seoul Master Plan is required to be revised every five year to reflect the physical and social changes, and is a statutory plan to suggest the basic direction of urban planning.
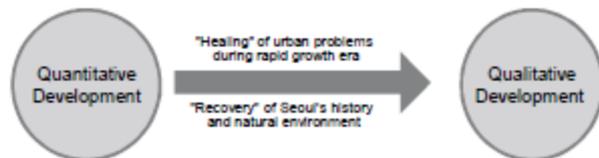
Vision and Goals

- Seoul, a world city in harmony with nature, human being, history and technology

Quantitative Development → "Healing" of urban problems during rapid growth era / "Recovery" of Seoul's history and natural environment → Qualitative Development

- "World City" leading the Northeast Asian Economy
- "Culture City" presenting a unique character
- "Eco City" reviving nature
- "Welfare City" enriching everyday life

- **World City**
  - Business-friendly environment : enhance Seoul's image and attract global companies
  - Convenience of mobility : improve mass transportation system and service quality; maintain concurrency with land use plan
  - Beautiful urban scenery : maintain attractive urban scenery and residential environment; protect natural environment
  - Advanced information : create information city and e-governance; expand IT service infrastructure
  - Foreigner-friendly environment : create a positive social ambience for overseas visitors; enhance support and service system
  - Administrative transparency : realize advanced administration and vitalize active citizens' participation
- **Culture City**
  - Vivid history and tradition : conserve and restore historical and cultural assets; strengthen management of cultural treasures
  - Unique culture : promote local culture; develop local cultural festivals with citizens participation
  - Environment for cultural life : improve accessibility to cultural experiences
- **Eco City**
  - Clean air : reduce air pollutants and improve air quality
  - Clean water : improve sewage treatment and river management; secure water resources
  - City with nature : preserve the ecosystem
  - Environment management : reduce energy consumption; construct comprehensive environment management system
- **Welfare City**
  - Care for those in need : guarantee basic livelihood, health and welfare service and basic residential rights; subside low-income group
  - Citizens' welfare : create life-long education society; provide abundant opportunities to

City Planning Systems

01

```
┌─────────────────────────────────────────┐
│        National Comprehensive Plan        │
└─────────────────────────────────────────┘
                    │
┌─────────────────────────────────────────┐
│   Arrangement Plan for the Capital Region │
└─────────────────────────────────────────┘
                    │                  ┌──────────────────────┐
                    ├──────────────────│    Regional Plan     │
                    │                  └──────────────────────┘
┌─────────────────────────────────────────┐
│             Seoul Master Plan             │
└─────────────────────────────────────────┘
                    │                  ┌──────────────────────┐
                    ├──────────────────│ Downtown Development  │
                    │                  │        Plan          │
                    │                  └──────────────────────┘
┌─────────────────────────────────────────┐
│           Urban Management Plan           │
└─────────────────────────────────────────┘
                    │
┌─────────────────────────────────────────┐
│            Implementation Plan            │
└─────────────────────────────────────────┘
```

02
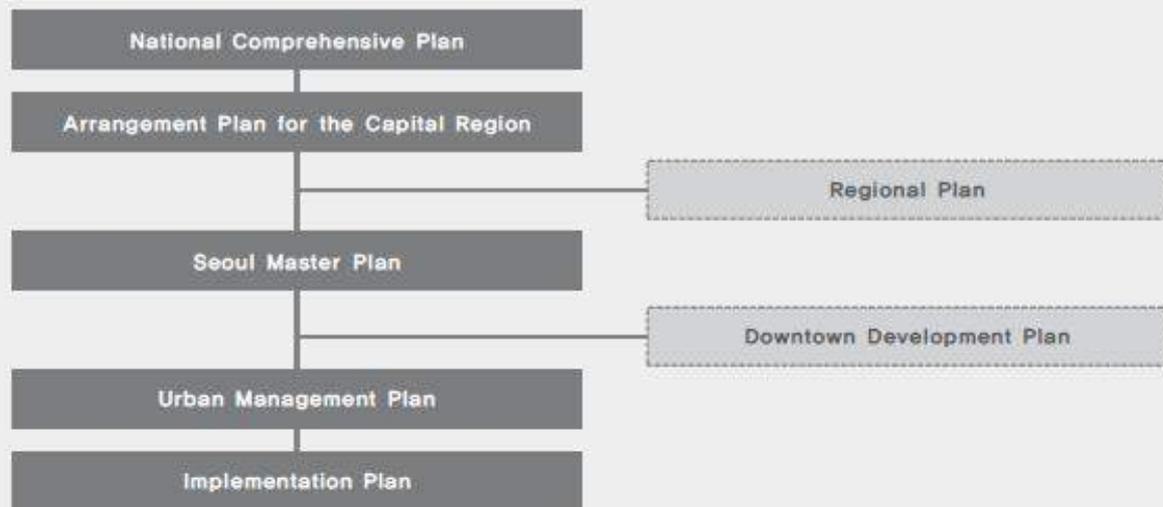
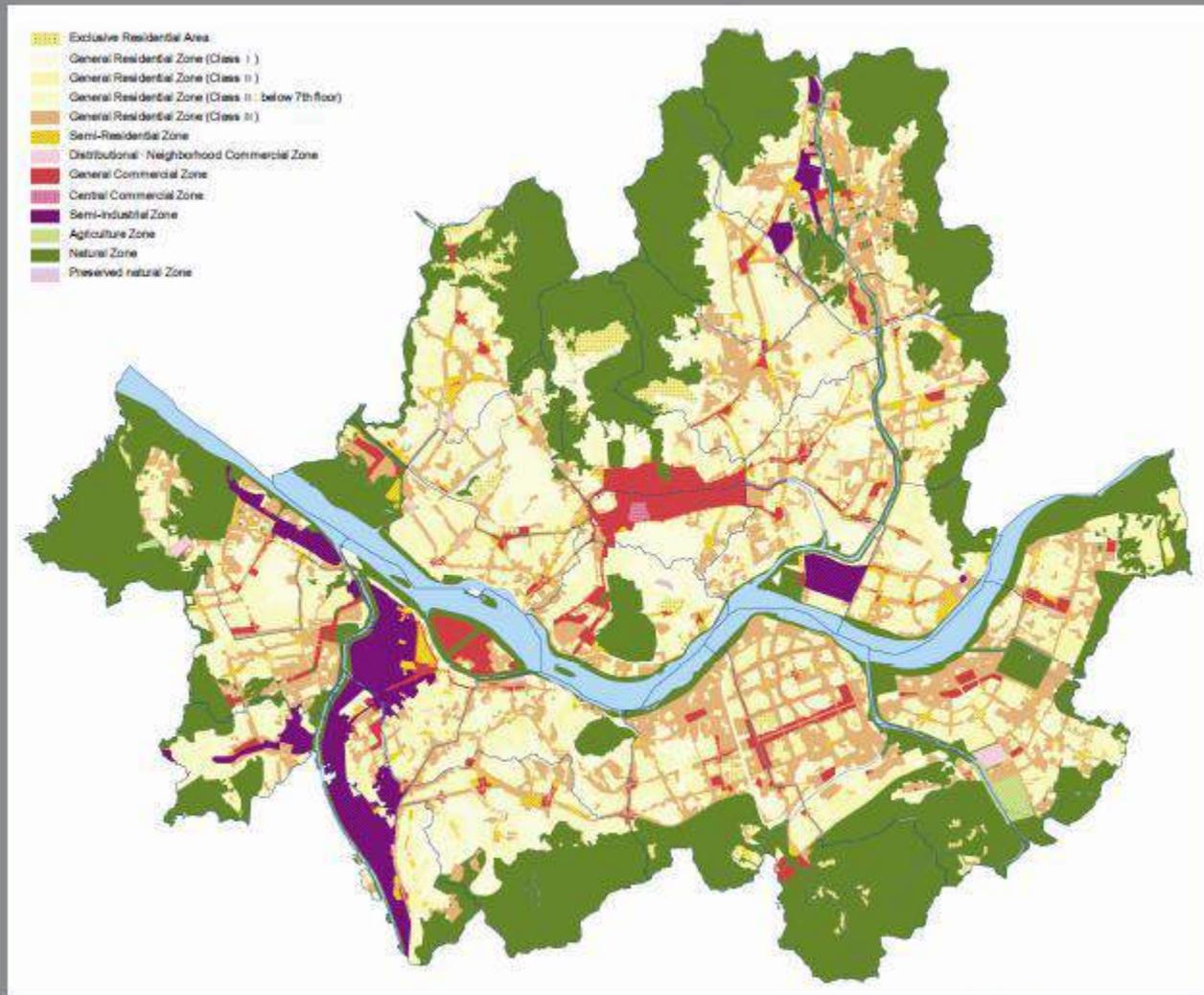|	Seoul Master Plan	Urban Management Plan	Implementation Plan
Goal	Basic Spatial Plan and Long-term Development Direction	Concrete Development Procedure and Restrictions	Execution of Project
Feature	Physical and Social-economic Plan	Physical Plan	Specific Project-based Plan
Legal Ground	Land Planning and Utilization Act	Land Planning and Utilization Act and Relevant Regulations	Land Planning and Utilization Act and Relevant Regulations
Legal Obligation	Mayor, County Governor	Individual Citizen	Individual Citizen
Plan Period	20 year (Review every 5 year)	10 year (Readjustment every 5 year)	

Spatial Restructuring Plan

- Main center (1)
- Sub-center (5) : Yongsan, Yeongdong, Yeongdeungpo, Cheongnyangni, Sangam
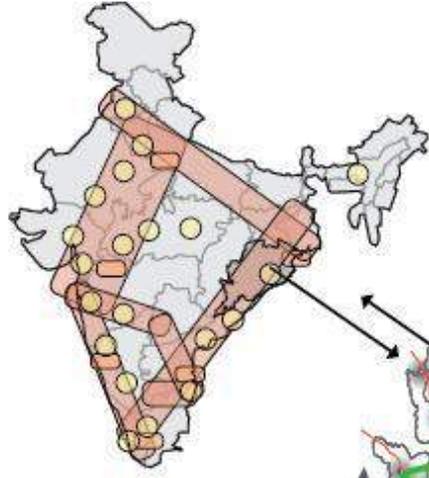- Local center (11)
- District center (53)

Legend:
- Downtown / Sub-center
- Local Center
- District Center
- Strategic Development Zone
- Strategic Development Zone (Plan)

Map labels:
Uijeongbu, Dongduchon, Pocheon
Namyangju
Sanggye
Paju, Munsan
Yeonsinnae
Mia
Mangwoo — Guri, Namyangju
Gimpo
Sangam, Susaek Sub-center
CBD Main center
Cheongnyangni, Wangsimni Sub-center
Yeongjong Island
Magok
Sinchon
Gongduk
Hanam, Gwangju
Cheonho, Gil-dong
Mok-dong
Yeongdeungpo Sub-center
Yongsan Sub-center
Incheon, Bucheon
Jamsil
Incheon, Bucheon
Daerim
Yeongdong Sub-center
Mujeong
Sadang, Namhyeon
Gwacheon, Anyang
Seongnam, Bundang
Anyang, Suwon
Seongnam, Bundang, Yongin

Source : Urban planning and design in Seoul, Seoul Development Institute, 2007

Zoning District (2008)

Exclusive Residential Area
General Residential Zone (Class I)
General Residential Zone (Class II)
General Residential Zone (Class II : below 7th floor)
General Residential Zone (Class III)
Semi-Residential Zone
Distributional · Neighborhood Commercial Zone
General Commercial Zone
Central Commercial Zone
Semi-Industrial Zone
Agriculture Zone
Natural Zone
Preserved natural Zone

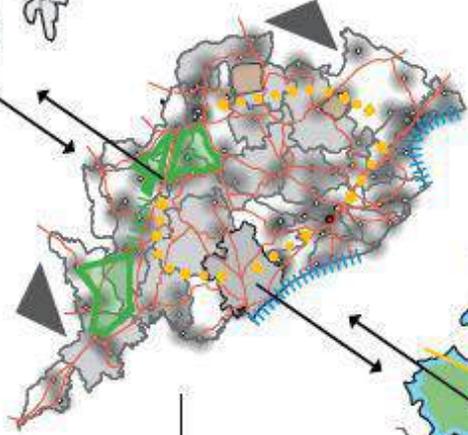# TRANSFORMING THE CULTURE OF URBAN PLANNING IN INDIA

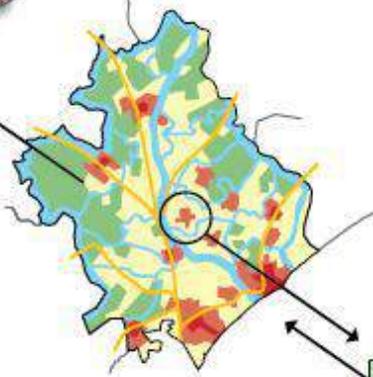INDIA — National Territorial Planning

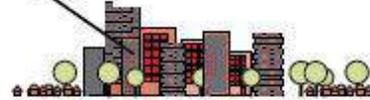STATE — State Land Use Strategy

DISTRICT

Overall Land Use Plan

(URBAN) MASTERPLAN — Detailed Land Use Plan

CONSTRUCTION PLAN — concrete project approval
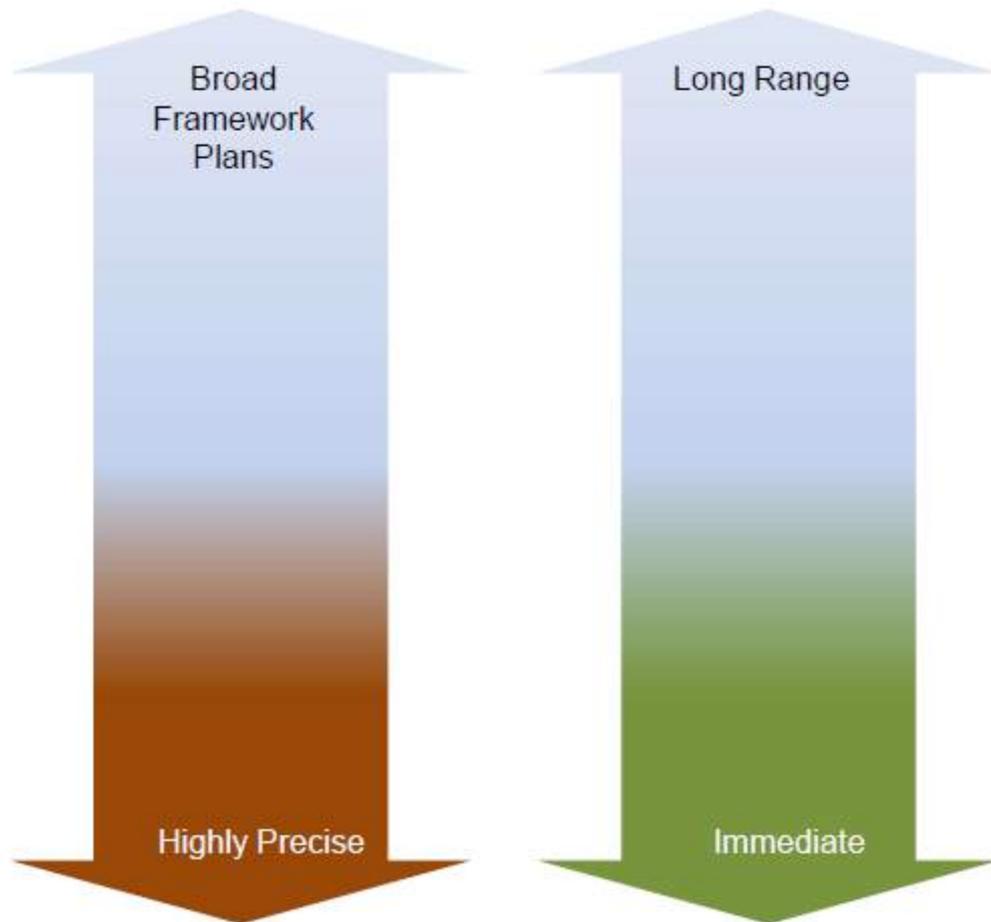
Source, LUPM, GIZ, 2018

Plans at different scales

Regional Plan

Urban Area Plan

Zonal Plan / Ward Plan

Local Area Plan / TP Scheme
/ Neighborhood Plan

Layout Plans

Projects

Broad
Framework
Plans

Highly Precise

Long Range

Immediate

Establishment of Clear Urban Spatial Planning Hierarchy

Left pyramid (2 tiers):
- Master Plan
- Zonal

Right pyramid (4 tiers):
- Strategic Planning
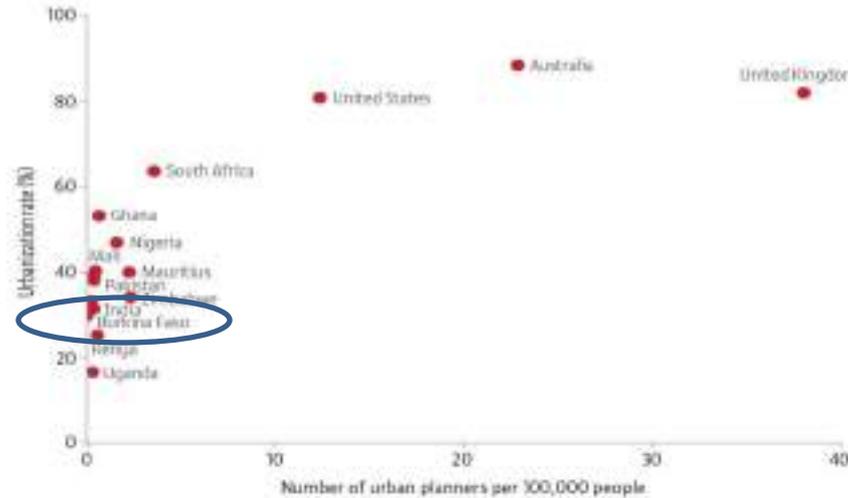- City Master Plan
- Zonal /TP Scheme
- Local Area Plan/ Neighborhood
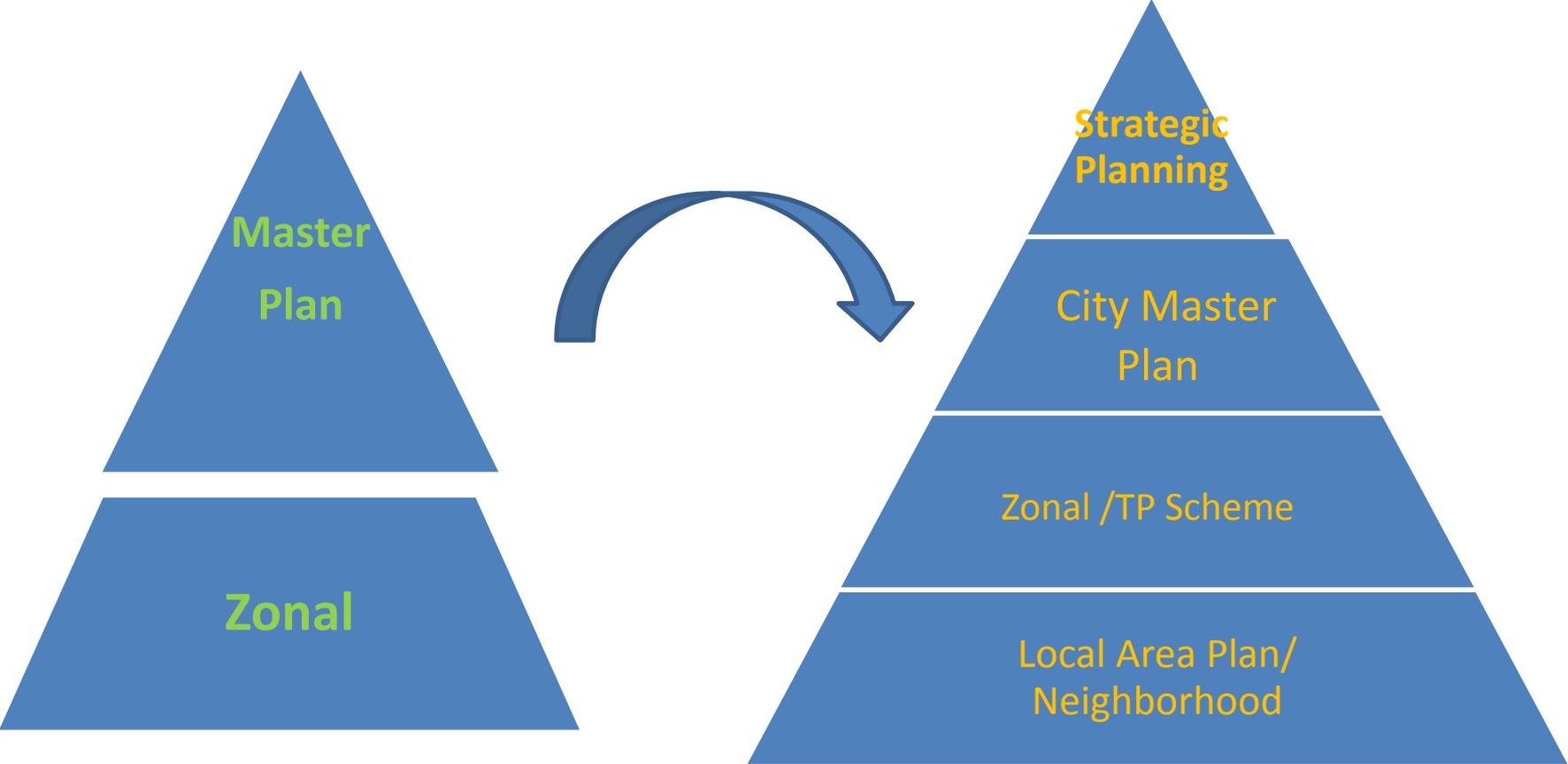
Transforming Urban Planning in India – Key Action Areas

1. **Establish National Framework for Urban Planning in India - Key Principles, Scope and a Clear Spatial planning Hierarchy**

2. **Standard TORs, Hand book and Codes of Practices for City Leaders, Officials and Practioners**

3. **Good Urban Planning Practices Data Book- Gujarat, Goa, Odhisa….**

4. **Short Term Training and Certification courses on Urban Planning and Sub themes/ Modules for City Leaders and In-service professionals**

5. **National Registry and Platform for Urban Planning Professionals in India**

There are too few urban planners in Africa and Asia

Number of urban planners per 100,000 people and urbanization rates, selected countries, 2011

GEM StatLink: http://bit.ly/fig18_2
Note: Data are from 2011 for number of planners and 2014 for urbanization rate.
Sources: UNDESA (2014); UN Habitat (2016b).

This graphic was designed for the 2019 Global Education
Monitoring Report: Migration, displacement and education –
Building bridges, not walls.

unesco.org/gemreport

United Nations
Educational, Scientific and
Cultural Organization

Global
Education
Monitoring
Report

Qualified Urban Planners per 100000 Population

India Ranks amongst the lower bottom countries

Acknowledgement :

Dr. Bimal Patel, Mr. Gerog Hansen, Mr. Jignesh Mehta, Members and Expert Groups of National Steering Committee, Habitat Sector, 2017-2018,
 Urban Redevelopment Authority (URA), Singapore, TCPO, New Delhi, United Cities and Local Governments (UCLG) and Seoul Metropolitan Government

Prof. Saswat Bandyopadhyay
Email : saswatb@cept.ac.in
Mobile : 8128291880
CEPT University