



# Regional Development at Metropolitan Scale : Role of Spatial Planning and Development Institutions in the context of Mumbai Metropolitan Region

**A presentation at the  
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Johannesburg**

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# India

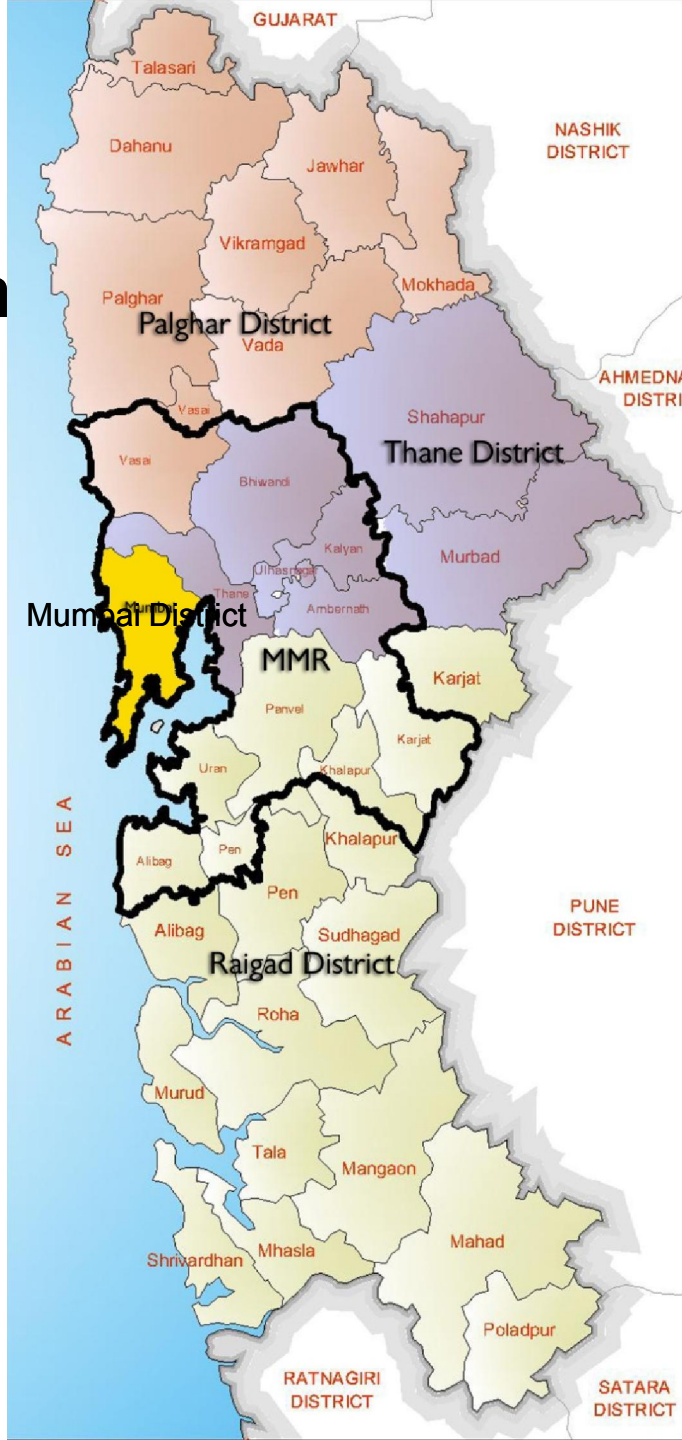
- A federal state with 3-tier governments at national, state and local levels
- Local is both urban and rural
- India divided into states, states into districts, districts into urban and rural
- Land, urban development, housing, public utilities are state subjects
- Legislation on these subjects is at state level
- However, national level policies and model legislation exist
- Between mid sixties –mid seventies, spatial planning received attention
- Attempts made to address growth of cities beyond their boundaries
- State level acts are passed, new institutions created for dealing with urbanisation, public housing, industrial growth, infrastructure provision
- Mumbai is the capital of Maharashtra state – 45% urban
- Maharashtra state - pioneer in urban and regional development field
- Mumbai Metropolitan Region (MMR) – hosts 20% state's population

# Planning Framework

- National Policies for Economic Dev., Land-use, Urbanisation, Industrialisation, Environment, Housing and Transportation impact spatial planning
- Also incentives for some
- State level has policies, regulations and projects for the same
- Basis for regions includes : economic, investment, environmental, metropolitan
  - a. Economic region : National Capital Region (across states)
  - b. Investment based : Delhi-Mumbai Industrial Corridor (across states)
  - c. Administrative : District Regions
  - d. Environmental : Eco Sensitive Regions
  - e. Metropolitan : Mumbai Metropolitan Region
- Maharashtra has legislation for spatial planning at urban and regional levels
- Mumbai Metropolitan Region delineated in 1967 : basis was urbanisation and daily commuting distance



# Mumbai Metropolitan Region : The Location

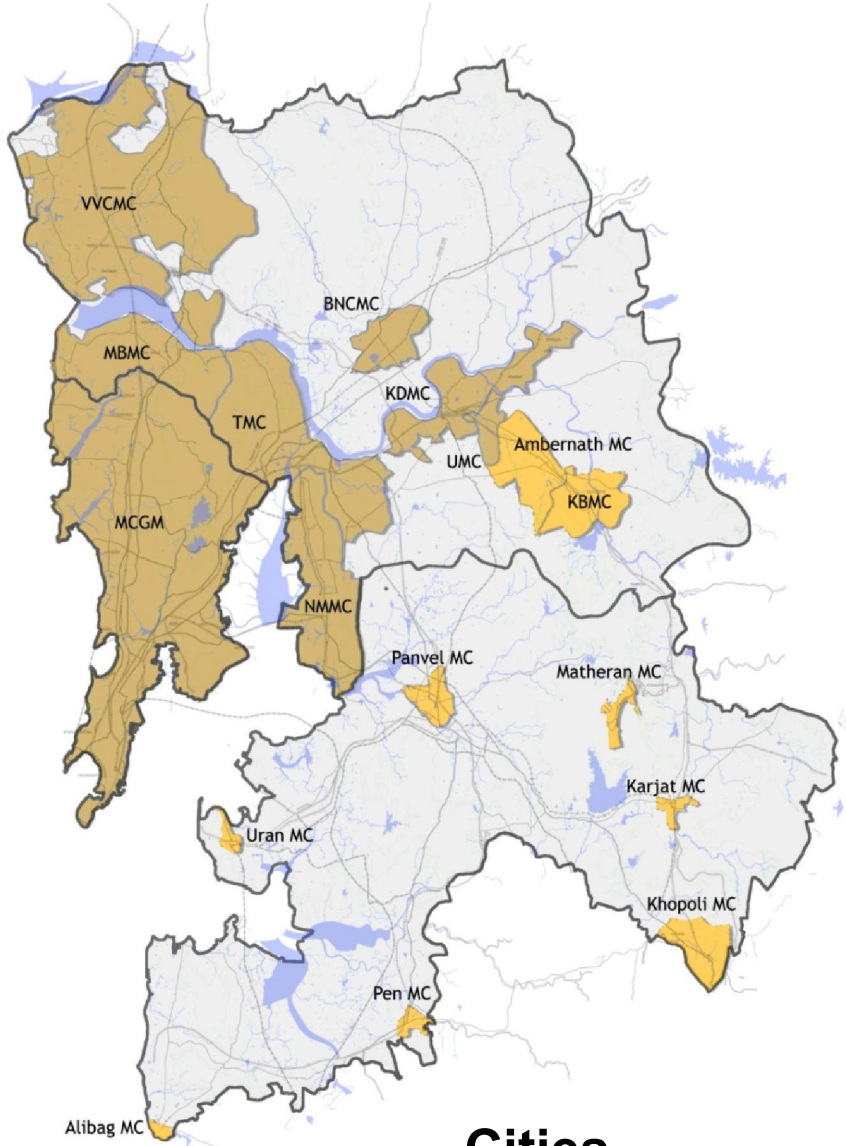


# MMR : Basic facts

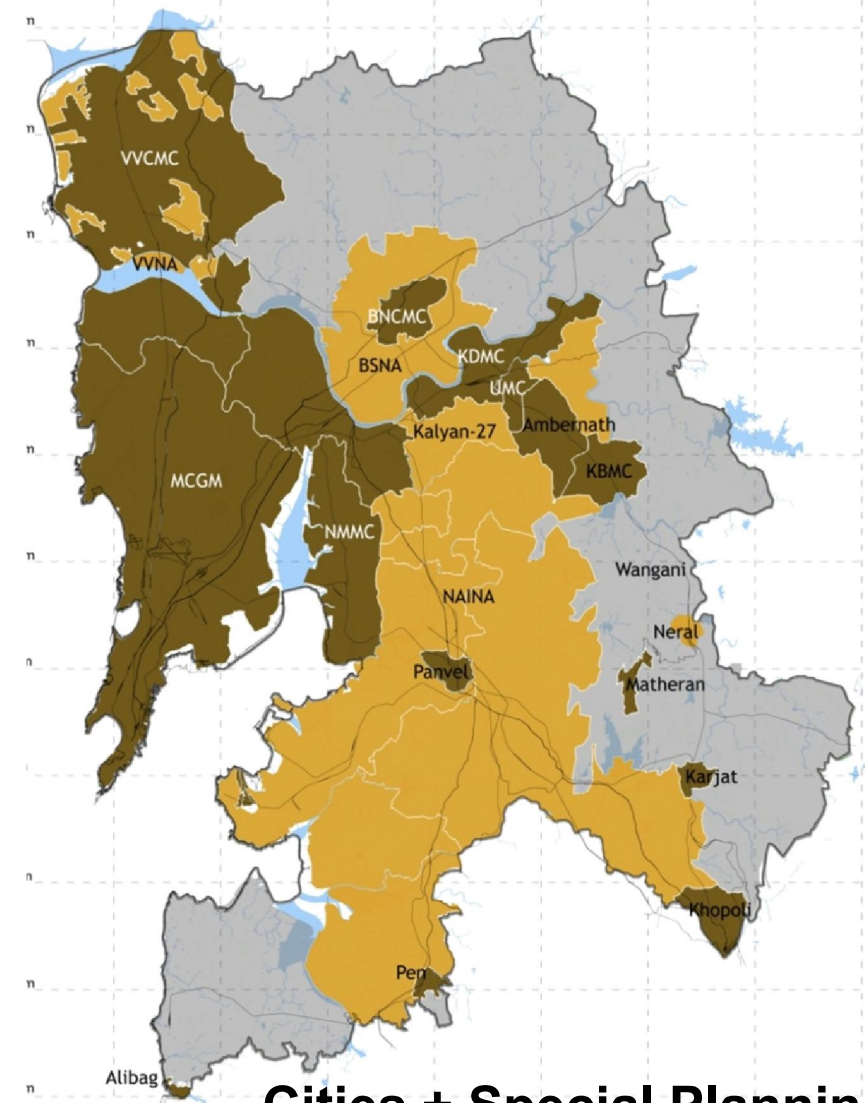
- 4312 sq. km.
- 5 Districts (2 full, 3 part)
- 22.8 M people in 2011
- 94% urban population
- 62% area has detailed plans
- 30% ULBs, 32% SPAs
- 17 Municipalities (30% area, 91% population)
- 35 Census towns (5% area, 3% population)
- 994 Villages (65% area, 6% population)
- 38 Planning Authorities
- 14 Infrastructure Agencies
- 25% area under designated forests



# Administrative Boundaries



**Cities**



**Cities + Special Planning**

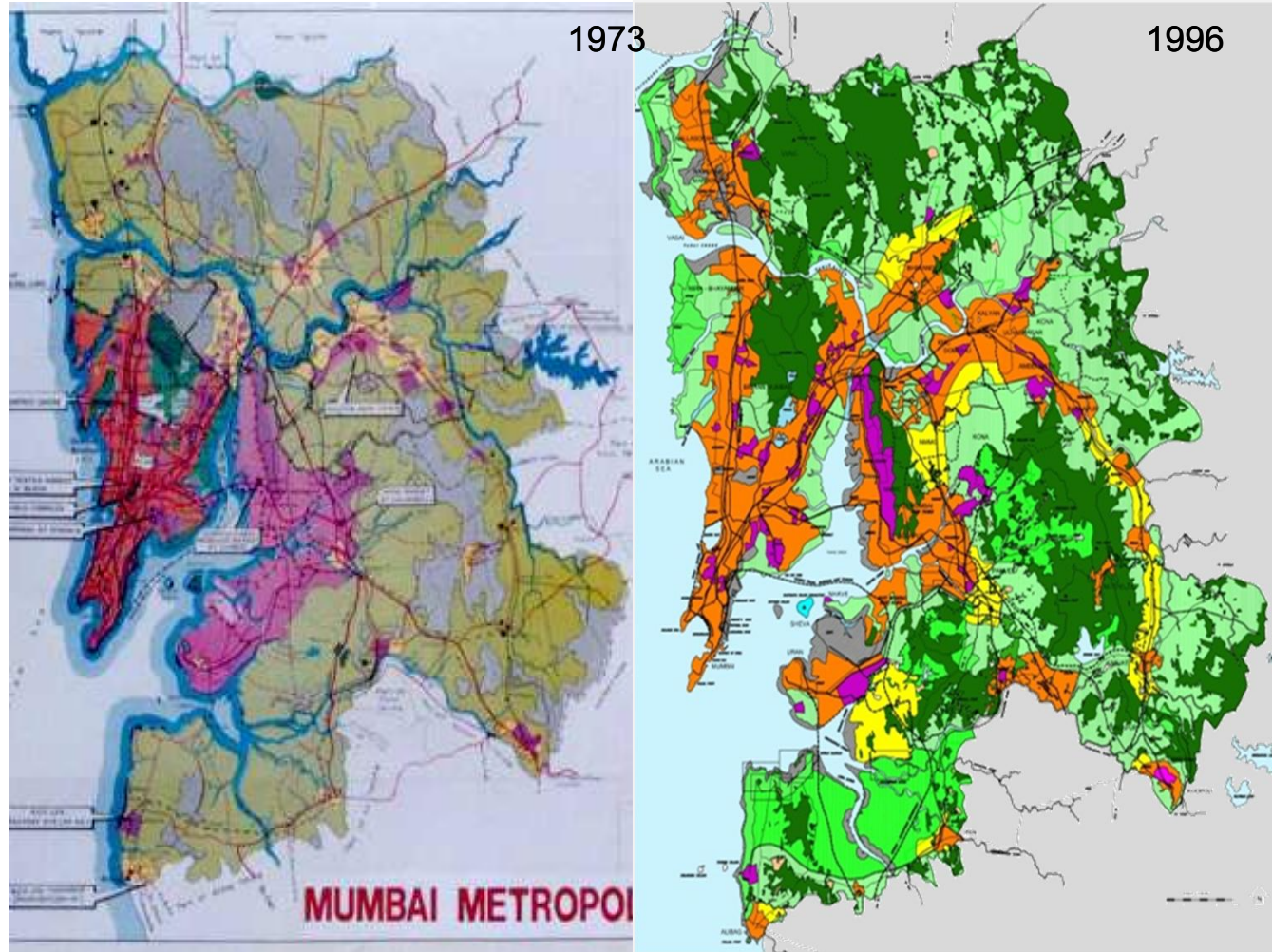
# MMR : What for?

## Reasons for MMR's emergence

- Fast growing Mumbai, physical constraints for lateral expansion, activity concentration at one end, long and uni-directional commuting
- Industrial and office sector dispersal policy
- Need for expansion across mainland, eastward
- Result - combination of newtowns, smaller growth centres
- MMR delineated over influence area, spatial planning initiated in 1973
- Navi Mumbai new town planned and developed
- Activity de-concentration from Mumbai began : new CBDs, industrial dispersal, new port, shifting of wholesale markets

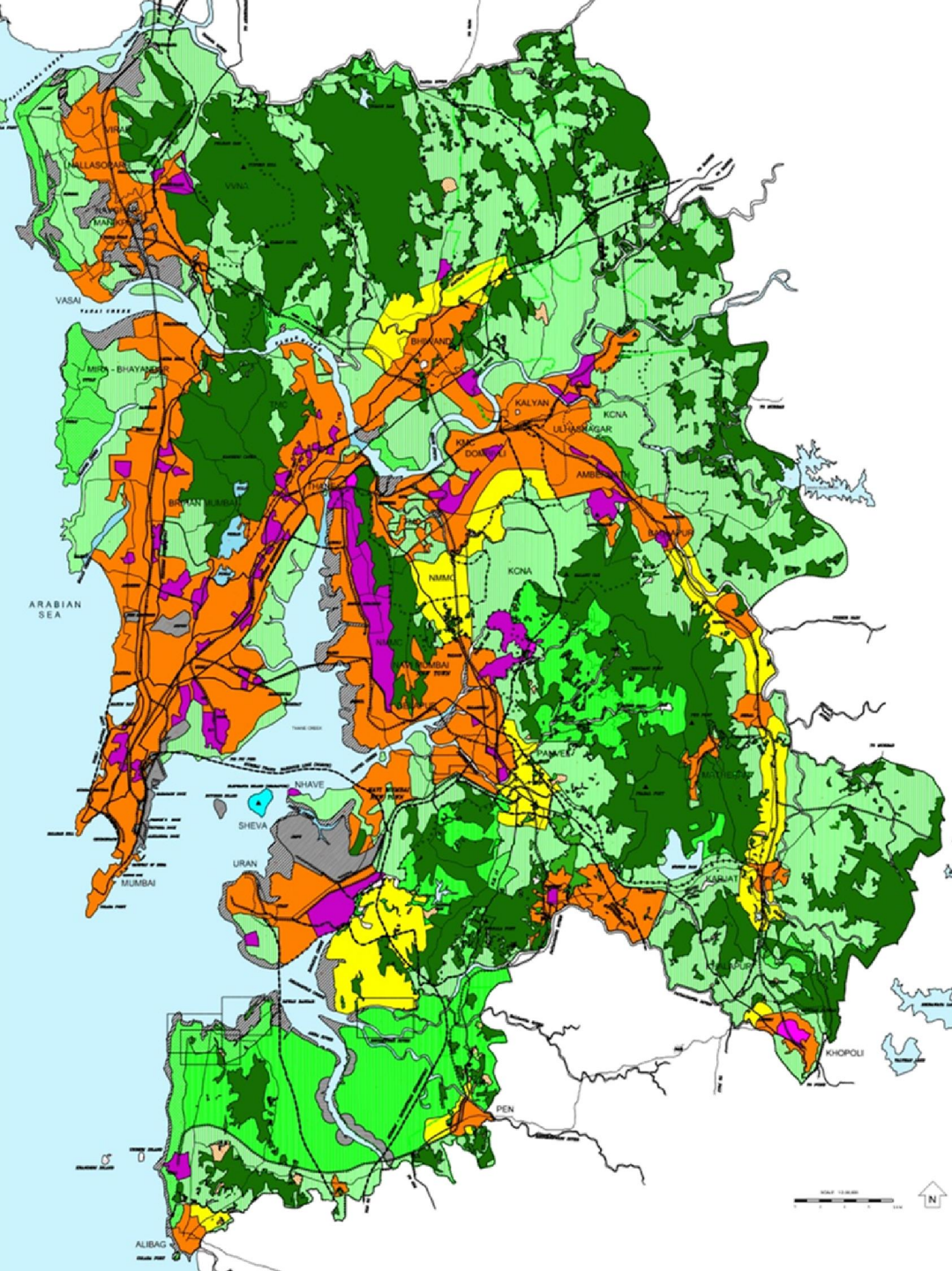
# The earlier Regional Plans



- Two Regional Plans prepared in 1973 & 1996
- Helped map the region; provided framework for spatial development of region; and identified areas for urbanization
- MMR planning for balanced growth of region
- Focus on de-concentration of economic activities
- Shifting office jobs, industries and wholesale markets from south Mumbai; creation of new Port and Airport.





# Regional Plan 1996-2011



No.	Use Zone	Code
<b>Development Zones</b>		
1	Urbanisable Zone 1	
2	Urbanisable Zone 2	
3	Industrial Zone	
4	Recreation Zone	
<b>Low Development Zones</b>		
5	Green Zone 1	
6	Green Zone 2 (sensitive)	
<b>Conservation Zones</b>		
7	Forest Zone	
8	Wetlands	

- 29% area for development,
- 39% area for low development,
- 32% area for conservation

# RP : Achievements

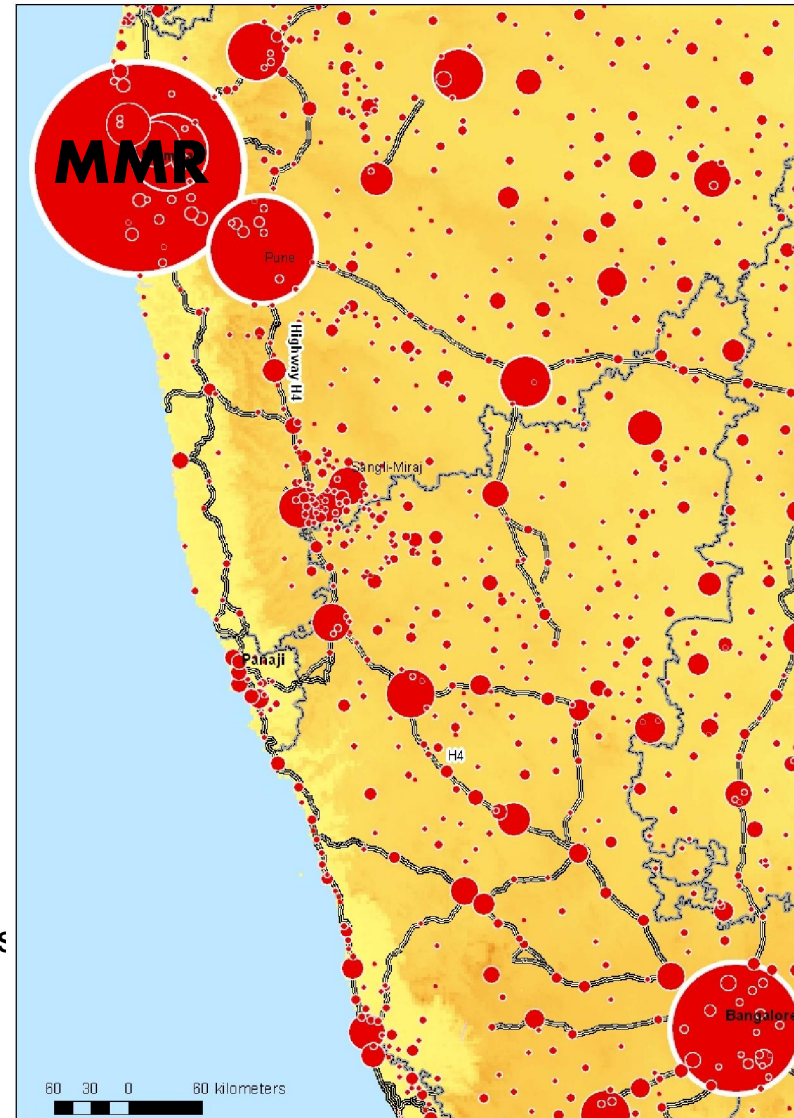
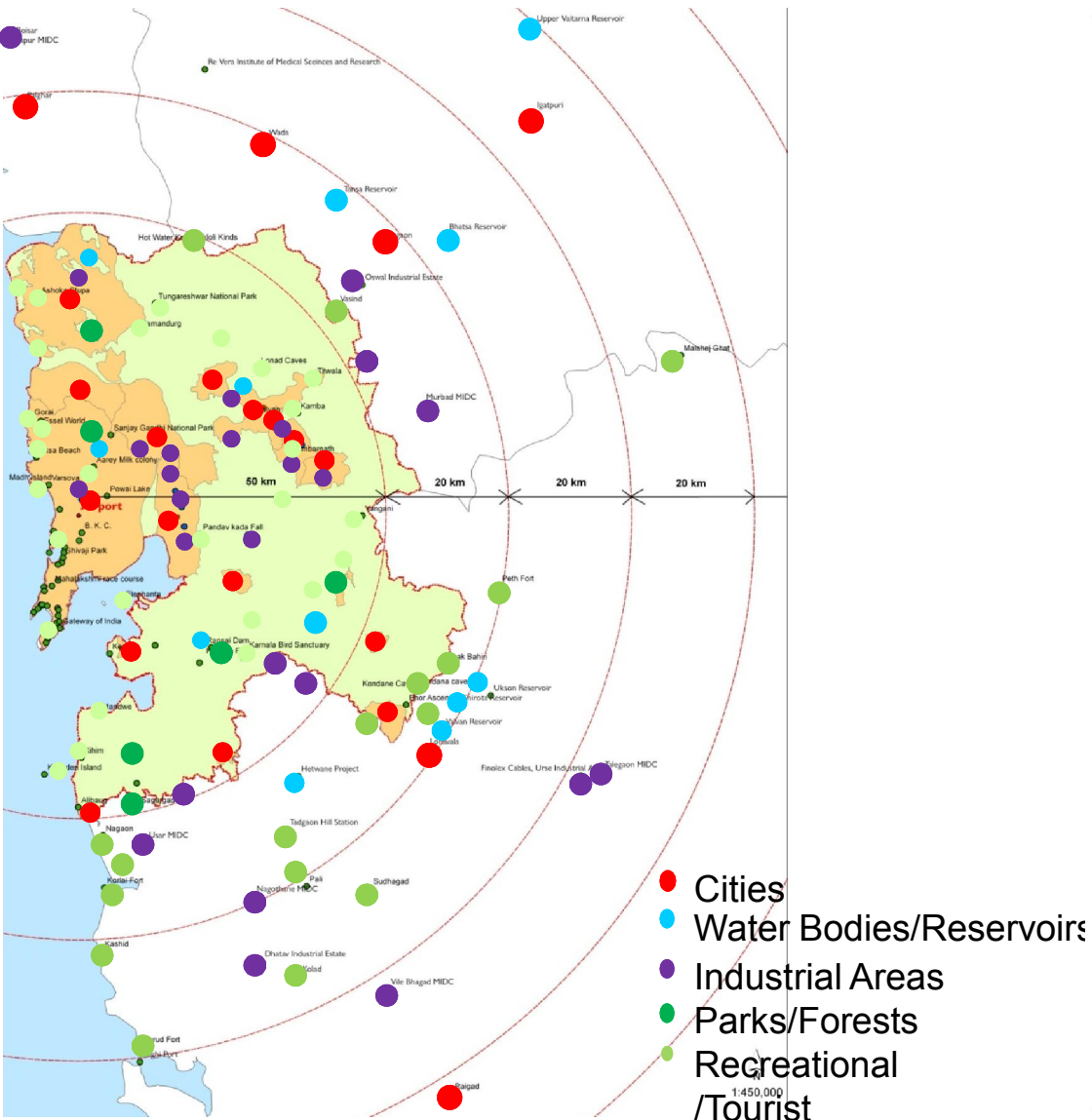
RP has been able to

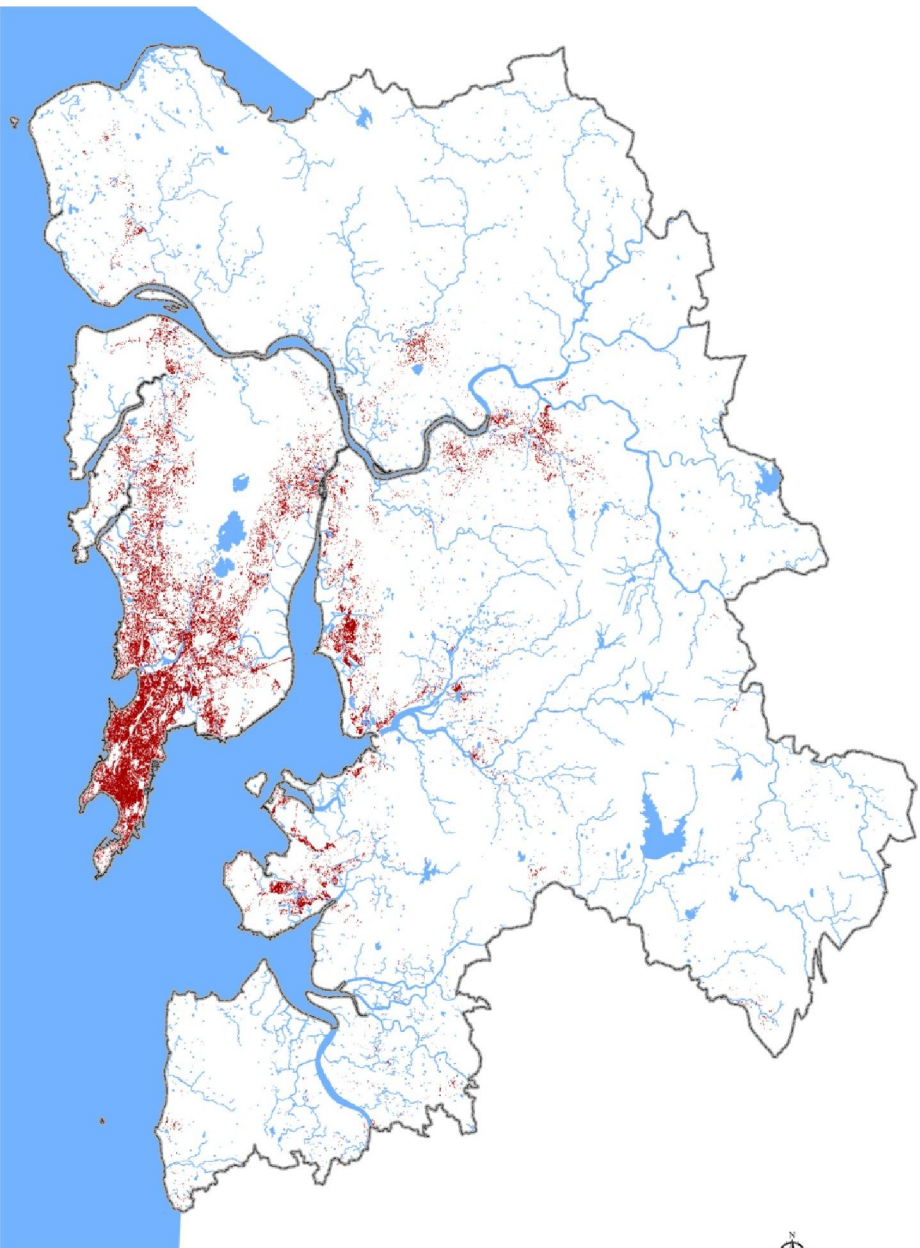
- Channelise urbanisation in direction and extent
- Promote new towns and growth centres
- promote industrial location policy
- indicate potential areas for economic and tourism dev.
- alter Mumbai Plan to achieve regional objectives
- curb industrial and office sector developments in Mumbai
- influence activity decongestion in Mumbai
- encourage use conversions and redevelopments in Mumbai

# **MMR**

## **Characteristics**

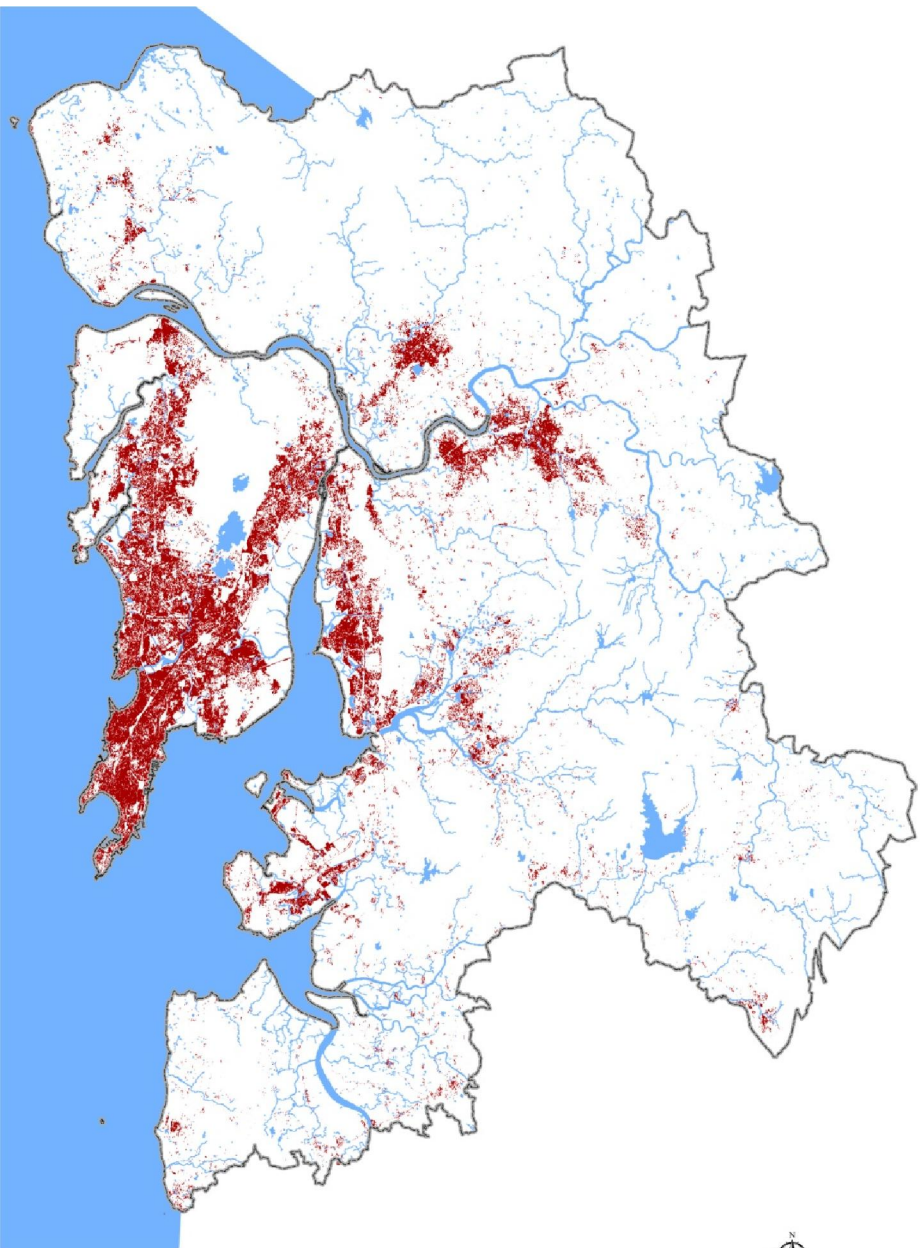
# MMR and Surroundings



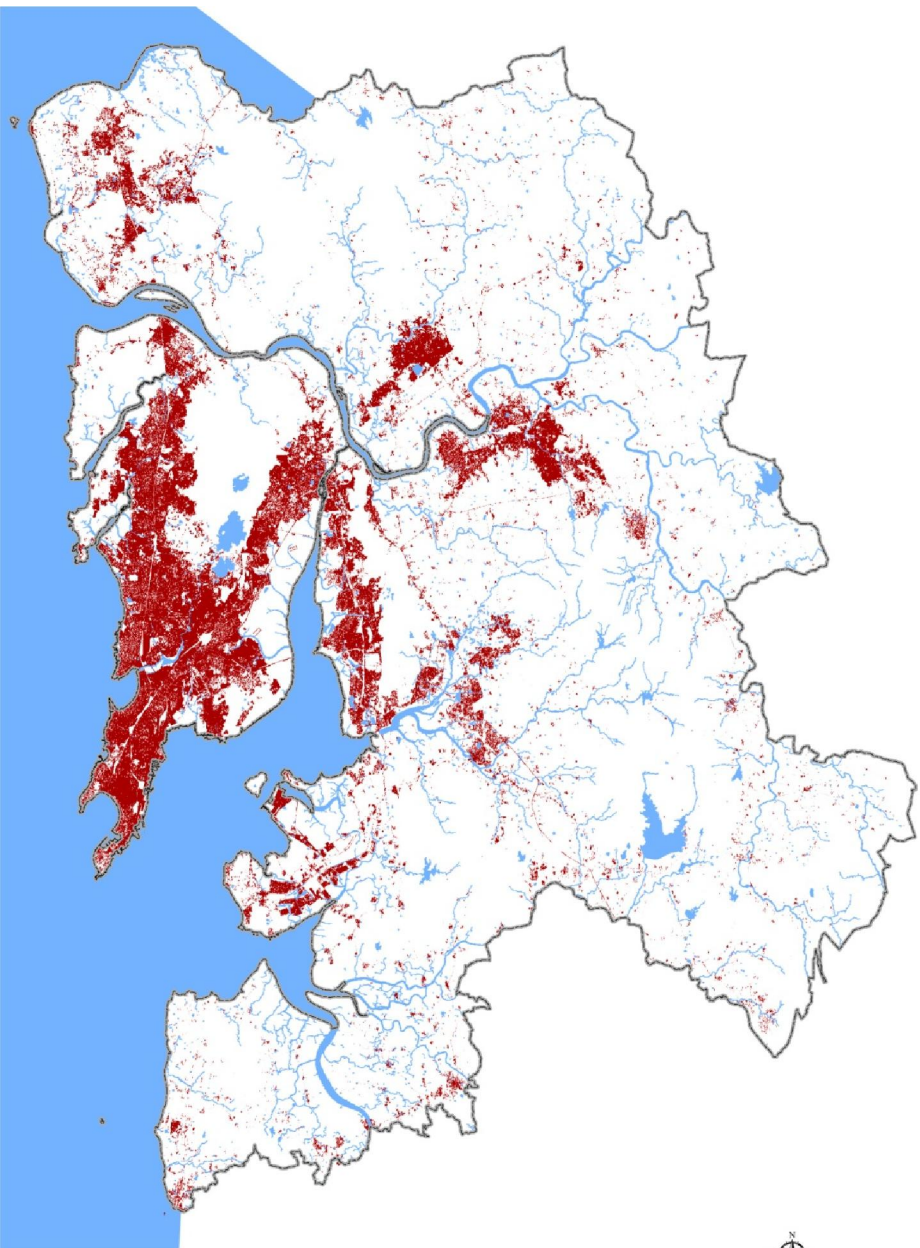


**1973**

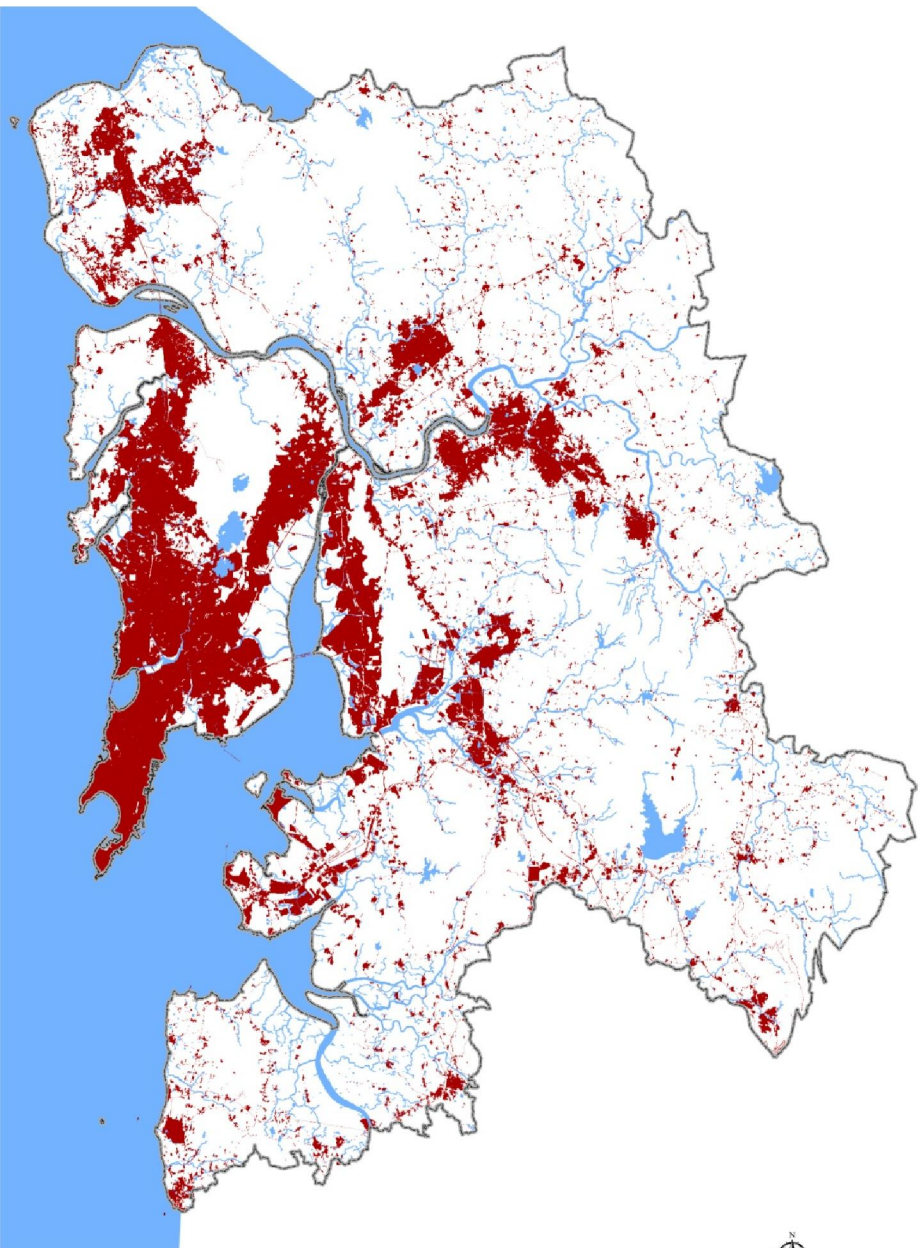




**1992**

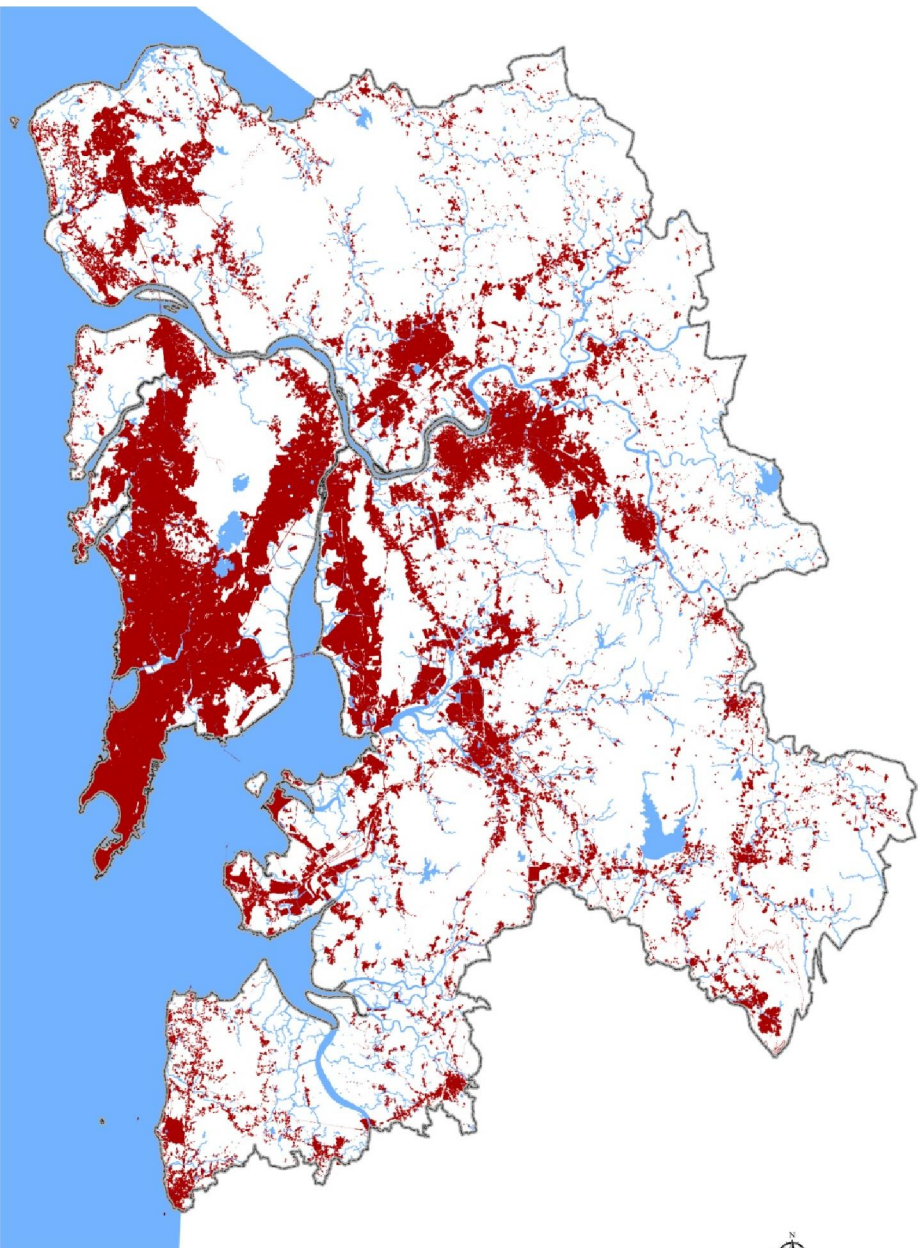


**2001**

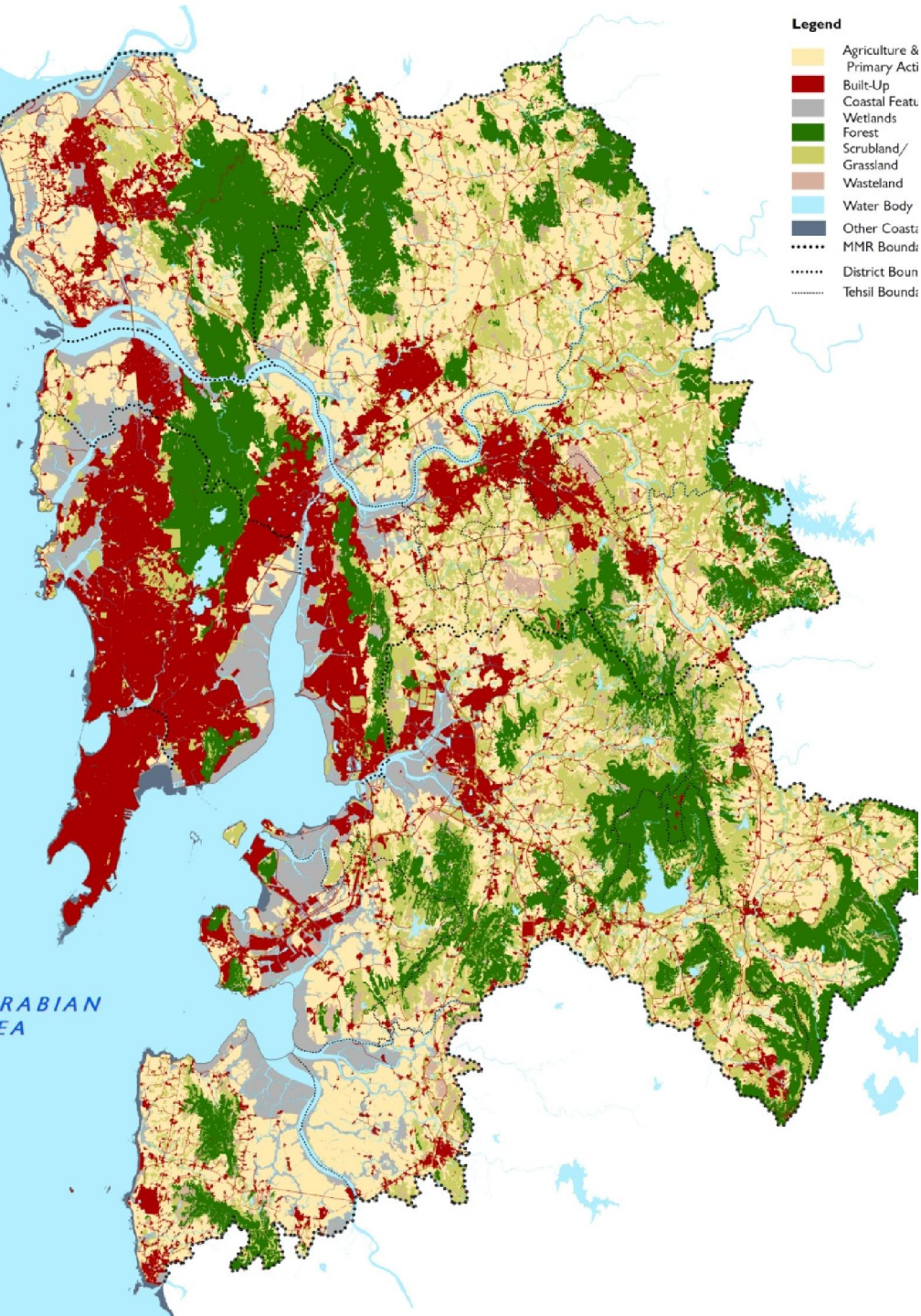


**2010**

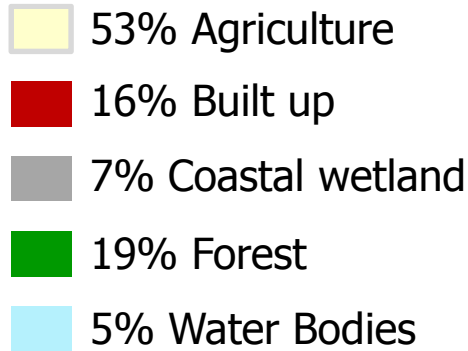




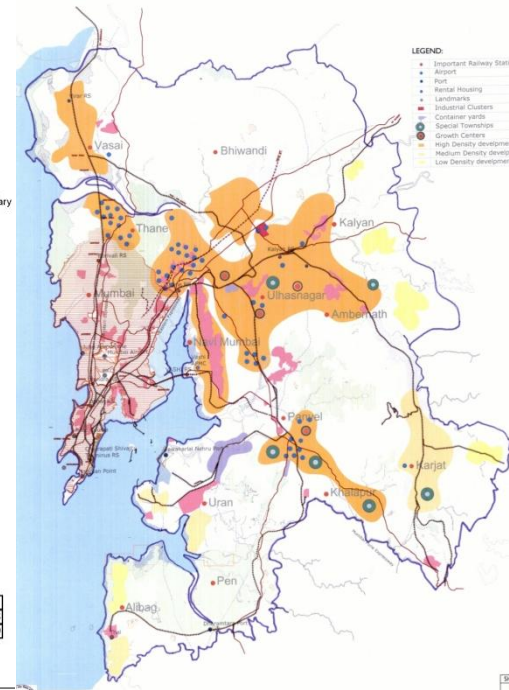
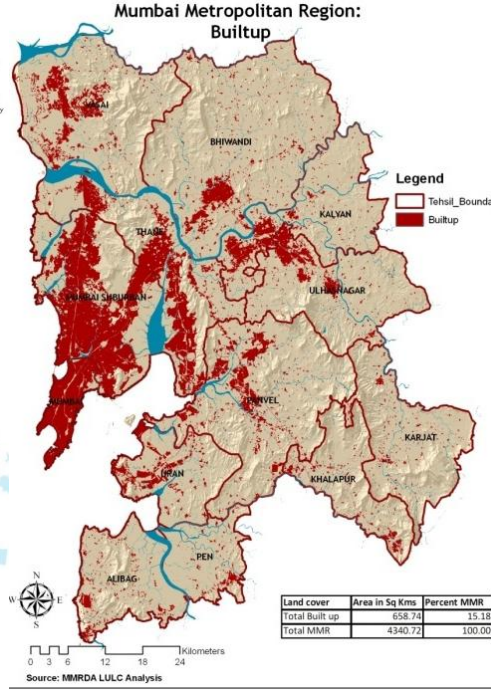
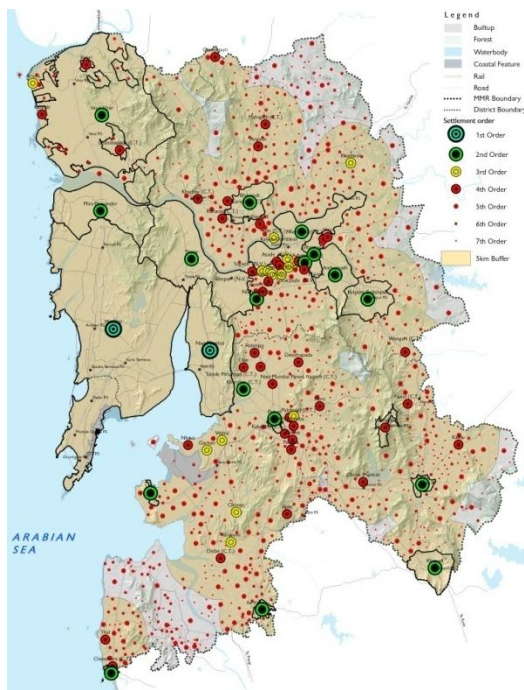
**2014**



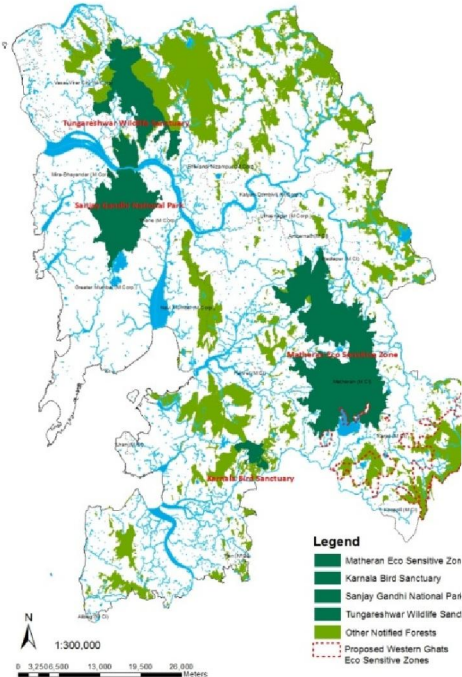
# Land Use :2008



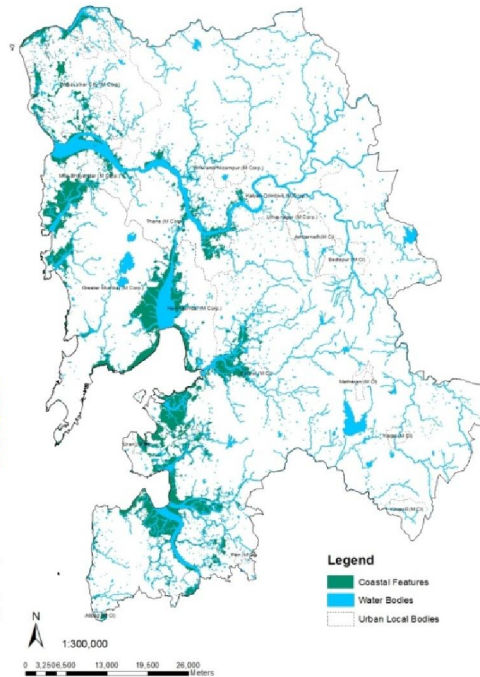
# MMR



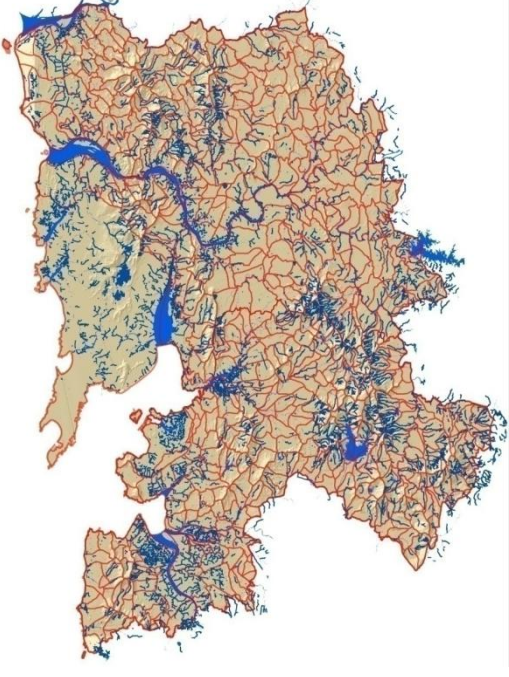
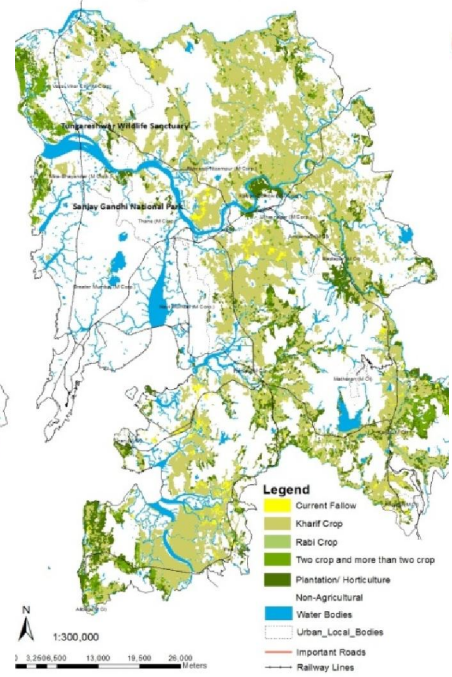
Notified Protected Areas and Forests of MMR



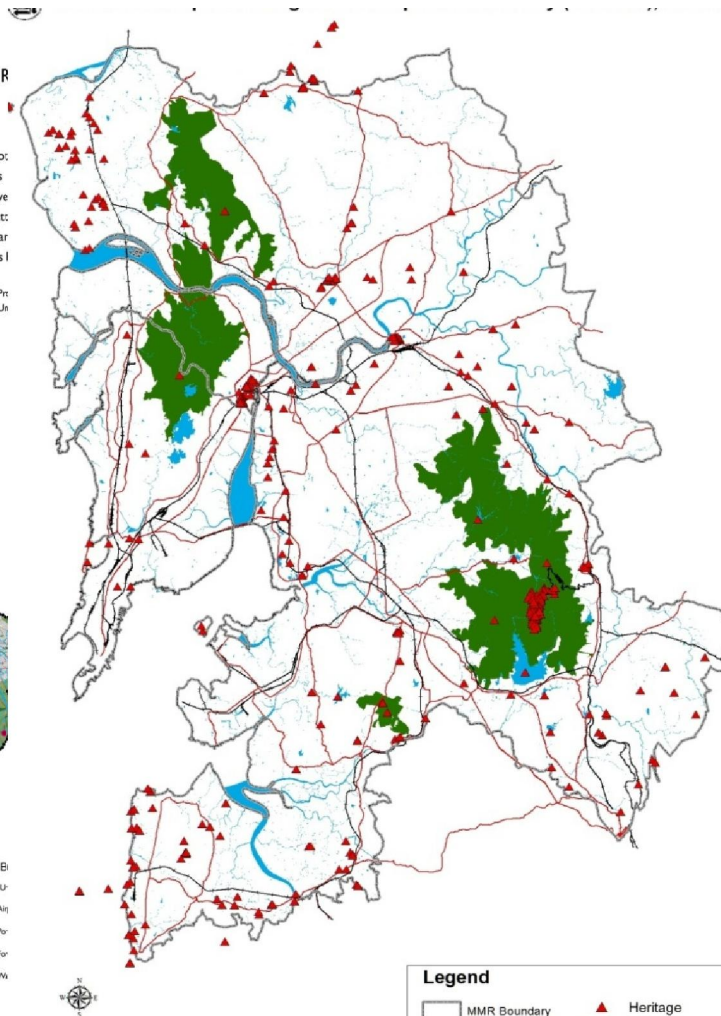
Coastal Features and Waterbodies



Agricultural land in MMR



# Environment and Heritage



## Forests

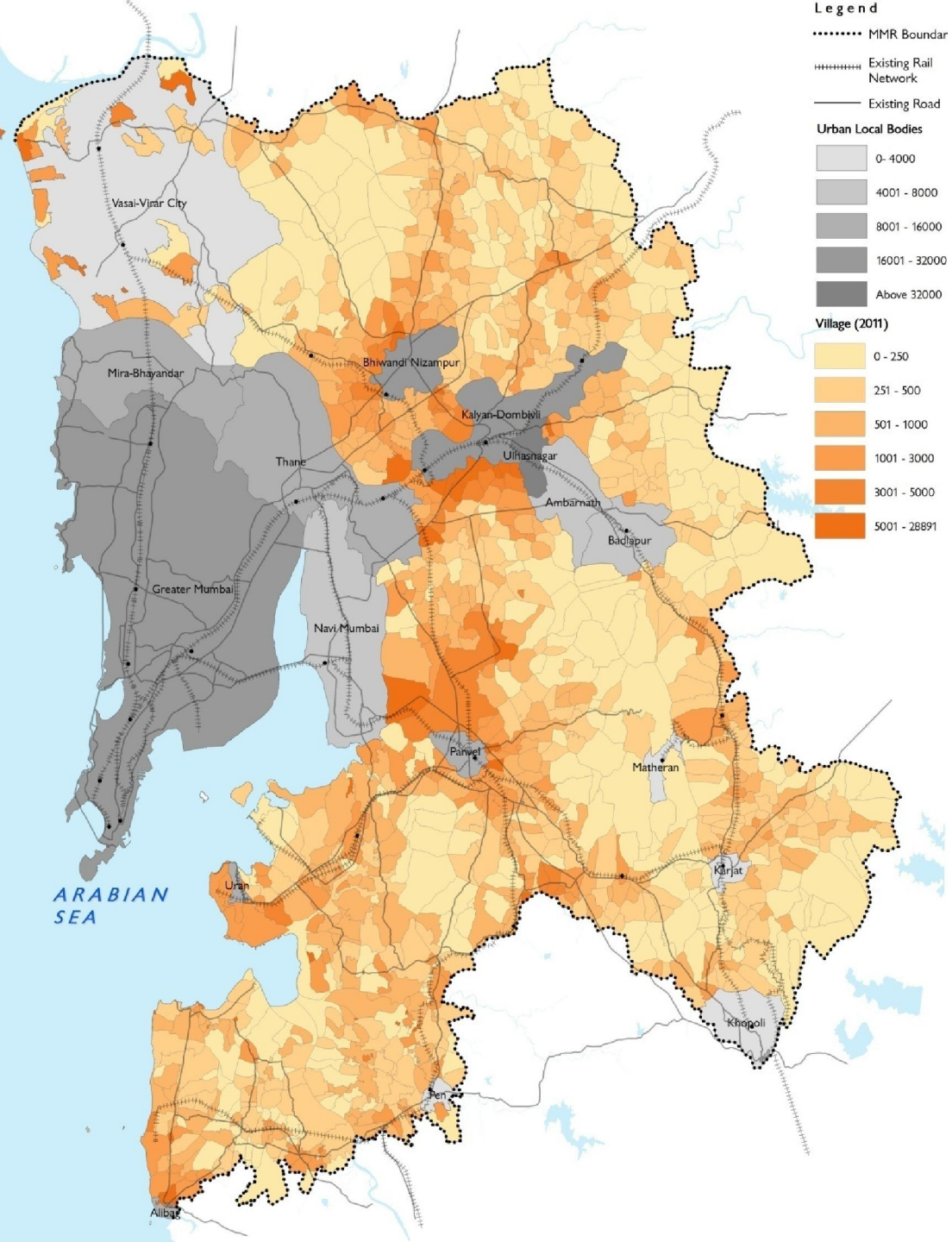
1100 sq.km. forest  
 Jawahar Wildlife Sanctuary  
 Yashwantrao Chavan Gandhi National Park  
 an Eco Sensitive Zone  
 Karanala Bird Sanctuary

## Bio-Diversity

- 413 species of Birds
- 3 species of Butterflies
- 279 Marine species
- 1484 species of Flora

## Built Heritage

- 2 World Heritage Sites
- 18 Archeological Sites
- 25 Forts
- 2700 Heritage Sites



# Population Densities

## Densities of cities

- Current gross densities  
4,000 – 40,000 P/Sq.Km
- Current net densities  
7,000 – 40,000 P/Sq.Km

## Projection for 2011-31

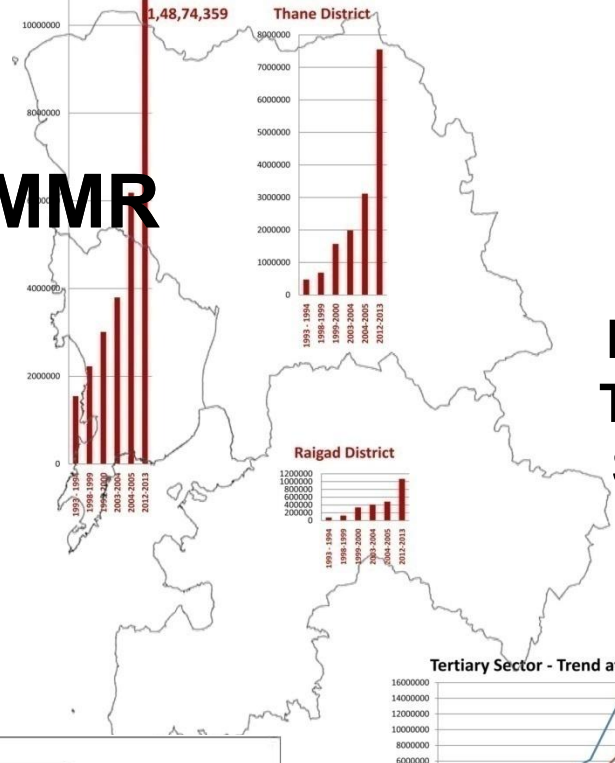
- MMR population in 2034 : 30.43 M
- Mumbai's share to reduce to 38 %  
(55% in 2011)

If current trends continue, density of all cities - 40,000 P/Sq.Km by 2034.

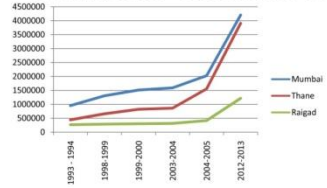
# Economy of MMR

NDP of Secondary Sector

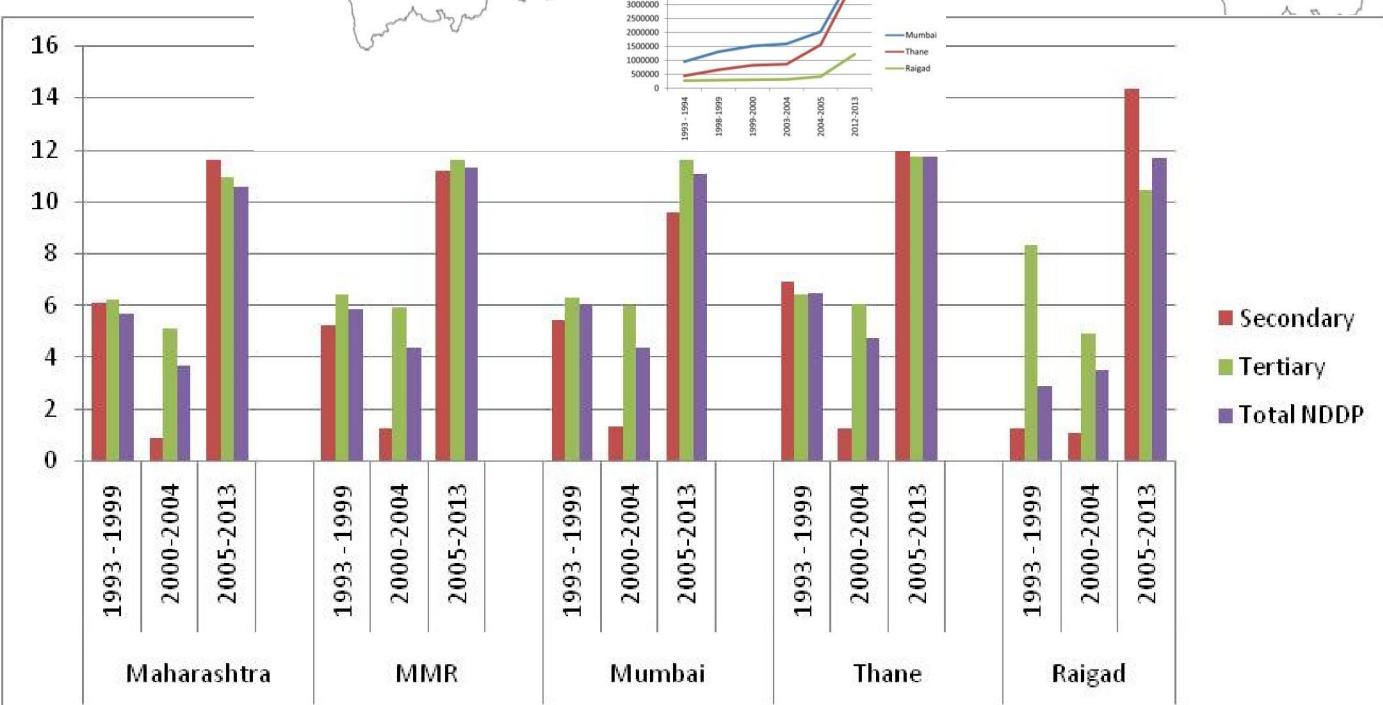
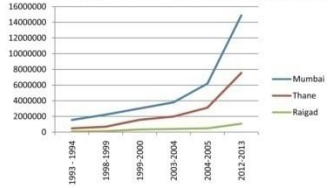
NDP of Tertiary Sector



Secondary Sector - Trend at MMR level



Tertiary Sector - Trend at MMR level



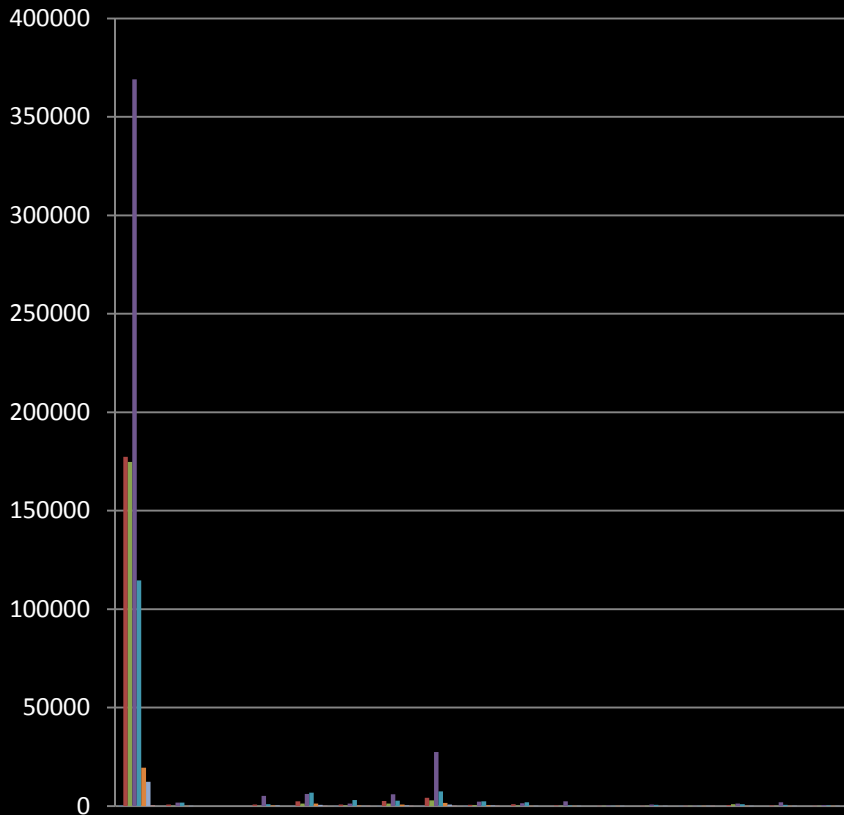
**CAGR (1993-94 to 2012-13)**

# Employment in MMR

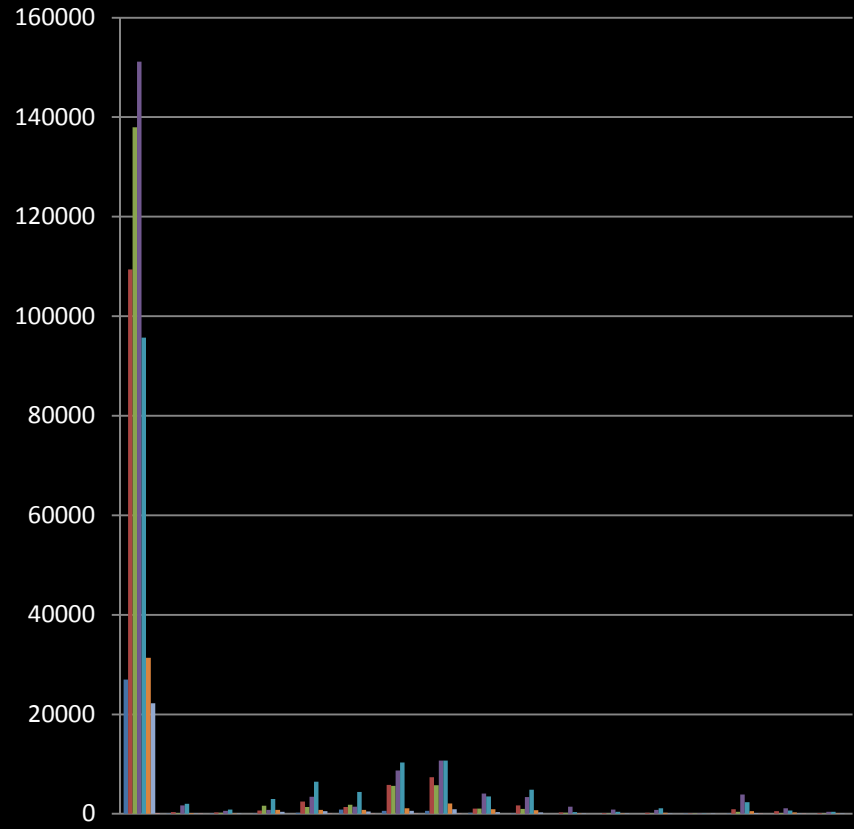
- 39% population working – rate of increase higher for females
- Growth rates higher during 2005-2013
- Tertiary sector growing at higher rate
- Secondary sector growing at lower rate
- Primary sector declining
- Mumbai still retains a large proportion of jobs, but its contribution to additional jobs reducing

# Office Sector Employment

1998



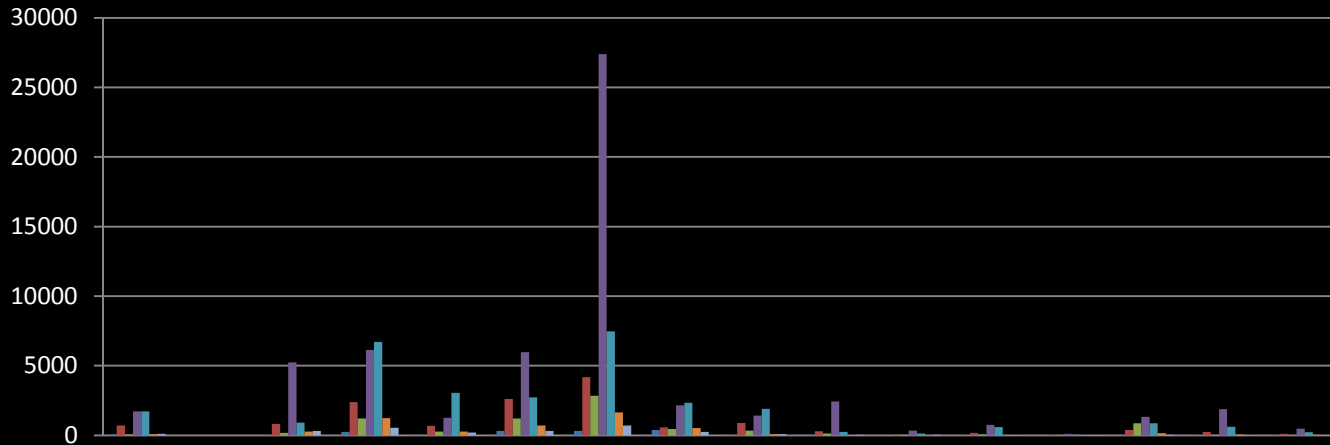
2005



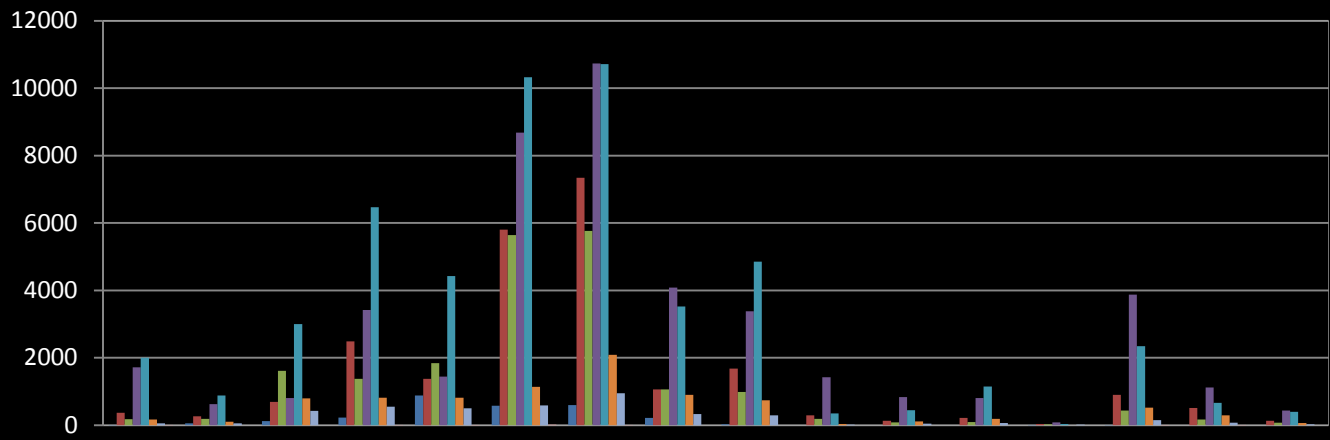
MMR including Mumbai



# Office Sector Employment



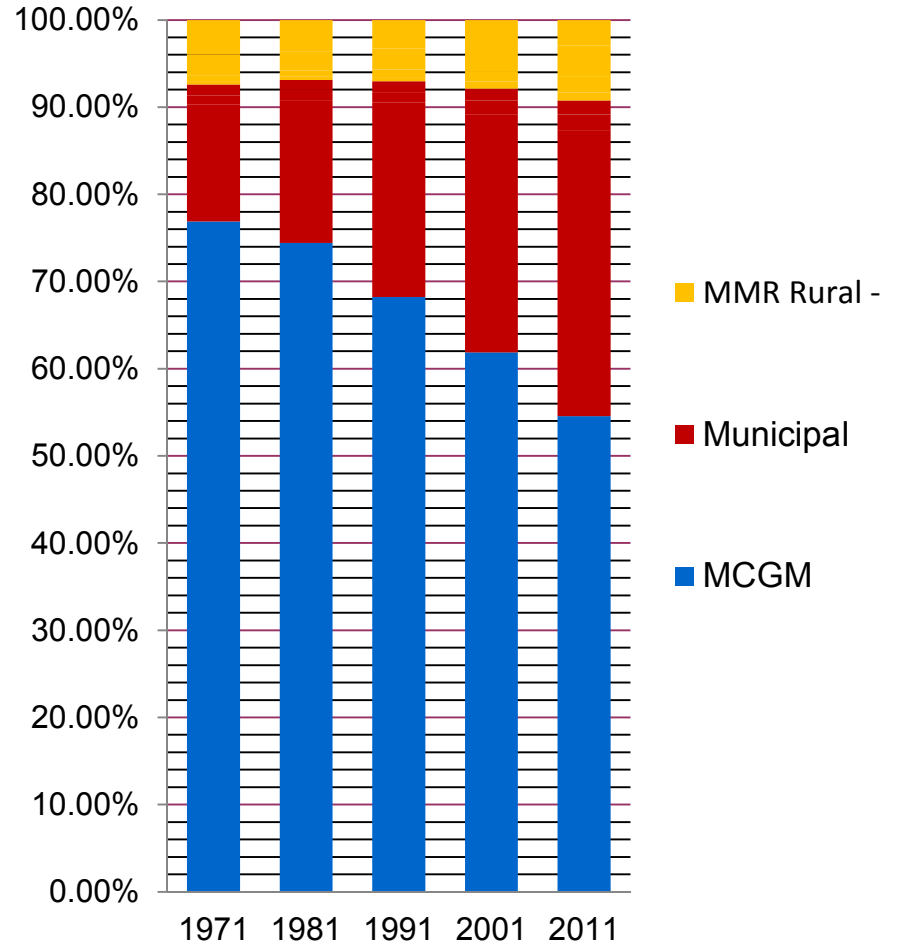
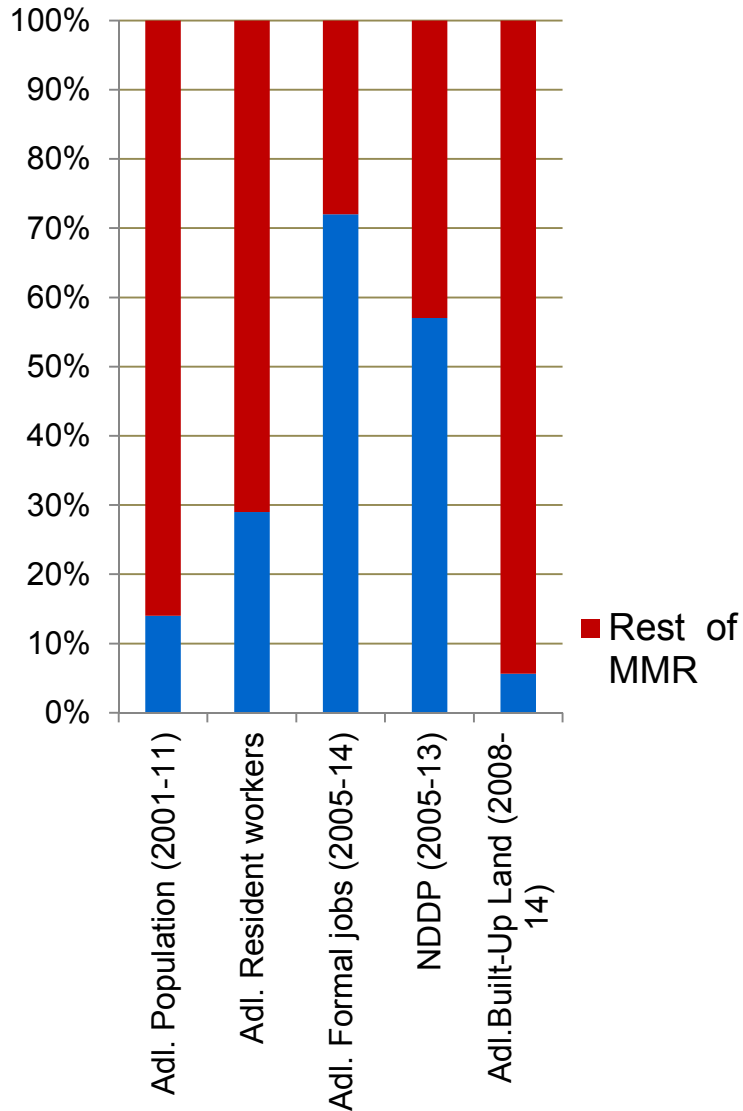
1998



2005

MMR excluding Mumbai

# Share of Mumbai in MMR



# **Issues for the 3rd Regional Plan**

# Consultations

## General suggestions

- Brand MMR as an entity
- Communicate what it to citizens, ULBs, Maharashtra, India and World
- Dovetail into Central/State vision for common purpose/better results
- Make full use of spectrum of powers and capacities of MMRDA
- Implement specific actions where land & regulatory powers available

## Regional Information System

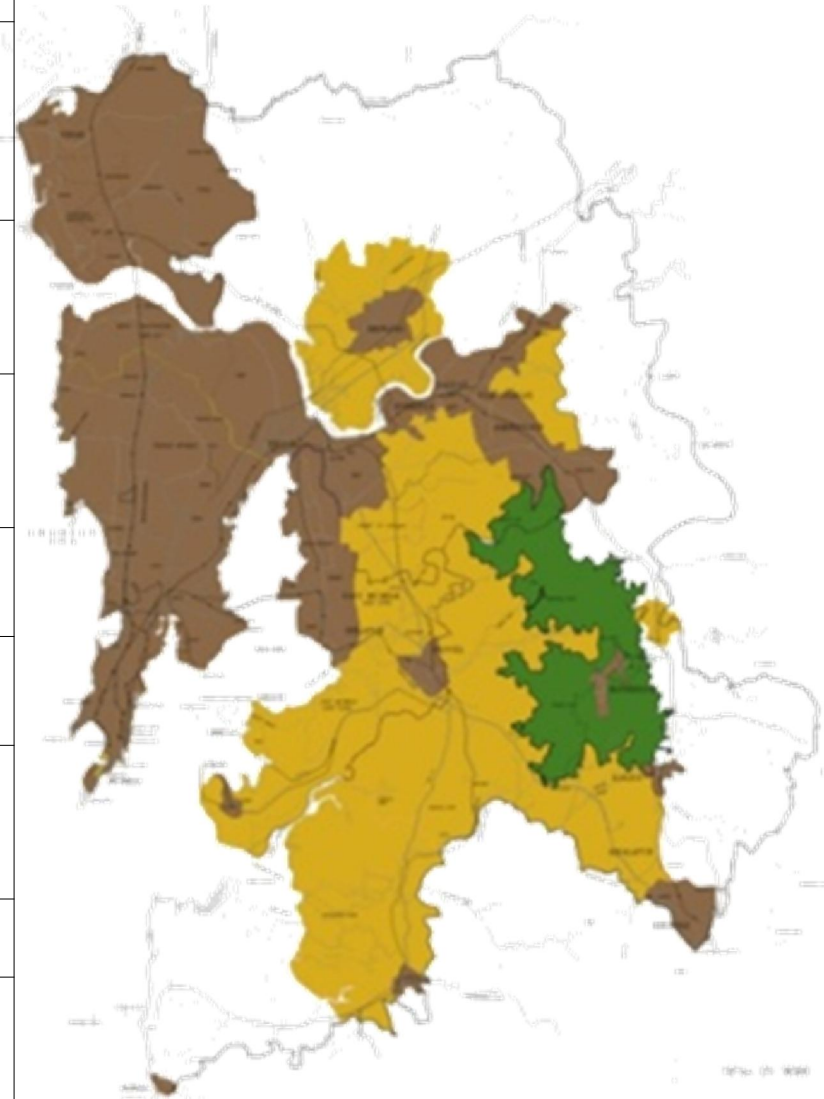
- MMRDA to become Regional Observatory for Data & Intelligence
- MMRDA to assume a greater role in Regional Management
- In 3 phases - Needs assessment, staffing&capacity bldg, observatory

## Institutions, Finance and Implementation Strategies :

- Create/strengthen platforms for agencies to generate ideas together
- Find areas of common interest and incentivise collaborative action
- Examine effect & consistency of local plans to meet regional vision
- Develop a monitoring system of the Regional Plan
- Develop Municipal financial information system
- Establish dedicated funds for MMR infrastructure development
- Develop non land-based instruments to finance infrastructure

# Regional Plan 2014-34 : Focus

No	Concern	Therefore
1	Population growth slowing down - empl increasing - economy stagnant	Transportation/other infra. estimates need revisiting
2	Declining manuf industry – tertiary sector not matching GDP with jobs	Manufacturing needs to be brought back with various strategies
3	Mumbai's share in population reducing, but not in jobs at that scale	Dispersal of jobs in new growth centres across the region needed
4	Peri-urban developments without governance	municipal extensions and new municipalities
5	Urban-rural imbalance	Cluster development of rural areas
6	Only 38% of MMR under direct land-use control	RP focus should be on co-ordinated development of constituents
7	Data paucity for planning	Regional Information System
8	Inadequate infrastructure, environmental	Demand and supply need rationalisation, new alternatives to be considered



# Mumbai Metropolitan Region Development Authority

- MMRDA created as an institution responsible for planning and development of MMR

## Strengths :

- Regional and micro planning, regulating developments,
- Execution of projects,
- Development Co-ordination,
- Institution building,
- Rehabilitation of the displaced
- Formulation of PPP projects,
- Land development, and
- Financing Infrastructure Agencies and Municipalities

## Powers

- to direct other institutions towards actions,
- to levy betterment charges,
- to acquire lands for public purpose

# Regional Development Issues

## Multiple agencies

- Several big cities in MMR – self identities, historic – compete
- Multiple infrastructure agencies – national, state, local
- Multiple Planning Authorities and jurisdictions – co-ordination issue
- Law doesn't provide for review of Local Plans by MMRDA

## Data Paucity

- Boundary does not coincide with admin units (data issue)
- Data inadequate, not inventorised, with many instt, diverse, dissemination also an issue

## Lack of Governance

- Absence of metro governance – Planning Authority can only perceive and plan for regional dev but not ensure its implementation

## No financial base

- Regional level does not have devolved funds or revenue sources – dev financing is an issue
- Land dev increasingly becoming a tool to raise finances : unsustainable

# The Opportunity

- Floods of 2005 brought focus on to regional drainage
- Studies on Transportation & water resources, Business Plan Concept Plan and ESR provided valuable inputs for the next Plan
- Difficulties in municipal areas sought regional interventions in transportation, solid waste management and water resource dev.
- Need for regional institutions felt –MMRDA trying to play this role
- Public debate going on including in Courts of law, about city development and imbalances within the region
- Metropolitan Planning Committee will bring balanced regional representation into Regional Planning and Development



**Thank you**