MMR - The Regional setting

INDIA

MAHARASHTRA

MMR

www.mapsedge.com
Mumbai: the ‘Financial Hub’ of India
The strength

- Commercial and financial capital of India
- Generates 5% of India’s GDP
- Contributes over 1/3rd of India’s tax revenues
- 2 ports in Mumbai handle 1/3rd of the country’s total foreign trade
- Caters to about 38% and 26% of international and domestic air traffic respectively
- Contributes over US$ 111 m annually as taxes to Central Government
Mumbai Metropolitan Region

4 Districts
Mumbai, Sub-urban
Mumbai, Thane, Raigad

8 Municipal Corporations
Greater Mumbai, Thane, Kalyan-Dombivali, Navi Mumbai, Ulhasnagar, Mira-Bhayandar, Vasai-Virar, Bhiwandi-Nizampur

9 Municipal Councils

17 Urban Centres

1003 Villages

Area: 4355 Sq.Km.
Total Population: 19 millions
Population 1991-2011
Popln. 1991 – 14.53 m
Popln. 2001 – 19.29 m
Popln. 2011 – 22.44 m

Urban: 18 million (94%)
Rural: 1 million (6%)
Established in 1975 under MMRDA Act, 1974 for Planning, co-ordinating and supervising the proper, orderly and rapid development of the areas in the region and executing plans, projects and schemes for such development, and to provide for matters connected therewith.
Functions of MMRDA mandated in the Act

To secure the development of MMR according to the Regional Plan and MMRDA shall:
- Review any project/scheme
- Formulate and sanction
- Execute projects and schemes
- Recommend proposals to GoM/others
- Review physical, financial and economic plans
- Participate with others for inter-regional devp.
- Finance projects
- Co-ordinate execution of projects
- Take up activities conducive for overall objectives

Principal functions in practice
- Regional Planning
- Micro-planning and dev. control in designated areas
- Project formulation
- Co-ordination
- Financing infrastructure development
- Implementation of select projects
MMRDA - Constitution

Authority (17 Members and 8 invitees)

Chairman  H’ble Minister for Urban Development

Members
- Hon. Ministers for Urban Devp. and Housing
- Members of State Assembly nominated by the State Govt.
- Chief Secretary, Secretaries of Urban Devp. and Hsg. Depts.
- Commissioner, Mayor and 4 reps. of Gr. Mumbai Mun. Corp.
- Metropolitan Commissioner, MMRDA
- Managing Director, CIDCO

Invitees
- Mayors of other cities in MMR
- Chairpersons of District Councils (Zilla Parishads)
MMRDA - Constitution

Executive Committee (9 Members)

Chairman  The Chief Secretary

Members
- Secretary, Urban Development
- Secretary, Housing Department
- Municipal Commissioner of Gr.Mumbai
- Metropolitan Commissioner, MMRDA
- Managing Director, CIDCO
- 3 expert members
Organisational Structure

MMRD Authority

Executive Committee

Metropolitan Commissioner

Addl. MC & Project Director (MUTP)

Jt. Metropolitan Commissioner

Planning Division
Town & Country Planning Division
Transport. & Comm. Division
Engineering Division
MUTP Division
Accounts & Fin. Division
Admin. Division

Policy Planning
Micro Planning
Transport Planning
Powers of MMRDA include ....

- To freeze or restrict development, where necessary
- To give directions
- To require local authority to assume responsibility in certain area
- To impose conditions while financing schemes
- To levy a Cess on buildings and lands for activities in the Act
- To levy Betterment Charges on increased land value as a consequence of its projects
MMRDA’s role

- Spatial planning at regional level
- Micro planning through SPA
- Co-ordinating development
- Development financing
- Execution of special projects
- Providing Technical Assistance to ULBs
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Orientation of the Regional Plans

First prepared in 1973, revised 1996, due for another revision by 2011

Orientation of Regional Plans: Policy towards Spatial Devp.
: Development Finance
: Development Co-ordination

The 1973, 1996 Regional Plans laid framework for addressing the above issues

1973 RP - philosophy of urban containment, socialistic approach, prescriptive, land banking: had measurable objectives

1996 RP - reflecting economic liberalisation in India, market orientation, interventions for land-assembly through regulatory mechanism, environmental focus: outcome being measured

2011 RP - Under preparation by MPC with MMRDA’s assistance
### Regional Plan 1996-2011

<table>
<thead>
<tr>
<th>No</th>
<th>Use Zone</th>
<th>Area</th>
<th>Zone</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Urbanisable Zone 1 (U1)</td>
<td>791</td>
<td>19 D</td>
</tr>
<tr>
<td>2</td>
<td>Urbanisable Zone 2 (U2)</td>
<td>217</td>
<td>5 D</td>
</tr>
<tr>
<td>3</td>
<td>Industrial Zone (I)</td>
<td>129</td>
<td>3 D</td>
</tr>
<tr>
<td>4</td>
<td>RTD Zone (RTD)</td>
<td>111</td>
<td>2 D</td>
</tr>
<tr>
<td>5</td>
<td>Green Zone 1 (G1)</td>
<td>1350</td>
<td>32 C</td>
</tr>
<tr>
<td>6</td>
<td>Green Zone 2 (G2)</td>
<td>303</td>
<td>7 C</td>
</tr>
<tr>
<td>7</td>
<td>Forest Zone (F)</td>
<td>1091</td>
<td>26 C</td>
</tr>
<tr>
<td>8</td>
<td>Wetlands</td>
<td>116</td>
<td>3 C</td>
</tr>
<tr>
<td>9</td>
<td>Others</td>
<td>128</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>4236</td>
<td>100</td>
</tr>
</tbody>
</table>

- 29% area for development,
- 39% area for low development,
- 32% area for conservation
In summary, MMR Planning has:

- Statutory regional planning framework available
- A dedicated institution (MMRDA) established for regional planning and development
- MMRDA acting as nodal agency and also development financing the ULBs along with technical assistance where necessary
- An industrial locating policy for MMR in place
Future role in view of Metropolitan Planning Committees

The Maharashtra Metropolitan Planning Committees (Constitution and Functions) Act, 1999

Functions
- to prepare draft development plan for the metropolitan area and recommend to govt.
  to ensure compliance of provisions of article 243-ZE of Indian Constitution

Constitution
- Ex-officio: Secretaries to GoM
  Nominated: Chairman, CEOs, MLAs, experts
  Elected: from elected representatives
  Invitees: MPs/MLAs, DTP, CEOs of Infrastructure agencies of GoM & GoI

MMPC held 2 meetings and constituted 5 study groups to prepare reports on various aspects of MMR’s development

MMRDA to assist MPC in preparation of Regional Development Plan
The Opportunity

- Floods of 2005 brought focus on to regional drainage
- Difficulties of land-fill sites in municipal areas sought regional interventions
- Dr. Chitale Committee report on Water resources in MMR, Comprehensive Transportation Study 2005, Business Plan for MMR 2007 and the Concept Plan for MMR-2010- will provide valuable inputs for revision of Regional Plan
- Need for regional transport and water source development authorities felt - UMMTA and MMRDA to play this role
- Public debate going on including in Courts of law, about city development and imbalance within the region
- MPC will bring balanced regional representation into Regional Planning and Development
MMRDA’s role

- Spatial planning at regional level
- Micro planning through SPA
- Co-ordinating development
- Development financing
- Execution of special projects
- Providing Technical Assistance to ULBs
In Mumbai Dist. :
- Bandra-Kurla Complex
- Backbay Reclamation Scheme
- Oshivara District Centre
- Wadala Truck Terminal
- Mumbai International Airport

In Thane Dist. :
- Ambernath-Badlapur surrounding notified area,
- 27 villages excluded from KDMC,
- 51 villages notified around Bhivandi, and
- Gorai-Manori-Uttan notified area

In Raigad Dist :
- NIL
MMRDA is SPA for:

- Special commercial, transport & tourism hubs in Mumbai
- Newly urbanising areas outside Mumbai

Bandra-Kurla Complex and Wadala Truck Terminal with land banking provided MMRDA with required finance for Infrastructure development.
Land Banking
Development of Bandra-Kurla Complex

- 160 ha. of international finance & business centre
- Development of infrastructure undertaken
- Several offices of Govt. & Fin. Instt. started operations
- A large Nature Park and bird sanctuary
- Metro Line-2 passing through BKC connecting both Bandra and Kurla
- International Exhibition and Convention Centre promoted
Bandra-Kurla Complex
Land Banking
Development of Wadala Truck Terminal

- 80 ha. of land being developed in phases
- Space for parking 3000 trucks, 1100 goods transport companies
- Inter-state Bus Terminus (ISBT) and Regional Transport Office engaged
- The ‘Tall Tower’, an over 100 m high tower being planned
Role of SPA without land banking

- Oshivare District Centre
- Backbay Reclamation Scheme
- Mumbai International Airport
- Gora-Manori-Uttan Tourism zone (4000 ha.)
- Ambernath, Kulgaon-Badlapur and surrounding notified area
- 27 villages excluded from Kalyan-Dombivali Mun. Corp.
- 51 villages surrounding Bhiwandi city

Role of SPA: Preparation of Development Plan with or without Development Control
Special Planning Authority
Gorai-Manori-Uttan Notified Area

- 42 Sq.Km. area notified for tourism devp. and appointed MMRDA as SPA
- Preparation of Devp. Plan in progress
- Notified area has tourism potential but environmentally sensitive and falls in CRZ
- Local citizens concerned about their livelihoods and env. sensitivity of the area
- Draft Devp. under preparation is addressing the above and is expected to be submitted to Govt. by early 2011
**Special Projects**

- **Marine Drive Refurbishment**
  - Phase 1 completed by MMRDA
  - Further phases expected to be taken by MCGM

- **Electrification of Gharapuri (Elephanta Island)**
  - MMRDA financing the project with Rs. 10 Cr budgeted in 2010-11
  - Tendering by MSEB in progress
MMRDA’s role

- Spatial planning at regional level
- Micro planning through SPA
- Co-ordinating development
- Development financing
- Execution of special projects
- Providing Technical Assistance to ULBs
MMRDA’s role: Co-ordinating development

- Facilitated shifting of wholesale markets to Navi Mumbai in a planned environment
- Acting as Special Planning Authority for detailed planning and development of identified Growth Centres
- Helped frame Industrial Location Policy for MMR with focus on environment
- Helped delineate Matheran Eco-sensitive Zone and preparing the zonal master plan for GoM
- Co-ordinated World Bank funded BUDP with focus on shelter and MUTP with focus on railway network augmentation & improvement
MMRDA’s role: Co-ordinating development

- Facilitated studies:
  - Capital investment study for ULBs in the state
  - Regional Water Resource Planning,
  - Comprehensive Transportation Study and Business Plan to arrive at infrastructure needs and financing reqmts. of MMR,
  - Flood mitigation of various rivers in MMR

- Directly undertaking regional transportation, water resource development and solid waste management projects

- Established Societies for Heritage Conservation and Environmental Improvement in MMR, providing grants for studies and projects
MMRDA’s role: Co-ordinating development

- Acting as State level nodal agency for channelising funds from the Central and State Governments for urban infrastructure schemes
- **MUDP-RF**: providing loan and grants
- **MCS-RF**: providing soft loans and grants
- **JNNURM**: technical appraisal of proposals and monitoring & reporting progress of projects
MMRDA’s role

- Spatial planning at regional level
- Micro planning through SPA
- Co-ordinating development
- Development financing
- Execution of special projects
- Providing Technical Assistance to ULBs
Development Financing

- MMRD Fund for regional infrastructure
- urban infrastructure
- rural infrastructure

- External funding - MUDP Revolving Fund
  - Mumbai Megacity Scheme
  - JNNURM
# Development Financing

<table>
<thead>
<tr>
<th>Name of Scheme</th>
<th>Source of fund</th>
<th>Eligibility</th>
<th>Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MMRD Fund</strong></td>
<td></td>
<td>Urban and regional infrastructure in MMR</td>
<td>Loan</td>
</tr>
<tr>
<td><strong>MMRD Reserve Fund</strong></td>
<td>MMRDA's own revenues</td>
<td>Transport projects in MMR</td>
<td>Loan</td>
</tr>
<tr>
<td><strong>Integrated Village Improvement Scheme</strong></td>
<td></td>
<td>Infra within urbanising villages</td>
<td>Grant</td>
</tr>
<tr>
<td><strong>Outer Area Road Development Scheme</strong></td>
<td></td>
<td>Improving road connectivity to villages</td>
<td>Grant</td>
</tr>
<tr>
<td><strong>MUDP - Revolving Fund</strong></td>
<td>World Bank loan repayments</td>
<td>Urban infrastructure in MMR</td>
<td>Loan, grant</td>
</tr>
<tr>
<td><strong>Mumbai Megacity Scheme</strong></td>
<td>Central and State grants</td>
<td>Urban Infrastructure in MMR</td>
<td>Loan, grant</td>
</tr>
<tr>
<td><strong>Jawaharlal Nehru National Urban Renewal Mission</strong></td>
<td></td>
<td>For 6 Corporations and 2 Councils in MMR, UAs of Pune, Nagpur, Nashik, Nanded</td>
<td>Grant</td>
</tr>
<tr>
<td><strong>Heritage Conservation and Environmental Improvement Societies</strong></td>
<td>Income from Corpus by MMRDA</td>
<td>Studies and implementation of projects in the two fields</td>
<td>Grant</td>
</tr>
</tbody>
</table>
MegaCity Scheme

Water Supply

Civic amenities

Arterial roads

Bridges
JN National Urban Renewal Mission

- Sewage treatment - PCMC
- Storm water drainage - Thane
- River bridge - Nanded
- Solid Waste management - PCMC
- Roads & cycle tracks - Nashik
- River front devp. - Nanded
Contribution to Heritage and Environmental Preservation in MMR

- MMR-Heritage Conservation Society (MMR-HCS)
- MMR-Environmental Improvement Society (MMR-EIS)
- Two separate societies established by MMRDA
- Corpus of Rs. 5 Cr. to each provided by MMRDA
- Income on above used to fund studies and projects
- As on 31.3.2015, in Heritage Conservation - 66 projects funded @ Rs. 6.97 Cr., 59 completed
- In Environment Improvement - 78 projects funded @ Rs. 7.67 Cr., 72 completed
MMR Heritage Conservation Society

Urban Village
Khotachiwadi
Mahatar Pakhadi
Bandra Village
Manori, Marve, Madh, Aksa, Malavani, Erangal, Culvem, Gorai

Urban Places
D N Road
Marine Drive
Opera House
Ballard Estate
Cumballa Hill
Mahalakshmi
Dadar Parsi & Hindu Colony
Stone Cleaning

Urban Region
Thane
Kalyan
Matheran
Soil Amelioration of Land Spoilt by Industrial Effluents using Phytoremediation

Shridhar
Department of Environmental Sciences, Institute of Science, Mumbai

Abstract
Mumbai Metropolitan Region – Environment Improvement Society MMRDA

Nov 1991

Say No To Fire Crackers

Chemical Colours Are UnHoly
Enjoy Holi Naturally

MMR ENVIRONMENT IMPROVEMENT SOCIETY

Lateritic Caps
MMRDA’s role

- Spatial planning at regional level
- Micro planning through SPA
- Co-ordinating development
- Development financing
- Execution of special projects
- Providing Technical Assistance to ULBs
Project Interventions
Transportation Projects
Proposed Transportation Strategy

- Improve and expand the railway network through MUTP I & II
- Improve road network by implementing MUIP
- Develop Mass Rapid Transit System through Metro Rail
- Develop Freeways like Eastern Freeway, Western Freeway, Mumbai Trans Harbour Link.
- Introduce High Capacity Bus Transit System and dedicated Bus Lanes
Major Transportation Projects in MMR

1. Rs. 4526 Cr. - Mumbai Urban Transport Projects (MUTP)
2. Rs. 2600 Cr. - Mumbai Urban Infrastructure Project (MUIP)
3. Rs. 1300 Cr. - Worli Bandra Sea Link
4. Rs. 6100 Cr. - Mumbai Trans Harbour Link (MTHL) and its dispersal
5. Rs. 19925 Cr. - Metro Master Plan for Mumbai
6. Rs. 2400 Cr. - Monorail
7. Rs. 600 Cr. - Skywalks
I. Mumbai Urban Transport Project (MUTP)

- For improving transport system in the region in phases
- With financial assistance of the World Bank
- Suburban railway, roads and related transport components included
- Govt. of Mah. and Indian Railways to share capital expenditure on suburban railway component on 50:50 basis
- Resettlement of 23,000 project affected households - an integral part
- Total cost of the project - Rs 4,526 Cr.
1. Mumbai Urban Transport Project (MUTP)

Project Components and costs

<table>
<thead>
<tr>
<th>Component</th>
<th>Rs. Cr</th>
<th>US $ M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railway</td>
<td>3146</td>
<td>655</td>
</tr>
<tr>
<td>Road</td>
<td>878</td>
<td>185</td>
</tr>
<tr>
<td>R&amp;R</td>
<td>480</td>
<td>100</td>
</tr>
<tr>
<td>Fees</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>Total Cost</td>
<td>4526</td>
<td>945</td>
</tr>
</tbody>
</table>

- World Bank loan: 2602 US $ 542
- Counterpart funds: 1924 US $ 403

Implementing Agencies: MMRDA, MRVC, MCGM, MSRDC, BEST

Project Period: 2003-2010
2. Mumbai Urban Infrastructure Project (MUIP)

**Need for MUIP**
- MUTP focuses on rail transport
- MUIP to supplement MUTP with emphasis on road network improvements and providing benefits to the pedestrians and Public Transport users

**Objectives**
- Efficient traffic dispersal system
- Major North-South road links
- East-West Connectivity
- Safe, convenient & efficient movement for pedestrians
- High capacity un-interrupted connectivity to International Airport
- Efficient/fast public transport corridors
- Bus terminals/depots with integration facilities
- Elimination of railway level crossings
### 2. Mumbai Urban Infrastructure Project (MUIP)

<table>
<thead>
<tr>
<th>Schemes</th>
<th>Eastern Suburbs</th>
<th>Western Suburbs</th>
<th>Island City</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP Roads (No)</td>
<td>52</td>
<td>60</td>
<td>22</td>
<td>134</td>
</tr>
<tr>
<td>DP Roads (in Km)</td>
<td>195</td>
<td>151</td>
<td>116</td>
<td>462</td>
</tr>
<tr>
<td>Elevated Roads (No)</td>
<td>6</td>
<td>-</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Flyovers (No)</td>
<td>10</td>
<td>17</td>
<td>14</td>
<td>41</td>
</tr>
<tr>
<td>ROBs (No)</td>
<td>1</td>
<td>7</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Vehicular Subways (No)</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Pedestrian Subways (No)</td>
<td>27</td>
<td>5</td>
<td>24</td>
<td>56</td>
</tr>
<tr>
<td>Estimated Cost (Rs. Cr.)</td>
<td>1317</td>
<td>674</td>
<td>656</td>
<td>2647</td>
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</table>
3. Mumbai Metro Master Plan

DMRC prepared in May 2003 a Master Plan for Metro System for Mumbai with proper connectivity to neighboring areas like Thane, Navi Mumbai, Vasai-Virar etc.

The main objective is to provide a rail based mass transit connectivity to people within an approach distance of 1 to 2 K.m. & to serve the areas not connected by existing Suburban Rail System.
3. Metro Rail Master Plan

Total Length : 146.5 km
Total Estd. Cost : Rs.19,525 Cr.
Implementation : in 3 Phases

Phase-1
Versova-Andheri-Ghatkopar
11 Km. - In progress - 2007-2010

Charkop-Bandra-Mankhurd
32 Km. - Recently awarded - 2009-2014

Colaba - Mahim
20 Km - Project prepared
4. Monorail in MMR

- MUTP, Mumbai Metro Project cater to high demand corridors
- Monorail to act as a feeder to them, and where others are not feasible
- 20 Km. 1st Corridor from Jacob Circle-Wadala in progress
5. Skywalks

- At Railway station areas and congested locations
- 50 km of Skywalks proposed @ Rs 600 Cr.
- Pilot project completed at Bandra (East) in Aug ’08 - over 1 lakh users a day
- 37 works awarded, all are completed or nearing completion
Special Projects
Slum sanitation in MMR
Nirmal MMR Abhiyan

- The Central Government decided to eradicate the practice of open defecation by 2009.

- Following the above, MMRDA undertook slum sanitation programme on mission mode in September 2007

- To construct Community Toilet Blocks with Community Participation in urban areas in MMR (excluding Mumbai & Navi Mumbai),

- Grants by MMRDA, implementation by Municipalities, with help of NGOs

- **Current Status**
  - 24,000 units proposed @ Rs. 248 Cr.
  - 20,000 units completed
  - 4,000 units in progress
Rehabilitation of the Project Affected Families

- R & R necessitated by infrastructure development projects
- 55,000 units constructed for MUTP, MUIP and Mithi River development projects
- Residential and Commercial and units and community facilities provided
- Post rehabilitation - livelihood and maintenance helped
- With the experience, MMRDA facilitates R&R for other agencies, for vital projects like Airport Authority
Rental Housing

- **Policy**: adequate housing for Lower Income Groups is an objective Maharashtra State Housing Policy
- **Scheme**: MMRDA to provide 5 lakh rental units in 5 years
- **Area**: Small tenements of 160 sq.ft. carpet area
- **Delivery**: By land owner, agency approved by MMRDA, or MMRDA itself; 3-4 FSI granted subject to 1.0 FSI utilised for rental units to be handed over free of cost to MMRDA
- **Eligibility**: min income of Rs. 5000/month, domicile status in Maharashtra, no other house in MMR

**Current status**:
- 11 projects with 172,000 rental units given clearance
- 2 in progress
Thank you