



PLANNING OF METROPOLITAN CENTRES-

Methodology for preparing Master Plan

Master Plan- Introduction

- Master Plans prepared served as an instrument for ;
- --Regulating physical development
- - rationalizing land use pattern
- - promoting orderly development
- Better implementation of urban development programs
- Master plans/ Development plans- synonymous- used interchangeably-having same meaning
- Scope, procedure, objectives defined in legal framework
- -called statutory instrument- meant to control, regulate, direct, promote, sound rational development /re-development of an urban area to achieve maximum- economic, social, economic benefits
- Master Plan generally includes single unified land use plan and regulatory guidelines to ensure orderly/planned development
- -- having long term horizon of 20-25 years

Master Plan- Introduction

- **Master Plans;-Concept originated from British experience**
- **- Third five year plan- post independence – recognized the need /importance of preparing master plans for urban areas**
- **-Foundation of panned development laid- by Sir Patrick Geddes visit to India in 1915**
- **-First master plan prepared for Delhi- 1961-82**
- **Other cities followed Delhi Model**
- **Master Plans prepared under State Town Planning Acts- land being state subject**
- **- primarily allocates land for different uses- including residential, commercial, institutional, roads, highways, public purposes- based on defined norms and standards for the existing and future population**
- **-- for promoting planned and orderly development of urban areas**
- **-to ensure availability of all basic amenities and facilities to all the citizens including poorest of the poor**

Defining Master Plan

- A **master plan** is a;
- -- dynamic
- -- long-term **planning** document that
- -- provides a conceptual layout
- -- to guide future growth and development
- -- of a Human settlement
- **Master Plan** is a;
- --Statutory instrument for
- --controlling, directing , regulating and promoting
- - the sound and rational development and/or
- Re- development of an urban area
- - with a view to achieving
- maximum economic, social, environmental and aesthetic benefits

Master plan includes'

- analysis,
- recommendations, and proposals for the
- settlement population, -- economy,
- housing,-- transportation, environment, ecology
- community facilities, and
- land use

Master Plan-Need

- Master plan -- an appropriate/ scientific tool for promoting systematic & planned growth of city
- For promoting, guiding and rationalizing-- future growth/ development of urban centers.
- Promoting planned development
- Endorsing growth in the desired direction,
- Quantifying the future population
- Quantifying the infrastructure requirement
- Estimating infrastructure investment
- --promoting economic development,
- -- improving service delivery
- Providing basic/essential amenities to people.

Master Plan- Objectives

Promotes systematic & planned growth of city by:

(i) Identifying existing gaps in physical/social infrastructure & to bridge those gaps

(ii) Making assessment/suggesting strategies for economic development.

(iii) Leveraging economy

(iv) Rationalizing land use and their interrelationships

(v) Minimizing haphazard and uncontrolled growth of town/cities

(vi) Minimizing haphazard and uncontrolled growth of activities– commercial, industrial, residential etc

Vii, Achieving planned growth/ development -- to provide healthy living environment

(viii) Promoting better urban governance/resource generation.

(ix) Rationalizing orderly movement of traffic/transportation

(x) defining area for network of various services.

Master Plan- Objectives

(xi) Indicating spatial distribution of physical/social infrastructure for optimum use

(xii) Ensuring systematic, balanced/integrated development

(xiii) Framing mechanism/strategies for resolving core area problems

Xiv) Identifying/preserving Heritage

Xv) Ensure growth of cities take place according to prescribed norms and standards

Xvi) Creating adequate housing stock and equitable spatial distribution of social and healthcare institutions

Xvii) Eliminating slums and squatter settlements in the city

xvii) Making informal sector integral part of urban planning

Xviii) Making land market affordable, cost-effective and efficient

Xix) Rationalizing land use planning to minimize travel

Xx) Controlling residential overcrowding by redefining densities and planning of housing

Xxi) Providing land based solutions to rationalize traffic congestion

XXII) Making cities compact

Xxii) Promoting accessibility not mobility

Preparing Master Plan- Scope

- **Preparing Master Plan** covers the following aspects:
- **Collection and review of available data, documents, reports, etc.**
- **visiting city**
- **Studying demand, supply and identifying gaps in service delivery. ,**
- **identifying strengths, weaknesses, opportunities and threats,**
- **preparing Existing Land use Plan, thematic maps,**
- **• Reviewing ongoing / proposed development projects and other Govt schemes**
- **• Formulating of vision and working out strategy**
- **• Preparing of detailed Development Plan including approximate location and extent of land uses such as residential, industrial, commercial, etc.**
- **Preparing Proposed Land use Plan and Zonal Development Plan etc.**
- **Defining Development Control Regulations.**
- **Evolving framework for implementation of the Master Plan/ Development Control Regulations •**
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Preparing Master Plan- Scope

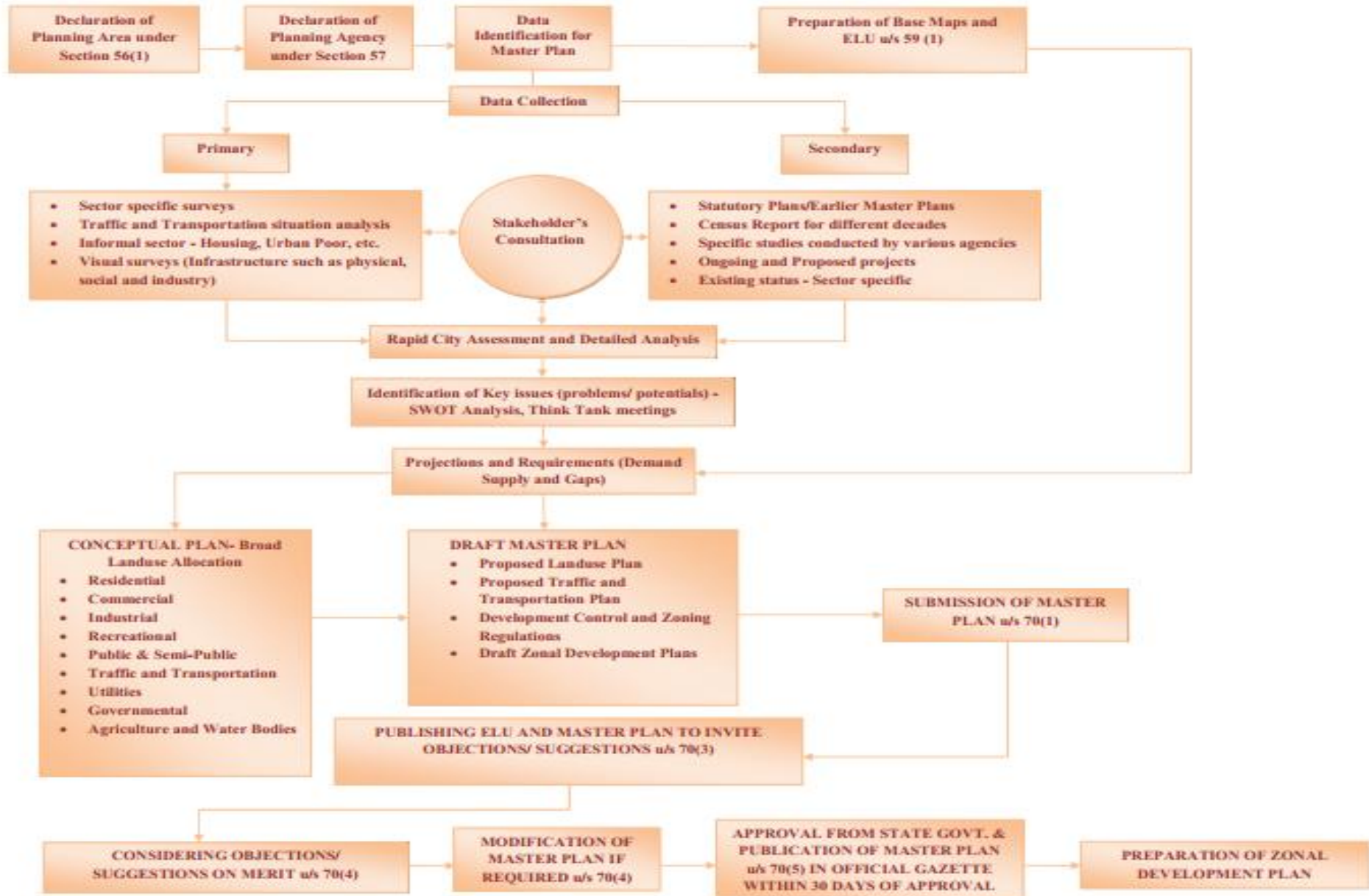
- **Preparing Master Plan** covers the following aspects:
- **Prioritizing** projects and formulation of Investment Plan
 - **Formulating** Investment Plan with appropriate financing strategies.
 - **Focusing** on reforms to be carried out at the State/ District level in consonance to promote planned interventions
- **Master Plan** can be prepared for ;
 - -- new town
 - --existing town
 - --Additional Area to be added/extension to any city
- **Master Plan** comprises of –
 - -- A report detailing the -- study, analysis, finding and proposals and
 - **Maps**
 - --- Existing land use plan
 - --- Proposed Landuse Plan
 - --- plans depicting various studies carried out for city
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APPROACH TO THE MASTER PLAN

- Approach to the preparation of Master Plan would involve :
 - --outlining the critical issues of city development,
 - -- undertaking a demand-supply gap survey and analysis
- Making Projections for the next two decades
- -- formulating management framework including /strategies for future growth and development to include :
 - Defining options for promoting rational development
 - --through the introduction of a regulatory mechanism
 - --realistic planning and
 - -- management interventions
 - --within overall regulatory and institutional framework.

PREPARING MASTER PLAN

Fig no. 1 METHODOLOGY



METHODOLOGY FOR MASTER PLAN

Various stages of preparation of Master Plan include:

1 Taking an administrative decision regarding preparing master plan of any settlement

2. Identifying ,defining ,notification of Local Planning Area

3 Identification and notification of Planning Agency

4.- defining procedure, aims, objectives, stages, legal requirements of master plan

. 5,Preparation of Existing Land Use Plan- ----

--Satellite Imageries,

--Survey of India maps

--Physical Ground Surveys

--Revenue maps

-- other available documents

- Ground truthing

METHODOLOGY FOR MASTER PLAN

· 6 Study, assessment and analysis of Local Planning

Area/urban areas in terms of--

- Regional Setting**
- Historical Evolution**
- Demographic Studies**
- Socio-Economic Studies**
- Housing**
- Slums & Poverty**
- Trade and commerce**
- Industries**
- Traffic & Transportation**
- Physical Infrastructure (Water Supply, Sewerage, Solid Waste Management, electricity, roads etc**
- Social Infrastructure (Educational, Medical, Recreational, Miscellaneous)**
- Environment , Heritage and Tourism**
- Growth Pattern**
- Land use**
- Available studies and report**
- Ongoing and Proposed Projects**

METHODOLOGY FOR MASTER PLAN

7. Involving Stakeholders--- through:

FGD's and personal interviews

- *Meeting with experts*
- *Think Tank meetings*
- *NGOs/ Private agencies/ Public Agencies/state Departments*
- *Public Representatives,*
- *Conducting surveys*

8. Identifying Gaps , Issues and Problems of services, infrastructure, amenities, congestion, housing, pollution, traffic and transportation social, economical, physical, environmental etc through

- *– based on existing population-*
- *-- Comparison with available norms and standards*
- *-- Spatial Distribution*
- *-- Quantitative and Qualitative analysis*

METHODOLOGY FOR MASTER PLAN

- 9. **Carrying S.W.O.T analysis based upon--**
 - *Studies made and analysis carried out*
 - *Focused group discussions*
 - *Discussions in think tank*
 - *Discussions with experts*
 - *Discussions with officials working at local level*
 - *City Assessment*
 - *Surveys carried out*
 - *Stakeholders/NGOs' Perception*
 - *Identified problems and gaps*
 - *Identified major socio-economic drivers*

METHODOLOGY FOR MASTER PLAN

- **10 Defining a vision for city-** based on **SWOT analysis** and
- **11. Missions to achieve the Vision**
- **12. Working out population for next 20 years** – in a slab of 5 years
- **13 Working out City requirements- for next 20 Years based on:**
 - – *Population Projections made,*
 - – *Norms and Standard prescribed*
 - – *Broad Land use Requirements for different uses*
 - – *Existing gaps already identified*
 - – *Additional land requirement for population projected to be added*
- **14 Carrying out land suitability analysis of the planning area**
- **15. Defining Conceptual Framework through:**
 - -- *Defined Vision for future growth and development*
 - -- *Identified broad objectives*
 - -- *Laid down mission statements for critical areas*
 - -- *Working out traffic and transportation network*
 - - *Land suitability analysis carried out*

METHODOLOGY FOR MASTER PLAN

- - identifying areas to be;
 - -- preserved
 - - conserved
 - - heritage area- manmade and natural
 - -- eco-sensitive areas- forest area/ watershed/ reserve park
 - - area prone to flooding/disasters- low lying area
 - -area fit for development
 - - area under statutory restrictions
 - - used for defence
 - - area unfit for urbanization
 - - area fit for urbanization
 - - land suitability for different uses- residential, commercial, industrial, institutional, wholesale trade etc
 - -- Existing/proposed road network
- **16. Preparation of alternatives--Concept Plans**

METHODOLOGY FOR MASTER PLAN

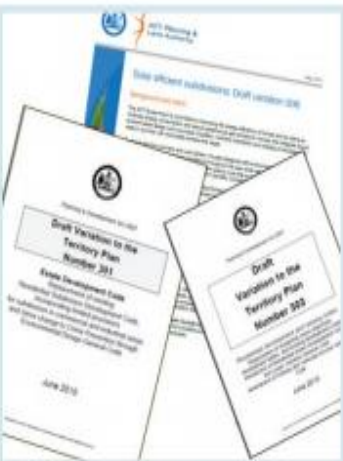
- **17. Evolving Draft Master Plan – Involving Proposed Land Use Plan /Traffic & Transportation Plan along with Development Control Regulations (D.C.R)**
 - - *Based on existing land use plan*
 - - *critical areas,*
 - - *growth drivers*
 - - *areas to be preserved, conserved and promoted, heritage areas*
 - — *land use analysis, land suitability analysis etc*
 - -- *Studies and assessment made*
 - — *Gaps and problems identified*
 - · *Stakeholders' perception*
 - ---*Objectives/ vision/ Mission framed*
 - · *Future population growth*
 - — *Future infrastructure requirement*
 - – *Available land for development*

METHODOLOGY FOR MASTER PLAN

- **18. Approval of draft master plan-- from competent authority and state government**
- **19 Notification of Draft Master Plan for Inviting Public / parastatal agencies --Objections/ Suggestions**
- **20 Considering Public Objections/Suggestions**
- **21 Amending draft master plans based on;**
- **-- suggestions made and-- objections received**
- **22. Approval of amended draft master plan from Master Plan- from competent authority and state government**
- **23 Notification of approved Master Plan-**
- **24 Evolving Zonal Plans based on Proposed Land Use**
- **25 Implementation of the Master plan**
- **26 Revision of the Master Plan after every 10 years**
- **27 New Master Plan to be prepared after 20 years of framing**

How is a master plan implemented?

After a master plan is endorsed by government, implementation can commence. Implementation may involve:



Territory Plan variation

For many centres a variation to the Territory Plan will be necessary. In some instances a precinct code with specific details relating to the centre will be introduced into the Territory Plan. The precinct code will provide the opportunity for the building heights and land uses outlined in the master plan to be realised by lease holders.



Sale of territory owned land

Some territory owned land may be identified as appropriate to sell to a developer. Other government agencies take this land to market for sale.



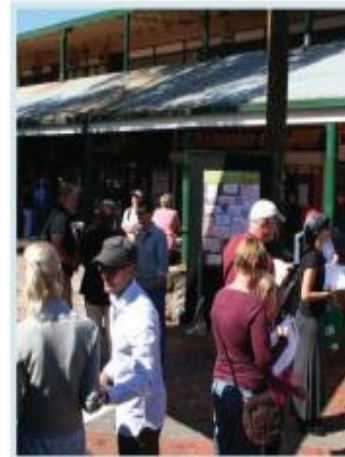
Capital works

Infrastructure and public space improvements may be required. This will involve various government agencies, and funding through future government budgets.



Industry opportunities

It is up to the business community to take advantage of opportunities identified within a master plan. Often many of the proposed changes are on existing developed sites, therefore a master plan is likely to take a number of years to be realised.



Ongoing community engagement

The community is involved at each stage of development, either through consultation on changes to the Territory Plan or notification of development applications.

MASTER PLANS - Limitations

- Lengthy, cumbersome time consuming process--Requires lot of time/resources- manpower
- Requires large financial allocation
- Rigid- lacks flexibility
- Based on only physical aspect--defining land use mechanism
- -sometimes ignores large social, economic, environmental issues
- emphasizes plan preparation
- Lack of availability of city centric accurate data
- Prepared mostly using secondary data; Only few surveys are done
- Absence of stakeholders participation
- Lack of transparency
- Lack of trained manpower/ technology
- Inaccurate base plan/ existing land use plan
- Mismatch between plan proposals and ground realities

MASTER PLANS - Limitations

- Large number of disputes in plan interpretation
- Lack of involvement of specialized agencies/expertise
- Plan preparation and plan implementation divorced
- Freezes city/ Land use for 20 long years
- Unable to meet emerging urban challenges
- Unable to address urban dynamism
- Emerged as major road block in planned development
- Leads to emergence of Slums/ haphazard development
- Does not address needs of the informal sector
- --document of exclusion
- --Emerged as elitist in nature
- --Major source of corruption/ manipulation

CHANGING CONTEXT OF MASTER PLANS

- Need to make Master Plan a better Master Plan by:
 - -- changing its intent, content, approach and philosophy
 - -- making it people/city centric
 - -- involving participatory approach
 - -- bringing flexibility
 - -- preparing it in a short time,
 - --structure defined through
 - -- road network,
 - --infrastructure network and
 - ---detailed planning / development guidelines

CHANGING CONTEXT OF MASTER PLANS

- Master Plan to be promoter of Planned development rather than controller of development
- Master plan to make city compact
- Plans prepared with energy efficiency as focus
- To reduce carbon footprints of city
- Promoting mixed rather than pure land use planning
- Promoting Green Transportation-- pedestrianisation, cycling, public transport as the-- preferred mode of transportation
- Promoting transit oriented development (TOD) to minimise travel--Minimising use of Agricultural land
- minimum land under urbanization-Promote 24x7 use of land--

CHANGING CONTEXT OF MASTER PLANS

Promoting self-sufficiency in day to day needs

- Promoting Decentralization
- Providing open spaces on defined norms
- Planning city on well defined norms and planning parameters--Planning for people rather than vehicle
- Planning for accessibility rather than mobility
- Promoting water sufficiency
- Promoting-- reduce, recycle and reuse in city
- Making informal sector integral part of planning process
- Promoting Green Energy in city- Solar, Wind, Bio-mass, Geo-thermal energy
- Preparing Master Plan using nature as the basis- SUN, SPACE, VERDURE

MANIFESTO

- build *less*
- build *on less*
- build *in and out*
- build *slender*
- build *robust*
- build *light*
- build *leftover*
- build *ordinary*
- build *safe, not sterile*
- build *local*
- build *interim*
- build *hope, not ambition*
- build *need, not greed*
- build *joy, not ego*

slim the program

*reduce the footprint, grow trees,
dissolve barriers between inside and outside*

*reduce mass, get slim, make natural light an
lets go to ruin gracefully, reduce the need for*

*lightweight structures, layers and skin: touch
adapt the existing, bring history to life*

*seek out the beautiful in the everyday: regular
kill hazard, don't kill joy*

*feed off local material, local skills
affordable now, grow later*

*architecture should offer hope to grow, not
necessity is cool, excess sucks*

the difference could be subtle

Thank You



Thank You