

# Rationalization of Regional Plan Preparation Process in Indian Context

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## ABSTRACT

*In the Indian context, there are different Regional Plans prepared for regions based on various aspects depending on peculiar characteristics of the region. There are varying guidelines and provisions for preparation of Regional Plans including Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, Town and Country Planning Organization (TCPO) provisions, Maharashtra Regional and Town Planning Act, 1966, the 73rd and the 74th Constitutional Amendment Acts, 1992 and National Capital Region Planning Board Act, 1985, etc. These guidelines and provisions have varying process and contents as far as Regional Plan preparation is considered. Analytical Hierarchy Process has been used to identify and prioritize various parameters pertaining to Regional Plan preparation process and its contents. The following paper recommends guidelines and suggestions for a rationalized Regional Plan preparation process.*

**Keyword:** - Regional Planning, Regional Disparity, Regional Planning Process

## 1. INTRODUCTION:

In India, due to its vast size and various cultures present, there exists disparity at various levels. The exploitative nature of British Colonial rule either created or accentuated Regional Disparities. The Planning in independent India has also not been able to remove these disparities. Planning process is not uniform.

As part of Planning Interventions, over the years, there have been various efforts towards planning and development, and different states have incorporated various planning processes. Maharashtra State has Maharashtra Regional and Town Planning (MR&TP) Act, 1966 which has provision for preparation of Regional Plan. There is also provision for District Planning Committee (DPC) and Metropolitan Planning Committee (MPC) in 73rd and 74th Constitutional Amendment Act (CAA). Each region also prepares its own Development Plan.

The following paper focuses on Regional Planning in India and various Regional Planning process have been studied. Analytical hierarchy process has been used to identify and prioritize various parameters pertaining to Regional Plan preparation process and its contents. Based on these parameters, guidelines have been recommended for a standardized Regional Planning Process.

### 1.1 Region

A region is identified by specified criteria, and its boundaries are determined by these criteria. [17]

Region is a contiguous geographical area, which has a fair degree of uniformity, in administration, economic linkages or natural environment. It is relatively a large area, with hierarchy of settlements and varying landscape. (URDPFI, 2015)

#### 1.1.1 Identification of regions

- Special Regions (each one being unique)
- Generic Regions (containing a number of similarities)
- Synthetic Regions (made up of a number of contrasting though related parts)

#### 1.1.2 Types of Region-

- Homogenous Regions- based on the similarity of one or two or combination of phenomena, alike in all its parts; emphasis similarity-formal regions
- Nodal Regions-based on the centrality-emphasis interdependence-functional regions
- Programming/ Planning Regions-based on administrative convenience-emphasis uniformity and convenience, Planning and Programming Regions. [17]

#### A) Regions in Regional Economics

1. Homogeneous Regions of various hues. Formal regions.
2. Nodal, polarized, heterogeneous, or functional regions.
3. Planning and Programming Regions.

#### B) Regions in Multi-level planning

1. Macro region
2. Meso Region
3. Micro region

#### C) Regions in in the 'stages-of-development' analysis

1. Developed Region
2. Backward and Depressed Region (Vestigial regions also)
3. Neutral and Intermediate Regions.

#### D) Regions as per the activity status analysis

1. Mineral regions
2. Manufacturing regions
3. Urban and or Congested regions

## 2. REGIONAL PLANNING IN INDIAN CONTEXT

At the time of independence, there was a lot of Regional Disparity and socio economic differences present. To address the issue Government used Regional planning and development approach. Based on this approach, Regional plans were prepared for identified regions.

## 2.1 Timeline

Over the years, various laws have been enacted in the country to ensure proper Regional Planning.

- 1962- Central Town and Country Planning Organization or TCPO drafted the Model Town and Regional Planning and Development Law in 1962, which formed the basis for various States to enact Town and Country Planning Acts, with modifications to suit local conditions.
- 1966- The Maharashtra Regional and Town planning Act
- 1985- This model Law was revised by TCPO in year 1985 as “Model Regional and Town Planning and Development Law” to enact a Comprehensive Urban and Regional Planning Legislation in all the States and UT’s.
- Based on the Model Regional and Town Planning and Development Law, 1985, many states enacted their own Town and Country Acts.
- 1996- First UDPFI Guidelines were prepared in 1996 in consonance with the provisions of 74th CAA.

Part –II contained suggested changes required in Model Regional and Town Planning and Development Law (Volume 2A) and modifications in Town Planning Acts of Maharashtra { Volume 2B) and Gujarat (Volume 2C) The objective of the Volume 2A and B was to guide the State Governments to incorporate the provision especially for preparation of Metropolitan and District Plan.

However, most of the State Governments did not incorporate the provisions in the Town and Country Planning Acts as suggested by UDPFI Guidelines, 1996. An attempt was made under the JNNURM, wherein, one of the reform was to comply with 74th CAA with reference to constitution of both Metropolitan Planning Committee (MPC) and District Planning Committee (DPC)

## 2.2 Regional Planning Process

As part of research, five Regional Planning processes have been focused on

- Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines
- Model Law by Town and Country Planning Organization (TCPO)
- The Maharashtra Regional and Town Planning Act, 1966
- The 73rd and the 74th Constitutional Amendment Acts, 1992
- National Capital Region Planning Board Act, 1985

When one looks at all the processes, there are differences as well as many similarities between the processes.

**Table - 1** : Comparative Matrix

	<b>(URDPFI) Guidelines</b>	<b>The 73<sup>rd</sup> And The 74<sup>th</sup> CAA, 1992</b>	<b>MRTP (1966)</b>	<b>NCR (1985)</b>
<b>Statuary body</b>	Guidelines, based on which each state can make their own laws	Provisions of Articles 243ZD of the constitution of India for district and	Maharashtra Regional and Town Planning Act, 1966	The National Capital Region planning board act, 1985, An Act to provide for

		prepare a draft development plan for the district. Article 243 ZE says that there shall be constituted in every Metropolitan area a <b>Metropolitan Planning Committee</b> to prepare a draft development plan for the Metropolitan area as a whole	An Act to make provision for planning the development and use of land in Regions established for that purpose and for the constitution of Regional Planning Boards [23]	the constitution of a Planning Board for the preparation of a plan for the development of the NCR. The Central Government may direct the board when needed [12]
<b>Planning Authority</b>			Regional Board ” or “ Board ” means a Regional Planning Board constituted under section 4 Regional Planning Committee ” committee appointed under section 10	Planning Committee formed, for assisting the Board in the discharge of its functions
			duty of a Regional Board— (a) to carry out a survey of the Region, and prepare reports on the surveys so carried out; (b) to prepare an existing-land-use map, and such other maps as may be necessary for the purpose of preparing a Regional plan; (c) to prepare a Regional plan; (d) to perform any other duties or functions as are supplemental, incidental or consequential to any of the foregoing duties, or as may be prescribed by regulations.	The functions of the Committee shall be to assist the Board in— the preparation and co-ordinated implementation of the Regional Plan and the Functional Plans; scrutinising the Sub-Regional Plans and all Project Plans to ensure that the same are in conformity with the Regional Plan. Recommendations to amend or modify Perform any function entrusted to it by the Board
<b>Region</b>	Region is a contiguous geographical area,	District area Areas with a population of 10 lakhs or more, a	Region ” means any area established to be a Region under section 3;	National Capital Region” means the areas specified in the Schedule

	<p>which has a fair degree of uniformity, in administration, economic linkages or natural environment. It is relatively a large area, with hierarchy of settlements and varying landscape. The planning regions could be classified under three heads:</p> <p>(a) Administrative Regions, which can be District Regions or Metropolitan Regions as per the recommendations of the 73rd &amp; 74th Constitutional Amendment Act,</p> <p>(b) Investment Regions, which can be new investment manufacturing zones, industrial and freight corridors, special investment regions etc. They could be identified under National Acts/policies,</p> <p>(c) Special regions, which are sensitive in terms of environment/ socio economic or political aspects.</p> <p>If region so identified is inter-state, all such states will need to prepare sub regional plans for their respective areas.</p>	<p>Metropolitan Planning Committee shall be constituted</p>	<p>the State Government may, by notification in the Official Gazette, establish any area in the State, by defining its limits, to be a Region for the purposes of this Act, and may name and alter the name of any such Region.</p>	
<p><b>Contents</b></p>		<ul style="list-style-type: none"> <li>• Plan prepared by the Municipalities and the Panchayats in the metropolitan area</li> <li>• Matter of common</li> </ul>	<p>Regional Board shall, carry out a survey thereof, prepare an existing-land-use map thereof, and other maps as are necessary for the</p>	<p>The Regional Plan shall be a written statement and shall be accompanied by maps, diagrams, illustrations and descriptive matters, necessary</p>

		interest between the Municipalities and Panchayats including coordinated spatial plans of the area	purpose of preparing the Regional plan	for the purpose of explaining or illustrating the proposals
	<p>1. Introduction of the Region</p> <p>2. Analysis of regional resources- Physical setting Geography of the Region Demography (Region and Sub-region wise) Settlement pattern Transportation Physical and Socio Economic linkages Social Infrastructure Physical Infrastructure Heritage &amp; Tourism Economic activity and Fiscal policy Shelter Environment</p> <p>3. Projected requirements</p> <p>4. Major proposals and projects</p> <p>5. Implementation Plan</p>	<p>preparing the draft development plan</p> <p>Planning according to spatial particularity;</p> <p>(c) Sharing of water and other physical and natural resources;</p> <p>(d) Integrated development of infrastructure and environmental conservation;</p> <p>(e) extent and type of available resources whether financial or otherwise;</p>	<ul style="list-style-type: none"> <li>• Allocation of land for different uses,</li> <li>• Reservation of areas for open spaces, gardens, recreation, etc.</li> <li>• Transport and communications</li> <li>• Public utilities &amp; amenities like water supply, drainage etc.</li> <li>• Reservation of sites for green field development</li> <li>• Preservation, conservation &amp; development of areas of natural scenery, forest etc.</li> <li>• Heritage preservation</li> <li>• Areas for military &amp; defence purposes</li> <li>• Prevention of erosion &amp; afforestation, reforestation &amp; other environmental issues</li> <li>• Proposals for irrigation, water supply, flood control etc.</li> <li>• Distribution of population</li> </ul>	<p>Indicate the land use</p> <ul style="list-style-type: none"> <li>• the policy in relation to land-use and the allocation of land for different uses;</li> <li>• the proposals for major urban settlement pattern;</li> <li>• the proposals for providing suitable economic base for future growth;</li> <li>• the proposals regarding transport and communications including railways and arterial roads serving the National Capital Region;</li> <li>• the proposals for the supply of drinking water and for drainage;</li> <li>• indication of the areas which require immediate development as “priority areas”;</li> <li>• Any other matter related to the planning and development of NCR</li> </ul>
<b>Procedure</b>	<ul style="list-style-type: none"> <li>• Development of aim and objectives</li> <li>• Identification of site needs</li> <li>• Identification of projected needs</li> <li>• Plan formulation</li> <li>• Inclusive planning</li> </ul>		<p>First a draft regional plan will be available for review.</p> <p>Every Regional plan shall be submitted to the State Government together with all connected documents, maps and plans for approval.</p>	<p>Before preparing any Regional Plan, First a draft Regional Plan will be published, inviting objections and suggestions until a specific date.</p> <p>Local authority, make any representation with respect to the draft Regional Plan.</p>

	<ul style="list-style-type: none"> <li>• Statutory obligations</li> <li>• Decentralization of plan approval process</li> <li>• Peoples participation</li> <li>• Plan modification</li> <li>• Review and revision of plans</li> </ul>			
<b>Revision</b>	The process and time frame varies from State to State. Plan evaluation after every five years must be built in as permanent process and be done.		State Government, after a Regional plan has come into Operation, after 10 years can revise the plan and form a regional board in case one is not there.	After every five years from the date of coming into operation of the finally prepared Regional Plan, the Board shall review.
<b>Land Acquisition</b>			Compulsory acquisition of land needed for purposes of Regional plan through <ul style="list-style-type: none"> <li>• Paying an amount</li> <li>• Or giving Floor Space Index (FSI) or Transferable Development Rights (TDR) against the area of land surrendered free of cost</li> <li>• Under Land Acquisition Act, 1894</li> </ul>	the acquisition of land or the determination of any right or interest in, or in relation to, any land or other property, where necessary to give effect to any Regional Plan, Functional Plan, Sub-Regional Plan or Project Plan, shall be made by the Government of the concerned participating State, or, as the case may be, the Union territory, in accordance with the law for the time being in force in that State or Union territory.

### 3. NEED FOR RATIONALIZATION OF REGIONAL PLANNING PROCESS

#### 3.1 Need of the study

One can observe that there are different planning processes being practiced in India, based on the state, region, area, need etc. In some cases plans are prepared but there is no proper implementation mechanism. At times planning board is formed for plan formulation but it is dissolved after plan preparation.

There cannot be one common format for Regional Planning as each region has its own specific needs and various interventions are needed to address the issues. Only few states have made Regional Planning statutorily binding, while in many states there is no specific law and thus no Regional Planning. In some areas there are Development plans prepared as well as Regional plans but at times they do not complement each other.

Based on the study, relevant parameters pertaining to Regional Plan Preparation Process and contents have been identified for addressing disparity in development at Regional level.

### 3.2 Regional Plan Preparation Process Parameters

1. Statutory process (defined by the governing body, legislative order)
2. Regional development authority (from start till implementation)
3. Functions and powers of regional development authority (should be clearly defined)
4. Region delineation and demarcation
5. Scale of region (guidelines)
6. Standardization of procedure
7. Scope for involvement of stakeholders
8. Monitoring and revision of Regional plan

### 3.3 Regional Plan Content Parameters

1. Physical Infrastructure- Transport, water supply, sanitation, Regional level solid waste management etc.
2. Social Infrastructure- Education/ health, other required (Police, Fire, etc.)
3. Economic- Primary (Agriculture, fishing, mining, forestry, quarrying ), secondary (manufacturing, processing, and construction), tertiary (service)
4. Ecology and Environment- Land, forest, water, air and natural resources
5. Settlement pattern
6. Intra and inter Regional connectivity/ inter dependence
7. Other aspect- Tourism- destination, Administration- function, Strategize- location, trade and commerce, tribal settlement etc.
8. Resource analysis and mobilization

## 4. ANALYTICAL HIERARCHY PROCESS

### 4.1 Analytical Hierarchy Process

A decision making method that compares multiple alternatives, each with several criteria to help select the best option. The Analytic Hierarchy Process (AHP) is a method for organizing and analyzing complex decisions, using math and psychology. It was developed by Thomas L. Saaty in the 1970s. [15]

When finding decisions to complex problems with high stakes, AHP is a very useful tool. It stands out from other decision-making techniques as it quantifies criteria and options that traditionally are difficult to measure with hard numbers. AHP helps decision makers find a decision that best suits their values and their understanding of the problem instead of prescribing a "correct" decision. By having all stake holders weigh in, it ensures that there are varied criteria evaluation, as various divisions will value criteria differently.

Derivation of the weights has been done using AHP Software. Analysis has been carried out using web based AHP software on: <http://bpmsg.com>; Created by: K. D. Goepel [1]

### 4.2 Survey Format: Questionnaire for Pair wise Comparison

Questionnaire is based on pair wise comparison where each of the two components of a hierarchy are to be compared on a *Saaty* scale.



### SURVEY QUESTIONNAIRE

Pairwise comparison of criteria for standardised Regional Planning process addressing Regional Disparity

Name of Respondent- .....

Email Id- .....

Contact number- .....

Profession- .....

Professional experience in relevant field- <5 years [ ], 5-10 years [ ], 10-15 years [ ], 15-20 years [ ], 20-25 years [ ], >25 years [ ] .....

The Fundamental Scale for Pairwise Comparisons		
Intensity of Importance	Definition	Explanation
1	Equal importance	Two elements contribute equally to the objective
3	Moderate importance	Experience and judgment moderately favor one element over another
5	Strong importance	Experience and judgment strongly favor one element over another
7	Very strong importance	One element is favored very strongly over another; its dominance is demonstrated in practice
9	Extreme importance	The evidence favoring one element over another is of the highest possible order of affirmation
Intensities of 2, 4, 6, and 8 can be used to express intermediate values. Intensities of 1.1, 1.2, 1.3, etc. can be used for elements that are very close in importance.		

Kindly tick mark your opinion about the relative importance of the parameters and sub-parameters given on both sides of the scale as shown below. Please tick mark on the number of your choice on each scale.

Option 1									Option 2								
9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	

#### 4.3. Respondents of the Questionnaire

Number of Respondents for the expert opinion survey is 10. The experts have been selected based on their Experience in Regional Planning in professional as well as academic work.

**Table - 2 :** Experience in: Regional Planning in professional as well as academic experience

Sr. No	Professional experience in relevant field	No. of respondents
1.	More than 20	4
2.	15-20	2
3.	Less than 15	4

**4.4 Result for Analytic hierarchy process (AHP) approach for assessment of Regional Planning process in India- Planning process**

- Objective - Rationalize Regional Plan preparation process
- Result of Hierarchy: Planning Process
- No. of criteria- 8
- No. of participants- 6

Table	Criterion	Comment	Weights	Rk
1	Statutory process		11.6%	5
2	Regional developm		10.5%	6
3	Functions & powe		11.6%	4
4	Region delineation		15.9%	1
5	Scale of region		9.8%	8
6	Standardisation of		10.4%	7
7	Scope for involment		15.7%	2
8	Monitoring & revisi		14.5%	3
9		for 9&10 unprotect the input sheets and expand the	0.0%	
10		question section ("+" in row 66)	0.0%	

  

Result	Eigenvalue	lambda:	8.145
	Consistency Ratio	0.37	GCI: 0.05
			CR: 1.5%

**Fig. 1** Screenshot of AHP Analysis using web based AHP software

Name		Weight	Date	$\alpha$ : 0.1	CR: 11%
		Criteria		more important ?	Scale
i	j	A	B	A or B	(1-9)
1	2	Statutory process	Regional development	A	1
1	3		Functions & powers	B	3
1	4		Region delineation	A	1
1	5		Scale of region	A	1
1	6		Standardisation of	A	1
1	7		Scope for involvement	A	3
1	8		Monitoring & revision	B	3
2	3		Regional development at	Functions & powers	A
2	4	Region delineation		A	1
2	5	Scale of region		A	5
2	6	Standardisation of		A	5
2	7	Scope for involvement		A	1
2	8	Monitoring & revision	B	3	
3	4	Functions & powers	Region delineation	A	5
3	5		Scale of region	A	5
3	6		Standardisation of	A	3
3	7		Scope for involvement	A	1
3	8	Monitoring & revision	B	3	
4	5	Region delineation	Scale of region	A	3
4	6		Standardisation of	A	3
4	7		Scope for involvement	A	1
4	8		Monitoring & revision	B	5
5	6	Scale of region	Standardisation of	B	3
5	7		Scope for involvement	B	3
5	8		Monitoring & revision	B	5
6	7	Standardisation of proces	Scope for involvement	A	1
6	8		Monitoring & revision	B	5
7	8	Scope for involvement of	Monitoring & revision	A	1

Fig. 2 Screenshot of AHP Analysis Process using web based AHP software

Matrix	Statutory process	Regional development authority	Functions & powers	Region delineation	Scale of region	Standardisation of process	scope for involvement of stakeholders	Monitoring & revision of regional plan	0	0
	1	2	3	4	5	6	7	8	9	10
Statutory process	1	1 3/5	1	3/4	1	1	4/5	2/3	-	-
Regional development	5/8	1	5/8	5/9	1 1/2	1 3/5	2/3	2/3	-	-
Functions & powers	1 1/9	1 4/7	1	7/9	1 1/6	1	2/3	3/5	-	-
Region delineation	1 3/8	1 4/5	1 2/7	1	1 1/8	1 3/5	1	1 1/3	-	-
Scale of region	1	2/3	6/7	8/9	1	3/4	4/7	4/5	-	-
Standardisation of	1	5/8	1	5/8	1 1/3	1	5/6	5/7	-	-
Scope for involvement	1 1/4	1 1/2	1 1/2	1	1 3/4	1 2/9	1	1 1/3	-	-
Monitoring & revision of	1 1/2	1 1/2	1 2/3	3/4	1 1/4	1 3/7	3/4	1	-	-
0	-	-	-	-	-	-	-	-	1	-
0	-	-	-	-	-	-	-	-	-	1

**normalized principal Eigenvector**

- ( 11.57% )
- ( 10.52% )
- ( 11.61% )
- ( 15.85% )
- ( 9.82% )
- ( 10.42% )
- ( 15.67% )
- ( 14.55% )
- ( 0.00% )
- ( 0.00% )

Fig. 3 Screenshot of AHP Analysis Process matrix using web based AHP software

**4.4.1 Ranking**

Based on the analysis following ranking has been derived

1. Region delineation and demarcation
2. Scope for involvement of stakeholders
3. Monitoring and revision of Regional plan
4. Functions and powers of Regional Development authority
5. Statutory process
6. Regional development authority
7. Standardization of procedure
8. Scale of Region

**4.5 Result for Analytic Hierarchy Process (AHP) approach for assessment of Regional Planning process in India- Contents of Regional Plan**

- Objective - Rationalise Regional Plan preparation process
- Result of Hierarchy: **Contents**
- No. of criteria- 8
- No. of participants- 7

Table	Criterion	Comment	Weights	Rk
1	Physical infra		17.4%	1
2	Social infra		14.6%	3
3	Economic		17.0%	2
4	Ecology & environ		9.1%	7
5	Settlement pattern		9.4%	6
6	Regional connectiv		14.4%	4
7	Other aspect		6.4%	8
8	Resource analysis		11.7%	5
9		for 9&10 unprotect the input sheets and expand the	0.0%	
10		question section ("+" in row 66)	0.0%	

  

Result	Eigenvalue	lambda:	8.121
	Consistency Ratio	0.37 GCI:	0.05 CR: 1.2%

Fig. 4 Screenshot of AHP Analysis using web based AHP software

Name		Weight	Date	$\alpha$ :	CR:	Consistency Ratio		
Kop Sir		1	08-03-2021	0.1	16%			
i	j	A	Criteria	B	more important ?	A or B	Scale (1-9)	
1	2	Physical infra	Social infra	Social infra	A	5	1	A1
1	3			Economic	A	3		
1	4			Ecology & environment	A	1		
1	5			Settlement pattern	A	3		
1	6			Regional connectivity	A	1		
1	7			Other aspect	A	3		
1	8			Resource analysis	A	3		
2	3			Social infra	Economic	Economic	A	
2	4	Ecology & environment	A			3		
2	5	Settlement pattern	A			5		
2	6	Regional connectivity	A			3	2	
2	7	Other aspect	A			3		
2	8	Resource analysis	A			3		
3	4	Economic	Ecology & environment	Ecology & environment	A	1		B1
3	5			Settlement pattern	A	3		
3	6			Regional connectivity	B	3		
3	7			Other aspect	A	3		
3	8			Resource analysis	B	3	3	
4	5	Ecology & environment	Settlement pattern	Settlement pattern	A	3		A1
4	6			Regional connectivity	B	3		
4	7			Other aspect	A	3		
4	8			Resource analysis	A	3	3	
5	6	Settlement pattern	Regional connectivity	Regional connectivity	B	5		A1
5	7			Other aspect	B	3		
5	8			Resource analysis	B	3		
6	7	Regional connectivity	Other aspect	Other aspect	A	3		A1
6	8			Resource analysis	A	1		
7	8	Other aspect	Resource analysis	B	3			

Fig. 5 Screenshot of AHP Analysis Process using web based AHP software

Matrix	Physical infra	Social infra	Economic	Ecology & environment	Settlement pattern	Regional connectivity	Other aspect	Resource analysis	0	0	normalized principal Eigenvector
	1	2	3	4	5	6	7	8	9	10	
Physical infra	1	1 1/2	1	2 2/7	1 2/3	1	2 1/2	1 5/9	-	-	17.37%
Social infra	2/3	-	3/4	1 3/4	1 2/3	1	2 1/3	1 5/8	-	-	14.57%
Economic	1	1 3/8	-	1 1/2	2	4/5	2 7/9	1 3/4	-	-	16.95%
Ecology & environment	3/7	4/7	2/3	-	5/7	2/3	1 4/5	6/7	-	-	9.15%
Settlement pattern	3/5	3/5	1/2	1 2/5	-	3/5	1 3/8	7/9	-	-	9.45%
Regional connectivity	1	1	1 1/4	1 1/2	1 2/3	-	1 1/2	8/9	-	-	14.37%
Other aspect	2/5	3/7	1/3	5/9	5/7	2/3	-	3/7	-	-	6.42%
Resource analysis	2/3	3/5	4/7	1 1/6	1 2/7	1 1/9	2 1/3	-	-	-	11.72%
0	-	-	-	-	-	-	-	-	-	-	0.00%
0	-	-	-	-	-	-	-	-	-	-	0.00%

Fig. 6 Screenshot of AHP Analysis Process matrix using web based AHP software

4.5.1 Ranking

Based on the analysis following ranking has been derived

1. Physical Infrastructure
2. Economic
3. Social Infrastructure
4. Intra and inter Regional connectivity/ inter dependence
5. Resource analysis and mobilization
6. Settlement pattern
7. Ecology and Environment
8. Other aspect

5. RECOMMENDATIONS

Planning Interventions- Regional Planning is a Planning Intervention, which helps in decreasing the disparity present in a Region. After research it was concluded that Maharashtra Regional Town and country planning act, covers almost all points and works as a good Planning mechanism, although it has a few lacunas, especially in terms of implementation mechanism.

Following guidelines have been suggested and recommendations have been framed based on the AHP analysis and majority point’s reference have been taken from existing MRTP act, NCR act and URDPFI Guidelines.



## 5.1 Planning Process

1. Standardization of procedure - A standardized process is very important, which ensures that planning takes place in an efficient manner.

- Establishment of Region
- Constitution of Regional Planning Board- formation of Regional Planning board through a statutory law. This ensures that it becomes legally binding.
- Survey of Region
- Identification of disparities
- Preparation of Draft Regional Plan
- Suggestions and objections
- Modifications- Reasonable opportunities to all persons affected of being heard
- Plan approval -Submission to state government
- Publication of Regional Plan and date of operation- Available for sale to public, Plan would come into operation not before 60 days from publication. Restriction on change of user or development
- Implementation
- Monitoring
- Evaluation and review
- Revision of Regional Plan

2. Statutory process - Statutory law or statute law is written law passed by a body of legislature.

An act should be passed by the government for formation of Regional authority and all the rules should be clearly mentioned, this ensures that the planning will take place as per law and everyone will have to follow the rules.

- Constitution of State Regional and Town Planning Board by the State Government for the purpose of advising on the delineation of the Region for the planned development. (MRTP)
- Directing the preparation of Regional Plans by the development authorities.
- Setting up of Regional development authorities for different urban and rural areas within the State to undertake preparation of Regional Plans and to enforce and implement them,
- Coordinating the planning and implementation of physical development programs.
- Provisions for permission to be granted for controlling and regulating the use and development of land within the jurisdiction of a local authority or the Collector, as the case may be.
- Numerous laws and policies made by the Central and the State Legislature and Governments impact spatial plans.

3. Regional development authority

- As per MRTP Act, a Regional Planning board for the specified region is formed and a notification is published in the official gazette.
- The members of the body are appointed by the government and includes persons with knowledge in the field as well as members from local governing body.
- Location of office of the board and name specified by the governing authorities.
- The authority formed should not be dissolved after plan preparation and it should be continued to oversee the implementation process. It should be from start till implementation and monitoring.

4. Functions and powers of Regional Development Authority

- Carry out a survey of the Region, and prepare reports on the surveys so carried out;
- Is entitled to relevant information from local officials, and its members may enter upon property for examination or survey
- Prepare an existing-land-use map, and such other maps as may be necessary for the purpose of preparing a Regional plan;
- To prepare a Regional plan;
- To perform any other duties or functions as are supplemental, incidental or consequential to any of the foregoing duties, or as may be prescribed by regulations.
- To co-ordinate the enforcement and implementation of the Regional Plan and ensure development plans of the region are also in line with the regional plan.
- To ensure proper and systematic programming by the local authorities in regard to project formulation, determination of priorities in the Region in accordance with stages indicated in the Regional Plan;
- Indicate the stages for the implementation of the Regional Plan
- Review the implementation of the Regional Plan

- To arrange for, and oversee, the financing of selected development projects in the Region through Central and State plan funds and other sources of revenue.

Source- MRTTP & NCR act

#### 5. Region delineation and demarcation

Region- An area having some characteristic or characteristics that distinguish it from other areas. A territory of interest to people and for which one or more distinctive traits are used as the basis for its identity. ([www.geographic.org/glossary.html](http://www.geographic.org/glossary.html))

Region is a contiguous geographical area, which has a fair degree of uniformity, in administration, economic linkages or natural environment. It is a relatively a large area, with hierarchy of settlements and varying landscape. (URDPFI, 2015)

Definition of Region is limited by the purpose. In terms of addressing Regional Disparity within a Region, a Region is marked based on the purpose, into homogenous units and to make the area more manageable.

- As per the Maharashtra Regional Town and Country planning act, Region is demarcated by the state government as per the need.
- As per Metropolitan Planning Committee, district boundary is used to delineate the area, which also makes it easy to handle the administrative part. When a district boundary is used, data is also available district wise.
- Usually a Region has a nodal point to which different parts are attracted in some ways. When delineating a region, these nodes should be carefully considered and their influence zone beyond the municipal limits should be taken into consideration.
- The final Region boundary should be notified by publishing a notification in the official gazette, with a map accompanying clearly showing the area boundaries.

#### 6. Scope for involvement of stakeholders

- It's important to have stakeholder's consultation in the planning process. At every stage there should be advisory committee, peoples representatives and citizens participation.
- Regional Planning board should constituent of members who are well versed in the field of planning and expert in the domain. Town planners, architects, engineers. Also there should be locally elected representatives from the local governing body to address the needs of the local area.
- At every stage, official notification should be published in the official gazette informing the citizens starting with the intention to prepare the plan, delineation of Region, draft Regional Plan should also be published, then there should be a call for objections and ample time should be given to stakeholders to review the draft plan, and raise objections, if any.
- The plan should also be in compliance with the Development Plans as well as local area plans, which also ensures all resources are used judiciously.
- At implementation stage there should be involvement of advisory committees, private sector participation and there should be focused group discussions.
- There should be a provision to receive feedback from the stakeholders which makes the planning authorities aware of the ground realities.

#### 7. Monitoring and revision of Regional plan

- There should be a permanent regional planning board which monitors the plan implementation and every 2 years a review meeting should be held which examines the regional plan and monitors the implementation plan.
- Every 10 years there should be a modification and revision of the plan as per need. For the same a notification should be issued in the official gazette and objections and suggestions invited from the stakeholders for the same. A draft modified regional plan should be published first, inviting suggestions and objections, then the modified plan should be forwarded for approval and based on the amendments final plan published.
- Revision should be approved by the local governing bodies and the development plan of the regions should also be taken into consideration.



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