

Governance in Regenerative Towns of Tomorrow

by

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The Environmental Framework and Governance

- Environmental sustainability is using the earth resources for habitat, Infrastructure, Economic activities and Transportation in such a way that coming generations inherit a cleaner, healthier and more sustainable planet.
- It is about reducing the Carbon footprint, Increasing Energy efficiency, Recycling waste water, segregating and recycling garbage, enhancing green cover ,nurturing our forests and facilitating the restoration of the ozone layer.

The Environmental Framework and Governance

Environmental Sustainability has a close relationship with the five elements of life: Air, Water, Energy, Sky or Space and Earth.

Each elements can be divided into two parameters and two indicators within each parameter.

- **A . Air related Group of parameters**
 - (i) Ambient air quality un the city.*
 - (ii) Intra-city transport modes and dedicated jogging/cycling tracks vis-à-vis roads/streets length in the context of impact on ambient air quality.*

- **B . Water related Group of parameters**
 - (i) Water supply, Rain water harvesting & dual piping system for water recycling in buildings.*
 - (ii) Sewerage, Industrial effluents & storm water drainage.*

The Environmental Framework and Governance

- **C. Energy(or 'Fire' by mythological connotation) related *Group of parameters***
 - (i) *Power generation and energy management.*
 - (ii) *Motor Vehicles*
- **D. Sky/Space('sky/ether' by mythological connotation) related *Group of parameters***
 - (i) *Green areas promoting photosynthesis in the city.*
 - (ii) *Emissions into the sky.*
- **E. Earth related *Group of parameters***
 - (i) *Built-up environment & solid waste management*
 - (ii) *Regional planning & the urban-rural continuum*

The Constitutional cum Administrative Framework & Governance

- The 73 and 74th Constitutional Amendment Acts
- The 12th Schedule of the Constitution
- The Town & Country Planning Acts
- The Periphery Control Act
- The Environmental Regulation Guidelines
- Gram Sabhas & Wand Committees
- Neighbourhood Groups & Locality Groups

Common Man & the Knowledge Society

- General Awareness
- Breathing life into Structures
- Government – Planner – Citizen Interface
- NGOs – Media – People Trinity

The Scientific & Technological Interface and Access to Information

- CSIR, National Laboratories
- NARSA
- National Surface Water Commission & National Ground Water Board
- Bureau of Energy Efficiency
- Model Building Bye-Laws
- Access to Information & Multi Disciplinary approach
- Developing an Interactive Platform

Why Planning?

Demystifying Planning for the common man

- A clean and healthy environment.
- A reasonably comfortable place to Live.
- A convenient place to Work.
- Short time of connecting from living place to workplace.
- A neighbourhood Dispensary & School.
- A Playing field and Park closely.
- A convenient place to shop.
- A few places of Recreation at a reasonable distance.
- A good quality of life.

What is a Regional Plan?

- A Regional Plan (RP) has a '*spatial foundation*' which analyses the natural features of the Region in terms of both surface and underground water, soil types, mineral deposits, climatic conditions, flora, fauna and types of crops/plants grown with a view to *determining land uses in a harmonious manner*;
- '*a structure*' consisting of *the nature of human settlements* both rural and urban along with the relationship between the two as well as *current infrastructure requirements* relating to water, drainage, power and transportation on the one hand and health, education and allied social requirements on the other hand;

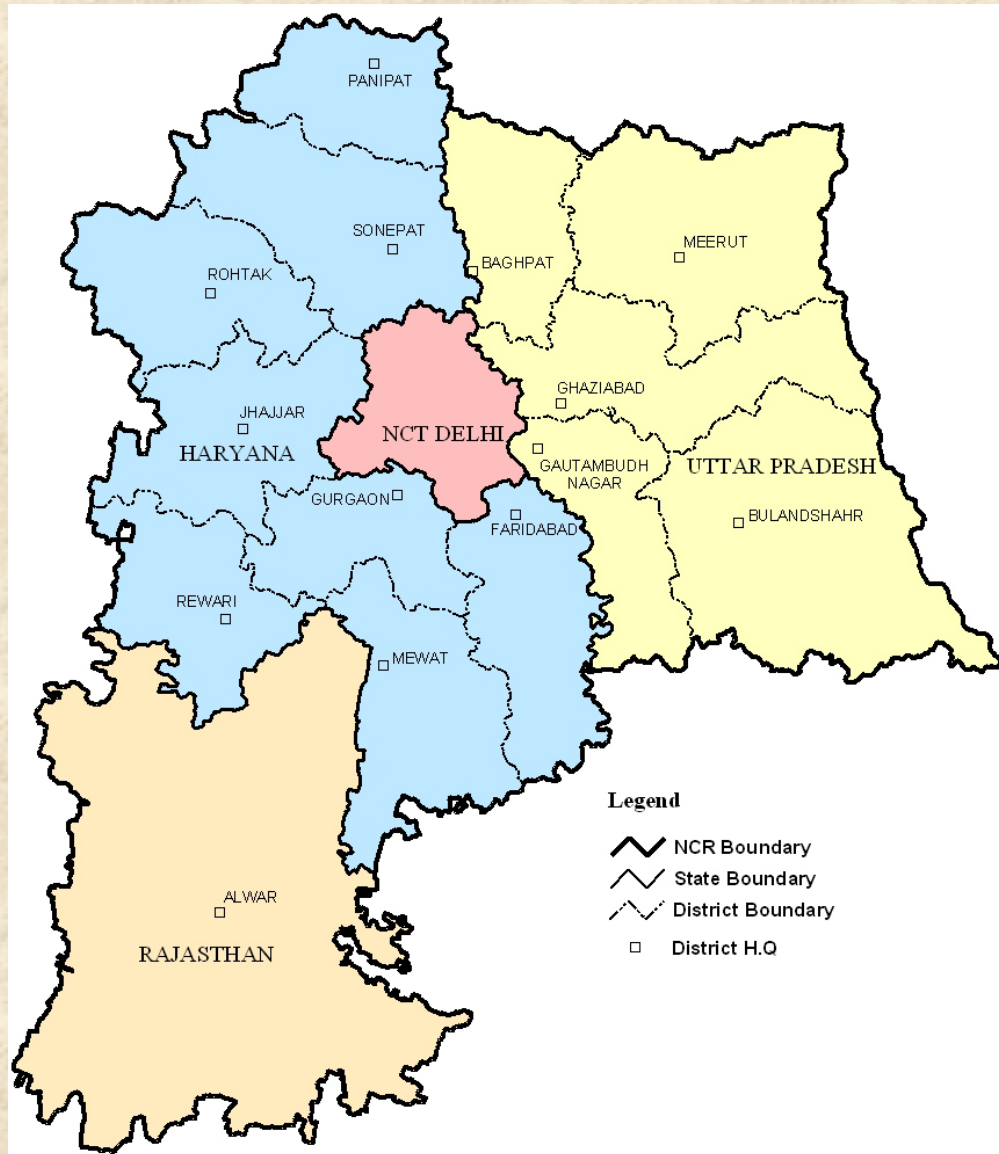
What is a Regional Plan?

- *'a superstructure'* giving *the nature of the economy* in terms of primary, secondary and tertiary activities as well as projections about growth of population, infrastructure, housing and economy;
- with a view to providing planners with the basic analytical material for designing a *Vision document about the Region's future development* on the basis of an assessment of financial resources required, critical project plans and a feasible implementation strategy.

Salient features of a Regional Plan

- Lays down Land Uses at the Regional level in terms of a harmonious pattern emerging from a careful examination of natural features including susceptibility to natural disasters and socio-economic activities.
- Examines *human settlements on the basis of the rural-urban continuum* and projects their growth over a Perspective Plan period.
- Analyses current and future requirements of both Physical and Social Infrastructure.
- Studies the nature of the economy in terms of primary, secondary and tertiary sectors including the current *Gross Geographic Product* and its projected future configuration.
- Assesses *fiscal policy options, domestic financial resources* and possibilities of Foreign Direct Investment.
- Develop critical Project Plans which are integral elements of the development vision.
- Designs a feasible implementation strategy.

National Capital Region: An Illustration



	RP-2021 (in Sq Kms)
NCT-Delhi	1483
Haryana	13413
Uttar Pradesh	10853
Rajasthan	7829
Total area	33,578

- NCR area is
 - 1.06% of the India's area;
 - 86% of the Kerala
 - 75.9% of Haryana
 - 66.67% of Punjab

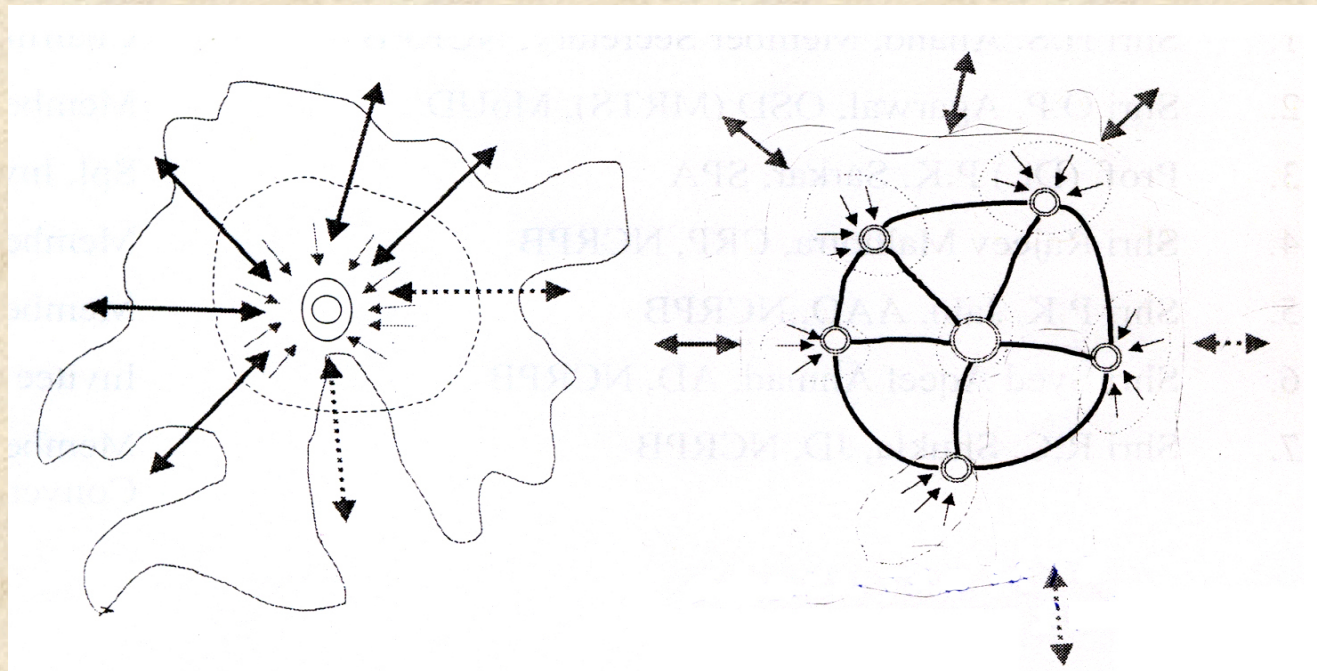
- NCR area is almost 23 times that of NCT-Delhi (1,483 sq kms)

- NCR area is more than the combined area of 3 States of Tripura, Nagaland and Sikkim (27,885 sq kms)

Hierarchy of Planning based on the Rural Urban Continuum

- Regional and Sub-Regional Plans.
- Significance of Functional Plan.
- Rural-Urban Symbiosis.
- Area Plans: District and Cities
- Approval Debate : ‘Wrap around rather than coat of armour.’

Development Patterns

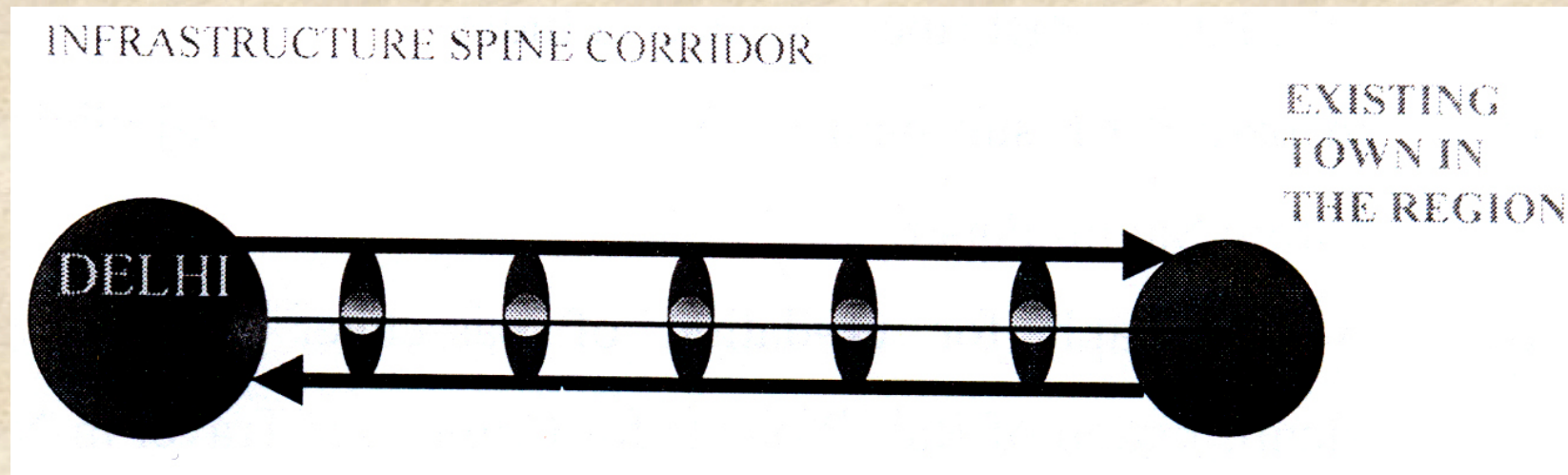


Unipolar Structure
of Regional Plan

Epicentre with Multipolar Structure
of Regional Plan

II. Development of Physical Infrastructure for provision of Basic Amenities & Services : TRANSPORT

Concept



Features:

- Corridor of 100 kms connecting two major cities with railway, water supply, communication line, etc.
- Width of 4-5kms on either side of the spine corridor is reserved for planned urban development.
- A railway station at every 2 kms can be developed as a Town Centre for a 2 lakhs population.
- Series of such towns will function as a complimentary to each other for specialised activities.

**“ Space and light and order
These are the things that men
need just as they need
Bread or a place to sleep.”**

~ Le Corbusier

From Habitat to Cities.... ***Urbanization and Development***

“Urban” in India is defined as a human settlement with a minimum population of 5000 persons, with 75% of the male working population engaged in non-agricultural activities and a population density of at least 400 persons per sq. km. Further, all statutory towns having a Municipal Corporation, Municipal Council or Nagar Panchayat as well as a Cantonment Board are classified as “URBAN”

The Urban Setting

Poverty, Housing & Urbanization

- 99% of the housing shortage of 24.7 million at the end of the 10th Plan pertains to the Economically Weaker Sections (EWS) and Low Income Groups (LIG) sectors.
- National Sample Survey Organization (NSSO) 61st Round reports that the number of urban poor has risen by 4.4 million persons, between 1993-94 to 2004-05.
- From 12 in 1981 with 26.8% share of the total urban population, the number of million plus cities has increased to 35 in 2001 with 37% share of the total urban population.
- One fourth of the country's total urban population, numbering 80.7 million persons is below the poverty line.

Urban India: Statistical Profile 2001

- Urban Population 286 Million
- Urban Population % 28%
- No of Urban Agglomerations/Towns 5,161
- No of Metropolitan Cities 35
- Metropolitan Population Share 38%
- Share of Cities with Population > 50000 74%
- Urban Contribution to GDP 60%

The Urban Setting

Share of Slum Population in City Population: Select Cities

Mumbai	54%
Faridabad	46%
Aligarh	45%
Meerut	44%
Warangal	43%
Amaravati	43%
Raipur	37%
Nagpur	36%
Guntur	33%
Kolkata	32%

The Urban Setting

Urban India: Growth in Population & Slum Population

- Decadal Total Population Growth 25%
- Decadal Urban Population Growth 40%
- Decadal Metro-Population Growth 79%
- Decadal Slum Population Growth 70%

The Urban Setting

Category-wise Housing Shortage

Estimated Urban Housing Unit Shortage as on 1.4.2007:

Total	:	24.71 m	100.00%
EWS	:	21.78 m	88.14%
LIG	:	2.89 m	11.69%
MIG&HIG:		0.04 m	0.16%



More than 99% shortage is for EWS/LIG segments

The Urban Setting

The Strategic Framework

Supt Sindhu: The Seven Streams

- Identity and Aspirations
- Abudana: The precious pearl
- Lead kindly light.....
- Going places
- Green is go.....
- Roti, Kapra aur Makan: Housing and Employment
- The Human Touch & Antodaya

Supt Sindhu: The Seven Streams

Present Identity & Aspirations

- Sense & belonging
- Character of the City
- Cauldron of pluralist participation
- The Invisible Presence
- Phoenix reborn

Supt Sindhu: The Seven Streams

Abudana: The Precious Pearl

- Regional framework for the Water Supply
- Floods and Upstream Reservoirs
- Capturing the Monsoon runoff
- Stabilizing and augmenting underground water resources
- Connectivity of water bodies
- Conserving & Recycling Water
- Quality of Water: The Technological Interface

Supt Sindhu: The Seven Streams

Lead kindly Light....

- Renewable Energy Sources & Incentivisation
- Improvements in thermal plants
- Fly Ash Destination
- Energy efficiency to the fore....
- Smart grids

Supt Sindhu: The Seven Streams

Going places....

- Regional approach to transportation
- Planning, Connectivity and Settlement Patterns: PC Sorear
- The three destinations of the poor
- Multi-modal Public Transport
- NMT: Cycles, Jogging Tracks & Walkways

Supt Sindhu: The Seven Streams

Green is go....

- The Green Belt Movement
- Breathing lungs: City Forest, Botanical Gardens, Woodlands and Parks
- The City Beautiful: The Leisure Valley
- Sports, Recreation & Tourism
- The Healthy City Movement

Supt Sindhu: The Seven Streams

Roti, Kapra & Makan: Housing & Employment

- What is affordable housing?
- Need without capacity to pay
- Housing bonds
- Reversible Mortgages
- Fiscal options
- Multiple PPP Models
- Spatial incentivisation and provision of housing

Supt Sindhu: The Seven Streams

Roti, Kapra & Makan: Housing & Employment

- Role of the informal sector
- Ekalavya: two thumbs
- Dr. Reddy's Lab
- Small is beautiful
- Ramlila Grounds, Sidewalks, Mixed land use, Delhi Haat

Supt Sindhu: The Seven Streams

The Human Touch & Antodaya

- Antodaya or the last decile
- Putting people at the center stage of development
- Participation: Planning, Implementation and Review
- Decentralized Planning and the Planning Hierarch
- Nature, Habitat and Identity

V. Augmenting Financial Resources & Offering Attractive Financial Products

- Raising financial resources in the Capital Market.
- Seed money for Infrastructure Projects.
- City Forest Development & Ecological balance.
- Incentives for congruent planning, planned cost adherence & quality benchmarking.
- Explore possibility of assistance from bilateral & multilateral funding agencies for large Infrastructure Projects.
- Recovery & Financial Rating.

CITY OF THE RICH & A CITY OF THE POOR?

