



Rethinking Urbanism

A step towards Golden Era

Pradeep K. Saxena
rethinkingurbanism@gmail.com
+91-9425007551



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INDIA SPECIFIC TECHNICAL POLICY DOCUMENT (TPD), based on traditional wisdom and modern technology, for planned urban and rural settlement has been prepared and published as a book * -

" Rethinking Urbanism - A step towards Golden Era"

by Pradeep k. Saxena.

The **TPD** gives a **national master plan** for settlement of 30 crore rural migrants by 2040 with housing, urban amenities and progressive employment with creating opportunities for rural and urban areas to develop hand in hand.

Why Rethinking Urbanism ?

In last 50 years, it is believed that investment in urban infrastructure in terms of ring roads, flyovers, elevated roads, Metro, BRTS etc. are solutions to all our urban problems.

Time has proven that we were following a wrong direction.

These solutions have created more problems like increased congestion, pollution, crimes, commuting time, slums etc. Even though they are expensive time tested them as failure.

The pace of urbanisation in India is going to increase in coming decades and now it is essential to find out a solution to accommodate the migrants in the most economical way, within the stipulated time and provide them with all urban amenities, housing, employment, etc.

** The book is available in Lok Sabha library als*



**With emphasis on
QUALITY AND VIABILITY**

The salient features of the work :

- Converting **Natural migration** into a **boon for the economy**.
- **Financial independence** for cities without any support of the state.
- Drastically reducing planned **urban encroachment** of arable land by 99%.
- Reducing average city to city road distances by 24%.
- **Pollution free cities** with a strong infrastructure.
- Market for all rural products **within 1 ½ hour distance**.
- **Drastically Bringing down cost** of urban infrastructure and **built units**.
- **Slum-free cities** with **affordable bigger houses** for the poorest citizens.
- **Very low start-up cost** for young entrepreneurs for **self-employment**, business and industries.
- **Quality education** and health services for **rural India**.
- *Grahini* as the prime mover of economy.

India's Urbanisation by 2040

As per present
planning Practices

As per proposed planning
model of human habitation

270 lakh hectare

(90% will be expensive and arable land in peri-urban areas)

Land

3.75 lakh hectare

(less than 50% will be cultivated land)

Capital investment to meet projected demand on infrastructure

4.2 lakh crore / year
+ cost of land

0.20 lakh crore, a onetime
rotational fund
(inclusive of cost of land)

Additional space requirement in 24 years

1680 crore sqm to **2160** crore sqm
(Estimated cost Rs 324,000 billion rupees)

960 crore sqm
(Estimated cost Rs 144,000 billion rupees)

The proposed model of human habitation will have
positive impact on

1. EXISTING CITIES

Overflowing and overcrowded Indian cities, with insufficient water and infrastructure will have realistic development plan.

2. RURAL AREAS

- a. Excellent and affordable health and education services will be available **uniformly throughout the country**.
- b. Consumers will be available within 1½ hours distance from the remotest places for most of the rural products.
- c. Each and every rural settlement will be **within 70 km from a city of 20 lakh population** (at present this distance is **up to 700 km** from cities of 20 lakh population and **up to 350 km** from cities with 10 lakh of population).

3. LAND REQUIREMENT

The requirement of land for urban areas by 2040 will only be **3.75 lakh** hectare against **270 lakh** hectare (as estimated with prevalent planning norms).



Green-field city image- Bharat Gaurav kendra & Dholavira

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4. SOIL CONSERVATION

Use of soil for filling under the roads and plinths of buildings in urban areas will be negligible (with our present urban forms and practices quantity of soil to be consumed in this work by 2040 will be more than soil available by making a 1.5 m deep pit in the whole country of Netherlands or top 25cm of fertile land available in Uttar Pradesh).

5. WATER

- a. Total city water supply by **rain water and recycling only**.
- b. No leakage and distribution losses.
- c. Water bodies in cities with their own basins.
- d. Replacing sea water with fresh water.

6. HEALTH

- a. Create **opportunities for prevention** against illness.
- b. Health services in rural areas.
- c. Viability in private health services even after making them cheaper.



Green-field city image- Bharat Gaurav kendra

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7. POLLUTION

- a. **Covered open earth spaces with grass** at city level.
- b. **New industries near raw material** away by at least 30km from cities.
- c. **Planned forest areas within cities.**
- d. Water bodies and tropical trees (80 % of city area).
- e. Need eliminated, though citizens are permitted to keep private automobiles.
- f. **Piped gas connections** to all households, use of other cooking fuels eliminated.

8. TRAFFIC CONGESTION

- a. It will be eliminated due to **reduced commuting time.**
- b. Decentralized / **Uniformly distributed urban population.**

9. PARKING

- a. Problem is solved by planning for **future human-car ratio.**
Incremental parking.
- b. Reduced necessity of automobile to **maximize automobile free human movement.**



Green-field city image- Multiuse Area and Housing

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10. LONG DISTANCE MIGRATIONS

Long distance migrations will be minimized [At present these are increasing every year at a large pace due to increasing gap in remuneration for similar work in different cities. In near future this problem will over burden transport systems (railways, airways, etc.) much beyond their carrying capacities].

11. ROAD AND INTERCITY DISTANCES

Average intercity road distances will be reduced by about 24%

(at present they are about 30 % more than aerial distances in India. In some of the developed countries they are about 12 % higher. Small 30-35 km links proposed in the model will dramatically reduce them and provide citizens with choice of routes also).



Green-field city image- Exclusive cycle tracks.

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12. AVIATION

- a. About **25 uniformly distributed airports** feeding an urban population of 1.0 Crore each **will bring back Indian aviation business** from middle east, south east and European airports and the aviation industry will grow to its real potential.
- b. Creating opportunities for **aircraft centric aviation industry** will give us ease in doing business and promote domestic tourism.

13. TOURISM

Create opportunities to take tourism and allied services to its full potential by providing **cost effective easy reach** to tourist spots (we shall aim at rise of domestic passenger volume to 40 crore per year and our international passenger arrival share to 15% from 0.6% today).



Green-field city image- Shri-Yantra

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14. BUILDING AND CONSTRUCTION INDUSTRY

- a. Uniformly distributed dense cities will provide new opportunities.
- b. **Time schedule for completion** of buildings will be **reduced by upto 60%** making the **rotation of funds faster**.
- c. The speed of infrastructure development can be increased or decreased as per requirement (no other philosophy provides these opportunities resulting in unoccupied building and infrastructure at a large scale).

15. HOUSING

- a. The proposed model creates opportunities for constructing **housing for all urban progressive families**.
- b. **Bigger houses made affordable to the poorest of citizens**.



Green-field city image- Expensive looking economical affordable progressive housing for masses. Alternate to present EWS and slums

The proposed model of human habitation will have

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16. SLUMS

With gradually increasing numbers by 2040, India will have about **125 slum free cities of 20 lakh plus population** each. Other cities will see a fast **reduction in slum population** in process of making them slum free (the slum population is expected to be rise upto 60% in coming years in despite of our present efforts and huge investments to keep it under control).



Green-field city image- Expensive looking economical affordable progressive housing for masses. Alternate to present EWS and slums

17. LAW AND ORDER

- a. Opportunity to plan for **preventive law** to reduce load on judiciary.
- b. With **security at building and cluster level** the load on city policing will be reduced.

18. SOLID WASTE MANAGEMENT

- a. Solid waste **management will replace** the present solid waste **transportation.**
- b. The cost will reduced to 10% in new settlement (solid waste transportation cost Rs.2800 crore/year in Delhi alone).

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19. FIRE FIGHTING

The proposed model ensures **control in all left over areas** in present system (high rise buildings, congested areas of cities, slum areas, rural and forest areas).



Green-field city image- Housing

20. EMPLOYMENT

The cluster of four green field cities and one existing city will create:

- a. **Manifold reduction in start-up cost** for self employment.
- b. **“Grahini ”** as prime mover of economy.
- c. **Minimize underemployment** in terms of working hours.
- d. Jobs will be pushed in **organized sector from informal sector**.
- e. Higher turnover, **better competitive edge**, more jobs.
- f. Well paying **flexible jobs for women** in service sector.
- g. **Work as a Catalyst** for growth of service, industry and agriculture sector.

The proposed model of human habitation will have

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- h. **Higher turnover lower profit model** of business will be possible due to increased densities. This will result in faster growth of every business and employment generator.
- i. **Individual and collective workplaces for housewives** in all block of flats will act as a bigger employment generator and augment family income.
- j. **Direct employment to 3 lakh citizens for first 2 years and 14 lakh jobs for next 3 years.**
- k. Indirect job creation for initial five years in these cities will be **about 3 lakh per year and industrial sector related to construction industry will see a 300 % increase in employment.** This percentage will be much higher in states which are major hub of construction related industries.
- l. **After five years employment will be stable at 60 lakh.**
- m. **30,000 jobs in core sector** are essential.



Green-field city image- Office building and Hotel

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21. ECONOMY

Planned urbanisation and its proper execution will create strong opportunity to become **number one economy in next 20 years &** bringing per capita income at par with developing countries in 30 years.



Green-field city image- Multi-use Area

22. CAPITAL AND OPERATIVE EXPENSES ON INFRASTRUCTURE

- a. The operative expenses will be met by revenue generated.
- b. Capital expenses in the development of the city infrastructure will be available for rotation gradually.
- c. **Regular funding from central or state government may not be required** (This cost is increasing at a very fast pace every year),e.g. Bhopal municipal corporation budget rose from Rs.200 crore in 1989 – 1990 to Rs.2600 crore in 2014 – 2015.

The government investment will be rotational and will be returned back in two years for construction of infrastructure of next cluster.

The government may decide to **start 4-5 clusters in the first phase as the demand is for 6 clusters at a time.**

The proposed model of human habitation will have
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23. IMPACT ON GDP

- a. The project will result in to **creation of employment at a very large scale** (explained elsewhere) in the construction industry and its feeder industries. This will contribute to GDP.
- b. The plan has been designed to address **issue related with under employment**, employment of females and **creation of fresh employment for the youth**. It is estimated that **60% of the people in the employable age will get employed** through this proposed model. They will contribute to the GDP.
- c. Entrepreneurship, for which the country is known, will get a fillip due to **nominal cost of land and other related infrastructure**. This will be a major booster for GDP.
- d. Through participation of **private sector in research and development** huge world class facilities will open big opportunities in business, employment and technology transfer.
- e. In our large cities a worker is spending 3-4 hours of his active time in commuting to the work. This **time will be available for adding to his productivity and contribute to GDP**.
- f. The government is already running several programs for skill development, entrepreneurship development, export promotion, agriculture and animal husbandry development, processing technology promotion etc. By aligning development of infrastructure facilities, man power training and development with the government philosophy and action plan right at inception stage miracles can happen.
In essence, implementation of “ Rethinking Urbanism” can truly become a step towards Golden Era.

The proposed model of human habitation will have
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24. OPPORTUNITIES FOR LAND OWNERS

- a. **Only about 1%** of land owners will lose their land in comparison to present pattern.
- b. Even if they are given **4 times of cost of land + a house designed for progressive families + a choice between urban or rural employment, the government expenses will be much lower than present pattern** and the **land losers will happily contribute.**
- c. In addition the land owners will become a **beneficiary of the big economic activity in their area.**
- d. No land user will be uprooted from his village. They will be resettled on their land with **addition of progressive employment, skill enhancement and bigger homes with richer specifications and life expectancy.**



Green-field city image- Char Dham

25. OPTIONS FOR FINANCING AND INITIAL SEED MONEY

The cost of infrastructure development for one cluster of five cities is estimated to be within 20,000 crores Indian rupees.

The seed money will be raised from following resources :

- a. Crowd Funding.
- b. The habitat being zero carbon emitting, corporations having large carbon footprint can invest.
- c. Compensation from developed countries for our eco-friendly urbanisation.
- d. Global financial institutions.
- e. Big business houses can participate.
- f. Public share.
- g. NRI Investment.
- h. **Service provider**

The model generates (due to increased density) **scope for profitable and viable private railways, airways, road ways, telecommunication, energy**, (electricity and gas) [The city transport system alone will generate 1200 crore yearly @ Rs. 500 per month for users while initial and operative cost will be much less].

i. **Central and state government funding**

The remaining amount if any after funding by the above seven is to be given by government.

The MoHUA has some fund allocated for green field cities under different heads.

The governments are smart enough to believe in the old saying

"Money Saved is Money Earned".

The housing sector of the proposed model alone **has a saving of Rs.180 lakh crore + cost of land** (approximately 150 times of joint budget of urban and rural development ministries), hence it is believed that the governments will give share due from them.

- j. Rural development ministry can also spare funds from its various schemes as the concept gives the rural development an easy, money and time saving path.

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26. ENERGY

- a. A bright opportunity to promote green energy.
- b. Losses in transmission will be reduced drastically.
- c. In all cities of the clusters of the model, **no overhead wires** will be visible and their **length will be reduced by 95%** in comparison to existing cities of same population.



Green-field city image- Public Transportation

27. ENVIRONMENTAL IMPACT AND ADVANTAGES OF SUCH PROJECTS (UPTO 2040)

- a. It will produce **at least 30%** of its power requirement **through Solar Power.**
- b. There will be **no Industrial Pollution.**
- c. The water resources will not be allowed to be polluted.
- d. The Lungs of the city, by having a large part of the **city covered by linear forest and other landscaped greenery will provide more oxygen than what it will consume.**

The proposed model of human habitation will have

positive impact on

The healthy environment so created, **cycle tracks and walkways and the short distances between places, will encourage the residents to either walk or use cycle** for their movement within the city. It will directly have a Positive impact on their Health and lifestyle.

- e. The availability of playing grounds, parks and sports complexes will again add to the well being of the residents.
- f. **Use of automobiles will not be essential in the cities** to be developed and hence **negligible pollution from automobiles.**
- g. The saving on commuting time will leave more time with the residents for work, rest and recuperation.
- h. The designing of the houses will reduce energy consumption.
- i. Urbanisation in concentrated places and corridors effects environment adversely. With our present pattern and growing demand for urbanisation we will soon overtake US, the country with maximum contribution to global warming.
- j. **Present pattern hits the soil conservation in a big way (2.0 m deep soil cover in an area equal to state of Haryana will be buried below buildings by 2040)** In the proposed pattern of urbanisation our carbon emission will stabilize and will start reducing in coming years.
- k. Total quantity of soil to be used in plinth will also be saved. Use of **arable land for urbanisation will also be reduced from 2,70,00,000 hectare to 3,75,000 hectare.**

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28. POLITICAL MILEAGE

- a. Creation of world class infrastructure, one of its rare kind habitat will give a new image of a creative, progressive and eager to do better for the society, to the government.
- b. The planned way to give a positive direction to the pattern of human habitation in India.
- c. **Least time consuming, economical way requiring least land** and easier to execute than our present urban and rural policies and solutions.
- d. Win-win situation for politicians, planners and all citizens.
- e. Unprecedented in human history as the scale of the need arose for the first time in the land with potential to fulfil them.

29. GLOBAL MILAGE

- a. The cities in the model are designed to be better than the best global cities.
- b. Ideal for multinational companies to shift their Head / zonal offices in India.

This model will also have positive impact on forming policies in education, defense, security, administration, railways, skill development, environment, forest, petroleum etc.