

CC-4-09-TH-REGIONAL PLANNING
METROPOLITAN CONCEPT AND URBAN
AGGLOMERATION

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Urban Agglomerations

Towns

For the Census of India 2011, the definition of urban area is as follows;

1. All places with a municipality, corporation, cantonment board or notified town area committee, etc. 2. All other places which satisfied the following criteria:

- i) A minimum population of 5,000; ii) At least 75 per cent of the male main working population engaged in non-agricultural pursuits; and
- iii) A density of population of at least 400 persons per sq. km.

The first category of urban units is known as Statutory Towns. These towns are notified under law by the concerned State/UT Government and have local bodies like municipal corporations, municipalities, municipal committees, etc., irrespective of their demographic characteristics as reckoned on 31st December 2009. Examples: Vadodara (M Corp.), Shimla (M Corp.) etc.

The second category of Towns (as in item 2 above) is known as Census Town. These were identified on the basis of Census 2001 data.

Urban Agglomeration (UA):

An urban agglomeration is a continuous urban spread constituting a town and its adjoining outgrowths (OGs), or two or more physically contiguous towns together with or without outgrowths of such towns. An Urban Agglomeration must consist of at least a statutory town and its total population (i.e. all the constituents put together) should not be less than 20,000 as per the 2001 Census. In varying local conditions, there were similar other combinations which have been treated as urban agglomerations satisfying the basic condition of contiguity. Examples: Greater Mumbai UA, Delhi UA, etc

Out Growths (OG): An Out Growth (OG) is a viable unit such as a village or a hamlet or an enumeration block made up of such village or hamlet and clearly identifiable in terms of its boundaries and location. Some of the examples are railway colony, university campus, port area, military camps, etc., which have come up near a statutory town outside its statutory limits but within the revenue limits of a village or villages contiguous to the town. While determining the outgrowth of a town, it has been ensured that it possesses the urban features in terms of infrastructure and amenities such as pucca roads, electricity, taps, drainage system for disposal of waste water etc. educational institutions, post offices, medical facilities, banks etc. and physically contiguous with the core town of the UA. Examples: Central Railway Colony (OG), Triveni Nagar (N.E.C.S.W.) (OG), etc. Each such town together with its outgrowth(s) is treated as an integrated urban area and is designated as an ‘urban agglomeration’.

In the 2011 Census, 475 places with 981 OGs have been identified as Urban Agglomerations as against 384 UAs with 962 OGs in 2001 Census.

Number of UAs/Towns and Out Growths (OGs):

Type of Towns/UAs/OGs

Number of towns

	2011 Census	2001 Census
1 Statutory Towns	4,041	3,799
2 Census Towns	3,894	1,362
3 Urban Agglomerations	475	384
4 Out Growths	981	962

At the Census 2011 there are 7,935 towns in the country. The number of towns has increased by 2,774 since last Census. Many of these towns are part of UAs and the rest are independent towns. The total number of Urban Agglomerations/Towns, which constitutes the urban frame, is 6166 in the country.

Population of UAs/Towns

1. The total urban population in the country as per Census 2011 is more than 377 million constituting 31.16% of the total population.
2. **Class I UAs/Towns:** The UAs/Towns are grouped on the basis their population in Census. The UAs/Towns which have at least 1,00,000 persons as population are categorised as Class I UA/Town. At the Census 2011, there are 468 such UAs/Towns. The corresponding number in Census 2001 was 394.
3. 264.9 million persons, constituting 70% of the total urban population, live in these Class I UAs/Towns. The proportion has increased considerable over the last Census. In the remaining classes of towns the growth has been nominal.
4. **Million Plus UAs/Towns:** Out of 468 UAs/Towns belonging to Class I category, 53 UAs/Towns each has a population of one million or above each. Known as Million Plus UAs/Cities, these are the major urban centres in the country. 160.7 million persons (or 42.6% of the urban population) live in these Million Plus UAs/Cities. 18 new UAs/Towns have been added to this list since the last Census.
5. **Mega Cities:** Among the Million Plus UAs/Cities, there are three very large UAs with more than 10 million persons in the country, known as Mega Cities. These are Greater Mumbai UA (18.4 million), Delhi UA (16.3 million) and Kolkata UA (14.1 million). The largest UA in the country is Greater Mumbai UA followed by Delhi UA. Kolkata UA which held the second rank in Census 2001 has been replaced by Delhi UA. The growth in population in the Mega Cities has slowed down considerably during the last decade. Greater Mumbai UA, which had witnessed 30.47% growth in population during 1991-2001 has recorded 12.05% during 2001-2011. Similarly Delhi UA (from 52.24% to 26.69% in 2001-2011) and Kolkata UA (from 19.60% to 6.87% in 2001-2011) have also slowed down considerably.

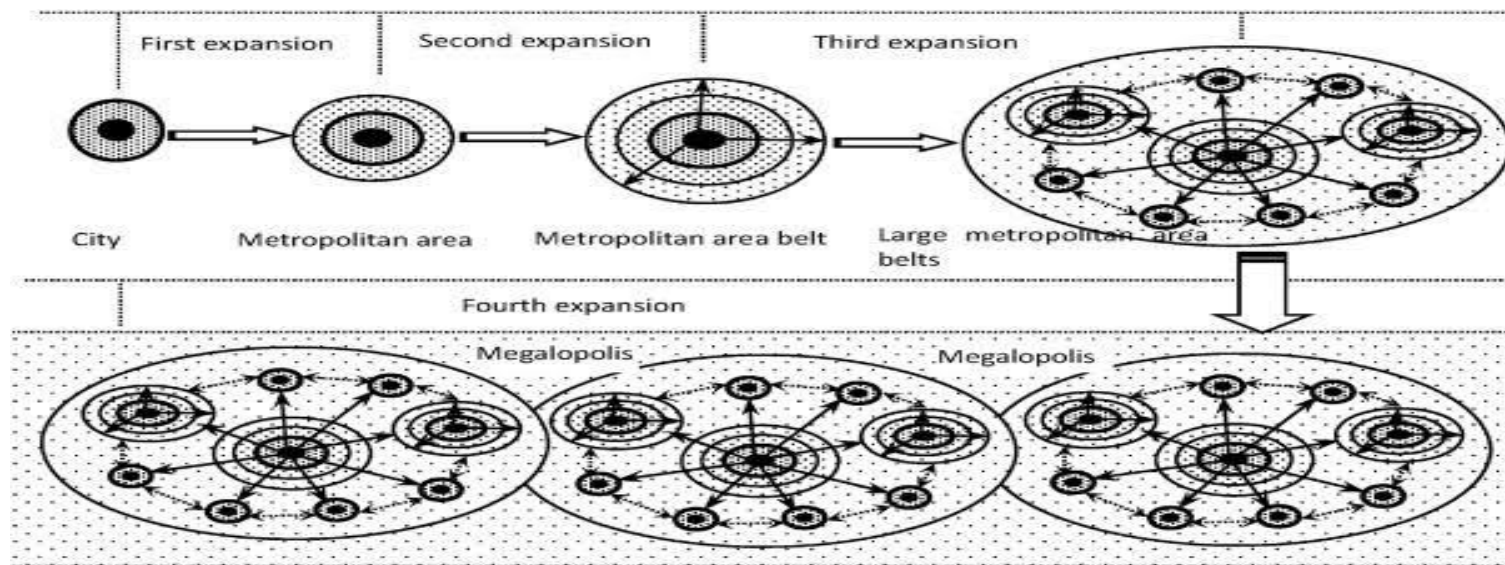


Fig. The Four Expansion Stages of Urban Agglomeration Development

Stages of urban agglomeration development	First expansion	Second expansion	Third expansion	Fourth expansion	
Name	City	Metropolitan area	Metropolitan area belt	Large metropolitan area belt	Megalopolis
Spatial scope	Small	Sub-regional	Regional	Cross-regional	National/international
Radius	Municipal	Metropolitan	Inter-metropolitan	Sub-national	National/international
Number of cities	1	1	1	Three or more	3 cores with multiple peripherals
Population	5–10 million	5–10 million	10–15 million	More than 20 million	More than 30 million
Spatial structure	1 city	1 city and its immediate peripherals	1 city and influencing peripherals	3 or more cities and their peripherals	At least 2 large metropolitan area belts and all the cities
Transportation network	Inner city network, weak inter-city connectivity	Stronger inter-city connectivity	Complete inter-city connectivity	Complete inter-metropolitan connectivity	Extensive connectivity within and among metropolitan areas
Industrial integration	Very weak inter-city integration	Weak inter-city integration	Some inter-city integration	Strong inter-city integration	Fully integrated industrial systems
Regional structure	Single core	Single core layered structure	Single core radiating layered structure	Single or multi-core axis-layered network structure	Multi-core nebula highly interconnected network structure
Expansion mode	Point expansion	Point-circle expansion	Point-axis expansion	Axis-belt expansion	Beaded network radiating expansion
Development stages	Infancy stage	Initial stage	Medium stage	Mature stage	Ultimate stage
Function	Municipal growth center	Sub-regional growth center	Regional growth center	National growth center	International growth center

Top 10 Urban Agglomeration of India by Population 2011

Rank	UA	Population
1	Mumbai	1.84 crore
2	Delhi	1.63 crore
3	Kolkata	1.40 crore
4	Chennai	86.54 lakh
5	Bangalore	85.20 lakh
6	Hyderabad	76.75 lakh
7	Ahmedabad	63.61 lakh
8	Pune	50.58 lakh
9	Surat	45.91 lakh
10	Kanpur	29.20 lakh

Metropolis and Metropolitan Concept

The word *metropolis* was first used by Lewis Mumford (1938, 1966). It was originally applied to the capital city of a state.

The modern metropolis is differ from the traditional city in the following ways:

- It combines the function of central leadership of material production and services.
- Its population is ten time larger than that of the biggest preindustrial city.
- Under modern, fast transportation system, the metropolis is hundred times larger in area than the biggest city of the former times.
- It is neither city or country but a complex urban districts an open area.
- Residential and work area have become segregated and are no longer combined on one location
- Workers and residents have higher physical as well as occupational mobility with a wider range of choice.

Berry and Horton, (1970) in their book *Geographic Perspectives on Urban System* have tried to list some of the more important metropolitan characteristics. These are as follows

1

• A centralising control over the activities of the surrounding region;

2

• A population much larger than ordinary cities;

3

• Segregation of place of work and residence with in the city;

4

• Segregation of residential areas according to class and status;

5

• Clear segregation of the functional zones like the CBD, industrial, residential and recreational areas.

6

• A tremendous proliferation of mass service;

7

• It covers a larger area than an ordinary city.

8

• It may include open land, parks and rural enclaves.

The Metropolitan Structure

1. The hard core

- The Central Business District or CBD

2. The core city

- The central city

3. The suburbs

- The urban fringe

4. The metropolitan area

- The territory in which daily economics and social activities of the local people carried on through a common system of local institution.

5. The metropolitan region

- Metropolis and smaller urban centres separated by large rural tracts (not incorporated in the urban areas) but the region is economically controlled by the metropolis.

Census Definition in USA

The 1910 and 1920 censuses of USA defined the **Metropolitan District** are a city of over 200000 population and together contiguous civil division in which population density >150 persons/sq.mile.

1950 US census new definition of **Standard Metropolitan Area** has following criteria: central city with at least 50000 people, two contiguous cities included, adjacent counties two cities with over 50000 people each with in 20 miles of each other, each county must have either 10000 non agricultural workers 10 per cent of non agricultural workers of the area, peripheral county must be economically and socially integrated.

In 1960 the US census introduced the term **Standard Statistical Metropolitan Area (SMSA)**. It has to satisfy the following criteria:

Cont...

❑ Population Criteria

1. One city with 50000 inhabitants or more or
2. Two cities having contiguous boundaries and combined population of at least 50000
3. If two or more adjacent counties each have a city of at least 50000 inhabitants and the cities are within 20 miles of each other.

❑ Metropolitan Character

1. At least 75 per cent of the labour force in non agricultural occupation.
2. 50 per cent population living contiguous minor civil division radiating from central city (density 150 persons) or
3. The outlying county must be the place of employment of 10000 non agricultural workers.

❑ Integration criteria

1. If 15 per cent of the workers living in the given outlying county work in the county containing the central city or cities of the area;
2. If 25 per cent of those working in the given outlying county live in the county or counties containing the central city or cities of the area.

Definition in India

In India, the Census Commission defines a metropolitan city as urban agglomeration having a population of over four million. Delhi, Mumbai, Kolkata, Chennai, Hyderabad, Bangalore, Ahmedabad, Pune, Surat and Nashik are those Indian cities that have over 4 million people.

Calcutta Metropolitan

Three types as Calcutta Metropolitan District (CMD), Calcutta Metropolitan Area (CMA), and Calcutta Metropolitan Standard Urban Area (CMSUA)

The first attempt at delineation of the metropolis and its umland was made by the Calcutta Metropolitan Planning Organisation (CMPO) which was formed in 1961.

- **Calcutta Metropolitan District (CMD)**

The CMD delineated by the CMPO consisted of the following

1. 2 Corporations
2. 33 Municipalities
3. 37 Urban Units

- **Calcutta Metropolitan Area (CMA)**

1. Comparatively larger area than CMD
2. Delineated based on daily supply of perishable goods beyond the district
3. It extended over 10368.4 sq.km

- **Calcutta Metropolitan Standard Urban Area (CMSUA)**

Defined by the 1981 census covered an area of 1488 sq. Km

1. 3 Municipal Corporations
2. 31 Municipalities
3. 3 Notified Areas
4. 70 Non- Municipal Urban Units
5. 390 Rural Mouzas

Delhi Metropolitan

- ❑ In 1962 two layers of influence had been found on the basis of intensity of interaction, spatial affiliations and linkages (Sundaram, 1978).
 1. The Metropolitan Area covering an area of 2073.68 sq.km including certain parts of Uttar Pradesh and Haryana.
 2. Town includes Ghaziabad, Loni, Faridabad, Bahadurgarh, Gurgaon, Ballabhgarh and Narela.
 3. The layer extended up to 15-20 miles from central city and exhibited a close affinity and interlinkages of economies with the central city.
- ❑ The Metropolitan Region around Delhi also called the National Capital Region
 1. Second layer extending over an area of 32777.10 sq.km.
 2. Including 25 tahsils outside the Union Territory of Delhi in the states of Uttar Pradesh, Haryana and Rajasthan.
 3. Extended up to distance 70 miles.
 4. This area supplies the central city with milk, meat, fresh vegetables and perishable food items.

Conclusion

The previous section has highlighted the metropolitan structure of Calcutta and Delhi. The identification of the metropolitan structure is necessary for planning the future expansion of the city in both economic and spatial terms.

The concentration of population towards metropolitan centres and its diffusion to their peripheries has resulted in many complex problems (Kundu et al 2002) such as land scarcity, inward and outward mobility of labour, economic, social and spatial segregation of population between the core and periphery. As the phenomenon of peripheral development is recent in India as compared to 59 western countries, less research is available in this field to explore and explain the complexities of this process at the national or regional or city level. (Sridharan, 2006)

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