

Changing Face of Cities

Lesson Highlights

1. Concept of satellite towns
2. Concept of smart cities
3. Some top smart cities in the world
4. Smart cities in India
5. Strategies to keep urban areas clean

Urbanisation leads to increase in population and development of infrastructure. This causes expansion of city borders which spread into the neighbouring urban areas to form mega-cities. In 1970, there were only three mega-cities across the globe, but by the year 2000, the number had risen to 17 and by 2030, 24 more mega-cities will be added (United Nations Department of Economic and Social Affairs, 2014).

The process of urbanisation affects all types of settlements. Villages gradually grow to become small towns, smaller towns become larger towns, and large towns become cities. This trend has led to the growth of Million Plus Urban Agglomerations¹ (UAs), urban centres, and Mega-cities. A town which has a population of one million or above is known as Million Plus UA/City. Such cities are the major urban centres in the country. An urban area of population greater than ten million people is known as a megacity.

According to the Census of India 2011, 160.7 million persons (or 42.6% of the urban population) live in these Million Plus UAs/Cities. Among the Million Plus UAs/Cities, there are three very large UAs with more than 10 million persons in a city. 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. The growth in population in the Mega Cities has slowed down considerably during the last decade. (Source: Census of India 2011)

Geo Fact

A 'million' city is a city with one million (or more) inhabitants. These are the largest cities on the planet. The top five million cities in the world are Tokyo (Japan), Seoul (South Korea), Mexico City (Mexico), New York (USA) and Mumbai (India).

Increasing urbanisation across India is one of the most serious challenges today. According to the report on 'India's Urban Awakening' by McKinsey Global Institute (a worldwide management consulting company), 'in the next 20 years, India will have 68 cities with a population over one million—up from 42

1. Agglomeration: a group of things put together in no particular order or arrangement

today. That is nearly twice as many cities as all of Europe'. Most cities in Europe and America were established in the 19th century when there was easy availability of land, gas and water. India is a late starter and is much more crowded and complex. Therefore, India requires a much more efficient and sustainable solution for problems arising from urbanisation.

SATELLITE TOWNS

The concept of 'satellite towns' also known as 'new town', is a new concept in urban planning to overcome the problems related to urbanisation. Under this plan, new planned settlements were developed far away from the big metropolitan cities so that population congestion at one place could be controlled and a more balanced distribution of population could be achieved.

A satellite town or satellite city refers to smaller metropolitan areas which are located somewhat near to but mostly independent of larger metropolitan areas. Satellite cities develop when a town or a city reaches a certain limit of congestion and exhaustion. These cities have their own identity but are under the influence and power of the metropolis or the main town or city. 'Satellite towns' or new towns are developed as extensions of a parent metropolis. Some examples of satellite towns are Rohini, Dwarka and Narela as extensions to Delhi; Navi Mumbai to Mumbai; Salt Lake City to Kolkata; Yelahanka and Kengeri to Bangalore; Gold Coast, Queensland to Brisbane and La Plata to Buena Aires. Noida, Greater Noida, Manesar, Pimpri-Chinchwad, Rajarhat, Dankuni, etc. are other examples of satellite towns.

Around Delhi, there are urban centres which have developed as satellite towns, e.g. Ghaziabad, Bahadurgarh, Gurgaon (now called Gurugram), Sonapat, and Faridabad. Similarly, Kolkata has a number of urban centres in the surrounding area which have developed as satellite cities, e.g. Kalyani, Barrackpur, Jadavpur, and Banskroni.

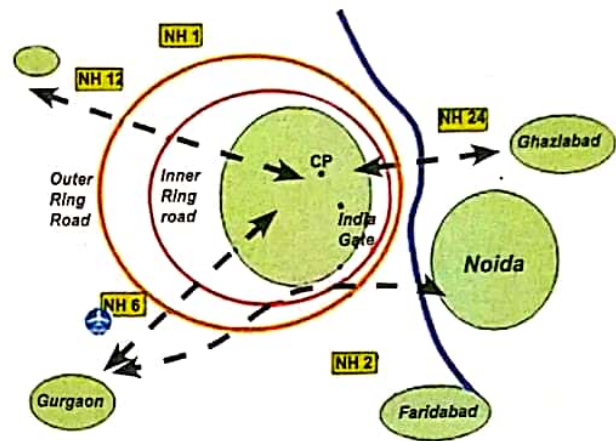


Fig. 6.1 Diagrammatic Representation of Delhi and its Satellite Towns

Features of Satellite Towns

- They are small or medium-sized cities near a large metropolis.
- They are partially independent from the metropolis, economically and socially.
- Most workers of the satellite cities come to work from the main metropolitan town.
- The satellite town provides certain employment opportunities and facilities for holidaying and relaxation.
- There is frequent transport and communication services between the metropolitan town and the satellite town.

SMART CITIES

Smart city has become a popular term in recent years. In the imagination of any city dweller in India, the picture of a smart city contains a wish list of infrastructure and services. A

'smart city' is one that uses digital technology solutions to enhance the standard of living of citizens in ways that are economical and eco-friendly. We can also say that a smart city is an urban development strategy to provide decent quality of life to its citizens, a clean and sustainable environment and methods of 'smart' solutions.

Features of a Smart City

Some typical features of smart cities are given below:

- Efficient land use
- Adequate water supply
- Assured electricity supply
- Affordable housing for all, especially for the poor.
- Reduced congestion
- Minimal pollution levels
- Establishing sanitation facilities, including solid waste management.
- Preserving and developing open spaces and recreational spaces such as parks and playgrounds to enhance the quality of life of citizens, reduce the urban heat effects and promote eco-balance.
- Promoting a variety of efficient public transport options
- Robust IT connectivity and digitalisation
- Increase in online services to bring about accountability and transparency, making governance citizen-friendly and cost-effective.
- Good governance, especially e-Governance and citizen participation.
- Safety and security of citizens, particularly women, children and the elderly.
- Sanitation and quality of life

- Health and education facilities
- Giving an identity to the city, based on its main economic activity, such as local cuisine, health, education, arts and craft, culture, sports goods, furniture, hosiery, textile, dairy, etc.
- Applying Smart Solutions to infrastructure and services in area-based development in order to make them better.
- Energy savings
- Low-carbon economy
- Maximum recycling, efficient use of resources and creating a sustainable environment.
- Information technology as the basis for providing essential services to the residents
- Making areas less vulnerable to disasters, providing cheaper and faster services.

Many cities of the world have been categorised as smart cities on the basis of the above mentioned factors. Various lists of the top smart cities of the world are released from time to time. Some of the famous smart cities of the world are Vienna, Toronto, Paris, New York, London, Tokyo, Berlin, Copenhagen, Hong Kong, Barcelona, Amsterdam, Melbourne, Seattle, Sao Paulo, Stockholm and Vancouver.

Five Smart Cities of the World

Singapore

Singapore, one of the world's major financial centres is currently the smartest smart city. It is currently leading the world in its integration of smart technology and is on the verge of becoming the world's first 'smart nation'. Almost every aspect of the city is monitored through sensors provided by private

□ Answer the following questions.

1. Why villages grow into a smaller towns?
2. What is Megacity?
3. What is Million Plus Urban Agglomerations?
4. What is a satellite town? Name some satellite town. What are the features of a satellite town?
5. Why satellite towns are developed?
6. What is the need to build a smart city? Name some smart cities. What are the features of a smart city?