CHAPTER 7

India's Urban Landscape

Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.

— *Jane Jacobs, American Urbanist*

Fig. 7.1

The Big Questions?

1. *How do cities become the centre of diverse economic activities?*
2. *In what ways can urbanisation impact people's lives?*
3. *What kind of challenges do cities face in the 21st century?*
4. *How can effective urban planning improve life in cities?*

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Introduction

India has a rich urban legacy, from Harappan cities such as Dholavira, Kalibangan or Rakhigarhi to historical ones such as

Fig. 7.2. Dholavira: Spread over 48 ha with residential areas, fortifications, streets, complex water structures and large community grounds

Vijayanagara, Varanasi, Ujjain and many others, most of which are still flourishing today. You have visited these in the chapters of the theme 'Tapestry of the Past'. Today, cities are areas that have a concentration of human populations, different kinds of businesses and occupations, government institutions, and often elaborate transportation and communication systems. These areas are also referred to as 'urban', and have elected local bodies responsible for the development of infrastructure and other amenities of the area.

Rural areas, on the other hand, consist of villages that usually have lower populations, close-knit communities, a larger number of agriculture-based occupations, fewer businesses, and generally, less elaborate transport and communication systems compared to cities. These areas are governed by gram panchayats, as you have read in the Grade 6 chapter, 'Grassroots Democracy — Local Government in Rural Areas'. The exact definitions of cities and villages, as well as urban and rural, differ across the world. For instance, in Denmark, a place becomes urban if its population exceeds 220; in Japan, 50,000; and in India, 5,000.

LET'S EXPLORE

Where do you live? Is it a village, town or city? In what ways can you differentiate between urban and rural areas? Write your observations and share with your classmates.

Population Density in Cities

Imagine you invite a few friends for a get-together at your home; you will have plenty of space to move around. But if 30 people squeeze into the same space, it feels crowded, right?

This distribution of the number of people within a specific area reflects how densely or sparsely crowded a place is. So, experts known as **demographers**, assess the number of people living per unit of area, called population density. This is usually expressed as the number of people per square kilometre.

Population density = total population of a region / area of the region (in square km)

Demographer: Individuals who study the characteristics of populations, such as size, age structure, geographic distribution, etc.

Satellite view: A top-down view or visual data of the earth's surface captured by satellites orbiting the Earth.

THINK ABOUT IT

Fig. 7.3 shows the **satellite view** of a village and a city in Haryana, respectively. The larger blocks of green and brown land on the left in the village show open areas, whereas the grey built-up area on the right shows a complex network of buildings. What can you infer about the population density of the two regions? Why do you think such a difference exists?

Village Asadpur Khera, Jhajjhar, Haryana *Gurugram city, Haryana*

Fig. 7.3. Satellite images of a rural and an urban area in Haryana

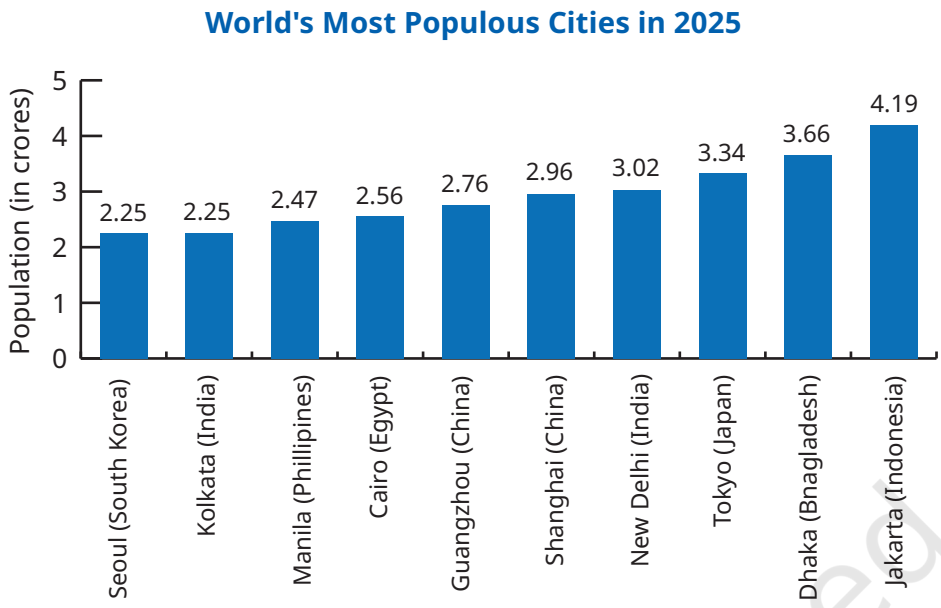

Fig. 7.4. Population of a few of the most populous cities in the world. Two of the most populated cities are in India — Kolkata and New Delhi.

How do Cities Become Centres of Economic Activities?

Throughout history, we have seen places grow to become prominent urban centres through the advantages of location near rivers that afforded ease of transportation, at the crossroads of trade routes that facilitated the development of markets, as well as ease of access to agricultural produce and raw materials that supported the development of artisan communities and manufacturing. They became centres of economic activities as well as political and administrative power.

According to the United Nations' estimates, by 2050, 68 per cent of the world's population will be living in cities, compared to the 55 per cent now. A similar trend is expected in India, where the urban population has grown from 17 per cent in 1951 to around 40 per cent in 2025.

LET'S EXPLORE

→ Observe and compare the two satellite images of an area of Bengaluru (Fig. 7.5). They are from 2012 and 2025, respectively. What are your observations? What has changed? Guess what might be the causes for the change.

Fig. 7.5. (a) Satellite view — Electronic City, Bengaluru (2012)

Fig. 7.5. (b) Satellite view — Electronic City, Bengaluru (2025)

→ As a small group project, make a list of adults from different generations in and around your neighbourhood. Draft a questionnaire to enquire into their observations about their own village, town or city and how it has changed over the decades. What, in their view, are the key reasons that towns and cities have changed? If they have grown larger, what are the reasons for this? What do they miss about the 'old days' and what do they appreciate about the current time? Report on your project through a presentation to the class.

What Leads to Urbanisation?

From villages to small towns to bustling megacities, areas and regions undergo a gradual transition from rural to urban.

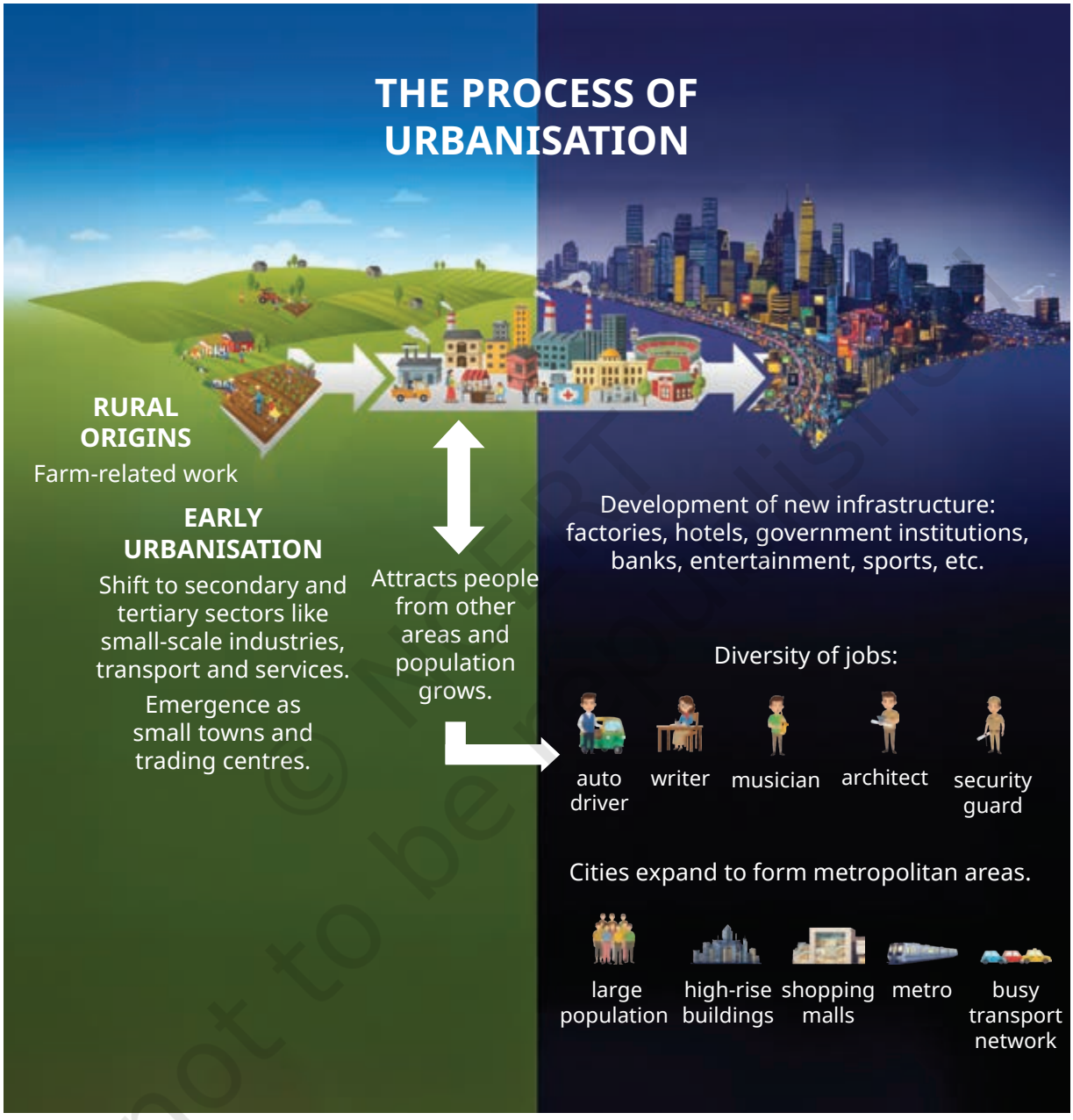

Fig. 7.6. The process of urbanisation

Over time, cities can become crowded and expensive to live in, yet they offer social and economic value because of the concentration of diverse resources.

Sakchi was a small village in the Chota Nagpur Plateau when it was chosen as the site for Asia's first steel plant, due to its proximity to rich iron ore deposits. The vision of the Tata family was to develop the area into a township with modern facilities for all personnel working in the factory. Sir Dorabji Tata even built a hospital in the village long before steel production began. Sakchi grew from a small village into a bustling city and was renamed Jamshedpur in 1919. Today, it is the largest industrial city in Jharkhand. The city was designed with wide, tree-lined streets, gardens, open spaces, houses, and civic amenities. With its planned development, more factories emerged in the region, attracting people from within and outside the state for work opportunities.

Fig. 7.7. Tata Steel Plant at night, Jamshedpur

Fig. 7.8. Jamshedpur city

Just as Jamshedpur thrived on industries due to proximity to **natural resources**, cities often develop based on a **favourable geographical location**. Places near coastlines, rivers, or important trade routes tend to become economic hubs. For example, Mumbai's location along the Arabian Sea and Kolkata's nearness to the eastern coast made them vital port cities for domestic and international trade. Many cities today started off as large villages or small towns. Over time, their location and other factors drive their **urbanisation**.

Urbanisation: Population shift from rural to urban areas and the corresponding decrease in the proportion of people living in rural areas.

LET'S REMEMBER

What were the reasons that Surat became a textile manufacturing and diamond-cutting hub? *(Hint: Recall from your Grade 7 Chapter 'Understanding Markets'.)*

With the setting up of the Bombay Stock Exchange (BSE) in 1875, the port city of Mumbai became the financial capital of the nation. Trade and commerce expanded, and Mumbai became a hub where talent from all sections of society began to congregate. Exposure to what was happening around the world through the exchange of information and ideas led to innovation. The film industry started in the 1910s and was flourishing by the 1930s. Today, the city has a vast network of modern physical infrastructure which enables a wide range of economic activities.

Fig. 7.9. Taj Hotel (left), Gateway of India (right) are famous tourist attractions

Fig. 7.10. The Bandra Worli Sea Link bridge connecting western and southern Mumbai reduces traffic jams and eases mobility for commuters

Bengaluru, also known as the Silicon Valley of India, became an IT hub due to the concentration of software firms, new start-ups, and higher education institutions. **Specialised industries** grouped together in **clusters** turned it into a modern hub that offer jobs to skilled workers from different fields. A close link between industries and educational institutions encouraged innovation and led to development of new products and services using advanced technologies like Artificial Intelligence.

Fig. 7.11. Coastal Road (highway), Mumbai enables faster connectivity between areas

Fig. 7.12. The Bandra Kurla Complex, Mumbai, has banks, corporate offices, and financial institutions

Similarly, Hyderabad has grown into a major centre for technology-based enterprises.

While cities like Delhi, Mumbai, Bengaluru, and Chennai are large metropolises, there are smaller urban centres that are less populous with emerging economic and infrastructure development and specialise in certain industries. For example, Moradabad is famous for brass work, Ludhiana and Tirupur for textile production, Jaipur for handicrafts and gem jewellery, Channapatna for wooden toys, Kanchipuram for silk sarees, and so on. Other rapidly growing cities, such as Kochi, Indore, Lucknow, and Nagpur, are also lucrative for companies, as the cost of operations is lower than in larger cities. So, they establish warehouses and offices in these regions while serving customers across India, and globally.

Fig. 7.13. A bazaar in Jaipur selling traditional Rajasthani embroidered clothes.

Apart from industrial development, some cities hold historical and cultural significance, and are home to famous monuments. For example, Agra, with the Taj Mahal, attracts 70–80 lakh visitors

Fig. 7.14. A bustling market in Varanasi. A large variety of goods is sold here, and pilgrims visit to buy souvenirs and the famous Banarasi sarees.

Fig. 7.15. Selling flowers and other items for pūja outside a temple

every year. Other cities like Amritsar and Varanasi thrive on pilgrims visiting these sacred places. This drives economic activity in sectors such as transportation, hospitality, local food vending, handicrafts, and more, providing livelihoods to the people.

In the case of Delhi, the city has thrived as a centre of culture, trade and administration from the Iron Age. The Rajputs, Turks and Mughals built forts, roads, and markets, while the British built a new capital for their Indian empire and introduced railways and electricity. After Independence, New Delhi became the capital of the Indian Republic with many ministries, industries, universities, and research centres, attracting people for jobs and education opportunities from across the country.

As the population in Delhi expanded, it put pressure on infrastructure like housing, and water and sewerage systems. Creation of the National Capital Region (NCR) to include NOIDA (New Okhla Industrial Development Authority) and Ghaziabad, helped to ease the pressure. Better roads, highways, and the metro rail system boosted the region's expansion. Since the 1990s, Gurugram has become a major IT and **BPO (Business Process Outsourcing)** hub, drawing global companies and driving the development of housing and commercial spaces.

Business Process Outsourcing (BPO): A company hiring another service provider to do specific business functions or processes of their business. This reduces the costs for the hiring company and can get expert professionals to do their work.

Fig. 7.16. (a) Rashtrapati Bhawan, New Delhi (L); (b) Bharat Mandapam, New Delhi (R)

Cities as Cultural Hubs

Cities draw people from various regions, they create a potpourri of culture, languages, customs, traditions, food, festivals, and so on, which begin to be shared along with shared spaces. For instance, *vaḍā pāv* is a famous snack from Mumbai where a Maharashtrian-style potato dumpling is placed delicately inside a *pāv* (where *pāo* or bread and potatoes are Portuguese). This easy-to-make, easy-to-carry, easy-to-eat snack became very popular among workers in Mumbai's textile mills.

Similarly, Kolkata was once the capital of British-ruled India; even today, it has many institutions from the era, like the Indian Museum and Victoria Memorial. However, it is also famous for the annual Durga Puja festivities. This five-day festival takes place every autumn, and Kolkata's Durga Puja was inscribed on UNESCO's list of Intangible Cultural Heritage of Humanity in 2021.

Cities also allocate resources to create other types of facilities — cultural centres, libraries, museums and sports stadiums — which become hubs for enrichment of socio-cultural aspects. Spaces are created for national and international gatherings for sharing knowledge and ideas. They give inhabitants new and exciting experiences and help them interact, build relationships, and form networks.

Indian Museum, Kolkata, West Bengal

Street art, Delhi

Durga Puja celebrations, Kolkata

Stadiums and their facilities

Interaction and networking among commuters

Open-air music festival,
an event that connects people

The Pradhanmantri Sangrahalay in New Delhi tells the story of the prime ministers of India and their contributions to national development. People from all walks of life visit here.

Fig. 7.17. Cities as cultural hubs

LET'S EXPLORE

Can you name some towns and cities near you? Find out some interesting traditions, cuisines, and customs specific to those areas, and discuss them in class.

Challenges Faced by Cities

The influx of large populations into cities puts pressure on their resources, and increased demand for food, water, energy, housing, etc., strains infrastructure. Narrow and poorly maintained roads, the rapid development of unplanned residential areas with poor access to water, sanitation, energy, and waste management, a growing number of vehicles on the road, and rising temperatures on account of the creation of 'heat islands' are some of the problems that urban areas face. Pollution and waste are also on the rise. The National Capital Region (NCR), for example, frequently records **Air Quality Index (AQI)** levels over 400, far above the safe limit of 50, posing serious health risks to the residents. In addition, urban areas often experience higher crime rates than rural regions due to higher population density and economic inequality. This affects the safety and wellbeing of urban residents, and necessitates greater policing and law enforcement.

Air Quality Index: Numerical scale used to report air quality. It includes data on various pollutants like particulate matter (PM2.5,PM10), carbon monoxide, sulfur dioxide, etc., into a single, easy-to-understand value. The higher the AQI, the greater the level of air pollution and the greater the risk to public health.

THINK ABOUT IT

Observe the pictures in Fig. 7.18. Do you notice the other side of the city? What could be the possible challenges faced by people living in urban slums?

Slums are overcrowded city settlements with poor housing and limited water, sanitation, and other municipal services. Slums generally grow near city's periphery, railway tracks, industrial areas where vacant land is available. This is due to lack of enough affordable housing for everyone migrating to the city. These are present in most countries worldwide. Slum dwellers often support cities by performing informal work — vegetable vending, domestic

Poor air quality

Water scarcity

Traffic jams

Reduced green spaces

Waste generation

Flooding during monsoons

Urban slums

Fig. 7.18. Some challenges faced by Indian cities

help, laundry services, construction work, plumbing, and so on. Improving housing, health, and education infrastructure for them is a key urban challenge. Many government schemes try to address the issue, such as the Pradhan Mantri Aawaas Yojana, which provides affordable housing to economically weaker households. Let us look at efforts to mitigate another urban challenge — water scarcity.

Power of collective action in the revival of Bengaluru lakes

Bengaluru, a modern metropolis, faces water shortages in summer and flooding during the monsoon season due to poor urban planning. Overuse of groundwater, lack of rainwater harvesting, and encroachment of lake beds have worsened the crisis. The city once had around 1,000 lakes, but rapid urbanisation reduced the number to about 200, many of which were polluted by sewage and chemicals; wells also dried up. Some lakes, like Bellandur and Varthur, got covered in foam, released toxic gases and even caught fire. Some efforts by non-profit organisations, Resident Welfare Associations (RWAs) and communities are reviving the lakes through desilting, repairing bunds with natural materials, clearing drainage channels, planting native plant species, and restocking fish. Such efforts can improve residents' quality of life by increasing water availability and maintaining the surrounding area's ecological balance.

Before development **After development**

Fig. 7.19. Yelahanka Lake revival, Bengaluru

Planning Our Cities

Urban planner: A person who plans and designs how land in cities and towns is used, aiming to optimise infrastructure and the overall quality of life for residents.

Cities need to be planned as dynamic systems with evolving needs to address these challenges, especially considering climate change. So, **urban planners** need to address many factors to improve the lives of the city's inhabitants. For example, how many people live there? What types of jobs do they have? What kind of transportation do they require, and how can it be interconnected for a smoother commute and access for everyone? Where would homes, businesses, parks, and public facilities (such as schools, hospitals, libraries, sports facilities, and cultural and community centres) be located? What kind of public safety provisions are required, such as safe streets for pedestrians and cyclists, fire stations and police stations in easy-to-reach places?

Let us look at a couple of examples of planned cities.

India's 'Pink City'

Vidyadhar Bhattacharya was the chief architect and urban planner of Jaipur, Rajasthan, appointed by Maharaja Sawai Jai Singh II to design a new city in 1727. Chosen for his knowledge and expertise in Indian architecture — *vāstu shāstra*, and *śhilpa shāstra*, he designed the city using a grid pattern, dividing it into rectangular blocks or *chowkris*, and considering the east-west and north-south cardinal directions. The city plans had wide streets, open spaces, gardens, and nine public squares. These

Fig. 7.20. Buildings made from locally available pink sandstone

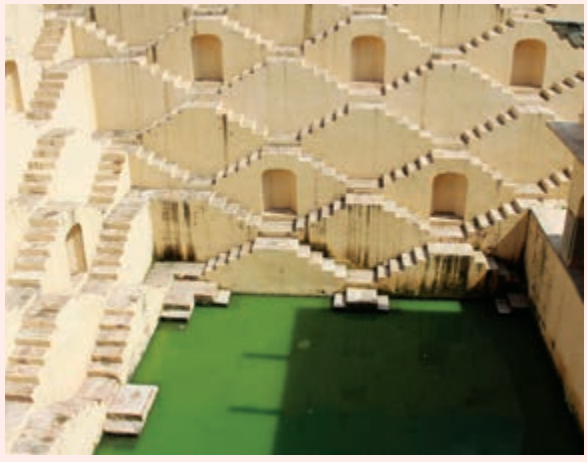

Fig. 7.21. Panna Meena Kund, a stepwell

squares were centres of trade and interaction among people, and had important buildings and temples. For ensuring security, the city was enclosed by a 20-foot wall with seven gates. Keeping in mind the aesthetic appeal of the place, the buildings along major streets were built using pink sandstone, which gave them a uniform appearance and created a cohesive, holistic identity, and look and feel of the city. Hence, the city earned its name, the 'Pink City'. The design allowed good sunlight, fresh air, and a steady water supply through reservoirs and canals, keeping the local dry climate in mind. Markets were built with shaded porches for the comfort of traders and travellers. Even today, Jaipur works much as it was originally designed — a marvel of traditional planning, sustainability, and aesthetics.

Fig. 7.22. Map of Jaipur, 1914

Dynamic urban planning of Singapore

Singapore, a small island nation with over 8,000 people per sq. km, is often seen as a model of urban planning. Despite its density, it has managed to grow while maintaining a high quality of life for the residents. The city has a Concept Plan for how the land must be used that looks up to 40 years ahead. The **Master Plan** is updated every 5 years to reflect the changing needs of the city's infrastructure, making the planning very flexible. From an overcrowded port in the 1960s, Singapore has transformed into a modern city-state with strong infrastructure in transport, electricity, water supply, and waste management.

Master Plan: Long-term planning document that provides a conceptual layout to guide future growth and development.

Fig. 7.23. Old (left) and new (right) Singapore

The city promotes mixed-use spaces where homes, offices, and recreational spaces like parks and museums exist nearby. Marina Bay Sands and Raffles Place (Fig. 7.24 and Fig. 7.25) are just a few kilometres apart.

Vertical gardens: A method of gardening that involves growing plants on vertical surfaces, such as walls, fences, or structures, instead of on the ground.

Fig. 7.24. Marina Bay Sands — a leisure area having a museum, theatre, hotels, restaurants and gardens

Fig. 7.25. Raffles Place — a financial business district with banks and offices

The city's mass public transport system connects rail, buses, cycling paths, and green walking corridors for pedestrians that reduce reliance on cars, encourage walking and help create vibrant public places. To utilise the limited available land, Singapore developed sustainable high-rise buildings with rooftop and **vertical gardens**, earning the title of a 'garden city'. This is not only aesthetically pleasing but also reduces heat during summers and supports biodiversity.

Fig. 7.26. Mass Rapid Transit, a railway system connecting the main parts of the city

Fig. 7.27. Park connectors that link multiple parks; for the convenience of joggers, cyclists and pedestrians

Fig. 7.28. (Left) Buildings with vertical and terrace gardens (Right) Greenhouse Flower Dome that creates an all-weather space using sustainable technologies.

Singapore's urban planning promotes walkability and integrates residential housing for senior citizens with healthcare services, childcare facilities, diverse neighbourhoods, and green spaces. It serves as a model for intergenerational living and meeting diverse community needs within compact areas. Because of its community-centred design for interaction and social connections, Singapore is considered one of the **blue zone** cities where people have longer and healthier lives, focusing on overall wellbeing. Singapore remains a prime example of urban planning through which economic prosperity and a good quality of life is possible using innovative approaches.

Blue zones: Some cities or regions where people live significantly longer, healthier lives — often reaching age 90 or even 100 — with low rates of chronic diseases like heart disease, cancer, and diabetes. For example, Okinawa in Japan.

In India, several urban redevelopment projects have created vibrant public spaces. These require integrating technology, citizen participation, efficient infrastructure and improved urban services such as waste management, water supply, public transport, energy efficiency, housing, and e-governance. Ahmedabad's Sabarmati Riverfront is one such example that blends ecology and public utility. It features promenades, parks, markets, boating, and the Atal Bridge, which allows pedestrians and cyclists to walk along the river.

Two-level promenade for walking along the riverside

The Atal Bridge connecting the two sides of the river

Fig. 7.29. Sabarmati Riverfront, Ahmedabad, Gujarat

Similarly, Gangtok's Mahatma Gandhi Road is a central shopping hub and a pedestrian-only zone brimming with shops, restaurants, and hotels. It is also known for its cleanliness and vibrant atmosphere.

Fig. 7.30. M.G. Road, Gangtok, Sikkim

Cities are more than just clusters of buildings, roads, and markets — they are like living organisms that grow, adapt, and transform with time. They are centres of consumption as well as production, which are important aspects of economic growth. In addition, these are spaces where ideas are born, where traditions meet modernity, and where people from different walks of life come together to shape a shared future. A well-planned city not only provides infrastructure but also nurtures creativity, diversity, and community. This further needs to be complemented by innovative technologies using ICT (Information and Communication Technology), such as intelligent traffic systems, digital surveillance, online grievance redressal platforms, and solar-powered public spaces, to make urban life more convenient and sustainable.

Cities also remind us of our responsibilities. Rapid urbanisation brings challenges such as pollution, traffic congestion, inequality, and the loss of green spaces, affecting not only those who live in cities but also the rural areas connected to them. A sustainable city of tomorrow must balance growth with care for people and Nature. It must offer opportunities without excluding the vulnerable, and provide comfort without exhausting resources. As urban landscapes evolve and expand, balancing growth with sustainability will shape the cities of tomorrow.

Before we move on ...

- Cities are large human settlements that are centres of diverse economic and cultural activities. Many factors, such as locational advantage, the development of business clusters, tourism, and efficient infrastructure and so on, result in the growth of cities.
- As cities grow, they face many challenges such as air and water pollution, expansion of slums, lack of green spaces, traffic jams, and waste generation and so on.
- Cities need to be planned dynamically, keeping in mind the constantly changing needs of the inhabitants in a sustainable manner. With better planning, cities can remain centres of innovation, culture, and economic prosperity.

Questions and activities

1. What are some common features of cities?
2. Can you think of a city or town near you that has grown in population? What could be the underlying reasons for the urban migration?
3. With reference to the epigraph at the beginning of the chapter, who are the participants in the making of the city and what could be their contribution?
4. In what ways can urbanisation affect rural areas? Do cities also depend on rural areas? If yes, how? In what ways can rural and urban areas help each other develop?
5. What is urban planning? What are the risks of ignoring sustainable urban planning as cities expand into villages and forest areas?
6. Observe your own neighbourhood. What signs of good or poor planning do you notice? How do they affect daily life for you and others?
7. Imagine you are an urban planner, what are the things you would consider to plan a city? Do groups like children,

the elderly, and people with disabilities get easy access to parks, toilets, and public transport? What changes would you introduce to make it more inclusive?

8. Suppose your town, village or city has 100 people. Draw a rough map of the place on a graph paper. Imagine each square on the paper represents a specific area of the place, like residential neighbourhoods, parks, schools, factories, post offices and so on.

   Now, distribute the 100 people throughout the area. You can decide where the people will live, whether they all live in the residential areas, or some live in the commercial or industrial areas. Write this number in each of the boxes.

   In your depiction of the map, which areas are heavily populated and which are not? What were the reasons behind your choices of allocation of people?

9. Observe the satellite view of Mumbai and Gangtok, respectively. Find out their population density and likely reasons for the difference.

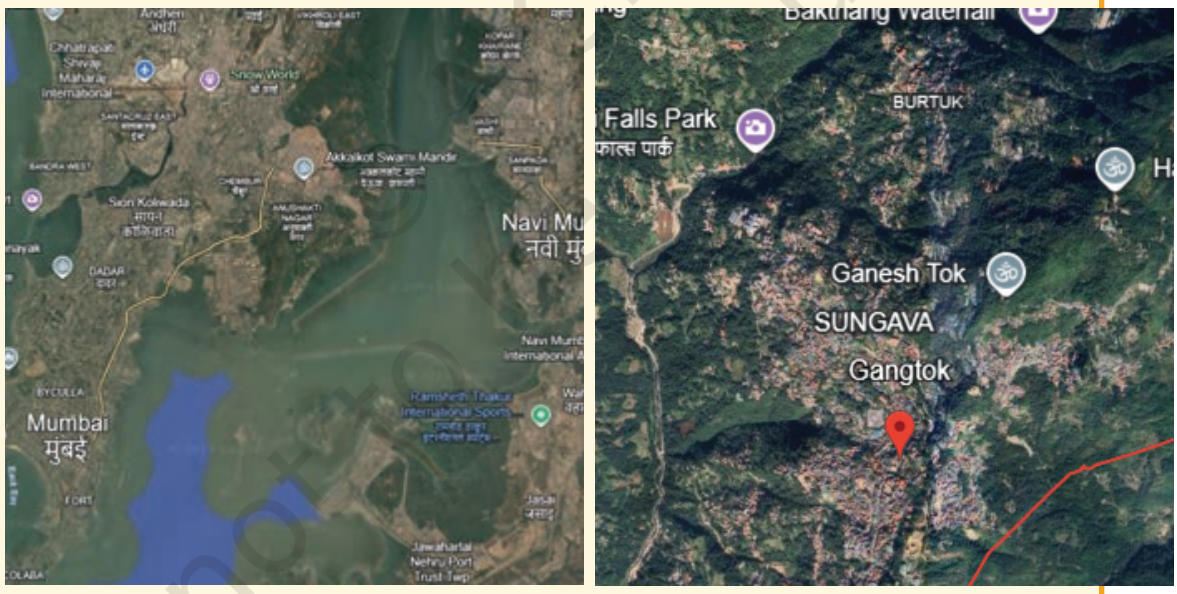

Fig. 7.31.

10. Find out how the city of Beijing, China, tackled the problem of air pollution. Prepare a report outlining measures that can be taken in India to mitigate air pollution in cities.

11. Talk to a family or community member who has moved from a village to a city. Ask them the reason for the same and their experience, challenges and opportunities. How does city life compare to rural life?
12. Learn about urban planning in other cities around the world. In what ways can some of those aspects be adapted for a city near you?
13. Explore and suggest action points with respect to urban planning in cities to mitigate the challenges below and write a report. Two have been completed for you.

    Waste Management: Conducting a 'Segregate at Source' awareness drive in residential areas with demos on dry/ wet waste disposal and composting.

    Traffic congestion: carpooling, high taxes on vehicle purchase, etc.

    Inadequate safety of residents

    Poor mobility within the city

    Expansion of slums

    Heat waves during summers
14. Find out about a slum rehabilitation program where people moved from slums to proper housing in your city. What do you think its possible benefits could be for the communities there?