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## **EVOLUTION OF MODERN CITIES**

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### Although there were a few cities as early as 4000 B.C, these cities were generally small. Most of the world's population is now living in urban areas and this is predicted to increase in the next few decades. For the first time in history the majority of the world's population is living in urban areas. As humans change so do their working and living environments. In contrast to agrarian rural settings cities are characterized by their mass production, marketplaces and service industries. It is not only the visible aspects of working and living environments that change but also their intangible qualities such as their intellectual assets, vibrancy, creativity, and shared identity. Typical urbanites now have more opportunity and choice than their ancestors had before. This study looks into the various factors which have influenced the development of a city and those that led to its downfall. The study gives a critical analysis of urbanization and industrialization and its influence on modern cities. It looks into the development and evolution of Indian cities over the various eras and critically analyses an Indian city like Mumbai for a better understanding of the various factors influencing the development and detoriation of Indian cities

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## **INTRODUCTION**

There were a few cities as early as 4000 B.C, but they were generally small and had to be supported by much larger rural populations. Urbanized societies in which a high proportion of the population lives in cities developed only in the nineteenth and twentieth centuries. The process of urbanization has moved rapidly in the entire world since 1800 and the peak is not yet in sight. There is so much about the modern city that is wrong. Isolation and insecurity have spoiled the quality of life. In architecture, modernism-the cult of abstract rationality and change for its own sake, has given us inhumanity and sterility instead of the promised liberation and progress. Most of us look to the cities we admire from the past for a solution. In traditional cities like Bath in England or Sienna in Italy we see something that is not only beautiful but humane and alive, the qualities that seem to have been destroyed by modernism. One can't help feeling that if we were to build our cities like these traditional ones we could make them more life enhancing. Therefore, a revival of traditional architecture and city planning has grown up; it is flourishing, from Brussels in Belgium to Seaside, Florida, from Portland, Oregon, to Paternoster Square in London.

The word "city" is derived from the Latin for citizen and means a community of citizens. The average population of a pre-Hellenic Greek city was a little over 5,000. A large provincial Roman city had a population of 10,000 to 20,000.

\**Corresponding author:* Kishore Kandasamy School of Architecture and Planning, Anna University, Chennai, India There was not much change in size until the Industrial revolution. Most medieval cities had fewer than 10,000 inhabitants. Even major Italian renaissance cities rarely exceeded 50,000. Today, London counts 8 million inhabitants, Chicago contains nearly 3 million people, Paris 2.5 million, and even a small Italian city such as Perugia has a population of 120, 000. [1]These size differences lead to very different dynamics of city life. So, too, do differences in political and social organization. Democracy in Greek city-states or Italian communes was not like modern democracy and it was a fragile flower easily and often crushed.

Another very important factor in understanding of the city is its economic base. Very early cities were fortified villages where people engaged in agriculture outside the walls. Since antiquity, the city has been a consumer of goods produced in the countryside. It supported itself on trade or conquest. A city was a place where wealth free from the pressures of sufficiency could be enjoyed. Outside the city there was brute existence, the struggle for survival, the wilderness, and danger; inside the city there was safety, order, wealth, and the leisure to pursue the finer things of life.

This idea of civilization, however, is not in concurrence with the modern city concept. The modern city is the urban junglethe wilderness. The inner city is a dangerous place where the struggle for survival dominates brute existence. People with sufficient wealth leave the public city for a private place where there is order, safety, and the enjoyment of leisure[1]. In this study Mumbai has been studied thoroughly and it is taken as the example of how a city was developed over time and how various factors such as migration, slum development, overcrowding, land scarcity, failed government policies, lack of infrastructure to adapt to the incoming population have led to the failure and detoriation of the city. This is not the case of just Mumbai but also several other metropolitan cities of the country such as Chennai, Delhi, Bangalore etc which are all in the same line of detoriaton. We need to tackle these issues immediately and come up with efficient solutions keeping the future development of the country in mind.

*Causes for the Development of Modern Cities:* Many causes led to the development of modern cities. Each city developed because of various reasons; some of these reasons may be specific to that particular city only and some others common The causes may be distinguished into two classes[2]:

## General or Social causes

*Industrial Revolution:* This revolution is the most vital cause for the growth of cities. The great city is largely the product of modern industrialization. Improved transportation, improved machinery, enlarged markets and the increased wants of men have caused the growth of manufacturing industries. Thesehave led to the centralization of the manufacturing industries in the cities.With a greater number of big markets, industrial complexes, shopping centres, and housing developing, the places near the industries attract large number of people and become important business centres. In time, this place turns into a city.

*Increase and improvement in commerce and trade:* During the 19<sup>th</sup> century between different communities, there developed a rapid increase in commerce andtrade. Growth and improvement of transportation led to increase in commerce and trade. All the great cities are located at natural breaks in transportation. The modern city even after developing into an industrial centre has not lost its characteristics. On the contrary, the status of the city in commerce and trade has made it a valuable centre for the development of manufacturing industries. A large business centre will also have big market centres, housing colonies, shopping centres, cultural and educational centres, buildings, hotels, restaurants and clubs. All these are a must for a city. People are a must to man these business centres. So, the people migrate in large numbers to run these centres.

**Diminishing Importance of Agriculture:** Once, agriculture was the allembracing occupation. All goods were produced upon the farm. Now man's wants have increased so greatly that the primitive industries of the farm cannot satisfy these wants, and therefore men have developed large manufacturing industries. Nowadays fewer men are required on the farms to produce the same amount of raw material as was formerly produced by many due to the invention and application of labour-saving machines. Hence, the people displaced by farm machinery must find other work, mainly in manufacturing industries. In the 19<sup>th</sup> century, the diminishing importance of agriculture was one of the main causes for the growth of the cities.

## Minor or Individual Causes

*Educational Centres:* In most places, growth of good educational institutions, such as Universities and colleges, attract more number of students toobtain better education. These education centres over time turn into cities, and associated businesses like residential complexes, hotels, stationery shops, etc. develop around these educational

institutions to cater to the needs of the students and the migrated teachers. An important example of this type of city in India is Pilani, which became popular because of the presence of the popular educational institution Birla Institute of Technology and Science (BITS).b. Political Factors:Due to the spread of education, people now have become conscious of their duties and rights, giving rise to political consciousness. Due to political reasons, some places become importantand become cities. In all the states, the capitals in comparison to other cities have developed at a faster pace. For example, Kolkata was a small village but when it was became the capital of British India; it very fast became a modern city. Similarly, the cities of London, Delhi and Tokyo have developed due to their becomingcapitals.c. Means of Entertainment :In villages, there are not many means of entertainment. The people therefore visit the nearby towns for entertainment. With time, they settle down in these towns, which develop into town cities. Industrialization "Industrialization is the systemic exploitation of wasting assets. In all too many cases, the thing we call progress is merely an acceleration in the rate of that exploitation"-Aldous Huxley[3]Industrialisation is the period of economic and social change that changes a group of humans from an agrarian society to an industrial society, leading to extensive reorganisation of an economy for the purpose of manufacturing Industrialization by creating economic growth and job opportunities lead to urbanisation. Urbanization begins when multiple factories are established in a region, leading to high demand for factory labor. Other businesses such as retailers, building manufacturers, and service providers develop around the factories so as to meet the workers demand for products. This leads to more jobs and further demands for housing, causing establishment of an urban area. Urbanization Occurs near Bodies of WaterIn the history of human civilization, urbanization generally takes place near large bodies of water. Initially this occurred to meet the food and water needs of the vast populations. But, since the Industrial Revolution, thistrend has continued because industries need large bodies of water to sustain it. Businesses require large amounts of water for productmanufacturing; in addition for transportation of goods, they depend on rivers and oceans. It is because of this that 75% of the world's urbanisation takes place in coastal regions. Urbanization Continues after Industrialization Occurs Industrialization creates economic growth leading to the demand for the improved public work agencies and education. This is because businesses are looking to increase productivity by using new technology .For thisthey require an educated workforce, and only pleasant living conditions will attract skilled workers .Following Industrialisation of an area, theurbanization process continues for a longer period of time as the area needs to go through several phases of social and economic reform. This concept can be illustrated by comparing a city such as Bangkok, located in a lessdeveloped country, with a European city such as Berlin and an American city such as Los Angeles. Eachof these cities have a progressively higher level of environmental, social, and economic prosperity through increased education, social reform and government intervention

## Drawbacks of Industrialisation

*Environmental Disadvantages:* The biggest harm of industrialization is on the environment. Most companies that take part in industrialization impose a major negative effect on

society leading to widespread pollution, deforestation, excessive waste and extinction of species.

*Financial Disadvantages:* Financially, industrialization leads to a major division between the rich and poor due to division of capital and labour. The rich who own capital accumulate the excessive profits they achieve through their economic activities, leading to high disparity of wealth and income.

*Social Disadvantages:* Industrialization causes the workers to migrate to cities and leads to repetitive tasks and automation. Rapid urbanization causes the workers' quality of life to detoriate and leads to problems for society, such as stress, crime, and psychological disorders. Longer working hours leads to consumption of quick and low quality foods, poor nutrition and results in increased incidences of diabetes, stroke and heart attack.

The Formation of Cities: Agriculture is a prerequisite for cities to develop, this helps preserve surplus production and create economies of scale. The cities first formed with the spread of agriculture after the Neolithic Revolution. With the advent of farming, the huntergatherers abandoned their nomadic lifestyles and settled down near those who lived by agricultural production. Agriculture yielded more food, leading to denser human populations which supported city development. Agriculture resulted in creating dense, settled populations, and food surpluses which required storage and trade facilitation. These are the most important requirements for city life. Many believe that agriculture lead to the development of cities and their growth. Cities also have other advantages, like reduced cost of transport for goods, ideas and people, by bringing it all together. Cities contributed to worker productivity by reducing these transaction costs. It is believed that people may have joined together and formed cities to protect themselves against barbarian marauding [4].

*Preindustrial Cities:* Preindustrial cities had important economic and political functions and developed into well-defined political units.

*Cities as Political Centres:* Ancient cities organically started as trading centres but preindustrial cities became well defined political units; some cities had their own legislatures. In continental Europe and in the Holy Roman Empire, some cities had only the emperor as lord. Medieval communes in Italy had a state-like power. Cities like Genoa, Venice, or Lübeck, became powerful states, taking over surrounding areas and by creating extensive maritime empires[4].

*Trade Routes Some:* cities that became major urban centres benefited from trade routes. In the early modern era, large capital cities grew even larger by benefiting from new trade routes .In the early 19th century, London became the world's largest city with over a million population, while Paris rivalled the other well developed regional capital cities of Beijing, Baghdad, Kyoto and Istanbul. But most other towns remained smaller places. In 1500 world contained more than 100,000 inhabitants only in about two dozen places. As late as 1700, there were fewer than 40, and by 1900 there were 300.In the early modern perioda small city might contain around 10,000 inhabitants.

*Industrial Cities:* Cities grew rapidly during the industrial area and became centres of population growth and production. The growth of USA shows how this process unfolded; from 1860 to 1910, the railroads were invented and this reduced cost of

transportation and large manufacturing centres started to evolve in the United States, causing migration of people from rural to urban areas. This rapid growth of urban areas bought problems with it, and these industrial cities were full of dangers to safety and health The Structure of CitiesUrban structure is the arrangement of land, and can be understood using different models. Urban Structure Modelsi. GridIn grid models, the land is divided by streets intersecting at right angles, forming a grid. These are seen more in North American cities than in Europe. This model helps in the development of the land as developers can subdivide these large parcels of land and sell them off. This subdivision produces regular size lots that can maximize the use of the land and minimize the boundary disputes. But this gridsdesign can lead to danger as these long, straight roads allow faster movement of automobiles. In 1960s, the city planners changed from grid design and started planning developments in suburban areas with cul-de-sacs and dead ends.

**Concentric Ring Model:** The concentric ring model was designed in 1924 based on his observations of Chicago by Ernest Burgess. The residents of these urbanareas sort themselves into appropriate rings, or ecological niches, depending on cultural and class distribution. The innermost ringis called Zone A which represents the central business district. This Zone is surrounded by a zone of transition, and this contains poorer quality housing and industry. The third ring consists of the zone of independent workers' homes. The fourth ring has larger and newer houses of the middle-class. The outermost ring, called commuter's zone, consists of the residential suburbs.

**Sectoral:** In 1939, the economist Homer Hoytproposed that cities develop in wedge-shaped sectors instead of rings. Certain cityareas are more favoured for some activities, either by chance or environmental/geographic reasons. When these activities develop they expand outward and form wedges, leading to formation of city sectors. This sectoral model has been found faulty as it ignores physical features and the transportation patterns that direct or restrict growth.

*Multiple Nuclei:* After the arrival of the automobile in 1945 the multiple nuclei model was proposed to explain city formation. Due to the increased use of automobiles people had greater mobility leading to the specialization of regional centres. A city could have more than one centre around which specific activities revolve. Such activities are restricted to particular nodes while incompatible activities will move to different areas.

*Irregular Pattern:* The irregular pattern model was proposed to explain third world urban structure. It explains the lack of proper planning which is found in many rapidly built cities of the Third World. This model contains blocks without any order; these urban structures are not related to any urban centre[4]

*The Process of Urbanization:* Urbanization is the process of shift of the population from rural areas to cities. During the last few decades, populations throughout the globe have urbanized rapidly. In the year 1900 13% of people lived in urban environments while it became 29% in the year 1950. It is suggested that, the percentage of people living in cities may reach 60% by2030.Urbanization correlates positively with industrialization. As greater employment opportunities occur with industrialization, people from rural areas move to cities

for greater economic rewards. As more and more people leave farms and villages to live in cities, urban growth occurs. In the late nineteenth century Chicago grew rapidly as also Mumbaiin the twentieth century. This is extensively due to migration from rural to urban areas. This kind of growth is common in developing countries. Urbanization occurs due to better job opportunity, better housing, education, transport and entertainment, and people want to reduce time and expenses commuting large distance [4]Economic and spent in Environmental Effects of Urbanization As the urban populations grow, the demand for goods and services increases, raising the prices of these as well as land price. Due to this the local working class will be priced out of the urban real estate market and forced to move into not so desirable neigh bourhoods - a process known as gentrification. Suburbanization and Counter urbanization Recently, sociologists have observed that in developed countries suburbanization and counter urbanization, or movement away from cities is taking place. This may be due to transportation infrastructure, or social factors like racism. In developed countries, people are able to move away from cities while still having most of the advantages of city life. Counter urbanizationoccurs most commonly among the upper and middle classes who can afford their own homes. Suburbanization is the movement of people from cities to surrounding areas. Commuter towns are mainly residential, the residents commute to jobs in the city. They are also called bedroom communities as residents spend their days working in the cities and come home only to sleep. Generally commuter towns have little industrial or commercial activity going on, though there may be some retail centres to serve the residents daily needs The Rural Rebound During 1970s and 1990s, in a reversal of urbanisation, the rural population increased. The rural rebound refers to the movement to suburban and rural areas from cities. Urbanization occurs along with modernization, yet in most of the developed countries in the world, their cities are now losing population. In the1970s in the United States, it was observed that rural population was growing faster than urban populations, a phenomenon labelledas the "rural rebound." This trend reversed again in the 1980s, due to a recession that hit the farmers. Again in 1990s, rural populations appeared to be increasing compared to cities. 370 cities all over the world with more than 100,000 populations have undergone population losses of more than 10% in the last fifty years, and more than 25% of these cities are in the United States. Urban Sprawl Urban growth is an undeniable fact: cities have grown rapidly in the twentieth century. In some cities, there has been poorly controlled growth, leading to a phenomenon known as urban sprawl. Urban sprawl's segregated land use means that the places where people work, live, relax and shop are far away from one another, which makes walking, bicycling or public transit, not feasible . This leads to the necessity of the residents to use an automobile. Urban sprawl is also associated with negative public health and environmental effects, most of which are due to increased automobile use leading to air pollution, increases in personal transportation costs, increases in traffic accidents, decrease in land and water quantity and quality and reliance on fossil fuel, delays in emergency medical services response times, Urban Decay Customer preferences drives urban sprawl, people prefer to live in quieter, lower density and more private communities that they consider more relaxed and safer than urban neighbourhoods. Urban decay is caused by the

crowding and excessive density of cities, which drives out residents, leading to urban sprawl. Responses to Decay Cities have launched urban renewal programs in response to urbandecay and urban sprawl. These urban renewal programs are of two types -New Urbanism and smart growth. These programs try to make cities more liveable and pleasant. Smart growth programs keep urban development compact and dense by drawing urban growth boundaries. This boundary protects the wild areas and surrounding farmland and increases the density of the city. Smart growth programs work towards transitoriented development goals and this make pedestrians and bicyclers more comfortable and encourage use of effective public transit systems .New Urbanism is an urban design movement that promotes walk ableneighbourhoods with a range of job types and housing options. As an approach to urban planning, it encompasses principles such as traditional neighbourhood design and transitoriented development [4]. The Evolution of Towns And Cities In India Favourable ecology is the first precondition for urban development. At the end of the Ice Age Climate change led to receding of glaciers and people congregated in warm regions with fertile soil. The availability of food at the place of settlement is the second precondition for sedentary life Origin of Towns and Cities: Cities are not merely enlarged villages. The early cities in Asia and the Middle East, which grew along fertile river valleys, were totally a new kind of society. In course of time domestication of animals and plants provided surplus of material which is the third pre-condition for the urban centre growth. This resulted in a stratified society of the ruling elite and subordinates. This new class of people focused their energies on making weapons, tools, and gathering wood for heat/shelter[5] Pre-Colonial Era: (Pre-Colonial Urbanization) In Indian subcontinent from eleventh to seventeenth centuries Muslim invasion took place. The biggest impact of this was upon trade, resulting in a common legal and commercial system, extending from Mongolia in the north-east, Morocco in the west and Indonesia on the south east. In medieval times South India was already in trade with the Arabs while North India found new opportunities and set up important centres of industries and trade such as Delhi, Bombay, Lahore, Ahmadabad, Jaunpur, Sonargaon, Hence, India had always had a favourable balance in her trade dealings with other countries. Her earnings from various exports such as textiles, indigospices, silver, gold, diamonds etc. amounted to crores of rupees. Industrial Cities: During the middle ages, there was steady increase in commerce leading to a new urban middle class .The enormous productive power of the factories resulted in the unprecedented growth of cities. Besides growth the cities changed from being planned cities with broad, straight roads, etc to unplanned irregular shapes. The streets grew haphazardly in all directions accommodating the commercial traffic including the electric and steam. During this period land became a commodity that could be bought and sold; the developers divided the land into regular sized lots and sold them. The cities became more crowded and impersonal, class stratification became prominent and crime rate increased.[5] Colonial Era (Colonial Urbanization) From the second half of the eighteenth century the East India Company emerged as political power in India and the situation changed. The main reason for the British success was their naval dominance in the Arabian Sea and the Indian Ocean. During this period the British were establishing their commercial and administrative system between Delhi and Calcutta. Bengal which was the wealthiest province of Mughal India proved an excellent prize for the British and helped them to deal with other states and economies in the subcontinent. The Company started dominating industry and trade of eastern region with the gradual emergence of British entrepreneurship in industries of indigo, tea, salt, jute, coal, textiles, cotton, iron and steel, cement, sugar, matches, paper, etc. Mumbai, India - Case study: Economic development and rapid urbanization Background Mumbai is a major Indian city situated on the west coast. With a population of over 20 million it was the biggest city in India .The population has increased by more than 8 million people due to internal migration and more than half of this increase in population occurred between 1960-1970. The population density is estimated to be about 22,000 people per square kilometre. It is India's finance centre, a major industrial area and port and also a centre of culture due to "Bollywood". Mumbai lies in Maharashtra, which is India's richest state in terms of both total and per capita GDP. Mumbai was originally a series of fishing villages that became a port and this encouraged its early development. It receives about 1000 new migrants a day and it is estimated that by 2020 the population is likely to be over 26 million and it could become the world's largest city by 2050. However there is a problem: India's tax rates are low so as to attract investments and companies, therefore high income earners and companies pay little tax. This leads to low revenue with which to provide public services like water, public health and sanitation. The low income workers cannot afford to pay for these services .Until the 1980's, the economy was mainly based mainly on shipping and textile manufacturing .Recently there has been a rapid increase infinancial services and IT recently .Mumbai is a major centre for out-sourced work from foreign companies. Mumbai is a major media centre for India and is one of the largest in the world. Causes Services - banking, insurance, IT and call services. Mumbai's universities produce welleducated, English-speaking graduates who are employed by large western companies who contract them to provide services - outsourcing as India's wage rates are low Manufacturing - half of Mumbai's factory workers work in the textiles industry, producing cotton textiles for export. Other booming industries: food processing, cement steel, engineering, and computer software. Construction - demand for housing, offices and factories leads to boom in construction industry Entertainment - Mumbai has world's largest film industry - Bollywood Leisure and business services - e.g. restaurants and hotels. Vast number of people move in from the countryside due to varied work being available from highly skilled jobs to unskilled work and people believe they will have a better life in the city Effects/Consequences This rapid urbanisation and the economic development provides 33% of India's entire tax revenue About 40% of international flights to India land at Mumbai. High demand for land has driven rents in exclusive parts of the city higher than those in New York or London. Headquarters of Indian MNCs like Tata Steel and Mukesh Ambani Oil are in Mumbai. Large percentage of the population suffers from unemployment and poverty. As land value in Mumbai is expensive and as people cannot afford homes they live in illegal shanty towns which are very cramped. There is poor transport link and the city is incredibly cramped due to so many people living within the city.

## Slum Development a Result of Rapid Urbanisation

Dharavi: One million people live illegally in Dharavi in Mumbai which is Asia's second largest shanty town. It's situated between two main railway links and it provides cheap accommodation for low-skilled workers. Their average incomes are low and as Mumbai is very expensive they cannot afford to move out. Quality of life has deteriorated, slums have multiplied, and congestion, water problem and pollution have increased VISION MUMBAI is the solution to these problems developed by MMR (Mumbai Metropolitan Region) and McKinsey company and has6 main targets:1. Increase availability of housing so as to make it more affordable and to reduce the number of people living in slums 2. Reduce administrative expenditure and raise adequate financing 3. Improve transport facilities, provide more buses and train carriages; increase the number of expressways and freeways and increase parking space4.More responsive and efficient governance 5.Boost economic growth by 8-10% per year by focusing on services and by making Mumbai a 'consumption centre'6.Upgrade other infrastructure (safety, water. environment, education, sanitation, and healthcare)

## Making Vision Mumbai work

Dharavi and other slums should be removed by which land which is worth \$10billion will be available to be sold and developed. Private developers will be able to buy the land for less than it's worth and in return, for every square foot of new housing they build for the poor, they are allowed 30% more for commercial development. 'Quick wins' include clearing, restoring and maintain 325 open and green spaces, building an extra 300 public toilets and widening and beautification of road networks

# Seven Crucial Problems Faced by Urban Society in Mumbai are [7]

1. Slums and Housing, 2. Depersonalisation and Crowding, 3. Drainage and Water Supply, 4. Traffic and Transportation 5. Power Shortage, 6. Pollution, 7. Sanitation.

Urban problems are never ending. The important among them are: pollution, unemployment, corruption, overcrowding and slums, crime and juvenile delinquency, begging, drug addiction and alcoholism. We will analyze some of the crucial problems.

## Slums and Housing

Housing people in a city is a very serious problem. Government, capitalists, industrialists, contractors, entrepreneurs, and landlords are not able to cope with the housing needs of middle class and the poor people. Almost50% of the population pay more than 20 per cent of their income on rent and this is the major expense next to food and clothing. Housing is the major problem in cities

## Depersonalisation and Crowding

Crowding (increased density of population) and people's apathy to other persons' problems is another problem in cities. Sometimes five to six persons live in one room. Overcrowding has some deleterious effects. It spreads disease, encourages deviant behavior and fosters alcoholism, mental illness and riots.

### Drainage and Water Supply

Nowadays no city has water supply round the clock. Cities like Chennai, Rajkot, Hyderabad, Udaipur and Ajmer, get water for less than one hour a day from municipal sources. Most small town have little rain water supply and are dependent on tube wells. Even a relatively planned and serviced city like Delhi has to reach to Ramganaga 180 km away for water supply augmentation. Bangalore pumps water from far off distance with a lift of about 700 metres. In the last eight-nine years mostcities and towns which previously used to get good rain every year have been undergoing acute water shortage. A national water policy is lacking which could assess the total water resources and then allocate water accordingly. When we look on the other side of the water problem, which is drainage, the situation is equally bad. There is not a single city in India which is fully sewered. This is so even in Chandigarh which is a fully planned city as unauthorised constructions in and around it lie outside the main system purview. Because of the non-existent drainage, even in summer ,large pools of stagnant water can be seen all over every city Just as we need a national water policy, we also need a national and regional drainage policy.

### Traffic and Transportation

In Indian cities the traffic and transportation situation is unsatisfactory. Majority of people use tempos and buses, while few use trains. The increasing number of cars and motorcycles worsen the traffic problem. For example, in Mumbai, automobiles have trebled (from 3.1 lakh to 8.73 lakh) between 1986 and 1996 (The Hindustan Times, November 29, 1996). In Mumbai alone, daily pollutants let out into the air are about 3,000 tons, of which 52 per cent come from automobiles, 46 percent from industries and the remaining 2 per cent from domestic fuels. The number of buses plying in metropolitan cities like Mumbai, Delhi, Calcutta and Chennai is not sufficient and commuters have to spend about one to two hours waiting for a bus. The low income of commuters forces them to live in far off areas where accommodation is cheapand necessitates long travel.

### **Power Shortage**

Closely linked with transportation is power shortage. The use of electrical gadgets has increased in cities; the expansion of old industries and the establishment of new ones have also increased the use of electricity. Most states are not in a position to generate their own power and need to depend on neighbouring states for power.

### Pollution

Our cities and towns are major polluters of the environment. Several cities discharge 40 to 60 per cent of their untreated industrial effluents and entire sewage into the nearby rivers. .Delhi is considered the fourth most polluted city in the world. The poison we emit into the environment comes back to us through our water, air, and food, entering our bodies and causing cancer, immune disorders or hormonal system disorders.

### Sanitation

Municipal corporations in India are loaded with corruption and maladministration and they don't have time for sanitation work in the cities, like removing garbage, unclogging sewers and cleaning drains. This problem is further compounded by the spread of unauthorised slums in congested urban areas and lack of civic sense among the settlers in these slums adding to the growing mound of disease and filth. If sewage and sanitation are treated as low-priority areas, in the coming years overcoming health crisis in urban areas will be an impossible task. A fundamental change in the municipal infrastructure, using new techniques for refuse collection and garbage disposal and planning of land use is the need of the hour[7].

## CONCLUSION

Through this study we have critically analysed how the cities have evolved over time and have also looked into the various factors which have led to the growth and the detoriation of cities such as over population, migration, the lack of basics facilities such as bad roads, public transportation etc. We have looked into the evolution of Indian cities and have also considered the timeline and the political, social and economical influences on the evolution of these cities. Throughout the study it has been clearly observed that despite any city's geographical location the pattern of growth and the evolvement of the city is the same and that despite its differences all the cities are facing the exact same issues The issues faced by 19<sup>th</sup> and 20<sup>th</sup> century Europe and America are the same that India is facing at present Most of these developed countries have devised several methodologies for overcoming these issues. It is high time we realise the seriousness of the issues faced in India and come up with immediate solutions for future growth before it becomes too late. Job opportunities and all other basic facilities need to be provided throughout the country and not just in urban spaces. By doing so we will be able to evenly divide the population of the country and avoid the overcrowding of cities such as Mumbai.

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