

URBAN SOCIOLOGY

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Unit-I: Evolution of Cities in History based on Major Functions:Growth of Urbanization in India, City type and functions in India, The Rural-Urban dichotomy and continuum in India and Theories of Unrbanization

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UNIT-I

Evolution of Cities in History based on Major Functions:

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1.0. OBJECTIVES

The main objectives of this unit are to acquaint the readers with the following:

- *Evolution of cities in history based on functions
- * Growth of urbanization in India
- * Rural- urban dichotomy and continuum
- * Theories of urbanization

1.1. EVOLUTION OF CITIES IN HISTORY BASED ON FUCTIONS

Chronological factor has been considered significant in the evolution of different cities. While attempting on the historical analyses of cities, we refer to the changes experienced by a city through a period of time. A multiplicity of factors are held responsible for bringing about changes in the structure and functions of cities, The historians have identified the following factors that have led to the changes.

- i. social factor
- ii.economic factor
- iii.political factor
- iv.technological factor
- v.other factors

During each period of history, may it be ancient or medieval or modern, we evince changes in the character of city. Another way of looking at the temporal analyses of city may be linked with the pre-industrial and industrial categories. Whereas the industrial city arises out of the process of industrialization, the pre-industrial one has arisen not due to the same factor. The cases of Rourkela and Varanasi may be taken as examples respectively in this regard. Although it has been assumed by scholars that the pre-industrial city pre-dates industrialization , the case

is not always the same. This dichotomy may be made time related only as they may exist at the same time in different parts of the country or the world. In real terms, different kinds of cities that have existed at different points of time performed different types of functions as per the requirement regional or national economy or social expectations.

Notwithstanding the evolution of cities in history based on functions, temporal changes in cities along with their functional changes may be evinced in the forms:

- I. Ancient
- II. Medieval
- III. modern
- IV. pre industrial
- V. industrial

1.1.1 Ancient Cities

Archaeology has always been useful in the study of ancient cities. Archeologists have identified cities on the basis of its size and from the scale of its remains. We will be examining the first cities that emerged in India. The cities first emerged during the Bronze Age and then the second phase of urbanisation took place during the 6th century B.C. First we will look at the Bronze Age cities:

Bronze Age: The 'Bronze Age' may be construed as the period relating to the earliest cities in India Indus civilisation that witnessed the emergence of well organised cities, planned and inhabited by specialists - such as carpenters and metal workers. Bronze Age refers to a period in history when there was an increased dependence on copper and copper alloys (when copper is mixed with other metals such as arsenic, tin or lead to manufacture bronze. V. Gordon Childe puts forward ten criteria based on archaeological data, to distinguish the earliest cities from older cities the villages found today. These are the ten features that he postulated:

- 1) In terms of size, the first cities should have had larger and more densely populated areas than any previous settlements, although

considerably smaller than many villages found today.

- 2) There were differences in composition and function of the urban population and that of a village. There may have been citizens who were cultivating land near the city. The city must have accommodated full-time specialist craftsmen, transport workers, merchants, officials and priests.
- 3) Each producer paid a tiny surplus as tax to an imaginary deity or a divine king and the surplus concentrated in his hands. Cities were distinguished on the basis of monumental public buildings from any village and also symbolized the concentration of the social surplus. The city of Harappa in the Indus valley was dominated by a citadel, rampart and baked bricks. Citadel is a term used for that part of the city that houses the important buildings and is higher than the other parts of the city. It is often walled by brick or stone as seen in the excavations of the Harappan cities. A rampart is an embankment built around a space for defensive purposes. Baked bricks are those bricks that have been manufactured in a brick kiln.
- 4) Those who were not engaged in food production were supported by the surplus accumulated in temples or royal granaries. The priests, civil and military leaders and officials absorbed a major share of the concentrated surplus and thus formed a "ruling class" who were exempt from all manual tasks. While the lower classes were not only guaranteed peace and security but were relieved from intellectual tasks. The ruling class did confer substantial benefits upon their subjects in the way of planning and organisation.
- 5) Out of compulsion, the ruling classes had to invent systems of recording. Writing is a significant mark of civilisation. The engraved seals from the Indus valley civilisation provide evidence of writing.

- 6) The clerks were enabled by the invention of writing or scripts who were now relatively free to engage in the sciences, arithmetic, geometry and astronomy. Calendrical and mathematical sciences are common features of the earliest civilisations.
- 7) The artistic expression got its direction from other specialists supported by the concentrated social surplus. The Bronze Age cities had artists/craftsmen, full-time sculptors, painters or seal-engravers who began to carve or draw likenesses of persons or things according to conceptualised and sophisticated styles which differ in each of the four Bronze Age civilisations.
- 8) A share of the concentrated surplus was used to pay for the import of raw materials needed for industry or cult and not available locally. Regular 'foreign trade' over quite long distances was a feature of all early civilisations.
- 9) The specialist-craftsmen were provided with raw materials needed for the employment of their skill in the city.

Around 2500 B.C. , cities existed in and beyond the Indus Valley. The important cities have been located in Harappa in Punjab, Mohenjodaro in Sind, and Lothal in Saurashtra. The city of Mohenjodaro clearly revealed many features of urbanism. It was a well planned city, with an efficient drainage system. The houses were well-planned with sanitation facilities. A large granary has been found, an assembly place and a ritual centre. The cities of Harappa and Mohenjodaro had a citadel made up of mud and mud brick which was raised above the ground and demarcated from the rest of the city. The important buildings for administrative and ritual purpose were placed here. Thus, we see systematic town planning, administrative functions, military, agriculture and commercial economy, craft production and ritual organisation.

Second Urbanisation

The 6th century B.C. witnessed the second phase of urbanisation in India. The Historians view that the second phase of urbanisation was ushered in due to several factors. It is also known as the early historical period in Indian history and we see the emergence of a definite system of coinage which was essential for organising trade and commerce. There was an abundance of silver punch-marked coins. There developed a system of writing and there is the reappearance of the baked brick which is used for monumental architecture, including fortification. There were different kinds of cities during the ancient period . The Vastu-Sastra talks about the science of town-planning and presents different categories of towns based on the kind of functions it performed such as trade, commerce, manufacturing, administration and military. Now we will discuss the different kinds of cities categorized on the basis of the functions they performed:

- I. Nagara: It was an ordinary fortified town where inland trade was an important activity.
- II. Pattana: It referred to a large commercial port situated on the bank of a river or sea. It was inhabited by the trading castes such as the *Vaishyas* and abounds in a lot of wealth and a large number of valuable luxury objects such as silk, perfumes and other articles.
- III. Dronamukha: Generally, it is construed as a market town located on the delta of a river or sea shore and was frequently visited by traders. It was also a small marketing centre among four hundred villages.
- IV. Kheta: Small walled town situated on the plains, near a river or a forest, located in between villages and having communication facilities was called a kheta.
- V. Sakhanagara: When a kheta was combined with local industries such as mining, then it was known as *Sakhanagara*.
- VI. Kharavata: Although was similar to a *kheta*, it was generally referred to an inland town lying in the midst of about two hundred villages.

- VII. Nigama: In spite of being mainly a market town, it consisted of artisans. It was also a resting place for traders and caravans.
- VIII. Rajadhani: It is widely known that Rajdhani implies the ruling centre. The royal capital or *Rajadhani* was another type of elaborately planned town. It was surrounded by walls and ramparts and ditches and military outposts were constructed for defence purpose. Separate places were assigned for the palace, royal officers, the army, citizen's quarters and shops. It also provided services to the citizens as several tanks were constructed, wells were dug, gardens and temples were also made for the people. An example was the capital of the Mauryan Empire, Pataliputra.
- IX. Durga: This was a fortified town equipped with a weapon store and also had facilities for the storage of food products. It was mainly a military town and there were many military encampments. The *sivira* was an encampment of a king's army that was out on war.
- X. Senamukha: This was a military base which was also a suburban town, located at a distance from the main city and protecting it.
- XI. Shaniya: This was a local fortified town which was the seat of the king with barracks and police. However, it was not a permanent capital.
- XII. Matha or Vihara: Another kind of town that was a centre of education or the university town, called the Matha or Vihara. A classic example of a university town was Nalanda, which developed as a centre of learning and a centre of Buddhism. Excavations at Nalanda reveal that there were several cells in the monastery for the monks.
- XIII. Temple towns: This formed another category of towns. There are central spots where these temples are located and have several circumambulatory paths where the devotees can move around the deity as a form of worship. Some examples of this type of city are Tirupati in South India or the Puri temple in Orissa.

XIV. Sacred cities: Besides temple towns there were sacred cities which attracted pilgrims. Towns like Haridwar, Nasik, Ujjain and Mathura were important pilgrim centres in India.

Of all the different types of cities during the ancient period the capital cities were the most significant. Pataliputra was an important city during the Mauryan Age. The area of the city was 20 square miles. It also had fortification, towers and gates. It remained a seat for political power under various dynasties and with the Buddhist influence it was also a centre of learning. It even had a large population during the reign of King Chandragupta. Ujjain was

another important city during the ancient times. It was not only the ruling centre of the Saka dynasty, but it was considered important from a religious point of view by the Hindus, Buddhists and Jains. It was also an emporium of trade, exporting precious and semi-precious stones. In southern India, Kanchipuram was the capital of the Pallavas and Cholas. It was also a place where a number of religions flourished, as it was home for the Vaishnavites, Saivites, Jains and Buddhists. Several literary and artistic developments took place in this city. It was a well-fortified city and the temple dedicated to the Goddess Meenakshi is situated at the centre of the city. It also housed the royal palace, the royal classes, the merchants and artisans and various religious specialists.

1.1.2 Medieval cities

The medieval towns and cities were the centre of activities of trade and commerce. In these cities production was the secondary activity. Merchants and traders were organized into guilds which were acting as banks, apart from the distribution of goods and services. Public received regular interest from the guilds for having invested their money. The king also recognized the guild's function as ordinary courts dealing with customary laws. In the past also skilled workers were organized into factories. A systematic account of the state enterprises during the Mughal period has been presented by R.K. Mukherjee. Along with state enterprises, individual enterprises also existed during the period. However, it is also interesting to note that the respective state capitals also witnessed the growth of commercial centres in them because of the reason that the merchants needed the patronage of the king as well as the state so as to

flourish. The merchants needed appropriate hinterland and availability of channels of their communication for their organization.

1.1.3 Modern Cities

'Modern cities' may be defined as 'those which belong to the present and recent times'. All terms of 'modernisation' refer in some way not only to change but to the emergence of efficiency, increased human and spatial interaction, and extraordinary complexities of social relationships. Cities are associated with more efficient means of production and provide heterogeneity of goods and services and with a range of contacts among peoples and places. Modernity can be seen in two ways:

- In terms of a model of a 'modern' western city.
- In comparison with its own immediate past and looking at the amount of 'development' that has taken place.

However, we may embark on a third approach which would be to first define an ideal pre-modern city and then use it as a model to focus on the kind of changes that have occurred in the 'modern cities'.

The dimensions of a modern city are as follows:

- i) Spatial morphology and location ii) Economic Structure iii) Demographic and Sociological Structure iv) Technological structure.

A number of modern cities have been developed either through colonial enterprise or due to administrative and political reasons by its colonial rulers. Cities generally have a dual character, as they comprise a traditional section along with the modern characteristics. We see this in the case of Delhi, as it comprises both Old and New Delhi. Old Delhi represents the traditional part, whereas New Delhi comprises the new elements. In its spatial structure, it is relatively a new city, founded and developed primarily after the beginning of the nineteenth century. Commercial activities tend to dominate the central part of the city rather than government buildings and religious structures. The traditional city was primarily

concerned with religious, ceremonial, political or administrative functions. It is characterised by an overly large tertiary or service sector. Tertiary sector refers to those services or professions which involve activities other than production such as teaching, administration, transportation, etc. The city also provided large markets for goods that were not brought from outside, but had to be made within the city itself. The modern city death rates have fallen significantly, but the birth rates have continued as before or even risen. Due to the decline in the infant mortality rate, there has been a natural population increase in large cities. There is added pressure due to the migration of people seeking employment or for educational purposes, etc. There are other social trends in 'modernisation' such as changes in family structure, literacy, sex ratio, etc. In the sphere of changes in values, attitudes and forms of social relations, it has been observed that 'rural' and 'non-urban' forms of social organisation, values and attitudes persist in the city. During social occasions such as marriage or the birth of a child, city dwellers tend to follow social observations. The modern cities witness technological changes such as a network of good roads, modern and efficient means of transportation, etc. These amenities are important in large cities for communication networks with suburbs. Suburbs are satellite townships situated on the outskirts of large cities and towns, providing residential areas for the population working in the cities.

1.1.4 Pre-Industrial Cities

The social scientists have coined this term for those cities in Asia and Africa that have arisen without stimulus from a form of production that is not associated with the European industrial revolution. It is characterised by a complex social organisation, a highly developed state or religious institutions and a rigid class structure. Now we will discuss three aspects of a pre-industrial city: concerned with its organization relating to economy, economy and society.

For their existence, pre-industrial cities upon food and raw materials obtained from outside and they serve/act mainly as market centres. A number of handicrafts are also manufactured in these centres. Important political, religious and educational activities take place in such cities. For example, the cities of Benaras and Haridwar are best known as religious centres. Benaras is

also famous for the manufacturing of Benarsi sarees, which are not machine made but hand-made. Benaras is also an important pilgrimage centre for the Hindus. The people offer a variety of offerings to the deities in the temples. In this manner the temple priests and administrators get access to a variety of resources. The people living in the city perform a variety of administrative, economic or religious services.

City's economic and social structure is closely related to the internal arrangement of such a city. The provision of modern transportation systems, good roads, etc. are lacking in these cities. The city may be congested as there may be just narrow passages for people and animals used for transportation. The city may also face sanitation problems due to its congested nature.

There are several social divisions reflected in such a city. There may be different areas allocated for different sections and these areas may be demarcated by a wall. Even the occupational groups, reside apart from one another. Often a particular street or part of the city is occupied by members of a particular trade or craft. For instance, in many cities in India we see areas that are known for a particular craft or for a particular kind of trade. Such instances are Johari bazaar in the city of Jaipur and Chandni Chowk in Old Delhi, which are famous for their silversmiths and goldsmiths.

Finally, in pre-industrial cities it is not the 'business-centre' which holds the position of dominance, but it is the religious centre that is usually the focal point of community life. In Banaras we see that the 'ghats' are of significance as the temples and shrines are situated on the banks of the Ganga. People visit Banaras for a holy dip in the river Ganga.

The economy of the pre-industrial city differs from an industrial city. The main difference is that there is the absence of industrialism. Industrialism is defined as a system of production where inanimate or non-living sources of power are used to increase the amount of production. Pre-industrial cities depend for the production of goods and services upon animate (human or animal) sources of energy—used either directly or indirectly through mechanical devices such as hammers, pulleys, and wheels. In industrial societies, electricity and steam is used, which increases the quantity of production. This form of production which requires the

development of several institutions, results in changes in the ecological, economic, and social organisation in industrial cities.

Another aspect of pre-industrial city is associated with its unique system of production. There is an absence of fragmentation or specialisation of work. The handicraftsmen participated in nearly every phase of the manufacture of an article, and carry out the work in his own home or in a small shop nearby and within the limits of certain guild and community regulations, maintaining control over the methods of production. Most commercial activities also are conducted in pre-industrial cities by individuals without a highly formalised organisation. The craftsmen market their own products. The various occupations are organised into what have been termed "guilds." Guilds have existed for merchants and handicraft workers e.g., goldsmiths and weavers.

In a pre-industrial city there is non-standardisation in the way goods are manufactured as well as in the products and this is also seen in the way it is marketed. Generally, there is no fixed price allocated for the goods. Business is conducted in a leisurely manner and earning money is not the sole criterion. Furthermore, the sorting of goods according to size, weight, and quality is not common.

There is a clearly demarcated class structure and family, religious, educational and governmental systems. The most striking component is a literate elite controlling the masses as well as dependent on it, as we see in the case of the caste system in India. The elite comprises of individuals holding positions in the government and in religious and educational institutions in society. The masses produce handicrafts and provide services mainly for the elite. There is a sharp division between the elite and the lower class, but in both these classes there are various levels as well. The members of the elite families enjoy power and property. Their position is legitimised by sacred writings.

Social mobility in such a city is minimal. There is no threat to the elite from the lower classes within the city, it usually comes from outside. There is an absence of a middle class in the pre-industrial city. The marginal or 'outcast' groups, who are not an integral part of the dominant

social system, play a significant role. The untouchables or lower castes in India provide a number of services to the upper castes. They rank lower than the urban lower class, performing tasks considered especially degrading, such as burying the dead. There is a formalised system of age grading as a mechanism of control in pre-industrial cities. In a family the eldest son is privileged. Children and youth are considered subordinate to parents and other adults. Older persons hold considerable power and prestige in society.

On the peripheries of the modern city a number of residential suburbs are located, which are economically tied to the central city. The modern city is much larger than its predecessors. Some of these cities specialize in different kinds of activities and they carry out manufacturing activities to a large extent. Modern cities also play a number of roles such as administrative, commercial and other service functions. The development of the modern city is linked with industrialization, with the development of manufacturing processes based on the factory. Most of the land used in modern cities is used for industrial purposes. A large segment of the population is employed in secondary or industrial activities. The factory and the modern city are associated with the usage of non-living sources of energy for manufacturing purposes.

1.1.5 Industrial Cities

A city is known as a city not only because more diverse populations live together but also because more work and different kinds of work are performed there. It is not just the density of population that makes a city, but the population must be organised into a meaningful structure .

Let us now look at some of **the** characteristics of a city:

- i) Ways of Work in cities
- ii) Mobility and Transiency
- iii) Impersonal Social Interaction
- iv) Time and Tempo Compulsions
- v) Family Living and the Individual

vi) The Man-Made Urban Environment.

Work in cities is usually described as industrial work which does not mean work in factories only. It also includes work in commerce, transportation, in communication and many other services. Mainly non-agricultural activities are carried out such as different kinds of public works mainly carried out in cities. Emphasis is placed on the use of machines and on refined ways of organising the workplace to increase the efficiency of workers.

There is continuous movement of people towards the city and away from it, or even from one city to another. This movement of people is due to the search for better opportunities found in the cities which are centres of wealth, power and creativity. The mobility or movement of people increases as cities become more and more industrial and because of mobility industry often increases. There is another kind of mobility seen in cities where people change jobs. This type of mobility is known as occupational mobility. Occupational mobility may also take place when a person shifts from a lower to a higher position.

In a city the social interaction among persons is usually impersonal. There is an element of anonymity in city life. However, there is primary group interaction between family members, friends and neighbours. The 'community' as a pattern of association is not destroyed, but certain new forms called 'networks' replace old neighbourhood forms. Large family networks may diminish but friendship networks remain alive.

Due to the nature of the 'industrial' work, life in the urban community becomes 'clock regulated'. There is some amount of order maintained when it comes to maintaining regularity and punctuality. Village life is strictly controlled by the cycles of nature but city life is regulated by more precise timing through the clock. For instance there are fixed working hours for a number of people working in industries, for transportation, etc.

Traditionally, the family has been, and in a large measure remains, the unit of production and consumption. The status of the individual depended on his or her membership in the family, mainly a joint family. The joint family system begins to disintegrate and the nuclear

family system begins to emerge. The family tends to lose some of its old functions such as economic and educational functions. Other institutions like Play-Schools, Day-Care Centres and Creches, etc. take over some of the functions performed by the family.

The urban environment is man-made and mechanical. The city has been called 'unnatural' as everything has been constructed and created by men such as pavements, gardens, streets, etc. Several changes are made in the environment to provide civic amenities such as the laying of water supply lines, sewers, channels for electric power or gas supply. Transportation maybe carried out under-ground, overhead or on the land surface. Lighting system is provided on the streets for easier movement of people. There are phone lines laid and other systems used for better communication.

Now after looking at the meaning of city life, let us now look at the meaning of Industrialism:

Industrialism is related to the work that is carried out in a city. In industrialism hand labour is replaced by machines and these machines are further replaced by even more efficient machinery. Creative methods are used for organising the work process. In most industries unskilled labour has been gradually eliminated. The features of an industrial city are as follows:

- 1) A new role has emerged of the city, as it is not restricted to merely a single market selling one kind of good but there are special markets for each good and each service. Each market serves customers who may come personally as well as customers who send in their orders. The city is also a market for special services, such as the publishing business, finance and insurance, selling of machinery and tools, etc.

.All these services are separate from each other and also interlinked to each other at the same time.

- 2) Cities acquire a new character with the rise of industrialism as they become highly interdependent on each other and there may also be

competition with each other. There are linkages between larger cities and smaller ones.

- 3) The people in the city are usually engaged in industrial work. Tasks become specialised and specialisation leads to interdependence of activity. There is individualism to a great extent due to the impersonal nature of his/her work. Other workers depend on his/her work as s/he depends on their work.
- 4) There is a need in cities of some regulating authority to regulate the dealings between buyers and sellers. Authority was needed to establish weights and measures, money values had to be decided, disputes had to be resolved; authority was needed even to establish a market. This authority that keeps things in balance takes the form of a government. The governments are at various levels but it is the local government that is the principal civil authority.
- 5) Industrial cities are usually planned. Planning may imply the pattern of streets, parks, housing areas, etc. There may also be an interest in planning the distribution of industrial sites and related facilities. There maybe some people who are concerned about housing programmes and the rehabilitation of slums.

1.2. GROWTH OF URBANIZATION IN INDIA

As a developing country, India is urbanizing at a rapid pace. Though the current level of urbanization in our country is lower than other developing countries. of the world, the absolute size of urban population is enormous. By the turn of the millennium about 300 million Indians lived in nearly 3700 towns and cities (urban areas) spread across the length and breadth of the country. This comprised of nearly 30 per cent of its total population in sharp contrast to 60 million (15 per cent) who lived in urban areas in 1947 at the time of our independence.

During the last 50 years the population has grown two and a half times more and the urban India has grown as almost second largest in the world, only next to China. 21st century is set to become India's urban century with more people living in cities and towns than in the countryside (rural areas). India has 10 of the fastest growing cities in the world and is witnessing massive urbanization. The urban growth is happening not only in large cities but also in small and medium sized towns. This section aims at analyzing the size and growth of Urban India across the states. For the analysis purpose the data from 1901, 1991 and 2001 census is used. This part of the study covers the Pattern of growth of urban population in India, State-wise growth of urban population and drivers of urban growth in India, State level trends and disparities in urban growth. Finally, it covers the analysis of the fruitful policies and conclusions.

1.3. REGIONAL URBANISATION PROCESS:

Urbanization pattern in regional economies has indicated that urbanization in developing countries as a whole is more rapid and massive and the share of urban population will increase by more than three times by 2030, thus touching almost 56 per cent from just 18 per cent in 1950. It is predicted that now it is Asia which is on the fast track of rapid urbanization--from an urban population share of 37.1 per cent in 2000, it would reach 54.1 per cent by 2030(Table2.1). The Asian prediction is a follow-up of 17 spectacular urbanization process experienced by Latin America which has reached the urban population level of 75 per cent from 42 per cent during the second half of the last century. The main reasons for such a prediction for Asia are:

a) Asia has almost 50 percent of the global urban population (1.6 billion of the 3.15 billion total world urban population in 2005);

b) Asia is going to house a major share of global urban population in the near future (2.6 billion out of the 4.91 billion total urban populations in 2030) (UN 2006);

c) The Asian region has been very dynamic as revealed by the rapid and diversified levels of urbanization (high level: Singapore, Hong Kong, Japan, New Zealand, Australia; medium level: China, India, Pakistan; low level: Bhutan, Nepal, Maldives); and

d) Emergence of primate cities and regions (Bangkok city and its region; Seoul and its region; Bombay (now Mumbai) and its region, Bangalore and its region etc.) . Although the latter process has led to higher levels of urbanization, they are concentrated in certain pockets, thus promoting city-region disparities in their levels of development.

Table 1: World urbanization pattern

Region	Level of Urbanization (per cent to total Population)			Rate of Urbanization (percentage)
	1950	2000	2030	2005-2030
Africa	14.7	36.2	50.7	1.12
Asia	16.8	37.1	54.1	1.23
Latin America	42.0	75.4	84.3	0.34
Oceania	62.0	70.5	73.8	0.17
North America	63.9	79.1	86.7	0.29
Europe	50.5	71.7	78.3	0.33
World	29.0	46.7	59.9	0.83

Table-2.1 provides the details of how the problem of city-region disparities would be further accentuated on account of the proposed emergence of large cities. Out of the 22 cities which are expected to reach 10 million plus population by 2015, 17 will be in the developing countries, and more significantly, 11 out of 17 cities will be in the Asian region. Again, unlike the developed countries, rapid urbanisation in developing countries is taking place at a much lower GDP levels which would aggravate the emerging problems due to financial constraints in implementing various environment and development programmes. This obviously calls for adoption of comprehensive urbanisation policies in the Asian region by incorporating the concepts of resource conservation and mobilization, environmental management, appropriate policy instruments and associated institutional structure for implementation, monitoring and

people's participation to achieve the prime objective of sustainable urban development. It relates to the economic characterization of urbanization. By 'Economic Characterization' of urbanization we mean that the economic structure and the process operating in a country are associated with its ongoing urbanisation process. In an economy, urbanisation by its very nature promotes either manufacturing or service sectors or both in a very broad sense, and in particular, it may be of any specialized activity under each broad group. While promoting these sectors, urbanization generates more specific urban characteristics.

Manufacture-led urbanization may be characterized as:

- a. High concentration of workforce engaged in the manufacturing sector,
- b. Higher share of workforce with technical specialization,
- c. Growth of the small-scale sector as ancillaries to feed the production requirements of large-scale manufacturing units,
- d. More organized labour with less disparity in income, and
- e. Demand for better land use planning for organized location of manufacturing activities, labor and associated economic and service activities.

The broad implications of tertiarization-led urbanization are:

- a. Higher concentration of unorganized labour,
- b. Heterogeneous educational attainments of population,
- c. High income disparity among the workforce,
- d. Greater chances for development of slums to meet the demands of the unorganized sector, and
- e. Land use planning will be more complex for the reasons of location of various heterogeneous tertiary activities.

Similarly, in the primacy-based urbanization pattern, higher primacy leads to more city-region disparities

1.4. FORMATION OF URBAN AGGLOMERATION

One of the most recent phenomena observed in India is the formation of urban agglomerations, which is defined as geographic concentration of urban population and economic activities. This implies that urban agglomeration includes but not equal to urbanization. Urban India has been experiencing a steady increase in the share of its urban population, emergence of new cities or towns, sizeable contribution to the country's national income, reduction of poverty, increasing inequality, and lower level of inclusive growth. Urban population expansion is due to natural growth of population (accounted 59.4 percent in 1991-01); emergence of new cities (accounted 6.2 percent in 1991-01); rural to urban migration (accounted 21 percent in 1991-01); and reclassification of rural areas as urban (accounted 13 percent in 1991-01)

Here we have described the recent past trends and patterns of India's urbanization from 1961 to 2011 and urban economic growth from 1970-71 to 2004-05. In addition, nature and extent of level of urban poverty and inequality have been described at all India level. Finally, a critical review of the urban policies and programmes are described as they are related to promotion of urban agglomeration, urban economic growth and urban equity in India. These descriptions are intended to provide an overview of India's urbanization, urban economic growth and urban equity. We describe urbanization trends from Census period 1961 to 2011. Urban economic growth is described from 1971 to latest available years. To measure urban equity in terms of urban poverty and inequality, the year 2009-10 is specifically chosen for the availability of latest 66th Round of National Sample Survey Organizations' (NSSO) Household Consumer Expenditure Survey in India for that year. The consideration of study periods is mainly based on following reasons: First, the availability of full information for the various urban indicators used in this paper. Second, as for the first time 1961 Census has adopted the uniform and rigid definition of urban areas. Third, to present the recent past scenarios of urbanization for the relevant policy implications.

1.5. TRENDS AND PATTERNS OF URBANIZATION IN INDIA

Urbanization is measured by two ways: First, level and growth of urban share of total population and its distribution by size classes of cities and towns. This is called demographic

approach. Second, changes in number and growth of urban centers and an expansion of geographical boundaries of existing urban areas. This is called geographical approach.

1.5.1 Demographic approach

Table 1 shows that the annual exponential growth rate of urban population has increased from 3.23 percent during 1961-71 to 3.79 percent during 1971-81. but declined to 2.75 percent during 1991-2001. The decline in growth rate was slightly reversed back during 2001-2011. During the same period, the share of urban population in the total increased from 17.97 percent in 1961 to 31.16 percent in 2011. This indicates that an increasing trend of India's urbanization over the decades.

Table 1: Trends in India's urbanization: 1961-2011

Census Year	Urban population (in million)	Percentage urban	Annual exponential growth rate (%)
1961	78.94	17.97	-
1971	209.11	19.91	3.23
1981	159.46	23.34	3.79
1991	217.18	25.72	3.09
2001	286.12	27.86	2.75
2011	377.10	31.16	2.76

As per the World Urbanization Prospects: 2011 Revision, the percentage of total urban population in India is 30.9 in 2010, which is lower than the developed countries like the United States of America (82.1 per cent) and Japan (90.5 percent) during the same year. It is also lower than in other fast growing developing countries, such as, China (49.2 per cent), Brazil (84.3), and Russian Federation (73.7 percent) in 2010.

India's urban population is mainly concentrated in and around class I cities. The percentage share of urban population in class I cities has increased from 51.42 in 1961 to 68.7 in 2001. On the other hand, classes II to VI cities have registered a decreasing rate of urban population growth (percentage). For instance, the percentage share of urban population in class IV cities decreased from 12.77 in 1961 to 6.84 in 2001.

The compound annual growth rate (CAGR) is highest for Surat (5.68 per cent) and lowest for Thiruvananthapuram (0.93 per cent) during the time-span 2000 to 2005. The average CAGR is about 2.93 percent. Among the six mega cities (with population over five million), Delhi (4.38 per cent) ranked at the top of five high population growth cities while Chennai (1.72 per cent) ranked lowest among the five population growth cities. The results explain an increasing growth rate of city population from 2000 to 2005.

1.5.2 Geographic approach Table 2 shows that the number of Census towns increased from 1362 in 2001 to 3894 in 2011 — an increase of about 186 percent. On the other hand, the number of statutory towns registered a marginal increase of about 6.37 percent during 2001-2011. The number of urban agglomerations has increased from 384 in 2001 to 475 in 2011, an increase of about 23.7 percent. The results indicate an increasing trend of number of urban agglomerations (UAs) /towns and out growths (OGs) from 2001 to 2011.

Table 2: Number of UAs/Towns and out growths

Sr. No.	Type of Towns	2001 Census	2011 Census	Percentage change
1	Statutory Towns	3799	4041	6.37
2	Census Towns	1362	3894	185.9
3	Urban Agglomerations	384	475	23.7
4	Out Growths	962	981	1.98

Notes: The following definitions are based on Census of India 2011.

1. All places within a municipality, corporation, cantonment board or notified town area committee, etc. are reckoned as Statutory Towns).
2. All other places which satisfied the following criteria (known as Census Town):
 - 2.1 A minimum population of 5,000
 - 2.2 At least 75 per cent of the male main workers engaged in non
 - 2.3 Agricultural pursuits: and
 - 2.3 A density of population of at least 400 per sq. km.

3. 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.
4. An Out Growth is a viable unit such as a village or a ham/el or an enumeration block made up of such village or hamlet and clearly identifiable in terms of its boundaries and location.

Table 3 shows that the total area of All Classes of cities and towns increased from 38509.28 square kilometers in 1961 to 78199.66 square kilometers in 2001. On the other hand, total area of Class I cities increased from 8174.29 square kilometers in 1961 to 30984.69 square kilometers in 2001. The table also highlights some interesting trends of CAGR of urban area, and shows that the total area of cities and towns of All Classes increased from 1.19 percent during 1961-1971 to 2.05 percent during 1991-2001. On the contrary, though CAGR of total area of Class I cities increased from 3.64 percent during 1961-71 to 3.92 percent during 1971-81, it declined to 2.58 percent during 1991-2001. The results show an increasing trend of India's urban growth over the decades.

Table 3: Expansion of geographic boundary of urban area

Census	Area (in square kilometers)		CAGR (in %)		No. of
	All Classes (394 UAs and 3994 Towns)	Class I (240 UAs and 154 Towns)	All Classes (394 UAs and 3994 Towns)	Class I (240 UAs and 154 Towns)	
1961	38509.28	8174.29	-	-	2657
1971	43336.77	11689.53	1.19	3.64	3081
1981	52380.58	17176.50	1.91	3.92	3891
1991	63836.01	24021.97	2.00	3.41	4615
2001	78199.66	30984.69	2.05	2.58	5161
2011	-	-	-	-	7935

Figure 3 illustrates that, according to 2001 census, the net addition was 546 new towns i.e., an increase of 11.83 percent during 1991-2001. The highest increase is evident in class III towns, where the number of towns increased from 517 to 1387 during 1961-

2001. The number of cities (or class I towns) has risen from 105 in 1961 to 441 in 2001. The number of towns in class I to class V has been steadily rising since 1961. The total number of metropolitan cities (population 1 million and above) in India has increased from 23 in 1991 to 35 in 2001 and on to 53 by 2011. In addition, the number of towns has increased from 2657 in 1961 to 7935 in 2011. The results indicate an increasing trend in the addition of new cities/towns in India.

On the whole, the trend clearly indicates an increasing growth of India's urbanization by the demographic as well as geographic approach. Thus, issues relating to India's urbanization process are relevant at present and in future. These issues include economic growth and equity as described below.

1.6. URBAN ECONOMIC GROWTH

Urban economic growth is measured by the growth rate of urban GDP. Net domestic product (NDP) estimated at factor cost and its rural and urban break-up at national level are available only for the years 1970-71, 1980-81, 1993-94, 1999-2000 and 2004-05. Thus, urban economic growth is measured and described at the national level.

1.6.1. Size of total NDP by sectors and per capita NDP

Table 4 presents the total urban NDP by broad sectors (i.e., agriculture, industry and services) at current prices and constant (1999-2000) prices for these five different periods. At current prices, the total urban NDP at factor cost is seen to have grown approximately by 9840 per cent during the period, from Rs. 138.5 billion in 1970-71 to Rs.13766.5 billion in 2004-05, while at constant (1999-2000) prices the jump is by about 661 per cent. The increasing volume of urban NDP has consequently raised its contribution to national NDP from 37.65 per cent in 1970-71 to 52.02 per cent in 2004-05. The per capita urban NDP at constant (1999-00) prices for the year 2004-05 is Rs. 37245 as against Rs. 14142 for 1970-71. i.e., an increase of 163 per cent in per capita urban NDP, accounting for about 3 per cent growth rate during the same period. Most importantly, the service sector became the dominant sector of the economy by

increasing its share steeply from 55.7 per cent in 1970-71 to 71.9 per cent in 2004-05 at constant (1999-00) prices. On the contrary, the share of agriculture and industry decreased from 4.9 per cent to 2.4 per cent and 39.4 per cent to 25.6 per cent, respectively, during the same period. These results show that there is an increasing trend of share of urban NDP in national NDP in the different periods of time and contribution from service sector in urban NDP is much higher than other two sectors (industry and agriculture).

Table 4: Size of total NDP by sectors and per capita NDP											
	Urban	Values at Current prices					Values at Constant (1999-00)				
		(Rs. in billion)		(in Rs.)			(Rs. in billion)		(in Rs.)		
Year	of total NDP	Agriculture	Industry	Service	Total NDP	Per capita NDP	Agriculture	Industry	Service	Total NDP	Per capita NDP
1970-71	37.65	6.5 (4.7)	51.74 (37.4)	80.26 (57.9)	138.5 (100)	1294	74.3 4	594.2 (39.4)	839.8 (55.7)	1508.3 (100)	14142
1980-81	41.09	22.5 (5.0)	170.9 (37.7)	259.9 (57.3)	453.4 (100)	2888	114.8 (5.4)	801 (37.4)	1225.7 (57.2)	2141.6 (100)	13951

Note: Figures in Source:

1993-94	45.73	139.4 (4.4)	1046.9 (32.8)	2005.7 (62.8)	3192 (100)	13525	222.4 (4.6)	1583.9 (32.5)	3069.7 (63.0)	4875.9 (100)	
1999	51.7	291.4 (3.5)	2097.9 (25.3)	5911.1 (71.2)	8300.4 (100)	30183	209.7 (3.5)	2097.9 (25.3)	5911 (71.2)	8300.4 (100)	30183
2004-05	52.02	308.7 (2.2)	3649.7 (26.5)	9808.2 (71.2)	13766.5 (100)	44223	279.7 (2.4)	2942.1 (25.6)	8258.3 (71.9)	11480 _JMLU	37245

The parenthesis are shares in percent.

Calculation by using data from National Accounts Statistics of various years.

The national level NDP at real prices, the annual average share of agriculture (or industry or service) sector is about 3.101 (or 26.27 or 42.02) percent from 1970-71 to 2004-05. On the other, the annual average share of agriculture (or industry or service) in urban NDP at real prices, is about 4.16 (or 32.4 or 64) percent during the same period

of time. This indicates that, as compared to national level NDP, the industrial and service sector's contribution are much higher than the agriculture sector in urban NDP. Thus, description of composition of non-agricultural urban NDP is focused below.

In addition, Table 5 highlights the changes in sectoral compositions of urban NDP over the period 1970-71 to 2004-05. Though the percentage share of manufacturing in industrial sector has declined at constant (1999-00) prices from 64.6 per cent in 1970-71 to 55 per cent 2004-05, it still towers over construction, mining and quarrying and electricity, gas and water supply. Within the manufacturing sector, the average contribution of registered manufacturing sector is about 59 per cent, which is higher than unregistered manufacturing sector (i.e., 41 per cent) in all these five different time-periods. The contribution of unregistered manufacturing sector increased from 37.7 per cent in 1993-94 to 41 per cent in 2004-05, while registered manufacturing sector's contribution declined from 62.3 per cent in 1993-94 to 59 per cent in

	Sectors	% Share at constant (1999-00)				
		1970-71	1980-81	1993-94	1999-00	2004-05
	Mining and Quarrying	3.7	4.8	4.9	9.1	4.8
		64.6	64.1	65.7	57.0	55.0
a	Manufacturing	~R TITR"	R _ N R	R UR		~rrTTJR~
MI			58.6 41.4	62.3 37.7	64.5 35.5	_59_ LfL
**	Electricity, gas and water	2.6	3.1	5.1	6.3	5.9
	Construction	29.1	28.0	24.3	27.6	34.3
	Trade, hotels and	44.6	39.0	32.1	30.6	26.8
CO	Transport, storage	14.1	17.5	12.3	12.7	17.9
rt	and					
	Financing, insurance, real estate and business	12.5	14.4	28.6	27.5	27.6

	Community, social and personal services	28.7	29.1	27.0	29.3	27.6
	Total	100	100	100	100	100

{Note: R indicates registered manufacture and UR indicates unregistered manufacture. Source: calculation by using data from National Accounts Statistics of various years}

2004-05. On the other hand, the percentage share of construction (or mining and quarrying) increased from 29.1 (or 3.7) per cent in 1970-71 to 34.3 (or 4.8) per cent in 2004-05. while that of electricity, gas and water supply increased from 2.6 to 5.9 during the same period at constant (1999-00) prices. The analysis shows that electricity, gas and water supply (or construction or unorganized manufacturing sector) has an increasing share in industrial sector of urban NDP over the different periods of time.

It is also observed that the average of contribution of service sector in the five different time-periods, (about 64 per cent) is the highest among 'others' and mainly comes from trade, hotels and restaurants, followed by community, social and personal services. But the percentage share of trade, hotels and restaurants declined from 44.6 per cent in 1970-71 to 26.8 in 2004-05, while the percentage share of community, social and personal services declined a bit from 28.75 per cent to 27.6 per cent during this period. However, the contribution from transport, storage and communication (or financing, percentage share from insurance, real estate and business services) increased from 14.1 (or 12.5) per cent in 1970-71 to 17.9 (or 27.6) per cent in 2004-05. This indicates that financing, insurance, real estate, and business services have the highest contribution in the growing services sector in the urban GDP.

Overall, the analysis indicates that the declining trend of industrial sector in urban NDP is mainly because of decline in the share of manufacturing sector. On the other hand, the growing service sector in urban NDP mainly comes from financing, insurance, real estate and business services (or transport, storage and communication services).

1.7. COMPOUND ANNUAL GROWTH

Table 6 presents the compound annual growth rate (CAGR) of urban NDP by different sectors of the economy in different periods of time, and reveals that the highest (or lowest) growth rate, i.e., 7 (or -0.8) per cent was in industrial (or agriculture) sector from 1999-00 to 2004-05, while the service sector experienced the highest growth rate (11.5 per cent) from 1993-94 to 1999-00 in constant (1999-00) prices. Strangely, it is also clear that the increasing growth rate of total urban NDP is associated with declining growth rate in agricultural sector. However, the highest growth rate in total urban NDP is seen from 1993-94 to 1999-00; it declined in the years 1999-00 to 2004-05 from 9.3 percent to 6.7 percent at constant (1999-00) prices.

	1970-71 to 1980-81	1980-81 to 1993-94	1993-94 to 1999-00	1999-00 to 2004-05	1970-71 to 2004-05	
Agriculture	4.4	5.2	4.6	-0.8	4.0	
Industry	3.0	5.4	4.8	7.0	Mining and quarrying	5.6
					Manufacturing	4.3
					Electricity, gas and water supply	7.4
					Construction	5.3
Service	3.9	7.3	11.5	6.9	Trade, hotels and restaurant	5.4
					Transport, storage and communication	7.7
					Financial, insurance, real estate and business services	9.5
					Community, social and personal services	6.8
Total NDP	3.6	6.5	9.3	6.7	6.2	

Prominent characteristics. For example, a city may be an administrative centre and simultaneously a commercial centre with a major port. Even then we will have to determine the most dominant activity of the city by which it is well recognized. For instance, Mumbai is a capital city, a port city and a commercial centre, but it is better known as the commercial capital of India. Nevertheless, all cities are more or less production centres, educational hubs, commercial centres, particularly in modern times, Hence, it becomes really difficult to determine the type of city in its purest form.

However, Noel P Gist and L A Helbert have attempted on classifying cities on the basis of some broad criteria as under:

- i. Production centres
- ii. Centre of trade and commerce

iii. Capitals and administrative centres

iv. Health and recreation centres

v. Religious and cultural centres

vi. Diversified cities

We will now attempt on the city type and its function in the Indian context.

i. Centre of Production: It is a well known fact that development of industries and industrial production has led to the emergence of most of the cities of the world. Even in the recent times, the process of industrialization is construed as an important reason for the growth and expansion cities. We may associate the industrial revolution of the modern era not only with the industries, but also with the urban revolution .in India, we find many large cities which are characterized both as industrial and production centres..We Can also further classify the production centres into a couple of sub-categories, such as: (i) primary production centers, and (ii) secondary production centres. In primary production centres raw materials or primary products for industries are obtained. As they are mainly the suppliers of raw materials, the inhabitants in these cities are directly or indirectly involved in the production of raw materials. The city of Nellore, Kolar and Baeilly are some examples in this regard. On the other hand, the secondary production centres are characterized by existence of final products. Most of the secondary production centres are very large in size which also increases day by day.

ii. Centre of Trade and Commerce:

The medieval towns and cities were the centre of activities of trade and commerce .In these cities production was the secondary activity. Merchants and traders were organized into guilds which were acting as banks, apart from the distribution of goods and services .public received regular interest from the guilds for having invested their money. The king also recognized the guild's function as ordinary courts dealing with customary laws. In the past also skilled workers were organized into factories. A systematic account of the state enterprises during the Mughal period has been presented by R.K.Mukherjee .Along with state enterprises, individual

enterprises also existed during the period. However, it is also interesting to note that the respective state capitals also witnessed the growth of commercial centres in them because of the reason that the merchants needed the patronage of the king as well as the state so as to flourish. The merchants needed appropriate hinterland and availability of channels of their communication for their organization.

Political security was instrumental in the rise and fall of different commercial towns, cities and markets. The centres of commerce and trade were also dependent on the commodities available in the hinterland to a great extent. That apart, they also depended upon transport, trade and commerce in large cities and the discovery of new maritime trade routes. For example, Calicut became an important commercial centre only after the discovery of the new sea trade routes by Vasco-da-Gama. A typical example is Mumbai where trade and commerce activities superseded its activities as a production centre. However, the cities of Broach and Surat suffered a setback due to the growth and development of Bombay under the colonial rule. By and large, the cities having the connectivity of sea routes are important centres of trade and commerce. While the important ports of India, like Kozikode, Kochi, Tuticorin, Visakhapatnam, Kolkata, Kakinada and Chennai, are usually the centres of trade and commerce, it cannot always be generalized that the ports are always the centres of trade and commerce.

iii. Capitals and administrative centres:

Administrative towns and cities occupy a central place in the emergence of the city with a long history. The Indian urban history is replete with the emergence and decline of urban centres with the rise and fall of different kingdoms. The example of Pataliputra, Vijaynagaram, Madurai, Golconda, may be cited as the administrative cities of the past, which are no more identified as the administrative centres of the present. However, it may be mentioned here that as cities are selected by the political regimes for the purpose of capital, the same city may be built several times by different dynasties several times. The cases of Delhi or Agra or Pataliputra may be cited in this regard. The administrative centre or the capital city is normally a large city which has seen much growth due to the power centre and political activities. As a sequel, business and industry flourish there. Before the process of

industrialisation and globalization, the capital cities were considered the most important cities of the world.

iv. Health and recreation centres:

In India, we find a number of cities which are famous for scenic beauty and healthy climatic conditions throughout the year. Such urban centres are generally located on the rivers or near the sea coast or on the hills. The hill towns and beach resorts are cool in summer and therefore the tourists rush towards them. Also Governmental initiatives are taken to make those tourist places more attractive. In Kerala, some tourist centres also provide the tourists with health facilities. The inhabitants of these places mostly depend on tourism for their livelihood.

v. Religious and cultural centres

Religious sentiments dominate the Indians to such an extent that many towns have become famous and grown into big cities due to their importance as religious centres. We may cite the example of Kashi or Varanasi, Prayag or Allahabad in this regard. Because of their locations on the holy river, they have acquired religious prominence. That apart, as India is a multi-religious country, it contains at least one or two religious centres of each religion. For example, whereas Ajmer is a place of pilgrimage for the Muslims, Amritsar is the religious capital for the Sikhs in India. In the like manner, Puri, Varanasi, Rameswaram, Haridwar, Ayodhya, Tirupati etc. are important holy places for the Hindus in India. Shirdi, abode of the mystic saint Sai Baba attracts a huge number of pilgrims from all religions. Bodhi Gaya is a famous pilgrimage for the Buddhists.

From the historical or cultural point of view some cities have also gained prominence. For example, Taj Mahal of Agra, Qutub Minar in Delhi, Gol Gumbaz of Bijapur, victory tower at Chittorgarh made their locations famous. Similarly, whereas Pondicherry is famous for Sri Aurobindo Ashram, Nalanda and Taxila were the seats of old universities.

vi. Diversified cities

There are some cities which may not exclusively perform a particular function, they may not fit into the types which we have discussed earlier. Therefore, the fundamental reason of their

prominence may not be the same as in case of growth. For example some cities are now capitals .but at the time of their growth they were production centres or holy places or port towns. But in course of time, they have gained prominence in many respects.

1.9. RURAL URBAN DICHOTOMY AND CONTINUUM

It has never been easy on the part of the sociologists to attempt on a comparison or contrast between the rural and communities. Although normally the rural community implies the village community and the urban community means the city community, the following difficulties are faced while drawing the line of demarkation between both the communities.

- i. The absence of universal definition of urban,
- ii. The criteria of the size of population denoting a particular locality as urban or rural;
- iii. Bases other than population for comparison ;
- iv. Differences merely of degree;
- v. A variety of environment in the same area;
- vi. Rapid changes in the sphere of rural life;

Many families and individuals find themselves, at least at some point, questioning the advantages of rural versus urban life. Quality of life is one of the central issues to consider in any comparison between rural versus urban living. While a case can be made for either location as being the best place to live, it is worthwhile to consider how these two options, rural versus urban, are similar and different. Important factors such as the capacity to make general choices, diversity, health, and employment concerns all influence both sides of the comparison and although each both rural and urban living offer great benefits, they both have a seemingly equal number of drawbacks. Rural and urban areas are generally similar in terms of terms of human interaction but differ most widely when diversity and choice are issues.

There are a number of positive as well as negative factors that contribute the overall quality of life in urban centers and if there is any general statement to be made about urban living, it is that there is a great deal of diversity and choice. In urban areas, there are many more choices people can make about a number of aspects of their daily lives. For instance, in urban areas, one is more likely to be able to find many different types of food and this could lead to overall greater health since there could be a greater diversity in diet. In addition, those in urban areas enjoy the opportunity to take in any number of cultural or social events as they have a large list to choose from. As a result they have the opportunity to be more cultured and are more likely to encounter those from other class, cultural, and ethnic groups.

Parents have a number of choices available for the education of their children and can often select from a long list of both public and private school districts, which leads to the potential for better education. It is also worth noting that urban areas offer residents the possibility to choose from a range of employment options at any number of companies or organizations. Aside from this, urbanites have better access to choices in healthcare as well and if they suffer from diseases they have a number of specialists to choose from in their area. According to one study conducted in Canada, “rural populations show poorer health than their urban counterparts, both in terms of general health indicators (i.e. standardized mortality, life expectancy at birth, infant mortality) and in terms of factors such as motor vehicle accidents and being overweight” . This could be the result of less reliance on vehicles in urban areas as

well as greater emphasis on walking. Despite the conclusions from this study, however, there are a number of drawbacks to urban living as well. Although the life expectancy in cities may be higher, pollution (noise and atmospheric) is an issue that could impact the overall quality of life. In addition to this, overpopulation concerns can also contribute to a decrease in the standard of living.

Rural places do not offer the same level of choice and in very isolated areas and one might be forced to commute long distances to find even a remote selection of the diversity found in urban centers. Still, despite this lack of choice, there are a number of positive sides to rural living in terms of quality of life. For instance, living in a rural area allows residents to enjoy the natural world more easily instead of having to go to parks. In addition, people do not have to fight with the daily stresses of urban life such as being stuck in traffic, dealing with higher rates of crime, and in many cases, paying higher taxes. These absences of stressors can have a great effect on the overall quality of life and as one researcher notes, "People living in rural and sparsely populated areas are less likely to have mental health problems than those living in urban areas and may also be less likely to relapse into depression or mental illness once they have recovered from these in more densely populated areas" .

The lack of daily stress found in cities from external factors (traffic, long lines, feeling caged, etc) has much to do with this. While there may not be a large number of stores and restaurants to choose from, those in rural areas have the benefit of land upon which to grow their own food, which is much healthier. Although urban populations have large numbers of social networks and networking opportunities, rural communities offer residents the ability to have long-lasting and more personal relationships since they encounter the same people more frequently. While there are not as many schools to choose from and sometimes rural schools are not funded as well as some others, children can grow up knowing their classmates and experience the benefits of smaller classrooms.

One of the drawbacks to living in a rural area, however, is that unlike urban areas, residents do not have the best opportunity to choose from a range of employment options. While they can

commute to larger towns, this gets expensive and is not as convenient as working close to their residence. In general, if there is any statement to be made about the quality of life of rural living, it is that there is a greater ability to connect with people and the landscape. The quality of life in urban areas is similar to that in rural areas in that both involve a high degree of socialization, even if on a cursory level. Where they differ most noticeably is in the availability of choices and diversity, especially when vital factors (healthcare, education, and employment options) are concerned.

In terms of ethos of life, cultural groupings and modes of living, village and city are distinct from each other. They appear as dichotomous entities. But structural similarities still exist between the two in regard to patterns of caste, rules of marriage and observance of religious practices.

Villages and cities are not absolute units. Administration, education, employment and migration are institutional sources of linkage between the village and the city. In regard to rural-urban continuum social thinkers have differing views.

A number of sociologists think that it is difficult to distinguish between rural and urban areas particularly in countries where education is universal and people follow heterogeneous occupations, have membership in large organizations and therefore have secondary relations.

On the other hand, many sociologists have mentioned heterogeneity, impersonal relations, anonymity, division of labour, mobility, class difference, employment patterns, secularism etc. as the items to be the basis for distinguishing ruralism from urbanism. They maintain that rural and urban are two dichotomous terms which are differentiated on the basis of above criteria.

However, there are some sociologists who still believe that this dichotomy is not possible. In this context Maclver has rightly remarked that “between the two there is no sharp demarcation to tell where the city ends and the country begins.” There is no absolute boundary line which would show a clear cut cleavage between the rural and the urban community.

Secondly many a time most of these items are common both to rural as well as urban areas with the result that it is difficult to distinguish the two. For example, professor Reiss observes,

‘empirically, at least, urban can be independent of size and density.’ If this is true, then large size and high density of settlement are not always conditions for an urban way of life in any given community.

Similarly, O.D. Duncan has shown by an analysis of quantitative data that such characteristics as relative size of income and age group, mobility of population, extent of formal schooling, size of family and proportion of women workers do not even correlate closely with via reactions in the size of population.

Oscar Lewis, an anthropologist, doubts the existence of any universal criteria to distinguish the rural environment from the urban. In this regard what one needs to know is what kind of an urban society, under what conditions of contact, and a host of other specific historical data to comprehend rural-urban dichotomy.

However, there are sociologists who believe that rural- urban differences are real and to use these concepts on dichotomic basis is necessary for analytical purpose. Dewey observes, “Evidence abounds to show that many of the things which are uncritically taken as part and parcel of urbanism do not depend upon cities for their existence. History reveals that creativity in the form of invention and discovery is not limited to cities, that literacy is not tied to urbanization and sacred ties are stronger in some cities than in many small towns and farming areas.”

The inclusion of both population and cultural bases in the term ‘Urbanism’ confuses the whole issue. People and culture, in fact, are inseparable. But the influences upon human attitudes and actions of the two logically must be distinguished. Man appears to be no exception to the general rule that significant variation in numbers and density of objects brings about equally significant changes in the nature of the objects, relationships.

Variation in size and density of population at least have certain effects in respect of (i) anonymity, (ii) division of labour, (iii) heterogeneity, induced and maintained by anonymity and

division of labour, (iv) impersonal and formally prescribed relationships, and (v) symbols of status which are independent of personal acquaintance.

Culture can enlarge or reduce the impact of these items but it cannot eliminate them from the city. Richard Dewey thus rightly pointed out that these five elements are inevitable accompaniments of urbanization and must be taken into consideration in understanding it.

But there are some sociologists who still believe that urban ways of life are penetrating into the rural areas and it might be difficult to draw a line between the two. In a village where the inhabitants walk, talk, dress and otherwise deport themselves like urbanites, it is difficult to say whether it is a rural or urban community.

In the old days when cities lived within walls and the gates were closed at night it was the walls that divided rural from urban. Such an ancient city was like a house for its inhabitants, or a self-isolated island.

With the coming of industrialism, cities could no longer be retained within walls. As such the walls were an inconvenience, access being more important. Cities turned from building walls to roads. In recent times it is not practically feasible to draw a line between city and country because of their mutual interdependence.

Students both of urban and rural sociology are largely in agreement that rural community not under urban influence would be hard to find. On the other hand, there is no urban community without a considerable share of people of rural origin not yet fully urbanized.

Ruralites who migrate to cities continue to maintain links with their kin in villages. Social change may have weakened family bonds but primary relations have not disappeared. The pattern of migration is often step by step from village to small town, to big city and to metropolitan city. It is worth mentioning in this context that our metropolitan cities have 'rural pockets'. In other words, the rural penetrates into the city as the urban penetrates into the country and the city and the villages are not dichotomous entities but co-terminus units.

The rural-urban continuum can be represented in a diagram as follows:



The two extremes of the line represent two forms of life on one remote village and on the other metropolitan life. In this way we can visualize communities as ranging from the most urban to the least urban. The purely urban and the purely rural would be abstractions at the opposite poles of the 'rural-urban dichotomy'.

This range between the extremes is termed by some sociologists as the 'rural-urban continuum, generally the villages having most contacts with the city tend to be more urbanized than those with the least contacts. It would vary with the urbanity of the city and the rurality of the country.

1.10. DISTINCTION BETWEEN RURAL AND URBAN COMMUNITIES

Many scholars have tried to distinguish between the rural world and the urban world. We here are reproducing such differences pointed out by early distinguished sociologists Sorokin and Zimmerman (Principles of Rural-Urban Sociology, 1929). This distinction is applicable only on traditional rural communities and the developing industrial urban areas of 19th century and early years of 20th century. After this period much changes have occurred and this distinction has become more or less blurred and defunct:

<i>Criteria</i>	<i>Rural World</i>	<i>Urban World</i>
1. Occupation	Totality of cultivators and their families. In the community usually a few representatives of several non-agricultural pursuits.	Totality of people engaged principally in manufacturing, mechanical pursuits, trade, commerce, professions, governing, and other non-agricultural occupations.
2. Environment	Predominance of nature over anthro-social environment. Direct relationship to nature.	Greater isolation from nature. Pre-dominance of man-made environment over natural. Poorer air, stone and iron.
3. Size of community	Open farms or small communities. 'agriculturalism' and size of community are negatively correlated.	As a rule in the same country and at the same period. The size of urban community is much larger than the rural community. Urbanity and size of community are positively correlated.
4. Density of population	In the same country and at the same period the density is lower than in urban community. Generally, density and rurality are negatively correlated.	Greater than in rural communities. Urbanity and density are positively correlated.
5. Heterogeneity and homogeneity of the population	Compared with urban populations, rural communities are more homogeneous in racial and psychological traits (negative correlation with heterogeneity).	More heterogeneous than rural communities. Urbanity and heterogeneity are positively correlated.
6. Social differentiation and stratification	Rural differentiation and stratification less than urban.	Differentiation and stratification show positive correlation with urbanity.
7. Mobility and direction of migration	Territorial, occupational and other forms of social mobility of the population are comparatively less intensive. Normally the migration current carries more individuals from the country to the city.	More intensive mobility. Urbanity and mobility are positively correlated. Only in the periods of social catastrophe is the migration from the city to the country greater than from the country to the city.
8. System of interaction	Less numerous contacts per man. Narrow area of the interaction system of its members and the whole aggregate. More prominent part is occupied by primary contacts. Predominance of personal and relatively durable relations. Comparative simplicity and sincerity of relations. "Man is interacted as a human person".	More numerous contacts. Wider area of interaction system per man and per aggregate. Predominance of secondary contacts. Predominance of impersonal casual and short-lived relations. Greater complexity, manifoldness, superficiality and standardised formality of relations. Man is interacted as a "number and address".

The above distinction shows that the rural and urban communities used to differ among themselves on the bases of physical and socio-cultural environment, way of life, norms and values, and a large number of other factors such as density of population, birth and death rates, economic activities, caste, class, family and religion etc.

F. Tonnies, in his book *Gemeinschaft and Gesellschaft* (1887) and E. Durkheim in *Division of Labour* (1907) also contrasted the social life of traditional rural communities with that of rapidly developing, industrial urban areas. On the one hand, they stressed family and community as sources of identity and support and, on the other, their relative weakness in urban context where a more individualistic and impersonal way of life was developing.

Tonnies used the terms *gemeinschaft* and *gesellschaft* to describe this broad sweep of social change. Durkheim's terms—mechanical and organic solidarity—overlap and complement Tonnies terminology. He described solidarity in traditional (rural) societies as mechanical and in industrial urban societies as organic.

The work of Georg Simmel (1950) also echoes many of the sentiments of Tonnies and Durkheim. Simmel's particular interest in the effect of the urban environment on the individual—eloquently expressed in his essay 'The Mind and the Metropolis'. Louis Wirth (1938), a renowned urban sociologist, made a firm distinction between rural and urban society. He defined the city in terms of three fundamental features, viz.,

- (1) Population size,
- (2) Density, and
- (3) Heterogeneity.

Social contacts typical of the city were seen by Wirth as impersonal, segmental (narrow in scope), superficial, transitory, and usually of a purely practical or instrumental kind.

The main difference between the two societies as under:

Rural society was one which has not industrialized, whereas present day urban society is highly urbanized and industrialized.

SI No.	Rural Society (Pre-industrial Society)	Urban Society (Industrial Society)
1.	Life in the society was very simple and reflected in the way of living, dressing, food habits, shelter and manners etc.	Life in the city is not simple but very complex and complicated.
2.	The people in the society had homogeneity and thus enjoyed more or less the same social status.	The people in the city belong to different castes, creeds, religions and cultures, thus do not enjoy the same social status.
3.	In the rural society there was very little scope for occupational mobility.	In cities there are many occupations, so occupational mobility is as well as frequent.
4.	Here the family played a very significant and predominant role. Its hold was very strong.	In the cities hold of families is not strong, and many functions which the families used to perform have been taken away by other institutions and associations.
5.	In villages there is no fast change and as such no necessity for social adaptability.	In the cities there must be fast mobility and adaptability to suit ever changing fast life.
6.	In the rural society culture was very deep-rooted. Everyone loved culture and cultural heritage above everything else.	In the cities it is different to find pure culture.
7.	In a rural society there is no division of labour.	In an urban community there is always division of labour and specialisation in job allotment.
8.	Rural society did not give due and proper respect to the womenfolk.	In urban communities women enjoys comparatively high social status.

9.	In this society people loved nature and natural bounties. They were religious minded and afraid of gods and goddesses.	In cities, people have no time to stand and gaze at the nature. They are not religious minded but more materialistic.
10.	There were very few chances of providing employment and incentives to the unemployed by the society.	The cities provide both incentive and employment to the people and thus frustrated villages find solace in the cities which respects ability and judges their worth.

1.11. THEORIES OF URBAN GROWTH

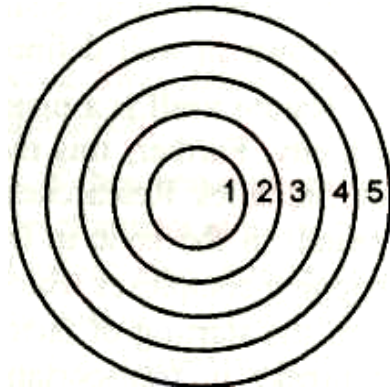
Although several theories have been developed to explain the dynamics of city growth, all such theories are based upon the operation of five ecological processes of concentration, centralization, invasion and succession and observations based upon it about actual city growth in concrete situations. However, one can hardly find a theory of an ideal pattern of urban dynamics as growth of particular city depends upon many factors, the basic one being natural location of a city .Nevertheless, one can notice a set of common principles which govern city growth everywhere. Thus the areas in a city are divided according to the. snicns they serve as functional zones and each function chooses for itself the\ s convenient location e.g., the central business district, residential zone etc. The major theories of internal structure of urban settlements have been advanced on the basis of empirical investigations conducted in the Western urban society, particularly in North America and Europe.

1.11.1. Concentric zone model

Ernest Burgess is the pioneer and his theory on city dynamics which provides the base for the later theorists on the subject. The hypothesis of this theory is that cities grow and develop outwardly in concentric zones. Burgess set out to evolve a theory of dynamics *but he* arrived at a theory of patterns of city growth which applies to any stage stages of urban development.

According to Burgess, an urban area consists of five concentric zones which represent areas of functional differentiation and expand rapidly from the Justness centre. The zones are:

- (1) The loop or commercial centre
- (2) The zone of transition.
- (3) The zone of working class residence
- (4) The residential zone of high class apartment buildings.
- (5) The commuter's zone.



1. The loop or central business district or commercial centre: This is called as downtown in American terminology. It is usually situated at the centre of the city. It is an area of business and official activity. Transportation routes from all parts of the city converge upon it. All the activities connected with business and service such as shops of various articles, departmental stores, restaurants, cinema houses, banks, main post offices and warehouses are all situated in and around th area at convenient places.

2. The zone of transition. This is the area which is located in the immediate vicinity of the market district. It is a haphazard area of dilapidated buildings and slums. It is in the process of transition from a residential area into a business area. It develops out of over-concentration of business area and

the consequent turnover of extra and weak units into less favourable neighborhoods. It is an area of business and light industry. It is an area of squalor, regular vice and disorganization.

3. The zone of working class residence. This is situated immediately after the zone in transition or the factory area as the workers usually prefer to live near the place of their work. This area is a near slum, congested with multifamily dwellings. It is inhabited by workers who have escaped from the influence of the area of deterioration.

4. The residential zone. The residential zone of high class apartment buildings or exclusive residential districts are usually situated at a reasonable distance from the city centre and consist of decent single family dwellings inhabited by middle and upper middle class professionals and executives. Well-planned roads, lounge spaces and beauty are the features of this area.

5. The commuter's zone. This lies at the outskirts of the city and is usually an area of the rural urban fringe. Hence this area reflects the characteristics of both types of habitats. This area is usually inhabited by people working in cities who also own land or by people who cannot find accommodation in cities. The inhabitants of this commuter's zone go daily to their place of work in the city through city transportation.

However, this theory was not free from criticism by himself and others.

Burgess himself was the first to point out that his proposition was not an actual description of patterns of city growth but an abstract scheme. This theory does not conform to the actual growth patterns of cities as proved by subsequent testing in relation to existing cities. It is very rare that we can find a city which has grown in well defined concentric cities.

Nature itself is a major limiting factor deciding the limitation in the shape of a city. Further, this theory does not explain the patterns of commercial or cultural cities. Researches have shown that excess business, instead of flocking around, in the zone in transition flows away to

more remunerative suburban shopping complexes which is a novelty. The concept of industrialization insists upon the starting of factories along waterfronts or at the outskirts of the city or breaks in transportation as convenient sport on grounds of health and availability of raw material. The prominence of the loop has been greatly reduced due to the opening up of suburban shopping centres. The idea of the commuter's zone has been reduced in importance with the growth of twin cities. Contrary to expectation, new business and industry does not always flock towards the city centre or to the immediate area but move towards the convenient available area within the city for their location without touching the existing pattern. The theory does not account for the growth of satellite townships. However, the idea that residential zone lies away from the city centre and factory area nearby conforms to facts. The theory on the whole provides a ground work for the understanding of the growth patterns of contemporary cities.

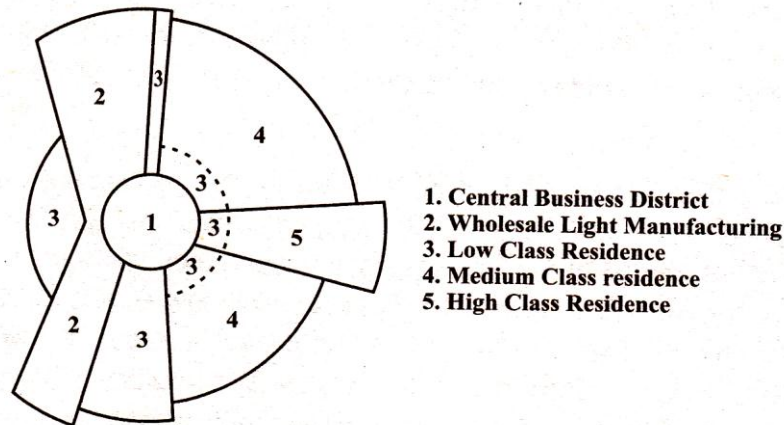
1.11.2. Sectors model

Homor Hyot, an economist, followed the the theory of Eecest Burgess and propounded a proposition of urban structure and its growth pattern in 1939, which may be construed as an alternative to the concentric zone theory. Designating his theory as Sectors Model, Hyot attempted on overcoming the weaknesses of the earlier theory. His theory was mainly based on residential rent pattern and impact of transport development. Based on the findings of an empirical investigation of 34 American cities, it was observed that high rent areas are located in one or more sectors in the city. Hyot prepared a map to substantiate how rent changed by sectors by sectors of the city irrespective of concentric circle. He also analyzed the impact of transport and recreational areas and other changes which he generated from the maps of housing features and land uses pattern of city.

Hyot's survey of Washinton DC metropolitan area in 1954 enabled him to provide factual evidence .That apart, evidences from Latin American cities also corroborated the fact that the finest single family homes and apartments were located on one side of the city only. In this regard, he cited the examples of Guatemala,, city, Bogota, Lima, Lapaz, Quito, Santiago, Buenos Aires, Montevideo, Rio de Janerio ,Sau Paolo and Caracas. He further revealed that the main

concentration of families of high-income group were found in the form of scattered clusters Hyot 's observation was similar both in the cases of latin American countries and New York metropolis.

Figure



The concept of CBD(Ccntral Business District) and outward expansion remains common to both the theories, sectors model and concentric zone, the only difference being differential radical growth from CBD or centre. According to Hyot the sectors develop because of the difference in accessibility from outlying portions to the core region. Hence, it may be construed that his theory also includes the development of concentric patterns within the zone.

However, the the sectors theory is contrasted from the concentric theory in the sense that the sectors theory assumes that land rents change from sector to sector not in the form of concentric ring area..A multiplicity of factors contributes to the development of a sector. Those include planning, transport, class character of the residents and other facilities available to that particular sector. It has been observed that whereas the newer constructions are found on the outer fringes, the inner portions contain older houses.

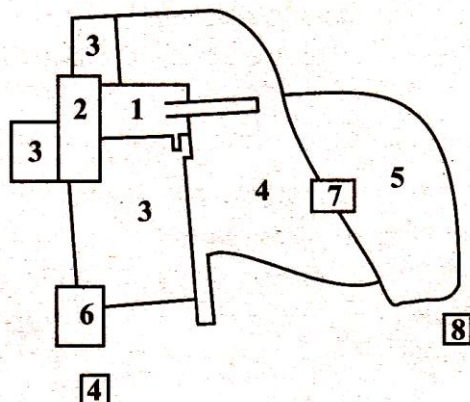
1.11.3. Multiple nuclei model

Chauncy Harris and Edward L Ullaman developed this classical theory in 1954 with the basic assumption that cities are not homocentric,rather they contain many mini centres which play a significant role in the process of development of a city.These minicentres originally develop independently with the specialized advantages that they offer or similar activities clustering in these areas.

Like the sectors theory or concentric zone theory, the multiple nuclei theory also differs from the earlier theories.This theory holds that cities have not developed around a single centre of central business district,but they have a group of mini centres, although the phases of their development may not always be simultaneous.In many a case, the phases of development may be related to different periods.Ullaman has further divided the multiple nuclei type into ten major areas such as:

- i. Central business
- ii. Wholesale light manufacturing
- iii. Low class residence
- iv. Medium class residence
- v. high class residence
- vi. Heavy manufacturing
- vii. Outlying business dlstrict
- viii. Residential suburb
- ix. Industrial suburb
- x. Commuter's area

Multiple Nuclei Model



- 1. Central Business District**
- 2. Wholesale light Manufacturing**
- 3. Low class Residence**
- 4. Medium class Residence**
- 5. High class Residence**
- 6. Heavy Manufacturing**
- 7. Outlying Business District**
- 8. Residential Suburb**
- 9. Industrial Suburb**
- 10. Commuters Area**

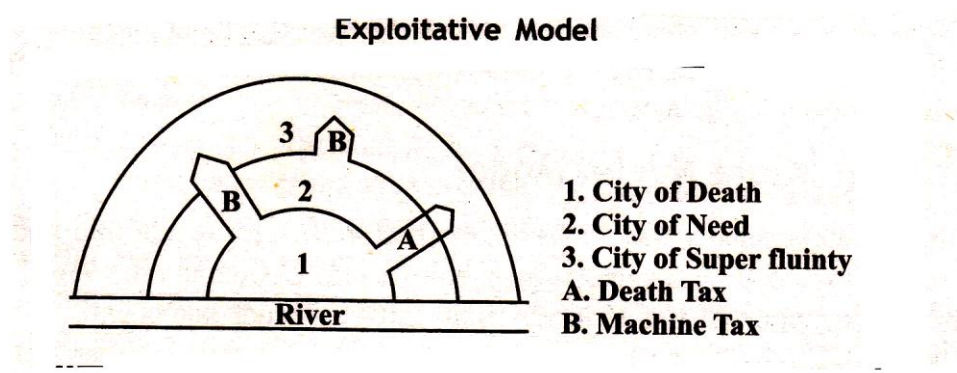
These various parts of a city become fairly clear when we make analyses of its social organization. However, it must always be remembered that these parts have developed through a natural process rather than a planned one.

1.11.4. Exploitative model

Taking into account the ownership of resources and ability to pay, this theory divides the city into three semi circular concentric zones, depicting how money flows from inner city to outward zones towards affluent urban sections. The three semi circular concentric zones are:

- i. The city of death
- ii. The city of need
- iii. The city of superfluity

FIG.



The inner-city is described as the city of death because it is characterized by a centre of exploitation by the city of need and the city of superfluity-the rest two semi-circular concentric zones. The inhabitants of the city of death are poor and exploited through two different taxes, such as machine tax and death tax .Payment of wages below the worker's worth is described as machine tax. Therefore if the workers are paid less than their work output surplus exaction is viewed as the machine tax. The second tax, i.e., the death tax is paid by the poor residents in terms of paying higher price of food ,housing, other consumer items and services. In addition to these problems, the city of death also suffers from a lack of city services and civic amenities on account of congestion and encroachment. This part of city has the status of a slum.

The second semi circular concentric zone which occupies an intermediate location between the city of death and the city of city of superfluity is called the city of need. this part of the city is inhabited by the blue collar working class inhabitants which resembles the working class zone in Burgess's concentric model. The residents in this area are characterized by William Bungee as the hard hats, the solid union members of middleclass America. The suburban based business interests and politicians exploit this semi circular concentric zone.Unlike the inner city residents they pay only a single tax-the machine tax and are exempted of the death tax

The outermost semi circulate concentric zone of the city is described as the city of superfluity which houses the elite entrepreneurs, managers and people belonging to higher class. Although the population of the outer zone is small in number, they constitute the very affluent group which is instrumental in the allocation of the resources .They also play a decisive role in the governance of the country and live a leisured life and indulge in mass consumption at the cost of the other two concentric zones.

Thus the exploitative model presents the picture of exploitation along with problems of inner city dynamics- It also describes how the inhabitants of inner city are provided with less opportunity of jobs, enhancement through skill development and training owing to a continuous system of exploitation. Levy of more taxes in different forms on them reduces their chances of growth and development at par with their counterparts in the city of superfluity.

1.11.5. Mann's model

Apart from the aforesaid models of internal structure of the city, its spatial structures of economic activities and residential areas, Mann(1965) developed a model on the basis of his study of three industrial towns of England- Huddersfield, Nottingham, and Sheffield. In this study, he tried to apply Burgess's concentric zone and Hyot's sector model .He assumed that due to the prevailing wind direction from the south west , the higher class housing would be located in the north east of the central business district. The following significant conclusions may be drawn from Mann's study:

i. The higher class residences are not concentric of central business district but located beside a few pockets of the city.

ii.Mann also observed that industries are found in sectors along main lines of communication. This resembles the sector model.

iii. Moreover, Mann designated the lower class housing area as the 'zone of older housing'. He further observed that the area of higher class housings are relatively modern houses and situated away from industries and smoke.

iv. Contrary to the models of Burgess and Hoyt, Mann described the role of local governance in slum clearance and gentrification.. As a sequel to that the emergence of large council estates becomes possible to protect the interest of the working class or lower income group in the city. Mann's study may be differentiated from the existing models in a couple of ways:

i. His observation is solely based on the European city which possesses its own historicity and social structure ,as different from the American cities.

ii.His suggestion that even through a small sample generalization may be made opens the gateway to a variety of approaches for the study of urban structure.

1.11.6. Symbolic approach

Walter Firey(1945) developed the symbolic approach as another model to study urban structure and as a corrective to the ecological and functional approach for cognizing the internal structure of cities.His contribution to this approach began with his analysis of the land

uses pattern in Central Boston. He identified symbolism as a variable and highlighted the independent role of symbolism as a major force in shaping the internal structure of cities , with special reference to historically meaningful public buildings and open spaces.

At a later stage, Wheatley conducted a couple of studies to bring further development in the approach. He conducted both these studies in two Asian countries-the Chinese cities and the Japanese cities in 1971 and 1978 respectively. On the basis of his study, he came to the conclusion that the ancient cities developed in terms of their religious or cosmological meanings. He further observed that the site of a city or a particular structure is characterized by its own symbolic meanings and is regarded as the centre of the world. Its specific meaning in a particular context is reflected by the alignment of the walls, gates, roads and other designs. The structure consists of temples shrines and palaces developed mainly by the ruling elites as a centre of power. In the like manner, the skyscrapers of modern times also symbolize corporate activities of a place of work in cities on modern world.

1.12. KEY WORDS

Ancient city, Medieval city, Modern city, Pre-industrial city, Industrial city, Rural-urban continuum, Urbanization, Urban growth, Rural-urban dichotomy, Concentric zone, CBD , Multiple nuclei.

1.13. CHECK YOUR PROGRESS

Long type questions

1. Describe the evolution of cities from the ancient times to the contemporary period.
2. Discuss some of the major types of cities in India.
3. Delineate the classification of cities based on major functions.
4. Give an account of the growth of urbanization in India.
5. Explicate the rural-urban dichotomy in India.
6. Analyze the rural-urban continuum in India.
7. Discuss the concentric zone theory.
8. Analyse the multiple nuclei theory.

Write short Notes on:

- a. Sectors model

- b. Commuter's Zone
- c. The city of death
- d. Symbolic approach
- e. Diversified cities
- f. Natural cities
- g. The industrial city

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UNIT -II

SOCIAL INSTITUTIONS IN THE URBAN MILIEU

2.0. OBJECTIVES

2.1. URBAN SOCIAL INSTITUTIONS

2.2 .THE BOUNDARIES OF MARRIAGE

2.2.1. Marriage in urban milieu:

2.2. 2. Family in urban milieu:

2.2.3. Agencies taking over the functions of urban family

2.2.4. Changes in the activities of urban family

2.2.4. Futuristic trends of urban family

2.3. CASTE IN URBAN MILIEU:

2.3.1 The concept of Caste:

2.3.2 Changes in caste system

2.4. CASTE SYSTEM IN URBAN INDIA

2.5. RELIGION IN THE URBAN MILIEU

2.5.1 Characteristics of urban Religion

2.5.2 Co-existence of sacred and secular elements

2.5.3 Urban Indians are more religious

2.6. ECONOMY IN THE URBAN MILIEU

2.7. POLITY IN THE URBAN MILIEU

2.8. KEY WORDS

2.9. CHECK YOUR PROGRESS

2.10. REFERENCES

2.1 URBAN SOCIAL INSTITUTIONS

Marriage and family are institutionalized social arrangements in all known societies. However, the natures of the arrangements differ greatly across societies, over time, and even within a given society at a specific point in time. Frequently, the legal and social norms themselves lack clarity as to what does or does not constitute a marriage, family, or kin group. For example, is it a marriage if two males live together and recognize each other as spouse, a male and a female live together but have no marriage contract or ever experience a wedding ceremony, or a man and a woman go through a marriage ceremony and then separate permanently? Can any group of persons be considered a marriage or family?

The difficulty of definitions becomes acute when one attempts to distinguish between marriages and non marriages; between families and non families; between marriages and families in the united states as opposed to those that exist around the world; between wives versus mistresses or concubines; between parents who provide and care for their own children as contrasted with situations where children are provided for by the community and cared for by professional nurses; between sexual relationships in marriage between spouses versus sexual relationships prior to marriage involving the same or other individuals; between relationships that last until death versus those that last for several days or months; between those that sign legal documents versus those that simply agree to a certain type of relationship; or between those that share the same house versus those that live close to one another.

Apart from marriage and family, other sub systems of the society which are of immense importance are religion, economy and polity. In the Indian context, caste system is considered one of the three major pillars of the social system, the two others being the joint family system and village community

2.2 .THE BOUNDARIES OF MARRIAGE

Marriage has been defined in a number of ways. Harold Christensen says that “marriage is an institutionalized mating arrangement between human males and females”. Thus marriage is viewed as a precondition of family organization. Marriage, being institutionalized, is a social institution that is strictly human and that assumes some permanence and conformity to societal norms.

Burgess and his coauthors write:

“The animal mates, but man marries”. The significance of this distinction is simple and clear. Mating is biological, while marriage is social and cultural. Marriage implies a ceremony, a union with social sanctions, a recognition of obligations to the community assumed by those entering this relationship. Marriage may be defined as a “socially sanctioned union of one or more men with one or more women with the expectation that they will play the roles of husband and wife”.

In a dictionary of the social sciences, compiled under the auspices of UNESCO, marriage was denoted as a mating arrangement approved in society with special reference to the institutionalized relationships of husband and wife, also the ceremonies that established such relationships. It stated that in ordinary usage marriage included two distinct ideas: (a) that a man and a woman cohabit, generally with the intention of founding a family; (b) that some distinction can be drawn between marriage and other forms of sexual union, qualifiable as pie-

marital, extra-marital, adulterous, etc. A mere casual commerce, without the intention of cohabitation, and bringing up children, would not constitute marriage under any supposition.

William Stephens, an anthropologist, says that marriage is

- a) a socially legitimate sexual union, begun with
- b) a public announcement, undertaken with
- c) Some idea of permanence, and assumed with a more or less explicit
- d) Marriage contract, which spells out reciprocal obligations between spouses and between spouses and their children.

Finally, Ira Reiss, who is interested in providing a universal definition of marriage, says that marriage is an institution composed of a socially accepted union of individuals in husband and wife roles, with the key function of legitimation of parenthood.

There seems to be a general consensus that marriage involves several criteria that are found to exist cross-culturally and throughout time. These criteria include:

- Heterosexual, including at least one male and one female
- Legitimizing or granting approval to the sexual relationship and the bearing of children without any
loss of standing in the community or society
- A public affair rather than a private personal matter
- A highly institutionalized and patterned mating arrangement
- An assuming of mutual and reciprocal rights and obligations between the spouses
- A binding relationship that assumes some permanence

2.2.1. Marriage in urban milieu:

Though the sacramental aspects of marriage still tend to persist, marriage as an important social institution has responded to the changing time in the urban Indian society. Transformations have been marked in respect of restrictions in marriage, selection of mates, marriage rites and rituals, age at marriage, aim of marriage, parental control in marriage, settlement, stability of marriage, practice of dowry etc. The following are some of the changes in the mode of marriage in urban India.

(i) Change in the exogamic and endogamic rules : Traditionally in Hindu marriage, while selecting a mate, the exogamic and endogamic principles were adhered to. Whereas the exogamic principle stipulated that one must select his life partner from outside his own group such as the pinda or pravara or gotra, the endogamic rules proclaimed that the Hindus are to select their mates inside their own caste group. Violation of the principle of endogamy attracted punishment amounting to ostracizing and excommunication.

But now the situation has entirely changed. The Hindu marriage Act, 1955 has allowed sagotra and sapinda marriage. It has also allowed the cross-cousin marriage where it prevailed customarily. Thus, at present, the exogamic rules have come under strain.

Furthermore, the endogamic rules have undergone profound changes. Inter-caste marriages are encouraged by the social reformers and the legal system. Even inducements are given by the government

for the practice of inter-caste marriage. The traditional mode of punishment for breaking the endogamic rules has been declared illegal in the changing Indian social scenario.

However, this is not to say that the principles relating to caste endogamy and gotra exogamy, have become completely extinct, even now these principles are widely followed in Hindu marriage.

(ii) Changes in marriage rites and rituals : Changes have also been marked in respect of the rites and rituals of Hindu marriage. These rites and rituals envisaged the Hindu marriage as a

religious sacrament, which included saptapadi, panigrahana, kanyadana pradakhina, etc. The chanting of Vedic mantras by, the officiating priest also further justified the sacramental character of Hindu marriage. But at present, attempts are on to simplify the rituals and make the marriage rites and rituals precise. Even the rituals and rites are not allowed sincerely or rigidly. The Civil Marriage Act of 1954 has made provision for marriages in civil courts. The Arya Samaj and other religious reform movements have made the marriage rituals simple and precise.

(iii) Increase in the age of marriage : Now-a-days the age of the couple at the time of marriage has gone up. Legally speaking the minimum age for marriage for boys has been fixed as 21 years and for girls as 18 years. Therefore, the occurrence of child marriages has become very rare. This trend has developed due to several reasons. First of all people have become conscious of the bad effects of early marriage. Secondly, the spread of education and the desire for higher education has engaged the partners in studies. This is common in the case of boys and girls belonging to the higher castes. Thirdly, the boys prefer to settle down first and then go in for marriage. Fourthly, the desire for economic independence in the case of girls, may be attributed to the causation of late marriage'.

(i v) Decline of parental control over the arrangement of marriage : Previously the marriages were settled by the parents or other relatives. Their decision regarding the selection of mates was binding. The life partners had no say in the matter. But now-a-days, in the wake of modernization and with the spread of modern values and modern education boys and girls are inculcating individualism and liberalism. These values enable them to take their own decision in marriage. The parents and relatives now seek their opinion in marriage.

(v) Incidence of widow marriage : Previously the Hindu widows were not allowed to contract a second marriage. Rather the practice of 'sati' was followed wherein the widow was asked to put an end to her life by burning herself on the funeral pyre of her deceased husband. But now the practice of sati has been abolished with the enactment of law.

The Hindu Widow Remarriage Act, 1950 has made provision for remarriage of widows.

(vi) *Marriage has become unstable* : Customarily the Hindu marriage was considered a religious sacrament and an indissoluble bond between the spouses. But with the enactment of the Hindu Marriage Act, 1955, the sacramental aspect of the Hindu marriage has been challenged. The Act has made provision for divorce. Women are no longer prepared to put up with injustice meted out to them in the name of family honour. They may seek divorce within the ambit of the Act in order to break the ill-fated marriage. The Marriage Laws Amendment Act has further simplified the provision of divorce. Due to these reasons the Hindu marriage has become brittle and the incidence of divorce is on the increase.

(vii) *Changes in the aims of marriage* : The aims of the Hindu marriage have undergone the process of change. In the past, 'dharma' 'Praja' and 'rati' were considered as the three aims of the Hindu marriage. 'Dharma' was considered the main objective of marriage and it was followed by 'praja' or procreation and 'rati' or sexual pleasure. Thus sex was given the lowest priority in the Hindu marriage. But at present the order of priority, with regard to the traditional aims, has been reversed with rati or sexual pleasure at the top followed by praja and dharma.

(viii) *Changes in the considerations in the choice of mate* : The traditional criteria of caste, religion, family background and income are no more considered important in the selection of mates. The emphasis has shifted to the socio-economic status of the bridegroom's family and his education and earning potential. In case of girls, their intelligence, education, capability of household management etc. are taken as the criteria in the selection of mates.

(ix) *Change in control of parents over the selection of mates* : **The** control of parents over the selection of mates in marriage is on the decline. Traditionally, it was the responsibility of the parents or the guardians to arrange marriages for their children and their decision was final and binding even against the wishes of the mates. But the impact of the West, spread of modern education and economic independence have enabled the boys and girls in the urban setting to choose their mates according to their own wishes. This has resulted in a number of love marriages in the urban milieu.

(x) *The emergence of dowry system* : In the past at the time of marriage the parents of a bride offered her jewels and ornaments as a token of their love and affection towards her. But

now-a-days, this custom seems to have gradually degenerated into the practice of dowry and it is playing a decisive role in marriage. As a necessary pre-condition of marriage dowry has become a major social problem and this evil is spreading like wild fire in the Hindu society. Non-payment or deferred payment of dowry has resulted in broken marriages, bride burning and bride torturing.

(xi) Prohibition of Polygamy : The Hindu Marriage Act of **1950** has declared polygamy to be illegal. The law provides that no one can marry a second time while the former spouse is alive. This has brought to an end the age-old practice of marrying several women in order to get a son. Women have now become educated and conscious of their equal rights in marriage.

2.2.2. Family in urban milieu:

The family, like marriage, has been defined in various ways. Christensen says that family refers to marriage plus progeny. Family, in other words, signifies a set of statuses and roles acquired through marriage and procreation. Thus the family is a product of marital interaction.

Burgess says that the following characteristics are common to the human family in all times and all places and differentiate the family from other social groups:

1. The family is composed of persons united by ties of marriage, blood, or adoption.
2. The members of a family typically live together under one roof and constitute a single household; or, if they live apart, they consider the household their home.
3. The family is composed of persons who interact and communicate with each other in their social roles, such as husband and wife, mother and father, son and daughter, brother and sister.
4. The family maintains a common culture. It is derived mainly from the general culture, but each family has some distinctive features.

The UNESCO dictionary defines the human family as an institutionalized biosocial group made up of adults (at least two of whom, unrelated by blood and of the opposite sex, are married) and children (the offspring of the marital related adults). The minimal functions of this group are the iding of satisfaction and control of affectional needs, including sexual:

Urban family is nuclear, small, unstable and sometimes even disorganised. This may be seen from the growing number of divorces in the Indian and Western contexts.

Basic functions of the urban Family:

The following are the basic or fundamental functions of the urban family:

I. Biological Functions. The most fundamental biological functions are as:

(a) Reproductive functions:. According to the Hindu scriptures procreation is the the mostly desired function of the family. Commentators on the Hindu scriptures

have written that the religious activities of man cannot be consummated unless he has a son and he cannot repay his ancestral debt. He views that man has to suffer in hell if he has no son. In almost all societies of the world barren women are the objects of scorn and derision. In the words of Ogburn and Nimkoff, "The sex and parental functions are distinctive of the family. And in some societies marriageability is attributed only to a woman who gives evidence of her fertility by conceiving a child before marriage. Hindu scriptures permit a second marriage if there is no issue from the first wife. The woman was permitted to conceive a child from another man through 'niyoga' if the husband is impotent or otherwise incapable of procreation. In most human societies of the world the child is believed to be the nucleus of the family. Procreation perpetuates the family. It increases the population of the country. Some Hindu thinkers have considered reproduction to be the sole aim of marriage. To quote Sutherland and Woodward, 'The basic biological

function which the family has been performing, is a function absolutely essential to the survival of any human or animal society.

(b) Providing food, housing and clothing to family members: Food, housing and clothing are indispensable to the existence of human life. A major biological function of the family is the provision of these amenities for its members. The earning members of the family provide food and clothing for all the rest. Every family has a house to live in and the food for the family members is generally cooked at home. In the words of Dennis Chapman, "Each new family establishes an independent home as soon as possible after marriage, the new home reflecting the interest and the culture of both husband and wife."

2. Psychological Function: The second universal function of the urban family is psychological. Ogburn has included affectional functions in the necessary or vital functions of the family. According to Groves, it is the function of the family to provide opportunities for the establishment of intimate relations. Burgess and Locke have written, "Mutual affection is becoming the essential basis of marriage and the family." The individual receives affection, sympathy, love and psychological security in the family. The relations between man and woman in the family are not exclusively physical. Profound conjugal affection for each other is generated in husband and wife by working together in the family and by sharing each other's joys and sorrows. In the absence of family love an all round development of the individual is not possible. The family plays an important part in the development of the child's personality. Ralph Linton has held that merely the satisfaction of bodily needs is not sufficient for the proper development of the infant. Children are in greater need of individual attention, love and satisfaction of response.

3. Gratification of sexual needs: Another universal function of the urban family

Other Functions of urban Family:

The following are the additional but traditional functions of the urban family:

1. Economic functions. The urban family performs many economic functions which may be stated in the following manner:

Division of labour: In the urban family, the work is divided among the members according to their status. The male members generally do the external work which means outdoor movement. The women generally take care of the domestic chores while the children undertake only such work which can assist in their personality development. While this division of labour prevents putting excessive burden on the shoulders of one individual, it ensures the systematic performance of the family activities. All people undertake responsibility and work cooperatively. Arrangement for income. Money is needed for such of the family requirements as food, cloth, habitation, etc. The family is the centre of economic activities, consumption, etc. The family makes arrangements for an income in an effort to fulfil the needs of the family members, Organisation and care of property. Most families possess some property in the form of a house, farm, jewellery, money etc. The family looks after this property and in case such a contingency arises it also equitably distributes it among the members. The family is the judge of what property an individual shall receive who shall look after the property and how. and other important questions.

2. Social functions: The family being a social institution, the social functions of the family assume a lot of significance. since family is the fundamental and primary unit of society. Among many social functions the following deserve mention:

Determination of status: An important function of the family is the determination of an individual's status in the society, The modes of earning wealth of an individual are also generally determined by the family.

Socialization of individual: The family imparts learning to the individual on all those subjects whereby he can become an ideal member of society. It

carries out the socialization of individual and teaches the etiquettes of eating, conversing, coexisting etc.

Exercise of Social control: Another function of the family is to exercise social control over the individual. The prevalent moral norms are enforced upon the individuals and their conduct and thoughts are controlled so that the order in society may remain intact. In the family, the antisocial tendencies of the individual are watched.

Transmission of social heritage: The family keeps the social heritage intact and hands it over to the next generation

2.2.3 AGENCIES TAKING OVER THE FUNCTIONS OF URBAN FAMILY

In the urban milieu, the functions of the family are changing because other agencies are taking over its functions. The main agencies of this nature are: (i) Maternity hospitals, (ii) Women hospitals, (iii) Baby clinics, (iv) Creches, children parks and the kindergarten, (v) Baby sitters, (vi) Hotels and restaurants, (vii) Public aid to the family, (viii) Club, cinema and other means of recreation,

I. Maternity hospitals. Previously children were born at home and midwife was called in at the time of delivery. Now in the prosperous families this is done in the maternity hospitals. During pregnancy the women constantly consult doctors and are confined to the hospital some days in advance of the delivery. They remain for some time in the hospital after the child has been delivered. This system is very beneficial. In this way the mother and the child are constantly kept in the care of expert physicians and can get any and every kind of medicine whenever required. Even if there is difficulty in the delivery, operations can be formed without delay. There can be neither the facility of medicine nor the arrangement for operation in the family house. This creates much travail and lack of these facilities can even be a danger to the lives of the mother and child in certain cases. One cause of the increase in the use of maternity hospitals for child delivery is the disintegration of the joint family. In the modern societies the newly wedded people live separately from their families. At the time of delivery there is no old

and experienced woman near them who can give them proper advice and take the matter into her own hands. Moreover, the houses in the towns are so small that it becomes difficult to accommodate relatives. Under these conditions the easiest course to follow is to confine the pregnant woman to a maternity hospital or a delivery home.

2. Hospitals for women: In the modern age of specialization there are specialists for every kind of disease. Now-a-days one can secure specialists in the peculiarly feminine diseases in all big towns and cities. Thus, it is they who treat the women for their diseases. Previously, this work was done in the family, being performed most incompetently and dangerously.

3. Provision of Baby clinics: In the urban setting,, in addition to the treatment of women, there are

doctors who specialise in the treatment of children. Previously the infantile diseases were treated at home but now this is done in the baby clinics. In this way much of the responsibility for the care and treatment of the diseased is on the doctors' shoulders. This, however, does not mean that Sjt.is function has been completely taken away from the family.

4. Creches and children parks: Creches and children parks are being

developed in modern progressive countries. Employed women who work in factories leave their boule feeding children at the creches where educated women look after them, feed them at the proper time, and keep them occupied with toys, etc. Institutions of this kind have developed very much in modern countries, particularly in the U.S.S.R.

Similarly, in the Western countries, Montessori schools, nurseries and children parks have been developed for children between three and six years of age. In these, every care is taken of the children. The number of nurseries md creches in India is very small.

Provision of Baby Sitters: In the Western countries much of the chores of caring for and upbringing children has been taken up by baby sitters, in addition to the creches and nurseries. These baby sitters are generally female. Their duty is to keep the children busy and for this they receive payment by the hour. In America when a woman has to go out of the house on an

important mission on which it is inconvenient to take children, she leaves them with the baby sitters. Public Aid:. Previously, one of the fundamental functions of the family was caring for and assisting the old, the invalids and the unemployed. Now

a-days in many European countries (he government undertakes to assist the old,; helpless, unemployed people and orphaned children. There is a similar system in Canada and America also, Women who work in factories get paid leave along with free medical facilities. Everywhere the government assists the old people and the orphans through (he media of pension and insurance. In many countries an extra allowance is paid by the government when the number of children increases. There is a special arrangement for this kind of assistance in Russia, Sweden, Germany and Italy

In this way, many institutions render assistance so the family in ihc • performance of its duties. Hotels and restaurants provide food and rest while \ the picture houses and clubs provide ihe recreation. In this way these institutions share much of the family's work. But these can never replace the family, they can only supplement its efforts.

2.2.4. CHANGES IN THE ACTIVITIES OF URBAN FAMILY

In the present times, the institution of urban family is undergoing rapid change and modification. The main changes, in this connection, are the following:

1. Changes in the Economic Functions of Family.

In the recent times, many of the economic functions, which were previously being performed by the urban family, are now being performed by factories, government aid and other associations.

2. Changes in other Activities of Family. Many a function of the urban family have now been taken over by other agencies. The work of looking after and bringing up children is now being performed in crèches, children parks, kindergarten schools and by baby sitters. Hospitals undertake the work of delivering children and of treatment. Restaurants provide food to thousands of families.

3. Increase in Family Recreation. With the invention of radio and television, and the advent of indoor games modern families have been transformed into centres of recreation. :

4. Changes in the gender Relationship: In the present times, the women have gained equal rights with men, their mutual relationships have undergone much changes. The husband is no longer the head of the household in many families. Despite the fact that he still provides the family name which his wife uses upon more formal occasions, within the family circle, he is no longer the autocrat whose word is law. In fact he is lucky if his children look upon him other than as an outsider or as an ally to be catered to when support is needed in breaking down his wife's opposition to some programme of the children.

The wife on the other hand, finds herself equal to her husband in the family circle, if not superior, she rules the destiny of the family group with a sympathetic, but nonetheless determined hand. She is no longer the drudge of the other days. So far as the children are concerned, her commands are also to be taken into account more than those of father.

5. Laxity in Marital and Sex Relationships. The rigidity traditionally maintained in marital and sexual relationships are no longer the characteristics of the urban family. To quote Sutherland and Woodward, "The family has been greatly affected by the changes in sex mores.

6. Increase in the Importance of Children. In the modern family the importance of children has increased. They are now only rarely physically punished but are instead taught lovingly. The modern families tend to become child-centred families.

7. decrease in the Importance of Blood relationships. In the urban family there has been a continuous decrease in the importance of blood relationships. The family is now constituted of a husband, a wife and their children.

8. Disorganisation of Joint Family. The modern family is no longer joint, urban joint family is rapidly being disorganised.

9. Smaller Family. Due to the prolific use of contraceptives and the tendency to regard children as an obstacle in the progress and enjoyment of life, the birth rate is continuously falling and the modern families are becoming smaller.

10. Family Disorganisation. The process of disorganisation is quite apparent in the modern family. The number of divorces is on the increase. The control which the family exercises over the individual is being lessened,

11. Family Instability. The modern family is no longer a permanent association. It is precarious and can be rendered void at any time. Marriage has been reduced to a mere social contract which is not difficult to break in the event of even the slightest friction. In comparison with the ancient and medieval families the modern family is weak and unstable- New Problems Confronting the Urban Family

In this way the urban family is beset with many new problems the major among which now follow:

I. Problem of adjustment of the husband-wife relationship. In the modern family the most difficult problem is that of the mutual adjustment of husband and wife. The educated and enlightened woman of today wants to be the equal Mower, Earnest, R-, The Family (1932), pp. 274-273. t, Sutherland and Woodland, Introductory Sociology, p. (50.1.

"They in fact tend to dominate the scene, their wishes determining the policy of the family. Thus the trend seems to be toward the filio-centric family in which the child plays the dominant role." —Earnest R. Mowrer, The Family, University of Chicago Press. (1932), p. 274. 10. "The two child family is now the prevailing social standard or ideal,"

in every aspect of life. They now demand the same fidelity which they demand of them. When the men do not want to have women on an equal footing with themselves the result is a struggle due to which the family tends to be disorganised.

5. Conflict between parents and children. Now-a-days an important element indicative of family disorganisation is the conflict between parents and children. The control of the old people over

young men and women is constantly decreasing. They do not want to be ordered by their parents in their behaviour, marriage, society, etc. Consequently, the misunderstanding between the two parties increases and the family becomes further disorganised,

6, Lack of security. As a result of conflict between husband and wife and parents and children, psychological security is being continually diminished due to which mutual trust is decreasing and the family organisation is being shattered.

7. Industrialism In the modern industrial system women and children work in factories along with the men. This reduces the unity of the family and increases disorganisation. :

8. Ideal of Romantic Love. Modern marriages are based on the ideals of :

romantic love. When the dreams of the two partners do not materialise, in the family hatred increases and is gradually transformed into conflict.

9. Less Social Protection in Family Crises. Previously conflicts between husband and wife were overcome by the constraining influence of the elders, kinsmen, social mores and traditions and the family was saved from disintegration, but with the existing loss of respect for these modes of social control the husband and wife are deprived of any guide or mediator and in a fit of temper or even vengeance they destroy the delicately and lovingly nurtured sapling which is the family no matter how much remorse they may experience when they have cooled down. Previously, being financially dependent upon the husband the wife silently bore much injustice and did not dare think in terms of a separation. Now, (the women who are capable of earning their livelihood marry only for love and when that is not forthcoming there is almost nothing to deter them from dissolving their marriage. At some places extreme laxity of divorce laws has led to instability of the urban family.

10. Replacement of domination by co-operation. The basis of husband- wife relationship in the modern family is no longer domination but co-operation. Previously, everywhere, be it in the East or in the West, the wife was dominated by the husband and hence the family stability

survived despite the husband's dictatorship. But with the removal of this dominance, in the modern time, the liability of the family can be maintained only by benevolence, sympathy and co-operation. Normally, it is not easy to create these qualities. Hence, the instability of the modern family.

It is obvious from the above mentioned causes, that the family is being rapidly disorganised in the modern age. The families are becoming smaller.

The number of divorces is increasing. Mutual intimacy and faith are being reduced and their place has been taken by selfishness and frivolity.

2.2.5. FUTURISTIC TRENDS OF URBAN FAMILY

All the above changes have led some sociologists to doubt whether the family will survive in the present crisis in the highly industrialised and mechanised societies of the West. Sorokin holds. "Accordingly contractual family, in the progress of its development has unexpectedly reached the point where it has lost most of its functions and prerogatives, even those it retains are often atrophied and poorly performed. The urban family has shrunk in size. It has become increasingly unstable and prone to breakdown. Less and less does it furnish even pleasure and comfort, primary objects (he sensate contractual family. When any institution finds itself in such a feyaiion it is in the process of decay. This is precisely the position of the am actual sensate family to-day.": Will the family survive to continue in the rm of a primar association? What will be the future of the family? Actually, there can never be any doubts concerning the continued existence of the family ince it is based upon the fundamental needs of human beings. It would be no an exaggeration to say that the family will assuredly exist in whatever varied or transformed form, as long as the human society exists. The desire for procreation is a natural desire in men. Outside the family there can neither be any legal offspring nor any proper arrangement for its upbringing. Some or the other fund of marriage system and a family are needed to afford a permanent means for the gratification of the sexual impulses of men and women. The family satisfies not merely the physiological needs of the male and female but also illicit psychological needs, the desire to love and to be loved, the sense of psychological security, etc. The family exercises the control of society upon the individual. The family creates

an environment in which the child can be brought up to develop his personality fully and to become an ideal citizen. Many studies have revealed that among people aged more than thirty, the death rate among the unmarried men and women is twice that of the married women and men. Among people who die as a result of tuberculosis, accidents, suicides, alcoholic indulgence and sexual diseases, the proportion of unmarried is greater than that of the married. Mutual affection of family members guards against many of the mental and physical difficulties of a complicated society. This is clearly indicative of the benefits which accrue to man from the institution of family. Actually, the family is a primary and fundamental unit of society. It is the foundation of all social life. It socializes the individual and assists him in the choice and selection of a life partner. It determines inheritance and procures property. It is difficult to describe all the direct and indirect benefits of the urban family. It is an inseparable part of human nature. It is the foundation of both the urban as well as the rural social structure. Let us strongly believe that family has been and will remain the nucleus of the urban social structure in future also.

2.2.6. Opinions regarding the disintegration of urban Joint family

As regards the question of disintegration of the joint family, there is no unanimity of opinion among the sociologists. It is now clearly visualized that there is no linear transformation of the joint family into nuclear family under the impact of industrialization, urbanization, education and migration. Many studies have been conducted by sociologists to examine the impact of industrialization and urbanization on the family. Richard D. Lambert's Study, based on some factory workers in Poona reveals that fragmented families are not produced due to factories. Even though the workers just live away from their kin, they do not change themselves into nuclear families. It was also noted that the workers were heavily burdened by their dependents and they were the main earners of with regular cash income. Another pertinent observation of Lambert was that employment of spouses does not necessarily impel them to follow the western familial pattern. Thus the concept that the joint

family is not functionally adaptive to an agricultural society is not fully maintainable because it is also equally functional to an industrial society.

Aileen D. Ross- "The Hindu Family in its Urban Setting (1961) dealt with the empirical study of the effects of industrialization and technological change on the Hindu family. It sought to understand these effects on *the* traditional middle and upper class families who, according to Ross, are facing the full impact of rapidly changing conditions due to growing industrialization. Aileen D. Ross has also discussed the effects of education and new occupational opportunities on the aspirations of the members and on the role relationship within the family and wider kinship group.

M.S. Gore's "Urbanization and Family change' examines the nature and extent of change in family relationships among the Aggarwals, a business community of Delhi under the possible impact of industrialisation and urbanisation. Gore comes to the conclusion that though we cannot talk of a rural fringe-urban continuum in family behaviour or attitudes no significant differences are evident in the data. Gore asserts that the Aggarwal caste still largely conforms to the pattern of joint family living in behaviour, role perception, and attitudes, but within this over-all pattern, a certain measure of change can be associated with urban residence and education.

K.T. Merchant had surveyed the changing attitudes toward, the family. His findings revealed that 43.2 percent, persons favoured the joint family whereas 36.5 percent opposed it.

K.M. Kapadia has evaluated the recent trends affecting the joint family. Kapadia has showed how, since the British days, legislation regarding co-parcenary gave greater rights to individual members and how various labour laws for the benefit of employees have reduced the reliance on the joint family to some extent. But he maintains that there has been little disintegration of the institution of the joint family as such. Kapadia asserts that the form of the joint family might have undergone change but its functions remain the same, Kapadia is of the opinion that the cultural ideal of 'care of the dependents' favours the continuance of the joint family in India.

E.D.Driver's study of Poona district in Maharashtra revealed that the number of joint families in rural areas was one and half time more than that in the urban areas.

Milton Singer's study on nineteen leading industrial families of Madras revealed that even though there have been changes in the size of the family, status of women and household activities, nevertheless the families living in nuclear households continue to maintain numerous joint family obligations. Many a time members also subscribe to the norms of that system.

The above studies show' that the incidence or prevalence of joint family in India is still high. Even joint families were found to be prevalent in urban areas. It is a truism that the old pattern of joint family living with members of three or more generations residing under the same roof and sharing food cooked at the same hearth are rare. But now these two criteria have been repudiated by many sociologists. As for example, sociologists like I.P. Desai is of the view that to over emphasize common residence and common kitchen as the determinants of a joint family is to ignore the relevance of other significant characteristics. Desai has laid emphasis on social relationship and construed joint family as a functioning unit. He has defined joint family as "the family which has greater generation depth (three or more) than the nuclear family and the members of which are related to one another by property." Hence, considering from this view point of Desai, studies on Hindu joint family are quite few in number.

2.3. CASTE IN URBAN MILIEU:

In the urban milieu caste exists in different form, from that of the rural India. But before discussing caste in urban India, we must be acquainted with the concept of caste as existed in its purest form.

2.3.1 The concept of Caste:

The word, „caste“ is of Spanish and Portuguese origin. The term, „caste“ originated from the Spanish word „casta“, meaning „lineage“ or „race“ or „a group having hereditary quality“. It is derived from the Latin word „Custus“, which means pure. The Spaniards were the first to use it, but its Indian application is from the Portuguese, who had so applied it in the middle of the

fifteenth century. The current spelling of the word is after the French word „Caste“, which appears in 1740 in the academies, and is hardly found before 1800. Before that time it was spelt as “casta”. In the sense of race or breed of man it was used as early as 1555 AD. The Spanish word “Casta” was applied to the mixed breed between Europeans, Indians (American) and Negroes. But caste was not used in its Indian sense till the 17th century. The Indian use is the leading one now, and it has influenced all other uses. Caste can be defined as hereditary endogamous group, having a common name, common traditional occupation, common culture, relatively rigid in matters of mobility, distinctiveness of status and forming a single homogeneous community. However, in the changing situation caste has adapted too many new features like having formal organizations, becoming less rigid and having a link with politics. Thus we may list from the above the following features of caste system.

1. Hereditary in nature: It implies that caste system is based on heredity. It is based on ascribed values rather than achieved qualities.

2. Segmental division of society: It means Indian social stratification is largely based on caste. There are various castes having a well-developed life style of their own. The membership of a caste is determined by birth. Thus caste is hereditary in nature.

3. Hierarchy: It indicates various castes according to their purity and impurity of occupations are ranked from higher to lower positions. It is like a ladder where pure caste is ranked on the top and impure is ranked at the bottom. For example the occupation of Brahmin is that of performing rituals and teaching. It is considered to be the purest occupation; hence they are placed at the top of the hierarchy. On the other hand sweeper, whose occupation is cleaning and scavenging, is placed at the bottom the bottom of the hierarchy because of impure occupation.

4. Restrictions on food, drink and smoking: Usually different castes do not exchange food and drink, and do not share smoking of hukka among them. For instance, Brahmins do not take food from any other caste. It is a complicated process. For example in Uttar Pradesh, among Kanyakubj Brahmins, there are many sub-divisions. Each sub-division does not take food from other sub-division. There are two types of food: „pucca” (food prepared in ghee like puri, kachodi and pulao) and kuchcha (food prepared in water like rice, pulses and vegetable curries). Some castes exchange only pucca food among themselves. Invariably, the high caste does not take anything from the low caste. The same principle is applied to smoking.

5. Endogamy: It indicates members of the caste have to marry within their own caste only. Inter-castes marriages are prohibited. However, among educated people, particularly in the urban areas, inter-castes marriages are gradually increasing.

6. Purity and pollution: It is one of the important features of the caste system. Purity and pollution are judged in terms of deeds, occupation, language, dress patterns, as well as food habits. For example liquor consumption, consuming non-vegetarian food, eating left-over food of the high castes, working in occupations like leather craft, lifting dead animals, sweeping and carrying garbage etc. are supposed to be impure. However, in recent times some high caste people are today doing all the above jobs, like working in a shoe-shop, shoe-factory, cutting hair in a beauty parlour etc.

7. Occupational association: Each caste has a specific occupation and cannot change the occupation. For instance, Brahmins do priesthood and teaching, Kayasthas maintain revenue records and writing. Baniyas are engaged in business and Chamars are engaged in leatherwork, etc. With new job opportunities available due to industrialization and urbanization some people have shifted from their traditional occupation. However, in rural areas traditional occupations are still followed. Such cases are also found in urban areas like a barber has a hair-cutting

saloon where he cuts hair in the morning and evening simultaneously works as peon in some office.

8. Social and religious disabilities and privileges of a few sections: The lower caste are debarred from doing many things like they are not permitted to enter the temple, do not use literally language and can not use gold ornaments or umbrella etc. However, thing have changed considerably, these restrictions are hardly found today.

9. Distinction in custom, dress and speech: Each caste has distinct style of life, i.e. having its customs, dress patterns and speech. The high caste use pure language (sometimes use literally words), whereas, the low caste use colloquial language.

10. Conflict resolving mechanisms: The castes have their own conflict resolving mechanisms such as Caste Panchayats at the village and inter-village levels.

2.3.2 Changes in caste system

1. Westernisation: It indicates adapting to western style of living, language, dress pattern, and behavioural pattern. In India largely the British influence has been found. The features of westernization are: (a) rational outlook (scientific and goal oriented outlook), (b) interest in material progress, (c) reliance on modern communication process and mass media, (d) English medium education, (e) high social mobility, etc. The higher castes were first to westernization themselves. Later on, the lower castes also adapted to this process. It has largely influenced the rigidity of caste system and changed it into a flexible system, particularly in the urban areas.

2. Modernisation: It is a process which primarily relies on scientific outlook; rational attitudes, high social mobility, mass mobilization, empathy, belief in liberty, equality and fraternity; high level of motivation to do every thing with perfection; specialization and super-specialisation in work; active participation; and dealing with complex organizations. It also requires changes in institutional, structural, attitudinal, and organizational aspects at then social, cultural and personal level. This has affected greatly the caste system in the sense that it has become more flexible. In urban areas castes are gradually becoming classes. In India we find an emerging middle class with a rational outlook and goal orientation. Modernization is a broader concept than westernization. Any culture can modenise itself without adapting to western values. In our case we can modernize ourselves not by abandoning the tradition totally but by integrating the rational aspects of the tradition and suitable aspects of modernity. Our caste system has adapted suitably to the modern practices, i.e. educating people, forming formal organizations and making people conscious about their existence.

3. Industrialisation and urbanization: Both these processes have affected the caste system. With the growth of industrial towns and cities, migration to these areas has gone up. In these areas following strict caste rules are not possible. There are public places like parks, restaurants, canteens, hotels, offices and communication systems like buses and trains etc. where inter-dinning and sharing places are essential. Hence, a flexible approach has been adapted.

4. Democratic decentralization: Through the introduction of Panchayati Raj, local self-governments have been created in the villages. In the Panchayat reservation has been made for the lower castes. This has given an opportunity for the lower castes to empower themselves.

5. Caste and politics: It is not a new phenomenon since politics is a part of life always. During the Varna vyavastha, Brahmanical supremacy was an example of politics. Today it is said that castes have a close link with politics because castes have become vote banks, castes have become politically aware, there have been identification of castes with political parties and every caste has its own association. In fact, the link between caste and politics has led to an empowerment among the lower castes. These castes never had any opportunities to express

themselves. Today they ventilate their feelings through elections and power lobby. Dalit politics is one such example, where the Dalits are trying to assert their identities and have become successful in capturing power in various States. However, the negative aspects of this link have been found in functionalism, i.e. the high castes always want to maintain their status quo. They are not able to accept the changing dominant position of the lower castes. This has led to frequent conflicts between high castes and low castes in several regions of the country. However, this is only a transitional phase. Better education, mass awareness campaign and good employment opportunities would ensure smooth passage towards a progressive society.

6. Caste and economy: Traditionally, it was said that caste system has been functional for the society particularly in the economic sense. It is nothing but the jajmani system. It is a system of traditional occupation for the lower castes,

particularly the service caste. The service caste is known as Kamins and they used to provide service to the higher castes known as Jajmans. The Kamins provided specialized skills and services to the Jajmans and in return they used to get rewards in kind (food grains). The relationship between Jajmans and Kamins used to be a permanent and hereditary relationship i.e. after the death of the Jajman, his son used to be a Jajman and the same principal applied to the Kamins. Thus, it was a functional relationship in village India. However, due to introduction of market economy and land reforms the Jajmani system gradually is being eroded.

In this manner, caste system has undergone many changes due to the above processes and it has adapted to the new socio-economic condition. In urban areas, today people do not adhere to caste norms. The only aspect where caste comes is that during marriage they still become endogamous. However, as mentioned earlier, some people have adopted to inter-caste marriage and inter-religious marriages.

2.4. Caste System in Urban India

It is an indisputable fact that the caste system exists in a change form in Urban India. Change has always been present, though its rate in the different aspects of the system has not been uniform.

Changes in the caste system in urban India are visualized in three forms such as structural change, functional change and attitudinal change.

Structural Changes:

(i) Decline in the supremacy of the Brahmins:

There has been a sharp decline in the supremacy of the Brahmins in Urban society. In the past, the Brahmin occupied the topmost position in the caste hierarchy. But today consequent upon the process of modernization the dominance of the Brahmins has been relegated to the background. In urban India they do not enjoy the same social status, which they once used to in the traditional society.

(ii) Changes in the Caste hierarchy:

The caste system is no longer a clearly demarcated system of hierarchically-ordered caste groups in Urban India. As a result of certain factors such as occupational diversification, migration to urban areas, mechanisation of agriculture, boundaries between caste groups are tending to blur or break down. There is an increasing degree of interpenetration between different groups, classes and categories in the urban milieu. A gradual lessening of the congruence between caste, class and power is visible in urban India.

(iii) Improvement of the conditions of the downtrodden:

The governmental policy of protective discrimination has gone a long way in improving the socio-economic conditions of the downtrodden and this is quite visible in urban India and they are socially accepted in the urban matrix. Consequently, their social status has improved to a considerable extent.

Functional Changes:

(i) Change in the fixation of status:

In a caste society, birth was taken as the exclusive basis of social status in the traditional pattern. But in the changing social scenario, particularly among the urbanities birth no longer constitutes the basis of social prestige. Criteria such as wealth, ability, education, efficiency etc. have become the determinants of social status in urban India the significance of caste as an ascriber of status has been relegated to the background.

(ii) Occupational Changes:

In the rigid caste system, the individual had no choice but to follow the occupation ascribed to him by his caste. But in the urban India today, occupation is not the hereditary monopoly of any caste any more. One is free to take up any occupation he likes according to his ability and interest. Mahatma Gandhi's movement preaching dignity of labour has drawn higher castes to dirty-hand callings while education has opened white-collar occupations for members of lower castes.

(iii) Changes in Connubium:

Under the caste system endogamy was the basis of mate-selection. The members of a caste or sub-caste were forbidden by an inexorable social law to marry outside the group. But at present the Special Marriage Act, 1954 and the Hindu Marriage Act, 1955 have removed endogamic restrictions and declared inter-caste marriages as legally valid. This is more visible in urban India today.

Of late, several factors such as impact of western philosophy, coeducation, working together of males and females of different castes in the same factory or office in the urban setting have contributed to an increase in the cases of inter-caste marriage, love-marriage and late-marriage.

(iv) Change in commensality:

In the traditional society, the unit of commensality was defined fairly rigidly in terms of caste affiliation. In recent times, in the urban setting there has been a gradual expansion of this unit. Today, Brahmins are inter dining with 'clean' Shudras. They do not hesitate to take kachha food from other clean castes. Furthermore, they do not hesitate to accept food and water from the members of the lower castes for fulfillment of their political ends.

(v) Change in the concept of purity and pollution:

Kapadia stated that the Hindu concept of purity and pollution was very extensive in its scope and mandatory in its observance till the twenties of this century. Under the caste system occupations were ranked in accordance with their ritual purity. For example, a person coming into contact with a barber was supposed to become impure. Meat, fish, wine etc. were regarded as ritually impure.

A menstruating lady was considered impure and as such the food cooked by her was considered impure. But in urban setting the importance of these ideas of purity and pollution in Hindu social life has considerably decreased. Some of the restriction relating to purity and

pollution has either been diluted and some others are waived in the urban setting. Religious sanction no more constitutes the basis of pure and impure. The rules of hygiene have formed the criterion of pure and impure at present.

(vi) Change in the life style of caste groups:

In the traditional society, every caste had its own life style. It was the differences in the styles of life that made the people of different castes appear distinct from one another. But in the urban India today, differences between the life styles of castes are gradually being eliminated and there is a marked tendency towards the evolution of a common style. The standardization of life styles is due to the twin processes of modernization and westernization.

(vii) Change in inter-caste relations in the urban setting:

In the urban setting, the pattern of inter-caste relations has undergone profound changes. The mutual rights and obligations characterizing inter-caste relations have crumbled down. Members of the low castes no longer obey the orders of the members of high castes. They do not come forward to perform forced labour for the members of the upper caste.

Further, efforts made by the lower castes to rise in the social ladder have annoyed the upper castes. All these factors have led to inter-caste conflicts in the urban setting. Such inter-caste conflicts are gradually increasing. However, these are more for achieving power than on grounds of ritual status in the urban India.

(viii) Change in the power of caste Panchayats:

So far as caste system was concerned, each caste had a caste Panchayat. The caste Panchayat played the role of a judicial body. But today Jati Panchayats are on the decline. Law courts and village factions have taken over most of their roles.

(ix) Restrictions on education removed in the urban setting:

Education is not confined to the higher castes. Anybody belonging to any caste can prosecute study in educational institutions. Of late, the Government both at the Union and State levels has adopted several measures for the spread of education among the lower castes by way of giving them stipends, scholarships, free study materials, reservation of seats etc. In the urban India, where most of the educational institutions are located, removal of restrictions on education is quite visible.

(x) Changes in the system of power:

The notions of democracy and adult franchise have affected the caste system in several ways. The new political system attacks the very roots of hierarchization. In the past politics was regarded as the sole preserve of the higher castes. But today people belonging to all castes are becoming conscious that they can play an important role in the political processes and can be benefitted from them. The urbanites being more conscious politically are eroding the traditional bases of power. The caste system has no doubt, broken down in urban India. But at the same time casteism has solidified its base and this has affected the political issue and decision.

(xi) Growth of caste consciousness:

Casteism has increased. It has affected political issues and political decisions.

(xii) Absence of Jajmani system:

The Jajmani system is almost absent in the urban India today due to Brahminical supremacy, development in the field of transport and communication, intergenerational educational mobility etc. may be attributed to the decline of Jajmani system in rural India.

Attitudinal Changes:

(i) Loss of faith in the ascriptive status:

Under the sway of rapid social transformation changes are taking place in urban society following the processes of industrialization, urbanization, westernization, secularization and modernization, the attitude of the people towards caste system has undergone considerable changes in urban India.

They are not psychologically prepared to accept the fixed status of an individual solely on the basis of birth. They attach importance to ability, efficiency, talent and aptitude. Hence it is quite natural that they repose their faith in achieved status. As such, the very foundation of the caste system has been shattered.

(ii) Change in the philosophical basis:

M .N. Srinivas holds the view that the law of karma and the doctrine of transmigration of soul are responsible for the acceptance of caste system by the „ people. But such an attitude towards caste does not exist at present in urban India. People do not believe that caste is divinely ordained. They have begun to doubt the very philosophical basis of caste system.

In fine, the traditional Indian caste system does not find favour with modern sociologists. The reason is not that it is intrinsically unsound but that it is wholly out of tune with the prejudices of modern sociology. Industrialization, urbanization, secularization, modernization have brought about the aforesaid significant changes in the caste system. M. N. Srinivas has rightly observed that caste has taken the shape of an incarnation in modern India.

2.5. Religion in the urban milieu

As one of the basic social institutions, religion performs several important functions in the urban setting. These are as follows:

- It helps man to deal with his fear of the supernatural powers. It helps individuals to overcome pain, fear and anxiety.
- It is a means used by man to adjust to his belief in the existence of supernatural powers.

- It gives people explanations regarding the road to salvation or release from the **cycle** of births and rebirths.
- It is a potent and powerful means of controlling social behaviour. The fear of punishment from supernatural powers for violating religious rule is an effective means of controlling the behaviour of individuals within society. Each religion has its own code regarding acceptable and unacceptable modes of behaviour, which is binding on all the individuals who belong to, or follow a particular religion.
- It provides emotional and psychological comfort by assuring people that there is a meaning in life, and there is a purpose even in suffering. It is a great source of comfort and solace in times of crises.
- It unites people and brings social solidarity.
- It provides answers to certain basic questions in life—what is the purpose of life, why do people suffer, why do people die, what happens after death, and so on.
- It provides guidelines regarding everyday life, societal behaviour, behaviour towards others, and so on.
- It helps people to adapt to changing situations, environment and customs. It helps individuals to adapt to all kinds of social change, including change in marital status, death in the family, and change in family structure due to death, divorce or separation.
- It provides individuals with a sense of identity.
- It is an effective means of preserving or conserving the values and morals of life.
- All religions promote welfare of people, and inculcate a desire to help the needy.
- It helps individuals to understand the reason for their existence, and makes the world more understandable.

Every religion is made up of certain elements. These elements are as follows:

Beliefs: A belief is a conviction. Religious beliefs refer to the belief in the existence of supernatural powers, which take the shape of divine beings, who are not part of this world, and are not governed by the ordinary rules of nature. Different societies and different religions have different sets of religious beliefs. These vary not only from society to society, but within societies, variations can be seen from region to region, state to state and between different communities and groups.

Rituals: Every religion is associated with a set of practices, rites and rituals, which are ceremonies or repetitive practices. Religious rituals are prescribed acts that are not only sacred in themselves, but also symbolize the sacred (Broom, Selznick and Darroch, p. 392). Ritualization of religious behaviour makes it sacred. A ritual may emerge simply as a means of coordinating activities, but once it is given religious connotations, it becomes sacred.

Symbols: Every religion uses certain symbols, with which it is usually associated. The cross denotes Christianity, the Muslim symbol is the crescent moon and star, the Jews have the Star of David and so on.

Organization: Most modern societies have organized religious groups, which are used to affirm religious beliefs and sentiments, to recruit and train specialists in theory, rituals and doctrine, and to organize meetings and gatherings and the relations between religious groups and the masses.

Emotions: All religions evoke strong emotions in the believers or followers. Generally, religious emotions are associated with all things that are sacred and close to the hearts of the believers.

Though religion occupies an important place in the rural society, the new economic and political environment is eroding this importance. Now-a-days, even people in the villages are adopting a secular and democratic outlook, which is drawing a line between religion and secularism. However, it is true that until the rural masses are educated and develop a scientific outlook, religion would continue to occupy a significant place in rural areas.

It should not be misunderstood that the urban people do not follow any religion. The people in urban areas have developed refinedness, while observing the religious rites and rituals. There is rationalistic and materialistic outlook among urban people in regard to religion, which is absent in the rural population.

2.5.1 Characteristics of urban Religion

Some of the important characteristics of urban religion are as follows:

i. **Sense of the World:** Urban religion explains the meaning and direction of human existence. It gives an outlook to the urbanites about their survival in the world. The people believe more in the Karma theory. This theory guides the day-to-day activities of the people. Every individual in the urban society is aware that if he does not behave properly in this birth, his next birth will be full of sorrows and miseries. Thus, the theory of transmigration of soul controls and regulates the lives of the urban people in spite of the development of the science and technology and medical facilities. In sharp contrast, people in urban areas of the western countries do not believe much in this theory, as their outlook is more scientific and rational. The theory of transmigration is also accepted by the rural people due to their ignorance about the reality of the world. Such a situation makes them to believe whatever is specified by the religion.

Religion as a Body of Rituals: Religion in India is basically the observation of rituals. Rituals form an important aspect of religious life of individuals. Such observation of rituals was more in rural areas than in urban areas. The rural people are generally illiterate. They do not possess the knowledge to make out the meanings in the religious and sacred texts. This situation makes the rural masses to observe all the rituals as said by Brahmins, who officiates these rituals, without even knowing their theoretical interpretations. But of late, it is also found that the urban people are becoming more and more oriented towards rituals

Prayers, sacrifices to gods and goddesses and rituals form an integral part of any religion. Prayers are offered to the deity at home as well as in the temples. Usually, prayers are offered at home for family gods. Urban people offer a variety of sacrifices, which range from sprinkling of water drops, leaves or grains to animal, and rare even human sacrifices .

Rituals are referred to as means through which the purity of the individual and social life becomes guaranteed. The inherited rural religion prescribes a complex pattern of behaviour for the individual as well as for social groups in all spheres of life. They are complex because rituals are associated with their numerous significant and even insignificant activities.

Rituals differ from one ethnic group to another. People observe rituals, whether they are difficult or easy, irrespective of their structure and function, because they fear that if they violate any ritual it might cause harm to them or to their family as a whole. The mindset of these people with regard to the observation of rituals is highly superstitious in nature, because of which they hesitate to violate any rituals.

Religion as an Institution: In India, apart from a majority of Hindus, there are followers of various religions, such as, Jains, Sikhs, Christians, Buddhists, Muslims, Parsis and other tribal groups. Religion has all the characteristics of any other institution and is also undergoing change. The spread of scientific knowledge and rational thinking of the people has made the institution of religion undergo change. However, with the growth of urbanization certain rituals are being observed with more enthusiasm, and pomp and show. There are also instances of the emergence of new cults, and renovations made to the old shrines, which are quite contradictory to the process of modernization.

2.5.2 Co-existence of sacred and secular elements:

The Republic of India does not seek the promotion of any religious interest though the State does not prohibit the practise of any religion. Article 25 of the Indian Constitution states that, subject to public order, morality and health, all persons are entitled to the freedom of conscience and the right freely to profess, practise and propagate religion. Herein lies the very essence of the secular character of a State and, as a further guarantee to religious freedom and tolerance, no provisions have been made. It is punishable to promote enmity, hatred or ill-will between classes and religious communities, and such acts have been made criminal offences under Section 505 of the Indian Penal Code. Article 26 of the constitution guarantees of Indians

the freedom of establishing and maintaining institutions for religious and charitable purposes. Religious minorities have, under Article 30, full freedom of establishing and administering educational institutions of their choice. Neither will the minority be deprived of State assistance merely on ground that they endorse certain religious views, nor will any one be subjected to payment of any tax, the proceeds of which are to be used for the promotion or advancement of the cause of any religion. Article 29 prohibits discrimination in admission to educational institutions on ground only of religion, race, caste, language or any of them if such institution is maintained out of State funds. However, lest it appears that the State is patronizing any of the religions followed by Indians, Article 28 has made it very clear that no religious instruction of any brand or type can be imparted in any institution that is maintained wholly with the help of State funds. This does not prevent minority institutions from imparting such education, even though they are in receipt of some State assistance.

All that appears above is State policy and the letter of the law. In actuality, differences between creeds are only of obvious manifestations. While the Hindu believes in God as an entity, the Jain or the Buddhist follows principles of morality, but not Almighty. The Hindu creed entertains polytheistic thoughts and, even from the Vedic times, Hindus have been worshipping many Gods and Goddesses who are capable of taking several forms. Idolatry, therefore, is a part of Hinduism and, in this respect, the creed is diametrically opposed to Islamic thoughts of a formless Almighty power who can not be conceived of as an incarnate being. Idolatry is a grave sin with the Mohammedan, much more than it is to the Roman Catholic. The Catholic is not an idolator in the sense the Hindu is, but he does not totally discard the image of the Almighty as also material representations of the Virgin and the Christ himself from his modes of worship. Therefore, diversity of religious thoughts and the harmonizing of all beliefs and creeds with at least the virtues of tolerance seem to be the theme of Indian living. To deny occasional outbursts of vicious hostility of one community for the other would be pretence of a very degrading nature; but laying emphasis upon such discordant notes in the mode of Indian life would be little short of shameless propaganda. The truth is that, in India, co-existence of several communities together is more a practical possibility than it is in many countries that lift their finger of accusation against the Indian nation on the count of communal disharmony.

What Emperor Akbar tried to achieve through his composite creed of the Din-e-Elahi was an attempt at giving formal and external recognition to a fact that all faiths together effect a unity of thought that God is divine and that He is the Creator of all universal objects. It is more important to appreciate the fact that Indians have by and large applied this theme to their everyday practice and matters of social intercourse.

It will be interesting to note in Indian urban way of living the following features which happen to be a distinct contribution of the various religious thoughts that we subscribe to :

(a) Though the Hindu follows Hinduism, the Muslim adheres to Islam and the Christian upholds the teachings of the Christ, together they represent a common attitude of religiosity. Every urban Indian is a religious individual and he, in his own way, agrees with his brother that the Divine Being controls all.

(b) Since every religion teaches the right conduct and the ethical basis of proper human behaviour, an average Indian can effect a unity of thought with his brother belonging to another faith. Religious differences can not interfere with standards of ethics and religious practices prescribed for every community inspire the devotee's conduct with ethical ideas and lofty norms of behaviour. When the Muslim engages in fasting during the month of Ramzan, the Christian mourns with austere practices the Crucifixion of the Christ during Easter, and when the Hindu fasts in remembrance of his ancestors or while he makes worshipful offerings to God, they are all admitting the value of a good, noble and moral way of life.

(c) All faiths in India subscribe to the view of fraternity of man and it is believed that, within the limitations of different creeds and religious beliefs, every man stands as brother to his fellow human being. The concept of a secular republic is, therefore, not thrust upon the people

of India; the Constitution of the country merely gives official recognition to the free will of all its nationals.

(d) Charity is regarded as an act of high virtue and religious sensibility by the religions of India and, in this regard, these different creeds have effected a unity of theological thought. Like Samuel Taylor Coleridge, an average Indian firmly believes that 'He prayeth best who loveth best, both things great and small, For the dear God who loveth us did make and loveth all.'

2.5.3 Urban Indians are more religious :

Faith in religion is increasing in India and the educated, urban people are more religious than those living in villages, says a Hindustan Times-CNN-IBN State of the Nation Survey conducted by Centre for the Study of Developing Societies (CSDS).

Four out of every ten Indians believe they are very religious, five think they are also religious but not to a great extent. Only one among ten Indians considers himself or herself to be non-religious.

The survey found that among people of various religious communities Hindus are the least religious and Sikhs are most religious. This is not surprising for minority communities tend to be more religious all over the world.

As regards Indian prayer,

it is also interesting to note that, people living in small towns and cities are much more religious compared to those living in villages. One would expect women to be more religious compared to men, but what might surprise is, the urban women are more religious compared to the rural women.

Among Indians, the level of religiosity has also gone up considerably during the last five years. While 30 percent said they had become more religious during last five years, only 5 percent mentioned in negative.

While this has increased among people from all religious communities, but much more among the Muslims, the Sikhs compared to the Hindus. Among Hindus, more among upper castes admitted becoming more religious compared to people from other castes.

Among Adivasis, only 19 percent admitted becoming more religious during last five years. It is important to note that this change has happened more in urban areas compared to the villages since more people in towns and cities admitted becoming more religious during last five years.

People believe being very religious precisely because their engagement with religious activities seems to have increased over the years. Majority among Indians pray every day, more among those living in cities and town compared to those living in villages. The engagement with offering prayer daily is seen more among the upper castes Hindus compared to other castes.

Education builds faith

People generally associate the act of engagement with religious activities with those who are low on level of educational attainment. But the survey’s findings indicate, higher the level of education, more is the frequency of offering prayer.

How religious are people?

	Very Religious (%)	Some what religious (%)	Not religious at all (%)
All	42	45	9
Hindus	38	47	9

Muslims	55	35	5
Sikhs	56	39	3
Christians	50	35	11

The level of people's engagement with various public religious activities is also high. Majority participate in Katha, visit temple or mosque while only little less than that visit shrine and participate in public gathering of religious nature.

People's faith has increased in the last five years

	Increased (%)	Decreased (%)
All	30	5
Hindus	27	11
Muslims	38	8
Sikhs	33	9
Christians	47	7

No wonder, such deep engagement with various religious activities have made all Indian, whether illiterate or educated, whether living in villages or cities equally theist.

Majority of Indians admitted observing fast, and only little less admitted going for pilgrimage during last one year. A sizeable number also read religious books and magazine quite regularly and nearly 10 percent also admitted being member of religious organisation.

Defying rationality

Sizeable proportions of Indian also believe in things like ghosts, re-birth, and the concept of heaven and hell. People have faith in numerology and sun sign and nearly 24 percent consult palmist either frequently or occasionally. Considering the total population of India, in absolute numbers these would constitute large numbers of people.

Whatever one may take about religious difference among people of different religions living in this country, but the findings of the survey indicate, there are sizable numbers among Indian cutting across religion, who, participate in religious festivals of religion other than their own.

2.6. Economy in the urban milieu

A lot of discussions have been made about urban economies. The questions are always the same: Why do some cities grow faster than others? Why do some generate more wealth? Why do some decline? No simple answers exist, and much remains open to speculation. However, the accumulated wisdom of more than 50 years of research does allow us to state certain principles about the economies of cities. I propose five.

Before getting to them, a word on the nature of cities is in order. Cities are first and foremost places—agglomerations of people—rather than economic and political units. That fact complicates the study of urban economies. For starters, delineating urban areas can be done in a variety of ways. Exactly where does New York begin, and where does it end? We might opt to study the entire New York metropolitan area, figuring (correctly) that such a definition is more economically significant than merely the area of New York City proper. But even then, we have to remember that a metropolitan area's borders can expand or shrink over time. The boundaries of the New York metro area aren't the same today as they were 50 years ago, so one can easily draw mistaken conclusions from the statement that it has grown from 12 million people in 1960 to 20 million today.

Also, cities' power to make economic policy is limited. (City-states like Singapore are an exception.) The policies that most significantly affect urban economies usually come from higher levels of government. This doesn't mean that local policies don't matter, but it does mean that their ability to affect broad economic and geographic trends is sharply

circumscribed. It also explains why the scholarly literature focuses on determinants that urban policy can do little about, such as location and “agglomeration economies” (essentially, the beneficial effects of urban size and diversity).

Finally, that cities aren’t economic and political units in the way countries or even states are means that they face particularly fierce competition for mobile resources, especially for talent and brains. After all, it’s much easier to move your residence or your business to a nearby city than to move it to another country or another state. This reality is of fundamental importance in the knowledge economy, whose primary scarce resources are brains, skills, and entrepreneurial spirit. Much of the scholarly literature about cities therefore focuses on “human capital”; for example, the pioneering work of Harvard’s Edward Glaeser, a *City Journal* contributing editor, has shown that cities initially endowed with highly educated and skilled populations will be more successful down the road. Yet I have consciously chosen not to discuss human capital, talent, skills, the creative class, or whatever term one wishes to use. This is partly because we aren’t at all sure how to attract the young, educated, and ambitious. Further, the presence of a skilled and educated population is as much a result as a cause of success. Talent will flock to successful cities and flee unsuccessful ones. And both success and failure usually have deep historical roots.

Those roots are the subject of the first principle of urban economics: cities’ size and location are key determinants of wealth. One of the more surprising findings of the research on city economies is that urban hierarchies are remarkably stable over time. Only rarely do top cities find themselves dislodged by newcomers. The first city to arrive at the top acquires a fixed advantage, which translates into higher levels of wealth. In every European nation, the biggest city a century ago remains the biggest one today. The population rankings of cities are also surprisingly stable. Lyon has long been France’s second-largest city. Today, it is one-seventh the size of Paris, a proportion that has barely changed over the last 200 years.

The advantages of size and location are the outcome of decades, even centuries, of investments in infrastructure and in institutions. Once in place, these accumulated investments define a good location and cannot easily be undone. Just look at a map of the rail and highway

systems of Britain or France: hub-and-spoke networks centered on the largest cities, reinforcing their initial location advantages. Each new city that is connected to London or to Paris further increases the capitals' market potential.

The United States and other New World nations are somewhat different, in that their settlement patterns remain in flux and their populations are historically more mobile. But even in the U.S., the relative standing of cities has remained surprisingly stable over time, once we put aside the country's long westward migration. The three largest metropolitan areas east of the Mississippi in 1900—New York, Chicago, and Philadelphia—are still the three largest today, and in the same order, despite the draw of the Sunbelt since the 1960s. The population of the Chicago metropolitan area in 1900 was just under half of New York's, a proportion that has barely changed since.

The first principle, then, teaches us that the possibilities of dramatically altering a city's economic standing are necessarily constrained by the city's location and relative size. Cities aren't like nations, which can leap from rags to riches within a generation, as South Korea has done. A city's initial size and location will largely determine which classes of economic activity are likely to succeed there and which are likely to fail. Philadelphia, lying in New York's shadow, will probably never be a global financial or entertainment center, though it has been highly successful in other sectors, such as health. The constraints of size and location weigh even more heavily on smaller metropolitan areas, such as Syracuse, New York, and Scranton, Pennsylvania.

The first principle of urban economics doesn't mean that every city's fate is preordained. That brings us to my second: when cities do experience dramatic changes in their growth paths, the reason is almost always outside events or technological change. European postwar borders are an example of the way political conditions can shape growth. After the Iron Curtain was drawn in 1947, cities in West Germany had access to the growing European Economic Community, while cities in East Germany didn't. One of the East German cities was Leipzig, which was Germany's fourth-largest city before World War II but has fallen to 13th place today.

Technological change, too, can shift cities' growth paths. For instance, as the technology of steel production grew less reliant on economies of scale, and as other metals and alloys entered the market and reduced the demand for steel, growth declined in steel towns, from Pittsburgh to Essen (in Germany) and Birmingham (in the United Kingdom). New transportation technology or infrastructure is an especially powerful agent of change, since it can alter a city's location advantage, turning a good location into a bad one or vice versa. The emblematic example is the construction of the Erie Canal in the 1840s, which gave New York City access to western markets and solidified its position as America's biggest city. Similarly, Buffalo's stagnation since the 1950s can be traced in part to the construction of the Saint Lawrence Seaway, which allowed western goods headed east to bypass Buffalo. And the arrival of air travel has meant that the absence of a port is no longer a handicap for aspiring corporate and financial centers, such as Denver and Atlanta.

In the United States, the most momentous recent shift in urban fortunes has been the rise of Sunbelt cities. We owe that rise partly to new technologies. Miami would still be a fever-ridden swamp if not for drugs and improvements in sanitary conditions that eradicated malaria and yellow fever. Blistering-hot Phoenix, Las Vegas, and Houston probably wouldn't have attained their current size without air conditioning. The Sunbelt shift also depended on changing demographics—namely, greater life spans, which produced a growing population of retirees in search of warmer temperatures. Technology facilitated that development as well, with air travel enabling the retirees to migrate back and forth easily to keep in touch with friends and relatives back home.

The essential lesson to draw from this second principle of city economies is that no location advantage is eternal, no matter how seemingly indestructible. A new technology can undermine a city's economy overnight. Two parallel lessons follow. First, the more highly specialized an urban economy is, the more vulnerable it is, no matter how hip or high-tech the city's star industry. Second, changes in transportation generally aren't geographically neutral, since they imbue some cities with new location advantages and undercut those of others.

Also related to transportation is the third principle: accessible, well-connected cities exhibit higher growth. Studies of European and North American cities have repeatedly shown the relation between accessibility and growth, most commonly defining accessibility by measuring the number of destinations (often weighted by income) that one can readily reach from a given city, taking transportation costs and time into account.

Market access and connectivity may be even more crucial than human capital. The city that succeeds in positioning itself as the meeting place and market center for a wider region has won a tremendously important battle, since transportation and travel hubs have historically emerged as dominant finance and business centers, attracting talent, money, and brains. Chicago became the market center of the Midwest thanks partly to the city's canal links with the Mississippi River system, which were promoted by the local business community. The construction of the Erie Canal, again an excellent example, shows that pivotal infrastructure need not be located within the city itself: the link that established Gotham's access to the continent's interior was constructed between the headwaters of the Hudson River, several hundred miles upriver from the city, and Lake Erie.

Twenty-first-century wars for connectivity are waged with highways, high-speed rail, and especially airports, which have become accelerators of the conference- and seminar-crazy knowledge economy. Few self-respecting, globally connected executives would seriously consider a job offer in a city lacking daily flights to New York and London. The rise of Atlanta owes much to Hartsfield-Jackson Atlanta International, now the world's busiest airport. Or consider Frankfurt. Though considerably smaller than Munich, Hamburg, and Berlin, Frankfurt is where Lufthansa, Europe's largest airline, chose to locate its hub and base of operations. Frankfurt's arrival as continental Europe's leading financial center is no coincidence.

Some cities start with a natural connectivity advantage, such as a central location or proximity to major markets. Monterrey, Mexico's rising industrial metropolis, is near the Texas border on the principal highway linking Mexico City to core markets in the United States. In China, growth is concentrated in the two principal points of contact with world markets: Shanghai and the Guangzhou / Hong Kong area. In Europe, proximity to the continent's

economic heartland—a boomerang-shaped corridor, dubbed the Blue Banana by geographers, stretching from London to Milan—is a clear asset. That’s why Italy’s wealthiest cities are in the north and also why Barcelona and Bilbao, the Spanish cities most accessible to the Blue Banana, are growing industrial centers. Here again, transportation infrastructure has boosted the growth potential of well-connected cities; think of the Chunnel linking London and Paris.

In the United States, the growth-inducing effects of accessibility have produced urban economic corridors, such as the 60-million-strong northeastern megalopolis stretching from Boston to Washington, D.C. The megalopolis has continued to expand south along Interstates I-95 and I-85, and one might say that it now includes a string of cities as far south as Atlanta, including the cities of North Carolina’s Research Triangle.

A useful qualification to the rule comes from France, where research on high-speed trains suggests that it has identifiable growth effects. Whether the trains accelerate overall growth is open to debate, but they can clearly steer growth toward the cities located on high-speed rail lines. The problem is that there can’t be too many stops on such a rail line, since that would slow down the trains and defeat the whole purpose of high-speed rail. So high-speed rail differs from roads in at least one significant respect: it may actually reduce the accessibility of cities left out of the bonanza.

Principle Number Three teaches us that city fathers must be attentive to the opportunities of new transportation links. It also warns us that a loss in accessibility can seriously harm growth. Even a new airport doesn’t automatically improve accessibility, as my own city, Montreal, learned to its sorrow. Back in 1974, the Canadian government, with the enthusiastic support of Montreal’s business community, endowed the city with a shiny new airport named Mirabel (after a nearby village). Because Montreal’s market wasn’t big enough to support two full-service airports, Mirabel would receive intercontinental flights, while Dorval, the older airport, would continue to serve North America. But separating the two streams extinguished the hub function that an airport should serve. No Londoner flying to Cleveland would want to change planes at Montreal, since it would mean driving from Mirabel to Dorval.

So passenger traffic through Montreal plummeted during the 1970s. Not coincidentally, the same period saw a transfer of financial institutions and head offices to Toronto, which (like similarly sized Atlanta) understood that maximizing accessibility in the airplane age required a single, efficient, full-service airport. Toronto soon emerged not only as Canada's principal air hub but also as the country's financial center. Mirabel has since been shuttered, an embarrassing and costly white elephant, and all flights now arrive at Dorval. But the damage is done.

The fourth principle of urban economics is that every industry leaves its imprint on a city—and it isn't always a good one. In North America and Europe these days, the best illustration of this principle is that cities with a legacy of heavy industry and large assembly plants generally exhibit slower growth. The first cities to industrialize, not long ago models of economic progress, are often among the most troubled today. Many have found it tough to move to the knowledge economy.

Their story tells us much about the dangers of industry specialization, or "clusters," to use the currently fashionable term. When a single industry comes to dominate the local economy, the long-term results can be devastating. The obvious example in the United States is Detroit, the Silicon Valley of the early twentieth century, which was one of the country's fastest-growing cities until the 1970s but now seems stuck in irreversible decline. Detroit is by no means unique: the great industrial cities of the Midwest, the English Midlands, and the German Ruhr have all registered below-average growth over the last few decades.

Common to these once-great industrial cities is the presence of large plants or other large-scale operations, such as railheads and dockyards. Such installations, while they remain operational, typically pay comparatively high wages for low-skill jobs. Large plants with high sunk costs also give companies a disincentive to move elsewhere, resulting in seemingly secure employment for workers. The outcome is a high-cost business environment that may benefit workers for a time but isn't conducive to the start-ups that an urban economy needs over the longer haul. If you can get good wages with little schooling, why go to college? If your job is

secure at the local plant, why start a business? And if you do decide to start that business, why not move to the city next door, where labor costs are lower?

An even deeper problem is that a city's ingrained mind-set is hard to undo. The residents of a city with big, unionized factories will naturally come to expect good wages and job security, and their expectations will endure long after the last plant has closed its doors. I know of no example of a painless transition from heavy industry to the knowledge economy—and unfortunately, no standard-issue tool kit exists for helping cities make that transition. The tools may include worker retraining, counseling, small-business support, school reform, downtown revitalization, and industrial-land decontamination, but often the most important step is grudgingly accepting the fact that local wages (and local costs in general) must fall if the community is to regain its competitive edge.

That grudging acceptance has a corollary: city fathers must avoid the temptation to keep plants alive with public funds. Such advice is easier to give than to implement. Faced with sudden job losses, few elected officials will have the courage to do nothing. In an ideal world, every owner would give enough notice before closing a factory, or else downsize slowly enough, to enable the community to absorb the shock painlessly. That isn't the way of markets, but at the very least, political leaders should comprehend that many established industries will eventually close and start pointing their cities in a different direction. This, too, is easier said than done. The turnaround seldom begins until the shock of closures drives home the need for change.

The fifth principle of urban economics: though much remains unexplained, good and bad policies do matter. Despite the best efforts of scholars, econometric models rarely succeed in explaining more than half of cities' variations in growth over time. Many factors are impossible to quantify, such as the ability of a dynamic individual, such as a mayor or an entrepreneur, to make a difference. Local business and political culture surely plays a part in a city's growth, but we know little about how such cultures form.

In the end, we probably understand which policies cause failure better than we understand which cause success. Poorly governed cities with a reputation for corruption, violence, or

deficient institutions will pay a price. Recall the openness of city economies: people and firms can leave at will. In open societies, good governance is not only a matter of virtue but also a competitive necessity. New Orleans's decline began long before Hurricane Katrina; its reputation for endemic corruption, cronyism, and parochial politics was part of the reason. Another was Louisiana's long and unfortunate tradition of underinvestment in education, which resulted in one of the least educated populations in the United States. In France, the city of Marseille has an equally poor reputation for governance and has also consistently exhibited below-average growth. Both cities enjoy warm locations, but that advantage hasn't been enough to keep them growing quickly.

At the other end of the spectrum, not only climatically, is the Minneapolis–St. Paul area, which has done well, despite chilly temperatures and a peripheral location. The area has a reputation for being well governed, and Minnesota boasts a tradition of investment in higher education. The Scandinavian roots of its population are undoubtedly a factor.

Crafting good urban policy isn't limited to local government; higher levels of government also have to get it right. Montreal's airport blunder was largely of federal doing. And policymakers should always remember that a single project, no matter how grand, will seldom be enough to turn an ailing city economy around. Two years after the airport mistake, Montreal embarked on the construction of a colossal stadium for the 1976 Olympics, this time with mostly municipal money. The project almost bankrupted the city and did nothing to bolster the long-term growth of the local economy.

But let us end on a positive note. Many policy initiatives have succeeded in sparking growth. Los Angeles's phenomenal progress after World War I owed much to the foresight of its business community, which—defying nature and geography—built an artificial harbor for the city, along with vast systems of aqueducts to bring water from the distant Sierra Nevada. We can trace Houston's similarly meteoric growth since the 1950s not only to nearby oil reserves (a natural advantage) and to the invention of air conditioning (a technological change) but also to such wise policies as the construction of navigable channels, as well as a strong municipal

government. True, sustained growth is rarely the outcome of one action, and there is no easy road to success. But policymakers can nevertheless help their cities thrive.

2.7. Polity in the urban milieu

Cities have traditionally been centers of civilization and power, the abodes of gods and men. Their glories inspired awe and endowed their chieftains with command. They were the vehicles of recorded history, the repositories of learning and conservators of law and custom. Cities have nurtured most of man's creations, social and technical, and witnessed their elaboration on ambitious scales. Cities have sustained variety and specialty by promoting intramural harmony, and yet they have also served as launching pads for imperial conquest and territorial domination. Once cities were for the privileged; today they are as much for the destitute. Once cities were the focus of imperial communities; today they are submerged in nations. Once cities commanded their hinterlands, but today they are commonly besieged from without. Cities used to monopolize technology, knowledge, and power, yet today they are more often mere shareholders in massive corporations. In a world of accelerating modernization, the city remains important, but not always exclusively so. Cities are still centers of technology, but technology penetrates the non-urban peripheries and exerts autonomous effects. Cities multiply and compete. Their impact today is less as individual units and more as aggregations; it is profound but complex, seldom subject to purposive control, often frightful, and always fascinating.

The special significance of cities for developing countries stems from their strategic contribution to processes of economic development and modernization and from their potential for political disruption. Both in turn are functions of the growth of cities i.e.: size and number, and of the increasing proportion of a country's population they embrace. Urbanization is seldom an unmixed blessing; it offers grounds both hope and despair. In the more familiar Western experience, white urbanisation has had ambivalent consequences, it has led on the whole to favorable social, economic, and political results, both because the growth of individual cities was usually moderate in scale

and because it proceeded concurrently with industrial growth, bureaucratic and associational development, and increases in political participation.

But this pattern does not fit neatly with the facts of urbanization in the less developed countries today. Although the rate of urbanization that is, of the upward shift of the ratio of urban to total population is only slightly greater in the developing countries today than it was in Europe and North America during the last two centuries, there are several ways in which recent patterns depart from (those of the past First, the sheer total population is far greater; Spectacular) large numbers of people reside in cities today. Second, while the rate of urbanization has been nearly constant, the growth rate of the urban population taken by itself has jumped recently, from an average of 6 percent per decade from 1800 to 1950 to nearly 41 percent per decade between 1950 and 1970, Moreover, the rate of

growth of the world's population in larger cities, those of 100,000 or more residents, has been even higher, reaching nearly 46 percent in each of the last two decades, Third, all too often in the developing regions of Asia, Africa, and Latin America, urbanization is unevenly dispersed and huge numbers concentrate in "primate" cities, And finally, urbanization today frequently lags far behind industrialization, so that the proportion of industrial workers in the urban centers of developing countries is about half that found in the West at comparable levels of urbanization^ Massive, rapidly growing urban populations, the primate city phenomenon, and the discontinuity between industrial and urban growth are what constitute the "urban explosion" experienced today. What are its consequences?

Two interrelated controversies permeate the literature on urbanization. The first concerns the effects of urbanization on economic development. Are cities, to use McGee's terms, "catalysts" or "cancers" in society? The issue arises because expansion of industrial and other modern economic opportunities lags behind urbanization in developing countries. Rural migrants frequently flood into the cities, even when, objectively speaking, economic opportunities would appear to be too scarce to sustain the flow. The rural influx, it is argued, becomes parasitic.

It drains inadequate urban and national resources and diverts the investment needed for economic growth. Those who call these trends "overurbanization," therefore, advocate demographic and investment policies designed to curtail the flow of migrants into the large established cities or to divert them to smaller centers.

The second debate follows from the first, for it is concerned with the potentials or political radicalization thought to be present when urbanisation outstrips economic growth. Whether the inspiration lies in classical sociological theories of urbanism and alienation, Marxist categories of class conflict, or psychological theories of relative deprivation amidst rising expectations, the outcomes anticipated are much the same. Rapidly growing urban populations are politically volatile, the breeding grounds of revolutionary violence and reaction. Rural migrants to the city are uprooted; their imported traditional way of life does not provide them with the means for coping with the unfamiliar signals and routines of urban life. The effort to adapt is stressful. There is little in the way of family, friendship groups, or other sources of personal **warmth** and sympathy to cushion failures or restore self-esteem. In the absence of economic rewards, migrants are presumed to be susceptible to radical appeals, easily moved to aggression against those held responsible for their plight. So goes the interpretation. Despite the plausibility of the radicalization model, there is growing evidence that it is not generally valid under present conditions,

Part of the significance of this study lies in its contention that the radicalization model is not very compelling in the Indian urban setting. For example, it supports the findings of others that, however necessary the analytical distinctions between rural and urban, or traditional and modern, the social and political realities are not as sharply divided. Migrants to the city are not necessarily uprooted psychologically or socially. The traditional values and behaviors they import often have strong resonance and relevance in the city. Despite their appearance of extreme poverty, their move to the city is often the basis for economic improvement. On the level of political behavior, this study strengthens the view that extremist tendencies, while not unknown in Indian cities, seem to draw their support less from migrants than from more established

groups in the city. Migrants are generally politically quiescent. Furthermore, the radicalization tendencies in Indian cities seem to be effectively defused by the political apparatus through mechanisms of cooptation. The system is highly sensitive to political violence and disruption, but also highly effective in eroding the immediate sources of discontent with distributive and regulative actions. Thus something more complex in the way of models about politics and cities in India would seem to be in order, and this study takes a step in that direction.

It is a paradox of Indian public life that cities are both profoundly influential and politically weak. Urban forces pervade modern Indian politics, but cities as corporate actors are not, as a rule, individually powerful. Much of the political energy contained in Indian cities is not expended on their behalf as communities but is instead absorbed in national competition or on behalf of more specific interests. Part of the explanation of this paradox may be found in the imperatives of colonial rule and the upsurge of nationalism. By relinquishing control in stages, and last of all at the center, the British centralized the important stakes of politics at the outset for several generations of indigenous leaders. Cities and towns were the cradle of administrative professionals and the nationalist political leadership—the personnel who inherited the mantle of power. In assuming responsibility for the nation, these leaders were diverted from pleading the special claims of cities, but much of the style and content of their rule reflected their urban background and proclivities.

While urbanites swept up most of the high positions of power and status after independence, there has been a steady growth in rural claims for power and recognition. The ruralization of politics or, as Rosenthal ironically puts it, the "*deurbanization* of the Indian political system," has been marked by increasing attention to rural development policies by government and the mobilization of rural leadership in parties. This process had its roots in the Gandhian movement which made the rural areas the focus of the rhetoric of nationalism, but it came to fruition with community development programs and the new *panchayati raj* system of district local government. Universal suffrage, the fact that nearly four-fifths of the population is

rural, and the electoral reach of the Congress party have combined to promote a shift in the balance of power from urban to rural sectors.

But this shift should not obscure the importance of cities in Indian politics. The urban sector of India's population is large in absolute terms, more than a hundred million people, and much of this population is concentrated in larger towns and medium sized cities." Opposition parties appear to be more strongly based in cities than elsewhere. Their power will probably expand with urbanization, which is proceeding slowly but surely in the subcontinent. The cities and towns are still the places where social, economic, and political change are greatest. They are still the nerve centers of Congress as well as opposition politics, They are the locus of most of India's high-caste, educational, professional, and business elites, and the physical base for its growing middle and industrial working classes. They are the centers of capital and wealth, technological change, communications, manufacturing, and marketing.

The strategic centrality of the cities in the networks of communication and exchange confirms their function as headquarters for district and regional units of political parties and other political organizations. As growing competition makes the tasks of parties and organizations more crucial and complicated, the roles of urban specialists in fund-raising, accounting, and publicity become indispensable, guaranteeing their continued access to decisions about recruitment, the selection of candidates for elective offices, and the formation of government ministries. The city's inhabitants are favored in recruitment to the bureaucracies, and the urban orientation of bureaucrats remains a constraint on policy planning and implementation. Because of their common social upbringing, urban political leaders have easier access to bureaucrats than their rural counterparts. Consequently, as rural leaders are mobilized into state and national politics, they are usually engaged through party organization channels in unequal partnerships with urban leaders. Rural leaders become increasingly sophisticated in dealing with their urban partners, to be sure, but the medium of their sophistication is their infertilization of methods, skills, and styles drawn from the urban setting. Their politicization, in short, depends largely on their urbanization.

Little is known about the most basic features of urban politics in India, either about its internal structure or its external relations with state and national politics. Who are the major actors in Indian city politics? What are their goals and aspirations? How is political power distributed? On whose behalf is it used? What roles do organizations and elections play in urban political life? How do they affect decision-making patterns and the content of policy? How is urban government organized institutionally, and how do its institutions work? To what extent is urban government autonomous from, or penetrated by, other levels of authority? What, in short, characterizes the anatomy and functions, the behavior and policy processes, of Indian city government and politics?

If we look at precedents, the most prominent approach assumes that city politics consists mainly of municipal politics and that the boundaries of the latter may serve, for analytic purposes, as the boundaries of the former—Rosenthal's study of Agra and Poona employed this approach, but with qualifications—particularly his inclusion of extra-municipality party and electoral politics. The choice of the municipality as the unit of analysis for Indian urban politics might appear appropriate at first glance because it offers an analogy at the formal level with the familiar city hall-centered models of American urban politics. But this is an unsatisfactory choice. In any study of urban politics there are two basic concerns. Who exercises power in the city? And what does he do with it? It is on the answers to these questions that our understanding of urban governance in modern as well as developing societies hinges. Yet the keys to these questions do not lie in Indian municipal politics. Municipal government in India is far from sovereign in its own juridical domain, and its functional scope is severely limited. In *Indore* the scope of municipal action is restricted primarily to such services as maintenance of roads, sanitation, distribution of water, and administration of building regulations. Such functions are but a small part of what urban government is all about. To determine who exercises power in Indian city politics, one must look outside the framework of municipal politics. Where then does one turn?

There is a structural model which captures the outstanding features of city politics in *Indore* and also suggests a solution to the unit of analysis problem. The dominant structure in *Indore*

politics consist of dual series of cooperative hierarchies, one representative and embedded in electoral politics and the other bureaucratic and governmental. Decision-making crucial to the city is primarily centralized at the summits of the two vertical structures, usually outside the city at the state level of politics. Within the city, the hierarchies are interlocked, providing multiple centers, or arenas, of political activity. These dual hierarchies serve to integrate the urban political system with that of the state. Thus the political weakness of the city alluded to earlier is but an expression of its dependency on these state-dominated vertical hierarchies. The urban political system is open and penetrated from above; it consists not merely of the urban community and local municipal institutions but also of the interaction of individuals and groups in the city with the higher levels of the representative and bureaucratic hierarchies. The unit of analysis, in Adrian Mayer's terms, is "town outward," rather than city hall-centered. It consists of a multi-centered political system dominated by vertical decision-making hierarchies.

To clarify this model, it may be useful to distinguish three levels of analysis of urban politics, "the city as an actor in state politics," "the politics of the city as a whole," and "the politics of urban sub-systems." The first level of the *city as an actor* refers to its corporate competition with other cities or with rural communities for advantage in state and regional politics. Indore city, for example, manifested some degree of corporate unity on several occasions. But perhaps most

clearly, it was under consideration as one of the possible sites for the state capital. The *politics of the city as a whole* refers to city-wide political competition, and it coincides with the boundaries of the urban community at large. It does not correspond to what is conventionally known as "city politics," however, because that term usually refers to politics centering on a strong city government. And it is precisely this condition of a strong city government which is absent in Indore; the repository of political power in the city is not city hall (or the Municipal Corporation). In fact, there is no central institutional repository of power in the city at all. Nevertheless, there is a unifying feature of urban politics; it consists of the city-wide contest of political parties for state legislative assembly seats and for influence over bureaucratic agencies that operate in the city, and it is to this process that we

refer when we speak *in* the politics of the city as a whole. The usually dominant City Congress party *has* been the chief agent of urban political integration at this level on analysis *in* Indore. Finally, the *politics of urban sub-systems* refers to the fragmentation of urban politics, to subsets of (Political competition) and to what takes place in various distinct arenas or centers of, political activity. The third level of analysis constitutes the least visible substratum of urban politics, and it deserves further discussion.

"Political arenas" can be thought of as constellation *of* political activity, "islands of power" in the urban political system. For analytical purposes, a *political arena* consists of the recurrent competition for the same resources by a specific set of political actors. Political arenas in Indore tend to be functionally defined dependencies of bureaucratic and government agencies. Around each major agency revolve clusters of political actors and constituencies seeking to shape the implementation of policy and share in the distribution of benefits within that agency's jurisdiction. Just as there is some overlap among bureaucratic jurisdictions, so is there interpenetration of political arenas. Many political actors, whether individuals, factions, or interest groups, operate in more than one arena concurrently, but some actors are also specialists in a particular arena or function. One such arena is that of municipal politics, but Indore city politics also contains the political arenas of industry and labor, education, town planning and improvement, public health and water resources, cooperatives, agricultural markets, and the underworld of proscribed enterprises such as gambling, smuggling, and vice. The vitality of these islands of power is what makes Indore politics multi-centered at the base."

Thus the horizontal boundaries of Indore politics are defined by the reach of city-wide party and electoral competition.. The vertical boundaries are defined by the reach of the dual hierarchies from their state-level summits to their multi-centered bases. This way of conceptualizing urban politics in the Indian context does not exclude from the scope *of* analysis those decisional inputs outside the city that have a bearing on its internal fate. It draws attention to the centralized structure of policy-making and control over the Indian city. In the case of Indore, centralized policy-making has taken the form of a

symbiotic relationship between prominent politicians and bureaucrats at the state level, allowing them to intervene in Indore city politics to manipulate the levers of government power on behalf of their own interests or the interests of their allies. In short, this conceptualization permits what the more limited focus of municipal politics does not; an explanation of major political outcomes in the city.

Because the urban political system contains different levels of politics which are penetrated by the state system of politics, their interrelationships must be explored. Part of the penetration, of course, is formal that of government agencies and jurisdictions but more of it is informal. To trace the informal structures and determine how they condition the urban political process, the concept of "political linkage" is useful. This concept has been delineated most clearly in the context of international relations theory as a means of expressing the interdependence between national politics and the international system. Its use grew out of the conviction that contemporary study of the international system as if it were autonomous from national influences, or vice versa, introduces distortions and misconceptions about what actually goes on. A similar argument is made here about the relations between the state and urban systems of politics in India, as it might be made more or less forcefully for state-urban relations in other countries. Rosatau defines linkage as "any recurrent sequence of behavior that originates in one system and is reacted to in another," a definition which is compatible with even remote analytic relationships between abstract variables. In the related research, however, some of the more intriguing findings concern *penetrative* linkage processes, where members of one polity serve as political participant in the political processes of another. Chalmers, for example, identifies as "linkage elites" Latin American leaders who play dual roles at the nexus of national and international politics.

Such linkages of personnel and groups, more concrete than abstract are of central concern to this study. It traces "linkage elites" at the interface of the state and urban political systems, but it is equally concerned with linkages at the local level of politics in the city. With this in mind, *political linkages* are defined as structured transactions of influence, support, claims,

and information between political participants. They can be regarded as transmission channels established between individuals and groups who share some basis for mutual identification or seek common goals. Political linkages can be ascertained between political leaders and following, between individuals and groups constituting a faction, and between allied factions in party and labor union organizations. Linkages may consist of sustained ties between politicians and bureaucrats, as well as among bureaucrats themselves, cutting across different branches or levels of administration and quite apart from the prescribed chain of command. Political linkages may be horizontal or vertical. The dominant structure of vertical hierarchies in Indore politics consists of horizontal and vertical linkages binding high-level political chieftains and bureaucrat with each other and with clients in the duty for mutual gain. Mapping operationally linkage provides a way not only of revealing the interpenetration of systems of politics but of illuminating much of the informal fabric of politics. Underpinnings of this kind are all too often overlooked in research confined exclusively to formal group, organizational, or institutional categories of analysis,

Power and incentive comprise the energy of politics entirely palpable to the participant, but elusive for the observer. Patterns of power and influence can only be detected indirectly. They must be inferred from a variety of possible manifestations: from who participates in the making of, or has access to, authoritative decisions; from who gains or loses by virtue of decisions as well as "nondeditions"; from who occupies official positions in institutions or organizations; and from the possession of private resources such as money, information, and skills, or control over jobs and publicity. Power and influence may even, under some circumstances, be inferred from reputations; for believing "X has power" may make it so. This study of Indore is not preoccupied with any debate over "community power structure" such as has been waged between elitists and pluralists in American social science *in* recent years, but it is sensitive to the issues that have been raised by them. The sharp inequalities in wealth and status (list character-lie Indian society at large and Indore city in particular) might lead one to expect to find a power elite.

But empirical studies of urban society and politics have produced a more conditional and accurate picture of social change in them city. Ethnic studies in the United States have drawn

attention to the extraordinary resilience of immigrant communities and to the durability of the "urban village" in even the greatest and most of cities. A Research on Latin America, Africa, and Asia has display yet more vividly the imprints of rural and traditional social aspects in urban society. Moreover, what seems to emerge as a core theme among these studies is the finding that traditional attaché values and associations are often adaptable and functional in made settings. Clearly the city does promote social change, but it is not always as rapid or as thorough as classical theories would suggest Thus what is appropriate for comparative urban research is not a sharp conceptual dichotomy between rural and urban, but rather a continuum along which segments of urban society .

2.8. Key words:

Urban milieu, urban marriage, urban family, caste, urban religion, urban economy, urban polity.

2.9. Check your progress

Long type questions

1. Describe the institution of family in the urban milieu.
2. Examine the changes in marriage in the urban setting.
3. Explicate the recent changes in caste in Urban India.
4. Explicate the impact of religion on the urban inhabitants in India.
5. Examine the nature of urban economy.
6. Analyze the political dynamism in Urban India.

Write short notes on:

- a. Modern nuclear family
- b. Marriage rituals in Urban India
- c. Hereditary occupation and caste in Urban India
- d. Secularism in Urban India
- e. Secondary and Tertiary Sectors
- f. Political awareness in Urban India

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UNIT-III

The new Social Structures in Urban India

3.0. OBJECTIVES:

3.1 NEW SOCIAL STRUCTURES IN URBAN INDIA

3.2. INFORMAL SECTOR

3.3. VARIOUS OCCUPATIONS

3.4. FORMAL SECTOR

3.5 VARIOUS PROFESSIONS

3.6. SECONDARY INSTITUTIONS

3.6.1. Education

3.6.2. Leisure and Recreation

3.7. VOLUNTARY ORGANIZATIONS

3.8. KEY WORDS

3.9. CHECK YOUR PROGRESS

3.10. REFERENCES

3.0. Objectives:

After studying this unit, you will be able to learn:

- The new Social Structure in Urban India:
- Informal Sector in Urban India
- Various Occupations in informal sector in Urban India
- Formal sector and various professions
- Secondary Institutions: Educational, leisure and Recreation
- Voluntary Organizations

3.1 New Social Structures in urban India

As one of the central and basic concepts of sociology, 'social structure' became popular in social anthropological studies after World War II and since then it is applied to almost any ordered arrangement of social phenomena. Social structure is a pattern or arrangement of elements of a society in an organized and collective way. The interactions and behaviour of the members of a society are stable and patterned. These stable patterns of interaction are called 'social structures'. Social structure is the framework of society that sets limits and establishes standards for our behaviour. It is, thus, defined simply as any recurring pattern of social behaviour. A social structure includes or is made-up of elements of society, such as institutions, statuses, roles, groups and social classes. Sociologists study social structure by examining the elements or parts that comprise it.

The study of social structure with the principal form of social organization, that is, types of groups, associations and institutions and the complex of these which constitutes societies.

The term 'social structure' applies to the particular arrangement of inter-related institutions, agencies and social patterns as well as the statuses and roles, which each person assumes in the group.

After having known the concept of social structure, let us now proceed to know the new social structure of Indian urban centres that is unique and maintains a separate culture of their own, away from rural societies. Though the rural-urban continuum persists, there are some specific aspects, which occupy a significant place in the urban society. Some of them are caste, kinship, family, marriage, religion, economy and polity. Found in rural societies as well, these institutions have become flexible in their functioning in the urban society. For instance, the institution of family found in urban India is completely different from rural. The family in the village community has a greater importance. If a member of a family defaults in paying his loan installments in a cooperative bank, it brings great defamation to the whole family. It is very difficult for an individual to isolate himself from the family. The existence of individualism is marginal in the village but more in the urban centre. It is this perspective, which differentiates urban institutions from rural institutions. The urban social structure includes all these aspects in social, economic and political institutions. Thus, a urban community is a separate entity on its own. A correct idea about the urban social structure comes with an understanding of the characteristics of urban community.

Global change processes do not occur in isolation. Their impact at the local level, associated with the changes in social structures and relations, demonstrates the importance of a continuum of change stretching from international and national levels to communities and households. Two changes are particularly important in this context. First is the impact of migration on the household structure. Migration is both a global and a local phenomenon. Population mobility now occurs in various dimensions—migration from rural areas to urban centres, migration between two urban centres and migration from urban centres to other countries.

Migration changes households as social institutions and can be both a cause and a consequence of tension and stress. or instance, rural-urban migration in many contexts increases the number of female-headed households. Changed residence patterns have

consequences for relationships between partners, with the pressure of separation often increasing marital conflict. Migration has profound implications for children; they can be exposed to emotional and physical abuse.

Secondly, and closely linked to migration, is the impact of rapid urbanization on the inter- and intra-community level violence. While rural conflict can act as a push factor for urban migration, the phenomenon can itself worsen in urban areas. Rapid urban population growth, closely associated with overcrowding, inadequate housing and basic infrastructure provision (such as of water, electricity and transport), may result in a struggle for resources, particularly when the basic infrastructure in the cities is poorly planned.

Conflicts occur when neighbours and communities compete for scarce resources, eroding social capital and reducing participation in community development activities. Competition associated with the overcrowded services (such as public transport) often reduces income-earning opportunities. Insufficient state security protection, policing and judicial systems particularly affect poor people. Unable to pay for services, they are more susceptible to institutional impunity, corruption and brutality.

The Impact of Migration on Household Structure

Although migration has long been an established livelihood strategy, migration flows have increasingly become the key features of the current processes of globalization both within countries—from rural to urban areas—and between countries—such as from poor to rich countries. Migration is both a global and a local phenomenon with causes and consequences interrelated in a systemic manner. Migration can be both a cause and a consequence of violence and insecurity, often in a mutually reinforcing way. Regardless of the causal factors at both structural and individual levels, migration frequently results in changes in households as social institutions, and their associated structure. Here, the popular stereotype is often one of a move from 'traditional' extended family, with patriarchal structure and relationships, to one where the vulnerable, particularly women, increases their power and influence. Equally widespread is the perception that families fall apart, losing trust and cohesion. However, within the context of extensive global variations, the reality is more one of household restructuring and adaptation,

rather than destruction. Indeed, to state that families break down with migration processes assumes that the 'family' breaking down is synonymous with the 'intact' male-headed families.

Change impacts on the different aspects of household structure, including female-headed households, children, relations with spouses, and extended familial structures—each of which has implications in terms of violence, particularly gender-based social violence.

One important result of rural-urban migration is the widespread increase in female-headed households. This includes both male migration patterns, with women left behind in rural areas, and autonomous female migration to urban areas. Female headship **may** to be temporary arrangement, semi-permanent or permanent, as in the case of divorce or abandonment. Regardless of the type, the impacts on women are complex, combining both positive and negative implications in terms of violence.

Changed mobility and residence patterns brought about by migration have clear consequences for relationships between partners, with the pressure of separation often ultimately leading to divorce, for a variety of reasons. It is difficult to maintain a relationship over distance, particularly when there is a perceived lack of spousal support.

Inter-caste relationships are affected by persons of different castes working together in the factory, or office in the urban areas. In overcrowded housing conditions, the segregation of different castes is limited. Hence, there is a noticeable change in the caste system in urban areas. The high-caste men remain aloof to maintain their ceremonial purity, and the low-caste men become vociferous in their demand for equal treatment and acceptance. For a while, this condition prevails without disturbing the set-up. But when the low-caste men's vociferousness increases, it may lead to social tension.

The processes of global change have also led to two major transformations of political institutions, namely weakening of the state and the rise of alternative forms of social governance. Many states in India are increasingly unable to exercise coherent control over territories and people. This has allowed for the infiltration of organized crime, facilitating the building of international criminal networks, which obviously leads to violence and breaking of law. Another

problem is that the state institutions like the police department are increasingly challenged by the local-level non-state forms of social governance (example can be given of Naxalites). All these circumstances give rise to informal institutions such as gangs, vigilantes and unofficial justice. Although these institutions often support social cohesion and provide limited mitigation of conflict, they can also generate perverse rather than productive forms of social capital and hasten social fragmentation and the onset of violence. Moreover, they are frequently volatile and can rapidly change from being productive to perverse. Such global change processes have brought about fundamental transformations of state governance.

Another factor for the growth of unrest in urban areas is unemployment and poverty. Unemployment may lead to strikes, often linked to the rise of a new type of populist 'anti-polities', with leaders characteristically promising to ensure security through brutal means involving few democratic checks and balances.

A related governance issue is the increased privatization of security, with many state authorities all over the world now contracting private security firms to conduct public policing. This so-called outsourcing' of state sovereignty blurs the boundaries between the public and the private, and often leads to new vicious cycles of violence.

The transformation of state institutions is reflected at the local level in the rise of new forms of spatial organization. Once again, two issues emerge as particularly important.

The first is the development of new forms of socio-spatial governance, particular, urban areas. The policing of urban order is increasingly concerned with the management of space rather than the disciplining of offenders. Urban regulatory mechanisms aim to eradicate offensive behaviour from specific places rather than punishing thereby managing the risks by anticipating problems rather than reacting to them.

This is particularly reflected in the retreat of the affluent into 'fortified enclaves' in order to isolate themselves from high levels of crime and violence. This new form of governance produces new urban problems, as it changes the notions about urban space: this is no longer

seen to be about cohabitation but rather separateness. Forms of social discrimination overlay onto the new spatial order to create instances of heightened violence.

Secondly, new forms of violence are also generated by the emergence of new spatial forms. Cities are the privileged spaces of accelerated social transformation, constituting crucial nodes for the coordination and servicing of economies that are increasingly internationalized. There are considerable social costs associated with this change process, including a growing polarization between successful transnational elites and an increasingly impoverished and territorially immobile majority. The development of sprawling 'precarious peripheries', characterized by a lack of basic services, inexistent urban infrastructure, illegality and disconnection from the city centres where jobs and cultural and economic opportunities are concentrated, is a reflection of such emergent disparities. This 'territorial exclusion' has a clear relationship to violence as those on the periphery seek to reach the centre. This process is also mirrored more broadly at the level of the rural-urban nexus, the changing nature of which has made it increasingly into a fault line of conflict. Whether this entails the blurring of the urban and the rural or growing rural-urban cleavages, this has frequently translated into new patterns of violence.

Violence in non-conflict situations can be clearly identified as the central issue for the security and development agenda. It is associated with the processes of rapid social change that are magnified in the current context of globalization, and that lead to multiple forms of exacerbation of the levels of insecurity and fear in the society, particularly in poor communities. This change-violence nexus is reflected at both the global and the local level, and is extremely complex. It has multiple causes, manifestations and consequences, and is often highly context-specific. We identify four critical dimensions that constitute significant potential channels for violence in the contexts of a rapid social change, thereby providing a roadmap for the elaboration of context-specific policy recommendations that are relevant at different levels.

It is not poverty and unemployment that cause violence, but rather the costs of poverty and unemployment in the form of stress, loss of self-esteem and frustration that can cause male abuse.

In many cases, however, violence is caused by deeper changes in livelihood patterns wrought by changes in the national-level production systems and associated labour markets. These put households under pressure to develop new **survival** strategies in the contexts of change, the cost of which can strain intra-household solidarity and **lead** to violence.

Intra-household violence can also be precipitated by the nature of the actual strategies that households resort to in order to cope with the transforming systems of production and to grasp the opportunities the new order affords. Such changes can lead to significant household adjustments in order to adapt to new circumstances. Although such adjustments can potentially improve the gender distribution of responsibilities, in many cases they tend to have very high gender costs.

Economic need as a result of impoverishment and unemployment may force the households and individuals to turn to risky income-generating opportunities. Even targeted interventions to mitigate the negative consequences of changing production systems and labour markets, such as microfinance projects, that aim to provide new opportunities resulting from the change can potentially have undesirable effects, particularly in relation to the transformation of gender roles.

3.2. Informal Sector

The informal sector is characterized by the following:

- I. Low levels of skill of the workers-Due to low levels of education the workers are not in possession of high levels of skills. Therefore, they are engaged in jobs involving low technology.
- II. Easy entry for the workers- Compared to the formal sector, the informal sector provides easy access to the workers. Any physically capable person, notwithstanding his possession of skills, can become a daily labourer. If he so likes, he can also become a street vendor which does not require heavy investment. Because of this reason the informal sector is capable of absorbing a large number of workers who would otherwise get no employment they do neither have the qualification nor skill nor capital for investment in the market.

III. **Low returns-** As the workers are in possession of low skills and easily get the work in the informal sector, it has low returns. Workers who offer their labour are not paid high wages. In fact, the biggest grievance against this sector is that the wages are many times below sustenance level. In many a case, low wages drive other members of the family into the informal work force because the main wage earned is not sufficient for sustaining a household. In this sense, children too may be encouraged to join the work force.

IV. **Immigrant labour.** It is found in the study of Hart that the informal sector worker in Ghana had come to the city from the rural areas. As mentioned earlier, workers and small traders in the city came from the rural areas in search of a livelihood. We do have the same experience in urban India.

Employees are considered in informal employment when their employment relationship, in law or practice, is not subject to:

- National labour legislation
 - Income taxation
 - Social protection or
 - Entitlement to certain employment benefits, e.g. paid annual leave, sick leave, etc.
-
- No formal wage policy set by the government
 - Wages set by state governments as per some cost of living calculation and central government directives on minimum wages.
 - The Constitution of India (Article 41) laid down that the State shall make effective provision for securing these rights
 - Article 41 Right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement
 - Article 42 Provision for just and humane conditions of work and maternity relief.

The Indian Government took several steps in compliance of the constitutional requirements.

- Indian Ministry of Labour set up from time to time Welfare Funds for five specific category of unorganised workers. These workers include Building and Other Construction Workers, Beedi workers, Cine workers and certain categories of non-coal mine workers.

Estimates of Employment in India

Industrial Category	No. of persons (in millions)	
	Formal Sector	Informal Sector
Agriculture	1.39	238.87
Non-Agriculture	26.68	131.5
Mining & Quarrying	1.01	1.25
Manufacturing	6.71	37.07
Electricity, Gas And Water	1	0.04
Construction	1.17	16.36
Trade, Hotels And Restaurants	0.49	40.37
Transport, Storage & Comm.	3.15	11.48
Financial Services	1.65	3.29
Community Services	11.49	21.64
All Sectors	28.07	(93%) 370.37

Year: 1999/00 (Total labour force: 406 million) (GDP share: 63%)

Over 94 percent of India's working population is part of the unorganised sector. In local terms, *organised sector* or *formal sector* in India refers to licensed organisations, that is, those who are registered and pay sales tax, income tax, etc. These include the publicly traded companies, incorporated or formally registered entities, corporations, factories, shopping malls, hotels, and large businesses. *Unorganised sector*, also known as *informal sector* or *own account enterprises*, refers to all unlicensed, self-employed or unregistered economic activity such as owner manned general stores, handicrafts and handloom workers, rural traders, farmers, etc.

India's Ministry of Labour, in its 2008 report, classified the unorganised labour in India into four groups. This classification categorized India's unorganised labour force by occupation, nature of employment, specially distressed categories and service categories. The unorganised occupational groups include small and marginal farmers, landless agricultural labourers, share croppers, fishermen, those engaged in animal husbandry, beedi rolling, labeling and packing, building and construction workers, leather workers, weavers, artisans, salt workers, workers in brick kilns and stone quarries, workers in saw mills, and workers in oil mills. A separate category based on nature of employment includes attached agricultural labourers, bonded labourers, migrant workers, contract and casual labourers. Another separate category dedicated to distressed unorganised sector includes toddy tappers, scavengers, carriers of head loads, drivers of animal driven vehicles, loaders and unloaders. The last unorganised labour category includes service workers such as midwives, domestic workers, barbers, vegetable and fruit vendors, newspaper vendors, pavement vendors, hand cart operators, and the unorganised retail.

The unorganised sector has low productivity and offers lower wages. Even though it accounted for over 94 percent of workers, India's unorganised sector created just 57 percent of India's national domestic product in 2006, or about 9 fold less per worker than the organised sector. According to Bhalla, the productivity gap sharply worsens when rural unorganised sector is compared to urban unorganised sector, with gross value added productivity gap spiking an

additional 2 to 4 fold depending on occupation. Some of lowest income jobs are in the rural unorganised sectors. Poverty rates are reported to be significantly higher in families where all working age members have only worked the unorganised sector throughout their lives.

Agriculture, dairy, horticulture and related occupations alone employ 52 percent of labour in India.

About 30 million workers are migrant workers, most in agriculture, and local stable employment is unavailable for them.

India's National Sample Survey Office in its 67th report found that unorganised manufacturing, unorganised trading/retail and unorganised services employed about 10 percent each of all workers nationwide, as of 2010. It also reported that India had about 58 million unincorporated non-Agriculture enterprises in 2010.

In the organised private sector with more than 10 employees per company, the biggest employers in 2008 were manufacturing at 5 million; social services at 2.2 million, which includes private schools and hospitals; finance at 1.1 million which includes bank, insurance and real estate; and agriculture at 1 million. India had more central and state government employees in 2008, than employees in all private sector companies combined. If state-owned companies and municipal government employees were included, India had a 1.8:1 ratio between public sector employees and private sector employees. In terms of gender equality in employment, male to female ratio was 5:1 in government and government owned enterprises; private sector fared better at 3:1 ratio. Combined, counting only companies with more than 10 employees per company, the organised public and private sector employed 5.5 million women and 22 million men.

Given its natural rate of population growth and aging characteristics, India is adding about 13 million new workers every year to its labour pool. India's economy has been adding about 8 million new jobs every year predominantly in low paying, unorganised sector. The remaining 5 million youth joining the ranks of poorly paid partial employment, casual labour pool for

temporary infrastructure and real estate construction jobs, or in many cases, being unemployed.

3.3. VARIOUS OCCUPATIONS

Since the vast majority (79%) of the urban workforce in India is informally employed, it is especially important to understand the trends and patterns of urban informal employment. What follows is an analysis of what the three rounds of NSS data tell us about the composition of urban informal employment by employment status and industry branch and about specific groups of urban informal workers.

By Employment Status

In 2009/2010, urban informal employment was evenly divided between self-employment and wage employment. Whereas in both 1999/2000 and 2004/2005, self-employment represented more than half (54%) and wage employment represented less than half (46%) of urban informal employment. In 2009/2010, among informal wage workers, around 16 per cent of both men and women were employed by formal enterprises: up from 14 per cent at both earlier points in time. Around 75 per cent of male informal wage workers, compared to around 60 per cent of female informal wage workers, were hired by informal enterprises: down slightly from 1999/2000 for both men and women, but up slightly for women from 2004/2005 when a higher percentage of women informal workers were hired by households as domestic workers. In 2009/2010, 9 per cent of female informal wage workers were hired by households as domestic workers: down from a high of 12 per cent in 2004-2005 but up from 6 per cent in 1999/2000. By comparison, the percentage of male informal wage workers hired as domestic workers was 1 per cent in both 2009/2010 and 2004/2005, up only slightly from 1999/2000.

In 2009/2010, 37 per cent of the urban informal workforce (39% of men and 29% of women) were *own account workers* (i.e., those who run single person operations or family businesses without hired labour) roughly the same percentage as in the two earlier periods. Another 11 per cent (9% of men and 20% of women) were *unpaid contributing family workers*: down from the earlier two periods. Only 3 per cent (3% of men and less than 1% of women) were

employers who hired others: the same percentages as in 2004/2005 but up 1 per cent for men since 1999/2000.

In 2009/2010, around 56 per cent of all urban informal wage workers (56% of men and 53% of women) were *regular* workers: down from 2004/2005 but up from 1999/2000 for both men and women. Among the informal wage workers hired on regular contracts, 23 per cent of men and 20 per cent of women were hired by formal firms: the percentage for both men and women having risen steadily from 1999/2000. Among the informal wage workers hired on regular contracts, 30 per cent of men and 18 per cent of women were hired by informal enterprises: down from both earlier periods. Among regular informal wage workers, 14 per cent of women and only 2 per cent of men were hired by households as domestic workers: down significantly since 2004/2005 but up slightly since 1999/2000 for women. In 2009/2010, casual workers represented 45 of urban informal wage workers (44% of men and 48% of women): up significantly from 2004/2005 but down significantly from 1999/2000 for men and especially women. Among all casual wage workers in 2009/2010, 7 per cent worked in agriculture; 9 per cent worked for formal firms; 27 per cent worked for informal enterprises; and 1 per cent worked as domestic workers in households.

Among casual workers, there were important differences between men and women. Among urban informal wage workers, the percentage engaged in casual work decreased from 47 for men and 56 per cent for women in 1999/2000 to 20 and 44 percent, respectively, in 2004/2005 and then rose to 44 per cent for men and 48 per cent for women in 2009/2010. As of 2009/2010, only 5 per cent of male casual workers but 15 per cent of female casual workers were engaged in urban agricultural activities. Nine percent of both male and female casual workers were engaged by formal firms. Nearly 30 per cent of male casual workers and 20 per cent of female casual workers were engaged by informal enterprises. Less than half a per cent of male but 4 per cent of female casual workers were engaged as domestic workers by households. In sum, casual wage employment decreased significantly for both men and women between 1999/2000 and 2004/2005 then increased for both between 2004/2001 and

2009/2010 but not to the 1999/2000 level. The only category of casual wage employment that increased over the ten-year period, for both men and (more so) women, was domestic work: despite the fact that the percentage of women employed as domestic workers declined significantly during the second half of the decade.

By Branches of Industry

Across the first decade of the 21st. century, urban informal employment in India has been concentrated in three industry groups: manufacturing, trade, and non-trade services: at 26, 29, and 32 per cent, respectively, in 2009/2010. The percentages of the urban informal workforce concentrated in manufacturing and non-trade services went up during the decade (from 25 and 30%, respectively, to 26 and 32%) while the percentage in trade went down (from 33 to 29%). Another 13 per cent was in construction as of 2009/2010: up slightly from the two earlier points in time . But the percentage distribution has remained quite different for men and women. Compared to women informal workers, in both 2009/2010 and 2004/2005, more than twice as many men informal workers were in trade. The gender gap in informal trade was somewhat narrower in 1999/2000: with only 1.6 times as many men as women urban workers in informal trade. At all three points in time, 11 times as many men, as women, informal workers were in transport. Across the decade, women were over-represented in non-trade services, other than transport, as well as in manufacturing.

Specific Groups of informal workers

We have taken into account specific groups of urban informal workers: domestic workers, home-based workers, street vendors, and waste pickers. These are the first such estimates for urban India -agricultural employment. Among both total and informal urban workers, the share of all four groups combined - domestic workers, home-based workers, street vendors, and waste pickers – increased between 1999/2000 and 2009/2010. However, there was significant variation within this overall trend between and within the female and male urban workforce, both total and informal. There was an increase in domestic work but a decrease in home-based work among all urban women workers, both total urban and informal urban. There was an

increase in street vending and waste picking among informal urban women workers but not among all urban women workers. There was an increase in all four categories of workers among urban men workers, particularly in home-based work and in street vending.

What is striking is the share of these four groups in urban employment. As of 2009/2010, the four groups combined represented 33 per cent of *total* urban employment: 35 per cent of male and 24 per cent of female urban employment. And the four groups combined represented 41 per cent of urban *informal* employment: 44 per cent of male and 29 per cent of female urban informal employment. Virtually all workers in each of these groups are informally employed: in 2009/2010, for instance, only 5 per cent of home-based workers were formally employed.

What is also striking is how these percentages have changed since 2004/2005. At that time, the four groups combined represented 21 per cent of *total* urban workers (15% of men and 42% of women) and 26 per cent of urban *informal* workers (19% of male and 50% of women). In sum, the combined share of these four groups had increased from 21 to 33 per cent of *total* urban employment and from 26 to 44 per cent of urban *informal* employment.

What is most striking is the reversal in the percentage of urban men and women, in both the total and informal workforce, in these four groups. In 2004/2005, nearly three times as many women as men, in both the total and informal urban workforce, were in these four groups. By 2009/2010, 1.5 times as many men as women, in both the total and informal workforce, were in these four groups. What accounts for this marked shift? How much does the decline in the prevalence of these groups in the female workforce account for the decline in the female labour force participation rate between 2004/2005 and 2009/2010? Also, why did a larger percentage of men begin working in these occupations? The data suggest that, with the decline of self-employment opportunities, a large number of men entered into these occupations, pushing women out of these occupations.

Home-based workers – that is, those whose place of work is their own home – represent the largest group of these four groups: as home-based workers can be found across most industry groups. In 2009/2010, 18 per cent of *all* urban workers were home-based. This was up from both 1999/2000 and 2004/2005 when 11 and 12 per cent, respectively, of *all* urban workers

were home-based. By 2009/2010, 23 percent of urban *informal* workers were home-based workers.

Again, this was up from both 1999-2000 and 2004/5, when 14 and 15 per cent, respectively, of urban *informal* workers were home-based. But the trends were reverse for urban men and women workers. The prevalence of home-based work among urban male workers, total and informal, increased significantly between 2004-2005 and 2009-2010: by 12 and 15 percentage points, respectively. While the prevalence of home-based work among urban female workers, total and informal, decreased significantly over the same five years: by 17 and 19 percentage points, respectively. What accounts for these marked reversals in the prevalence of home-based work among the different categories of urban workers?

There are two broad categories of home-based workers: the self-employed (including employers, own account workers, and unpaid contributing family workers) and the wage employed (many of whom are sub-contracted workers known as homeworkers). The percentage distribution of home-based workers across these employment statuses did not change significantly over the first half of the decade but did change significantly over the second half (see Table 8). During the second half of the decade, within the overall expansion of home-based work, there was a marked decline in the share of own account workers among both male and (especially) female home-based workers; a slight decline in the share of unpaid contributing family workers among male home-based workers; and a slight increase in the share of unpaid contributing family workers among female home-based workers. In 2004/5, 67 per cent of all home-based workers (75% of men and 58% of women) were own account workers; and 27 per cent of all home-based workers (20% of men and 36% of women) were unpaid contributing family workers. By 2009/2010, 62 per cent of all home-based workers (65% of men and 40% of women) were own account workers: and 21 percent of all home-based workers (19% of men and 39% of women) were unpaid contributing family workers.

Between 2004/2006 and 2009/2010, there was a marked increase in the share of employers and wage workers, especially among women home-based workers. In 2004/2005, 4 per cent of all home-based workers (3% of men and 6% of women) were wage workers: and 2 per cent of

all home-based workers (3% of men and 0.3% of women) were employers. By 2009/2010, 9 per cent of all home-based workers (8% of men and 18% of women) were wage workers: and 8 per cent of all home-based workers (8% of men and 3% of women) were employers.

In sum, between 2004/2005 and 2009/2010, the share of home-based work increased by 6 percentage points in *total* urban employment, increased by 12 percentage points for *male* urban workers, and decreased by 17 percentage points for *female* urban workers. Over this five year period, the share of own account workers decreased by 5 percentage points among all home-based workers: 10 percentage points for *male* home-based workers and 18 percentage points for *female* home-based workers. Also, the share of unpaid contributing workers decreased by 6 percentage points among *all* home-based workers, decreased by 1 percentage points among *male* home-based workers, but increased by 3 percentage points among *female* home-based workers. Meanwhile, the share of wage workers and of employers increased among all, especially female, home-based workers over this period: to represent in 2009-2010, 9 and 8 per cent, respectively, of *all* home-based workers; 8 per cent each of *male* home-based workers; and 18 and 3 per cent, respectively, of *female* home-based workers. In many countries, including India, sub-contracted home-based workers are often misclassified as own account workers: even though they are dependent on firms or their contractors for work orders, raw materials, and sale of finished goods. There have been recent efforts in India to better measure and classify home-based work. It is likely, therefore, that some of the estimated shift in home-workers from own account to wage workers might be accounted for by a statistical reclassification of sub-contracted home-based workers from own account to wage workers. But the shifts in significance of home-based and, within home-based work, the shifts in employment statuses are more real, than statistical.

In sum, it is important to better understand what is going on within these four occupational groups in India which together represent over one-third of urban employment in India and, especially, within home-based work which represents nearly one-fifth of total urban employment in India. respectively, of *female* home-based workers.

3.4. FORMAL SECTOR: The urban formal sector may be defined as the sector comprising the activities performed by the corporate enterprises and the government at Central, State and

the local levels by employing the wage paid workers which in a great measure is unionized. Data on the enterprises(registered manufacturing units in the urban zone) in the formal sector comprise of the information on their activities and those are collected on a regular basis .The Factories Act,1948 covers all manufacturing, processing, repair and maintenance services registered or not registered

Those factories which employ 10 or more or less than 10 workers, and using power, or employing 20 or more or less than 20 workers without power, in the reference year, belong to the registered manufacturing sector. Manufacturing units covered by the Annual Survey of Industries (ASI), Central Statistical Organisation, fall under the purview of organised employment of the formal sector .

The following are the characteristics of the formal sector:

Prices controlled by few sellers: The large manufacturing firms in the formal| organised sector operate in markets where prices are controlled by few sellers, which are protected from foreign competition by high tariffs, they sell products mainly to middle and upper income groups'

Greater access to Credit Facilities: The organised sector has greater access to credit provided by various financial institutions while the unorganized sector often depends, on the money lenders who charge a high rate| of interest.

Capital-intensive technologies and imported technology: The formal organised, sector uses capital-intensive technologies and imported technology while the unorganised sector uses mainly labour intensive and indigenous technology.

A Privileged position: The organised "sector has a privileged position| as far the role of government is concerned because the organized sector not only has an easy access to government, but also can influence over Government machinery; it can build lobbies and pressurize the Government on an issue.

Protection by various type of labour laws: The organised sector is protected by various type of labour legislations and supported by strong unions. .

All developing economies consist labour force of two broad sectors, the organised and unorganised sectors. In the organised sector, the labour productivity is likely to be high. Incomes even in unskilled category are relatively high. Moreover, conditions of work and services are protected by labour legislations and trade unions.

A comparison between both the sectors shows the following:

The large manufacturing firms in the formal| organised sector operate in markets where prices are controlled by few sellers, which are protected from foreign competition by high tariffs, they sell products mainly to middle and upper income groups' On the contrary, a large numbers of small producers operate in the unorganized sectors, on narrow margins in highly competitive markets. The low income groups buy the products

As regards the credit facilities, the organised sector has greater access to cheap credit provided by various financial institutions while the unorganised sector often depends, on the money lenders who exploit by charging a high rate of interest.

Capital-intensive technologies and imported technology are adopted by formal organised sectors while the unorganised sector uses mainly labour intensive and indigenous technology.

So far as the role of the Government is concerned, the organised sector has a privileged position and distinct advantage because it has an easy access to and influence over Government machinery; it can build lobbies and pressurize the Government on an issue, on the other hand, the unorganised or informal sector is not politically advantaged. .

Various type of labour legislations and strong unionism always guide and protect the formal sector. On the contrary, the informal sector is either not covered by labour legislation at all or is so scattered that the implementation of legislation is very inadequate or ineffective One may hardly find any unions in this sector to act as watch dogs or to protect the interest.

3.5 Various professions

A profession is defined as possession of an intellectual technique acquired by special training, which can be applied to some sphere of everyday life. Talcott Parsons views occupation as performance of certain functions valued in society in general and earning a living as a full time job by these activities.

A profession is generally characterized by the following distinguishing marks and criteria :-

- (i) A profession is expected to be responsive to public interest and contribute through its services to the advancement of social well-being and to be accountable to the public for the manner and standards with which it conducts its activities.
- (ii) It should possess a relatively coherent, systematic and transmissible body of knowledge rooted in scientific theories which enables the practitioner of the profession to utilize concepts and principles and to apply them to specified situations.
- (iii) The professional practitioner must adhere to an identifiable body of values and display attitudes which stem from these values and which determine the relationship of the professional person with his colleagues, the recipients of his advice and the community.
- (iv) A profession must have a body of skills which reflect the application of general concepts and principles to attain the goals of the profession.
- (v) The members of the profession must be organized and consider themselves as members of a group where knowledge, skills, attitudes and norms of conduct they share and to whose achievement they are dedicated. According to Greenwood, distinguishing attributes of a profession are systematic theory (body of knowledge), authority (building confidence in the clients), community sanction and approval and respect by the society; ethical codes and

professional culture (focus on certain values and norms), dedication and interest in mankind and society.

Whatever we call it-job, work, occupation, position, duty or vocation- it is what we do for pay. Of course, work has more than a symbolic significance; our positions are determined in the stratification system in good part by our occupations or those of the primary wage earners of our families.

In urban industrial matrix, the majority of the paid labour force is involved in the tertiary sector of the economy- providing such services as health care ,education, banking and government. Along with the shift towards tertiary industries, there has been a rise in the number of urban occupations viewed as professions. There is no single characteristic that defines a profession . In popular use the term profession is used to convey a positive evaluation of work or to denote fulltime paid performance in a vocation

The urban sociologists use the term profession to describe an occupation requiring extensive knowledge which is governed by a code of ethics. Therefore, it is widely argued that medicine and law are urban professions, whereas driving taxi is an occupation in the urban setting. But when we evaluate such jobs as fire fighter or pharmacist in the urban setting, it is not clear where occupations end and professions begin. Moreover, in the recent times, a growing number of urban occupational groups have claimed and demanded professional status.- often in an attempt to gain greater prestige and financial rewards. In certain instances , existing professions may object to the effort of a related vocation to achieve designation as a profession. They may fear that loss in business or clientele will result or that the status of their profession will be downgraded if still more occupations are included. The hostility between the medical profession towards midwifery is an example of such a conflict between an established profession and an occupation which has aspired to professional status.

Our society is increasingly dominated by large formal organizations with bureaucratic structures. Since autonomy is an important characteristic of professions, there is an inherent conflict in serving as a professional within a bureaucracy ,such as a staff physician in a hospital or a

scientist in a corporation . The formal organization follows the principle of hierarchy and expects loyalty and obedience. Yet professionalism in the urban context demands individual responsibility of the practitioner. Bureaucracy fosters impersonality, yet professions emphasize close relations with one's professional colleagues. Consequently, working in large formal organizations represents a kind of trade-off for most professionals. While they resent limitations on their freedom and individual initiative , they appreciate the security that the formal organization provides in the urban setting.

There is a great deal of variability in the rewards that professionals achieve. Some, such as physicians and lawyers, receive very high income. The major reward that all professionals have shared , however, is substantial freedom from supervision.

3.6. SECONDARY INSTITUTIONS

In all the social systems , there is an in- built mechanism to socialize the individual and to transmit its culture to the young. In simple or folk societies ,the institution of family is the primary agent of socialization. As the simple society transforms itself into an industrial, urban and modern state, instruction for the young becomes increasingly differentiated, complex and closely connected with other features of society.

In such a society, socialization is often mediated by secondary institutions like education, apart from the primary institution of family. This system prepares the young for the transition from the confined and the concentrated relationships of the family to the impersonal and diversified relationship of the larger society.

3.6.1. EDUCATION

Education plays a paramount role in the process of economic development. The sociological perspective on education focuses on both, the process of education and the inter relationship between education and different aspects of society. The concept and phenomenon of education based on school-going is of modern origin in India. Education in the past was restricted to upper

castes and the content taught was also ascriptive. However, today, to lead a comfortable life in this fast-changing world, education is seen as the most influential agent of modernization.

The educational attainments in terms of enrolment and retention in urban India generally correspond to the hierarchical order. While the upper castes have traditionally enjoyed and are enjoying these advantages, the Scheduled Caste and other backward castes children have lagged behind in primary schooling. Studies have revealed that children of backward castes are withdrawn from school at an early age, by about 8 or 9 years. An important reason for withdrawal of children from school is the cost and work needs of poor households. Income and caste are typically correlated with lower castes having lower incomes and higher castes having better endowments in terms of land, income and other resources. Thus, one fact is certain that there is a clear divide in the urban areas, regarding access to schools. The very poor children are enrolled in the municipal school because it provides a number of incentives such as lower expenditure on books, uniforms, fees, etc. The well-off children go to the private school, where English and computers are given more importance. The tendency in favour of private schools in urban areas is influenced by people's perception of private schools, as a means of imparting quality education in English medium. Data on rural—urban break-up are not available for 2001-2. However those from 1993-4 indicate that the private schooling phenomenon is especially strong in urban areas.

Among primary schools private schools were located primarily in the urban areas. Greater than a third of all primary schools in 1993-4 in urban areas were private. Since aided schools tend to be fewer at the primary level' it is probable that the bulk of these were private unaided primary schools.

The poor urban girls, if not all, constitute a major chunk of disadvantaged groups that are excluded from the schooling process, especially because they enter late into school and drop out earlier. Parental illiteracy is another cause for lack of interest to become literates. Many urban children enrolled are thus first generation learners, who come from illiterate families thus, they have to single handedly grapple with school life, mastering language and cognitive skills without parental help and guidance. Most of these illiterate parents do whatever is possible to

educate their children because education for them acts as a vehicle of social mobility. Moreover, education and the subsequent attainment of town jobs is often looked upon by many of these urban families, especially families belonging to lower castes, as a means to break out of their position in caste hierarchy.

The religious beliefs and practices of a community can also largely impact the overall attitudinal and behavioural profile of an individual or group. In the Indian context, religion has a sway over people's minds and exerts a great influence over their behaviour. The motivation and attitudes of the people towards education are also moulded, to a large extent, by their religious beliefs. The literacy rate for Muslims is notably lower compared to Hindus but not better than Christians and Sikhs.

.The World Bank study (2002) finds that the poor parents not only recognize the value of educating their children but also are willing to invest meager resources in children's education. But a complex set of factors conspire against them. The key concern is no longer enrolment; attendance, transition, completion, and learning outcomes are emerging as bigger issues.

In all the states, the learning outcomes of children are way behind expected or acceptable standards. For example in Uttar Pradesh a study team observed that most of the children in classes III, IV and V were neither able to read fluently from their textbooks nor could they solve simple addition or subtraction problems. The situation was not dramatically different in Karnataka. Those who could read and write either have literate parents (especially mother) and/or attended private tuition classes. The first generation school goers barely managed to recognize alphabets and could at best, read a few words.

Group discussions in the community revealed that most parents across states feel that the quality of education has gone down. The teachers do not really care if the children of the poor learn to read or write. Teachers are not accountable for learning outcomes of children, especially in the light of the no-detention policy.

The cohort study done on the basis of the school records gives a fairly positive picture. As the midday meal and the dry ration are linked with attendance, official records do not always

reveal the correct situation with respect to regularity of attendance. teachers are reluctant to admit that children drop out and hence many names show up in the registers and some of them are marked as long-term absentees. Clearly, children from poor households are not very regular school goers

To ease the burden on older siblings of taking care of younger ones. Actual teaching time in class is another important concern. Observations in the classroom and discussions with children revealed that the actual teaching time is well below the expected norm. In multi-grade teaching situations, barely 20 minutes of each period is spent on actual teaching. Children are left to do their own work when the teacher is busy with another group.

Teaching and learning materials used, in the schools do not lend themselves to multi-grade teaching or self-learning. Teachers take turns to attend schools where there are three or more teachers. The team found that in Uttar Pradesh teachers collect 'fees', official or unofficial. Teachers in government primary schools often asked children to get Rs 5 to 10 during national festivals, for issuing of transfer certificate, etc.

There is growing evidence that private schools are mushrooming all over and that children are being sent to private schools if the parents can afford them. In some cases parents decide to send their children to private schools, even if they cannot really afford it. Parents seem to believe that children learn fast and are able to cope with their studies if they are enrolled in tuition classes. "The findings of the World Bank study are not isolated, just about every field study finds similar results. However, there are significant inter-state differences.

Some state governments have made efforts to address cadre management concerns to rationalize teacher deployment in their attempt to ensure that teachers reach all the schools. The enrolment for secondary school sharply declines from that in the middle school level. This pattern of decline is also along expected lines -the decline is higher for the underprivileged sections—females, lower castes, rural youth, and lower economic classes.

The transition rates are much lower in the middle to secondary stages than in higher stages. This suggests many (not mutually exclusive) possibilities for policy. Factors that promote

dropping out are already strong during early adolescence. These factors, such as income earning options, house-related work, inability to keep up with pressures related to studying, etc., need a counteracting force at the middle school stage itself. The midday meal scheme for instance is an important but only one such factor. The possibility of putting up crèches close or within the premises of schools is

another factor. Improving the quality of schooling specifically for under-achievers is a key area where there is scope for intervention, if economic factors and outside income earning options are important, then linking education with vocation-related course-work could have a positive impact on transition. Moreover, dual status of part-time employment and education during early adolescence should not be discouraged and perhaps even promoted if we want to keep the poor in school. But none of the above is possible given the present level of infrastructure available for imparting education. The non-responsiveness of the state to the requirements of basic education can be considered the greatest impeding factor for progress in the education sector. Despite high enrolment levels and impressive achievements in basic literacy the fact remains that most children continue to drop out even before they have completed elementary education.

Defects of Present System

We may begin with the observation of Amartya Sen, that 'Primary education in India suffers not only from inadequate allocation of resource, but often enough also from terrible management and organization [']. To him, management and organization of schools is still in a terrible state in India. That means, there are three major defects in the present educational system. The first is the physical environment in which the student is taught, the second is the curriculum or the content, which he/she is taught, and the third is the teaching method or the teacher, who is teaching. A brief description of all the three factors is explained here.

Physical Environment

We have become dependent on schools to such an extent that a co-dependent relationship is created between the broader and friendly notion of education and the manipulative reality of

school. Education should not be limited to the sphere of the school. It should have to encompass nearly every aspect of life. Schools should act as locations where the ideas of education are planted in the students and education has to become the foundation for how the students look at the world around them and how they interpret these things. Instead the present situation is that, the seeds of education are planted into the children in the schools but it does not go much further than the school system. The public in general and urban people in particular, often think of schools as a place for teachers to instruct children on the 'three Rs'—reading, writing and arithmetic. Schools are not considered as places, where the students are taught many life skills that will help them succeed in their future endeavours.

Getting into school is no more a problem in most parts of India. Ninety eight percent of population has access to school within a walking distance of 1 km. The core problem is the unpreparedness of the school system for mass education. Classrooms in most primary schools in urban areas are typically uninviting. Added to that, most of the schools do not have proper drinking water or toilets. In some schools, students of different ages are made to sit in one room. These students squat in passive postures, even regimented columns, with often the 'brightest' and the socially advantaged sitting in front. At a given time, a typical school could have at most two teachers trying to 'police' children of all five primary classes. The best teaching that these teachers may undertake is to make the students copy or recite from the textbook. Sounds emanating from the school are normally distinguishable from afar in the form of a ritual cacophonous chorus of children chanting their lesson, often shouting their guts out in a cathartic release. Surprisingly, no normal sounds— of joyous laughter, creative play of words, singing or recitation of poems, animated participation, excited discovery, or even the irrepressible curious questioning the characteristic of every child of that age are found in schools. The major drawback in these schools is that in the mechanical race to achieve 'schooling for all' the government seems to have completely missed out on what constitutes 'learning for all'. Here, greater emphasis is placed on establishing schools but not on what goes on inside a school. The result is high enrolment figure and equally high dropout rate. The students enrolled are compelled to attend school regularly and take all the exams, and the result is a sizeable number of students fail and are compelled to repeat classes. These students ultimately give-up the hope,

resulting in high resource wastage of the government, while at the same time inculcating a sense of despair among the students, thus, reducing the potential of their human development.

Since long, the educationists had thought that the high dropout rate is because of parental poverty and disinterestedness rather than concentrating on the failure of the school system. A paper by Jandhyala B. G. Tilak, titled 'Determinants of Household Expenditure on Education in Urban India, which is based on the results of NCAER's 1994 Human Development in India (HDI) survey, tries to clarify some of such myths that are associated with the education in urban India. The study mentions that the real household expenditures on education in India is not 'Virtually non-existent', but is considerably higher. Some of the observations made by this study are as follows:

- First, there is a complete absence of 'free education in India, regardless of a households socio-economic background, spending on education is very substantial even at the primary school level.
- Second, 'indirect' costs, such as books, uniforms and examination fees, are very high, even in government-run schools, including at the primary level..
- Third, given the absence of a well-developed credit market for education, expenditure on education is highly (and positively) correlated with income.
- Fourth, willingness to pay and compulsion to pay' (i.e., the need to compensate for a shortage of government spending on education) are two important factors.
- Fifth, government spending and household spending on education are not substitutes but complementary. An increase in government spending is associated with an increase in household spending (due to an enthusiasm effect, resulting from improvements in school facilities, number of teachers, etc.). Conversely, a reduction in government expenditure leads to a decline in household spending on education. (Equivalently, the elasticity of household expenditure to government expenditure is found to be almost unitary, and positive.)
- Finally, the provision of schooling in urban habitations, or the provision of such school incentives as mid-day meals, uniforms, textbooks, etc., are both associ

ated with the increased household demand for education.

Defective Curriculum

Another reason attributed to high dropout rate is 'most out-of school children are unable to study because they have to work'. The recent study by PROBE has refuted this reason as myth. It says that only a small minority of children are full-time wage labourers, while the majority of those, who work do so as family labourers at home or outside. According to this study, it is not because the children have to work that they leave school, but because they leave school they work. Then why do children leave school?

The teacher-centric education system, prevalent since time immemorial is the major concern. . From times immemorial, education has been expensive, as it is related to gaining and transmitting knowledge in India. 'Information,' the foundation upon which knowledge rests was and still is in limited **supply**: A teacher, together with a limited set of books, is the knowledge base, which anchors the education process. The teacher is the active agent, communicating information to the students, who are the passive receptors of information. Learning by rote is the method most favoured because the information transmitted is largely disjointed and the student is not really quite sure what the motivation behind knowing all those disparate facts is.

Curriculum-makers in India feel that children need to know a lot more to catch-up' with the others living in advanced countries. So, they try to include as much 'information and 'knowledge' as possible in the curriculum. While it is true that this century has seen an explosion of technologies that help to store large information, the capacity to understand these facts and concepts does not grow equally fast among the children. Therefore, a crucial aim of children's education should be to promote concept formation and enhance their capacity for theory-building. All children are natural theory builders, and from very early in life, they begin to construct their own explanations for the world they observe. The educational system presents a contrasting experience to these children. These outdated school systems do not allow for a child's mind and personality to develop. Moreover, the knowledge imparted is not continuous and are disjointed fragments of information that are arranged in the form of different pieces in the

syllabus. The curriculum-framers, while arranging such information, ignore the fact that the natural learning process in children is far from linear, and that they process information about the world in a much more holistic and integrated manner. The content taught, therefore, cannot be determined by what has to be covered' in higher classes, but by the children's ability to comprehend the concept at a given age.

In the Indian system of education, what is taught is crucially linked with how it is taught and, more importantly, with how it is assessed. The examination system here is so distorted that it actually discourages good classroom practices by forcing children to answer contrived meaningless questions, suppressing their own curiosity and expression. It emphasizes on written questions based on trivial recall, and discounts all activity-based learning.

Another major drawback is that the curriculum prescribed in the textbooks to a great extent are found to be 'irrelevant' to the closer lives of urban people. The curriculum-makers, who come predominantly from urban middle-class background believe that the urban children need to be taught how to conduct their lives 'properly', and that only 'positive' situations from their lives must be depicted. Thus, either highly prescriptive and moralistic lessons (about hygiene, cleanliness, hard work, etc.) or rather simplistic generalizations about the perceived 'needs' of the urban poor or over-idealized situations such as truly democratic institutions, benevolent employers, well-equipped and functioning hospitals, effective government schemes, etc., are described in the prescribed textbooks. They absolutely ignore the fact that the urban children, unlike those from protected urban homes, are much more conscious of the conflicts and complexities of life, which form a part of their reality. They know very well that these lessons are contrived and untrue, but have no chance to critically question the contents that they must passively parrot. The village child is also far more knowledgeable about the natural **world**, and does not need to look at 'pictures' to count the legs of a spider, or to **identify** the eggs of a frog or the leaves of a banyan tree.

Similarly, the teachers and other school authorities also neglect the fact that many **urban** children, especially the TV viewing children, are aware of rich bio-diversity around them. They become conscious only when some foreign companies pirate this information and patent it.

Thus, in the name of relevance, most of the content taught in the schools become irrelevant to the prevailing situations of the urban children.

In recent years, there have been attempts to change the elementary school curriculum to make it more child-centred, joyful and activity-based. However, in most cases, there have been mere cosmetic changes accompanied by much 'song and dance', with no radical restructuring in the content and design. The education systems in this region are highly monopolistic and rigid, and are controlled by bureaucratic departments that are resistant to change. Moreover, the people, who design school curricula have outdated notions about what constitutes 'learning', are burdened with the perceived demands of higher education, and are far removed from a typical average child of the country. They are also far too inflexible to learn from the experience of teachers and field-based voluntary groups working in close contact with children. Some flexibility may be permitted in the curriculum for 'those children in non-formal schools, but never in the highly guarded formal system for 'our kids'.

3.6.2. Leisure and Recreation

The importance of leisure time for young people, particularly as it relates to personal and community development, is examined here. It is imperative that youth be given a wide range of opportunities for meaningful participation within the community, provided or facilitated by a multitude of organizations, institutions and programmes in all sectors. The various sections in this part focus on how young people spend their free time, the developmental opportunities presented within diverse contexts, and the virtuous cycle of mutual benefit created through reciprocal youth-community support (illustrated in several detailed case studies). The conclusion emphasizes the importance of saturation

(adequacy of opportunities is more important than variety), a solid infrastructure, a strong public and political commitment, and the recognition that leisure time and opportunities constitute a right to be protected rather than a privilege to be earned or lost. Certain major themes—basic health, risk behaviour reduction, education, employment and political participation—constitute the pillars of youth policy. Indeed, they are the foundations of human

resource development in general, reflecting a continuum of goals from protection to prevention to civic and economic participation. They are the domains of responsibility of the main public systems charged with providing services and opportunities for youth. They represent the core indicators against which Governments and advocates track progress. They do not, however, represent the totality of young people's lives; herein lies the challenge. In every culture, there are hours in the day when young people are not formally required to be in school or engaged in household or paid work. They choose to be involved in various activities, and there are public and private programmes, organizations and individuals who support their participation. These hours, these activities and often even these programmes are considered discretionary. They are viewed as optional nice but not necessary, or even particularly important. These are the hours, the activities and the programmes whose absence or disappearance would not be noticed by policy makers but would be very much felt by young people. Public recognition of their importance is low, a fact reflected in the scarcity of relevant data.

Equally important, it is these hours, activities and programmes that policy makers, programme planners and frequently the public have few qualms about reducing. When crime rates go up, the quality and quantity of young people's discretionary hours are often diminished by strict curfews. When test scores drop or family incomes dip, opportunities to participate in voluntary activities are often restricted, as the hours required for work or study are increased. When public funds are low, sports, recreation and cultural programmes and institutions are often among the first casualties. In a number of sectors, these hours and activities and the infrastructure that supports them are seen as promising means to achieve specific, well-defined ends, including delinquency prevention, formal education or HIV/AIDS prevention. Reducing idle time is adopted as a delinquency prevention strategy, youth counselors are heralded as effective messengers for reaching peers and family members, and youth organizations are funded to reach and train young people who have failed in the mainstream educational system. Too often, forays into discretionary space are taken without an appreciation of what that space is and what it does for young people. The ease with which policy makers and large-system planners confiscate time, redefine activities and supplant or take advantage of community

programmes and organizations suggests a basic lack of understanding of, and a lack of respect for, what goes on when young people are not in school or at work. The language used by those who study discretionary time and programmes does not help. Terms such as “leisure”, “informal learning” and “play” imply a casualness of purpose and practice that does not do justice to young people, their activities,

or the programmes and people that support them. It is possible that major systems including education and public health, formally held accountable for achieving visible, measurable outcomes through codified interventions and practices, may simply believe they are stepping into uncharted or at least unstructured territory.

The purpose of the present discussion is to take a step back from detailing current trends in leisure and out-of-school activities to present a frame for thinking about why discretionary time, activities and programmes are important and how they can be better leveraged to promote individual and community development. The three basic premises underpinning this concept are as follows:

*Discretionary time plays an integral role in young people’s individual development and the development of their communities

. The amount of discretionary time available to young people varies considerably according to age, gender and culture. In all countries, though, this time provides space in which young people make important developmental headway. Youth show signs of strain and depression in countries in which discretionary time dips below a certain thresh-old. The developmental progress made during discretionary time is not solely individual; how young people use these hours has significant implications for the communities in which they live.

•The availability of a range of constructive, voluntary activities and opportunities to engage is critical to young people’s development and their contributions to the community

. Activities should vary to address the broad range of young people's interests and needs, should adhere to what is known about supporting development, and should strive to offer outlets and support that are often more difficult to provide in larger institutions.

The choice of institution is as critical as the choice of activity .Leisure activities and opportunities should be offered and made available by multiple institutions and organizations within the community. The decentralized infrastructure characteristic of most informal education, leisure-time, and community-based programmes is a useful counterpoint to large public institutions that determine not only what is done, but who is involved. The first section of the chapter offers different perspectives on discretionary/leisure time, focusing on the developmental opportunities these hours offer ,and presenting statistics and research on young people's leisure-time use and discretionary activities. The section concludes with the argument that young people will use their discretionary time more productively if activities and programmes are of higher quality, are focused on life preparation and community participation, and address concerns about prevention and problem reduction. The second section concentrates on the dual issues of young people's development and their community contributions, exploring through examples the recipro-cal relationship between young people and communities, and the community as the context in which most young people spend their discretionary time.

In its entirety, this chapter is meant to locate leisure/discretionary time and activities within a bigger picture of what young people need and can do. Young peo-ple's leisure time and activities are inseparable from many of the other pressing issues affecting them (covered in the different chapters of the present publication),as the following pages will make clear. Leisure— used here to refer simultaneously to the hours, activities and infrastructure is a key context for education and learning, for health care and the decisions that affect young people's health, for full participation, and for the use of ICT. It is inextricably connected with young people's employment opportunities and formal schooling. How young people spend their leisure time is

also linked to pressing threats to their well-being, including HIV/AIDS, delinquency, conflict and drug abuse, and to issues of globalization and interdependence.

Given these interconnections, it is critical that leisure be discussed as a context for the development of young people and their participation in the development of community and society. Researchers draw the picture differently, but all agree that leisure time, at a minimum, is the waking hours during which a young person is not in school and not at work. School-related activities such as homework, Saturday classes and summer school are often counted as extensions of school. Chores and required family responsibilities such as childcare are often counted as extensions of work. Pulling together a vast array of studies on how young people spend their time across cultures, R. Larson and S. Verma recently compiled a relatively clear picture of leisure time around the world.

The combination of immense diversity (within and across cultures, nations, regions, socio-economic situations and genders) and a shortage of data and credible studies (particularly those relevant to developing country contexts) make efforts to generalize difficult and tentative. While recognizing that doing so obscures important differences and missing information, it is nonetheless useful to use Larson's and Verma's effort to build a composite snapshot of young people's leisure.

The amount of time young people spend away from work and school work varies significantly across populations and regions. Differences exist within the developing world. In a Kenyan sample, 10 per cent of children's waking hours were free, compared with 63 per cent for a sample of young men in urban India. In developing country populations, boys tend to have significantly more leisure time than do girls, as the latter spend more time in household labour than do their male counterparts. In the developed world, about half of American young people's waking hours are free, and European adolescents seem to have about the same or slightly less leisure time, while Asian young people appear to have a quarter to a third of their time for leisure.

Leisure activities

While media use is not even mentioned in the developing country time-use studies Larson and Verma examine, it is a dominant force in developed societies. East Asian, European and North American young people appear to spend an average of about two hours daily in front of the television, with boys watching more than girls. Young people from all regions spend less than an hour reading each day, with those in the United States reading less than Europeans, and Europeans less than Asians. Music plays a less substantial role in young people's leisure time than any other activity. In terms of active, unstructured leisure, the time that younger children spend in play appears to be supplanted during adolescence by labour in developing and transitional populations and by talking (often more than two hours a day) among American and European young people, while children and youth in East Asia spend relatively little time in unstructured active leisure. Young people's engagement in inactive, structured leisure such as sports, organizations and the arts is also greater in Europe and the United States than in Asia; studies tracking organized activity participation in developing areas have not been carried out.

Across regions, participation

Appears to increase as socio-economic status improves, with sharper rises in sports for boys than for girls, and a greater increase for younger than for older adolescents.

Time spent "doing nothing"—waiting, hanging out and thinking, for example—takes more of Western young people's time than that of Asian youth, and perhaps more time of youth in developing than in developed countries.

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adolescence, while time with family stays constant for African-American young people and youth in India, with an increase in family time for young Indian women as they get older.

Opportunities presented by adolescent leisure time

In many cases, discretionary time is thought of first and foremost as an opportunity for problem behaviour—as the time when young people get in trouble, roam the streets, engage in risky sexual behavior and watch too much television. Concerns about poten

tial risks during leisure hours are valid. However, advocates and policy makers should set their sights higher than whether or not young people are in trouble. Leisure time is also an opportunity for play and recreation—for self-expression and relaxation, and for young

people to exercise their emerging self-control. Beyond this, though, leisure is when learning and development occur—not learning in the formal, academic sense, but no less critical than the learning that goes on inside schools. Finally, leisure time is the context in which young people flex their muscles as contributors and change-makers, as participants in the development of their communities and societies. This is the opportunity of leisure—robust, varied and essential. Too often, though, risk rather than opportunity is the focus of programmes and policies that affect young people's leisure, and leisure is not imagined as the critical time it genuinely is. How leisure is perceived makes all the difference.

Problem reduction and prevention

The out-of-school hours constitute a period during which bad things can and do happen, including drinking, smoking, unprotected sexual activity, delinquency and violence. It is nonetheless unfortunate that the reasons most closely associated with a willingness to support out-of-school opportunities are those that arise most often out of concern about the risks and problems associated with these hours. This perspective is reflected in the tone of popular media coverage focused on young people's leisure. Prominent news magazines in the United States lead with headlines such as "Wild in the streets" (Newsweek) and "Teenaged wolf packs"

(U.S. News & World Report) when they report on young people's use their leisure time. Coverage of children's leisure in South America and other parts of the developing world, especially that which makes its way to global media outlets, takes the street child as its primary figure, painting none too positive a picture. It is not only the press that represents leisure as a time of risk rather than opportunity. Much of the international research on leisure focuses on young people's problem behaviour as well. Policies and policy debates tend to be framed from a problem-reduction standpoint; in the United States, for example, new policy commitments to after-school programmes were spurred largely by reports that juvenile crime rates spiked during the hours directly after school.

With over 550 million Indians under 25, India is now the envy of many developed countries around the world which are facing problems arising out of aging populations. The 12-24 years age band is a tumultuous journey, synonymous with life-defining changes. In this 'growing up' phase, priorities metamorphose. It's in this context that the role of leisure becomes critical.

While leisure is important for all ages, its importance in the psychological, physical and intellectual development of young people is well recognized. But in the absence of any concerted initiatives like sports, cultural groups and youth camps like in many developed countries, what do India's urban young do in their leisure time?

One of Technopak's recent studies- India Consumer Trends 2006/07 - has brought out some very interesting facts about the leisure habits of 12-24-year-olds. Leisure is fast becoming sedentary and passive. Watching television is the most prominent among leisure activities for the youth, taking up close to three hours every day.

Young males may still be devoting about 40 minutes a day towards sports but females are on the playfield far less. Office-goers spend barely 15 minutes on exercise of any kind. While spending time with friends still comes up as a significant activity, its importance is reducing as gaming, Internet browsing and other 'my time' entertainment options become popular.

'Hanging out with friends' as an activity seems fairly prevalent among the student community but reduces once they start working, and is mostly done at a friend's house or around parks, movie halls, malls and markets. Access to a PC and the Internet is significant. Those who have a PC, use it to play games, work on something related to academics, browse or chat online.

Socializing, normally happening on the playground, is increasingly moving to a virtual medium, as it offers 'own-term entertainment'. So, are we breeding a generation of couch potatoes disinclined towards any physical activity? The answer lies in an acknowledgement of the environment our youth live in today. In a fiercely competitive world with importance attached to academic excellence and getting ahead, young people are using their limited leisure to build their skills.

An increasing number view leisure as an unaffordable luxury that cuts into time available for tuitions and self-improvement courses. De-stressing is no longer something only corporate executives do. Home has become the mandatory place to "chill, switch off and then thrill".

The other key contributor to this is, of course, the lack of urban infrastructure that would provide the facilities for active recreation. Most neighborhoods have the merest apology of a park. Many of the larger parks in a city are off limits for games. Government sports facilities are few and far between. Schools too typically do not provide access to their recreation areas after school hours. So where can Indian youth build the practice of an active lifestyle?

It is difficult to hypothesize how today's youth, brought up in such an environment, will cope with the challenges of the real world and what the impact will be on Indian society. However, as a 48-year-old, what I can say, with some sadness, is that the 'virtual' life we are subjecting our youth to today is not a patch on the 'normal' life we enjoyed in our youth—a life that seemed so much fuller even with fewer means and gadgetry.

While it is not feasible for the government to create large, open spaces in major cities any more, it is possible to create hundreds of natural parks—each of a few hundred hectares in size—across India that can be reserved for outdoor activities such as hiking, youth camps, sports, and

will bring the young out of their bedrooms, cyber cafes, and coaching classes into a world of sunshine and stars.

Modern Science helps to make our life-style more comfortable and easy. The urban people lead a high comfortable life-style with the help of scientific gadgets. The result of our life-style may be increased risk of coronary heart disease at younger ages. Obesity has become a menacing problem and persons who are overweight tends to have a poor self-image are disinterested in physical activity. Moreover it is somehow true that the rural people are more active and less prone to diseases and susceptibilities. Considering these aspects, the investigator tried to undertake a comparative study on leisure-time activities between rural and urban middle aged sedentary house wives. The activities which done in leisure-time that is called leisure-time activities. In present study leisure-time activities are – leisure-time physical activities, social recreational activities, creative recreational activities, family recreational activities, and leisure-time handicrafts activities. The purpose of the study was to find out the leisure-time activities of middle aged sedentary rural and urban house wives and by comparing the leisure- time activities between rural and urban house wives. It appears from the leisure-time activities that the urban subjects had more leisure-time. They participated mainly in recreational activities. On the other hand, rural subjects used to participate mainly in physical activities during leisure-time. It was observed that, urban house wives lead a comfortable life style than rural house wives. On the other hand, rural house wives had less leisure-time due to their household works.

3.7. VOLUNTARY ORGANIZATIONS

As an integral part of Indian society, Voluntarism dates back to ancient times when it operated in the fields of education, medicine, cultural promotion, and in crises such as droughts and famines. Modern indigenous forms of voluntary organisations began to appear in the colonial period. According to the World Development Report (World Bank, 1993),"Non Government Organizations (NGOs) are voluntary organizations (VOs) that work with, and very often, on behalf of others. Their work and activities are focused on issues and people beyond

their own staff and membership. NGOs often have close links with people's organisations, channelising technical advice or financial support as intermediate service organisations. But organizationally NGOs can be quite different from people's organisations, often having bureaucratic characteristics or accountability of most people's groups." The World Bank defines NGOs as "Private organisations that pursue activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services, or undertake community development." In wider usage, the term NGO can be applied to any non-profit organisation, which is independent from government. NGOs are typically value-based organisations, which depend, in whole or in part, on charitable donations and voluntary service. Although the NGO sector has become increasingly professional over the last two decades, principles of altruism and voluntarism remain key defining characteristics. (World Bank, 1999) In yet another document, the World Bank offers many other characteristics of NGOs (World Bank, 1990). Some of them are:

a) A non-profit making, voluntary, service/development oriented organisation, either for the benefit of members (a grassroots People's organisations, peasant movements, women organisations, tribal associations, women's clubs, federation of workers, women's cooperatives are local peoples' organisations, and are not being referred to as NGOs here, or in this dissertation organisation) or for other members of the population (an agency).

b) It is an organisation of private individuals who believe in certain basic social principles and who structure their activities to bring about development to communities that they are servicing.

c) An organisation or group of people working independent of any external control with specific objectives and aims to fulfill tasks that are oriented to bring about desirable change in a given community or area or situation.

d) A democratic, non-sectarian people's organisation working for the empowerment of economically and/or socially marginalized groups.

e) An organisation not affiliated to political parties, generally engaged in working for aid, development and welfare of the community.

f) Organisation committed to the root causes of the problems trying to better the quality of life especially for the poor, the oppressed, the marginalized in urban and rural areas.

g) Organisations established by and for the community without or with little intervention from the government; they are not only a charity organisation, but work on socioeconomic- cultural activities.

h) An organisation that is flexible and democratic in its constitution and attempts to serve the people without profit for itself. NGOs have some advantages over governmental agencies, which make them particularly suited to perform developmental tasks. Since the nature and qualities of individual NGOs vary greatly, it is extremely difficult to make generalizations about the sector as a whole. Despite this diversity, some specific strength is generally associated with the NGO sector. NGOs are seen as a necessary accompaniment to one of the many shifts in development thinking, with the focus on alternative developments. As a process of development from below, NGOs have a natural concern for the civil society, which the state had undermined in its earlier approach to development (Toye, 1987). As a part of civil society, the NGOs offer several advantages, since they have the ability to experiment freely with innovative approaches and, if necessary, take risks.

Moreover, they are flexible in adapting to local situations and responding to local needs and therefore able to develop integrated as well as sectoral projects. NGOs due to the nature of their work and the underlying principles, enjoy good rapport with people and can render micro-assistance to every poor people, as they can identify those who are most in need and tailor assistance to their needs. It is quite imperative for an NGO to have the ability to communicate at all levels, from the neighborhood to the top levels of government, to be successful in its activities. Also, owing to their autonomous structure.

NGOs can be broadly classified as:

- a) Service providing NGOs:
- b) Empowerment NGOs; and
- c) Support NGOs

a) Service Providing NGOs

These are welfare oriented or service providing NGOs. They are inspired by the motto of 'helping others', and largely provide services for the poor and the marginalized communities. Much of these services have been in the area of health through clinics, hospitals, health provisions, Schools, colleges, training programmes, non-formal education, literacy, drinking water and sanitation, agriculture and irrigation, reforestation etc. The sector of development may vary but these organisations essentially provide a service needed by the members of a community. They provide this service with great sacrifice, high efficiency, and low expense, and with commitment and dedication. These services are flexible, responsive to the needs of the community, and tend to fulfill an important gap that exists in meeting the basic minimum needs of the community.

b) Empowerment NGOs

These are development-oriented NGOs, and directly work on the issues related to mobilisation and empowerment of people, or work through interventions requiring awareness building and advocacy in certain development sectors. They have contributed towards the development of many innovative approaches to strengthen the socio-economic status of the poor and the deprived. Their approach to planning, intervention in socio-economic programming, etc. has been innovative, flexible and impactful. Many of these NGOs start with a development intervention and then build strategies for organising and empowerment of the people. Some others start by bringing people together on issues of common concern empowering them through a process of reflection and struggle and then build on development interventions and initiatives for their regeneration and sustenance.

Support NGOs

These are the newly emerging categories of NGOs that provide a variety of support functions to other grassroots level NGOs, mostly of the types mentioned above. The support functions vary depending on the nature of the organizations being supported. Support organizations provide inputs that would strengthen the capacities of NGOs to function more effectively and with greater impact. They are therefore involved in training, evaluation, programme planning, etc. Many large NGOs have their own support units within the ambit of their organizations. Smaller grassroots level NGOs are often supported by separate support organizations. Such organizations contribute towards the strengthening of the work of grassroots NGOs by extending kinds of support which is otherwise not available to them. This could be educational support and sometimes even financial support. Support organizations that undertake information sharing and dissemination role regularly collect and distribute information about the successes and failures, the opportunities and threats, programmes and schemes, legislations and policies related to the work of other NGOs and development within the country or a given region.

Role of VOs/NGOs-

In order to understand the role of voluntary organizations in a concrete manner, Karnataka may be taken as a case study. Karnataka initiatives have been taken to enunciate people's participation and involvement of NGOs in implementing several schemes of the Central and State Governments. There are more than 500 NGOs in the State. The societies, organizations, associations, trusts or companies registered under relevant Acts are considered as Voluntary Organisations/NGOs. Informal groups like self-help groups formed under Stree Shaktiporgamme, Swarna Jayanthi Swarojgar Yojana, Swarna Jayanthi Shahari Rojgar Yojana are also included under voluntary sector. Continuous efforts are being made and encouragement provided to create awareness among the public through the NGOs/VOs in rural and backward areas and urban slums in implementation of various programmes. Voluntary Organizations have been involved to organize skill development training and awareness in the

fields of women and child development, social welfare, health, education, watershed development programme etc.

The role of Voluntary Sector in development has been considered vital due to their vast experience and knowledge with regard to local needs, problems and resources. The commitment on the part of the VOs/NGOs has been considered more effective since they are not bound by rigid bureaucratic system of rules and regulations. The voluntary sector is observed to operate with greater flexibility and base its activities on the felt needs of the community. There is a growing importance for NGOs with the increased budget allocation for poverty alleviation programmes. These organizations undertake research and studies on Social Sectors such as Health, Education, Social Welfare, Water Supply and Sanitation and other various government programmes and policies.

Health and Family Welfare

1. National Rural Health Mission - NRHM (2005-2012)

Recognizing the importance of Health in the process of economic and social development and improving the quality of life of our citizens, the Government of India has resolved to launch the National Rural Health Mission to carry out necessary architectural correction in the basic health care delivery system. The Mission adopts a synergistic approach by relating health to determinants of good health viz. segments of nutrition, sanitation, hygiene and safe drinking water. It also aims at mainstreaming the Indian systems of medicine to facilitate health care. The Plan of Action includes increasing public expenditure on health, reducing regional imbalance in health infrastructure, pooling resources, integration of organizational structures, optimization of health manpower, decentralization and district management of health programmes, community participation and ownership of assets, induction of management and financial personnel into district health system, and operationalizing community health centers into functional hospitals meeting Indian Public Health Standards in each Block of the Country. The Goal of the Mission is to improve the availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women and children.

Vision

The National Rural Health Mission (2005-12) seeks to provide effective healthcare to rural population throughout the country. It aims to undertake architectural correction of the health system to enable it to effectively handle increased allocations as promised under the National Common Minimum Programme and promote policies that strengthen public health management and service delivery. It has as its key components provision of a female health activist in each village; a village health plan prepared through a local team headed by the Health & Sanitation Committee of the Panchayat; strengthening of the rural hospital for effective curative care and made measurable and accountable to the community through

Indian Public Health Standards (IPHS) and integration of vertical Health & Family Welfare Programmes and Funds for optimal utilization of funds and infrastructure and strengthening delivery of primary healthcare. It seeks to revitalize local health traditions and mainstream AYUSH into the public health system. It aims at effective integration of health concerns with **A Case study of** determinants of health like sanitation & hygiene, nutrition, and safe drinking water through a District Plan for Health. It seeks decentralization of programmes for district management of health. It seeks to address the inter-district disparities, especially among districts including unmet needs for public health infrastructure. It shall define time-bound goals and report publicly on their progress. It seeks to improve access of rural people, especially poor women and children, to equitable, affordable, accountable and effective primary healthcare.

Objective

Reduction in Infant Mortality Rate (IMR) and Maternal Mortality Ratio (MMR). Universal access to public health services such as Women's health, child health, water, sanitation & hygiene, immunization, and Nutrition. Prevention and control of communicable and non-communicable diseases, including locally endemic diseases. Access to integrated comprehensive primary healthcare. Population stabilization, gender and demographic balance. Revitalize local health traditions and mainstream AYUSH. Promotion of healthy life styles.

Role of VOs/NGOs

National Rural Health Mission is implemented across the country from 2005 integrating Reproductive and Child Health (RCH), Immunization, Inter-sectoral Convergence, Disease Control Programme etc. Under this mission, focus has been on the involvement of voluntary sector in service delivery. NGOs are participating in RCH activities like maternal health, family welfare activities, promotion of institutional deliveries, ante and postnatal care, organizing health awareness camps etc. NGOs are also involved in Reproductive Track Infection (RTI)/Sexually Transmitted Infection (STI) control programmes through Karnataka State Aids Prevention Society. RCH activities in remote and underserved areas are being carried out through 82 NGOs in 17 districts. Several NGOs like Karuna Trust, JSS Medical College, Vydehi Institute of Medical

Sciences in medical college, JN medical college, Belgaum have taken up the responsibility of running PHCs in remote locations. Totally 52 PHCs are run by NGOs in the state. Similarly, some hospitals are also run on Private-public participation. Provision has been made to outsource the services of specialists in government health facilities. Institutional delivery of BPL women is also incentivized in accredited private nursing homes. Voluntary Organizations are also actively involved in capacity building of Accredited Social Health Activists (ASHAs) and Village Health and Sanitation Committees. The state has adopted innovative approach through Public Private Partnership, concise details as follows. NGO are being supported financially and technically to reach and intervene with these vulnerable populations. Voluntary organizations are involved in the National Leprosy Eradication Programme, blindness central programme.

Monitoring and Evaluation of the Mission

- Health MIS to be developed upto CHC level, and web-enabled for citizen scrutiny
- Sub-centres to report on performance to Panchayats, Hospitals to Rogi Kalyan Samitis and District Health Mission to Zila Parishat
- The District Health Mission to monitor compliance to Citizen's Charter at CHC level

- Annual District Reports on People's Health (to be prepared by Government/NGO collaboration)
- External evaluation/social audit through professional bodies/NGOs Mid Course reviews and appropriate correction

2. HIV infection and AIDS

Voluntary organizations have helped to provide hope in the face of the unprecedented challenges posed by AIDS. They can fill the void, tackle issues and deal with needs that others may not even recognize, or unable or unwilling to face. Many of them are involved in training, education and counseling services by sensitizing and motivating the community to take active participation in AIDS related activities, development of IEC materials etc. Some of them are also functioning as care centers. NGOs are playing a major role in the AIDS Control Programme. There are 78 voluntary Counseling and Testing Centres in Karnataka. They have trained over 9000 health workers and initiated programmes to Panchayat Raj Institution members through satellite. They provide pre test, post test, counseling & HIV testing for Diagnosis & Surveillance purposes.

Targeted Interventions

The targeted intervention being implemented through NGOs has been successful in reaching out to High Risk Groups who are otherwise not reachable. Twelve NGOs are being supported financially and technically to reach these vulnerable populations. The main aim of the programme is to reduce vulnerability and promote safer sexual behaviors.

3. CBOs implementing Drop-in Centre

The care of HIV infected people is the most challenging aspect in HIV/AIDS prevention. The experience shows that to mobilize the Community Support, the advocacy among PLWHAS and networking among them for creating an enabling environment is essential. Community support groups of PLWHAs are coming forward to provide emotional and social support to themselves, such community based organizations have the committed responsibility in developing the

positive attitude in the community towards individuals and families living with HIV/AIDS. Currently Karnataka State Aids Prevention Society supports five Drop-in-Centres and planning to open eight more.

4. Prevention of Parent to Child Transmission programme - PPTCT – NGOs/CBOs

Karnataka State AIDS Prevention Society is implementing the Prevention of Parent to Child Transmission programme, which is a national programme under Round II of the GFATM through the NGOs and CBOs across the State. The role of NGO under this programme is to motivate women in the community to attend antenatal OPDs, provide counseling on health education regarding RTI/STD, HIV/AIDS, family planning, safe sex practices, infant feeding, immunization and nutrition, community level counseling of the women and her partner on HIV testing and motivate them to visit the PPTCT centre and follow up of dropout women in the community for regular antenatal care.

5. NGO Activity under HIV – TB Programme:

Two NGO are working under HIV – TB Programme in eight districts and provide awareness of services of HIV and TB and home based care for HIV positives There are 561 Voluntary Counseling and Testing Centres in Karnataka.

1. Thaiy Bhagya

Under this scheme, recognized private hospitals will get an amount of `3 lakh for every deliveries including surgery conducted in their institution as incentive. However, the services provided are free to patients. The scheme is implemented to decrease the infant mortality rate and maternal mortality rate.

2. Citizen help desk

In order to make hospitals user-friendly address patients problems citizen help desk have been established in 20 district hospitals, which render 24 hours services. The services area arranged under public private partnership.

3. Leasing specialist services in maternal health in Santhermarahalli CHC,

Chamarajanagara district

A pilot project of leasing out of specialist services in maternal health in Santhermarahalli CHC of Chamarajanagara district has been entrusted to a private trust.

4. Arogya Bandhu

Under public private partnership, management of primary health centers has been out sourced to medical colleges, NGOs and trusts. Entire expenditure towards salary is being reimbursed.

5. Vajapaye Arogya Sree

This is a health insurance scheme is implemented to give free tertiary health services to the BPL families in Bidar, Raichur, Gulbarga, Yadgir and Bellary districts. It is expected to benefit nearly 16 lakh families who have been identified. The beneficiary can avail benefit of treatment up to a limit of 150,000 to 200,000 on family floater basis. The scheme has now been extended to 7 districts of Belgaum division,

6. In sourcing specialist under NRHM and KHSDP

To combat the crisis of human resources in health sector specialists in private sector is being in-sourced on contract, retainer ship/case basis at predetermined rate of remuneration/honorarium.

7. Mobile medical units

To reach under served people staying in remote difficult geographical area 95 mobile health units have been fictionalized under NRHM project and under Karnataka Health System Development and Reforms Project.

8. Suvarna Arogya Chaitanya

School children having major medical problems, needing surgery, appliances are identified and provided free surgical and appliances by tying up with empanelled hospitals under Yashaswini scheme.

Akshara Dasoha

Mid Day Meal is a flagship programme of Government of India implemented to achieve Universalisation of Elementary Education. Food should be provided to every hungry child as it is announced in the Memorandum of Understanding of child right by United Nations Organisation. Akshara Dasoha is a prestigious scheme with the commitment of providing an opportunity for children to grow healthy, strong and sturdy. The main motto of this programme is to free all Government and Government Aided school children from hunger thereby increase their learning abilities and achievements.

Emergence and foot steps of the programme

Under Midday Meals Scheme, 3 kilograms of rice per month per each child is provided to all the Government and Aided schools until 2001-02. To start with this programme was launched on a pilot basis in the 7 north eastern districts of the state. Akshara Dasoha Programme was continued from the year 2002-03 in seven districts of north eastern parts of Karnataka which were identified as backward, both educationally and economically.

Under this programme children studying in first to fifth standard in primary schools were served with hot cooked midday meals. During 2003-04 the programme was extended to the remaining 20 districts. This programme was further extended to Government Aided primary schools from the 1st September 2004. Further, the programme has been extended to cover all the Government and Aided primary school children of sixth and seventh standard from the 1st October 2004 and further extended to cover all government and aided high schools from 2007-08.

Objectives of the programme

- To increase the admissions and attendance of the school children.
- To avoid children from leaving the school in the middle of the academic year.
- To improve the health of the school children by increasing their nutrition level.
- To improve the learning level of children.
- To develop equality and inculcate national integration among children.

The number of schools covered under Midday Meals during 2010-11.

Schools Government Aided Total

Primary 45681 2603 48284

High Schools 4210 3275 7485

AIE Centres 253

Madrasas 58

Total 49891 5878 56080

2010-11 Enrollment, Attendance and Beneficiaries.

(lakhs)

Class Enrollment Attendance Beneficiaries

1-5 37.44 35.44 33.89

6-8 23.52 22.42 21.24

9-10 13.11 12.50 11.62

Total 74.07 70.36 66.75

Details of Nutrition

Every child gets 490 calories of nutrition and 8-10gms of protein per day by MiddayMeals. Details of nutritional values of meals, cost of cooking ingredients used, the number of beneficiaries of each day, cleanliness, safety, economical usage, additional nutritional tablets redisplayed on the kitchen wall writings in schools for public information. Every child gets 13.8gm protein per meal and every highschool student gets 728.35 calories and 20.7gm protein.

Role of NGOs in Mid Day Meal programme

As per GOI guidelines NGOs are associated in implementation of mid day meal programme where they have come forward with a motive of no profit basis. NGOs are supposed to have infrastructure facilities and previous experience in the field. No liability towards kitchen construction, honorarium to cooks and logistics involved in transportation of prepared food is borne by either by the Centre or the State. At present there are 100 NGOs participating in the programme providing hot cooked meal to 10.98 lakh children in 5577 Government and Government Aided schools.

Findings

The summary of analysis of the data over the years 2002-03 and 2003-04 reveals that by and large, with exceptions-

- Enrolment has increased / out of school population has reduced
- Dropout has reduced / retention has increased
- Attendance has improved
- Administration has geared up to meet the huge and complex efforts required for this program. The health, education and Food and Civil Supplies departments have worked in coordination to make this program effective.
- Communities have been synergized with the collective efforts required for this program

While it has been difficult to make categorical assertions relating to aspects such as health and learning achievement, there is anecdotal data to support the hypothesis that Akshara Dasoha Program has positively impacted both aspects. Many districts have reported that students are able to participate well in the both morning and afternoon sessions and this has a positive impact on their learning. Learning is also positively impacted due to better attendance.

The study also reveals that given the enormous complexity of the Akshara Dasoha Program, involving close interaction amongst multiple Government agencies such as Education, Health and Food and Civil Supplies departments, and local bodies and School Development Monitoring Committees etc., there is scope for improving some of the infrastructure and administration aspects of the programme. The study also provides information that can serve as a baseline for subsequent studies. A second study on Mid Day meal programme was conducted during the year 2008-09 by Price Waterhouse Coopers, Bangalore. Report is submitted.

Women and Child Development

The schemes implemented through NGOs are as under:

1. Santhwana
2. Scheme for care and maintenance of destitute and orphan children (destitute cottages)
3. Crèches for children of working mothers
4. Hostel for girls
5. Child Line Services
6. Fit Institutions
7. De-Addiction Centers
8. Swadhar
9. Integrated Street Children Programme

10. Ujwala

11. Training of Anganawadi Workers / Helpers

12. Shishu Griha Scheme

13. Adoption.

14. Scheme of Assistance for the Construction/Expansion of Hostel buildings for working women:

1. Santhwana

Women who are victims of various atrocities such as dowry, rape, sexual harassment, domestic violence etc are subjected to physical and mental torture besides having to face social & financial problems. With a view to console these women and rehabilitate them, the scheme of “Santhwana” was launched during the year 2000-01.

Objective:

- The scheme aims at providing legal assistance, financial relief, temporary shelter and protection to victims of atrocities.
- Helps them to be self-reliant by providing training in order to empower these women to lead a life like other women in the society. Besides shelter and counseling, the victims are also provided with assistance for pursuing education and vocational training for self-sustenance. In extreme cases of atrocities involving the death of the victim, financial relief in the form of deposit is given to her kin, which can be encashed by her/ him on attaining majority. The scheme is being implemented through NGOs in all the district head quarters and taluks. In total 141 Santhwana Centres are functioning in the State. Sanctions for Santhwana Centres are given preferably based on Dr.Nanjundappa’s Report. During the year 2010-11, a budget allocation of `655.00 lakhs has been made for the scheme. `102.47 lakhs has been incurred upto the end of October 2010.

2. Scheme for care and maintenance of destitute and orphan children (Destitute

Cottages)

The care and maintenance of orphan children, children of single parents and children from below poverty line families.

Objectives

- ☐ To rehabilitate destitute children as normal citizens in the society
- ☐ Prevent further destitution by providing food, clothing & shelter etc.
- ☐ Utilize existing institution run by NGOs with Government Institutions.

Financial assistance is provided for a unit of 25 children each & accommodation will be provided on the basis of a cottage system. The services of a housemother for supervision and a trained social worker for casework are essential. Non-recurring grant is admissible for construction of cottage, furniture, equipments and utensils. At present 329 destitute cottages are functioning in the State. An amount of `433.63 lakhs is allocated, out of which an amount of ` 30.61 lakhs expenditure is incurred up to the end of October-10.

3. Creches for the Children of Working Mothers

The scheme provides Crèches for children of working women in rural areas who are engaged in agriculture and other occupations.

Objectives:

- To provide day care services for children of working mothers between the age group of 0-3 years for a better and safe environment and to ensure a healthy growth and there by lower the mortality rate.
- Services provided are health care, supplementary nutrition, sleeping facilities, immunization, play and recreation. There are 273 creches functioning. An amount of `76.31 lakhs is allocated, out of which an amount of `2.54 lakhs expenditure is incurred up to the end of October-10.

4. Hostels for Girls

The girls from rural, most backward areas drop out of school at a very early age in view of the non availability of suitable and safe accommodation in hobli headquarters or even taluk headquarters to pursue their education.

Objectives:

☒ To enable girls from rural areas to avail facilities for higher education.

☒ To reduce school dropouts.

At present 43 girls hostels are functioning in the state (24 hostels for girls studying in 6th Standard and above and 19 Post matric hostels).An amount of `258.49 lakhs is allocated, out of which an amount of `88.02 lakhs expenditure is incurred up to the end of October-10.

5. Child Line Services

Child line is a 24X7 free phone emergency out reach service for children in distress and who are in need of care and protection, linking them to long term services.

Objectives

☒ To ensure best interest of child is secured

☒ To provide a flat form of networking amongst organization to provide linkages to support system which facilitate rehabilitation of children

☒ To jointly determine strategies to reach out more effectively to children

During 2010-11 an amount of `50.00 lakhs is allocated out of which `12.50 lakhs has been spent up to the end of October 2010.

6. Fit Institutions

Under Juvenile Justice Act for providing care and protection to deserted, orphaned infants and children.

Objectives

☒ Providing care and protection to orphaned and deserted infants and children after being recognized as fit. Only such NGOs who are recognized as fit under Juvenile Justice Act 2000 and Amendment Act 2006 can opt for financial assistance from the GOI under the scheme. These institutions receive grants at the rate of `500 per child per month towards maintenance. At present there are 41 such institutions are working but only 11 institutions are covered under GIA.

An amount of ` 43.80 lakhs is allocated, out of which an amount of ` 27.74 lakhs expenditure is incurred up to the end of October 2010.

7. Scheme for prevention of alcoholism and substance (drugs) abuse

Grants are provided by the Government of India to run de-addiction centres wherein counseling, treatment and rehabilitation facilities are provided.

Objectives:

☒ To create awareness and educate the people about the ill effects of alcoholism and substance abuse.

☒ To provide for community-based services for the identification, motivation, counseling, de-addiction, after care and rehabilitation of addicts. Government of India provides 90 per cent of grants and the remaining 10 per cent will be borne by the organization. 31 Integrated Rehabilitation Centres for addicts has been sanctioned..

`290.00 lakhs is allocated for the year 2010-11.

8. Swadhar - A scheme for women in difficult circumstances

This is a Central sector scheme for providing holistic and integrated services to women in difficult circumstances such as destitute widows, women prisoners released from jail and without family support, women survivors of natural disasters; trafficked women/ girls rescued

from brothels or other places or victims of sexual crime, mentally challenged women who are without any support, etc.

Objectives

☐ To provide shelter, food, clothing and care to marginalized women/ girls living in difficult circumstances.

☐ To rehabilitate them socially and economically through education, awareness, skill up gradation and personality development.

☐ The scheme also supports a helpline for women in distress, counseling centre, training centre and medical centre.

The scheme is implemented through voluntary organizations including Department of Women and Child Development and Social Welfare Boards, State Women Development Corporation, Urban bodies, etc., provided they have the required experience and expertise in the rehabilitation of such women. Government of India has sanctioned 34 Swadhar Centres for Addicts, out of which 33 are functioning in the State.

9. Integrated Street Children Programme

The programme will provide non-institutional support necessary for the wholesome development of street children particularly those without homes and family ties and children especially vulnerable to abuse and exploitation such as children of sex workers and children of payment dwellers.

Objectives

☐ Provision of shelter, nutrition, health care, sanitation and hygiene, safe drinking water, education and recreational facilities and protection against abuse and exploitation to destitute and neglected street children.

☐ Enrollment in schools, vocational training, placement, health services, reducing drug

& substance abuse / HIV – AIDS in street children. For street children without homes and family ties, NGOs are supported to run 24hours shelter. 90% of the cost of the project will provided by the Government of India and remaining shall be borne by the Organization / Institution concerned. At present 5 NGOs are implementing this scheme in the State.

10. Ujwala

The Ministry of Women & Child Development has formulated Ujwala – a new Comprehensive scheme. The new scheme has been conceived primarily for the purpose of preventing trafficking on the one hand and rescue and rehabilitation of victims on the other.

Objectives

☐ Prevention of trafficking and rescue, rehabilitation of victims of trafficking and commercial sexual exploitation. The implementing NGO can apply for one or more components. At present 26 organizations are implementing the scheme. Component of the scheme include networking with law enforcement agencies, rescue operation, temporary shelter for victims, repatriation to hometown and free legal services etc. `31.02 lakhs expenditure is incurred up to the end of October 2010.

11. Training of Anganawadi Workers / Helpers

Under Integrated Child Development Services, the training of functionaries like Supervisors, Anganawadi Workers / Helpers is taken up by the State Government with Central / State funding.

Objectives

☐ Job training / refresher training / orientation training of ICDS Functionaries like Supervisors, Anganawadi Worker / Helpers.

☐ GOI funds 90% of the training programme and 10% borne by the State Government.

☐ It is proposed to bring a social change in society by empowering ICDS functionaries with sufficient knowledge about health, nutrition and childhood education. The Government

sanctions training centers based on the actual needs of the State. NGOs with sufficient infrastructure facilities for 50 trainees and those working in the field of Women and Children welfare can apply to open an MLTC / AWTC. Funds are released for non-recurring and recurring expenditure. There are 20 AWTCs and 1 MLTC in the State. An amount of `600.00 lakhs is allocated, out of which an amount of `132.71 lakhs expenditure is incurred up to the end of October-10.

12. Shishu Griha Scheme

The scheme aims to promote in-country adoption and to prevent illegal adoption of children. The Centre provides grants for running Shishu Gruhas by the Department. Four Shishu Gruhas are functioning in the State.

Objectives

- ☐ Promotion of in-country adoption and prevention of illegal adoption.
- ☐ Provides institutional care and protection to 0-6 year child who are abandoned/ orphaned/ destitute.

At present all the 4 units are functioning with a unit cost of `6.08 lakhs.

13. Adoption

The Juvenile Justice (Care and Protection) Act 2000 and its Amendment Act 2006 provides for rehabilitate and re-integration of children through Adoption, foster-Care, Sponsorship and after-care. An Adoption Cell is functioning in the Directorate and a State Level Advisory Commission has been constituted to monitor and implement the various adoption related activities in the State.

Objectives

- ☐ To identify and promote and regularize adoption of children who are legally free for adoption.

☒ The ultimate aim is to provide the child with a family

☒ Most viable alternative to institutional care

The Adoption co-ordination Agency is working since 1987 and is co-coordinating all adoption related activities. KSCCW is the scrutiny agencies. At present 32 NGO's are given recognition by the State Government and are working as Specialized Adoption Agency(SAA). During 2010-11, 5 SAAs will be given under ICPS programme.CARA is the nodal agency for streamlining inters – country adoption. All adoption processes are incorporated in the new Integrated Child Protection Scheme (ICPS).

14. Scheme of Assistance for the Construction/Expansion of Hostel building for

working women

The Government of India provides financial assistance to the extent of 75% of the estimated cost for the construction/expansion of the hostel for working women run by registered voluntary organisations working for the welfare of women and the state Government provides 12.5% of the estimated cost and the organisation has to bear the remaining 12.5% of the total construction costs.

Objectives

☒ To provide cheap and safe hostel accommodation to working women living out of their homes.

☒ To provide accommodation to women, who are being trained for employment, provided the training period does not exceed one year. So far, 76 Working Women's Hostels have been sanctioned, of which 66 hostels are functioning. During the year 2010-11 an amount of `15.60lakhs was allocated for State share, out of which an expenditure of `0.65 lakhs has been incurred up to the end of October 2010.

Welfare of Backward Classes

1. Pre-metric and Post-metric Hostels

Since backward classes constitute major chunk of population in the State, social educational and infrastructure improvement of backward classes is vital for the overall development of the State. Various measures are being taken by Government to improve the economic and educational status of the backward classes. The NGOs are also supporting this cause of the State in providing facilities to the backward classes particularly in assisting in their educational advancement. Apart from Government Voluntary organizations are also running hostels for pre metric and post-metric students catering to the needs of all sections of the society. Presently, NGOs are running 240 pre-metric hostels and 18 post-metric hostels. A total of 12,898 and 654 inmates respectively are getting boarding accommodation and other facilities in the State. NGOs get a boarding grant of `500 per month and 600 per month for the inmates for 10 months respectively for pre-metric and post-metric hostels from the Government of Karnataka. For 2007-08 to 2009-10 an allocation of `1738.63 lakhs was provided in the budget, out of which an amount `1505.95 lakhs was spent. During 2010-11 an amount of `711.54 lakhs is earmarked for grant-in-aid to private hostels run by the NGOs and nearly half of the budgetary allocation have been spent. Under the scheme of development of various communities, the Government is sanctioning `5.00 lakhs towards the grant for construction of hostel buildings by the NGOs belonging to various backward classes. During 2010-11 up to end of November 2010 `15.00 lakhs has been released for construction of 3 hostel buildings. NGOs are being assisted by the Government of India for training of Backward classes thereby improving the quality of manpower among the backward classes.

Welfare of Minorities

Construction of Shaadimahals /Community Halls for Minorities

To encourage and promote cultural activities of the religious minorities financial assistance for the construction of Shaadimahals/Community Halls is provided to minority organizations. Grants up to `50.00 lakhs is provided for such mahals at district headquarters and up to `20.00 lakhs for the taluka places. During the year 2009-10 a sum of `1000.00 lakhs were sanctioned for this, purpose out of which `999.10 lakhs is sanctioned for 109 Minority Organization for the

construction of Shaadimahals/Community Halls In the year 2010-11 `1000.00 lakhs is provided out of which `528.00 lakhs is sanctioned to 62 organization for this purposes.

Students Hostels Run By Minority Institution

Students of minority community studying in middle and high schools are provided with hostel facilities to curtail dropouts. At present 60 such Minority Pre-metric aided hostels are working in the State benefiting 3350 students. Each student is paid at `500 per month for 10 months towards food charges. During 2009-10 an allocation of `161.63 lakhs was provided out of which 133.52 lakhs is spent to benefit 2722 inmates. During the year 2010-11 an allocation of `154.91 lakhs is allocated out of which `34.8 lakhs is granted benefiting 2050 inmates.

Orphanages for Minorities

In the state 40 Orphanages run by the Minority self help Organizations are provided Financial Assistance to benefit 3569 Orphans and Poor Children .In these Orphanages students studying in 1st to 10th std are admitted and `350 per month per student is allocated for providing food to these inmates. During the year 2009-10 `41.91 lakhs swas provided out of which `41.74 lakhs is spent, benefiting 1950 inmates. In the year 2010-11 `96.41 lakhs is provided out of this `39.00 lakhs is spent to benefit 1250 inmates.

Welfare of Scheduled castes

Voluntary organisations are maintaining Pre-metric and Post-metric hostels for Scheduled Caste students with a view to encourage their education. Govt. of Karnataka is providing financial assistance to maintain these hostels by providing food charges to the inmates. 255 Grant-in-aid Pre-Matric hostels are being run by voluntary organisation for the sanctioned strength of 14925 students. State Govt. is providing financial assistance of ` 500/-per student per month for the maintenance of food charges as per Govt. norms. The management committee will provide other facilities. 92 Grant-in-aid Post-Matric hostels are being run by voluntary organisation for the sanctioned strength of 7660 students. State Govt.is providing financial assistance of ` 600/- per student per month for the maintenance of food charges as per Govt. norms. The management committee will provide other facilities. Under this scheme NGO's shall be

recognised management of hostels is a recognized body. Management has obtained prior permission of the Govt. to start the hostels. Management had run the hostel satisfactorily at least for a period of two years out of its own funds initially. Lodging and boarding facilities are provided free of cost to all students in the hostels and no fee or donation is collected directly or indirectly from the students in cash or kind or both. Accommodation provided for lodging is not less than 30 sq.ft. including kitchen room, dining hall, store room, bathroom, lavatories , library with provision for minimum medical facilities, indoor and out door games. Adequate staff appointment should be done. 75 per cent of the seats are reserved for Scheduled Castes/ Scheduled Tribes and the remaining 25% will be filled from among other backward classes.

Construction of Grant-in-aid-hostels

With a view to encourage the management of the Grant-in-aid hostels to construct building, so that, suitable accommodation may be provided to Scheduled Caste / Scheduled Tribe students Govt. have been giving Grant-in-aid to agencies for construction of hostel buildings. Govt. will bear 75% cost of the estimation or `10.00 lakhs, whichever is less. During the year2009-10, 249 NGOs were running the hostels for scheduled caste students. `640.67 were provided to these organizations. The expenditure incurred was`469.89. During the year 2010-11, 255 NGOs are running the hostels for scheduled caste students. `561.23 were provided to these organizations. The expenditure incurred was `94.42(up to October 2010).

3.8. Key words:

New urban social structure, Urban Informal Sector, Urban formal Sector, Urban Educational Institution, Urban Leisure and Recreation, Voluntary organizations

3.9. Check your Progress

Long type questions

1. Explain the new Social Structure in Urban India.
2. Define Informal Sector and discuss its characteristics.

3. Analyze various occupations in the Informal sector.
4. Define formal sector and discuss its characteristics.
5. Delineate the differences between the informal sector and formal sector.
6. Define voluntary organization and discuss the role of voluntary organization in Urban India.

Write short notes on:

- a. Urban Leisure
- b. Urban Recreation
- c. Education in Urban India
- d. Urban profession
- e. Secondary institutions
- f. Urban leisure
- g. Urban recreation

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UNIT-IV

PROBLEMS OF URBAN INDIA

4.1. OBJECTIVES

4.2. INTRODUCTION

4.3. URBAN HOUSING PROBLEM

4.3.1. Magnitude of the problem

4.3.2. Dimensions of the problem

4.3.3. The problems of Homelessness

4.3.4. Crowded Conditions

4.3.5. Consequences of Crowdedness

4.3.6 Surmounting the Problem

4.4. URBAN TRANSPORT PROBLEMS IN INDIA-

4.4.1 Vehicular growth and availability of transport infrastructure in metropolitan cities

4.4.2. Vehicular emission, congestion, and road safety issues

4.4.3 Urban road safety situation

4.5. POLICY MEASURES TO IMPROVE URBAN TRANSPORTATION IN INDIA

4.5.1 Promoting regional economies and compact townships

4.5.2 Focusing on public transport particularly bus transport

4.5.3 Introducing variety of bus transport services

4.5.4 Improving the efficiency of bus transport operation

4.5.5 Adopting optimal pricing strategies for transport services

4.5.6 Enhancing transport coordination

4.5.7 Promoting car sharing

4.5.8 Restraining the use of polluting vehicles and fuels

4.5.9 Tightening vehicle emissions standards and inspection and maintenance programs

4.5.10 Implementing demand side management measures

4.5.11 Using supply side management measures

4.5.12 Encouraging green modes

4.5.13. Introducing public awareness programs

4.5.14. Strengthening the urban institutions

4.6 URBAN COMMUNICATION

4.7. URBAN ENVIRONMENTAL POLLUTION: AN INTRODUCTION

4.8. URBAN SANITATION

4.8.1 Integrated Low Cost Sanitation Scheme (ILCS)

4.8.2 JNNURM

4.8.3 National Urban Sanitation Policy (NUSP) Extent of the Policy:

4.8.4 Key issues of urban sanitation

4.9. CRIMES IN URBAN INDIA:

4.9.1 Crime against women in cities

4.10. KEY WORDS:

4.11. CHECK YOUR PROGRESS

4.12. REFERENCES:

4.1. OBJECTIVES:

The main objectives of this unit are to acquaint the readers with the following problems:

- ❖ Urban Housing**
- ❖ Urban Transport**
- ❖ Urban Communication**
- ❖ Urban Pollution**
- ❖ Urban Sanitation**
- ❖ Urban Crime**

4.2. Introduction:

A problem is a condition which affects a significant number of people in ways considered undesirable, about which it is felt that something can be done through collective social action. Great cities have always had the power to intensify the triumphs and tragedies of human existence. Therefore, the world's demographic, environmental and social problems are most evident in urban places. According to the modernization theory, as poor societies industrialize and consequently urbanize, greater productivity will simultaneously raise the living standards and reduce poverty. Throughout the history, the city has improved peoples living standards more than any other kind of settlement. But cities of today are finding it extremely difficult to accommodate the increasing inflow of migrants. A large number of these migrants are rural poor, seeking employment in the formal or informal sector. Once they move towards the cities either in search of jobs or better prospects, they rarely go back to villages. Thus urban concentration is taking place consistently many urban problems spring from the heavy concentration of population in a limited space. Urban poverty and problems of housing and slums, problem of drinking water, problem of drainage, transport and traffic problem, problem of power shortage problem of environmental pollution problem of social evils like crime of different types, problems of transport and communication etc. have drawn the attention of sociologists, anthropologists, economists, political scientists, geographers and urban planners. They feel that these problems are the result of intolerable living conditions in urban areas. Some others observe that urbanization is inevitably linked with modern development, and problems are the outcome of this development, so they are a necessary burden to carry.

Let us now analyze in brief the gravity of some of the problems of urban India.

4.3. URBAN HOUSING PROBLEM:

Shelter is the basic human requirement. Even after 57 years of independence, the country is still grappling with the growing shelter problem, especially of the poor. The problem has further been compounded by the rapid increase in urban population. Constant migration of rural

population to cities in search of jobs is causing unbearable strain on urban housing and basic services.

There is a severe housing shortage in the urban areas with demand – supply gap increasing day-by-day. The National Building Organization (NBO) had estimated the 1991 urban housing shortage at 8.23 million, and had expected the absolute shortage to decline progressively to 7.57 million in 1997 and 6.64 million in 2001.

In some small towns in India, the problem is not the lack of housing facilities but the lack of adequate housing facilities. Here, there is a surplus of houses when compared with households but these houses are unfit to reside.

The people who are most likely to become homeless are those who have least resources as providing housing is a profit-oriented industry. They cannot purchase houses nor can they afford high rent, so they live in unfit accommodation, as the rents demanded for such an accommodation is much low. Some very poor people prefer to squat rather than even rent an accommodation, thus leading to the growth of slums.

4.3.1. Magnitude of the Problem

The total housing shortage at the end of tenth plan has officially been assessed as 24.71 million dwelling units for 67.4 million Households, where 98% of this shortage was in the Low Income and Economically Weaker Sections (EWS) segment. The situation even at the end of 11th Plan, despite efforts envisaged to be implemented, is also not projected to improve, but rather this shortage is expected to escalate to 26.53 million houses for 75.01 million households.

4.3.2. Dimensions of the Problem

(i) Un-planned growth of settlements

A number of housing clusters have mushroomed in and around various metropolitan centres in haphazard and unplanned manner, without a proper layout and devoid of service lines and other essential facilities. These unauthorized developments are encroachments on land parcels belonging to Govt. bodies, public- private-institutions or areas meant to be green belts. The removal/ re-settlement of these overcrowded un-hygienic clusters, commanding massive vote

banks, is a serious challenge to correcting these aberrations for a planned growth of cities, especially in our democratic set-up? Therefore, massive concerted effort needs to be made with best of administrative actions and deft political handling for the sake of our future generations.

(ii) Non availability of developed land and ineffective and unfavorable land management

There is dearth of developed and serviced land parcels at reasonable rates, especially to meet the needs of most needy section of society. The slum clusters currently inhabited by these deprived sections are located in high land cost neighborhoods near central business districts of the metropolitan centres. These land parcels dotted with shanties apart from being eye sores and not properly serviced also mean in-appropriate and gross under utilization of precious land banks.

There is lack of development and enforcement of master planning for long-term growth of cities with earmarked areas for different sectors of growth like light/heavy industry, commercial, Education, health, housing forests and parks etc. serviced by appropriate infrastructure and transportation system. Therefore earmarking of appropriately serviced land with needed infrastructure and growth promoting land management policy are the urgent need of the time.

The current system of management of land records manually by a junior level functionary at district level in different units of measurement, complicated by conflicting hereditary claims are subject to exploitation and lead to long drawn out legal battles. Moreover, the land development rules, permitting very low FSI utilization even in costliest central business districts is ir-rational and far below the international norms. The fees for registration of property deeds is also unreasonably high and needs urgent rationalized.

The remedies would include ensuring that the Development Plans/Master Plans as well as Zonal Plans and Local Area Plans being made and updated regularly, so that adequate provision is made for the homeless as well as slum dwellers. Prepare Master Plan and Metropolitan Plans in

consonance with the concerned District Plan and the State Regional Plan. Identifying city specific housing shortages and preparing city level Urban Housing & Habitat Action Plans for time bound implementation.

For supply & management of Land a National Land Policy should be developed for optimal use of available resources including enhanced supply of serviced land for sustainable development. Promote optimal utilization of land by innovative special incentives like relaxation of FAR for ensuring that 20-25% of the FAR are reserved for EWS/LIG units or issuance of Transferable Development Rights for clearance of transport corridors and availability of FAR in outer zones. Consider for upward review, the presently authorized Floor Area Ratio (FAR) in line with international practice of making more efficient use of scarce urban land through construction of highrise buildings in consonance with densities specified in statutory Master Plans.

Promote planning and development of industrial estates along with appropriate labor housing colonies serviced by necessary basic services. Incorporate provisions of model building bye-laws prepared by Town & Country Planning Organization (TCPO) and National Building Code in their respective building bye-laws. Make suitable provisions in the Building Bye-laws for innovative energy conservation practices and mandatory rain water harvesting for specified owners of buildings. In order to ensure that 10 to 15% of land or 20 to 25% of FAR /FSI, whichever is greater, is earmarked in every new public/private housing project, appropriate spatial incentives to be developed by Urban Local Bodies (ULBs) and Development Authorities.

Encouragements should be given to adoption of critical urban reforms relating to municipal laws, building bye-laws, simplification of legal and procedural frameworks, property title verification system and allied areas. Promote improvements for elimination of ambiguities in transaction of conveyance deeds, lease deeds, mortgages, gifts, partition deeds and allied property-related documents.

Slum up-gradation with partnership between the Central Government, State Governments, Urban Local Bodies, Banks/MFIs and potential beneficiaries should be promoted

Growth of a city beyond reasonable limits imposes unbearable strain on its services. City planners should be encouraged to lay down norms for development of urban sprawls and satellite townships. Reduction in the rate of in-migration into mega and metro cities is urgently needed through preparation of State/UT level regional Plans based on fast transport corridors for balanced growth.

Model bye-laws should be developed to promote the use of renewable energy sources particularly solar water heating systems in residential and commercial buildings. Promote appropriate ecological standards for protecting a healthy environment and providing a better quality of life in human settlements. Special attention will be paid to housing in coastal areas in order to promote fragile ecology. Further, adequate mangrove and allied plantations should be promoted in coastal areas especially those which are in high disaster-prone zones to avoid loss to life from natural disaster. Greenfield towns & integrated urban housing extensions of existing towns with complementary infrastructure or Special Economic Zones (SEZs) with both FDI and national investments in housing and infrastructure should be developed. It must be ensured that such fully integrated housing projects are well connected by MRTS corridors.

Regulatory measures for planned development in an effective manner should be ensured. Check the growth of unauthorized colonies, new slums, and unauthorized constructions, extensions of existing properties and commercialization of residential areas.

Public-Private Partnerships in planning and funding based on potential of local level stakeholders should be promoted. Suitable models for private sector's assembly of land and its development for housing in accordance with the Master Plan. Promote Residents' Welfare Associations (RWAs) for specified operation and maintenance of services within the boundaries of given colonies as well as utilize their assistance in developing an early warning system relating to encroachments should be developed.

Sustainability issues in development should be adequately taken care of, for instance by developing Green belts around cities with a view to maintaining the ecological balance. Suitable green recreational areas like zoo, lakes and gardens will be earmarked /developed for public visits in the Master Plan of each city/town. Water bodies shall be protected with special

emphasis on keeping the flood plains of tropical rivers free from construction or encroachments. Efforts should be made to encourage cities/towns to keep a significant proportion of the total Master Plan area as 'green lungs of the city.

(iii)Lack of Financial Resources

The National Housing Bank (NHB) and NCAER estimate the market size of the underserved segment at over a 100 million households. Most of this population have limited or no access to affordable housing or housing finance despite being able to afford simple habitable units. The International Finance Corporation (IFC), the private sector arm of the World Bank Group, however, has indicated that estimated investments to meet this housing requirement through 2012 as close to \$80 billion. IFC is a leader in sustainable investment in emerging markets. IFC promotes private sector development and economic growth as a way to reduce poverty and improve people's lives.

A number of Housing Finance Companies and Microfinance institutions have shown interest in entering/expanding housing finance product offerings. However, such institutions have limited experience in managing long-term collateralized financial products and require substantial assistance in capacity building.

IFC provides advisory services by establishing partnerships with donors, governments, and the private sector to design and deliver technical assistance programs and advisory services that promote entrepreneurship, improve the investment climate, mobilize private sector investment and enhance the competitiveness of micro, small and medium enterprises. The Working Group on Urban Housing pertaining to the 11th Plan has, however, made different assumptions on unit cost of construction of houses in million plus cities and other urban areas for estimating the investment required for overcoming the housing shortage. The total estimated investment for meeting the housing requirement up to 2012 was estimated by it to be of the order of Rs.3, 61,318.10 crores. This consisting of Rs.1,47,195 crores for mitigating housing shortage at the beginning of 11th Plan and Rs.2,14,123.10 crores for new additions to be made during the 11th Plan period (this includes construction of pucca houses & upgradation of semi-pucca and kutcha housing units).

The National Urban Housing and Habitat Policy issued by the Government of India recognizes the fact, that public sector resources alone cannot meet this high demand. It advocates for the involvement for multiple stakeholders and seeks to promote public private partnerships to meet this demand.

4.3.3. The problems of Homelessness

As a complex problem; the circumstances of homeless people vary greatly. Homelessness is sometimes a product of shortage of houses, but in some cases homeless-ness is caused due to other reasons also. Four main issues are found to be the causes for homelessness:

(i) Shortages of housing:

If there are not enough places for people to live, then some-one has to go without and those who are excluded are generally the poorest people.

(ii) Entitlement to land:

People erect temporary shelters rather than be homeless. Squatters usually build temporary shelters at first, but over time these settlements are given concrete shape and become more established.

(iii) Entitlement to housing:

If people are not entitled to use the houses which exist, they may be homeless, even when there is no apparent shortage. Some people are excluded because of their circumstances—street children are an example. The main reason for exclusion, however, is financial—homeless people are those who cannot afford the housing which is available.

(iv) Personal situation of homeless people:

Homelessness is often attributed to the characteristics of the homeless person, such as alcoholism and psychiatric illness; or to the social situation of homeless people, such as unemployment and marital breakdown (this condition mostly happens with women in India). People in these situations only become homeless if they are excluded from housing, or do not have enough resources to secure alternative housing.

4.3.4 Crowded Conditions:

Many households in urban areas have to cope with increasingly crowded conditions, although this is certainly not true for everyone. The housing conditions improve when people build high buildings, sometimes more than five storeys, to increase the number of houses. Many urban centres have very high population densities. The house owners therefore rent out numerous rooms to migrants. Poor migrants live under the most crowded conditions. They do not have access to ancestral residential land.

Therefore, they depend on the rented accommodation, which they often share with many others to save money. Some poor households of the original population also live in very crowded dwellings for two other reasons. First, many families expand and split up into multiple households, while the land available for construction becomes unaffordable. They are thus forced to fit more people into the same space or house or else to split up the existing plots and dwellings to accommodate a new household. Second, in the absence of sufficient income from other sources, some households are inclined to rent out a portion of their living space or sheds to tenants.

4.3.5 Consequences of Crowdedness:

Some of the consequences of congestion (over crowdedness) are as follows:

- i. According to official estimates, the present shortage of houses is about 7 million in urban areas. About 19 per cent of the Indian families live in less than 10 square metres of space leading to congestion. For example, about 44 per cent of families in the urban areas live in one room only.
- ii. The economics and health costs of congestion and haphazard movement of traffic are very heavy, besides exposing commuters and pedestrians to a high risk of accidents. Urban environment also suffers from degradation caused due to over-population. The dust load in the air in these cities is very high.
- iii. Crowding (higher density of population) and peoples apathy to other persons' problems is another problem growing out of city life. Some homes (which consist of one single room) are so overcrowded that five to six persons live in one room. Overcrowding has very deleterious

effects. It encourages deviant behaviour, spreads diseases and creates conditions for mental illness, alcoholism and riots. One effect of dense urban living is people's apathy and indifference. Most of the city dwellers do not want to get involved in others affairs even if others are involved in accidents, or are molested, assaulted, abducted and sometimes even murdered.

4.3.6 Surmounting the Problem:

In India, housing is essentially a private activity. The state intervenes only to provide legal status to the land. The state intervention is also necessary to meet the housing requirements of the vulnerable sections and to create a positive environment in achieving the goal of 'shelter for all' on self-sustainable basis.

In view of the above aim, the government introduced Housing and Habitat Policy in 1998, which aimed at ensuring the basic need 'Shelter for all' and better quality of life to all citizens by harnessing the unused potentials in the public, private and household sectors. The central theme of the policy was creating strong Public/Private partnership for tackling the housing and habitat issues.

Under the new policy, government would provide fiscal concessions, carry out legal and regulatory reforms, in short government as a facilitator would create the environment in which access to all the requisite inputs will be in tune in adequate quantum and of appropriate quality and standards.

The private sector, as the other partner, would be encouraged to take up the land for housing construction and invest in infrastructure facilities. Cooperative sector and Public Housing Agencies are also being encouraged to share the responsibility of providing housing facilities. The government has even repealed the Urban Land Ceiling and Regulation Act (ULCRA), 1976, to facilitate land for housing activity. Upgradation and renewal of old and dilapidated housing is also encouraged.

Another major problem is the lack of resources especially with people belonging to the middle class. To overcome this problem, housing finance institutions such as National Housing Bank, a subsidiary of the Reserve Bank of India, was established in July 1988.

The Housing and Urban Development Corporation (HUDCO) also started functioning with the financial support provided by the Government of India. HUDCO's focus is on providing housing facilities for economically weaker sections (EWS) and for low income group (LIG). With the advent of many private banks, a number of schemes such as providing tax concessions and lower interest rates have been introduced to promote the housing sector.

The government has also introduced some schemes to curb the housing problem. They are as follows.

i. Subsidized industrial housing scheme:

This scheme was started in September 1952, to provide houses to the labourers who worked before 1948 and 1952. The Government of India gave loans to the extent of 65 per cent to various industries, state government, legal housing construction societies and cooperative societies to construct houses for the labourers. The labourers could purchase these houses according to the rules framed by the government.

But these houses could not be sold or alienated without prior permission of the government. But this scheme did not succeed much because of the lack of cooperation of mill owners. In the third Five-Year-Plan, it was made obligatory for mill owners to provide housing facilities to their labourers. In the fourth Five-Year-Plan, a provision of Rs. 45 crore was made for this purpose. The fifth plan also included similar provisions. Apart from the central government, state governments have also formed various Housing Boards and implemented societies and various schemes.

ii. LIG housing schemes:

This scheme was started in 1954. Persons who have income less than Rs. 600 per annum could get a loan up to 80 per cent. Local and cooperative bodies are given such loans.

iii. Slum clearance and improvement scheme:

This scheme was started in the year 1956 to give financial assistance to the state governments and local bodies for improving the slum areas. It was estimated then that about 12 lakh houses were not fit for dwelling. Hence, the long-term and short-term schemes were started. But as it

was not possible to provide houses to all the people living in slum areas, this scheme could not progress satisfactorily.

iv. Middle-income group housing scheme:

Under this scheme, the people of middle-income group are given loans for constructing the houses. The state government also gives loans on low rates of interest.

vi. Rental housing schemes:

This scheme was started in 1959 to provide houses on rent to the state government employees.

vi. Land acquisition and development scheme:

The government felt that the LIG and middle-income group people could construct houses if land was made available to them on a reasonable price. For this purpose, a plan was set up under which the state governments could acquire land and plots at suitable places, develop them and give them away to the needy people.

The government has now started focusing on providing housing facilities but has not thought much about solving problems that are connected with human settlements, such as the problems of improving and managing the civic services, constructing inexpensive houses and conserving energy and recycling waste. Lack of proper water supply and sanitation facilities for drainage system and garbage disposal are major problems in most of the modern urban centres of today.

Some of the steps outlined in the National Urban Housing and Habitat Policy include:

- i. A Secondary Mortgage Market should be promoted by the Reserve Bank of India (RBI)/National Housing Bank (NHB). This will enhance transparency and flexibility in the housing market.
- ii. Residential Mortgage Based Securitization (RMBS) need to be nurtured through NHB, Scheduled Banks and Housing Finance Corporation (HFCs).
- iii. A Model Rent Act should be prepared by the Government of India to promote rental housing on the principle that rent of a housing unit should be fixed by mutual agreement

between the landlord and the tenant for a stipulated lease period prior to which, the tenant will not be allowed to be evicted and after the expiry of the said lease period, the tenant will not be permitted to continue in the said housing unit.

- iv. The feasibility of a National Shelter Fund to be set up under the control of the National Housing Bank for providing subsidy support to EWS/LIG housing would be examined in consultation with Ministry of Finance. The NHB will act as a refinance institution for the housing sector.
- v. Efforts should be made to encourage Foreign Direct Investment (FDI) from International institutions, Non Resident Indians (NRIs) and Persons of Indian Origin (PIOs) in the housing and infrastructure sector in consultation with the Ministry of Finance and RBI.
- vi. In order to facilitate RMBS transactions, stamp duty on the instruments of RMBS across all states should be rationalized.
- vii. Rental housing provides a viable alternative option to the home seekers and the house providers alike. Incentives are to be provided for encouraging lending by financial institutions, HFIs and Banks for rental housing. Also, Companies and Employers will be encouraged to invest in the construction of rental housing for their employees.
- viii. Plan Funds and other assistance for housing and infrastructure should be dovetailed according to the Action Plan prepared and adopted by the States under their State Urban Housing and Habitat Policy (SUHHP). This would bring about synergies in the operation of various schemes and funding sources.
- ix. Micro-Finance Institutions (MFIs) to be promoted at Central and State levels to expedite the flow of finance to urban poor. In this regard, suitable mechanisms would be evolved to develop simplified norms for prudential rating and providing finance to MFIs. Adequate regulation of MFIs would be undertaken to ensure that MFIs do not burden the poor by charging usurious interest rates and their operations are kept transparent

Suggestions for adequate Fiscal Incentives

There is a lack of fiscal incentives to encourage housing sector in general. The sector does not get the preferred funding treatment from financial institutions for not being defined as an

"Industry." The mortgage rates for the buyers are still high for the majority of families. Moreover, there are very limited personal taxation incentives for acquisition of such long-term fixed assets for self-occupation or renting.

It is therefore recommended that:

- Suitable fiscal concessions for promoting the housing sector would need to be developed by the Ministry of Housing & Urban Poverty Alleviation in collaboration with the NHB and the Ministry of Finance.
- Develop convergence between urban sector initiatives and financial sector reforms.
- Central Government and Governments of States/UTs should promote innovative forms of public-private partnerships.
- States/UTs are expected to develop 10 years perspective Housing Plans with emphasis on EWS and LIG sectors.
- Special financial and spatial incentives need to be developed for inner-city slum redevelopment schemes.
- The Central and State/UT Governments should develop special packages of incentives for in-situ slum up-gradation.
- In order to facilitate RMBS transactions, stamp duty on the instruments of RMBS across all states should be rationalized.

Manpower Shortage

There is a tremendous shortage of supervisory, as also skilled manpower to meet the needs of the construction sector. Even the availability of unskilled labour, said to be available in plenty, is also prone to seasonal shortage during local festivals and harvesting times. Not just unskilled workers, there is a severe shortage of electricians, plumbers, fitters, carpenters, bar-benders, etc to work on big infrastructure projects and in the manufacturing sector.

The Indian construction industry, which is set to witness massive investments in the next five years, is facing an acute shortage of skilled workforce. The construction industry employs about

31 million people, second only to the agriculture sector the workforce requirement is about 5 million people every year over the next seven years to eight years to sustain the current 8 percent growth rate. With only 10 million work force available in the country every year, the construction industry will face a daunting task in future in terms of recruiting and retaining skilled manpower.

According to a Planning Commission report, the economy needs to invest nearly \$500 billion in infrastructure over the next five years. And, to implement such mammoth projects, the manpower required would be huge. In fact, by 2013, India's total manpower requirement would balloon to 92 million, of which, 57 million would be blue-collar workers, the report says. Where will industry find so many workers?

A study undertaken by the Association of Indian Chambers of Commerce and Industry (Assocham) has shown that the number of vocationally trained workers in India stands at just 5.3%, compared to 95.8% in Korea, 80.4% in Japan, 78.1% in Canada and 75.3% in Germany. The report points out that nearly 93% of workers (or, 353 million people) in India's un-organized sector do not get employment-related training. The country is likely to face a shortage of nearly 50 million skilled workers by 2010, it cautions.

The only way industry can beat the crunch is to start training its own manpower. Take, for instance, the case of L&T, which set up Construction Skills Training Institutes in five metros of the country. The institute trains people in essential skills like masonry, carpentry, bar-bending, steel-fixing, plumbing and electrical wiring. L&T personnel who work on construction sites are drafted and professionally trained to instruct workers at these institutes. They are assisted by other experienced workers who demonstrate field practices. The trained workers are eventually posted to different work sites. L&T has, so far, managed to train nearly 8,500 people. The CIDC has since initiated a number of such workmen training institutions in different states to train and certify workmen and construction supervisors. With a pan India footprint, the programme is increasingly being patronized by both corporate and development sectors. The sustainability of the programme lies in the fact that it has now spread to 17 states and has

benefited over 200,000 citizens with a target to train, test and certify over 500,000 people in 2008-09.

Technology & Materials – Urgent Need for Improvement

It is matter of great concern that the traditional burnt clay bricks continue to be the primary raw material for housing activity all over India. Brick making consumes fertile top soil from agricultural fields making these unfit for cultivation for many years. Moreover baking of bricks consumes energy and burning coal emits unhealthy smoke and carbon dioxide into the atmosphere.

It would be worthwhile to note, that the land wasted in the production of current annual requirement of 170 billion bricks deprives the country of food production that could feed 30 Lakh Indians for the whole year. Moreover, production of these bricks consumes around 24 million tonnes of coal and the process emits 61.3 million tonnes of CO₂ into the atmosphere. We, as a nation need to continuously increase our food production to feed our growing millions. Therefore, we can ill afford to waste our precious agricultural land for brick making, since it is against our national interests. This amounts to meeting one basic need of shelter, while sacrificing the other basic requirement of food.

It is therefore imperative that we must look for and develop alternative materials, which are energy efficient and more environment–friendly. Fly Ash Clay bricks, Fly Ash lime Sand bricks are some of the alternatives being promoted by CBRI, NTPC, Fly Ash Mission, but with limited success. Fly Ash based Autoclaved Aerated Concrete (AAC) blocks, produced in big plants or more efficient and economical alternative of site produced Cellular Lightweight Concrete (CLC) blocks are gaining increased usage. The latter produced in an environment–friendly process need least intrinsic energy, offer superior thermal efficiency and lower water absorption than clay bricks, need lower raw material inputs and make productive use of fly ash – a waste industrial output. This seems to be one of the ideal futuristic materials.

Even on the technology front, we continue to depend on manpower intensive traditional construction practices, which are slow and highly dependent on skilled labor input - a category already scarce in availability. Therefore, in order to be able to meet the huge housing shortage,

we need to adopt partially or fully mechanised methodologies, which primarily need some unskilled labour inputs. Large scale application must be encouraged for semi-mechanised and mechanised systems like monolithic concrete/CLC construction using large area wall-, slab-forms or room sized forms or tunnel forms, with appropriate thermal insulation for external walls. These in-situ technologies are highly effective for mass scale application in earth-quake and tsunami prone conditions in India. These would provide faster, durable, economical dwellings deploying limited unskilled inputs. Use of prefabrication technology or ready-made building components in traditional constructions needs to be urgently encouraged. This can however be feasible, only if the establishments, producing and marketing such components are subject to similar labour laws and taxation structure as applicable to manufacture of clay bricks. The proposed alternative technologies, which offer safe, durable, energy efficient, economical and environment–friendly green dwellings to our countrymen are recommended to be encouraged for wide scale application.

4.4. Urban Transport problems in India-

In the process of urbanization, India's urban population is growing at an average rate of around 3% per year. The average rate of growth of the urban population is not expected to change significantly during the next ten years or so. Assuming decadal increase of around 32%, India's urban population is expected to increase from 377 million in 2011 to 500 million in 2021. In terms of percentage of total population, the urban population has gone up from 17% in 1951 to 31.8% in 2011 and is expected to increase up to around 35% by the year 2021. During the 2000s, 91 million people joined the ranks of urban dwellers – which implies that the growth rate in urban areas remains almost the same during the last twenty years; urban population increased by 31.5% from 1991 to 2001 and 31.8% from 2001 to 2011. However, the number of metropolitan cities – those with a million plus population – has increased sharply over this period. From 35 in 2001, the number of metropolitan cities rose to 50 according to the Census of India, 2011. Out of these 50, eight cities – Mumbai, Delhi, Kolkata, Chennai, Hyderabad, Bangalore, Ahmedabad, and Pune – have population more than 5 million. India's big cities now account for a larger share of total urban population – a trend that has been observed since independence. In 2011, the share of metropolitan cities was 42.3%, up from 37.8% in 2001 and

27.7% in 1991. The distribution of urban population by city size widely varies and is skewed towards larger cities. One specific feature of India's urbanization is the increasing metropolitanization, that is, growth in the number and size of cities with a million plus population. The trends indicate the continued urbanization and metropolitanization in the years to come. Often, there is a debate as to whether it is an index of development or distress. The very process of urbanization has sometimes been looked as something undesirable. While the objections used to be on social and moral grounds earlier, the criticism lately is more on economic grounds such as provision of requisite infrastructure and civic amenities at rapidly escalating per capita costs. Despite all the objections, the rate of urbanization has not even retarded, not to speak of its being halted. Certain inevitability about the process is being accepted steadily. It is now felt that urbanization is necessary for the benefits of sharing modern technology for the growth and development of the entire national economy. In India, urban areas contribute more than sixty percent of the national income. In the coming years, as India becomes more and more urbanized, urban areas will play a critical role in sustaining high rates of economic growth. But, economic growth momentum can be sustained if and only if cities function efficiently - that their resources are used to maximize the cities' contribution to national income. Economic efficiency of cities and well-being of urban inhabitants are directly influenced by mobility or the lack of it. City efficiency largely depends upon the effectiveness of its transport systems, that is, efficacy with which people and goods are moved throughout the city. Poor transport systems stifle economic growth and development, and the net effect may be a loss of competitiveness in both domestic as well as international markets. Although Indian cities have lower vehicle ownership rate than their counterparts in developed countries, they suffer from worse congestion, delay, pollution, and accidents than the cities in developed countries. In Kolkata, for example, average speed during peak hours in Central Business District (CBD) area goes down as low as around 10 Km/h. The problem of congestion and delays is not only faced by Kolkata but also by most of the big cities which indicates both the amount of time and energy that are wasted and the scale of opportunity for improvement. A high level of pollution is another undesirable feature of overloaded streets. The transport crisis also takes a human toll. Statistics indicate that traffic accidents are a primary cause of accidental deaths in

the Indian cities. The main reason for all these is the prevailing imbalance in modal split besides inadequate transport infrastructure and its sub-optimal use. Public transport systems in cities have not been able to keep pace with the rapid and substantial increases in demand over the past few years. As a result, people have turned towards personalized modes such as mopeds, scooters, motorcycles, and cars and intermediate public transport modes such as auto-rickshaws, tempos, and taxis. Cities cannot afford to cater only to the private vehicles and there has to be a general recognition that policy should be designed in such a way that reduces the need to travel by personalized modes and boosts public transport particularly bus transport system. Much needs to be done if public transport is to play a significant role in the life of a city. Measures need to be taken to enhance the quality as well as quantity of public transport services and to impose constraints on the use of private vehicles. People should also be encouraged to use non-motorized transport and investments may be made to make it safer. It must not be forgotten that cities are the major contributors to economic growth, and movement in and between cities is crucial for improved quality of life .

4.4.1 Vehicular growth and availability of transport infrastructure in metropolitan cities

During the year 2009, 115 million vehicles were plying on Indian roads (Table 1). According to the statistics provided by the Ministry of Road Transport & Highways, Government of India, the annual rate of growth of motor vehicle population in India has been around 10% during last decade. The basic problem is not the number of vehicles in the country but their concentration in a few selected cities, particularly in metropolitan cities. From 1999 to 2009, number of vehicles per 1000 people in metropolitan cities has increased more than two-fold from 132 to 286 (Figure 1). Vehicle ownership rate, number of vehicles per 1000 people, in many big cities including Delhi has already crossed the mark of 400. There are at least 5 metropolitan cities having vehicle ownership rate in excess of 500. It is interesting to note that nearly 35% of the total vehicles in the country are plying in metropolitan cities alone, which constitute just around 11% of the total population. During the year 2009, nearly 15 million vehicles were plying in four big cities (Delhi, Bengaluru, Chennai, and Hyderabad) alone, which constitute 16.6% of all motor vehicles in the country (Table 2). Delhi, the capital of India, which contains

around 1.4% of Indian population, accounts for nearly 7% of all motor vehicles in the country. Traffic composition in Indian cities is of a mixed nature. There is a wide variety of about a dozen types of both slow and fast-moving vehicles. Two-wheelers and cars account for over 85% of the vehicle population in most of the metropolitan cities. They account for at least 90% of total vehicles in Ahmedabad, Bhopal, Coimbatore, Delhi, Kanpur, Lucknow, Nagpur, Vadodara, Varanasi, and Vishakhapatnam. Two-wheelers alone account for more than 80% of the total vehicles in number of metropolitan cities. For example, during the year 2009, in Nagpur (84%), Varanasi (84%), Surat (83%), Coimbatore (83%), Madurai (82%), Bhopal (81%), Kanpur (81%), Vadodara (81%), Vishakhapatnam (81%), and Lucknow (80%), two-wheelers accounted for at least 80% of the total vehicles. Analysis of data presented in Table 3 reveals that, during the year 2009, the share of buses is negligible in most Indian cities as compared to personalized vehicles. For example, two-wheelers and cars together constitute at least 90% of the total vehicles in Ahmedabad (91%), Delhi (90%), Lucknow (93%), and Nagpur (91%) whereas in these cities buses constitute only 1%, 0.7%, 0.3%, and 0.4% respectively.

Table 1: Total number of registered motor vehicles in India: 1951-2009 (in thousands)

Year (as on 31st March)	All vehicles	Two-wheelers	Cars	Buses	Goods vehicles	Others
1951	306	27	159	34	82	4
1961	665	88	310	57	168	42
1971	1865	576	682	94	343	170
1981	5391	2618	1160	162	554	897
1991	21374	14200	2954	331	1356	2533
2001	54991	38556	7058	634	2948	5795
2002	58924	41581	7613	635	2974	6121
2003	67007	47519	8599	721	3492	6676
2004	72718	51922	9451	768	3749	6828
2005	81501	58799	10320	892	4031	7457
2006	89618	64743	11526	992	4436	7921
2007	96707	69129	12649	1350	5119	8460
2008	105353	75336	13950	1427	5601	9039
2009 (P)	114951	82402	15313	1486	6041	9710

Table 2: Total number of registered motor vehicles in selected metropolitan cities in India: 1999-2009 (year as on 31st March and no. of vehicles in thousands)

Metropolitan cities	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	CAGR (%) 1999-2009
Ahmedabad	739	799	846	899	978	1075	1632	1780	1451	1586	1691	8.6
Bengaluru	132	150	1593	16801	1771	1891	2232	2617	2179	2640	3016	8.5
Chennai	1056	1150	1257	13565	1895	2015	2167	2338	2518	2701	2919	10.7
Delhi	3277	3423	3635	36599	3971	4237	4186	4487	5492	5899	6302	6.8
Hyderabad	951	N.A.	N.A.	1241	1319	1356	1433	1522	2181	2444	2682	10.9
Jaipur	542	598	644	693	753	824	923	1051	1177	1289	1387	9.9
Kolkata	N.A.	N.A.	N.A.	801	842	875	911	948	987	573	581	9.5
Lucknow	N.A.	N.A.	465	556	615	N.A.	N.A.	N.A.	801	962	1025	9.0
Mumbai	911	970	1030	1069	1124	1199	1295	1394	1503	1605	1674	6.3
Nagpur	298	331	416	459	503	543	770	824	884	946	1009	13.0
Pune	568	593	620	658	697	755	827	874	930	1141	1153	7.3

Table 3A: Private transport vehicles in selected metropolitan cities in India (as on 31st March 2000 and 2009)

Metropolitan cities	Two-wheelers (2000)	Two-wheelers (2009)	Two-wheelers CAGR (%)	Cars (2000)	Cars (2009)	Cars CAGR (%)
Ahmedabad	616738	1312601	8.75	104179	233320	9.37
Bengaluru	1164204	1946767	5.88	238374	586639	10.52
Chennai	848118	2017816	10.11	207860	511457	10.52

Delhi	2184581	3846721	6.49	869820	1881135	8.95
Hyderabad	757684	1836549	10.34	99314	426733	17.58
Jaipur	444889	1035999	9.85	76133	204871	11.63
Kolkata	298959	173891	-5.84	238560	313900	3.10
Lucknow	344268	825088	10.20	53069	142861	11.63
Mumbai	407306	909993	9.34	325473	509246	5.10
Nagpur	272734	850276	13.47	27573	94823	14.71
Pune	443266	831029	7.23	62885	147108	9.90

Table 3B: Public transport vehicles in selected metropolitan cities in India (as on 31st March 2000 and 2009)

Metropolitan cities	Taxis (2000)	Taxis (2009)	Taxis CAGR (%) (2000-2009)	Buses (2000)	Buses (2009)	Buses CAGR (%) (2000-2009)
Ahmedabad	43865	94264	8.87	14993	17407	1.67
Bengaluru	77375	235525	13.17	6380	18176	12.34
Chennai	45016	136635	13.13	4409	34491	25.68
Delhi	104747	229991	9.13	37733	41142	0.97
Hyderabad	48898	110772	9.51	2539	22725	27.57
Jaipur	12513	33344	11.51	14362	18873	3.08
Kolkata	41946	49571	1.87	8586	6938	-2.34
Lucknow	15454	16010	0.39	2816	2794	-0.09
Mumbai	156261	161674	0.38	15414	13061	-1.82
Nagpur	10666	17436	5.61	2788	4160	4.55
Pune	44590	17533	-9.85	7827	12800	5.62

Table 4 presents existing modal split in terms of percentage of trips made on different modes including walking and bicycling across Indian cities. When compared with desirable level of modal split (Table 5), it was found that the share of mass transport is well below the desired range whereas the share of personalized transport and para transit is already above the optimal range in most of the Indian cities. What is worse is that the modal split does not appear to be moving in the right direction. Table 3 reveals that, from 2000 to 2009, the growth in two-wheelers and cars is significantly higher than the growth in buses across metropolitan cities. For example, in Delhi, from 2000 to 2009, number of cars increased at the rate of 9% per year

whereas number of buses grew only at the rate of 1% per year. Moreover, availability of transport infrastructure is not only inadequate but also used suboptimally in Indian cities. The area occupied by roads and streets in Class – I cities (population more than 100,000) in India is only 16.1% of the total developed area while the corresponding figure for the United States of America is 28.19% . In general, the road space in Indian cities is grossly insufficient. To make the situation worse, most of the major roads and junctions are heavily encroached by parked vehicles, roadside hawkers, and pavement dwellers. As a consequence of these factors, already deficient space for movement of vehicles is further reduced. The present urban rail services in India are extremely limited. Only four cities - Mumbai, Delhi, Kolkata and Chennai are served by suburban rail systems. The rail services in these four main cities together carry more than 7 million trips per day. Interestingly, the Mumbai Suburban Rail System alone carries about 5.5 million trips per day. A few other cities also have limited suburban rail systems but they hardly meet. Although, few years back, bus transport services were available mainly in the cities located in southern and western regions of India, but they are now available in most of the metropolitan cities, thanks to the Government of India’s Jawaharlal Nehru National Urban Renewal Mission (JNNURM). Services are mostly run by publicly owned State Transport Undertakings (STUs) or Municipal Transport Undertakings (MTUs). Most of the passenger buses use the standard truck engine and chassis and hence are not economical for city use. There are very few buses in India specifically designed for urban conditions. Qualitatively, the available urban mass transport services are overcrowded, unreliable, and involve long waiting periods. Over-crowding in the public transport system is more pronounced in large cities where buses, which are designed to carry 40-50 passengers generally, carry double the capacity during peak hours. As a result, there is a massive shift towards personalized transport, specially two-wheelers and proliferation of various types of intermediate public transport modes such as auto-rickshaws, tempos, and taxis.

Table 4: Existing modal split in Indian cities (as a %age of total trips) City population (in million)

	Walk	Mass transport	IPT		Car	Two wheeler	Bicycle	Total
			Fast	Slow				
0.10 – 0.25	37.1	16.4	10.4	20.1	3.3	24.1	25.7	100.0
0.25 – 0.50	37.8	20.6	8.9	17.2	2.6	29.8	20.9	100.0
0.50 – 1.0	30.7	25.4	8.2	12.0	9.5	29.1	15.9	100.0

1.0 – 2.0	29.6	30.6	6.4	8.1	3.3	39.6	12.1	100.0
2.0 – 5.0	28.7	42.3	4.9	3.0	5.0	28.9	15.9	100.0
5.0 plus	28.4	62.8	3.3	3.7	6.1	14.8	9.4	100.0

Table 5: Desirable modal split for Indian cities (as a %age of total trips)

City population (in million)	Mass transport	Bicycle	Other modes
0.1 – 0.5	30 – 40	30 – 40	25 – 35
0.5 – 1.0	40 – 50	25 – 35	20 – 30
1.0 – 2.0	50 – 60	20 – 30	15 – 25
2.0 – 5.0	60 – 70	15 – 25	10 – 20
5.0 plus	70 – 85	15 – 20	10 – 15

4.4.2. Vehicular emission, congestion, and road safety issues

The Indian metropolitan cities are facing serious environmental problem due to growing air pollution caused by fuels used in vehicles. Atmospheric pollutants commonly associated with motor vehicles are nitrogen oxides, hydrocarbons, carbon monoxide, sulfur oxides, and Suspended Particulate Matters (SPM). Pollutants from vehicular emission have various adverse health effects (see Table 6 for details). One of the main pollutants, SPM particularly fine PM, has serious health effects.ii The ambient air pollution in terms of SPM in many metropolitan cities in India exceeds the limit set by World Health Organization . Of a total of 127 cities monitored under the National Air Quality Monitoring Programme, only 3 have low air pollution, and 101 cities report at least one pollutant exceeding the annual average air quality standard (Central Pollution Control Board, 2009). In fact, air pollution in many of India’s cities has become atrocious, and has already had serious health effects, especially in the form of respiratory diseases.

There is a direct relationship between transport system and air pollution in a city. Vehicular emissions depend on vehicle speed, vehicle-km, age of vehicle, and emission rate. In general, the average peak hour speed in Indian cities is far less than the optimum one. Growing traffic and limited road space have reduced peak-hour speeds to 5-10 Km/h in the central areas of many major cities. The quantity of all the three major air pollutants (namely, nitrogen oxides, hydrocarbons, and carbon monoxide) drastically increases with reduction in motor vehicle

speeds. For example, at a speed of 75 Km/h, emission of carbon monoxides is 6.4 gm/veh.-km, which increases by five times to 33.0 gm/veh.-km at a speed of 10 Km/h. Similarly, emission of other pollutants increases with the reduction in vehicle speed. Thus, prevalent traffic congestion in Indian cities particularly during peak-hour not only increases the delay but also increases the pollution level. Problem is aggravated due to high average age and poor maintenance of vehicles (see Table 7 for age profile of on road vehicles in India). With inadequate availability of mass transport services and increasing use of personalized motor vehicles, vehicular emission is assuming serious dimensions in most of the Indian cities (see also Table 8). It is amply clear that among various modes of road based passenger transport, bus occupies less road space and causes less pollution per passenger-km than personalized modes (Table 9). This reveals the importance of bus transport in improving the air quality in urban areas.

India is also facing serious road accident problems. In 2009, latest year for which data is available, 126,900 people died and 466,600 people got injured due to road accidents. In a dubious distinction, India is the only country in the world which faces more than 14 fatalities and 53 injuries every hour as a consequence of road crashes. While in many developed and developing countries, including China, the situation is generally improving, India faces a worsening situation. During the last ten years, road accidental fatalities in India have increased at the rate of 4.6% per year while the population of the country has increased only at the rate of 1.6% per year. Consequently, fatality risk, road accidental deaths per 100,000 people, has increased from 8.2 in 1999 to 10.9 in 2009. Fatality risk in India is not only twice than that in some of the developed countries such as Sweden, United Kingdom, and Japan but also still increasing rapidly. If the trend continues, the total number of road traffic deaths in India would increase by 100% between 2009 and 2025.

Moreover, the burden of road traffic accidents in India is relatively high in its metropolitan cities . On an average, fatality risk in metropolitan cities is 11.6 fatalities per 100,000 people, higher than all India average of 10.9 fatalities per 100,000 people. Also, there is a huge variation in fatality risk across cities of India, ranging from 3.2 fatalities per 100,000 people for Kolkata to 34.4 fatalities per 100,000 people for Vishakhapatnam in 2009 (see Figure 2). During the same

year, Vishakhapatnam (34.4), Kanpur (25.7), Lucknow (23.3), Jaipur (22.8), Varanasi (20.6), Coimbatore (19.4), and Bhopal (18.6) faced more than 50% higher fatality risk than the metropolitan city average (11.6). From 1999 to 2009, fatality risk in 8 out of 21 selected metropolitan cities increased at higher rate than that in the country. Vishakhapatnam faced the highest increase in fatality risk (11.2 to 34.4) followed by Varanasi (5.5 to 20.6), Lucknow (8.9 to 23.3), Bhopal (10.6 to 18.6), Coimbatore (12.1 to 19.4), Kanpur (19.6 to 25.7), Jaipur (17.6 to 22.8), and Pune (10.0 to 13.9). However, there are nine cities which experienced decrease in fatality risk from 1999 to 2009; out of these, only two cities Indore (20.4 to 15.9) and Delhi (15.0 to 12.3) experienced significant decline whereas decline in others was only marginal.

The nature of road accident problem in Indian cities is different in many ways from that in their counterparts in the developed countries. Pedestrians, bicyclists, motorcyclists, and non-motorized vehicle occupants are often the most vulnerable in Indian cities, unlike cities from developed world where car and public transport users are the most vulnerable (see Table 10). Since pedestrians, cyclists, and non-motorized transport users are often from the lower socio-economic groups, road accidents in Indian cities have a disproportionate impact on the poor and vulnerable in society .

4.4.3 Urban road safety situation: Why is the road safety situation so bad in so many cities of India? The main reason for this appears to be the prevailing imbalance in modal split, inadequate transport infrastructure and its sub-optimal use, and the lack of effective road-safety policies. Very few cities of India have an adequate public transport system. People rely primarily on personalized modes such as cars and two-wheelers, para-transit modes such as auto-rickshaws and tempos, and non-motorized transport modes such as tricycles, bicycles, and walking. In most of the cities, two-wheelers and cars account for over 90% of the motorized vehicle population whereas the share of buses is negligible in comparison to personalized vehicles. In general, the road space in cities is grossly insufficient. There is hardly any provision for pedestrians and cyclists to safely use the road. Lane marking and traffic signs are usually missing and the intersections often require geometric correction. To make the situation worse, most of the major roads and junctions are heavily encroached by parked vehicles, roadside hawkers, and pavement dwellers. As a consequence of these factors, already deficient space for

movement of vehicles is further reduced. The problem of traffic accidents gets aggravated because of mixed nature of traffic composition. Busy roads often carry a mix of fast moving motor vehicles along with cyclists, pedestrians, and other non-motorized transport users. The experience shows that fatalities are concentrated around roads that are not fit for their purpose of carrying mixed streams of traffic safely. Many cities have somewhat dysfunctional roads with all the features that aggravate the traffic injuries and fatalities. Features such as roads with traffic volumes and speeds that they were not designed for, high proportion of young and inexperienced drivers, and high proportion of non-motorized transport users in the same road space are prevalent in number of cities.

Also, there is a lack of effective road-safety policies in India. Even simple measures like use of seat-belts and helmets, mandatory according to the Motor Vehicle Act 1988, are not properly enforced. One can get not only a driving license without having an adequate driving skill, but also drive the vehicle under the influence of alcohol particularly in smaller cities and towns. It is not uncommon to see over speed and rash driving on city roads. Some of the city authorities are even unable to tackle the problem of stray cattle on the roads, which often jeopardize the safety of road users.

Table 6: Adverse health effects from vehicular emissions

Pollutant	Health effect
Carbon monoxide (CO)	This gas is created when fuels containing carbon are burned incompletely. Fetuses and persons afflicted with heart disease are at greater risk. CO hinders oxygen transport from the blood into the tissues. Therefore, more blood is required to be pumped to deliver the same amount of oxygen. Healthy individuals are also affected at higher levels of CO exposure. Large dose of CO can be fatal.
Sulfur dioxide (SO ₂)	This gas is created when fuel containing sulfur is burnt. High concentration of SO ₂ can result in temporary breathing impairment for asthmatic children and adults who are active outdoors. This gas mainly affects the functions of lungs.
Suspended particulate matter (SPM)	At high concentration, particulate matter can adversely affect human health. There are two classifications for particulate matter, PM ₁₀ and PM _{2.5} . All particles smaller than 10 microns in diameter are classified as PM ₁₀ or coarse size particles. Fine size particles or PM _{2.5} , are those particles less than or equal to 2.5 microns in diameter. Diesel vehicle exhaust is the main source of PM in urban areas. These particles penetrate deeply into the lungs and are captured by lung tissue. The most dangerous aspect of PM pollution from

diesel vehicles is the hundreds of different chemicals that are adsorbed to the particle. Exposure to PM pollution has been associated with respiratory and cardiac problems, infections, asthma attacks, lung cancer and decreased life expectancy.

Nitrogen oxides (NOx) Nitrogen oxides contribute to the formation of ozone, production of particulate matter pollution, and acid deposition. Diesel engines produce a disproportionately large amount of NOx when compared to gasoline engines because of their high temperature combustion process. Nitrogen dioxide has been shown to irritate lung tissue, cause bronchitis and pneumonia, and reduce resistance to respiratory infections. The health effects of ozone are magnified in the presence of nitrogen dioxide. Frequent or long-term exposure to high levels of nitrogen oxides can increase the incidence of acute respiratory illness in children.

Hydrocarbons (HC) Hydrocarbons are a class of reactive organic gases which are formed solely of hydrogen and carbon. The incomplete burning of any organic matter such as oil produces hydrocarbons. They contribute to the formation of ozone and the resulting smog problem. The primary health effect of hydrocarbons results from the formation of ozone and its related health effects.

Air Toxics Air toxics are generally organic chemicals, including some hydrocarbons that are highly evaporative in nature. Benzene, formaldehyde, acetaldehyde, 1,3-butadiene, and acrolein are typical examples of air toxics. Air toxics are pollutants that cause or are suspected of causing cancer in those exposed to them. Benzene has been shown to cause aplastic anemia and acute myelogenous leukemia. Known health concerns related to aldehydes include cancer, asthma, and respiratory tract irritation. It is also believed that these air toxics have impacts on the reproductive system by causing chromosomal aberrations or mutations. The health effects of particulate matter from diesel exhaust are thought to be attributable to the many air toxics that are adsorbed to the particles. These small particles penetrate deeply into the lungs, and are the perfect vehicle for delivering air toxics into the body.

Table 7: Age profile of on road vehicles in India

Vehicle Type	< 5 Yrs (%)	6-10 Yrs (%)	11-15 Yrs (%)	16-20 Yrs (%)	20-25 Yrs (%)	>25 Yrs (%)
Two-wheelers	48.7	27.2	14.3	7.8	1.8	0.3
Cars	50.3	29.5	12.9	6	1.1	0.2
LCV	36.8	21.5	26.5	11.3	3.2	0.8

Table 8: Estimated vehicular emission load in selected metropolitan cities in India

India Name of the city	Vehicular pollution load (tons per day)				Total
	Particulates	Oxide of the Nitrogen	Hydrocarbons	Carbon monoxide	
Agra	0.9	3.3	10.3	17.9	32.4
Bengaluru	8.1	29.7	117.4	207.0	362.2
Chennai	7.3	27.3	95.6	177.0	307.2
Delhi	12.8	110.5	184.4	421.8	729.4
Hyderabad	8.0	36.9	90.1	164.0	298.9
Kanpur	1.9	7.3	11.7	28.7	49.6
Kolkata	10.8	54.1	47.6	137.5	250.0
Mumbai	10.6	46.4	89.9	189.6	336.4
Grand total	60.4	315.4	647.0	1343.5	2366.3

Table 9: Pollution rate and congestion effect of private and public transport vehicles

Type of vehicle	Average passenger per vehicle	Pollution load in gm/pass.-km	Congestion effect in PCU/Pass.
Two-stroke two-wheeler petrol engine	2	7.13	0.375
Four-stroke two-wheeler petrol engine	2	4.76	0.375
Car with catalytic converter petrol engine	4	0.93	0.25
Bus with diesel engine	40	1.00	0.075

Figure 2: Road accident fatality risk in selected Indian metropolitan cities in 1999 and 2009

Source: National Crime Record Bureau, Ministry of Home Affairs, Government of India, New Delhi. Accidental Deaths and Suicides in India, 1999 and 2009.

Table 10: Pedestrian and motorized two-wheeler fatalities as a percentage of total road accident fatalities

City/Country	Pedestrian	Motorized two-wheeler
Delhi, India (2009)*	23	34
Kolkata, India (2009)*	58	15
Mumbai, India (2009)*	29	22
Australia (2009)#	13	15
European Union (2009)\$	18	17
Japan (2004)@	26	15
Singapore(2005)@	24	55
USA (2009)€	12	13

Sources: (1) * Accidental Deaths and Suicides in India, 2009. National Crime Record Bureau, Ministry of Home Affairs, Government of India, New Delhi. (2) # Road Deaths Australia 2009 Statistical Summary published by Department of Infrastructure, Transport, Regional Development and Local Government, Australian Government. (3) \$ European status report on road safety: towards safer roads and healthier transport choices. Copenhagen, WHO Regional Office for Europe, 2009. (4) @ Road Safety in Asia and the Pacific published by Economic and Social commission for Asia and the Pacific on 26th United Nations Economic and Social Council. (5) € Traffic Safety Facts 2009, U.S. Department of Transportation, National Highway Traffic Safety Administration, Washington

4.5. Policy measures to improve urban transportation in India

4.5.1 Promoting regional economies and compact townships

There is a need to promote not only regional economies in such a way that reduces the need for long-distance travel but also self sufficient compact townships which would reduce the need for short-distance travel within the cities. The promotion of regional economies should be complemented by the creation of compact settlement structures with the provision of shopping, services and recreational facilities and work opportunities close to where people live, so that the trip distance is kept short. In other words, wherever possible, “towns of short

distances” should be promoted . There are many benefits of the compact township over urban sprawl, which include less car and two-wheeler dependency thus lower emissions, reduced energy consumption, better public transport services, better accessibility, less traffic accidents, and better quality of life.

4.5.2 Focusing on public transport particularly bus transport

Passenger mobility in urban India relies heavily on its roads. Although rail based transport services are available in few mega cities, they hardly play any role in meeting the transport demand in rest of the million plus cities. The time has indeed come to plan rail based mass transport system in all the cities having population more than 2 million. However, considering the financial health of various levels of governments (central, state, and local governments) and investment requirement to introduce and improve rail based public transport system, it is evident that bus transport will have to play a major role in providing passenger transport services in all million plus cities. Therefore, urban transport plans should specially emphasize on bus transport system.

Government regulation and control have exacerbated the poor operational and financial performance of publicly owned urban transport undertakings, which are the main provider of bus transport services in Indian cities. As cost of operation rises, transport system comes under financial pressure to raise fares, but politicians are under pressure to keep fares at existing levels. Unless the system is subsidized, it has to eliminate some of its less profitable or loss making services. In democracy, politicians are bound to yield to pressure from those whose services are threatened and to insist on maintaining money-losing operations. Due to this, transport undertakings find it difficult to raise their revenue sufficient enough to meet the cost of operation.ⁱⁱⁱ In addition, they have to provide concessional travel facilities to various groups such as freedom fighters, journalists, students, etc. besides paying a high level of different kinds of taxes. The total tax burden for public transport vehicles per vehicles-km is 2.6 times higher than that for private vehicles (Table 11). It is increasingly becoming very difficult for loss making

urban transport undertakings to augment and manage their fleet, which in turn leading to poor operational performance and deterioration in quality of services.

With few exceptions, publicly owned urban transport undertakings in India operate at higher unit costs than comparable transport operations controlled by the private sector. Kolkata provides an opportunity to make a direct comparison between privately owned and publicly owned bus system. Public buses are operated by the Calcutta State Transport Corporation (CSTC), with fleet size of almost 1,000 buses and staffing ratio per operational bus of around 11. CSTC's bus productivity is hardly 112 kilometers per bus per day and its fuel productivity is less than 3.5 bus-kilometers per litre of diesel. As a result of low productivity, CSTC requires a huge subsidy since revenues cover less than three-fourths of the costs. On the other side, there are nearly 2,000 private buses in the city. These buses are operated mainly by small companies or individual owners grouped into a number of route associations. Fares for private and public bus services are the same. Despite the similarity in fare rates, private operators have been able to survive financially without any subsidy. Their success is attributed to high level of productivity, which is reflected in low staffing ratios and high fleet availability. The private bus operators in Kolkata, who hold almost two-third of the market, play a major role in meeting the demand and thus substantially reduce the financial burden on the state government. Furthermore, publicly owned urban transport undertakings often lack the flexibility of organization, the ability to hire and fire staff, or the financial discretion needed to adapt to changing conditions. In such circumstances, a policy which encourages private participation in the provision of bus transport services should be welcomed. One should note that there is an urgent need for restructuring of public transport system in Indian cities to enhance both quantity as well as quality of services.

Private participation in the provision of bus transport services has been very successful in Indore and Surat. Indore, which did not have a public transportation system until 2006, now has a city bus service with 104 buses run by a special purpose vehicle (SPV), the Indore City Transport Services Ltd. (ICTSL). ICTSL was set up in December 2005 by the Indore Municipal Corporation and the Indore Development Authority to operate and manage the public transport system through Public Private Partnership (PPP). It runs buses on 24 routes with 300

bus stops built on Build-Operate-Transfer (BOT) basis. The marketing of bus services is done by a vendor who issues at least 15,000 monthly and daily passes at agreed rates every month, ensuring a monthly income of Rs. 4 million for the ICTSL. ICTSL has been making profits since its inception and its profit has increased from Rs. 3.4 million in 2006-07 to Rs. 10 million in 2009-10. Surat is another successful example of private participation in the provision of bus transport services. Surat has 125 buses running on 44 routes, carrying 70,000 passengers daily. There are 87 bus stops on BOT basis, each earning a revenue of Rs. 40,000 per year. The urban local body gets a premium of Rs. 20,000 per bus from the operator for the contract period of five years. All city buses run on CNG and are owned, operated, and maintained by private operators. In both the cases, Indore and Surat, operation of the bus services has been outsourced to the private sector, while the Municipal Corporations have found innovative ways of investing in public transport infrastructure and traffic monitoring systems of regulation and enforcement . This model of bus transport system may be adopted by all those cities where there is poor availability of public transport services.

Table 11: Vehicle taxation in Indian cities

Vehicle tax (Rs. per year)	Lucknow	Delhi	Bangalore	Hyderabad	Ahmedabad
For a car priced at Rs. 4 lakh	667	533	2400	2400	1333-2000
For a public transport bus	7880	13675	108000	5% of the gross traffic earnings	7092

4.5.3 Introducing variety of bus transport services

There is a need for variety of bus transport services. Given the opportunity, people reveal widely divergent transport preferences, but in many places authorities favor a basic standard of bus transport services. Presently, it is increasingly difficult to achieve good market acceptance with a single type of product. Bus transport operators operating in Indian cities still believe that the vast majority of its users make the same type of commuting trips everyday, and so promote

package that essentially assume this regularity. It may be possible that the current users of bus transport services have such regular pattern of use, but certainly many of those that have left it had varying mobility needs that they felt poorly satisfied either by the services themselves or by the price deals available. Therefore, it is required to segment the supply of bus transport system to provide different services for different people and even to the same person at different occasions.

4.5.4 Improving the efficiency of bus transport operation

A serious effort should be made to improve the productive efficiency of bus transport operators so that they can enhance both quality as well as quantity of bus transport services. It is recognized that some form of competitive pressure is needed to ensure that a serious effort is made towards productive efficiency. This competitive pressure may be obtained either through direct competition for the market or through some form of systematic comparison with similar operators. Direct competition for the market, for example through periodic tenders for the right to supply the service in a partly or totally protected environment, is more appropriate for cities where presently there is no bus transport operation. In this case, private operators may be encouraged to provide the service where a negative result will mean loss of business for the incumbent operator. This will have a competitive pressure on the operator to improve productive efficiency. Benchmarking i.e., systematic comparison with similar operators can effectively be used to improve the productive efficiency of publicly owned urban transport undertakings where a negative result will mean loss of job for the managers and some of the staff. This will improve productive efficiency of bus transport operation in those cities which are served by publicly owned transport undertakings.

4.5.5 Adopting optimal pricing strategies for transport services

Pricing of transport is another key issue which should be addressed properly. Pricing policy could effectively be used to encourage the public transport and restrict the usage of private vehicles. So far, in India, operating cost of using the private vehicles is far less than the marginal social costs which encourage people to use private modes. Over the years, government policies have been very supportive towards automobile industry. Motorcycle and car ownership is seen

as desirable and to be promoted at all costs. Coupled with this perception is the common view that development and support of the car and two-wheeler manufacturing industry is good for the economic development. For these reasons, government often implements policies that artificially lower not only the cost of vehicle ownership (through very low one time registration fee, low sales tax, etc.) but also the usage of the same. There is no doubt that government should encourage automobile industry for overall economic development, it should find ways to restrict the usage of cars and two-wheelers. Private vehicles should pay their full external costs. Government should use market based instruments such as annual registration fee, parking fee, road tax, fuel tax, congestion charges, etc. to increase the (actual) marginal cost of private vehicle use to a level where it is equal to the marginal social costs of the same. At the same time, government should promote public transport by abolishing annual motor vehicle tax and passenger tax levied on public transport vehicles. There is a need to have optimal pricing strategy for public transport services as well. Price of transport services must be seen not only as an instrument for cost recovery but also for driving consumers' behavior. Although, there is no such thing as the 'right' price but rather there are optimal pricing strategies, which facilitate attainment of specific goals. The optimum price to achieve profit maximization may differ from the one needed to maximize welfare or to ensure the highest traffic revenue. Many economists recommend adoption of prices based on marginal costs particularly in case of public enterprises. The driving force behind the argument in favor of marginal cost pricing for public enterprises is the assertion that they ought to maximize welfare rather than profits. The adoption of marginal cost pricing may, however, in certain circumstances, result in an undertaking making a financial loss. The classic example of this is the decreasing cost industry where, because of high initial capital costs, the setting of charges equal to marginal cost will result in a financial deficit. This deficit may not be necessarily indicative of mismanagement. Most of the urban transport undertakings in India appear to operate on increasing returns to scale and consequently marginal cost pricing will result in a financial deficit. When they are restricted to meet a revenue-cost constraint, it is required to find the second-best set of prices which could be based on inverse elasticity rule. The price and output combinations that it computes minimize the deadweight loss due to unavoidable deviation of price from marginal

cost. Since this pricing rule takes into account price elasticity of demand, it is superior to the average-cost pricing rule that most urban transport undertakings tend to adopt.

Publicly owned urban transport undertakings can think of charging different (optimal) prices for different quality of services. Assuming that shift of consumers between different qualities of services is negligible, the availability of the range of services means that total potential consumer surplus will exceed that generated if only a single price and service package were available. Operator stands to gain as a result of this pricing strategy since costs of servicing each customer group are not drastically different.

Apart from this one could also envisage differential pricing mechanism such as peak period, off-peak period, peak-direction, off-peak direction, etc. based pricing strategy. The problem of the peak is peculiar to transport sector. The problem here arises from systematic variation in demand, frequently over a relatively short period. The problem is further aggravated due to the fact that transport can not be stored to reconcile the systematic changes in demand with smooth, even production. Reconciliation can only be through price. Justification of differential pricing for peak and off-peak passengers stems from the fact that marginal cost of production during peak exceeds that during off-peak. Charging peak and off-peak passengers prices that are equal to their respective marginal costs not only maximizes social welfare but also has potential to augment traffic revenue. Even after adopting such pricing strategy if traffic revenue is not sufficient to cover costs, then one may have to adopt second best pricing where price charged to a particular group of passengers equals marginal cost plus mark-up. The mark-up over marginal cost would be inversely proportional to the price elasticity of demand. For example, peak travelers whose demand is relatively inelastic could be charged a price substantially higher than the marginal cost as compared to off-peak passengers.

4.5.6 Enhancing transport coordination

To encourage people to use public transport, there is a need to have transportation system which is seamlessly integrated across all modes. The various modes of public transport including intermediate public transport have to work in tandem. Presently, different agencies, independent of each other, are operating different services in Indian cities. For example, in

Delhi, metro rail is operated by Delhi Metro Rail Corporation Ltd, sub-urban rail service by Northern Railway, bus transport service by Delhi Transport Corporation, and taxi and auto-rickshaw by private operators. There is a lack of coordination among these agencies. Since the ultimate objective is to provide adequate and efficient transport system, there is a need to have a coordinating authority with the assigned role of coordinating the operations of various modes. This coordinating authority may be appointed by the central or state government and may have representatives from various stakeholders such as private taxi operators, bus operators, railways, state government, etc. The key objective should be to attain the integration of different modes of transport to improve the efficiency of service delivery and comfort for commuters. At the same time, a single ticket system, where commuters can buy a transport ticket that is valid throughout the public transport network within the coordinating authority's jurisdiction, should also be developed and promoted. Integration between different modes of public transport provides quicker, easier, convenient, and more reliable journeys which are essential to promote the usage of public transport. Integrated transport system has potential to attract people away from the private cars and two-wheelers and thus can contribute for congestion relief and environmental preservation.

4.5.7 Promoting car sharing

Car sharing, also known as car pooling, is when two or more people share a car and travel together. It allows people to have the convenience of the car, but at the same time helps to reduce congestion and pollution through reduction in vehicle kilometers. Car sharing may be organized through affinity groups, large employers, transit operators, neighborhood groups, or large car-sharing businesses . Car sharing provides the potential to reduce the costs of vehicle travel to the individual as well as society. In order to promote car sharing, it is important to ensure that sufficient parking places are allocated to vehicles belonging to car sharing groups at nominal or no parking fee.

4.5.8 Restraining the use of polluting vehicles and fuels

More than 50% of motor vehicles in India are more than five years old. In general, emission performance of older vehicles is significantly inferior to newer vehicles because of poor maintenance and lax emission standards for in-use vehicles. The large number of three-wheelers and many two-wheelers still operate with two stroke engines, which emit a high volume of unburnt particles due to incomplete combustion. Diesel cars now account about 40% of total car sales in India, compared with less than 20% few years ago. Diesel cars are becoming more popular because diesel price in India is significantly less than the petrol price. Government encourages this price differential primarily to help farmers and bus and truck operators. This price benefit is not meant to be available for personal cars. Although diesel cars emit less greenhouse gases, there are serious concerns about the public health effects of their NO_x and particulate matter emissions particularly in densely populated metropolitan cities. Therefore, government needs to check the use of polluting vehicles and fuels and promote cleaner technology and better fuels. Government may use the market based instruments to do the same. For example, a relatively high annual motor vehicle tax, which may be increasing with the age of vehicle, may be imposed on two stroke two-wheelers and three-wheelers and all vehicles that are more than ten years old. Similarly, cars that use diesel could be discouraged in million plus cities by levying cess on diesel in those cities.

4.5.9 Tightening vehicle emissions standards and inspection and maintenance programs

Appropriate vehicle emissions standards for new and in-use vehicles and a well-designed and operated Inspection and Maintenance (I/M) program are important elements of an overall strategy to reduce vehicle emissions and air pollution in urban areas. Stringent emission regulations and their effective implementation have produced good results in many developed countries. However, emission standards in India are relatively lax compared to current Euro standards. At the present time, India lags behind the European new vehicle standards and fuels requirements by 7-8 years (Table 12). Hence, there is a need to review the emission standards of India and make them more stringent. It is required to set a goal to achieve parity with Europe, United States or Japan by the year 2015 at the latest.

It has been estimated that at any point of time, new vehicles comprise only 8 to 10% of the total vehicle population in India. Currently, only transport vehicles, that is, vehicles used for hire or reward are required to undergo periodic fitness certification (see Figure 3 for existing inspection and maintenance system in India). The large population of personalized vehicles is not yet covered by any such mandatory requirement. Modern vehicles equipped with advanced pollution controls are even more dependent on proper functioning of components to keep pollution level low. Minor malfunctions in the air, fuel, or spark management system can increase the emissions significantly. Therefore, tightening of new vehicle emissions standards should be followed by a similar tightening of in-use vehicle emission standards.

The inspection and maintenance system, comprising inspection, maintenance, and certification of vehicles, is crucial for regulating pollution for the large fleet of in-use vehicles. At present in India, there is no regular fitness checking program for in-use private vehicles. Simple Pollution Under Control (PUC) checks came into existence in 1991 for all on road vehicles. Commercial vehicles are required to undergo simple fitness checks in addition to PUC checks. However, these are isolated checks and are grossly inadequate. There is an urgent need to strengthen the existing inspection and maintenance program in the country.

Government needs to consider (i) whether it has adopted the appropriate in-use vehicle emissions standards and test procedures on which to base I/M, (ii) whether the institutional capacity and willingness to enforce an I/M program exists, and (iii) whether the repair sector is sufficiently trained to carry out repair work on vehicles which fail the tests. If any of these aspects are found to be deficient, government should take appropriate measures to rectify the problems. To ensure the public acceptance and their participation in I/M program, public awareness campaign should be strengthened. Particular emphasis should be placed on the health benefits that can result from a successful I/M program.

4.5.10 Implementing demand side management measures

In general, Indian cities have not made much progress in implementing the demand side management measures, such as parking fee, fuel tax, congestion pricing, etc. Although measures that involve restraining the use of private vehicles are likely to be unpopular, a

gradualist approach of progressively introducing restraints on road use, while at the same time improving public transport, is more likely to lead to a greater acceptance. It is expected that improved public transport and more efficient management of demand would help to combat the trend away from public transport towards greater use of cars and two-wheelers.

There is no doubt that the public transport is desired but it can not be encouraged without the implementation of sound and comprehensive demand side management policies. Such policies should not be implemented in isolation, but in conjunction with other transport planning, supply side management, and transport pricing measures. Public needs and road safety should also be considered in design of the policies even when these are directed to improve the air quality.

4.5.11 Using supply side management measures

As discussed earlier, traffic congestion on roads increases the level of pollution dramatically. Hence, there is an urgent need to use supply side management measures to tackle prevalent traffic congestion problem. One way traffic system, improvement of signals, traffic engineering improvement measures for road network and inter-sections, bus priority lane, etc. could be used as short-term measures to ease traffic congestion. Road infrastructure improvement measures like new road alignments, hierarchy of roads, provision of service roads, bye passes, ring roads, bus bays, wide medians, intersection improvements, construction and repair of footpaths and roads, removal of encroachments, etc. should also be introduced at least in million plus cities. These can be considered as medium-term measures. Besides short- and medium-term measures, there is a need to have long-term measures as well, involving technology upgradation and introduction of high speed, high capacity public transport system particularly along high-density traffic corridors. However, capital-intensive projects should be considered if and only if they are absolutely necessary. In many cases, instead of building underground railways or elevated highways, government would have done better to have increased the capacity of existing bus transport services. There should be careful appraisal of capital-intensive projects before implementing them in metropolitan cities.

4.5.12 Encouraging green modes

Transport policy should also encourage the need for developing *green* modes like bicycles, cycle rickshaws, pedestrians, etc. The potential of *green* modes is often underestimated since they are used primarily for short distances. But, large fraction of journeys made by cars and two-wheelers are mainly for short distances say less than 6 km, a distance over which use of motor vehicle does not provide significant time advantage . Moreover, motor vehicle emissions are high for short distance travel because fuel consumption is high due to cold engine and because the catalyst is not yet working at full efficiency. Due to this reason, the use of *green* modes in place of motor vehicles for short distances has huge potential for pollution reduction. Green modes particularly walking and cycling have huge health benefits as well. However, to promote *green* modes, the safety concerns of cyclists and pedestrians have to be addressed adequately. For this purpose, there has to be a segregated right of way for bicycles and pedestrians. Apart from improving safety, this will help to improve traffic flow, increase the average speed of traffic, and reduce emissions resulting from low vehicle speed.

4.5.13. Introducing public awareness programs

Public attitudes influence politicians and policy makers and increase the political will to tackle problems. The adverse health effect of air pollution due to vehicular emission needs to be communicated to people as a means of influencing public attitudes. Deaths and injuries resulting from road traffic crashes are also a major and growing public health problem. Media, NGOs, and research institutions should be encouraged to highlight these issues, conduct independent analysis, and advocate possible solutions to policy makers and implementing agencies. At the same time, fair and equitable procedures for public complaints should be instituted. These can enhance awareness and understanding, influence public attitudes and public support, and create the necessary political will to tackle the problem of congestion, air pollution, and road safety.

At the same time, public awareness programs should also be initiated to communicate the benefits of public transportation, efficient vehicles and fuels, car pooling, green modes, economical driving, etc. One should note that an economical driving alone can bring about fuel savings of up to 10-15% per vehicle. The fact that fuel consumption can be influenced by economical driving is not widely communicated to the public. The public should be given better information about the same. To promote economical driver training for individuals as well as companies, government should positively think to provide financial subsidies to driver training schools.

4.5.14. Strengthening the urban institutions

Most Indian cities are struggling to address the transportation problem mainly because they are not equipped with the appropriate institutional capacity and required financial resources. This is because functional responsibilities for urban transport are fragmented among central, state and local level governments where no one is in charge of overall coordination (see Table 13 for institutional arrangements for urban transport in India). Management of urban areas is primarily a responsibility of the state governments in India. However, several key agencies those play an important role in urban transport planning work under the central government, with no accountability to the state or local government. Central government is directly involved in the provision of suburban rail service through Indian Railways in four mega cities. Ministry of Road Transport & Highways, Government of India, is responsible for the national highways, including the stretches within urban areas, and local governments have no role in the operations and management of these stretches though they are heavily used for urban transport .

State governments independently control local land use policies, motor vehicle and sales tax rates, bus transport systems, policies for private sector participation, etc. Most of the local governments at municipal level rely heavily on capital grants from the states for almost all infrastructure projects. Although, Urban Local Bodies (ULBs) in India have been empowered by the Constitution (74th Amendment) Act, 1992 to assume responsibilities for development of

urban transport, but most of them do not have adequate power to raise financial resources. Their revenues mainly depend on property tax collection and inter-governmental transfer from the state. ULBs' revenues are barely sufficient for salaries and current expenditures, and most capital investments are funded through borrowing, often from the state Urban Infrastructure Development Corporations (UIDCs). Revenues from user charges imposed on publicly provided infrastructure services are minimal. Due to this, insufficient funds are available for operation and maintenance of existing assets which badly affects the service delivery.

Although 74th Amendment of the Constitution aimed to provide administrative and fiscal decentralization at the local government level, the progress in this regard has been slow primarily because local governments are still dependent on higher level of governments for funding. They do not have power to raise additional tax revenue and are still dependent on inter-governmental transfer arrangements. As long as this situation continues, most cities may not be able to improve their infrastructure. There is a pressing need to empower the ULBs in the true sense so that they can raise funds for developmental projects in urban areas by their own rather than being dependent on states. Also, they may be authorized, through legislation, for overall coordination of activities relating to provision of transport infrastructure by various government agencies in their respective urban areas. Only then, they can augment the infrastructure base, provide improved quality of services on a sustainable basis to their residents, and contribute to the growth momentum of the Indian economy.

Table 13: Institutional arrangements for urban transport in India

Function	Policy	Sub-functions	Agency Responsible
Strategic and Functions		Strategic planning Policy formulation Capital financing	Ministry of Urban Development / State Transport Department / State Urban Development Department
Regulation of Commercial Issues		Fixation of fares / tariffs Monitoring quality of services	Ministry of Railways / State Road Transport Corporation / Regional Transport Office
Health and Safety Regulation		Setting standards Ensuring adherence to safety standards Ensuring adherence to environmental standards	Ministry of Road Transport & Highways / Central Pollution Control Board / State Pollution Control Board Ministry of Road Transport &

		Highways
		Central Pollution Control Board / State Pollution Control Board
Procurement and Provision of Public Transport	Network and route design Identification of demand Franchising/route allocation Planning and provisioning of services Contract monitoring	Municipal Corporation / State Road Transport Corporation Municipal Corporation State Road Transport Corporation Municipal Corporation / Public Works Department
Supply of Common Infrastructure and Other Services	Inter-modal coordination Passenger information systems Data collection and management Dispute resolution Management of common infrastructure Public relations Security services Management of common ticketing facilities Management of revenue-sharing arrangement between operators	State Road Transport Corporation / Municipal Corporation / State Transport Department Traffic Police Municipal Corporation / State Road Transport Corporation
Operation of Services	Operation of publicly owned bus services Operation of privately owned buses Operation of rail-based services	Municipal Corporation / State Road Transport Corporation Private Bus Operators Ministry of Railways

Concluding remarks

In most of the Indian cities, transport demand has increased substantially due to increase in population as a result of both natural increase and migration from rural areas and smaller towns. Availability of motorized transport, increase in household income, and increase in commercial and industrial activities has further added to it. Unfortunately, public transport systems in Indian cities have not been able to keep pace with the rapid and substantial increase

in travel demand. Rail based public transport services and well-organized bus transport services are limited to few big cities only. Qualitatively, the available public transport services are overcrowded particularly during peak hours and involve long waiting periods. As a result, there is a massive shift towards personalized transport, specially cars and two-wheelers, and also proliferation of various types of intermediate public transport modes, such as auto-rickshaws and taxis.

The increasing use of private motor vehicles in cities has been rapidly changing their modal-split structure. Motorization may have brought a higher level of mobility to the high-income segments of urban population, but its adverse impact in the form of congestion, air pollution, and traffic accidents is also substantial. Although these impacts are inherent to motorization, the excessively high level of impact faced by many Indian cities has a lot to do with the lack of effective public policy. The city cannot afford to cater only to the private cars and two-wheelers and there has to be a general recognition that without public transport in general and bus transport in particular cities would be less viable. Although rising income of the people is one of the most important reasons for change in modal-split structure, the more important reasons are to be found in the public transport system itself. Speed, service quality, convenience, flexibility and availability favor adoption of private mode as the main mode of transport. Given the opportunity, people reveal widely divergent transport preferences, but in many places city authorities favor a basic standard of public transport services. It is often thought to be inequalitarian to provide special services such as premium or guaranteed seats in return for higher fares. As a consequence, those who can afford private vehicle are successively leaving public transport. Until recently the main function of public transport was to satisfy the individual needs of the less affluent members of society, but now it has to contribute for congestion relief and environmental preservation. This requires a fundamental change of emphasis to fulfill its new role of attracting enough people away from the cars, two-wheelers, auto-rickshaws, and taxis.

The problem of acute road congestion, rising air pollution, and a high level of accident risk faced by metropolitan cities of India is taking serious dimensions and worsening the people's quality of life. Without vigorous action, this problem would intensify, as rising population over the

coming decades and the goal of growing economic prosperity put more pressure on the system. Reducing traffic congestion, vehicular emission, and accident risk requires a comprehensive strategy. The main objective of such strategy should be to provide and promote sustainable high quality links for people, goods, and services to, from and within the city. Strategy should be designed in such a way that it reduces the need to travel by personalized modes and boosts public transport system. This requires not only increasingly stringent emissions standards, specifications for clean fuels, proper maintenance of in-use vehicles, optimal pricing of transport services, demand as well as supply side management measures, but also a complete overhaul of public transport system. The time has come to act now.

4.6 Urban communication

Communication is the process by which messages are transferred from a source to one or more receivers. Man is the only animal who can communicate by expression and possesses the ability to express in words. Gone are the days when the pre-historic man used to produce sounds, signals, gestures to convey his feelings. But man in a globalized world has become successful in inventing a plurality of media communication. The information technology has revolutionized the world to such an extent that the mind boggling communication revolution has termed the modern age as the “age of communications.”

Communication is sharing of knowledge, ideas, feeling, and information among people in a manner that each participant involved in the process gains a common understanding of the meaning, intent and use of the message. When the sender communicates, he tries to establish commonness with the receiver. C. H. Cooley, in defining communication, wrote "By communication is meant the mechanism through which human relations exist and develop all the symbols of the mind, together with the means of conveying them through speech and-preserving in time. It includes the expression of the face, attitude and gesture, the tones of the voice, words, writing, printing, railways, telegraphs, telephones and whatever else may be the latest achievements in the conquest of space and time."

Communication is of different types. It may be broadly classified as: (i) natural and technological communication (ii) interpersonal and mass communication and (iii) active and

passive communication. Natural communication is that communication which takes place through words, gestures and movements. Technological communication, on the other hand, refers to communication which takes place through technology such as radio, television, films, newspapers etc.

Interpersonal communication refers to communication that may occur between two or more persons. When we speak to an individual or address a group of people, it is interpersonal communication in a face to face situation. When we speak to an individual over telephone then it is a form of interpersonal communication not involving a face to face situation.

Mass communication comes in when we are to reach a large section of the people. As the name implies, communication here takes place between a person (s) and the mass through radio talks, television shows, films, newspapers and magazines audio and video cassettes etc. Thus mass communication is the technologically and institutionally based mass production and mass distribution of public messages in industrial societies.

In active communication the communicator and receiver are actively involved in the process of communication. There is a two way communication between them. But in passive communication there is little involvement of the receiver. As a result passive communication yields no desired result. The urban society being large, possesses some problems of communication which are discussed below:

1.The Problem of Social Heterogeneity: An urban society is heterogeneous in its composition. The city is complex and many sided. Wide difference is found in the ways of living of the people, their ethnic composition and also in languages of the city dwellers Language being the main vehicle of communication, it is well imaginable that communication will be less vibrant, Uniformity and similarity

are rarely found among the city dwellers. It is more characterized by diversity. As Louis Wirth in his "*Urbanism as way of life* ", points out "the greater the number of individuals participating in a process of interaction the greater the potential differentiation between them " Louis Wirth

further says that "*the city has been the melting-pot of races, peoples and cultures, and a most favourable breeding ground of new biological and cultural hybrids.*" He also says that the city "has brought together people from ends of the earth *because they are different and thus useful to one another, rather than because they are homogeneous and likeminded.*" The ways of thinking, behaving, acting, the habits, moral religious beliefs and practices, food and dress habits, occupations, etc., of the people differ significantly: Differentiation is potent in urban life and therefore there remains the likelihood of communication gap.

2. Prevalence of Secondary Relations : The urban community is characterized by secondary relations. A city by virtue of its size cannot be a primary group. It is a secondary group. People are indifferent towards one another. Face-to-face, friendly or intimate relations may not be observed among people. Mass media of communication such as telephone, radio, press, post and telegraph, etc. are often resorted to by the urbanites for contacts. In cities people rarely take personal interests in others concerns. Superficial form of politeness and manners are commonly found. Physical contact rarely results in intimacy and closeness. Even the neighbours are often found to be strangers. Private interests prevail over the common interests.

3. Anonymity of City Life : The city is an ocean of strangers. Heavy concentration in a limited space makes it impossible for people to know one another. Every one appears to be a stranger for every other person. There prevails a state of namelessness in which the individual identities remain unknown., This kind of namelessness that is found in the city is often referred to as the *anonymity of city life*. The anonymity of city life makes the problem of social control more complex and lacks in close social interaction which are largely found in the countryside. Therefore the sense of "we feeling" cannot develop among themselves.

4. Formal Control:Due to lack of direct communication among the city dwellers, Control of social behaviour is more difficult in a city. Predominance of secondary relations makes it more complex, the social control. The social behaviour of the people is no more regulated by customs, traditions, religion and group standards. Instances of social deviation are commonly found in a city. As the city is the ocean of strangers, violations of standard of behaviour may pass unnoticed and unchecked. In this way, informal means of

social control **are not** very effective. Regulation of social behaviour is largely done through the specialised agencies law, legislation, police, court, etc. The larger the city, the greater it becomes the problem of communication and more complex the agencies like like secondary regulation.

4.7. Urban Environmental Pollution: An Introduction

Urban pollution – pollution in towns and cities – comes from a wide variety of sources. These include:

- cars, trains and other forms of transport
- construction and building
- misconnections – waste water draining to the wrong place
- ‘run-off activities’ – water from car washing, for example
- discharges from contaminated land

The sources of pollution we regard as priority areas are:

- misconnections
- run-off activities
- industrial estates
- contaminated urban rivers

Urban pollution is often referred to as non-agricultural diffuse pollution (NADP) as it comes from many sources and it’s made up of a large number of pollutants.

We’re currently updating how we deal with NADP. We consulted on our approach in November 2012. A summary of responses to the consultation was published in summer 2013.

Misconnections

A misconnection is where the drainage from a building has been connected to the wrong sewage network. There are two examples of a misconnection. The first is when foul

(contaminated) water gets into the surface water system, impacting on the water quality and the amenity value of the area.

The second type is when surface water (such as rainwater) goes into the foul sewer (a sewer that carries sewage from homes). This can cause sewer flooding.

Misconnections are considered to be a major source of urban diffuse pollution. Dealing with urban diffuse pollution is part of commitment 27 in the natural environment white paper.

Phosphates in detergents

Phosphate is a nutrient. Too much phosphate in rivers and lakes can cause 'nuisance growth' in plants and algae.

Algae is bad for water-bodies as it blocks light and uses up oxygen. This can lead to a decline in the quality of the water, known as eutrophication. Eutrophication harms a river or lake's ecology and limits what they can be used for.

Phosphates often enter rivers in sewage. The main sources of phosphates in sewage include human faeces and urine, food wastes and detergents.

We're reducing phosphates:

- in laundry detergent in 2013
- in dishwasher detergent in 2017

We're also working with farmers to reduce the amount of phosphate that runs off fields and the water companies to reduce the amount released from sewage works.

The Concept and Definition:

Environment is made-up of the circumstances, objects or conditions by which a human, animal, plant or object is surrounded. The term 'environment' generally refers to the natural world as perceived by humans.

'Pollution' refers to harmful environmental contaminants and to the act or the process of polluting the environment. Generally, the process needs to concern human activity, which results in pollution. Even relatively benign products of human activity are liable to be regarded as pollution, if they precipitate negative effects later on.

The Environmental Protection Agency (EPA) defines pollution as 'the presence of a substance in the environment that because of its chemical composition or quality prevents the functioning of natural processes and produces undesirable environmental and health effects.' Any material that causes the pollution is called a 'pollutant.'

Pollution can be defined according to its contextual efficacy (use). Blooms of algae and the resultant eutrophication (the enrichment of an aquatic system by the addition of nutrients primarily caused by leached phosphorous or nitrogen containing compounds in lakes, rivers, bays or other semi-enclosed waters) of lakes and coastal ocean is considered as pollution, when it is fuelled by the nutrients from industrial, agricultural or residential run-off.

Although carbondioxide (CO₂) is not toxic and actually stimulates plant growth but because it is a greenhouse gas that fosters global warming, it is sometimes referred to as pollution. More often and more properly, CO₂ from such sources as combustion of fuels is labelled neutrally as 'emission.'

Traditional forms of pollution include air pollution, water pollution, while a broader interpretation of the word has led to the ideas of ship pollution, light pollution and noise pollution.

Serious pollution sources include chemical plants, oil refineries, nuclear waste dumps, regular garbage dumps (many toxic substances are illegally dumped there), incinerators, PVC factories, corporate animal farms creating huge amounts of animal waste. Some of the more common contaminants are lead (like in lead paint), chromium, zinc, arsenic and benzene.

Pollutants are thought to play a part in a variety of maladies including cancer, lupus, immune diseases, allergies and asthma.

Water Pollution

Water pollutants originate from a host of human activities and reach surface water or ground water through an equally diverse host of pathways.

There are many causes for water pollution but two general categories of water pollution exist. They are as follows:

Direct contaminant sources: Direct sources include the effluent discharge of substances from factories, refineries, waste treatment plants, power plants, and coalmines, which emit fluids of varying quality directly into water supplies. In many countries, these practices are regulated, although this does not mean that pollutants cannot be found in these waters. These sources are relatively easy to identify and therefore are easier to monitor and regulate than the indirect sources.

Indirect contaminant sources: Indirect sources include contaminants that enter the water supply from soils/groundwater systems and from the atmosphere via rainwater. Soils and groundwater contain the residue of human agricultural practices (fertilizers and pesticides) and improperly disposed of industrial wastes. Agricultural run-off, or the water from the fields that drains into rivers, is another major water pollutant as it contains fertilizers and pesticides. Atmospheric contaminants are also derived from human practices (such as gaseous emissions from automobiles, factories and even bakeries).

Thus, the main cause for water pollution is the city sewage and industrial waste discharged into the rivers. The facilities to treat wastewater are not adequate in any city in India. Presently, only about 10 per cent of the wastewater generated is treated: the rest is discharged as it is into water bodies. Due to this, pollutants enter groundwater, rivers and other water bodies. Such water, which ultimately is used in the households, is often highly contaminated and carries disease-causing microbes.

Domestic Sewage

It refers to the waste that is discarded from households. Also referred to as sanitary sewage, such water contains a wide variety of dissolved and suspended impurities.

It amounts to a very small fraction of the sewage by weight. But it is large by volume and contains impurities such as organic materials and plant nutrients that tend to rot. The main organic materials are food and vegetable waste, chemical soaps, washing powders, and so on. Domestic sewage is also very likely to contain disease-causing microbes. Thus, the disposal of domestic wastewater is a significant technical problem. Sewage generated from the urban areas in India has multiplied manifold since 1947.

Today, many people dump their garbage into streams, lakes, rivers and seas, thus making water bodies the final resting place of cans, bottles, plastics and other household products. The various substances that we use for keeping our houses clean add to water pollution as they contain harmful chemicals. In the past, people mostly used soaps made from animal and vegetable fat. But most of today's cleaning products are synthetic detergents and come from the petrochemical industry. Most detergents and washing powders contain phosphates, which are used to soften the water among other things. These and other chemicals contained in washing powders affect the health of all forms of life in the water.

Agricultural Run-off

The use of land for agriculture and the practices followed in cultivation greatly affect the quality of groundwater. Intensive cultivation of crops causes chemicals from fertilizers (e.g. nitrate) and pesticides to seep into the groundwater, a process commonly known as leaching. Routine applications of fertilizers and pesticides for agriculture and indiscriminate disposal of industrial and domestic wastes are increasingly being recognized as the significant sources of water pollution.

The high nitrate content in groundwater is mainly from irrigation run-off from agricultural fields where chemical fertilizers have been used indiscriminately.

Industrial Effluents in urban India

Waste water from manufacturing or chemical processes in industries contributes to water pollution. Industrial wastewater usually contains specific and readily identifiable chemical compounds. During the past 50 years, the number of industries in India has grown rapidly. But water pollution is concentrated within a few subsectors, mainly in the form of toxic wastes and organic pollutants. Out of this, a large portion can be traced to the processing of industrial chemicals and to the food products industry. In fact, a number of large- and medium-sized industries in the region covered by the Ganga Action Plan do not have adequate effluent treatment facilities. Most of these defaulting industries are sugar mills, distilleries, leather processing industries and thermal power stations. Most major industries have treatment facilities for industrial effluents. But this is not the case with small-scale industries, which cannot afford enormous investments in pollution control equipment as their profit margin is very slender.

Types of Water Contaminants

Contaminants of water can be broadly classified into organic and inorganic.

Organic Wastes

Human and animal wastes contain organic matter that creates serious problems if it enters bodies untreated. Other kinds of organic matter such as leaves, grass clippings, trash etc. can enter water as a consequence of run-off. With the exception of plastics and some man-made chemicals, such organic matter is biodegradable. As bacteria and detritus feeders decompose organic matter in water, they consume oxygen, which is dissolved as a gas in water. The amount of oxygen that the water can hold in solution is severely limited.

In cold water, dissolved oxygen (DO) can reach concentrations up to 10 ppm (parts per million): even less can be held in warm water. When we compare this ratio with that of oxygen in air, which is 200,000 ppm (20 per cent), we can understand why even a moderate amount of organic matter decomposing in water can deplete the water of its DO. Bacteria keep the water depleted in DO as long as there is dead organic matter to support their growth.

Thus, a common water-quality test is the biochemical oxygen demand (BOD), which is the measure of the amount of organic material in the water, in terms of how much oxygen will be required to break it down biologically, chemically or both. The higher the BOD measure, the greater is the likelihood that DO will be depleted in the course of breaking it down. A high BOD causes so much of oxygen depletion that animal life is severely limited or precluded, as in the bottom waters of Gulf of Mexico. Fish and shellfish are killed when the DO drops below 2 or 3 ppm; some are less tolerant at even higher DO levels.

If the system goes anaerobic (i.e., without oxygen), only bacteria can survive, using their abilities to switch to fermentation or anaerobic respiration (i.e., metabolic pathways that do not require oxygen). A typical BOD value of raw sewage would be around 250 ppm. Even a moderate amount of sewage, added to natural waters containing at most 10 ppm DO, can deplete the water of its oxygen and cause highly undesirable consequences.

Inorganic Contaminants

Water-soluble inorganic chemicals constitute an important class of pollutants that include heavy metals (such as lead, mercury, cadmium and nickel), acids from mine drainage (such as sulfuric acid) and road salts employed to melt ice in colder climates.

Effects of Water Pollution

The effects of water pollution are varied. They include poisonous drinking water, unbalanced river and lake ecosystems that can no longer support full biological diversity, deforestation from acid rain and many other effects. These effects are specific to the various contaminants.

Virtually all water pollutants are hazardous to humans as well as lesser species; sodium is implicated in cardiovascular disease, nitrates in blood disorders. Mercury and lead can cause nervous disorders. Some contaminants are carcinogens. Dichlorodiphenyl-trichloroethane (DDT) is toxic to humans and can alter chromosomes. Polychlorinated biphenyls (PCBs) cause liver and nerve damage, skin eruptions, vomiting, fever, diarrhea and fetal abnormalities. Along many shores, shellfish are unable to survive due to the contamination of water caused by DDT, sewage or industrial wastes.

Dysentery, salmonellosis, cryptosporidium and hepatitis are among the maladies transmitted by sewage in drinking and bathing water. In many countries, beaches along coasts, riverbanks and lakeshores have been ruined by bathers, by industrial wastes, municipal sewage and medical waste. Water pollution is an even greater problem in the third world, where millions of people obtain water for drinking and sanitation from unprotected streams and ponds that are contaminated with human waste. This type of contamination has been estimated to cause more than 3 million deaths annually from diarrhea in the third-world countries, with most of the decreased being children.

Controlling the Problem of Water Pollution in urban India

Science provides many practical solutions to minimize the present levels at which pollutants are introduced into the environment and for remediating (cleaning up) past problems. All of these solutions come with some cost (both societal and monetary). In our everyday lives, a great deal can be done to minimize pollution if we take care to recycle materials whose production creates pollution and if we act responsibly with household chemicals and their disposal. Additionally, there are choices we make each day that can also affect the quantity of pollutants. Heavily packaged foods, for instance, contain boxes, cartons and bottles etc., made with polluting dyes, many of which are released into the ground-water at municipal landfills. Whether we choose to drive to the corner store rather than walk or ride a bicycle will determine how much we personally contribute to acid and hydrocarbon emissions to the atmosphere (and ultimately to global fresh water supplies).

Since water plays such a vital role in life on the earth, good quality water is a precious resource. Often, water quality is more important than water quantity. The quality of the water affects the use we make of it, but the reverse is also true. Once we have used the water, we affect its quality.

This circular process indicates that the traditional habit of discharging untreated sewage and chemical wastes directly into rivers, lakes, estuaries of oceans for eventual 'assimilation' into the environment is no longer acceptable—either technically or morally.

The explosion in human population and industrial activities, and the rate at which new chemicals and products are being developed and used pose a global environmental threat. The natural decay processes in water bodies can no longer cope with these loads.

The approach to controlling pollution depends on the following.

The type of pollutant whether it is degradable or persistent; whether it is metal or a pesticide or a PCB, and so on.

The source whether it comes from an industrial pipe or from a farmer's field or from atmosphere.

- The effects whether they harm fish or birds or plants or humans.

Measures taken to protect water quality include the following:

Regulations: Ideally, polluting contaminants should be prevented from entering the water. Specific causes which should be controlled to prevent water quality degradation are air pollution, agricultural run-off and seepage containing the residues of fertilizers, pesticides and other chemicals, industrial pollution, either directly from the facility, or indirectly from the leaching of chemicals from landfills, or pollution from average households in the form of improperly treated municipal sewage. At the most, in some circumstances, pollutants can be allowed only in low concentrations. In deciding how to prevent or to regulate water contamination, a number of questions have to be asked, including the sources, amounts and effects of various substances, 'their fate after entering the water', the concrete possibility to prevent substances to reach the water body or to remove them by treatment. Obviously, prevention is the only regulation method for those chemicals, which cannot be removed by water treatment methods from entering the water system.

Technology: Technology can be used in many cases to reduce or eliminate substances that may be harmful to the environment. Sewage treatment plants, properly operated and maintained, are the means of removing many toxic substances from wastewater and returning the treated water to a river or a lake without causing harm downstream.

Being a responsible consumer: All of us, as individuals, can do something to protect the water quality by being responsible consumers. Many daily normal activities as simple as rinsing dishes in the kitchen create wastewater that is contaminated to some degree. Once this water enters the sewer system, it must be treated in a sewage treatment plant. These facilities are never 100 per cent effective, which means that

some water quality deterioration remains after the treatment process. So choosing non-hazardous products, reducing the use of some chemicals, respecting the recycling programs of municipalities, ensuring a proper disposal of waste are important behaviours to maintain water quality.

Air Pollution

Air pollution is the contamination of the air by noxious gases and minute particles of solid and liquid matter (particulates) in concentrations that endanger health. The major sources of air pollution are transportation engines, power and heat generation, industrial processes and the burning of solid waste.

Sources of Air Pollution in urban India

The combustion of gasoline and other hydrocarbon fuels in automobiles, trucks and jet airplanes produces several primary pollutants such as nitrogen oxides, gaseous hydrocarbons and carbon monoxide as well as large quantities of particulates, chiefly lead. In the presence of sunlight, nitrogen oxides combine with hydrocarbons to form a secondary class of pollutants, the photochemical oxidants, among them ozone and the eye-stinging peroxyacetyl nitrate (PAN). Nitrogen oxides also react with oxygen in the air to form nitrogen dioxide, a foul-smelling brown gas. In urban areas like Los Angeles, where transportation is the main cause of air pollution, nitrogen dioxide tints the air, blending with other contaminants and the atmospheric water vapour to produce brown smog. Although the use of catalytic converters has reduced smog-producing compounds in motor vehicle exhaust emissions, recent studies have shown that in doing so the converters produce nitrous oxide, which contributes substantially to global warming.

In cities, air may be severely polluted not only by transportation but also by the burning of fossil fuels (oil and coal) in generating stations, factories, office buildings and homes and by the

incineration of garbage. The massive combustion produces tons of ash, soot and other particulates responsible for the grey smog of cities like New Delhi and Kolkata, along with enormous quantities of sulphur oxides. These oxides rust iron, damage building stone, decompose nylon, tarnish silver and kill plants. Air pollution from cities also affects rural areas for many miles downwind.

Every industrial process exhibits its own pattern of air pollution. Petroleum refineries are responsible for extensive hydrocarbon and particulate pollution. Iron and steel mills, metal smelters, pulp and paper mills, chemical plants, cement and asphalt plants— all discharge vast amounts of various particulates. Uninsulated high-voltage power lines ionize the adjacent air, forming ozone and other hazardous pollutants. Airborne pollutants from other sources include insecticides, herbicides, radioactive fallout and dust from fertilizers, mining operations and livestock feedlots.

Effects on Health and the Environment

Air pollution may possibly harm populations in ways so subtle or slow that they have not yet been detected. For that reason, research is now underway to assess the long-term effects of chronic exposure to low levels of air pollution—experiences of people to determine how air pollutants interact with one another in the body with physical factors such as nutrition, stress, alcohol, cigarette smoking and common medicines. Another subject of investigation is the relation of air pollution to cancer.

Effects of Air Pollution on Health

Air pollution has unhealthy effects on people, animals and plant life across the globe. Every time we inhale, we carry dangerous air pollutants into our bodies. These pollutants can cause short-term effects such as eye and throat irritation. More alarming, however, are the long-term effects such as cancer and damage to the body's immune, neurological, reproductive and respiratory systems. Children, due to their size and the fact that they are in the process of developing, are at greater health-related risk.

The mechanisms by which air pollutants can cause serious adverse health effects are not fully understood. However, many possible mechanisms have been proposed.

The possible mechanism of air pollutants related to lung disease is that small particles penetrate the alveolar epithelium and cause lung inflammation. If an individual already has damaged lungs or lung disease, then increased inflammation as a result of air pollution will worsen their condition.

Air pollution can also cause heart attacks. Two potential mechanisms by which it does this have been proposed:

(i) Lung inflammation can lead to the release of chemicals from macrophages that cause changes in the clotting mechanism of the blood.

(ii) A neural reflex may be initiated by the irritant effects of air pollutants in the lung leading to changes in heart rhythm and rate.

Effects of Air Pollution on Environment:

Climate change on a global scale has been attributed to the increased emissions of CO₂, a greenhouse gas. A global average temperature rise of only 1°C could have serious implications. Possible consequences include the melting of polar ice caps; an increase in the sea level; and increases in precipitation and severe weather events like hurricanes, tornadoes, heat waves, floods and droughts. Indirect effects include increases in infectious disease, weather-related deaths and food and water shortages. All these effects put a stress on ecosystems and agriculture, and threaten our planet as a whole.

Air pollution is not just a 'city problem.' Many air pollutants are dispersed over areas hundreds of miles from their source where they affect many different ecosystems. These pollutants often remain toxic in the environment for a very long time where they continue to affect ponds, streams, fields and forests. Acid rain and global warming are the results of air pollution on the environment.

Noise Pollution

Noise pollution is not easily defined. Part of the difficulty lies in the fact that in some ways, it is different from other forms of pollution:

- Noise is transient; once the pollution stops, the environment is free of it. This is not the case with chemicals, sewage and other pollutants introduced into the air, soil or water.

Other forms of pollution can be measured, and scientists can estimate how much material can be introduced into the environment before the harm is done. Though we can measure individual sounds that may actually damage human hearing, it is difficult to monitor cumulative exposure to noise or to determine just how much is too much.

The definition of noise itself is highly subjective. To some people, the roar of an engine is satisfying or thrilling; to others, it is an annoyance. Loud music may be enjoyable or a torment, depending on the listener and the circumstances.

Broadly speaking, any form of unwelcome sound is noise pollution, whether it is the roar of a jet plane overhead or the sound of a barking dog a block away.

One measure of pollution is the danger it poses to health. Noise causes stress, and stress is the leading cause of illness and suicide. Therefore, any form of noise can be considered pollution if it causes annoyance, sleeplessness, fright or any other stress reaction.

The actual loudness of sound is only one component of the effect it has on human beings. Other factors that have to be considered are the time and place, the duration, the source of the sound and whether the listener has any control over it. Most people would not be bothered by the sound of a 21-gun salute on a special occasion. On the other hand, the thump-thump of a neighbour's music at 2 am, even if barely audible, could be a major source of stress.

Urban dwellers are subjected to excessive noise. Most urban people live, work or play around noise of sufficient duration and intensity to cause permanent hearing loss. Noise consists of pressure waves that travel through the air, which we call 'sound.'

Another important source of environmental noise pollution is the public address system and loudspeakers used by the people for election propaganda, advertisement of goods, and announcement of programmes and finally amplification, and broadcasting of recorded music in connection with the celebration of religious festivals and marriages.

While the sources of noise pollution are many in an urban environment, the largest single source is the motor vehicle traffic, which raises the environmental noise. Noise emission levels of vehicles depend on various factors such as the type of vehicle, capacity of the engine, the condition of the vehicle etc.

Measurement of Sound

Noise is measured in decibels (dB), which compares the intensity of sounds, and is a measure of sound intensity, i.e., the magnitude of the fluctuations in air pressure caused by sound waves. The dB scale is logarithmic, not arithmetic. This means that a doubling of sound intensity is not represented as a doubling of the dB level. In fact, an increase of just 3 dB means twice as much sound, and an increase of 10 dB means 10 times as much sound.

A sound pressure level of 0 dB represents the threshold of hearing in the most sensitive frequency range of a young, healthy ear, while the thresholds of tickling or painful sensations in the ear occur at about 120-130 dB.

dBs are usually measured with a filter that emphasizes sounds in certain frequencies. The 'A' filter (dBA) is the one most frequently used. The 'C' filter (dBC) puts more weight on low-frequency sounds such as the bass in amplified music.

The perception of loudness by the human ear is not directly proportional to the dB level. For example, a sound 10 dB greater than another is not perceived as being 10 times as loud but only about three times as loud.

The intensity of noise diminishes with distance. Outdoors, and in absence of any close reflecting surface, the effective dB level diminishes at a rate of 6 dB for each factor of two increases in

distance. For example, a sound measuring 100 dB at 10 m would be 94 dB at 20 m, 88 dB at 40 m and so on.

Effects of Noise Pollution:

Noise pollution is an example of social cost. It is the price that is being paid for modern living. As permanent hearing loss is usually a long-term process, it is impossible to know at exactly what point noise becomes loud enough to cause damage to the ears.

Since sound intensity doubles with every increase of 3 dB, the time of safe exposure would be cut in half with each such increase. Thus, a worker should wear ear protection if exposed to a steady 75 dBA for 8 h, 78 dBA for 4 h and so on. Brief exposure to noises of up to 100 dBA is not considered risky provided the average remains within the prescribed levels.

Noise is dangerous in other ways too. It can be a cause of stress, illness, aggression and violence. As stated above, the volume of noise is only one component in its effect.

High environmental noise levels cause physiological and psychological disturbances in the human system. These disturbances include the interference with the power of concentration of mind, interference with the speech communications, and causing of annoyance, irritation, nausea and headache.

The journal *Noise and Health*, edited by Thomas H. Fay and published by the New York Academy of Medicine (1991), presents a critical and comprehensive review of the effects of noise on all of the body's systems. It documents the specific health hazards of noise on the body as well as on the psychology of the individual.

The effects of noise involve multiple aspects of the people's health and welfare. From a philosophical point of view, since noise may be defined as any unwanted acoustical stimulus, which interferes with human activity or rest, any amount of noise affects the people

(otherwise, it would not be noise). Often, however, noise is better tolerated if it is judged to be unavoidable. The noise of rain, for instance, is much more acceptable than that coming from the isolated but steadily repetitive drops from a leaking tap. Generally speaking, periodical noises are more annoying than random ones.

The future scene

The problem of urban pollution has become a serious threat to the urban environment. Environmental pollution is getting from bad to worse in all the cities, big or small. Anti-pollution laws are obeyed more in their breach rather than in observance. The situation may perhaps be controlled if the laws are made more stringent and are made to follow in letter rather than in spirit. In most cities of India, the citizens are not bothered to keep their surroundings or vehicles clean. Household wastes and other garbage are found strewn everywhere. But more important in passing and implementing laws is educating the public in civic duties and cleanliness and making them conscious of the dangers of pollution. The swachha Bharat Abhiyan will give an impetus to the anti-pollution movement in India.

4.8. URBAN SANITATION

Sanitation is a term used for hygienic disposal or recycling of waste materials, particularly human excrement. It is an important public health measure, which is essential for prevention of disease. By World Health Organization's (WHO) definition, sanitation is safe management of human excreta and includes the provision of latrines and promotion of personal hygiene. Environmental sanitation is a broader term, encompassing excreta disposal, solid waste management, wastewater disposal, vector control and drainage. Personal hygiene includes practices such as washing hands with soap after defecation and before contact with food, and in a broader sense, extends to the collection, storage and handling of safe water.

The safe disposal of human faeces is a prerequisite to protect health. In the absence of basic sanitation, a number of major diseases are transmitted through faecal pollution of the household and community environment. Even if good sanitation facilities are available, they are not always adequate to improve peoples health. Globally 2.4 billion people, most of them living in peri-urban or rural areas in developing countries do not have access to the improved sanitation facilities. Coverage estimates, according to WHO for 1990 and 2000, show that little progress was made during this period in improving this situation. The lowest level of facility coverage is found among 50 countries comprising the continent of Asia, where 48 percent of the population does not have access to adequate sanitation facilities. In countries of South-East Asia Region, this coverage is still lower at 42 percent. Most people defecate outdoors, especially in rural areas and urban slums, and do not cover or dispose of their excreta properly In many rural areas in the region, people use water for cleansing after defecation, then attempt to clean their hands by rubbing them on the wetted ground and thenrinsing. One study done by WHO found that 61 percent of the rural population in India uses water with ash or mud to clean hands, 24 percent wash with water only, and only 14 percent wash with soap and water. In India, over 700 million people defecate in open, along roadsides, on farmland, in municipal parks and so on. According to the Water Supply and Sanitation Collaborative Council, a single gram of faeces can contain 10 million viruses, one million bacteria, a 1,000 parasite cysts and a 100 eggs of worms. No wonder, water contaminated with faecal matter causes diarrhoea (with proper sanitation, the risk level can drop by 40 percent); malnutrition, anaemia or retarded growth (60 percent); blindness (25 percent); schistosomiasis (77 percent); and cholera (72 percent).

It is generally believed that urban centres are prone to health and sanitation, but the reality is different. This is visible from the following facts:

`4861 out of 5861 cities /towns do not have (even partial) sewerage networks

- 18 per cent of urban households defecate in the open
- Lack of treatment of wastewater is costing India \$15 billion in treating water-borne diseases.

- The cost per DALY due to poor sanitation is estimated at Rs. 5400 and due to poor hygiene practices at Rs.900 (HPEC 2011).
- Poor coverage of wastewater treatment – less than 25% of all waste water is treated.
- None of the 423 study cities are “healthy” and “clean”. Only 4 cities fared better & 190 cities are on the brink of emergency (MoUD, 2010).
- Pressure on freshwater resources - about 2500 million litres are disposed directly into the Ganges River alone and about 4,250 million litres into its tributaries.
- India’s urban population is likely to increase from 377 million in 2011 to 600 million in 2031
- Increasing peripheral expansion of many cities and towns (HPEC, 2011 and World Bank 2011), where there will be huge demand for urban services.
- Phenomenal increase of 2,774 new “census towns” – greater than the number of such new towns identified in all of the 20th century.
- Large proportion of urban population live in slums.This has been calculated at about 94 million

4.8.1 Integrated Low Cost Sanitation Scheme (ILCS)

- The scheme was introduced in 1980
- The main objective of the scheme is to convert latrines into low cost pour flush latrines
- 911 towns had been declared as scavenger free
- 11th Plan Allocation was Rs 200 crore; spending has been low

Mega City Scheme

- The scheme was introduced in 1993-94
- 676 projects costing Rs 8626 crore
- 50% of project cost has to be met from institutional finance/capital market.
- 75% of the Central and State shares would be recovered & ploughed back into the Revolving Fund
- The scheme was subsumed under JNNURM

Integrated Development of Small and Medium Towns (IDSMT)

- The scheme was introduced in 1979-80
- It is applicable to towns/cities with population up to 5 lakhs
- Total central assistance was about Rs 1100 crore (another Rs 707 crore by states)

4.8.2 JNNURM

- 4 sub-missions – UIG, UIDSSMT, BSUP and IHSDP
- Adopted in a reform-liked funding approach
- CDP – identifying city's development priorities through stakeholder participation
- Progress of both fund utilisation and reforms under the programme has been tardy

4.8.3 National Urban Sanitation Policy (NUSP) Extent of the Policy:

The policy attempts to deal with the sanitation issues such as:

- poor sanitation awareness,
- overlapping institutional responsibilities,
- poor supply-driven approach in provision of sanitation,
- the urban poor who face economic constraints in accessing safe sanitation

Framework of the Policy: It encourages states to formulate their own State Level Sanitation Strategies, and cities to prepare their own City Sanitation Plans.

The GOI supports the states and cities in the following ways:

- in generating awareness,
- in dividing institutional responsibilities,
- in funding projects proposed as part of City Sanitation Plans, o in coordinating sanitation with investments in urban infrastructure and housing

4.8.4 Key Issues of urban sanitation:

Low Infrastructure:

- Low investments – historic neglect
- Investments (whatever little) made on an ad hoc basis
- High investment needs (?)
- Always been a catch up game

Low Service Coverage:

- Norm based approach – one size fits all ?
- Focus on Individual Projects and Asset Creation rather than Improved Service Delivery
- No last mile connection
- BANANA (Build Absolutely Nothing Anything Near Anyone) problem !!
- Uncertainty over land tenure
- Weak Institutional Framework:
- Low Maintenance of Assets : Result is a “build-neglect-rebuild” cycle
- Many institutions; no coordination
- Limited technical expertise and capacity
- Inadequate capacity at ULB level
- Non availability of institutional finance
- Availability of land for infrastructure creation

Way Ahead

Integrated Strategic Planning at city level– (convergence of CDP, CSP, Master Plan and SFCP)

- Investment requirements should be large but financeable
- Rs 2.4 lakh crore for CAPEX and Rs 2.4 lakh crore for O&M for next 20 years
- Full costs must be collected and rights to all ensured
- Fix the institutions that fix the pipes
- Supply side Dynamics: Delinking land tenure to access to basic services
- Stimulating investments through innovative partnerships (For example -Alandur)
- Scaling up of the models that have worked (For example -community toilets in Trichi)

4.9. CRIMES IN URBAN INDIA:

For semi-urban and rural India, cities have gradually come to signify prosperity, better quality of life, and higher income underlined by a modern lifestyle and facilities. Of all the parameters that are perceived to qualify a successful life in the present context, living in a city is perhaps one of the most significant and sought after. In their quest for the seemingly ideal life, people are increasingly migrating to cities causing an imbalance in the supply and demand scenario of basic resources due to overpopulation. According to United Nations (1999), long term projections estimate that the world's population would probably stabilise at 9.3 and 10 billion between 2150 and 2200. This increase will occur mostly in urban areas, which will grow from 2.5 billion to more than 6 billion, with nearly all of this increase occurring in the developing world. In the shorter term, it is estimated that by 2020 the world's population will reach a 57 per cent urbanisation level.

The imbalance of available resources is marked by the dearth of space, shelter, food and basic amenities for the rising population leading to competition, rivalry and in turn insecurity. The most appalling and stark manifestation of this insecurity is the rise in crime in cities. The biggest irony of the present times is that, cities that attract economic power and foster growth are now the hub of crime and violence which drastically debilitate development. The rising crime in Indian cities may be attributed to widening inequality, poverty, improper urban planning, ever-increasing burden on urban infrastructure, proliferation of slums and poor neighbourhoods, and the not-so-perfect judiciary and legal system of the country.

Available statistics on crimes in India depict an extremely disturbing picture of the law and order situation of the country. As per National Crime Records Bureau (NCRB), Ministry of Home Affairs, Government of India, during 2010, a total of 67,50,748 cognizable crimes comprising 22,24,831 Indian Penal Code (IPC) crimes and 45,25,917 Special & Local Laws (SLL) crimes were reported, showing an increase of 1.11% over 2009 (66,75,217). The (IPC) crime rate has increased by 3.9% over 2009. Crime trends under major heads from 1953-2011 reveal that crimes such as Dacoity and Burglary/House breaking have been on the decline over a period of 59 years however, crimes such as murder, rape, kidnapping & abduction, robbery and riots have been on the rise. While, Burglary/ House breaking has declined by 37.2% (from 1,47,379 in

1953 to 92,504 in 2011) and Dacoity has declined by 23.2% (from 5,579 in 1953 to 4,285 in 2011), Murder has **increased** by 250.0% (from 9,802 in 1953 to 34,305 in 2011); Rape by 873.3% (from 2,487 in 1971 to 24,206 in 2011); Kidnapping & Abduction by 749.0% (from 5,261 in 1953 to 44,664 in 2011); Robbery by 193.8% (from 8,407 in 1953 to 24,700 in 2011) and Riots by 233.7% (from 20,529 in 1953 to 68,500 in 2011). It is evident that heinous and violent crimes are on the rise which is surely a cause for concern.

The police force in India is constrained by the lack of adequate manpower, equipment, technology & technical know-how and to some extent political will. According to NCRB, in 2011 the actual strength of police force was 12, 81,317 against the sanctioned strength of 16, 60,953. In terms of percentage of IPC cases, disposed by courts was mere 13.5% as opposed to the remaining 84.5% cases which were pending. Similarly, disposal of SLL cases by courts was 41.3% while remaining 57.9% cases were pending during the year 2011.

Urban safety and security is vital for the inflow of investment and overall development and it is time the challenge of securing our cities is taken up in the right earnest. Some of the measures that would be crucial to achieve this are better policing, inclusive urban planning to counter the risk of propagating crimes, technological advancement in security, and socio-economic up gradation and development of overcrowded slum areas that are prone to criminal acts and violence. The need of the hour is also for every citizen of the country to be aware of their role in ensuring the safety and security of society at large.

The Conference on Homeland Security 2012: Safe and Secure City being organised by FICCI on August 7-8, 2012 at Federation House, New Delhi attempted on finding out answers to several questions concerning the safety of Indian cities. It provided an opportunity to learn from initiatives across several states of India and deliberated on how to make our cities secure.

The writing on the wall is clear – It is not enough just to realise the gravity of the situation, take a backseat and hope that we as individuals never become the target of crime or violence. On the contrary, each one of us needs to rise to the challenge and strive for a society free of crime and fear.

The hullabaloo about Clean India and the quick extension of the campaign to cover urban agglomerates of the country got this quieter to inspect elements of urban living in India. As per the 2011 Census, the urban population of India stands at 31.16%, as against 27.86% in the 2001 Census. This is reflexive of the 11th Five Year Plan (2007-11) that had marked cities to be “the locus and engine of economic growth over the next two decades” (The Planning Commission of India, 2008). The 12th Five Year Plan, however, rues that urbanisation in India has “occurred more slowly than in other developing countries”, while simultaneously admitting that any increase in the speed of urbanisation would pose “an unprecedented managerial and policy challenge” since “urban infrastructure will fall woefully short of what is needed to sustain prosperous cities.”

There is official acknowledgement, therefore, even by the earlier government, that urban living in India is yet to match international standards of ‘prosperous cities’ – whatever they might signify. However, does poor infrastructure imply inadequacy in transport and communications, accommodation and other civic amenities only – or does it also reflect on the safety aspect of our cities? This query drives us to take a look at the crime scene in our cities and the graffiti that emerges isn’t exactly reassuring. The source of information is the Crime in India 2012 Compendium brought out by the National Crimes Record Bureau (, Ministry of Home Affairs, on 4th June, 2013 . This publication has an entire chapter dedicated to crimes in mega cities – an indication that these spaces occupy a significant enough position in the country’s map to get this special attention. It is, of course, redundant to add that there is no corresponding chapter on crimes in rural India.. Crimes in the country are listed under two different sets: crimes under the Indian Penal Code and crimes under Special & Local Laws . The major ones amongst IPC crimes are crimes against body (murder, attempt to murder, culpable homicide not amounting to murder, kidnapping and abduction, hurt and causing death by negligence); crimes against property (dacoity, preparing for dacoity, robbery, burglary and theft); crimes against public order (riots and arson); and economic crimes (criminal breach of trust, cheating and counterfeiting). Now, in common language, of course, dacoity and robbery, burglary and theft

are used as interchangeable – but the penal code of the country obviously defines them as separate and distinct from each other. Since the aim is to get an overall idea of the crimescape of urban India, it is not necessary to get into the legal details of such difference. Major crimes under SLL relate to illegal possession and use of arms, explosives and explosive substances, of narcotics, psychotropic substances and alcohol (in case of states which prohibit it); gambling; excise related offences; offences related to the railways; passport and illegal immigration related offences; forest, art and antiquities related crimes; cyber crimes; copyright violations and atrocities against Scheduled Castes and Tribes. Over and above these are crimes against women and children, which combine offences under IPC and SLL.

Going back to crimes in cities, the Compendium defines mega cities as those with a population of over one million, which have increased from 35 in 2001 to 53 in 2011. These 53 mega cities constitute just 13.3% of the country's population, but the crime rate (calculated as number of crimes per 100,000 population) with reference to offences under the Indian Penal Code stands at 294.2, as against the national rate of 196.7. If the entire urban agglomeration is taken into account, the rate is even higher at 294.7. Except in ten of the 53 mega cities, the crime rate is also higher than in their respective states. . The crime rate with reference to SLL crimes was more than twice the national average in mega cities: 685.2 in the latter as compared to 301.2 nationally. The Compendium also mentions that such crimes in 2012 decreased by 15.5% at the national level in comparison to 2011, but the reduction rate in the mega cities has been a meagre 3.9%. Except in ten among the 53 mega cities, the crime rate is also higher than that in their respective states. In a nutshell, then, Indian cities are certainly more unsafe than the rest of India as locations of crimes committed. An inevitable fallout of the emphasis on urbanisation maybe.

In the context of India, when one thinks of cities, some names immediately come to mind: Bengaluru (better known as Bangalore), Chennai, Delhi, Hyderabad, Kolkata, Mumbai. These prime Indian cities do not disappoint in terms of holding pride of place with reference to crime rates either. Not all of them, anyway. Mumbai, reputed to be the financial capital of India, reported the highest incidence of IPC crimes in 2012: a total of 30,508 cases throughout the

year. An average of nearly 84 offences committed every day of the year. Bengaluru, known till the other day as the cyber capital of the country, came a close second with 29,297 cases at an average of slightly more than 80 crimes per day. Not to be defeated in the race for glory in the crimescape of the country, Kolkata – the erstwhile cultural capital of the country according to popular sayings – occupied third position with 25,370 offences during the year with an average of 69.5 cases per day. If the residents of Chennai, Delhi and Hyderabad are about to heave a sigh of relief because these names do not feature as the top three crime-spots, they better hold their breath for a little longer. Chennai reported the highest number of deaths by negligence: 1411 cases in 2012 – nearly 4 such deaths per day. Hyderabad ranks ninth among the top 23 cities and districts of the country with reference to the number of IPC crimes committed. Delhi's share of IPC crimes committed stands at 10.1% of the entirety of mega city crimes, but its share in violent crimes (that include murder and attempt to murder; culpable homicide not amounting to murder; dacoity and preparation for dacoity; rape; kidnapping and abduction; riot and arson) is as high as 34.7% of the national total. Of course, the violent crime rate refers to the entire National Capital Territory of Delhi, rather than to just the city – but then, as high as 97.5% of that population is urban as per the 2011 Census.

However, it is the crime scene in the not-so-talked about cities that present interesting information. Kochi (formerly Cochin) in Kerala, one of the most advanced states of the country as per the Human Development Index (HDI), tops the crime chart with a rate of 817.9. Undoubtedly, food for debates on whether the rate is highest because of improved reporting owing to the high literacy rate in the city. However, Indore at second position with 762.6 and Gwalior at third with a rate of 709.3 would not contribute much towards substantiating the improved reporting argument since these two do not feature very high as per HDI. Coimbatore in Tamil Nadu reflected 157% increase in 2012 in comparison to 2011: the highest rate of increase among the mega cities. These are cities that hardly feature in mass media at the national level, but obviously have features worth exploring for a better understanding of why the crime rates there are so high.

The real nature of our cities become clear when one probes the nature of crimes committed there. The top three crimes committed in mega cities relate to auto thefts (41.9% of the national total), cheating (28.6% of the national total) and counterfeiting (27.8% of the national total) – which stands to reason. After all, more autos ply in cities than in villages; and cities are also the acknowledged centres of economic activities, so that economic crimes would naturally be concentrated there. The smartness and sophistication of our cities emerges as spectacular in the simple fact that the child sex ratio in urban India is 19 points lower (905 girls: 1000 boys) than rural India, as per the 2011 Census. The Compendium reports a rise of 59.1% in foeticide in 2012 over the previous year. The word ‘female’ is conspicuous in its absence, but can be easily inferred without much scope for any fallacy, since medical termination of pregnancy is not a crime in India; only sex selective abortion is. NCRB does not present an urban-rural comparison for this increase, but the sex ratio in itself is a pointer to where cases of female foeticide could be concentrated – urban or rural India.

4.9.1 Crime against women in cities

As far as crimes against women are concerned, the country as a whole reflects an alarming rate of 41.74 per one million population, with the rate standing significantly higher at 47.76 in the 53 mega cities. It needs to be remembered in this context that these are crimes committed specifically against women, thereby excluding women who may have fallen victim to any of the general crimes. The national and political capital of the country – Delhi – dazzles in all its glory in this sphere. It accounts for 14.2% of the national total of crimes against women. The top five crimes committed against girls and women in Delhi are: kidnapping and abduction – 23.1% of the total in mega cities; rape – 19.3%; trafficking cases – 16.5%; dowry deaths – 14.6%; cruelty by husbands and relatives – 11.1%. If these figures seem not too high, it would be worthwhile to reiterate that Delhi is only one among 53 mega cities that collectively represent only 13.3% of the country’s population.

Owing to the horrifying rape incident of December 2013, the lack of safety and security for women in Delhi had been in national media focus for quite a while. How would it feel to know that Bengaluru accounts for as high as 63.2% of the cases registered in mega cities under the

Dowry Prohibition Act? This city also holds second position among the 53 mega cities with reference to crimes against girls and women with a share of 6.2%. Kolkata, believed by many to be a city safe for girls and women, stands third with a share of 5.7%. However, it is again the lesser known cities that present an even more disturbing picture. While the overall rate of crimes against women in the mega cities stands at 47.8 (as already mentioned), Vijayawada is the worst with a rate of 256.4; followed by Kota at 130.2 and Kollam at 106.3. Vasundhara Raje's Jaipur accounts for 50% of the total number of cases registered in mega cities under the Indecent Representation of Women Act and Jodhpur for 40%. Can anyone remember any outcry in national mass media over the crime rates against women in these cities? This quieter certainly cannot. These cities are probably not important enough in the national map of development and image projection for anyone to raise a hue and cry. Women, even less so, one would presume.

4.10. Key words:

Urban Housing, Urban Transport, Urban Communication, Urban Pollution, Urban Sanitation, Urban Crime.

4.11. Check your progress

Long Type questions

1. Explicate the problems of urban India.
2. Discuss the housing problem in urban India .
3. "Urban transport needs a lot of improvement"-Comment.
4. Discuss the sources of urban pollution .
5. In spite of several plans and programmes ,urban sanitation remains a distant dream in India--Examine.
6. Delineate the nature of urban crime.

Write short notes on:

- a. Urban communication
- b. Noise pollution
- c. Air pollution
- d. City transport
- e. Contaminated water
- f. Accommodation in slums.

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