# B. ARCHITECTURE URBAN DESIGN (AR6711) ISSUES OF URBAN SPACE Lecture – 5

### **Challenges of Urbanisation:**

So when city is grow, so we term urbanisation as moving from rural to Urban, so moving in to cities, so when people moving to cities as a result of migration there are certain challenges that the city has to tackle upon in taking up this influx of population and that eventually create some problems within the city so looking at urban problems we could think about as an end result of urbanization migration happens when there are lot more economic opportunity in a city, people are pushed from the rural areas to the urban areas in search of employment and economic activities when there is more development in an urban economy people pull towards cities so when all these happen, there are set of problems that arise which includes housing, transportation, water, sanitation, crime and fire. So when you just think about the circle of these urban problems everything is related to it.

Now the first problem of housing arises when more people come into the cities so when there is lot of migration coming into city people need shelter, when people need shelter in there are no in a enough shelter has provided by government agencies or private agency, there is a shortage over here and this again leads to congestion or transportation problems which is nothing but more people need aspects in terms of moving from one place to another, the main aspect of people coming in to cities is search of jobs in search of jobs from the place there live that they need to move back and forth into different places looking for opportunities more people using the natural resource there is a shortage.

Now more people the housing shortage create issues of formation of slums and there is also sanitation issue there is more urban ways that is being generated more air, more noise and more water pollution that is being created and there is also health and hygiene aspects that are related to it, now more people come in and that leads to the aspect of crime, the lack of employment opportunities within city, force people to move into antisocial or corruption activities and fire is another major aspects due to the modern advent of technologies people grow high in terms, vertical building is the line-ups, the skylines or the skyscrapers, line-ups the skylines of particular cities and that are fire prone. So fire safety is another important aspect that is it city creates itself due to end result of urbanization.

#### Now urbanizations

The growth of cities are due to growing industry and increased immigration. So these are basic aspects which have been studied in previous chapters and Rapid urbanization basically lead to widening gap between rich and poor. So in a city where is social inequality which is being created and social inequality is based on the economic opportunities that city provides, there are few people who are upscale, who are employed in different firms, who engaged themselves in different social activities where they are socially high, socially have high moral and the other people who have come in search of opportunities and who are laid out who leads themselves in a life in a slum are considered to be social socially vulnerable.

#### Migration from farms to cities

This is another major aspect with everyone has to urban planner has to think of where a person moves from this urban to rural migration has led to deployment of person. So any person who has an opportunity within a city or focused on a particular age group, so this person who migrates are within a age group of 18 and 30. So take for an example of folklore arts in India and especially the traditional arts of pottery, traditional arts of silk weaving in South India where in the rural areas employment which was generated in terms of agriculture and silk weaving in Kanchipuram.

Now when lot of people have opportunities is an industrial technologies and IT warehouses in Chennai. People move which means that the employment that is generated in the rural part is been shifted in terms of a different economic buyers that is created in cities. So when these people between 18 and 30 that is otherwise called as youth are being pulled into city, the old farmers and old people who are involved traditionally in silk weaving, the viability is lost which again deprives the economic activities in that particular area. So in tenement I mean in decade or two more people who are involved in agricultural activities and people were involved in silk weaving activities have already migrated the city is there is no one to take up for the economic activity.

#### Housing

So this is the major cause or flyer on migration from ancient Cities, so which means that unequal opportunities are provided, so social policy should be reformed in terms of providing equal opportunities in despecialising activities, decentralizing industry from city is to the forms, major problem is tenements, so from a single family dwelling units say six or seven decades back there were single family dwelling units in city, post all these advent of technologies, urban problems created multifamily urban dwelling. So this multifamily urban tenement are nothing but growing high, growing high leads too many people living in unhealthy conditions, a house that has supposed to be accommodating 4 to 5 people, accommodates 10 to 15 people living in an unhealthy condition as a look at this image.

#### Crime

Either important aspect is crime, so more people forced into cities or under the barrier of providing economic opportunity. So when they don't find economic opportunities this increases the population moving into anti-social activities.

Fire

A skyscraper made possible today and these line-ups the Skyline of many cities and these possibility of elevators in steel buildings more increase the safety in terms of fire protection in cities.

So this also explained in the fire accident that was in New York in 1911 of trial shirtwaist factory where 146 female people are the workers died. So and these people are mostly immigrants, so which means that any country which occupies more of an industrial nature that is post world war had lot of immigrants coming from other cities. So what happens to the safety of these building will become?

Now this image is clearly explained what exactly is the urban living condition of a family dwelling in an urban unit which is slum. So you could see completely and unhealthy aspect of a river edge, which is unclean water and you could see lot of solid waste being dumped from the house tenements and you could also see the roof nature of those buildings are impermanent in nature, they are not permanent structure where the walls are consisting of 10 sheets which are again impermanent, these are temporary structures elevated around the stuilt, where the unhealthy conditions people used for deification. So there is no particular toilet facility where as boxes like this created as toilet facilities for people over here.

How many people could use such toilet and even do people use this toilet, the extreme waste of it gets again into the water polluting it. So this is again become a cycle of transactions that are happening urban people do not find houses. They find squatter settlements, slums are formed generated waste, the waste is being put on the water and again it recycles to them.

So this is the cycle of transformation that is happening has n<sup>th</sup> result of urbanization, so what would happened to be quality of living conditions, if

this is not taking care off, gain people are the workers are migrants coming are forced to live the conditions like a sleeping bag. So they don't find a proper place to live and the tenements, they are provided or not good quality, some of the workers try to spend their time, sleeping around in the industrial working unit, imagine people living and sleeping in the areas where machineries and equipments are kept.

So this again promotion unhealthy living environment, quarters town again there are height and tenements of buildings lined up in the side and their small lower settlements of multifamily dwelling units they are narrow Street there in accessible and these in accessibility as let to water shortage there are no proper hygiene sanitary facilities, water facilities, these are improving day by day.

This is also urbanization is another factor to lead of homelessness there are many kids and child labours were homeless and find the city, to sleep cross, sleeping in the streets have been made possible due to urbanization and due to housing shortage and again what was once domesticated are lying on the roads, carrying carriages, people living on streets, so all these come to the street were character of the street has been completely vanishing due to new advent of technologies in the city is growing's, which means that there is no right thing that is being followed there is no urban design principle be implemented in the city is to be followed.

Important aspect of city is growth is urban sprawl, so moving of a city from one expanding itself in Fringes, so what was the city skyline over here expand itself into different fringes occupying the rural land. So which means that urban sprawl has led to occupying a rural areas and these rural areas started to accommodate factories, power stations, commuter villages and motorways, Railways, connect those, so this is a good scenario is urban sprawl a good thing will be debated.

So urban sprawl again had lead to congested road networks that form or the line-ups the peri urban conditions or edges of different fringes of the cities that is left out many spaces that are redundant in nature.

So you could imagine of the above spaces which are left redundant how many families could be accommodated, so the cities are growing in a direction where these arterial roads occupy much of a place rather than houses is occupying much of a space. If it cities grow, grow and grow this would be the kind of dense environment which is be exhibited, so rather than having rural landscape which is much in terms of healthy or living urban landscape has created a lots of chaotic environments that are growing, so these urban environment have to be regulated through different urban principles as well as urban policies. So you could see already by 2011, 50% of the world has already been urbanized and this image explain on how urbanization has happened through out world and how many cities are already grown in terms of urban population.

So the remaining cities and natural reserves or the forest area are still kept closed where people are not inhabited but if the city are growing more and more eventually those will be occupied and already from the rural parts, people start moving to urban centres some of the terms for you to understand include urban sprawl.

So it is a dynamic and uncontrolled process of an urban expansion along transportation corridors, so only if there is a provision of people to connect from one place to another urban sprawl happens urbanization is a population from rural areas to urban areas.

Suburbanization is a general trend followed by the city dwellers to move out and live in a relaxed condition it's a relaxed kind of housing environmental area. Moodily land use form is predominated by residential.

Population density is nothing but the human population per unit area.

Core Vs fringe

Core is the dense city centre or the olden city centre where is multi functional activities happens.

Fringes refer to the low density area usually at the exurban perimeter In the fringes of the city.

Now the pattern of growth, this is a very clever diagram which explains the quality of life being perceived to increase, when he move from City to rural areas. So it is always a question of debate whether it is good to move from rural to urban areas or it is good to move from urban to rural areas but from a central business district to an inner city till the commuter belt it is seen the quality of life is perceived to increase in rural area because it is much more dominated by a landscape of green rather coming to the city centre which is dominated by skyline or high rise buildings.

So as you move on you could see in a city which has lot of suburban buildings he could see inner suburbs, outer suburbs which have garden based buildings and individual or multifamily dwelling units, edges of the city which has cluster of houses as gated communities and moving to rural areas which have farm lands.

Just an example of an American city which is grown along the river Mississippi, so you could see 1970 the population was grown around the fringes of the urban river and a population was around 800,000 in a over two decade the population started expanding itself into the north east and all directions where along the Memphis effort that is the city's airport think started developing around this area, so which means that the cities grow and literally connect another example where the population density 1970 was around 971000 was the city core.

Now due to expanded urban sprawl there is another exurbia or suburbs which is been created which is result to a population growth of 2 million another example of island nation which has a population which is dispersed across the edge of the water bodies, now due to the population increase from 1970 to two decadal growth has seen population increase from 1.7 million to 2.4 million.

## **Issues in Urban Space:**

Now why is this a problem is urban sprawl good or bad, this debate leads to question on

Is it seen as an opportunity where city is getting the de-specialised in moving into other units?

Is it positive or negative outlook or should be considered as when urban sprawl happen, all are rural areas have been eaten up, the forms-land are decreasing, the building footprint are increasing.

So the problem is basically on depleting the environment first important loss is for the

Loss of ecosystem services which means there is when you deploy a lot of trees, when you destroyed trees, flood control is lost pollination, nitrogen fixation and carbon dioxide, there is no fresh oxygen left.

Loss of biodiversity the flora and fauna of a particular country gets depleted

Habitat fragmentation there is a kind of human life which is be dispersed from one area to another; there is a population loss in a particular area.

Land loss which means of farmland and all the agricultural land in forest areas are being occupied or chew aped by investors.

Impervious surfaces polluted runoff, heat island effect.

So this urban sprawl has caused environmental degradation in growth of cities and other important effects

Heat island effect - The temperature differences between the cities and the suburbs, so heat islands have created more in terms of the summers need more cooling expenses and a winter's need more heating expensive.

So which means that the demand for air conditioning cost and air pollution and greenhouse emissions have increased and heat related illness and mortality and water quality is decrease due to heat island effect, you could see from rural area which is much more dominated in section by a lot of trees in a down town on urban park which is dominated by skylines, as it moves down the suburbs, it is again more in terms of houses with Highline, so which becomes important either downtown which acts or facilitates more economic transactions or rural areas which is monotonous in nature and other important aspect of that is the automobile which is created much chaotic environment in laving of highways, freeways and express ways, which is resulted in air pollution, fossil fuel emission and gas and energy cost. More in terms of fuel, more people travel, and more people use it.

So which release energy into the environment, income inequality and poverty is another aspect of the growth which results in economic aspect? So we say that's city provide opportunity more people come into the city but what happens in a city is there is no economic opportunity that is being generated. There is no proper housing provision that is given which means that these people the rich get richer and poor get poorer becomes the inequality component, so all of them are not provided equal opportunities in cities there is always a social stratification because of this called poverty.

So all the low income residents are unable to pay the cost of their basic living and they are not accessible to the three basic forms which is the food, shelter and clothing, to move forward what would be a successful policy, so either you have active efficient management of urban development, you should reduce economic environment externalities and they should be improved standard of living in every city that is being developed. This could be altered in terms of a policy where urban designer comes takes or implements the successful policy in terms of visualisation of cities.

Place making is an other concept ideally followed in a city which means that identity creates, so place making identity create experiences that connect people to the place. So I say this is my place, I identify myself in my place, so its provides a strong sense of "you are here" by differentiating a place or space from others.

Place making and identity is a multidisciplinary approach of planning design and development of public spaces. Its uses materiality, form and context to express the uniqueness of a place and inspire, engage, connect and call users to action, this again relates back to the Olden day of the mediaeval town planning which had the forum or the greek agora or the central church places or the market places, where emboarding all the civic sense which means involving people into a city centre providing them breathing place or public places enriches the quality of an urban environment, so place making is an important aspect that of urban design in designing a city.

What makes it to place or what makes a great place?

Sociability aspect users and activities, access and linkages, comfort and images, so any person who is in a particular place should identify himself in terms of sociability which means it be welcoming interactive friendly pride neighbourhood, he should be able to accommodate himself in a wide range of community, it should have a multiple use of activities and users for user to engage and it should have good connected linkages to neighbourhood, so that people can access it and anyone coming across that place should have a comfort of a zone, he should feel spiritually comforted, he should be economically comforted, you should feel himself as a place or owned the place.

Benefits of having a place include it builds in support local economy, you could have lot of marketplaces coming across a micro economy could be generated from the place, it nurtures and defines community identity, it fosters frequent and meaningful contact, draws a diverse population when there is a place that is being made you create a place and you invite many people of a city to come in, so it draws a diverse population in to it promotes sense of comforts and it creates improved accessibility.

So place making an identity design accentuate the combination of physical features, people, function, history, culture and potential that make the place the unique, so it encompasses every part of urban design to make to take the great effects of a place, to envision city as a place becomes a question on city that are developing today you could see lot of skyscrapers rather see very less public buildings.

How could you make a city or place becomes question on developing new urban environments.

Now days cities are moving more and terms of privatise public realm, if you go to Italy and see a series of grand staircase, if you could see lot of people occupying it and those people are part of diverse population of the city's population but nowadays creating grand spaces have been restricted to public plazas which are being privatized, most of the corporate or multinational companies have grand staircase, which are being used as a transport medium from moving one place to another rather being used by the public in terms of creating a realm.

Role of real estate plays a very important role over here because any open space in a city is decided to be showed upon by real estate or developer in terms of building high rise environment, so add densities these open spaces are being taken by investors to build tall buildings, so what will happen for the city to bread, if there is no space for a person inside a city to have himself organised around the open space where will he go where will be come?

Role of transportation in terms of connectivity becomes an important aspect and second thing is providing lot of transport infrastructure within the city and the roads have left lots of the derlic spaces like important junction of the city have been left across open where these redundant spaces are of no use, so transportation plays a very important role in designing spaces.

Role of Zoning, so every city has a land use map, zoning map which allocates open space areas which allocates residential areas, so planning aspect plays a very important role in allocating these open resources available for public

Globalization pushing economy towards difference aspect the interconnection and linkages between all the countries plays a very important role in creating diverse cultural, different social influences in the city but it should be taken a positive open positive way rather globalisation also have negative and adverse effect toward including accountability, terrorism, shrinking world, technology connecting different parts, free trade, culture, capitalism, monopoly it has poverty as well as growth. We couldn't say it city is not marching forward; it is growing forward but leaving behind the trail of poverty, trade vs aid, outsourcing. So there are different effects equality, inequality, so these have to be taken in a positive note on a positive way and final in terms of creating good environment, some of the contemporary approach to the cities which could be taught about of first would be

Ideas of sustainability

Sustainable city is not about promoting green city but it should be socially sustainable, it should promote equality among citizens, it should have an equal dispose of job allocation to all the citizens, it should be economically viable and sustainable good wages which have been support, there should not be an inequality in the ages god by a labour as well as. So they should be a proper hierarchy of for sustainable income in cities that as to be provided as well as, it should be energy efficient.

Heritage should be concept and all important aspects of city that are growing have a history, as if we thinking about Aldo Rossi history as a collective memory. So every city has an important aspect or memory to it, attached to it, so that has to be preserved that has to be conserved and renewed, so there are different methods of conservation building including preservation, maintenance, restoration, reconstruction and adaptation. So all these methods of conservation of historic parts have to be taken into accountability aspect and urban catalysts have to be foster in a way, it fosters economic development rather than hindering development, it should be a transit metro polis which means that means of railways means of fast moving transport, should link different cities in different parts and good inter connectivity in the globalized world, helps develop more economies.

Ideally transport has to be connected to the multi natural environment in an around everything and sustainable future for the same and ideal the last part would be community participation inform and involve as citizen as a hold, so any city should be participating in nature, this participation allows public to take a sense of pride in design of his own city. City is not private property, it is owned by the public, it is for the public. So when community participation every aspect of the policy and planning of a particular city state or a nationwide city that make much more viable space, so would the master plan cover all scale yes of course the master planning or a urban designers rather designing just the entire city, he takes into consideration individual user, he takes into consideration every street, he takes into consideration every edge of the city, landscapes of the city individual building and the details of every smaller elements in a city, so he encompasses from a user, to a small scale of a building, to entire city as such.

So are we really marching towards good cities becomes a question or becomes important in modern days where everyone should rethink how the cities where before encompass all the political, social, religious, cultural, geographical, environment put together form the city composition.

Rethinking cities on how it was rather changing the entire urban landscapes, new cities have to be taught as a sense of history or collective memory and things have to be incorporated with certain elements that are being used in urban design following certain principles and these principles should create heterogeneous urban environment and urban environment in cities should be liveable and it should be workable, it should not be monolith, just not for a place for public, so all the public should be involved in creating and rethinking cities.