

## **Evolution of Human Settlements- AR6004**

### **Unit 4**

## **Human Settlements as Political Expression**

### **Lecture 8**

#### **Contribution of Ebenezer Howard**

Ebenezer Howard, the main concept he came about was, the garden city concept. The most potent planning model in western urban planning. This was created by Ebenezer Howard in 1898 to solve both the urban and rural problems. This was a source of many key planning ideas during the 20th Century. So, in a way you can say that Ebenezer Howard started the whole process of urban planning and discussing the problems that emerge in a usual scenario. So, if you look at the important dates of the garden city, between 1850 - 1928 was when Ebenezer Howard worked. 1899, he published the 'Garden City of Tomorrow'. 1903, the Garden city association was formed. Then you had Letchworth designed for 35000 people, based on this Garden city concept. 1920, Welwyn was another town designed for 40000 people. 1947 - Letchworth had 16000 population and 100 factories while Welwyn had 18000 population and 75 factories. So first in UK, then Europe, then U.S, then rest of the first. This is the basic timeline of the work of Ebenezer Howard and the influence of Garden city concept. He lived and worked in several professions in England and the United states, during the age of industrialization, during the industrial revolution basically. When people flocked to cities like Manchester or Chicago, to work in the steam powered factories. These came to replace cottage industries like textile mills instead of spinning and weaving at farms and villages. So there was a shift of population from rural to urban. Farming started to become rationalized and needed less and less of manual labour. It became more mechanized. Cities promised more jobs, although living cramped closely together in tenements under the smoke of many such mills also increased the risk of spreading diseases. Steam power made it possible for people to commute by train. So, suburbs were built for more healthy living even before the invention of the automobiles but such suburbs with terraced housing were enclosed by more urbanization and provided only for the middle class and the upper middle class. Ebenezer Howard and his concept of the Garden city which was basically the best of both worlds between both the town and the countryside came into being. Some of these that, the towns we just saw, Letchworth and

Welwyn have indeed been constructed in the same design in the early 20th century. Also, he envisaged a permanent open area surrounding such new towns which was the idea behind the green belt around London after World War II. So, this is the Garden city concept, the three magnets. What the magnet does is, what is the thing that the country pulls. The main attractions of living in a country area or a farm area? The hands of work, beauty of nature, no lack of place, abundant greenery, abundant water, there is a need, there are no crowded areas. All of those points on the country area, make it very desirable. At the other end, what are the desirable ends of town living or city living? Its obviously places of amusement, it is closer to work, better wages, better chances of employment, you have better streets in terms of the kinds of things you can do during the day, better schools, better social opportunities and lesser discrimination as well. So, what actually happened was, he tried to combine the advantages of country living, the advantages of town living to make sure, the disadvantages were decreased or removed completely. So, the disadvantages of town living you had were overpopulation, overcrowding, lack of sanitation, lack of clean environment, air pollution, all of those were bad things of town living. If you look at the bad things of country living, there is no sense of neighbourhood, there is no concept of neighbours, you just live by yourself, you do things by yourself, that kind of a thing and so he wanted to combine both the beauty of town and country, beauty of nature as well as social opportunity, you should have fields but it should be accessible to work, you should of low rents, better wages, flow of capital, there should be bright homes, good gardens, there should be a combination of both the town and the country and that was the Garden City concept. So, if you look at it, he was very particular about what he was looking at. It should have about city area 1000 acres, agricultural land 5000 acres and a population cap of 32000 people. This should be the kind of layout that should proximately occur. Main Roads, cow pastures, forest area, agricultural area, homes asylums for the blind and deaf, he had decided everything. Then you have to have the grand avenues in the central park, surrounded by houses and gardens. So, he clearly had envisioned how a town and town centre should be. This diagram here, represents the details or the ward of a town, which will be useful, so we will understand what is the basic description of any town. So, here you have the central park, the crystal palace is nothing but a beautification element. The fifth avenue is where you would have your market area and things like that, the grand avenue, here you would have your houses, you would have the green belt, lawn and things

like that. Cycle workers, boot factories, clothing factories, printing, engineering, jam factories and railway station over here. Everything was like a boulevard, grand avenue and a school, this was a segment that emerged and it was supposed to be a self satisfactory segment. The segment we saw was just this unit we discussed in detail. These are the elements, you can see that it is pretty much self satisfaction. If you lived, worked here and your children went to school over here, you had a green belt over here, the amusement is over here, the market area is over here, so it is a very self contained area. He actually had a distance, between here to here you should reach in 15 minutes, between the fifth avenue in your house you should reach in 5 min and the school was centrally located such that, the children could easily walk to it without the requirement of vehicular or automobiles.

### **Ebenezer Garden City Concept**

He actually goes into the precise prescription down to the acreage and even the expenses. So, first you need to take 6000 areas of cheap rural land, 1000 of which are to be reserved for the city, there is a cap of 32,000 people population after which a new city will have to be colonized right next to this. So, what Howard basically wants is, he wants to avoid the overcrowding that happened in London but at the same time he wants Industries and factories to offer better jobs but there should be public parks and private lawns everywhere. The roads are incredibly wide ranging from 120 to 420 feet for the Grand Avenue and they are radial rather than linear. Commercial, industrial, residential and public uses are clearly differentiated from each other spatially. The overall goal for Howard is to combine the traditional countryside with the traditional town. For very long the residents have to make unfulfilling choices between living in a culturally isolated rural area or giving up nature to live in a city, but the human society and the beauty of nature are meant to be enjoyed together. That is the crux of the Garden city concept. The main problem, the financial linchpin of the plan was that all of the land had to be purchased upfront so that the increase in the property values generated by the growth will be captured by the community itself, which will help the community grow further. Another assumption he makes is, that everything is planned rationally from the beginning, the costly process of retrofitting old infrastructure can be avoided. There was a good grasp of problems associated with his rapidly industrializing England, which of course becomes as well as, is currently the similar phenomenon in the developing world. He basically identified the real social

inequities arising from industrialization. Besides the problems like tangible problems like we could see population, disease and pollution, there were a lot of problems that were intangible like inequality in society and a lot of class differences that were emerging and he believed that if this city could avoid that to a certain extent and at a local level if you can address it, a pro-municipal scope where the government actually builds the cities and lets people live in it. It is a little more socialist than capitalist but it is not completely socialist because they were still people who wanted factories, they were still people who worked in a factory and people worked in the service industry. So, it was rational planning over the chaotic growth of piecemeal evolution and it has some merit, even today it has a lot of relevance in the rapidly modernizing context. The particular objects of Garden city, to find for our industrial population work at wages of higher purchasing power, and to secure healthier surroundings and more regular employment. To enterprising manufacturers, co-operative societies, architects, engineers, builders and technicians of all kinds, it is intended to offer a means of securing new and better employment for the capital and talents. So, agriculture should be there. There is no way you can say no to agriculture. At the same time it is opening a new market, for new produce as well as manufactured produce from these areas. It is an object to raise the standard of health and comfort of all two workers of whatever grade. This is the socialist principles, let's improve the life and comfort of everyone, not just the middle class, upper middle class or the workers. The means by which these objectives are achieved are; health, natural and economic combination of town and country life where the land is actually owned by the municipality. So, on the outer ring of the town, you have factories, warehouses, dairies, markets. Where there was any population formed, it goes away via the outer ring. They have the railway station over there, which encompasses the whole town. Then you have sidings which is the main line of the railway, which passes through the estate. This arrangement enables goods to be loaded directly into the trucks such that the warehouses and the workshops were also away from the city and close to the market as well as the railway. So, it doesn't have to be taken from the truck and the railway back and forth. This is not only affecting and saving a great regard of packing and cottage but also reduces a minimum loss to breakage because by reducing the traffic on the roads, we are lessening to a very marked extent the cost of their maintenance. The smoke fiend is kept well within the bounds in the Garden city; for all machinery is driven by electric energy with the

result that the cost of electricity for lighting and other purposes is greatly reduced. What happens with all the refuse from the agricultural land? This is again used by large farms, small holdings, allotments, cow pastures; there is this natural competition of these various methods of agriculture which is tested by willingness of occupiers to offer the highest rent to the municipality, tending to bring about the best system of husbandry or what is more probable, the best systems adapted for various purposes. if you look at this, if there is a central city, the population increases by 32,000 people, then what happens? You have a central city, then you have the highways, then you another city coming up with the same combination but a smaller one. The principle is, let's not overcrowd any city we will have a cluster of cities, such that, it needn't be arranged in any particular geometric form. It doesn't have to be circular, it doesn't have to be rectangular but it has to have an interconnecting railway and highway and these cities have to be connected by high roads, such that it is not overcrowded, there is a sense of continuity, it is grouped around a main central city but they don't have to go to the central city for anything. It will be there as a mothership but all these nodes can sustain by themselves. It should be the combination of advantages of a beautiful great city as well as the offers of a fresh delightful country life. So, now you look at the Letchworth Garden city and the Welwyn Garden city, the examples of the two cities he came up with, it was inspired by an ideal Utopian city, how it should work, it was inspired works on Model by Robert Owen and the model Industrial towns by Buckingham, it comprised of both town, country and town-country interactions. This is the typical layout of what emerged, you have the central city and then these cities came into being. This was the final emergence of what happened. These were basically slumless, smokeless cities. There shouldn't be any slums and everyone should have the same quality of life. He analyzed the reasons, he made sure that obviously there are going to be differences in terms of people because it is not a socialist society but what he clearly stated was, the quality of life is not dependent on the status of a person. Everyone should have clean air, water, pollution free life, good food, irrespective of what his earning is, that is the basic requirement of good living. Secondary; the size of a house, the kind of clothes a person wears, all that is secondary and that is dependent on the kind of jobs he does and the kind of position he is in. The rest of it should be given to everyone irrespective of whichever walk of life they are from. So, the new city was to have a reasonable distance of 7km, such that it is walkable within a five to fifteen minute distance so

that the individual cities are well connected as well. So, we look at the applications of it in Letchworth, Letchworth is 35 miles from London, this is Letchworth city over here, land of 3822 acres, reserved greenbelt is 1300 acres, it was designed for 35000 population but in 30 years, it developed with 15000 population, 150 shops and industries. Obviously there was a decline because this model didn't particularly work, because he actually had a socialist kind of attitude towards the application of the city, even though it was not said to be like that, when you want equal types of housing, equal kinds of housing, that is what it actually led to. You can see the other cities that came about because of this, this is in France, Sweden and Germany. This is Vallinby in Stockholm again in Sweden. These are cities now. After 1945, the Garden city was mutated into satellite or new towns in many countries. So, these are mutated values of the Garden city council. What they decided was that the Garden city was let's call it a Satellite town, we will have a central town, obviously they will be cluttered towns like London, New York, Shanghai and places like that. Let's not disturb those, we will come out and make another town such that it is connected to the central city with the concept of a garden city. So, it was basically a residential suburb or a satellite town. So, the simplest issue to be faced is; can better results be obtained by starting on a bold plan and a comparatively virgin soil rather than attempting to adapt our old cities to our newer and higher needs? This question can only be answered in one way, that the simplest factor is grass, then only the social revolution will speedily commence. We have to decide, what is it we are looking for. Do we want a perfectly running city like a well-oiled machinery or even if there are cracks, should our old city organically develop into these so called Utopian cities?

### **Contributions of Louis Mumford**

He is one of the most internationally renowned people for the idea of urban planning, history of cities, civilization, technology, regional planning, environmentalism as well as he discussed a lot about public life in America and he is one of the most original voices in this field in the 20th Century. According to Mumford, cities can be classified among two dimensions; you have form. The form of a city is basically the historical development, the physical structure, the geographic space and the region. Second, Function, a stage for human interaction. If a city functions properly, people can be happy, healthy and fulfilled but if it is not functioning properly, people are going to be devastated. So, whether the city

helps or hinders people, it is dependent on the dominant theme of the era of which the city is a part. So, when you see what is the dominant theme of the era, which period was the city developed in, what was the theme behind developing that city. Mumford defines six dominant themes, three of these themes or eras are constructive while three of them end up being destructive. So, what was his plan for the urban design? Densities must be kept low, the size of the cities must be limited. People must live in natural, open, green environment. Most interaction must be kept on a primary level to assure mental health and the quality of social relationships. The family, as the most important primary group is the focus of redevelopment. Neighbourhoods are the main units of redevelopment and settlement. So, clearly part of it was from the Government city concept as well, when you talk about the density and size but he recognized that historically a city will have baggage, it doesn't make sense to start fresh in a new piece of land. Then you have education which is both formal and informal which is stressed upon, vehicular and pedestrian traffic should be separated. Mumford's new cities are complete communities. New town development policies which emerged in Great Britain and United States and New development in Great Britain which came about as Forshaw and Abercrombie, County of London plan 1945 and The Greater London plan 1944. So, all this they volunteered because of Mumford's theory. He characterized his orientation towards the study of humanity as organic humanism, this term is actually very important because it sets a limit on human possibilities. Limits that are aligned in nature of the body. He never forgot the importance of air quality, availability of food, quality of water and comfort of spaces because all these are obviously required to thrive but at the same time, technology and progress can never be forgotten. So, as long as all this organic humanism was there, it has to act as a breaking system. In the speed of technology and progress moving on, we shouldn't forget that we have basic requirements that need to be satisfied. If it doesn't we have to put a break to what technological advancements are happening. Mumford believed what defines humanity, what sets human beings apart from other animals, was not primarily because of what we could do with our tools and our hands but it was what we could do with our language i.e the use of symbols, that is what set us apart. He characterized the area's capability to support life, through its levels of complexity. Before the advent of technology, most areas of the planet were bio viable, this terminology is not from Mumford's time but it is for us to understand that all cities at one point or the other were viable for living.

There were some of technological advances happening rapidly, bio viability decreases rapidly. So, if we are going to technologically advance too fast, which is not considered to be sustainable, bio viability also comes down. Mumford believed that it was necessary for bio viability to collapse as techniques advanced. However he held that it was possible to create technologies that functioned in an ecologically responsible manner and he called that sort of technology bio techniques. So, technology cannot be ignored, at the same time, we cannot ignore our basic requirements for healthy living and technology which keeps a check on environment and ecology is what is bio techniques. So, that is a term coined by techniques at that point of time. Mumford's critique of a city and his vision for cities was they are organized around the nature of human bodies, so it is essential to all Mumford's work of city life, it is rooted in an incipient notion of bio techniques which is liveability. How liveable is a city? Does it have adequate technology necessary for us to move and thrive and move into the future. At the same time are we compromising on the quality of life and bio viability of the city. Mumford wrote, "The physical design of the cities and their economic functions are secondary to their relationship to the natural environment and to the spiritual values of human community." So, the physical design of cities should be the primary importance, economic functions are secondary to that of the relationship with the natural environment and to that of the spiritual value of the human community. So, nothing can actually be ignored. We have to come to a plain of existence such that all these elements can co-exist and offer the kind of life we are looking forward to. Yes, we want the creature comforts but what is the price we are willing to pay.