

Human Settlements Planning

Lecture 10

Characteristics of PUD

Now, if we look in to the characteristics of a PUD. In PUDs, the zoning of districts becomes very different from what we have under standard zoning Enabling Act. Within PUDs, zoning becomes much more integrated with multiple land uses and districts being placed on adjacent land parcels. Residential properties in PUDs are by far most numerous and occupied by the largest land areas. PUDs tend to incorporate single-family residential uses in proximity to two-family units and multiple-family dwellings to form a large diversified neighbourhood concept. Schools, churches, retirement homes, hospitals, and recreation facilities begin to find their way in to residential districts. Residential districts also tend to use the best land in the community, and the most favourable sites are protected from commercial and industrial uses. Grouping of shopping districts by service area is a first step in returning to the neighbourhood concept. Land is reserved for regional, community, and local shopping clusters with some specific restrictions based on market experience, and on what types of business intend to locate at each development. Local shopping districts with sufficient provisions for off-street parking, height restrictions, and traffic control are not frequently found surrounded by residential areas. PUDs do not normally have large numbers of industrial districts. But if they do, they tend to be geared more towards the light industries. A planned residential unit development (PRUD); or otherwise referred to as planned unit residential development (PURD) is a variant form of PUD, where common areas are owned by the individual homeowners, and not a homeowners association or other entity. A PURD is considered the same as a PUD for planning commission Purposes; and it allows for a lot of flexibility in both zoning as well as civic planning. A PUD is always considered a special case scenario. Now, if you look at the design principles of PUD and the houses with in these sectors. Houses in PUDs often include access to a large shared open space, surrounding the house as well as a smaller private yard. These large protected up open spaces are created by the layout of the buildings and are intended for use by all the residences of the developments. Different housing types, i.e. you have a single-family, two-family, or multiple-family. They are often mixed rather than separated as that is done, usually in a conventional development.

Now, the Design principles of Streets. Street patterns are one of the most important elements in establishing the neighbourhood character of a residential community. However, in order to dispel the monotony of the typical grid plan; PUDs often employ a hierarchy of street plans based on usage. Local streets serve only residences and have a low traffic volume, while collector's streets connect local streets to arterials, which are the major routes of travel throughout a PUD. Now, the design principles for sidewalks or pedestrian friendly streets. Sidewalks and pedestrian ways of PUDs supplement, as well as complement the street systems in establishing the character of the neighbourhood. Sidewalks are located on at least one side of every street to enable the walk ability of the

developments. Circulation systems are provided to link residential groupings, open space areas, schools, and local shopping areas. It is in the ability or to design each of these components simultaneously that makes PUDs unique as well as effective. Each of the elements work together to enhance the whole. This represents a major advantage over traditional zoning practices that force lots to be planned in accordance with broad rules that may allow for some incompatibility. Common uses of PUD- in urban redevelopment-redesigns for older urban areas face many challenges. Traditional zoning does not have the flexibility to address the need for mixed uses for buildings, changes in building setbacks, non-motorized transportation, environmental protection and possible regulations all within a confined space. The area for redevelopment is planned all at once, so land users complement each other. Using a PUD allows for innovative uses of spaces, and structures to achieve planning goals. Implementation of PUD- any municipality with zoning authority is able to establish ordinances for PUDs. The municipality must have adopted zoning and subdivision ordinances and should have a comprehensive plan. While a PUD allows for flexible project design, standards are needed to protect public health and safety and to assure design quality and conformance to the overall plan. Some examples of standards or criteria to be included in PUD regulations are: areas where PUDs are allowed; developer provision of land and capital improvements for public uses; Dimensions and grading of parcels and a ceiling on the total number of structures permitted in the development; Permissible land uses; Population density limitations; Amendment procedures; Schedule of development and assurance of completion; Preservation of architectural, scenic, historic, or natural features of that area. Now something called the Floating zone, this is similar to a conventional zone in that it describes the permitted uses, setback requirements, and other standards are to be applied in the zone. Unlike conventional zoning districts, however, the floating zone is not designated on the zoning map. Once enacted into law it “floats over” of is available for use in any designated area in the ordinance. When an application for its use is approved, it is then affixed to a particular parcel through an amendment on the zoning map. So, this offers the planning authorities, as well as the development authorities a lot of flexibility.

Urban Renewal Plan

Evaluating urban renewal in India. What exactly is urban renewal? it is a construction program to replace or restore substandard buildings in an urban area. For example, an area undergoing urban renewal or an urban renewal plan / project. Which could be a particular building or a series of buildings. The first use, it was put to, was in 1954. The Roots of the term ‘Urban Renewal’, this is completely an American origin. It emerged in the late 1940s i.e. post-war, as an attempt to revitalize central cities. Site clearance program remained in practice very much till the 1960s. Site clearance is nothing but bulldozing and clearing entire cities, to restart on cities. That’s what was the initial strategy of urban renewal. Only in the 1960’s it thought to be a complete waste of time, energy, efficiency and then another method of urban renewal started. Other emerging approaches came into practice only since the 1960s. Importance of Urban Renewal,

urban renewal is of growing importance because of: Urban areas are becoming larger as well as older. So, more and more renewal of urban fabric obviously has to take place to keep the city thriving as well as growing. Constant expansion of urban areas into agricultural hinterland; while large quantities of urban land and buildings are being abandoned, as well as being left dilapidated. Now, if you look at our own city, Chennai for an example, you have Anna salai, which was considered the commercial hub of Chennai at one point of time. But now the commercial hubs are changing, and growing in different directions; and lot of buildings on mount road or Anna salai have become obsolete. For this expansion of a town or a city in different direction requires or calls for a urban renewal of the area. So, it can compete with the growing areas and thrive. urban regeneration- Initiating comprehensive political, financial and technological strategies for an environmentally enhancing, restorative relationships between cities and the ecosystems form which they draw resource for their sustenance. Urban renewal is conventional city development and one that has resulted in the massive urban mess we are confronted with currently. Before formulating the JNNURM, did the Ministry of Urban Development compare city development models, or to see whether its relevant to address the challenges before urbanization actually took place? That is the first mistake done committed by most planning authorities. We do not go and see; or look into urban renewal as platform, before we go about building newer towns and cities.

Now, if you look at different City development Models. You have a Conventional model; you have a sustainable model; and then you have regenerative model. In a conventional model- little or no consideration is given to environmental impact of the design. The Designs aim to meet minimum compliances for the lowest price. It's often dubbed "green" if EIA is documented. Sustainable, this does not challenge current methods and activities that have negative environmental impacts'. The attempt is to minimize energy use, pollution or waste. Regenerative developmental model, it sees human habitat and cultures as a part of the ecosystems. It seeks to create or restore capacity of ecosystems and bio- geo chemicals cycles without human management. Designs appreciate and build on diversity of each city. It sees the design process as ongoing, indefinite and participatory process. Regenerative City principles- Small ecological footprint, compact urban development, energy sufficiency, renewable energy supply, zero emission transport, waste water recycling, circular metabolism. Biodiversity in landscape design, City embedded in farmland, city contributing to carbon sequestration and eco-restoration.

Redevelopment, Rehabilitation and Conservation

Now, moving on to redevelopment, rehabilitation and conservation, which is a branch of the urban renewal system in our country. If you look at the different definitions, we have in this, a continuous process of remodelling older parts of urban areas, including their central business areas by means of rehabilitation and conservation as well as redevelopment. The displacement of an existing low-income population, creating space for more profitable office, commercial or luxury residential development or the

provision of transport facility. The Basic Concepts, you have urban renewal programs that are generally undertaken by public authorities or by local governments. The emphasis is on those parts which have fallen below current standards of public acceptability. These are commonly to be found in: the residential parts of the inner city. The inner city is nothing but the previous commercial hub of the city which is no more recognized as a growing commercial hub, in the central business district itself. So the inner city is connecting the outer area to the CBD or the central business district itself. Indicators for residential parts of inner cities are: inadequate housing, environmental degradation, presence of non-conforming uses. What that means is other zoning are also slowly creeping in; or shops are creeping in; or other commercial activities are creeping in. Indicators for central business district are: traffic problems, congestion, dilapidated buildings. All of these are telling of our current situation with mount road. What are the different Policies, and approaches taken by our government? Number one is Slum clearance- demolition of dilapidated dwellings located in any slum. A slum is described as an area of sub-standard, overcrowded housing occupied by poor immigrants. Redevelopment, the demolition of an existing building and its replacement by a new building. Now, comes rehabilitation, which is the repair and improvement of existing structurally sound property. So, as you see these three terms are increasingly more suitable to have a more sustained environment. Slum clearance is nothing but what happened in the 1940s when urban renewals started; where the entire communities where erased and started from scratch. Redevelopment is the next stage, where an entire building alone is completely considered unworthy, and that is demolished and a new building takes its place. But rehabilitation actually makes an attempt to breathe life, new life in to an old building that has good structural properties. Now, how we go about doing this, the different policies that encourage this? Housing Improvement, improvement of dwellings by provisions of essential basic amenities. Conservation to retain intact or unchanged, also, referred to as 'preservation'. Environmental Improvements, main emphasis is to improve environmental conditions. This could mean water quality, air quality, or even soil quality. Economic Renewal, improvement of economic conditions of dwellers, this could mean by adding certain commercial areas nearby to sustain them; or to provide a branch of tourism to help new communities; or any such new typology; or special typology would be entrusted in this new commercial sector.

Urban Renewal projects- Following projects all fall under urban renewal: redevelopment projects, economic development strategies, housing loans and other financial tools, streetscape improvements, transportation enhancement, Historic preservation projects, parks and open spaces. So, all of these ways are used to breathe in new life in to an old area that is suffering from, neglect; or a new area that is slowly going in to bad hands, or bad commercial activities; or unwanted commercial activities happening there because of certain social elements or anti social elements.

Milestones

Now, we look at the Milestones, in the incorporation of a conservation ethics into urban planning. First you have the milestone Idea in London: this happened, change the, way of how conservation could be incorporated into urban planning. The intrinsic character of land should guide its use. This was established between 1850 and 1900s; the idea of a greenbelt is introduced in England to prevent one town from growing into another. Henry David Thoreau writes about the "importance of preserving some portions of nature herself unimpaired. Fredrick law Olmsted develops the concept of linked systems of parks and parkways. So, that's what the main idea of having a green belt was! It provided for the lung space, yes! But it also ensured that if every town has a green belt around it, a town cannot climb into the growth of other town, and they can simultaneously be well connected too. It does not mean you are completely isolating the town. You are just ensuring that the town's development does not hamper the environmental aspect of that area. Conserving natural places for future generations- this was the next milestone between 1900s-1920. President Theodore Roosevelt's love for great outdoors set the stage for the National Park system. Warren Manning uses the overlay technique to analyze natural & cultural information about a site. The next milestone is, linkages established between ecology & design. This took place between 1930-1950. The, New deal greenbelt of cities; Victor Shelford calls for the preservation of natural areas and so called buffer zones. Aldo Leopold introduces the concept of a land ethic. Benton MacKaye develops the discipline of a regional planning.

The next milestones ideas where in the 1960s, where Scientific definable process for land-use; planning & suitability analyses came by, Protecting core areas of Wilderness. So all of this happened in the 1960s post, where you actually give importance to the environment and we have learned by the end of the industrial revolution, the world wars all of that we have realized is that the environment and nature is taking its toll from all of this horrendous human activities. So, congress passes the wilderness Act; William H. Whyte coins the term "greenway". Ian McHarg argues that ecology should serve as the basis for any design. Philip Lewis creates a method of landscape analysis that included vegetation, scenery, and environmental corridors. Rachel Carson publishes Silent spring, bringing attention to man's impact on nature. Sciences emerge, i.e. Landscape Ecology, Island Biogeography- to study the relations between biological communities and the physical environment. It was only during this phase, that we realized, that there is an intrinsic relationship between man and nature; and there are lot of things that are hampering these relationships. At the same time research also started to find out ways to reduce the impact of human activities on the main forms of nature. Next, you have between 1970-1980; linkages between natural areas are needed to protect biodiversity and the ecosystem processes. Conservation Biology, introduced as a main discipline. GIS is introduced as a tool for regional planning. Next Milestone 1990 to the current scenario: Landscape scale focus. Participatory decision- making; Participatory decision making is where the community is involved, and community, when you say, all the city cannot be represented. So an important counsel was set up. A

City council and its members were set up, who represent the well being of the city and the people living in the city. So the different stakeholders are introduced and recognized. And first time between this period, it was recognized the people of a community are an important stake holder too. Planning efforts to create state wide greenway systems; Interest grows in green infrastructure as a tool to guide land conservation & development. President forms a commission on sustainable development. So, all of these milestones happened across the globe and these were later on incorporated; much later on incorporated in our very own country.

Now, Tools of the Trade or the role urban planning plays in the conservation of natural resources. Number one, we just discuss the Zoning codes. All of the zoning codes, now try to incorporate, how nature is going to be affected? You have Euclidian, performance based, incentive based and firm based. All of this, now takes in to a main concern is environment and how is it going to be affected? Next thing is planned unit development, again how is this going to help a particular green area? How can the green area be incorporated in to a PUD successfully? Conservation subdivision zoning, cluster zoning, open space zoning, forestry & Agricultural zoning. So when you have an area like this which is of, say a particular acreage, conventional rural designers will say you can go about doing anything, where ever you want. But now that we know that forestry is important; the green open space is important. A particular zone is set aside and making sure that we don't hamper the river, we can have our town or the development that is going to happen. So, we can actually gain a lot from living in an area like this. You can ensure better climate control; a lot of rain fall, a lot of cleaner air, as well as to ensure that you are going to have a lot of precipitation. Development ordinance- Clearing & grading, Steep slopes, sediment erosion control, rain water management, source water protection. Other ordinances-Tree preservation, planting requirements, habitat protection & light pollution. A very famous proverb- when you don't find shade, don't blame the sun, but yourself. It is because, that we constantly cut our trees, that we keep finding the sun is getting hotter and hotter. It is just because of the lack of shade that is there the other current situation is happening.

The different growth Management strategies- you have greenbelts, urban services boundary, nodal developments, wedges & corridors, new urbanism and finally, smart Growth. Now if you look at urban planners today, what should be our important requirements? Embrace the three E's- equity, Economy, environment. Acknowledge that to design a 21st century city we must have the "right rules in the right places". We should be confident that we have the tools necessary to make a wise land use decisions. Advocate for the public interest and therefore shall have a special concern for long-term consequences of present actions. Recognize that the role of a planner in a community is to lead, inspire, and innovate. It is only because we never include the public; that the public never participate in the growth of the city. They take things for granted, they go about cutting trees. They don't realize the importance of developing a city, or planning a city. Once the community is involved, the people, the general public have a say in the

whole process. They will have, they will be duty bound to look after the city, and they will have sense of duty that is instilled within them.

Optimum Benefits of Urban Conservation

Now we look into the Optimum benefits of urban conservation. There should be some incentives for the governments to take this up. First thing is preservation of culture-heritage, and the next one, main important optimum benefit is the economy. Obviously the government, any government across the world is going to understand the importance of money. Cities are often an important focal point for development based on these resources, because they provide concentration of heritage assets, infrastructure services, private sector activity, as well as human resources. Heritage conservation has increased city liveability- by preserving streets and neighbourhoods built at a human scale. Public areas are supportive positive community interaction, and green spaces also are afforded, and these offer for recreational activities. By preserving their heritage, cities can create a unique sense of place and singular urban landscapes, developing strong branding conditions to attract investors. In addition to improve the city's self-image, an identity through recognition of heritage assets, this has been shown to increase civic pride and energize communities to actively address a wide range of development and livelihood issues. So besides actually supporting the economy directly, it helps indirectly by providing for more job opportunities, by instilling a sense of pride and happiness amongst people, that people do not want to migrate and move to other places. So, like we just said, Economy is one made branch that no government is ever going to ignore. If a city is going to bring in money because of tourism, and if that is required, and one of the main reasons the economy is going to work is by urban preservation & heritage conservation, they will think of it as an investment and not as an expenditure. So they will make sure that the natural assets, as well as the built assets are going to attract tourism investment and will invest readily. The investments in heritage conservation are advantageous not for tourism development alone, but also key elements of creating liveable cities- in other words; improvements that support tourism, also enhance residents' economic opportunities and standard of living.

At the very end we have seen – heritage conservation and tourism development can not only improve the standards of living, and increase income- earning opportunities, but they generate the wealth for poorer communities. By combining the conservation of heritage assets and improving infrastructural services you can provide for liveable and dynamic environments that directly impact the ability of poor communities, to take advantage of opportunities for a better life, and at the same time you are ensuring your city is thriving and is competing in the world.