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Housing Policy & Planning

Lec – 24
Housing Strategy for City - 3
Dealing with New Housing Areas

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Hello last day we discussed about the housing strategy for the existing built-up area of a city and focusing more on the core city of the housing. Today we will discuss a different part of the city housing that is the housing for the new areas, how we can strategize new areas for our desired objection. So before I, so as the part of the discussion which we had last day we mentioned that for the old city or the core city housing or the already built-up areas of the housing we use concept of re densification, de densification and we use different kind of development controls.

Including affair so we can use a variable affairs and we can indensify the desired development by using different tools and techniques like tax assumption like the differential affair like the exemption of the fees and the different kind of insert charts, those kind of things are done and this re densification and de densification basically depends on the holding capacity of the area of the city of the built-up areas of the city in terms of their infrastructure.

So more the infrastructure development possibility or augmentation possibility more its holding capacity, more the density can be allowed. So based on the discussion we told that few terms we mentioned like vinual and the conservation. So either we augment the infrastructure de densify we go for more denser development and we knew the area with new infrastructure or we can, in addition to that we can conserve some of the core city of the housing areas which is basically depicting the tradition of the, our culture or the city or maybe it has evolved through the ages with the city history.

So those kind of study could be required for the existing built-up areas of the city. Now we will go to the deflection of the next part which is the next part is consisting the housing for the new areas. So new areas of the housing is different than the housing in the core city area. So in the new areas of the housing the first part which first element which comes in our mind is the assume land availability.

In the housing strategy destruction we already discussed that the land availability exercise is very, very important. Now after establishing the fact that which are the land available and which are land not available, the next part is that how we can assemble the land, now in the land assembly discussion we discussed that either we can go for acquisition, we can acquire the land if required or we can go for private public partnership where the private part they can purchase the land directly or we can, we do not acquire or we do not go for private public partnership we just prescribe the desired affair and the desired networks the people and the contours.

And third could be that the land assembly using different techniques of land readjustment where we take the land for some time, we develop the land that means we provide the infrastructure and give back the land to the owner. So we take the raw land, we develop it, we return back the developed land with the renewed infrastructure, those kind of land assembly techniques could be excel site in any city.

So after the land assembly we have the land with our land some substantial land will be available. So the next part will be to decide that what kind of housing is required. So based on the lands the strategy document already we have done the strategy document, so it is clearly retained that which part is going to be what, what kind of housing typology will come in which area.

So based on that what kind of, whether it is a group housing or plotted housing based on that what we do is the land subdivision.

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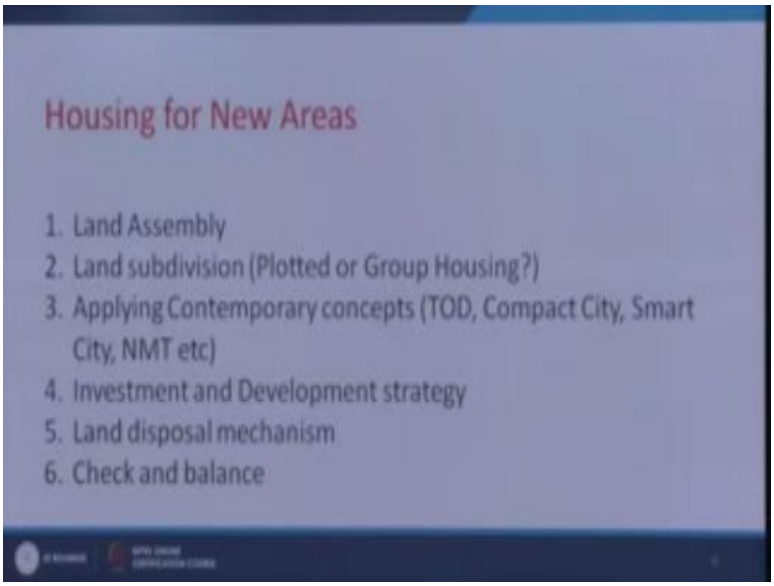

So land subdivision exercise is basically excel size where we subdivide the land with the concept of the group housing and the plotted housing. So there could be bigger land, there could be smaller land parcel or the medium land parcel, but the land pockets or the size of the land plots are very, very important.

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So in the city basically we have, these are already built-up areas and we are talking about the areas beyond this which is basically going to be the new housing areas and as far the housing strategy we measure then pockets are already identified as different pockets for example, these are going to be say cooperative housing, these are going to be okay or rental housing or execution of housing or simply group housing or plotted housing.

So after identification of those, all those pockets we have to take the decision that how we can subdivide the land. So subdivision of the land, so this is very, very big chunks of the land we have to go beyond, we have to go further details so that we can develop the land parcel in a better way to develop the land like this so we can go even further detailing with smaller parcel of the land so that each and every parcel of the land can be given to some developer can take it as a plot and develop a housing project.

So this land subdivision exercise is very important at this stage so land sun division exercise is basically the scientific method by which we subdivide a bigger chunk of the land into smaller pieces of plots and the plots for the further development.

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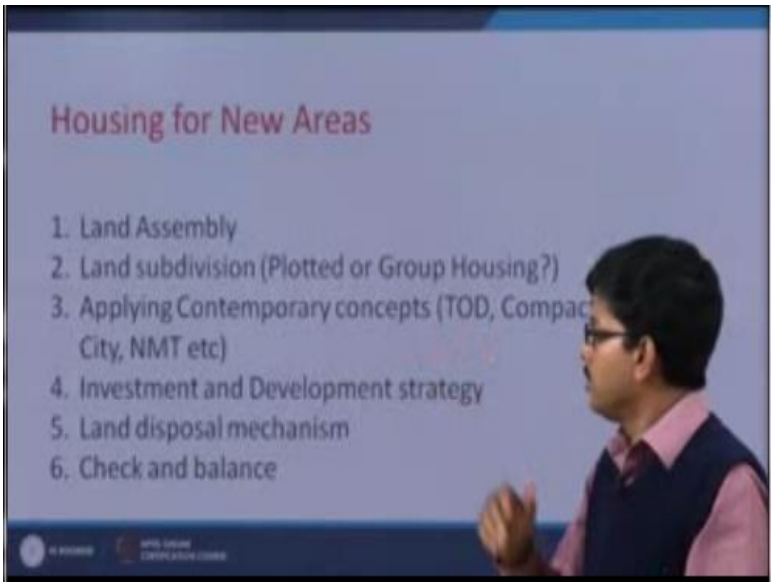

The after that we can use the contemporary concept like the transit oriented development the compact cities smart city non motorized transportation all the concept why we make the land subdivision like some of the pockets could be having some different concept so maintaining the overall theory overall concept and the vision of the city development plan and housing strategy those kind of if any concepts are prevailing there we could integrate those kind of concept at the land subdivision also.

The we do the investment and the development strategy what kind of instrument and development require for each parcel of the land institutional housing group housing plotted housing or cooperative housing or rental housing what kind of housing will come and then definitely how we dispose them dispose the land parcel to the market one approach of the disposal of the land is that you dispose them through a conman transparent loitering process where you just advertise.

The availability of the land to the common people or the private developer and dispose them another approach could be another approach could be that you just bit the you jest open for just call a open tender or building for the land and whoever is the highest builder that you allot that

land to the highest builder so usually the bigger land or the commercial land or the where major investment is possible and the private developers land those are given for the building and the open tendering process otherwise a small parcel which is basically for the small plots.

And the plotted housing those are given through the open lottery system transparent advertisement to the common people and based on the application based on the response a lottery is conducted and on that bases the land is disposed and not only that with the disposal mechanism another very important part is the pricing mechanism so after the land subdivision you have various kinds of plots size of plots sub land for each economy group for example there could be transfer higher income group middle group middle income group and low income group.

So what kind of pricing mechanism will be there will it be the uniform land prizing or there will be some differential land prizing for HIG MIG and LIG so those kind of concept need to be taken care of at the land deposal mechanism usually some kind of cause sub city could be taken out so that some additional amount of raising could there for the HIG and that could be leverage to the lower income group and economical weaker section for any plot for group housing project the group housing could be given to the developer with the meditate of the percentage of the economic group as a meditate to develop the mixed housing mixed group.

So those kind of motilities is important at the land disposer mechanism and not only at the end it should be consider at the beginning when we do the land subdivision there where land subdivision this part I will discuss in greater detail so land subdivision at the level time of subdivision you have the everything in your mind that how the land will be disposed and then how we will check the balance of the overall development so this is the fundamental stages of the housing development for the new areas after that we need to discus few element of the land subdivision.

That how we actually divide the land bigger parcel of the land into small pieces of land so let the small pieces of land are utilized by the developer or the small developer the first principle of the land subdivision is the levels of planning now we have told you that after the land the housing

strategy we have air mark all the bigger land chucks have cooperative housing as rental housing as institutional housing or group plotted housing now this is a very big area as a per the master plan and the housing strategy.

The total population and density will be return for example this land chunk could be there for 300 hector then density could be say 800 per hector and as per the housing strategy you have made it is also mentioned that this 800 hector 800 / hector of in a total area of 300 will be consisting of HIG MIG LIG and either ways in the proposition of 50% 30% and 20% so this is given to you as a in the housing strategy exercise.

So how do you allocate the land here the bigger land here so that ultimately we can achieve this proportion we can achieve the overall density of this particular gross area and within the limited area given to us so that is very important in this stage so one very important concept in the whole land sub division is the levels of planning, so there are various levels of planning which will dictate or which will determine this size of the plot or the shape of the plot so one of the major very important is the how we defined neighborhood.

So neighborhoods is the unit of the housing development basically so by and large one never who is determine by a community or a settlement who shares common facility in India the traditional cities you have seen in the traditional cities that the elements the names like Machala or the names like Para or Machala or different names or local names are there which is nothing but the neighborhood in our Indian cities.

So Indian cities are having the unit of various units so it may be having different population for example one neighborhood could have a 4000populzatiion or 5000 or even more like 25000 so basically it is determine by the sharing common facility at the, now even the sharing the common facility in terms of like the schools or health facility or community center it can be at the various level.

I told you an example that in a housing cluster if there are a housing cluster of the building cluster there could and internal coterie which can be utilize as communities or community

function or community area so this is this cannot be called as a neighborhood so we call this kind of arrangement as a cluster so cluster is basically a combination of various blocks and the buildings with some common facilities by and large it is common facilities it can small play area it can be coated so this is one cluster it can be the cluster of ten house or cluster of 15 house or 20- house the population could be 1000 even less.

So more or less this kind of population can be canted by a new cluster so one cluster basically gives you a mended to have one at least one community place where the children can play, so this kind of cluster can form multiple number of cluster can form one neighborhood so basically neighborhood is equivalent to so multiple clusters, so multiple clusters make a neighborhood so neighborhood is nothing nut a population of 4000 to it can be even bigger like 25000. So neighborhood basically enjoys a common playground of the older children and some other facilities like a primary school or commercial facility so first in these levels of planning the immediate.

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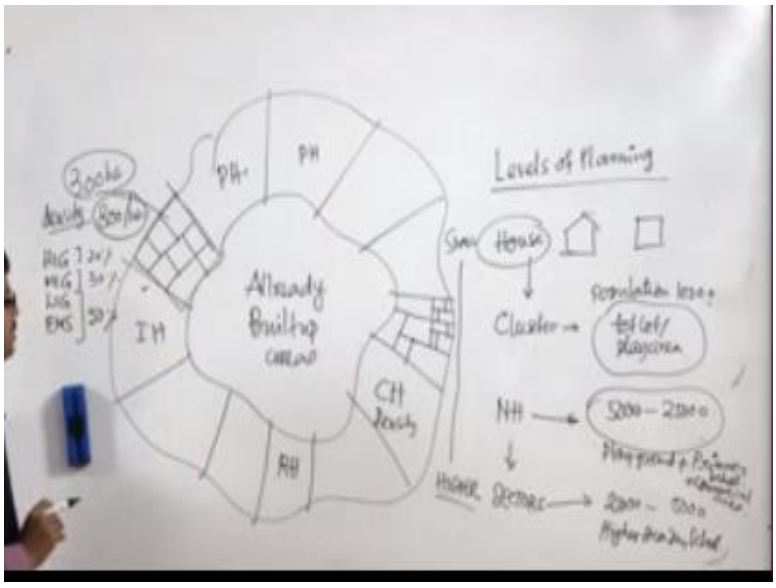

Your first element in this planning is your own house it can be plotted or it can be group housing also then is your cluster, so cluster is defined by a common facility around a tot lot or play area,

population ranging from 1000 and then we have the neighborhood. So for the neighborhood we can have the population of anything between 5000 to 25000 and then we have the sectors which are bigger than the neighborhood it can be have population of 25000 to 50000 so one cluster is defined by using a common plot lard or the community area whereas one neighborhood is defined by using one playground for the older children then you have primary school one primary school and commercial area.

Whereas one sector will be determine by its higher secondary school higher level of green park and few more facilities like say health facilities and commercial facilities so from the smaller so from small to so higher level of facility we design for the land subdivision now in a typical neighborhood typical area if you want to develop like say sectors say sectors having 25000 so if your density is 800 so accordingly you can calculate the land area for sector and you can distribute this sectors over the area suitably using your area.

Now this is a method where you have to have the special planning and design attitude by which you can make for mutation combination and few more exercise and you can connect the whole area with no network now making that road internal road network of this collector road and local road is essential we have discussed about this road network and the road and transportation when you discuss the info structure for the housing development.

So those discussion can be called and the collector road having the width of 18 meter to the 20 or 24 meter and the local road though it is of 10 meter to 12 meter, can be utilized to differentiate or to define the two side by side plot. And these can be given like one sector and another sector like that, like that and each sector can be developed separately by individual development or developer agency.

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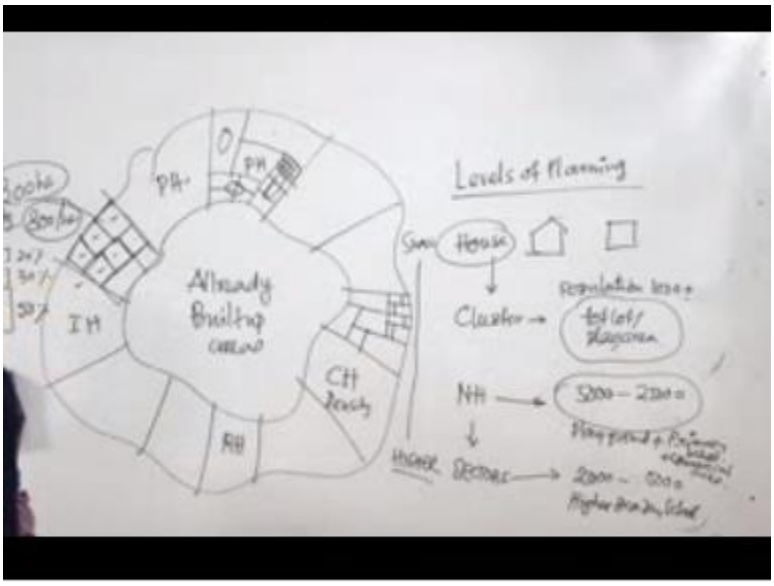

So this is how we do the land sub division whereas we go for the spate housing the land sub division will become much more complicated much more signify, because here may be the number of plots are may be very few because plots are very big in terms of the size and the shape because it is a group of plot. But here if the plotted housing is done the land sub division will be much more, we have to develop sector by dividing it into various neighborhood.

With some common facility and each neighborhood will be having several local road and small plots I will show some examples, so that you can understand in a better way so that is, this is since of defining any bigger plot into smaller plot. So based on the typology which is given or dictated in the development plan or the housing strategy we make the land sub division activity, according to group housing or the plotted housing or another housing. The second part is of the land sub division is the access road.

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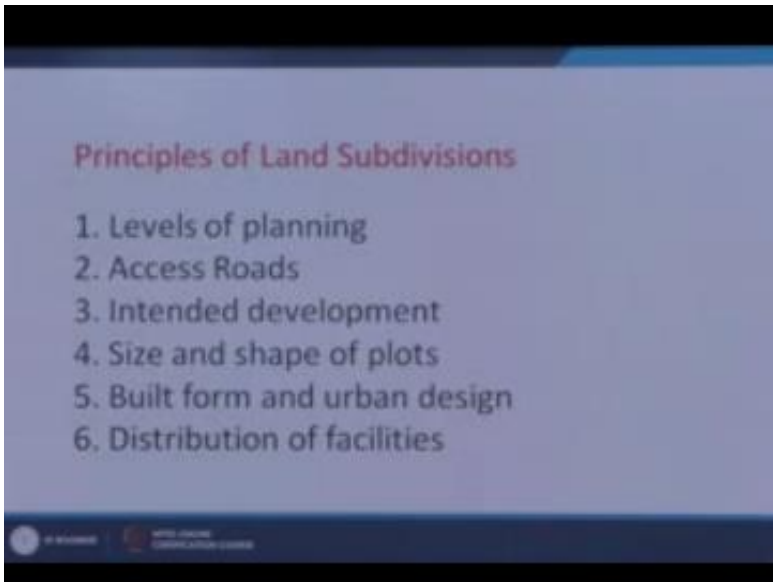

We told about the access road so access road for the, bigger plots will be wider and the smaller plots will be, will be lesser bigger plot wider road, smaller plot narrow road. That is the fundamental approach we do we should take for land sub division using the different kinds of road. The third part is intended development whether it is a group housing or plotted housing for rental housing or property housing. The requirement of the property housing is different than the group housing, because the size of the cooperative house may be different.

So we will have a different discussion on the cooperative housing but for today you can take a note that for cooperative housing we have to design the product. We have to design and design the product in such a way that each and every corner or cooperative can stay there can build the house in the plot size and the shape. So to determine the plot size and shape have to have a cross calculation, cross calculation of the possible architectural layout of the housing. For that particular in serve group or particular number of these group.

For example in a cooperative housing we have say 10 members cooperative member however cooperative. So for that particular group we say MIG may be the income group you have to calculate the how much area will be required for a MIG group for 20 numbers or 10 numbers.

So based on that you have to have a calculation of the architectural exercise and then you can determine the plot size. So that the why we are taking all this trouble to make the to strengthen the size and shape of the plot.

In a plot sub division exercise because we are trying to optimize the usage of the land we cannot waste the land any more that is why we are taking almost care in each and every stages of land sub divisions so that we can stop the wastage of the land at any stage. Then we have the size and shape of the plot usually the size and shape of the plots are considered as like rectangle, like this,

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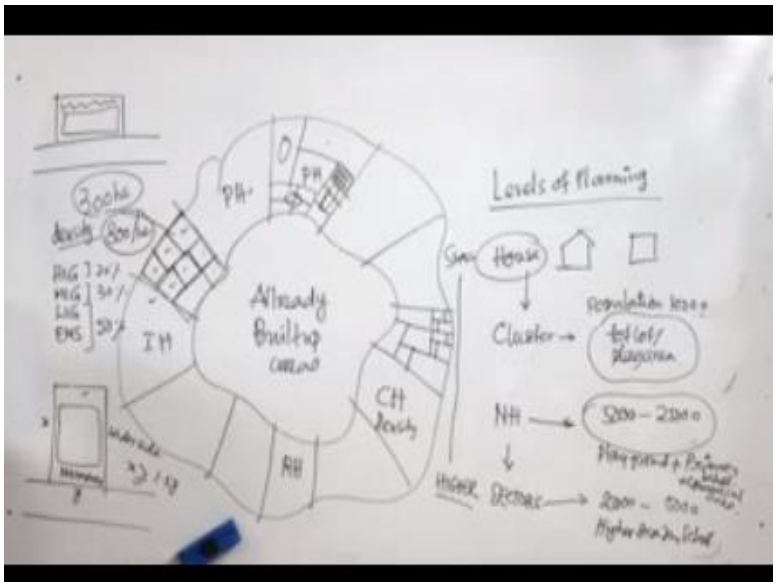

So where the access node is even at the narrow side so this is the narrow side and this is the wider side so if you depict this as X and Y. so X should be more than or equal to 1.5, Y so why we are doing this because we are doing this to optimize the usage of the land so that is we do the reverse one that means to provide the plot like this number 1 we have the bigger is to the plot more number of roads will be required to more amount of investment will be required.

And secondly when we make the building the back open space or the rear open space or the set back is bigger than the side open space. Usually so here if you make a building the back open

space will be much of the space will be wasted. So that is why this is the optimal situation where we are reducing the road frontage and the, the back open space where we are keeping the back open space for the ferriage and sanitation part.

And for the layout no the fairness pipe lines and also for the ventilation, but in the case of the corner plots like in corner plots definitely could be to loads having the corners like this. So these kinds of mechanism we do were the plot configuration side shape is considered. And for the size as in told you earlier that and the size depends on the how much people and how much unit to be accommodated in the in the particular plot. We can maintain the common fair of a every plot so that after construction of the free plot.

They can assume maximum fare of the plot and they can assume fare so it can slum all the people are required to be accommodated. If it is 10 member cooperative or it is 20 member property for 40 members property. The land size is very accordingly and proportional that is the essence of the land sub division. Then next point is the build form your urban design then hoe we are considering the build form the whole area from picture you will understand the design and the building form and the distribution of the facility.

The facilities also can be distributed in the level of value we told the house level some facility are given the cluster level some few level facilities given at the level few other facilities are given and at the center level some bigger levels are given. So facilities are given at varies levels and these levels are planning are determined defined with the facility now with the discussion let us see from the example that how it looks like in this example you can see that four levels are there.

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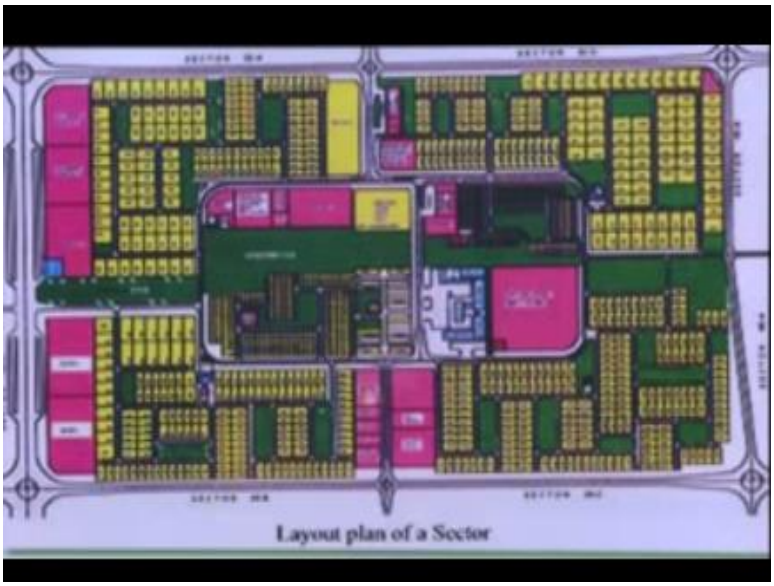

These are four neighbor hoods having common facility here and we can see the plot how the intricate of the plots are done let us take the second example.

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Here also you can see this is the major roads going there and these are the internal routes and you can see that bigger lands the grouping lands are here these are the group housing lands, so group lands are bigger, so bigger land placed in the side of the bigger routes so that they can get the maximum advantage are at the smaller land, smaller plots these are the smaller inside at the junction ate the side of the smaller local routes you can find that further smaller plots at there not only that this is now you can see these are the plots having.

the commodity facilities these are the facilities having the sector level and this the facility at the neighborhood level there we can find 1, 2,3 4,5,6,7,and 8 is one very small neighborhood so eight neighborhood so eight neighborhood consisting two different sector so in these sector they are enjoying this common facility you can see the open space and the school and all those plot and this particular sector.

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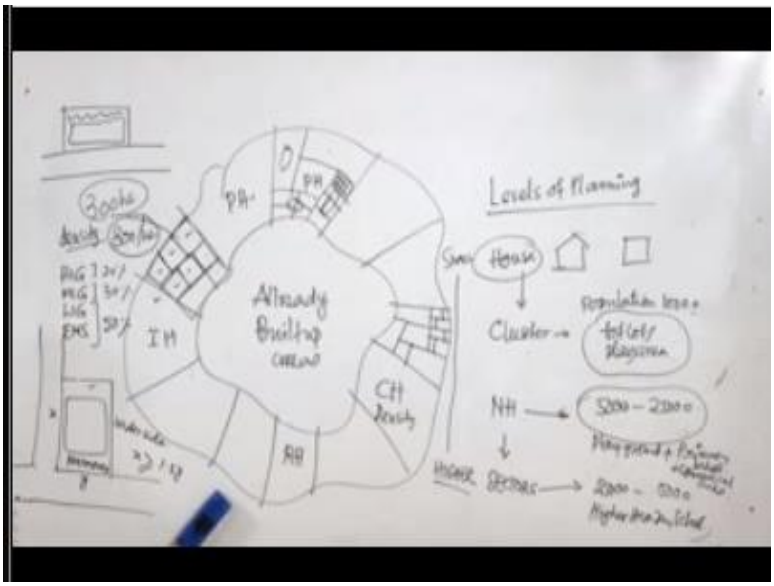

They are enjoying some common facilities in this side at here also some common facilities are given and apart from the common facility at the sector every neighborhood enjoying their own open space some cases they are having the water bodies and the primary school and some of the commercial areas therefore you can understand that how the facilities and the plotting can be done at every level. Here also you can see the higher key of the different levels of the planning similarly how we can see

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Now here you can see that these are the bigger plots given for the higher buildings and this is the smaller plots given for the low-rise building so concept is that we can go for this we discuss last day also concept is that in the preferri we are having higher building and inside we can have low inside building so that we can have maximum light indentation and we will passing and also visual pedestrian and visual accessibility considering this kind of urban design concept also can be applied for that bigger plots can be hope.

In the preferri and smaller plots can be put in center so that is cytology or the approach we can adopt this is another plotted development again you can see the similar the larger plots are given for the group these are the larger plots these are also larger plots some of the plots are given for commercial areas and you can see various individual plots having connective green areas so this alignment of the green area.

Further it is the isolated green like we showed in all the pictures all is connected green it depends on the concept of the whole development or the individual of whole development so that what type of urban design concept is considered but apart from that you can find out this is the one neighborhood this is another neighborhood and this is another neighborhood have been enjoying

their common green areas and facility that is moral same for is type of plotted development but definitely you can find different kind of higher routes.

This is a wider road and this is a narrow road and higher facilities this is the common facilities and the sector level these are the facility are the neighborhood level and green areas higher of the green areas you can see the major green areas at the sector level and the sub green areas at the neighborhood level and smaller patches of the green at every cluster so this is a cluster, this is a cluster this green area can be utilize by this many plots this type of green areas can be utilize by this many plots so though each and every cluster cannot be differentiated clearly but you will find a variety and higher key of open space road and all the facilities very clearly in this.

Layout that defines the plots sub-division mechanism of a new areas so next day we will discuss few more elements of the housing strategy so today we next the housing strategy for the new area we told that the housing strategy for the new area are completely different with why the housing strategy with the existing build-up area in the existing build-up area we basically obtain the infrastructure and we residency or residency the infrastructure wireless in the new areas we each and every pocket of the housing development based on the housing typology and the housing strategy like property housing group housing rental housing institutional housing and based on that we decide on the type of the development the side of the plot module of the plot and we sun divide the plot as per the levels pf planning and the levels of planning is defined as per the amount facilities shared at different level.

Like at the house level on building level cluster level neighborhood level and sector level so based on that we can design the building the housing pockets like in group housing or plotted housing and also we have seen few examples to understand to an appreciate that how and the lands of the division various had are maintain for the load for the open space we create open space and for the community facilities as at different level having said that next we will cover few other specialized area in terms or some cases for the housing strategy so today we are we have completed the strategy for the new areas and the core areas so for today thank you for attending this lecture.

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