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Housing Policy & Planning

Lecture – 26
Planning for Group Housing

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Hello in the last lecture we discussed principles of plotted housing, in this lecture will discuss the principles of the group housing in the principles of the plotted housing we discussed how we can approach for the planning of the plotted housing of a large chunk, we discuss that two approach could be taken one is a higher kale approach where we can distribute or divide the whole population ion to various clusters and we defined the clusters in terms very specific facilitates and open discretional areas.

Another approach is we do not divide as for the clusters we just place the plots ion such a fashion that in a centralize green areas for centralized open facilities can be provided to provide the essential facility to all the plots, equitably in a different type of manner different manner and not only that we also discuss that the how we can determine the plot size in a plotted housing we told that if the total population is given by the housing strategy for a large chunk for a neighborhood level.

Dividing the population with the house hold we can find out the total number of dueling units and that dueling units can be converted to various proportion of the higher income group material income group and low income group to determine the exact number of plots require for each economic group, and then we can also calculate the size of the plot and its total number of the plots for each dueling unit and provide.

Now for the plotted housing apart from the placement of the facility and the open space another very important factor is the network now we told that few example or few principles we discussed like in the periphery we should not make more number of puncture ion the local road and in the very close vicinity so that it makes it does not make a accident and the risk prone areas but inside the neighborhood where only local roads meets with local road those kind of areas it can be done.

Second we discuss that the number of junctions the periphery will be less and inside the number of neighborhood number of junction will be more it can be more and deficient or the segregation of the vehicular and the non vehicular traffic and for the non vehicular traffic like the pedestrians and pedestrians we can make save for it puncture save for it path ways for the non vehicular movement.

Now one disadvantage of the plotted housing if that the plotted housing though it provides a very individual kind of onashu to the inducer and you enjoy your sole ownership and freedom to design built and enjoy your own house but one difficult is that at the planning level the density is very less because for each and every plot you have to provide road you have to provide the open space and the facilities.

So the see the density is less your overall cost of the plot becomes higher so it is less affordable, so only the people who are in the higher income group or material income group they can only effort the plotted housing when that plotted housing is built inside the city but is yes in the periphery and also in the rural areas poor people can effort for the plotted housing. Another disadvantage of the plotted housing is that they since the plotted housing is when it is plotted you cannot play with its orientation too much.

So whatever is the orientation of the plot you have consider may be one or two orientation you can play with but buy and lard you have to keep the orientation for the whole neighborhood may be one or two variations you can achieve this types of disadvantage can be overcome if the group housing, so in the group housing we are not going to give the individual plot to any people so we are going to make overall design of the plot overall ion terms of the building.

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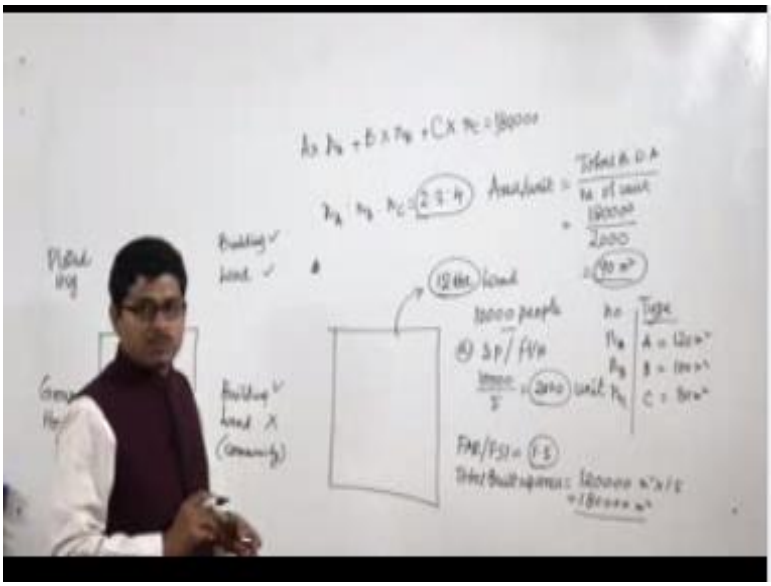

So in the plotted housing the size of the plot is smaller in a group housing size of the plot is very big here the number dueling unit is one or two but her it is a group and basic difference is what I told earlier that here the building and land both are own by the individual parts or the induce but her the building is own by the individual person but land is not own land is own by the community that is why it is called as a group housing right.

So this is the plotted housing and this is the group housing now how do we make the group housing in the plotted housing our basic objective was to consider the total number of the plots which can be calculated from the total population which is given by the master plan or the housing strategy then accommodate those many of the plots but in the group housing our approach could be little different like if this is the plot of the group housing given or given after the land subdivision exercise in a housing strategy and it is told that say for example this is say duel vector of land right it is told that in duel vectors of land we have to accommodate say 10000 people right.

So our objective will be the out of 10000 people if we consider at the rate of 5% for family or per house hold so it becomes 10000/5 = 2000 unit, now this is the total number of units we have to

accommodate in terms of total number of units now this units could be accommodated in one building theoretically can be two building three building four building so various permutations and combinations are possible based on the variable so here your variables are number of the buildings number of the building complexes number of the floors the building height.

So many variables are possible so based on the so many variable you can make different kind of options now concept of FAR could be FAR or FSI could be brought back here for example consider that FAR provided in this particular plot is 1.5 therefore total built up area becomes, so if duel vector is the total area of the land so duel vector is equal to this meter square in to 1.5 it becomes meter square.

Now consider that this is the total built up area and this is the total number of unit so area per unit will be total built up area divided by number of that is right so this becomes the average area average area per unit, now this is based on the assumption that you are taking you are designing 2000 unit and you are making all the units uniform and uniform and this when total built up area is 180000 meter squares.

So in this case it is 90ms but taken example that you are in a group housing project definitely all the units will not be uniform there will be variation even if the project is done for the higher income group or any particular group like material income group within that particular economic group there could be various kinds of options. Now let us assume that your taking, three typologies type A, B and C. so type A for example you are taking 120 meter square, and type B say 100 meter square, and type C 80 meter square. Right so based on that you can calculate by using simple mathematics that if the number is, this is the type and this is the number.

So simply right so based on this if you can consider what is the proportion of A. Now this NA and NB and NC, you can consider: NB: NC= say for example we can consider some ratio one say 2:23:4. So if this is known this can be considered assume as per your requirement or as per your intension of the project or as per the target of the project. Target can be population of the project so you can calculate the NA NB NC using simple mathematics. And those, those amount of numbers we have to be accumulated in this particular area.

Now this is the quantity part of the, the planning of the, the whole complex, but how to accumulate, how many building will be there. So there are few variables like it could be accommodated in one building or multiple building so your decision on the number of building, number of floor in a building, and the number of unit in a. so this is the number of building how many building will be there right number of floors in a building if this is one building what is the floor number N number of floor. Number of unit in a building floor like if this is floor plan,

So there could be four units which is severed by a common lift there could be six units which can be served by a like this so based on the different kind of permission and combination what is the number of units in a building floor. So making a combination and permutation of different kind of possibilities and, and the options you can make two, three scenarios and you can choose one scenario. So that is a quantitative part this can be done. But there is no directly formula which will guide you that what is the exact number of the floor or the exact number of the building or number of the building floor.

Now it like the building height, building height is determined by the maximum height is equal is determined by the year. Building regulations and there are building regulations related to set related to join open space related to fire regulation everthi9ng. So considering all the thing you have to determine the number of building the number of floor number of unit etc. so there is no short cut or no straight forward formula only one thing can be told that it can make several options and out of the options you can choose one or two.

Now let us discuss that how after deciding on the number of building block, number of different floors, and number of the units. We need that this much number of building and the building profile then how many blocks will be provided for example in this case you are finding that 16 number of building block had to be accommodated. Now 16 number of buildings could be accumulated in a, in a hierarchy manner like we discussed in the plotted hosing for all the buildings can enjoy common open space or it can be like this, like this.

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And that could be a centralized large facility so this could be one approach but by which we can distribute the buildings and it is facilities and connected. So this can be one approach similar with the plotted housing and approach could be another approach could be done that we may not distribute a bill or based on the hierarchy but we make a common facility area and place the building around the facility. So that each building gets the maximum advantage the large facility, facility as well. So this could be another approach here this, this state of building.

They are defied of getting the facility of the large open space like a playground or large facility but here every building can have the visual connection or the advantage of the bigger facility so this could be another approach or similar like plotted housing. So in group housing mostly you will find the this kind of approach because the advantage in this approach is that you can orient your building as per your sight requirement. For example this sight could be very much irregular.

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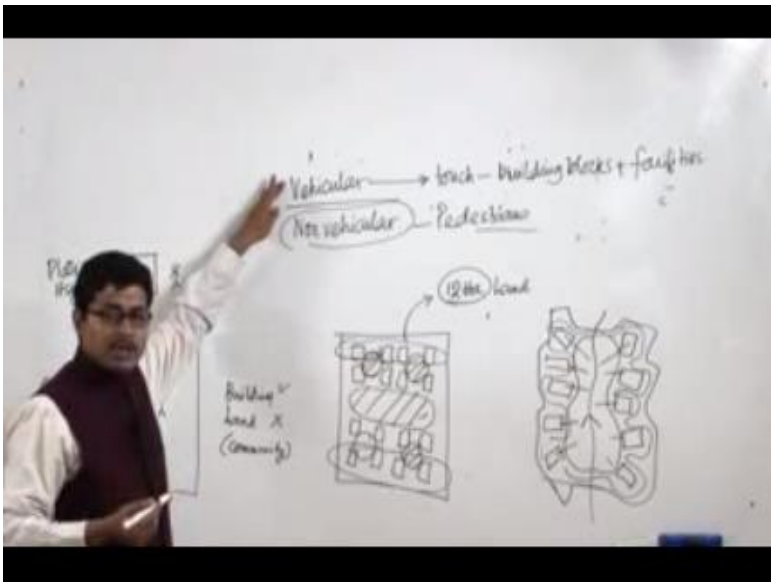

Usually try to get the regular plots but in practical field you will find very irregular sight like this. So based on this irregular sight feature you can oriented your building accordingly these can create very interesting pattern very interesting form, or very interesting build form which will enhance with the light ventilation wind flow everything in a particular project so this kind of approach could be taken. So first in this discussion first principle is how you are placing the blocks so placement of the blocks is can be done at the hierarchy approach and the placement of the blocks can be done at the individual approach keeping the centralized facility and orienting the building in their own fashion to increase, or to maximize the light ventilation and wind flow.

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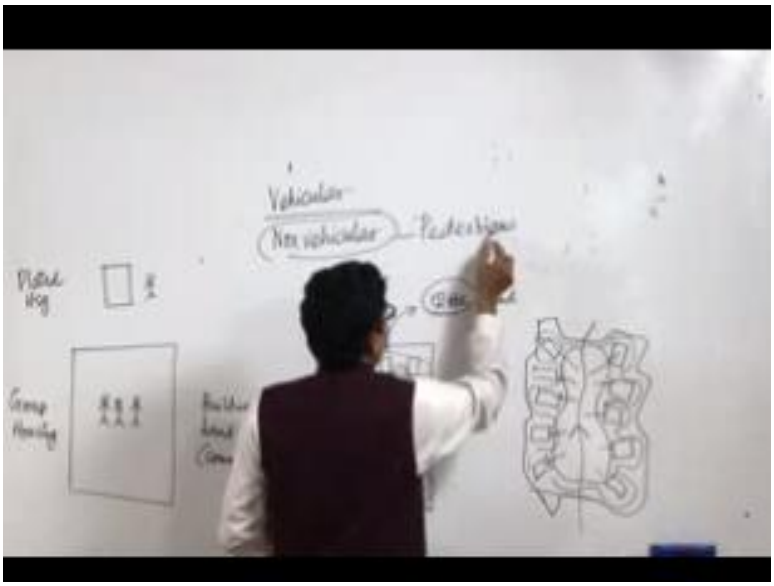

Second part second principle which can be discussed is that you can is that how group housing project you are you are considering you are integrating the vehicular and non vehicular movement one very disguisable parameter or feature in the group housing than the plotted house is that in group housing since there is no boundary of the plot apart from the external boundary inside there is no boundary .So every persons can reach to every block, every facility ,every open areas

But in the plotted housing everybody cannot entered to facilities in the other plot but here it is just reverse everybody can ,can go anywhere it is free area in the group housing context. So in this context our objective will be that the non-vacuolar movement that is pedestrian movement, so pedestrian should be given the opportunities to move freely along the open space along the side the building and all the facilities area.

Where the vacuolar movement should touch the building blocks and facilities and also parking areas, but the vacuolar access may not touch the open areas reconginal areas. But open areas are reconginal areas much be connected with pedestrian approach ,so pedestrians access is preferri

important so one approach to segregate to segregate or to integrate the vacuolar and non vacuolar apologies in a plot.

We can make the vacuolar this is the road we can make the vacuolar pathway at the very, very and we can have the non vacuolar movement at the centre and keeping some of the interface area between the non vacuolar and vacuolar movement this can be one approach that mean in the preferri you have the vacuolar movement in this centralized open area and the facility area where having the free flow of the pedestrian.

And some of the designator point you are allowing the interface area where you can load, unload or you can get down from the cards and come to the open specific area ,and building could be placed suitably inside the are so central iced space could be utilize for your green disscussional and the facilities area .Another approach could be the divided approach if this is a plot you can divide ,you can have vacuolar movement like this and your ,that is also possible that your non vacuolar are pedestrian movement is around.

The building so that they can see outside have the ,these are the building block provided suitably and inside the two set of building if these are the two set of the building that inside the building you are making a vacuolar only one vacuolar access giving,acces to all the building so here at the advantages the vacuolar access since vacuolar access or the department or the road is very costly element so instead of giving a very large amount of road.

You rate giving very nominal road just to give the aces to the building but you were allowing the non vacuolar pedestrian approach in each and every building and facility area but definitely you have some kind interface area or you have to have the various specific in your design to integrate the vacuole and non vacuolar interface.

Now based on these latest see some of the examples, so you understand in a better way some of the example, so this elements we have disguised that group housing have the community ownership of the land individual family ownership of the apartment.

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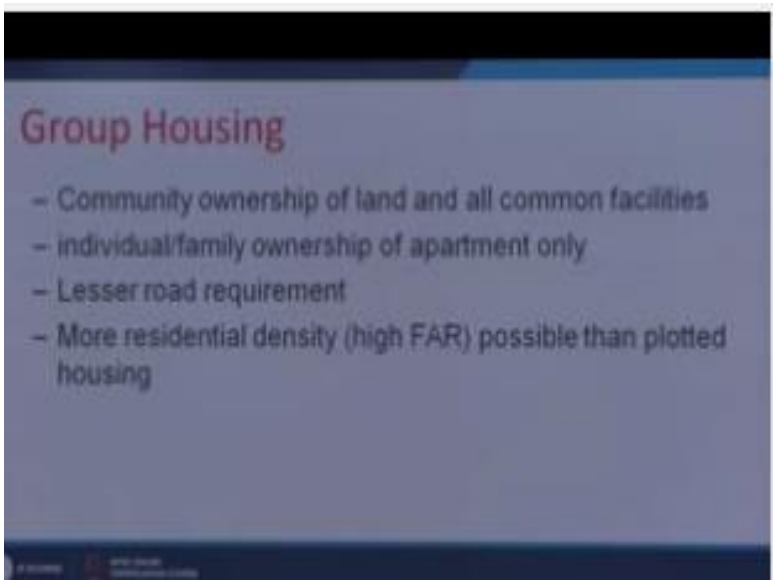

Lesser road requirement more densities possible to achieve using the higher FAR than the plotted housing this one example of segregated or the distributed in a higher fashion.

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you can see various clusters are developed this is one cluster, this is another cluster every cluster is having one centralized green areas inside the cluster but apart from the cluster there are large amount of area if is having the another facilities, common facilities which is shared by the group hosing so this one example you can see how the cluster are formed around the small green areas.

Another thing you can see that, this is the vacuolar aches for the roads, and these are pedestrian pathway how the pedestrian pathway are intergegrate with the green and green space, and these are the interface area why the pedestrian pathway is netting with the vacuolar are so this kind of design or the planning interfusion could be taken. Lets us see another example in this example you can see that this is the vacuolar aces.

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In this vacuolar access from the major this is the secondary vacuolar access and inside the complexes only the pedestrian movement and the green areas and facilities have provided you can see pedestrian movement is possible but in the preferri the roads are there the vacuolar movement .Similarly here you can see that inside the building ,inside the campus ,inside the complex you can have the pedestrian movement and some of the areas have the interfaculty the pedestrian and the vacuolar areas you can see that there is a connection between the pedestrian and the vacuolar movement so this could be done.

If it is design considering the plaster approach so this could be one cluster this could be another cluster but the five of the cluster here is much, much bigger than the size of the earlier example ,like this here the cluster was little smaller but here the cluster is bigger ,now let us see the example were all the buildings have placed around a large open space an open space and facility.

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Like this, this is the project which was done the first project done as the public,private partnership in India in Kolkata in city of Kolkata you can see that this part is done for the higher income group this part of the project is done the middle income group and this part of the project is done for lower income group and buildings are provided in the preferri keeping the green areas and the facilities .

In the central area so that everybody can come and take the advantage the green areas required us the vacuolar access is given at the preferri access and the central grin areas gives an opportunity for the pedestrian to Rome around or to enjoy the green areas at the same time they can come to the vacuolar area as will so this is the peripheral road, this is the peripheral road. There are one, two three entries; three entries. So from three entries from the major road is there. So from this example, you can understand that how suitably the distribution of the land for the higher income groups, middle income groups and lower incomes groups can be given and considering the centralized area and open place.

As a centralized facility also could be designed, this is the view of this particular green area. The large building are surrounded, are surrounding the green area this are the HIG blocks.

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This is another project by the same joint venture company designed by famous architecture BBOC. Here also you can see that irregular parts of land, how the land person is irregular and based on the irregular land part. How the designer had planned the complete in such a way, so that the centralized green open space become a continue sale of combination of peripheral and particular movement and a free flow movement is possible and the building blocks.

This is building blocks, similar building blocks. They are placed in such a way considering the profile of the boundary profile of the site. At the same time it is taking the optimize utilization of the profile and also creating a very interesting build form inside the project.

This are the building blocks of middle income group and this are the building block for the higher income group. So also from this example you can understand that how the vehicular and peripheral movement can be separated out. Within the plot are varied irregular and long and kind of a uncertain kind of plot profile. See this example.

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In this example you can see that though the plot is having a regular profile, but with in the regular profile. This is the vehicular axis and inside green area is the peripheral approach, how the peripheral interfaces there, with their vehicular approach.

Now some of the area, these are the shaded area and in this approach also the centralized green area is giving the axis of the view to all the building block. Apart from the group housing and the plotted housing, so these are the some example we have shown few more examples, I must request you that you see from the web site lot of projects are there.

In the web sites those are available so please go through all the, all the sites. See very internally and milutely all the planning of the campus of the group housing. See how the open places are distributed, how the axis from the vehicular road is given, see how the axis from the peripheral path way is given, how the interface between the peripheral path way and the vehicular path way is maintained.

So there is no shortcut or by the formula which can deduct you or teach you. This could be the layout of the planning but if you consider few thumb rule. As we discuss that the approach could be in the cluster best or approach could be centralized best.

So this kind of approach could be taken for any group housing. Now apart from the group housing project, there could be few projects which can accommodate group housing and plotted housing together t o make a very hydrogenous but a very integrated campus.

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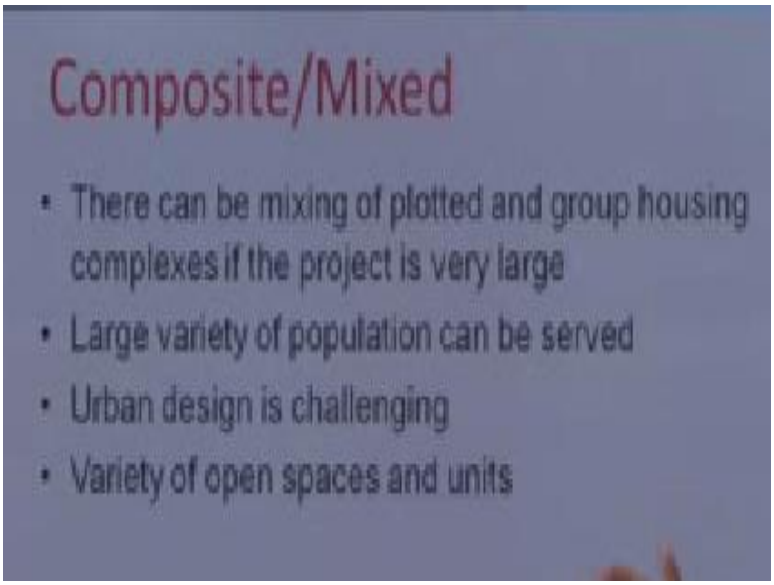

So in the mixed user or composite development there could be a composition of plotted and group housing project there could be few projects which can accommodate group housing and project housing, to get to make a very heterogeneous but very integrated campus. So in a mixed use or composite development there could be a composite composition of plotted and group housing, so here you can accommodate large variety of population.

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Urban design is challenging and variety of open space and units are posiible if you make a composite development. So this is one of the example taken from a very popular project.

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The central portion of the project is related to a group housing or it is reported to the plotted housing development. So this is one example of the composite development, now let us summarize the type of development in plotted housing basically your land ownership is the private, but in group housing the land ownership is held by the community of the publc body. Here the density could be achieved which is lesser, in group housing we can achieve more density.

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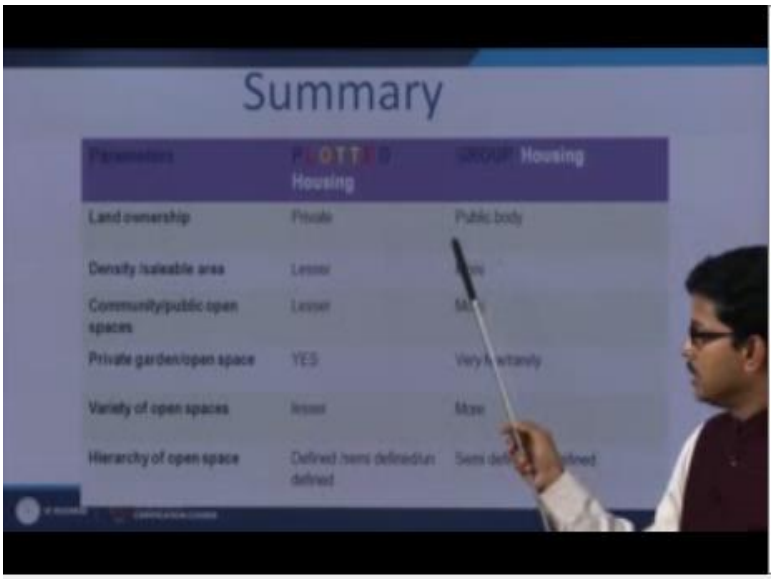

The community and the public open space is lesser where we can achieve more because here we do not have the open space given for the each and every plot, each and every unit so all the open spaces merge and creating a large amount of a open space. Private garden and open space some times we give the private garden to the group housing in the ground floor units but, yes for the plotted housing every plot can have their own small area small plotted garden's.

Variety open spaces could be lesser because the community open space is less and more number of land is given for the plotts, but here the community open space is more because all the open spaces are plot together to make it bigger amount of open space. And hierarchy of open space can be defined semidefined or undefined, similarly it can be semidefined and undefined. But here in the group housing the usually they define the hierarchy open space is not possible not seen.

Whereas, in the plotted housing we see largely the defined housing, defined hierarchy, defined priferi of the open space. So in the next discussion, next lecture we will discuss the strategy for the commdative developmentt in housing, so after the discussion of the plotted housing and group housing next lecture we will discuss that, how accomodity is important and based on the

commodity development. How we can stratigize few other typologies of the housing in a new housing area's of a city so, thank you.

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