

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

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Housing Policy & Planning

**Lec – 23
Housing Strategy for City - 2
Dealing with Core City Housing**

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Hello last class in the last lecture we discussed the basic methodology of preparing or formulating a housing strategy. So based on this discussing today we will discuss that how we take this strategy for a core city or a existing in the city area. And the next day we will discuss that how the housing strategy could be taken for the new development, how we did the new development and the new lands or the African lands.

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Stages of formulating Housing Strategy

1. Study of existing situation
2. Setting Aims and Objectives
3. Analysis
4. Synthesis
5. Making Scenarios
6. Developing Strategy
7. Action Plan

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So before we go to the detailed discussion let us, let me go for a quick recap of the yesterday discussion. We told you that the housing strategy formulation has seven simplified stages which we undertake and the housing strategy with exercise which is taken immediately after the master planning exercise. The master plan or a city development plan basically identifies the broad land and finance allocation in a gross level.

And that land and finance availability or the gross allocation can be detailed out in the housing strategy exercise where we are going to identify each land part and their development based on the housing the future housing demand and each of the land parts will be detailed out on their development control, finance requirement and their typologies of their housing which will be prescribed exactly.

The first stage of the housing strategy is the study for the existing situation, in the existing situation we discuss that we study the land profile; the housing typology, the finance and the organizations by enlarge. The second stage is the fashioning exercise, in the fashioning exercise we mentioned last day that we developed aims objective and a broad fashion of the housing delivery or the housing provision for the city.

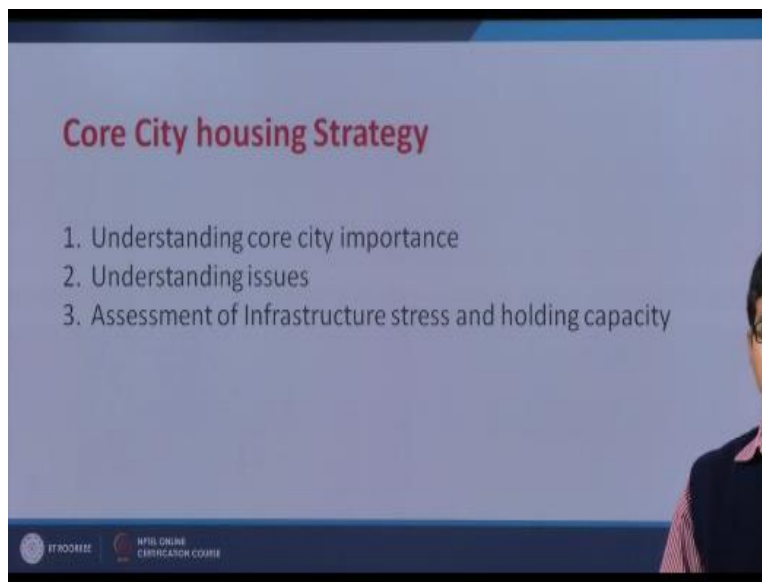
And this can be done in a participatory method. In the third stage we discuss that analysis could be taken, analysis of the land value, analysis of the train, analysis of the land availability, analysis of the investment possibility all these analysis will lead to the synthesis of the all data so that we can match and mix between the demand of the housing typology as for the different housing typology the demand for the land and the supply how much land we have, how much finance we have and how much time we have.

So this can be mismatch and make synthesis can be done with the available data. The next stage what we do is the making scenarios, we make different scenarios to differentiate and to compare between the scenarios we did various parameters like investment, lands, housing development, density, if we are required the implementation so many factors we take and based on the scenarios we select only one scenario and one scenario and based on that scenario we make development and various kinds of strategy for whole city housing, new housing, special type of

housing, plotted group, housing cooperative housing every category of housing typology we have the strategy differently.

And that is followed by the actual plan, in the actual plan we mention the timeframe of each typology of the housing and also we mentioned that who will develop that particular housing delivery. So this broad housing strategy framework or the methodology we discussed.

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Based on that we mentioned you that there are two broad difference in the approach or in the context or the study area one part you will find that in every city, there is a city extend the city limit beyond which there are vacant lines are available and before that limit these cities have been existing population, existing housing, existing buildings. And more you go to the center of the city you find that the city is very much congested which is very old and the congested sometimes we call it as a core city.

So core city housing development or core city development is different than the development takes place in the out code of the city which is for the future new housing, so that is why we need to discuss differently. So today we will discuss the core city, the first point which we need to

discuss is to understanding the core city importance. Now you will find the older cities which are having a very core areas congested and compact areas those are evolved through time and it has a history. So it shows the city culture, city traditions and cities morphology that how the city is evolved.

And its architecture, its route network is people, its style, its profile everything is very important in maintaining the city that the core city of the housing, though in the core city we will find the second or third layer of the housing development or the city development which may not be that much compact which may not be that much congested, but which is having substantial housing development, substantial developments are there with fragmented vacant areas or some vacant lands.

So those are also very important, because those kind of housing development came even after the development of the city or inception of the city, but it provided very important land or space for the housing or the shelter for the people. But this needs different action or different treatment. So understanding the core city importance in its sense, we cannot mark a core city as a very congested one or a very like a slum or like a shabby areas.

So we have to treat, we have to see the core city in its current context or current morphological context how it is related and how it is important for the cities core. Second is the understanding the issues, most of the issues in the existing cities, existing built-up cities are the infrastructures trace, because the by enlarge the cities, the core city of the cities are, they will up throughout the time organically.

And organically developed town ships, organically developed areas, lack of fundamental infrastructure because the people come and build their house without major load. So over the period of time on a narrow load, on the narrow width of load you will find that multi-storey building or very congested buildings have come up. So as they result, there are issues like congestion, there are issues like infrastructures space, there are issues like severe breach or severe crisis of the infrastructure in terms of water supplies, worst management or sanitation.

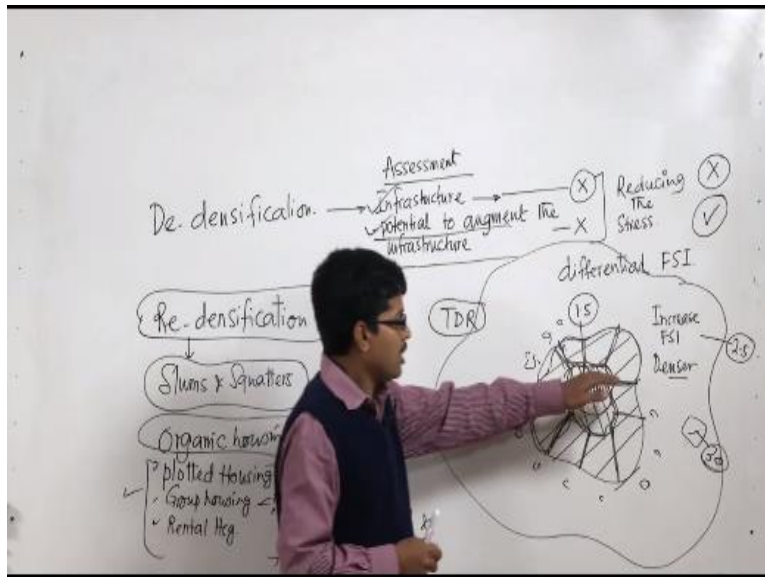
But on the other hand you will find that the potential areas or the positive areas of the core cities, its vibrant nature of the whole area or you will find that people are playing, people are enjoying their space and people enjoying their whole setting. So that is the kind of a mismatch or that is the kind of a discrepant, we have to deal within the, in the core city, core housing strategy. So what to do, what to do in the core city housing.

So it is the time that you have to make the infrastructure assessment that how much infrastructure is presently there. So some of the data's you will find from the municipal office that these are the infrastructure like the water supply and the other facilities. So we can assess the infrastructure level and you can compare that infrastructure or services based on some normal stand that is how you can find out the existing level or the infrastructure provision for capital or family.

Now the question, now here the decision we have to make that whether we are going to further densifying this area or we are going to reduce the density of this area, since it is a compact, since it is congested area. That is the very important question we have to deal with this core cities area, definitely we cannot give a blanket solution for the whole city, city where this city has been already built-up that either we do not go for densification or we do not go for de densification definitely there are variations of the treatments.

So based on the treatment we go for two types of major approach which we called as the de densification and the re densification, some of the areas we definitely prescribe for de densification, some of the areas we maintain the density and some of the areas we go for the de densification that reducing the density.

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So to simplify the concept we are calling it as a de densification or re densification by name you can understand the difference of their meaning. So de densification is basically reducing the density, so here if we find that infrastructure condition is very much chronic it is below the norms and the standers and not only that it does not have potential to argument the infrastructure for example you will find the narrow road if the narrow roads are there in the old city or the core city housing you may not find the adequate space for widening the roads so how do you prescribe further density to in the narrow road so that is not possible so assessment of the infrastructure is important assessment and after the assessment you have to see the assessment of the infrastructure assessment of the potential to argument to the infrastructure.

If both are negative or the chronic does not give you the suitable solution and suitable assaultive responses then we have to go for the densification that is reducing the stress by reducing the density but how do you do that we usually we do that by using differential FSI in the last lecture we discussed the power of FSI so in the last two tenure we discusses the power of the FSI and it is relation with the density and the infrastructure.

So more the FSI that more the floor area more the floor area is more the people living there and the more the infrastructure requirement so the other hand if we reduce the FSI the number of families will be less number of infrastructure will be less but how do you do that the one of the possible solution is that we can provide blanket solution of the minimum FSI or we can provide a incentivize of disincentives development in the core city by encouraging the people to develop outwards.

If this is the existing build area and out of that this is the core city area which is much consistent and beyond the existent build up area there are few more other areas where you have the substantial potential for the further development so one approach could be that you reduce the FSI here and increase FSI here so that in the further development you can have more dense development here denser development here and you can have the less denser development.

So that is what you can do but one possible issue what you might phase it that that why people living there will accept a lesser FSI so another method what has been tasted and experimented is using a incentive based mechanism which is called transfer of development right that means you can transfer the FSI from this palace to this place for example the average FSI in a city say prescribed city is a two and here your prescribed prescribing 1.5 and here you are prescribing 2.5 but since the average FSI is 2 so that remaining 0.5 FSI I can transfer to some of the other plot on the out curves of the city and we can go for 3.5 3.0 FSI in some other plot so transfer the FSI from 1 part to another part by using my right to develop in the land with an equity that is also possible which I called transfer of development right.

So those kind of mechanism or tools and techniques can be used by the city authority to incentives development in the out cuts area and to incentivize development in the in the core city area another part you can see that if the after the assessment if you find that infrastructure stress there but there is potential to augment the infrastructure that means definitely stress are there but with some intervention you can argument the infrastructure for example we can widen some part of the road you can enhance the capacity of the pipe lines to increase the supply of the waters drink waters you can widen the drainage networks you can widen the sanitary the sanitation or the sewerage pipelines and so on.

And using these you can since you argument to the argument the infrastructure provably you can go for the densification for example if the current existing FSI here the city is core city is having a staying that is may be 1.0 roughly so you can go for 1.51 or 2 based on your level of the infrastructure so from the calculation of the infrastructure which can be compared with the existing norms and standard you can prescribe that how much FSI could be permitted as a re densification strategy.

So those kind of prescription is required at the core city level at the core city level and at the other point of the or other pockets of the land in the exiting city level so every each and every pockets of the land parcel need to be given specific proposal in terms of FSI and it is modulated that way FSI if the uniform or it is the less or more or high your making a balance into this is so that is how you are making the densification re densification.

Now in the re densification exercise you will find that the already existing area you will find few more pockets which are developed outside the built up areas so in the re densification areas you will find in Indian condition that a substance in substantial area will be covered by the slums and squatters so for slums and squatter which I basically a informal kind of development you have to have completed different typology an strategy and we will discuss separately in some 1 or 2 lecture.

That what kind of development option could be taken in the slums and squatter that will take later on but other than the slums and squatter there you will find the organic housing traditional housing you will find purely plotted housing few group housing and also you might find some group housing including private or public both plotted housing and you might find some another category like rental housing so for plotted group and rental housing you have to have and the organic and traditional housing you have to have specific prescription.

So that the overall improvement of the infrastructure and build element improves another important part is that the organic housing and the traditional housing which are developed over the year and which is having the traditional style of the city and the architectural style and

architectural tradition which is barring the culture of the of the population in the particular area so for those kind of area you have to have a mechanism of kind of renewal and conservation.

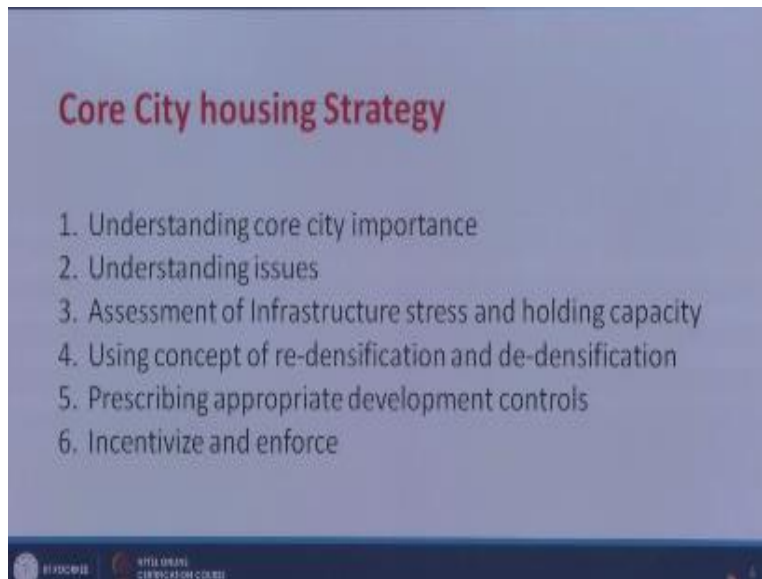
So we use the word renewal in terms of when of when you renew the area with the argument infrastructure with argument facilities and service so that people get little more extra benefit out of for the basic faculties and conservation is mentioned when you want to conserve the existing typology or existing pattern of the housing existing style of the architecture existing style of the culture or the craft in the old city or the some specific livelihood option which is present in the core city you might find in some of the city.

There old city housing which is part of personal which is extension of the livelihood activities all their cultural activity having typical development scenario typical typology of the housing having typical architectural character so those kind of housing typology need to be conserve so those is those are part of renewal and urban conservation so we are so as a part of the your exercise you might get some expert advice of the people who are specialized on that but apart form that for other plotted housing group housing or rental housing.

We have to take a wall whether you are going to re densify for the whole area so that is the concept we which we use so in this stage basically we have to air mark the stages the pockets of the area based on the physical boundary and on that pockets we have to identify the re densification or re densification possibility on a existing built up area, so next stage let us see the next stage so ion a next stage so after prescribing the broad strategy about the info structure re densification and densification you can prescribe the approving development controls based on the overall intension of the city how you would like the see the city for near for future.

So in terms of the height of the building in terms of the color code of the building in terms of the various few other parameters which will basically defined the city built-up and city extent that how the city will look like in the future, and to do this.

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You might have to make some incentivize and enforce so now incentivize what kind of incentivize is have in your hand to make this either you can enhance the if here which we can we are told FAR or FSI so that people build more in the decide areas and people build less in the areas which is congest and compact or you can incentivize by using differential pattern of sanction fees or the taxes different type of taxes that is within the public authority which public authority can do that for certain kind of development they can owe of the taxes and the user fee or may be the sanction fee.

So those are the incentivize or they can give some tax solid for few years or say five or ten years something like that and not only that wherever the even after incentivize or dis incentivize you need to enforce it like I tell you the example in some of the areas where you are finding that the areas are developed but not that much denser, you can go for re densification and you have prescribe for the re densification with additional FAR but you find that people are not developing.

So there could be enforcement or rules like that any plot which is lying vacant for two years three years or more the more sanction fees will be required or government is no longer will give the permission for sanctioning the building, so there could be time limit for the development of the building, secondly after getting the sanction there could be time limit for the contraction of the building for a given period of time.

So those kind of enforcement is also required by the government authority, so in this lecture we discussed the how we will do the core city housing as a whole so in the core city housing basically we discussed that there are two broad areas one is absolutely in our core areas which is congesting which is having the organic and the traditional housing areas and beyond that areas there are areas which is developed after the development of the city and which is also a built up area already developed area but having a mix of compact less compact or medium compact areas.

So for those kind of areas we need to take different kind of strategies so we discuss we started this discussion with the essence of understanding the core city importance how it evolved it is important in the history culture and the people how it related with the history of the city and the region, to understand its culture or its essence in a current context then understanding the issues most of the issues are related to info structure physical and social info structure we have seen then in many cities the core city housing lack severe info structure in terms of the social and community facility they do not have the open space they do not have the areas for children's playing they do not have the areas for the senior citizens to stay to see it and spend time.

So one of the major initial element in this section size is that how we can augment those kind of community spaces apart from the physical info structure which we discuss then understanding and assigning the issues then the assessment of the info structures and holding capacity we discussed that after the assessment of the info structure condition at present you we have to understand that how much info structure can be augmented of the future 10% 20% 30% or 40%.

So based on that augmentation possibility which you are calling as a holding capacity that how much population it can hold based on the present info structure or the future augmented info

structure capacity so that population we have to accommodate, so if that target info structure target population is less than the present population then we have to go for re densification or that holding capacity is more than the current one then we can go for re densification.

And then we have to use the re densification and re densification concept we discussed that re densification can be applicable in different kind of areas we can use differential FSI to incentivize and disincentivize to develop in the core areas and the new areas the concept of TDR transfer of development right which is nothing but to incentivize people to develop more in the out areas but less in the core city area those kind of concept could be utilized.

And then prescribing appropriate development controls by and large development controls are we told that it is to define the building envelope the building periphery building volume, so there could be specific development controls in the core city in the immediate outer region of the core city and the exceeded part in the city intake you one example the Indian cities which are developed through the ages historically will find them most of the cities some of the cities you will find that developed around the temples or the religious spaces.

So one of the major development control is that based on the city culture we do not go for high development which is more than that the cultural elements including the temples and the mass can be all these kind of structures in the core city but outside the city outside that particular or city area they prescribe the more height and the more different kind of development controls so there could be differential development controls in the core city immediate periphery of the core city the mid region and the outer areas or the new areas for the housing.

And we can incentivize and enforce that development using different kinds of tools and techniques with the government authority so with this discussion we can say that the core city housing strategy is by and large is an exercise of renewal and conservation some of the part of the existing city we are renewing with new or improvised infrastructure or improvised or new facilities and amenities and some of the areas we are conserving or preserving seen the culture and the core city is very much essence for the city.

And some of the part we are doing the both like the renewal and the conservation. So that is the info incentivize and the enforcement what we do and it may be require that as a part of the exercise you might need to take the help of the experts who are doping the conservation and renewal for the urban areas. So the next day we will discuss another very important part of the housing delivery which is absolutely different than the tutorial discussion today we discuss how to deal with the existing built up area existing core city areas.

The next day we will discuss the new housing areas beyond the city core the city core where there are lot of vacant Lents or lands are available lot of new areas are available how we can suitably and mutinously plan all those lands and so that no wastage is there in terms of the resource like land and finance that is our objective that how we can mutinously plan the land and the other features so that we can have compact city but sustainable city and sustainable housing so got today I express my thank for participation. Thank you.

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