

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NPTEL NPTEL ONLINE CERTIFICATION COURSE

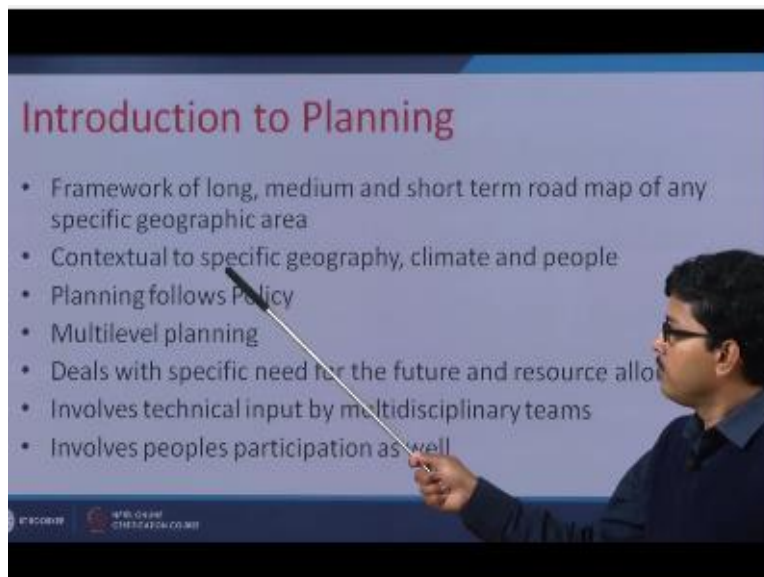
Housing Policy & Planning

Lecture – 16 Urban and Regional Planning

Dr. Uttam K. Roy
Department of Architecture and Planning
Indian Institute of Technology Roorkee

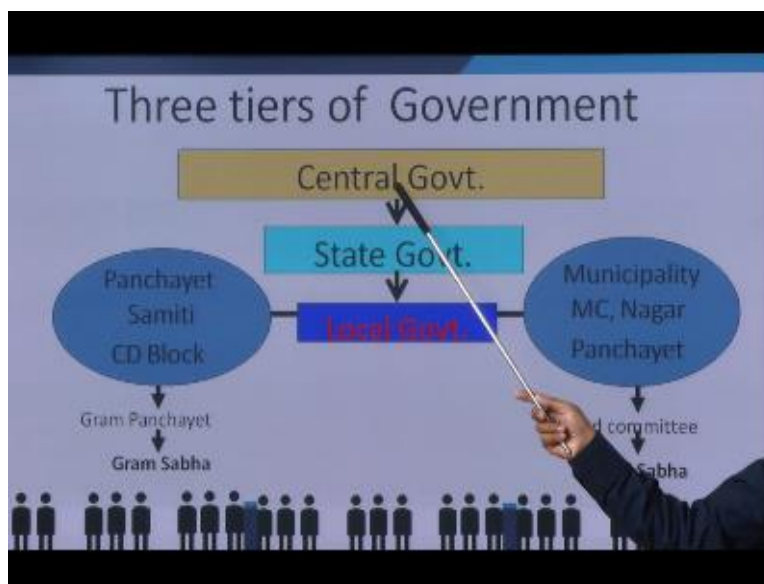
Hello, in the last lecture we introduce the subject of planning and how it can be contextual and the relevant for the housing. We started and we some about the discussion on policy matters and then we introduce the subject of the planning. So today we will see the how the urban and regional planning works after the policies frame for the region and the cities that we will see in the today's in lecture.

(Refer Slide Time: 01:00)



So before you go to the today's lecture these are the points we discussed in the last lecture like we discuss the various parameters of the planning it is contextual, it is specific to the geographic area it can be long, medium and short term period the planning follows the policy semantics and it is done at the multilevel planning, multilevel from the higher to lower and definitely it prescribe the specific needs for the people for the future and it involves technical input by the people and also it involves peoples participation as well when during the preparation phase.

(Refer Slide Time: 01:42)

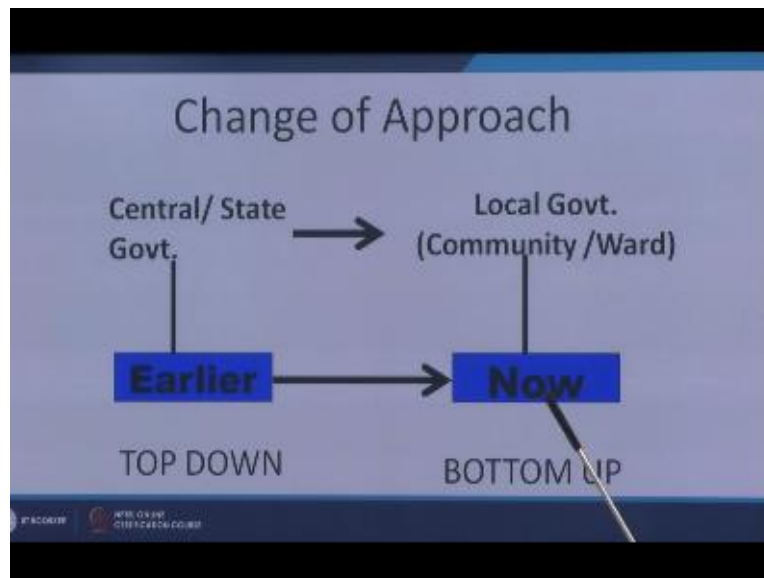


Now we will go to the next stage so this slide probably I showed before also the right now we have three tiers of government, central government, state government and local government under the local government paradigm there are two states of local government one can be in the village centre like panchayet samiti, community development block, the gram panchayet and gram sabha and we could have municipality, municipal corporation, nagar panchayet, ward committee and area sabha.

So our main objective is to considered into this level the local government level basically the local government level they provides the housing at the ground so our objective of overall discussion on the housing planning will be based on the local government level and more or less

it will be focused on the urban areas. So one of the major changes in last few years in the overall planning and development is that earlier the programs was designed at the central level and it used to come down at the local level usually.

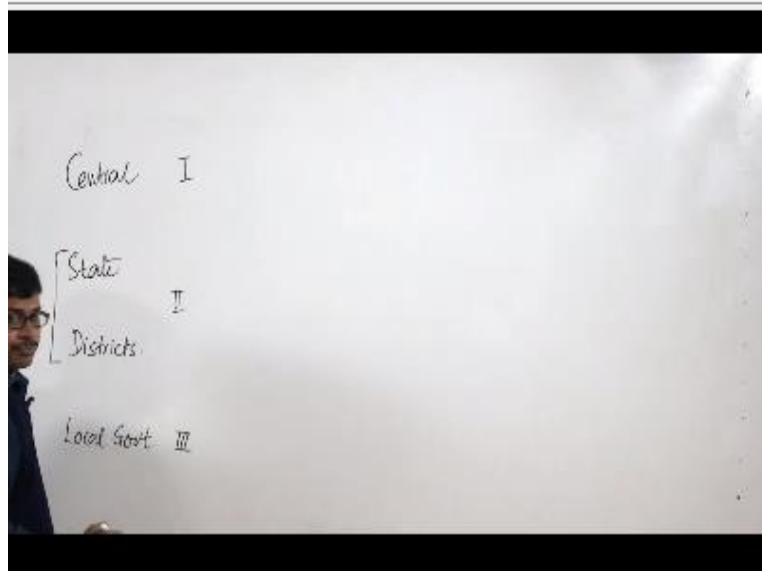
(Refer Slide Time: 02:50)



But right now we do the plan from the areas sabha or the gram sabha and the plan is considered at the central level so the major change in the planning approach in the development approach is form central state level to the local government level. So earlier it was drop down approach and now we are going to a bottom up approach so we will see how it is working in India.

So we do this at the multilevel planning in India, so let us discuss the what is the multilevel planning we discussed three tiers of government is there like central government, state government and there are districts, for districts are part of central government and then there are local government. So we make the planning for every level so this is the tier one this is the tier two and this is the tier three of government.

(Refer Slide Time: 03:47)



So the planning exercise we do here is the 5 year plan, we do at the central level central government does this for this state similarly we do the 5 year plan sometimes for districts and also the metropolitan area. Now here I will take another one or two minutes to explain this part because this is very, very important as per the housing planning is concerned. In most of the districts will be covering the element of urban and rural both type of area, but you will find many cities having continues development of the urban area.

Which continues beyond the one or two districts basically those are called as metropolitan area because it is not limited to a particular district or particular area it combines many areas of many districts so while we will make a district plan of a particular district all the districts prints may not be sufficient to solve the purpose of a metropolitan area because a metropolitan area is a part of various district because it is a continuous development of the urban areas maybe district one, district two, district three like this, but it is a whole urban areas.

So for all this kind of areas the state government they can declare or they can identifies as that metropolitan area as the bigger cities for example all the major cities Kolkata, Mumbai,

Bangalore, Chennai on metropolitan area which is basically capital city of the states and which is combining multiple districts for this metropolitan areas or the districts we may do 25 year plans. Sometimes it can be termed as vision plan or perspective plan and also this plan will be followed by 5 year plan as well and at the local level we make the city development plan for 5 year.

Now the question is why for the districts and the metropolitan area we are going for 25 year long term plan where as for the central area at the national level 5 year plan and the state level 5 year plan is done because the district and metropolitan area is a not only economic plan it also it is a basically a complex process it combines the economic, physical and the social cultural aspects as well that is why and it is very, very specific in the very geographical area.

So it is a long time frame to prescribe the specific prescription, but it is divided into various segments of 5 years so that it can be related to in the city development plan as well, but for the local government we do the planning for the city for 5 years sometimes it is called as CDP or DDP city development plan or dough development plan so this is the plan. Now who is the competent authority to prepare to formulate at this plan.

Basically at the central level we have earlier we had planning commission, but right now we are not continuing this planning commission we have currently NITI Ayog which is basically National Institute for Transforming India. It is basically body which gives the overall policy and the planning input to the government so whatever it is right now the plan and the policy done by the NITI Ayog and the state level either the state planning board or different organization are there whoever is the authority who are delegated or who given the authority to make the 5 year state plan they make the state plan for each respective state.

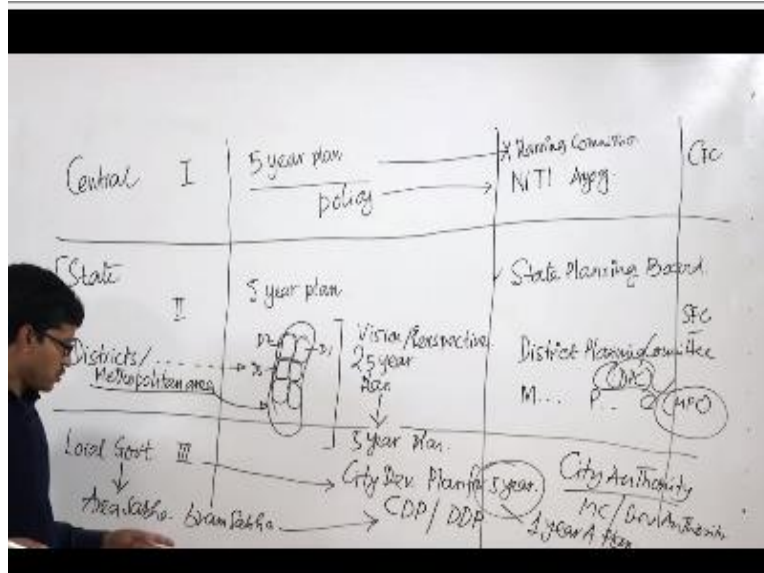
And then at the district level basically district planning committee in short it is DPC and if the area is called as a metropolitan area as we discussed it could be called as metropolitan planning committee so in short it is MPC. So district planning committee and metropolitan planning committee is the combination of a few technical and elected member from the districts or metropolitan area who will take the last decision of any project.

Any plan so this DPC and MPC either DPC or MPC they are the final authority to finalize the plan before the final go ahead signal is given by the state government but the state government is the final authority to approve the plan but the decisions are made at the district planning and metropolitan planning committee level. Then at the city level basically the city authority like Municipal Corporation development authority or municipality they are also tell to make the city development plan.

Under the smart city mission right now the government of India has a major program called smart city mission. Under the smart city mission few different organizations will be met to prepare the development plan so for that the mechanism is little different, but they will work in synchronization with the municipal local authority like municipal corporation and the developer authority. And the old finance after the planning exercise these conductive the whole finance is conducted by the central finance commission here the state finance commission.

They allocate the recourse for the development so this is the multilevel planning framework in India so this is the multilevel planning basically we make three levels of planning and after the local government planning is done basically we make the further grass route level planning like area sabha and gram sabha planning so this input of this local level grass route level planning is given to city development plan and this plan for 5 year is made and following the 5 year plan we make also one year annual plan.

(Refer Slide Time: 12:14)



So one year objective of one annual plan will be to give yearly budget to give to provide the yearly indication of the projects and budget so that is done for each city authorities each development authority and finally it is allocated distributed over the gram sabha's or area sabha's as per the context so let us now see the overall picture in a better way so that is what we discussed.

(Refer Slide Time: 12:23)

Multi Levels of Planning & Financing				
Level of governance	Planning By	Name of the plan	Period	Financed by
Central	Planning commission	Five year plan	5 yrs	(CFC)
State	State planning board	State level plan	5 yrs	(SFC)
District / Metropolitan	DPC / MPC	Distt. Plan	5 yrs	SFC
		Metropolitan dev Plan / perspective plan etc.	25 yrs	
Block / ULB	ULB / Block / ULB	ULB / Annual plan	1 yr	SFC
GP & WC	GP & WC	Development plan / annual plan	5 yrs / 1 yr	SFC thro block / ULB

So this is the section this is the level which we have to discuss because most of the planning and the development are done at the local level and after that further grass route level plans are done that we have discussed now we discuss what are the urban plans, what are the categories of the urban plans. We have already discussed that here the 5 year plan at the central level or the state level 5 years plans are done, but so one is basically perspective plan or the vision plan for 25 years.

Another this is the first category which we do for the regions or sometimes for the bigger cites or the likes a national capital region or any capital region area and after that we also do the 5 year plan for this is the second category of 5 year plan and also we do, the annual plan that is the third category of plan we do so this is the typologies of the plan we do and after this annual plan the annual plan will be consisting of various projects.

Now the basically city development plan and that development which we discussed it is a common comprehensive planning document, but if the city is very large or the region is very large within the document we do the various the strategy document so it is a plan document with compensate it with various strategy document for example can be for transport, housing, land

various other matters so with this is the city development dough development plan is the basic stage where we do all planning exercise for each and every sector of the development.

(Refer Slide Time: 14:33)



So perspective plan is done for long term 20 to 30 years development plan is done for 5 years are so annual plan one year and project reports or project scheme is done for only as per the requirement. Now this is the overall pictures of the planning hierarchy how we do for the annual plan at the local level to the national level which is 5 year plan. How you do the planning, any planning we talked about the planning and we differentiated the planning than the policy regarding two matters that the planning is always contextual about the location or the geography area and contextual with the people over there.

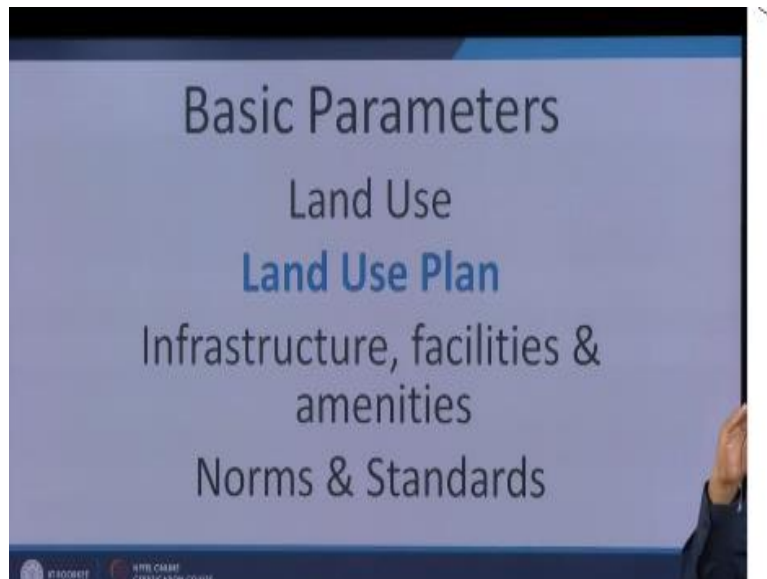
So seems it is the contextual it cannot be fictitious, it cannot be a properly anything out of the theory. Planning has to be contextual and specific to the peoples need of that area so first stage of the planning process is that what are you do is be with at the rural area in a greater details which we call as a situation assessment so based on the policy and overall perspective plan we state some visional objective that what can be objective and visual for the area and then we make a very detail description, detail study of the existing scenario related to land, related finance,

related to environment, related to housing, typology every element, transportation, the environmentally condition every aspect.

And then we analyzed its condition, its current status it is simply as comparable like when you go for a medical checkup the doctors prescribes several checks and we after the checks we can compare the label of the parameter on with the centre parameters similarly for a city development plan or planning process we check every status of the existing scenario based on some standards and norms which is already there in practice and based on that we can analyze the situation whether it is a good or bad or what are the areas of the region of the concern or at the issues or at the problems.

After that we go for we project the population based on the existing population a project we synthesize the requirement of the future population what is the infrastructure requirement of the investment in the housing, investment in the road, investment every sector we project then synthesize and we develop few development options which is going in line with visional objectives and which will solve the existing scenario or the existing problem and based on that we propose the spectral strategy.

(Refer Slide Time: 17:20)



Sectoral strategy means we talked about the sectoral strategy housing, infrastructure, transport strategy and followed by the projects so if the cities not very large likes one lakh or two lakh population maybe within a city development plan we prescribed strategy, but if the city is very large like a metropolitan city like Bangalore or Mumbai or any bigger cities.

So Sectoral plan becomes itself is a very complex exercise for example water supply plan of a metropolitan area. The transportation mobility plan, the housing plan or investment plan or environmental plan so this strategies are made separately and together with the mother document, mother city plan and then we come to a projects that is the overall process of the this process is generalized process this may not be in all the planning exercise which we do in various other programs interventions.

This process can be fragmented into various micro stages, micro options and micro modules, but this is a overall framework of the planning which we follow usually so for the planning exercise let us discuss the what are the basic parameters we deal. The first parameter is the land use we told you that the planning exercise is essentially contextual exercise and physical exercise because we give the final prescription on land how much land is required for the future

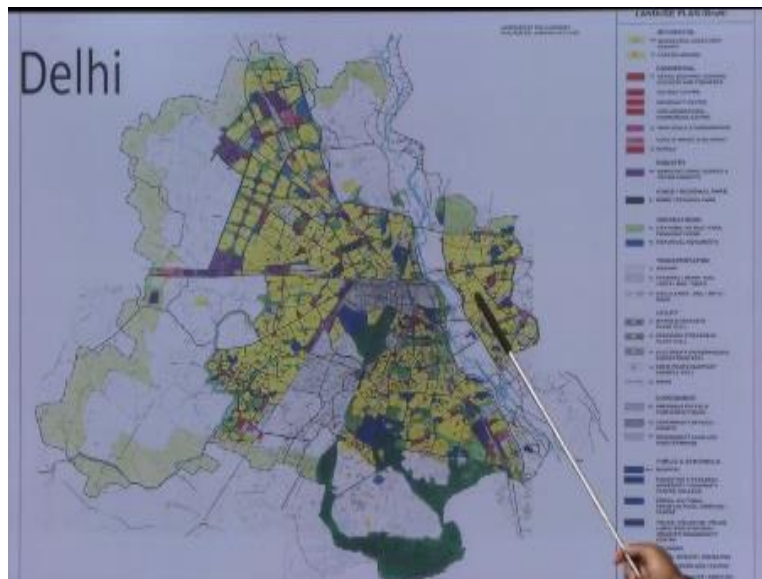
population and housing is never possible without the actual land is there so land is the first thing which we prescribe. So land use there are various types of land use residential, commercial, institutional, industrial.

So what type of land will come where in which direction what quantum, what density that we propose in a city development plan. So land use plan is the outcome based on the land use plan we propose the infrastructure in every aspect, infrastructure in terms of water supply, the mobility, the sanitation, solid waste management and power supply not only the infrastructure we also indicate the facility and the amenities like the community facilities the health facilities, the educational facilities, commercial entertainment facilities.

Every type of facilities and public amenities like a what kind of amenities in the streets will be required, what kind of amenities will be required in the public places or the parks everything will give a guidelines we give a indication that this kind of development framework will be possible. Not only that after the discussion in the land use and the infrastructure facilities and amenities we indicate that what is the norms or standards we are going to achieve for the city.

For an example a city like say Mumbai or Delhi can take a norms of water supply or water utilization or conception as 200 liter per day where is a city like very small city likes a Rookie which is about two lakh population can take a norms and standards that it can take 135 or 100 liter per day so that is the different that the decision we take at the planning level for each sector, each area so that next level when we go for the projects we can take that parameter or the norms and direct we can come to the projects.

(Refer Slide Time: 21:13)



So this is an example of a typical plan which we do. This is a master plan of Delhi. It is taken from the published master plan of Delhi. Now you can see in this plan that various color codes are there. The yellow color codes represent the future residential area. The red color which you can see is a major large level or the higher level commercial areas in terms of what they call as district centre.

The greens are the city level green areas. This is not a very small public place or public park or these small total area. These are large green spaces which can serve the city or the sub-city or the region. For example, these green areas are serving the total region of this where the population will be one lakh or two lakh or so. So small green areas, small facilities are included in the residential area which is not shown separately in the land use plan.

So the yellow color for the residential you can see is basically a gross color. It includes the net residential plot area. The plots used for the commercial or the public recreational like open space and local level roads. So do not be confused with the color codes. The color code shown here is the gross land use areas. The minute details are not shown in the overall city master plan,

but when we will do the sectored master plan and sectored detailing of the layouts of the each and every sector.

That time definitely we will show the net land use which is nothing but the land use of the each and every plot and not only the land use as per the technical color code the some of the areas can be given a special control mechanism likes old city area the areas reserved for the airport some identified for the future development so this kind of prescriptions which is very specific as per the geographical configuration is there.

You can see that this is the river Yamuna, but both side of the river Yamuna how they have preserve the land for the ecological and environmental purpose. This land is preserved and not suitable for the development that is why it is not given any specific land use so it is a land use which is preserved for the environmental purpose. So a land use plan will give a land use plan which is a geographical plan or map and it will give a description and legend of the color code and it is description.

So that is how we present a land use plan for each and every city, but this land use plan is not sufficient this is a symbolic or color wise indication of the future development of the city, but how we will develop each and every percent of the building when a person comes to the city authority with a building plan with a proposal we simply cannot say that this a yellow or this is a red and this is a different colors.

We did few more control mechanism, control parameters which basically influence the 3D building likes a height or the width , breadth, ground coverage several few others dimensions are there. The density and the few more parameters of those we deal in the building control which we call as a planning control tools which is not a basically geographical plan, but which is not geographical.

But it is implicational geographical like building development control so under the planning control tools we have land use control, land use control means the color code prescribed in the master plan that how much that color codes are flexible for example the residential use prescribe

in the master plan whether you can have any other mixed use in the residential plan or not whether you are a doctor you can have a doctors chamber or not.

This kind of flexibility are the extend of flexibility is prescribe in the planning controls or the master plan document so master plan is a basically combination of the plan, map and a document and in the land use control not only the extend of the mixed land use also we have to prescribe that what are the land uses which are not permitted in a prescribed area so that is very important because if we permit the incompatible land use which makes undesired results in combination with any other land use that is not good for the development.

So in land use control we have to prescribe that what are the land uses or land use means can be prescribed or permitted what cannot be permitted that should be very specifically prescribed and all the master plans, or the city development plan has this kind of prescription.

(Refer Slide Time: 26:28)



The second part is the development control regulation which is nothing but the after the land use control of any particular land we have to make a building when you talk about the housing project or any commercial project ultimate we have to construct a building so how the building

will look like, how many floor will be there, what will be the height, what will be the total floor are, what is the extend of the floor area, what is the limit of the floor area which you can build.

So both questions will be answered through the development control regulation. So development control regulation basically prescribe the control related to building and the few of the infrastructure where is the land use control basically prescribed the control of the land and its use. Apart from the building control regulations we could have building rules and laws now this two was in combination the basic difference of the regulation and rules are rules basically prescribe the process of developing a building.

The process of executing a building project, executing a housing project or any building project where as the building development control regulation or building regulation they prescribes the specification of the building and sizes of the building components its safety features, security features likes a seismic safety or the natural safety, natural hazard safety and the fire safety and the light and ventilation aspect all the desired aspect of the architectural design and the structural design aspect is mention in the regulation where are the rules are made to prescribe the process basically.

Apart from the building its land its development control we also prescribe various kind of control related to advertisement trade, license everything because in a city apart from the building there are various kinds of elements and which makes a city image so on which the advertisement is very important they hold us a how we can regulate that also if a part of planning control then how we can control the activities which is related to trade how we can promote the licensing to the business man so related to those we can made various kinds of rules and the local acts, local regulation at the municipal level or the development authority level.

So in the next lecture we will take few more case studies and we show in a case studies that how this control tools, control mechanisms are made and how this are implemented and what its implication so today we basically discussed the multilevel planning, multilevel planning is nothing, but the we discuss the central government.

(Refer Slide Time: 29:27)



State government and the local government level planning and what are the planning document they do at the central government they do the 5 year plan at the state government they also do 5 year plan at the district level they do the perspective plan, vision plan for 25 years and in the city level we make the plan for 5 year which we call city development plan if the city is very weak like a metropolitan area it can be called as a metropolitan plan and the planning is done by.

The district planning committee or metropolitan planning committee where as for the central government are the 5 year plan the NITI they are taking the policies planning at the central levels, state planning boards are there they are taking the planning at the state level similarly at the local level city authorities or the developer authorities are there who takes of the planning exercise at the local level.

So if the cities are bigger after the city development plan or within the city development plan we have to detail out various sectors of the development like housing and transportation or many other sectors so that we can finally end of in various projects and schemes and then we discuss today the basic planning process. Planning process deals with four basic process one is vision

then we start the existing situation of the stay city in a greater details then we come to analyses and projection level and make the options and finally.

We end up in the strategy and the projects that the basic stages we came to the final part of the discussion where we discuss the control tools what we deal planning basically we deal the land using the land use control we do the building using building regulations and rules we deal the other elements in a city like the advertisement holding and other elements and livelihood element using advertisement rules, thread rules, license rules everything which can be done at the local level.

So this is the overall planning for a framework we again reinforce this point that this planning framework or the planning exercise is done very specifically for a given geographic location where as policy is brought so based on the planning framework we also seen picture of a typical planning of the new master plan where specific color codes are described so next day we will see the few more example of the master plans of the city development plan and within that plan how they have detailed out every sectors like housing or the transportation every sector then we will come to the next level so for today thank you.

For further Details Contact

Coordinator, Educational Technology Cell

Indian Institute of Technology Roorkee

Roorkee – 247 667

Email: etcell.iitrke@gmail.com, etcell@iitr.ernet.in

Website: www.iitr.ac.in/centers/ETC, www.nptel.ac.in

Production Team

Neetesh Kumar

Jitender Kumar

Sourav

Graphics

Binoy. V. P

Camera

Sarath Koovery

Online Editing

Jithin. K

Video Editing

Arun. S

NPTEL Coordinator

Prof. B. K. Gandhi

An Educational Technology Cell

IIT Roorkee Production

© Copyright All Rights Reserved