

Urban Governance and Development Management (UGDM)
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Lecture – 21
Basic Concepts of Planning and Development

Welcome to lecture 21 in this lecture we will discuss the basic concepts of planning and development and with this lecture we will start the section on the development management. In last lecture we concluded the essential components of the urban governance. And we have seen that the discussions in the first 4 weeks were centred around the concepts of the urbanization basic urban governance legislative and the constitutional framework.

And the improvement of the organizational performance leadership team building etc and after that we have told you that governance is always not effective if governance cannot rightly or effectively manage that development or give the right direction of the development and implement the development within time for the people. So, it is also important to know the water the planning and development agent or a city or the urban areas and how to do it.

So, today we will start the that discussion with the basic concepts and few terminology so that throughout the whole discussion you can understand the other lectures. So, today our coverage will be basically the concepts of sustainable development.

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Contents

- Sustainable development and human development
- Policy, planning and development
- Significance of Development Management
- Multi level Planning
- Essential Concepts in Urban and Regional Planning

At the global level and also human development what we understand what the basic indicators the distinct meaning of policy planning and development significance of development management multilevel planning and essential concepts in urban and regional planning.

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Definition of sustainable development

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987)



So, I hope that you have heard the term sustainable development now I am giving one definition of the sustainable development which is taken from the World Commission on Environment and development 1987. Please read the definition it is not a very big definition so development that meets the needs for the present without compromising the ability of future generations to meet their own needs.

So, therefore whatever we do whatever we do in our cities to make roads to essential infrastructure we should not do that development in such a way so that it hampers the development of the future. So, it development which takes care of the implications of the next generation another few decades that is called the sustainable development. The basic intent of the sustainable development is this since the resources limited for the urban area.

Then otherwise also therefore utilizing that resource for the common good for the service or the development has to be very much careful and crucial so that we do not consume each and every resource at the cost of our future generation at the cost of our children. So, that they do not suffer out of the resource or lack of resources so that the message in this definition of the sustainable development.

And the development the classical concept of the development was that from a natural setting to a manmade intervention and manmade scenario where we create new infrastructure that is called development. Now the sustainable development and its definition is much more relevant in our context and we should follow that now globally we have 17 different goals of sustainable development which each and every country

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They are following so let just mention a few goals one is poverty, so eliminating the poverty the 0 hunger that is the food protection, good health and wellbeing, quality education, gender

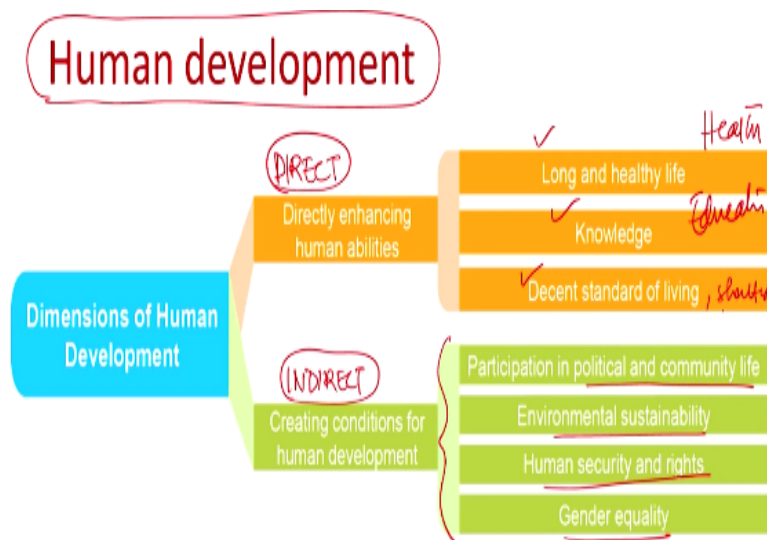
equality, clean water and sanitation affordability, affordable and clean energy, decent work and economic growth, industry and job generation and the related infrastructure and reduce inequality sustainable cities.

And the communities responsible consumption of the production and production climate action to address the climate change life below the water that is in the seawater or the river water and any other water life on land and peace and justice and partnership for goals. Now if you follow if you see this whole the 17 goals you will find that many goals are related with the job of the urban local government which we have discussed.

For example poverty education inequalities water and sanitation the economic growth infrastructure the community of development etc certain land everything. So, this is not an isolated goals definitely there are some macro level larger goals which cannot be achieved fully through the local government. Definitely the central and the state government and other parasitical and other international agencies has this take on there.

But definitely local government they have also role in working in fulfilling the agenda of this sustainable development.

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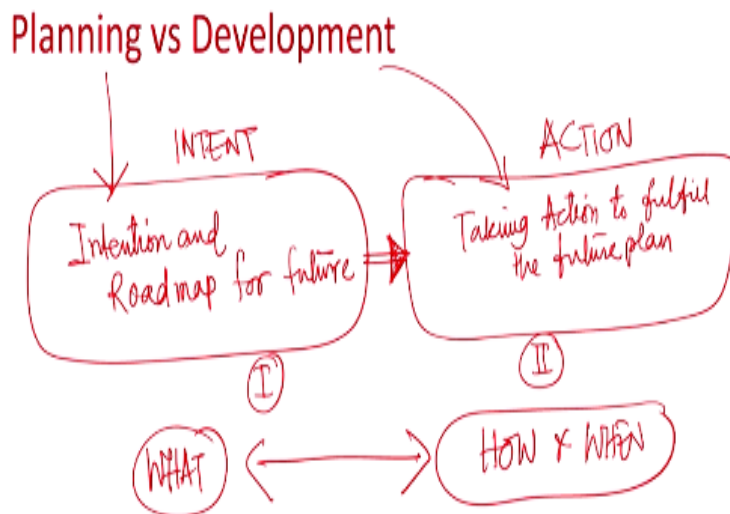


Then a human development is also another very important terminology which is used for human development in the world. So, it has 2 dimensions one is the direct dimension which directly influences their development which is basically indirect. Or which actually influence the improvement of the direct criteria for example long and healthy life knowledge and experience decent standard of living.

Including the house shelter is a factor which is directly influences the human development whereas the participation in political and community life environmental sustainability human security and rights gender equality. These are the few rights and few conditions which enables them directly or indirectly to achieve the long and healthy life the education knowledge and the shelter.

So, if you see very clearly the direct barometers are direct indicators are basically health education and shelter. So, a good system of health education and shelter can provide a direct influence on the human development in every area.

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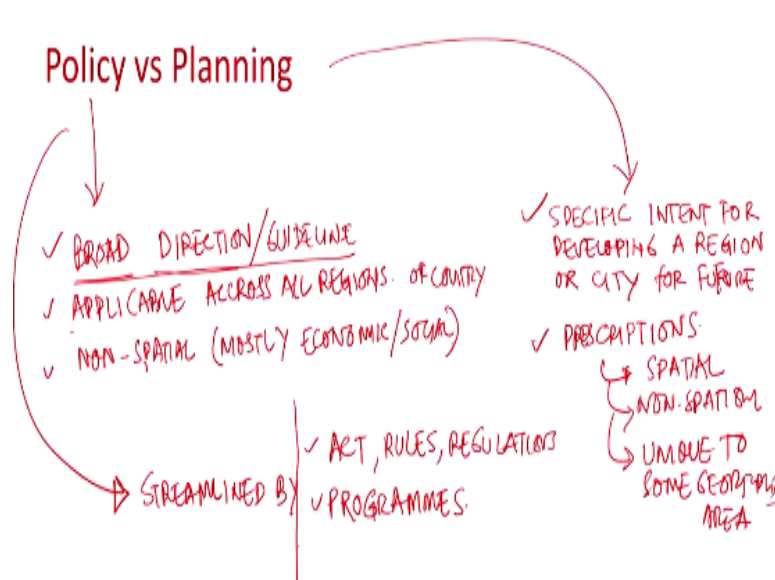


Next I just discussed the what is the difference between planning verses development? Planning is basically the intention roadmap for future whereas development is taking action to fulfil the future plan. So, therefore it is the intent and it is the action so basically if you remember one

word it is the intent and it is action. Second is that planning is the development is always followed by the planning exercise.

So, planning exercise comes first development comes second then so therefore it is what component what we want to do and it is the how and when component even though it is related and we in a better planning framework we also determine the how and when component. But this is broadly distinction between the planning and development so that we can understand.

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Then policy verses planning policies basically view broad directions which is applicable across all regions and which is by and large non–spatial mostly economic and social because so therefore it is the broad direction or the direction or the guideline which is applicable across all region of country. Whereas planning is basically specific intent for developing a region or city for future so it is the broad direction of the guidelines which is the policy.

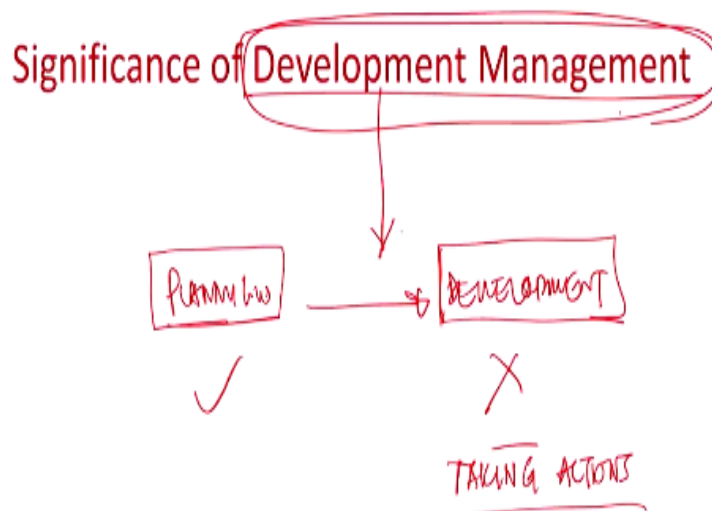
And but the planning is a very basically specific intent and not only intent and it is also prescription and in most of the cases it is also spatial and non-spatial as well. And it is also unique to some geographical area so therefore you can see that policy is basically broad which is applicable for all regions of the country whereas the planning is a very specific prescription for any particular region and the city or village.

So, planning is specific and planning is spatial non-spatial both land policies very general guideline general direction which gives the direction and policies also streamline by act rules regulations and also programmes. For example we have a policy for housing for all in India and it is streamlined by Pradhan Mantri Awas Yojana and Indira Awas Yojana all those programmes and not only that it is also streamlined by the acts rules and regulation.

Like land Acquisition act the realistic act so much acts rules and regulations are there now Act is basically the mother legal document created by the central and the state government. Whereas rules are created under any particular act which gives the procedures of the implementation of the act and regulations give the further details of the technicalities and the applicability of the act for the particular region or cities or particular application area.

So, you can see that policy is followed by the act through simulation programmes etc and then the specific land document is prepared for the particular city and particular areas. So, I hope that this difference is clear to you so that you can understand the further discussion.

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So, what is the significance of development management then? Basically development management is basically since we have discussed development the planning is it is done first followed by the development. So, if planning is done and development is not done so there is no

point of doing the planning or doing the policy and everything. So the key development is basically taking action.

You will find in many planning and development authority they are fantastic planning documents which is gift in the almirah or the desk or in the offices but which has never seen the light of sun and it has never been implemented. In the 80s when the first national commission on urbanisation was created. The chairperson Charles Correa the renowned architect who told that all the sterile reports because the planning reports were never implemented on ground.

Therefore the planning reports irrespective of its quality and the sanctity it is never fulfilled if it is not developed if it is not implemented or the particular action taken. Therefore development is the key word in our case and how to manage the development so that we can fulfil the project on time on the given intent. That is the development management and this significance of the term. So, therefore we will see one by one how this term is important. Next, we see that multilevel planning framework even though we showed earlier this picture.

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Level of Governance	Statutory Institution for plan approval/formulation	Name of the Plan	Period of Planning	Financing Organization
Central (First Tier Govt.)	Planning Commission	Five year Plan	5 yrs	Central Finance Commission (CFC)
State(Second Tier Govt.)	State Planning Board	State Level Plan	5 yrs	State Finance Commission (SFC)
District Metropolitan	District Planning Committee (DPC) /	Distt. Plan/ Metropolitan Dev. Plan/	5 yrs	SFC
	Metropolitan Planning Committee (MPC)	Perspective Plan etc.		
Block/Municipalities (Third Tier Govt.)	Formulated by Block /Municipalities approved by DPC/MPC	Draft Development Plan.	5 yrs.	SFC
		Annual Plan	1 yr.	
Village- Panchayat & Ward	Formulated by Gram Panchayat & ward Committee approved by DPC/MPC	Development Plan /	5 yrs	SFC through Block/ Municipality
		Annual Plan	1 yr	

Still I just recall this picture once again. In this picture, you are seeing the levels of governance the statutory institution for plan approval the name of the plan the period of planning. So, here basically there are two tier one is central government 2nd is the state government and 3rd is the

local government. Why does the district and metropolitan? These are basically regions districts and metropolitan and they are working.

Under the state government umbrella where does the village and panchayat work these are working under block and municipal umbrella. And the name of the plan is basically district plan metropolitan development plan and plan these are basically regional plan. We can call it sometimes perspective plan, spatial plan it can be 5 years or more. Whereas the block and municipal level draft development plan these are basically city level plan.

Which is done for 5 years followed by the annual plan for 1 year now this structure is called multilevel planning framework .Which is also the finance commission as centre level and the state level the streamline the funding. Now in this multilevel planning framework it is the regional plan and the city level plan which now we will focus more details to understand that how a regional plan and the city level plans are done and how what are the key words related to that.

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Essential Concepts of Regional Planning

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So we will see some essential concepts of regional planning first then we will see the concepts.

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Theories of regional growth and development

- Sector theory → PRIMARY - SECONDARY - TERTIARY.
 - Stage theory → Development in stages
 - Export base model → outside
 - Theory of Industrial Locations → How an industry is located
 - Central Place Theory → Centrality of settlement
 - Growth Pole Theory → Development around a node/pole.
 - Cumulative Causation Theory → Cumulative effect
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Of the urban planning so there are few theories even though it is not the typical lectures on the planning theory I would not discuss in details. But you should know that terminologies at least. The sector theory basically says that in economics they are 3 sectors 1 is primary secondary and tertiary. We mentioned this in the earlier discussion also during urban governance so primary is basically agriculture and fishery.

Secondary is the manufacturing and trade manufacturing and an industry tertiary is the business so the sector theory says that from primary secondary to tertiary. It is a gradual progression of the development and it is inevitable to happen. Next is the stage theory the stage theory says that every development happens in particular stages. I will show those stages development in stages then the export based model.

Here it is told that any areas which is also subject to the export from outside area that is also influencing the development and the growth theory of industrial location. Save how an industry is located in a region then central place theory says the centrality of settlement then growth pole theory says about the development around a north pole then cumulative causation theory is saying that how a cumulative effect also works in a regional planning.

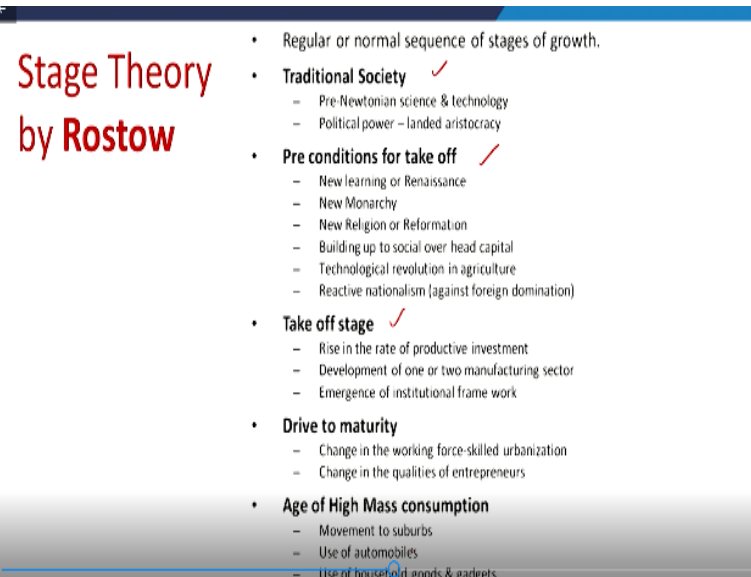
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Sector Theory, by Clark, Kuznets

- The three-sector hypothesis is an economic theory which divides economies into three sectors :
 - extraction of raw materials (primary),
 - manufacturing (secondary), and
 - services (tertiary).
- Based on ownership the economy may be subdivided into:
 - Public sector
 - Private sector
 - Voluntary sector
- Economy's activity shifts from the primary-secondary - tertiary sector

So, one by one let us see the sector theory as I told that there are three sector primary, secondary and tertiary. And also the other another classification based on the ownership it can be private sector a private public and voluntary sectors. So, around these three sectors we develop revolves that the basic essence.

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Stage Theory by Rostow

- Regular or normal sequence of stages of growth.
- **Traditional Society** ✓
 - Pre-Newtonian science & technology
 - Political power – landed aristocracy
- **Pre conditions for take off** ✓
 - New learning or Renaissance
 - New Monarchy
 - New Religion or Reformation
 - Building up to social overhead capital
 - Technological revolution in agriculture
 - Reactive nationalism (against foreign domination)
- **Take off stage** ✓
 - Rise in the rate of productive investment
 - Development of one or two manufacturing sector
 - Emergence of institutional frame work
- **Drive to maturity**
 - Change in the working force-skilled urbanization
 - Change in the qualities of entrepreneurs
- **Age of High Mass consumption**
 - Movement to suburbs
 - Use of automobiles
 - Use of household goods & gadgets

In the stage theory by Rostow there are several stages like traditional society based on the basically the agricultural and political power. Preconditions for take-off the take off stage drive to maturity and the age of high mass consumption. So, these are the terminologies this particular person he has used to identify various stages of the development. And every stage is there are some additions in terms of the development and the growth.

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Industrial Location & Spatial Development

- **Van Thunen, (1826)** -location emphasizing cost factors-
problem of location of various forms of agricultural
production in relation to markets.

Industrial location and the spatial development by Van Thunen in 18 hundred + and here he said the location depends on the value of the community of the market here he is saying that if this is a town this is the town the all the industrial areas are located around the towns like the dairy farming ,horticulture policies or firewood. So it has a kind of centrality also in the location.

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Theories of Industrial Location & Spatial Development....contd

- **Alfred Weber(1909)**-emphasized the cost factors (least cost approach) to the theory of industrial location.
 - Raw materials
 - Cost of transporting raw materials
 - Cost of labour
 - Agglomeration & deglomeration tendencies
- **Demand Approach: August Losch**
 - Best location would be the largest market area, since this would bring in the highest sales revenue.
 - Point of largest sales should be the correct location; place of greatest profit is the right place.

Then this particular theory was improved by Alfred Weber by giving few more concepts. I am not going into much details.

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Export Base Model

- Emphasis the exogenous factors (export)
 - Invisible export: money spend by the tourists from abroad
 - Visible export: goods sold by the traders abroad.
- Region as a territory around a common export base
- **Basic activities-** product, intended for the export

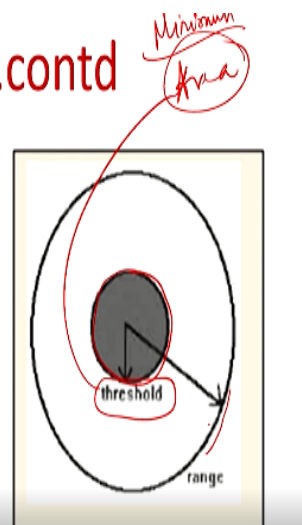


Export based model basically emphasize on exogenous factors that is the how a region if this is a region it has two factors one is exogenous which is basically coming from the outside and the indigenous that is from inside. Now a region interacts with the exogenous agencies or the organization or the settlement in terms of exchanging the goods that is the main principle of this model.

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Central Place Theory...contd

- **Centrality-** The centrality of a settlement (urban centre) is defined as the ratio between the services provided and the local needs.
- **Threshold-** Threshold is the minimum sales volume needed to support a business or service;
- **Range** of a central good/service delineates the market area of a central good/service. It



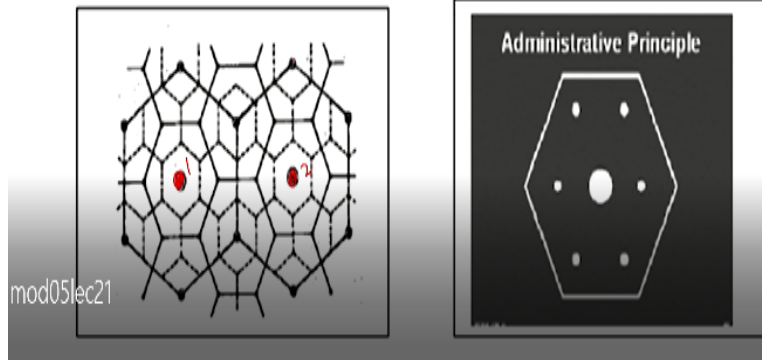
Then central place theory it is given by the one of the very renowned person called Christaller. He is saying that every settlement is born and growth in a centralistic manner and it has the concept of centrality like this and threshold and range. Please see the circles the smallest circle is the threshold is defined by which that the area the minimum area which can accommodate few

people and which can justify or which can make one particular goods or economic production justifiable or break even or it can sustain.

And the range is that is the maximum range in terms of distance or the extent of the development which can also take the advantage of that particular goods of the economic product. So, this concept is given by this central place theory by Christaller

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Central Place Theory...contd

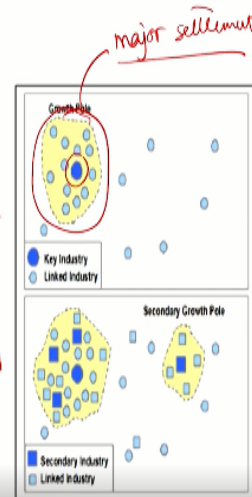


You can see some of the graphical representation of this central place theory. So, in this theory these are the main settlement one settlement 1 settlement 2 and it has other settlements surrounding. And every settlement has their own catchment area given as range and the threshold.

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Growth Pole Theory: Perroux

- Economic development, or growth, is not uniform, takes place around a specific pole.
- This pole is characterized by a key industry around which linked industries develop
- key industry implies the expansion of output, employment, investments, technologies and new industry.
- Unbalanced.
- Transportation can play a significant role in such a process.
- At a later stage, the emergence of a secondary growth pole is possible.



Then growth pole theory in this growth pole theory by Perroux he is saying that the growth pole it is nothing but the development is organizing around a pole. Pole is nothing but a major settlement. In India most of the bigger cities as has grown around the pole around this it is a classic example for typical settlement gentleman and we can see how it is growing like this. So, growth pole theory basically also applicable for our context.

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Cumulative Causation Theory: by Gunnar Myrdal

- The Theory of Backwash Effects of International Trade
- The Cumulative Causation Theory of Economic
 - Core Periphery Model
- Development and the Institutional Reform

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Then cumulative causation theory by Gunnar Myrdal then in this theory it says that it says that the theory of backwash effect of the international trades. And cumulative causation theory of economics so here it is told that a particular economic activity have some kind of forward and backward effect. And as a whole as a cumulative function it can generate substantial job or

substantial development potential which causes a growth in a region. That is the main essence of this theory.

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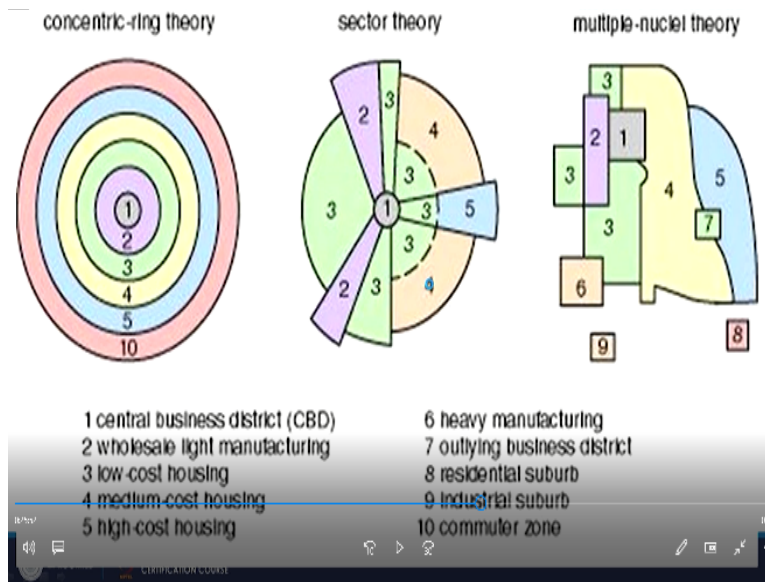
Urban planning theory

- Concentric zone theory ✓
- Sector theory
- Multiple nuclei theory

Then we will also like to discuss few urban planning theory at the city level. So, at the regional level all the theories are basically either centred around some centrality or the core or the poles. And if the multiple poles are there it can act as a corridor. So, all those are theories are there definitely will show all the theories and the some of the examples later. But today now it is important to see some urban planning theory.

So, we have three theories to show today the concentric zone theory the sector model then multiple nuclei theory. This all these three theories they describe how a city grows.

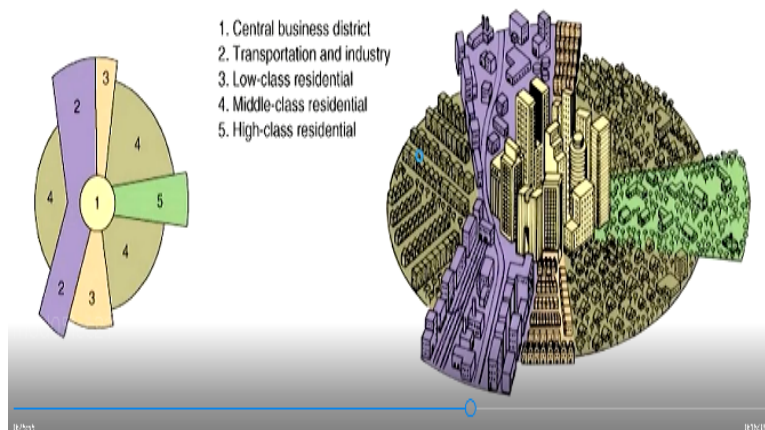
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But it is not a very new theory.

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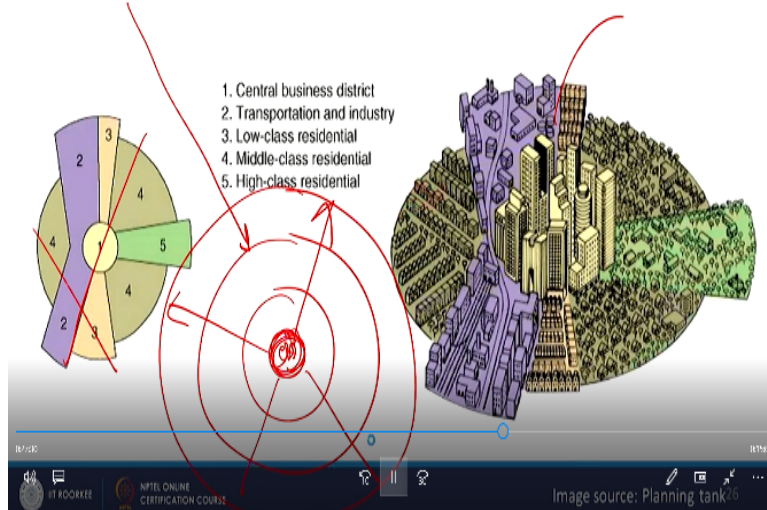
Sector Model



The sector theory says that the central business district with the which is the basically the epicentre of all business and trade. It is in centre and surrounding that business this central business district there are transportation and industrial sector which is this one you can see low class residential, middle class residential, high class residential which is segregated and set up and surrounded along different axis and in a circular fashion around this CBD. So, in this model few cities also were developed.

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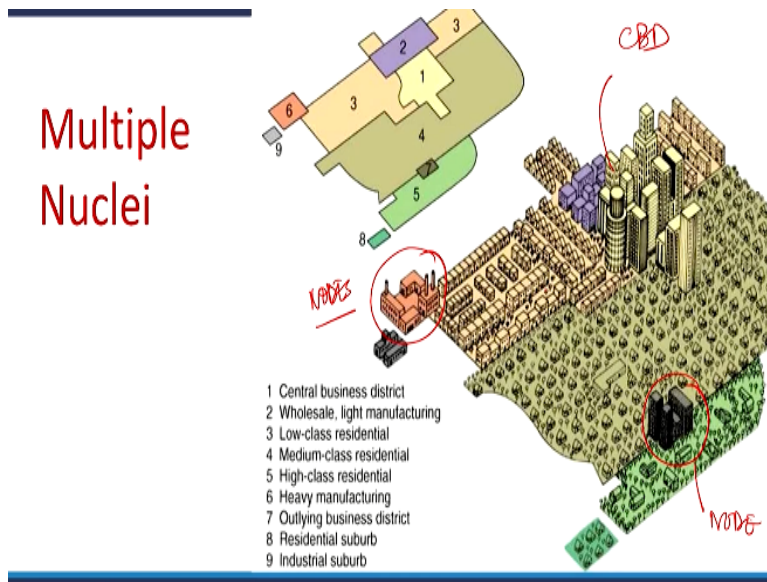
Concentric Zone Model



Next is the concentric zone model in this so I am sorry I think this picture is replaced by the but I described the concentric zone model. in this model it is said that the CBD is the centre and there are few others the development around the centre in a concentric fashion. So, do not follow this it is basically the sector theory model . Whereas the concentric model revolves around the central keeping the CBD in the central around a radial fashion.

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Multiple Nuclei

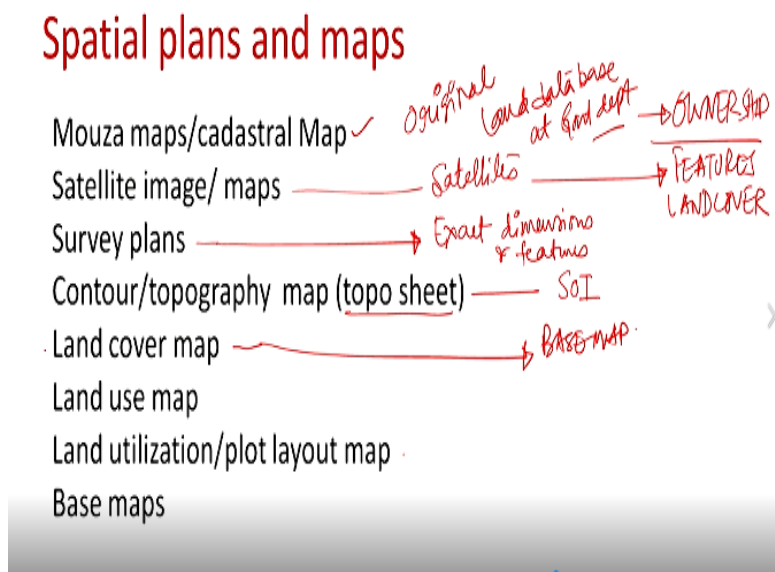


And there is another theory called multiple nuclei theory. In this model there are multiple nodes like this could be one node like CBD. There could be a few other nodes like this one or this one these are other nodes of development and other development like residential and the institutional.

They have grown around this in a in pockets. So, this is another model now in this model also various cities in India and other countries have grown so far.

So, this is also another very important model in urban planning theory. Now I would like to show that what kind of spatial plans are there. So, that you can understand that what kind of spatial plans and maps are made in a urban planning or regional planning exercise. I told you that planning is a very specific prescription for a geographical area which is distinctly different from the policy and the acts. So, there are the few plans and maps.

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First is the Mouza map and the cadastral map is the basically the original land database at government department and they have one set of maps which is called Mouza map and a cadastral map. Satellite image is basically derived from the satellites. The basic difference between Mouza maps and satellite image is that the Mouza maps and cadastral map gives the description of the ownership and satellite map gives the details of the features.

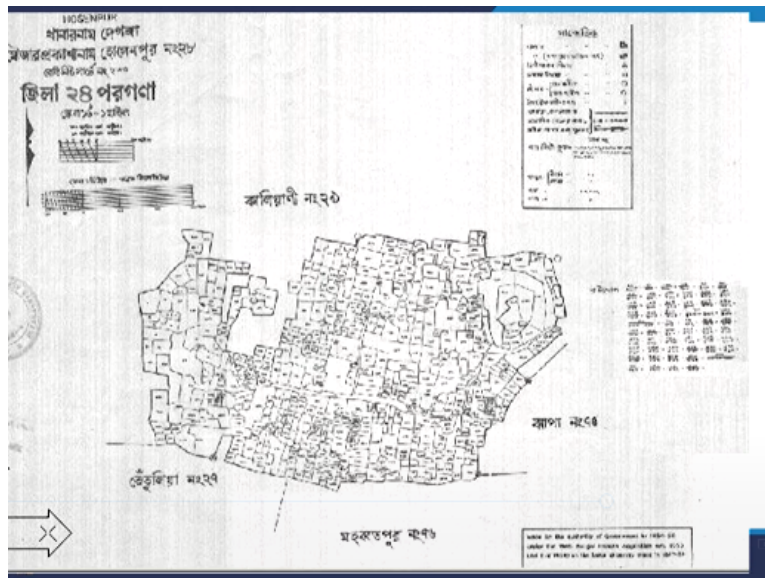
Mostly those are land cover feature. So, these are distinctly different two types of sets of map second is survey plan apart from this the Mouza map and the satellite image there could be survey plans which will give the exact dimensions and features. There could be spatialized contour or topography map in India we call it topo sheet. So, topo sheet is basically is also kind of a survey maps and survey plan it is available in survey of India.

And it gives the basic information of the contour and the topography. Then land cover map is also done using the topography, survey plan, satellite image etc. So, land cover map is very important and land cover maps basically leads to the base map of any city or region. Then land sue map is the map of the future land use which you intend to do and land utilisation of plot layout map.

It is another map which gives much details of the map in a smaller region of smaller areas. Base map I have told that all this will lead to create a base map. So, objective of creating base map of a city or a region is that base map will give all essential existing features of that area or the region that is the objective of the base map. Apart from that there could be some thematic or utility map for example demographic map.

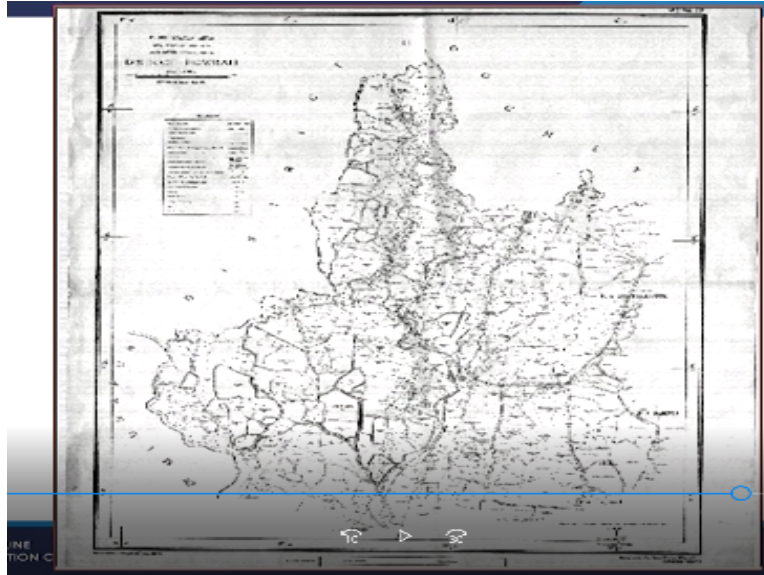
For example the educational infrastructure map, road network map, police station map etc. So, these are some indicative essential plans and maps which we did in any development management or planning exercise and after that we use this map to implement the projects and the development.

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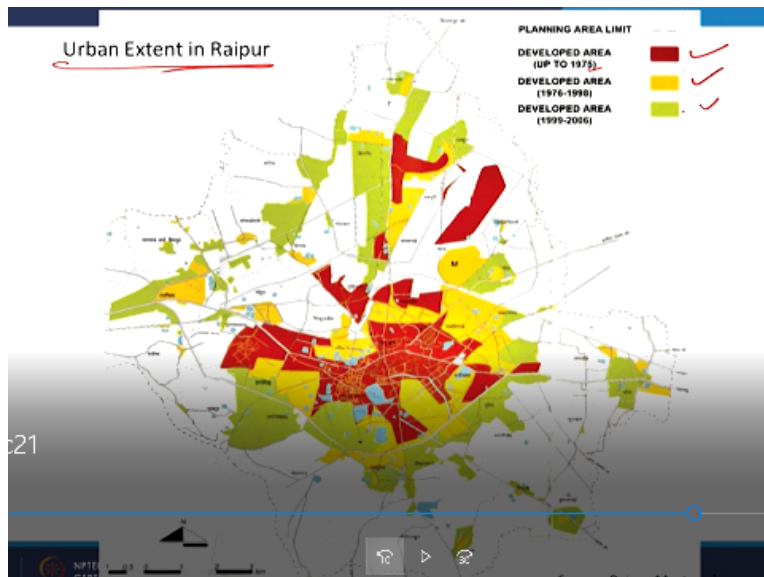
Then few examples I showed this is the classic example of a Mouza map. So, every government every state government and the local government they have the Mouza map in your area you can see.

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Then this is another example of the this is it more typical topo map. This is a satellite image showing the satellite information.

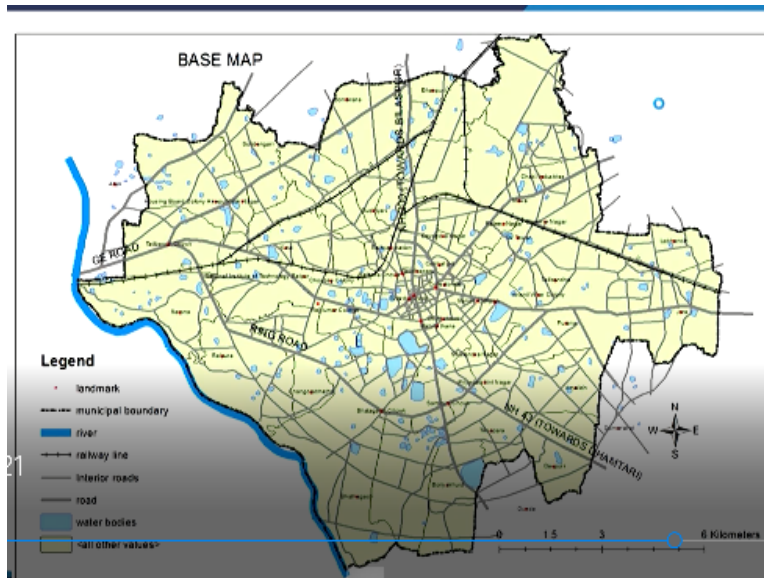
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Then I will show few examples of thematic plans and maps in our institute studios we did some exercise this is a typical urban extent map of city of Raipur. You can see that how it is explained using the development area till 75. And then thereafter how using different colours it is shown

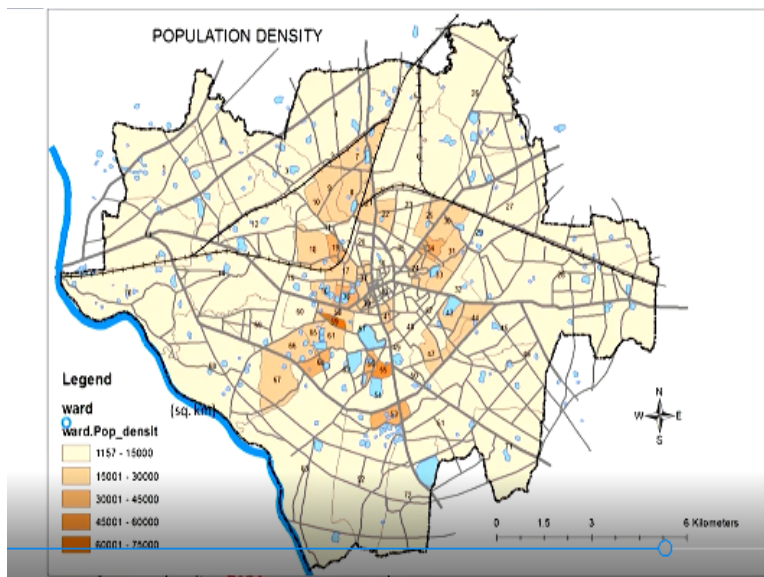
and through this map you can understand that what is the development extent. So, for till now and what is the vacant area which you can develop for the future.

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Next I will show this is the base map of the same city showing the base map showing the basic network and the river. Basically it is not a full base map it is showing the basic network and the river.

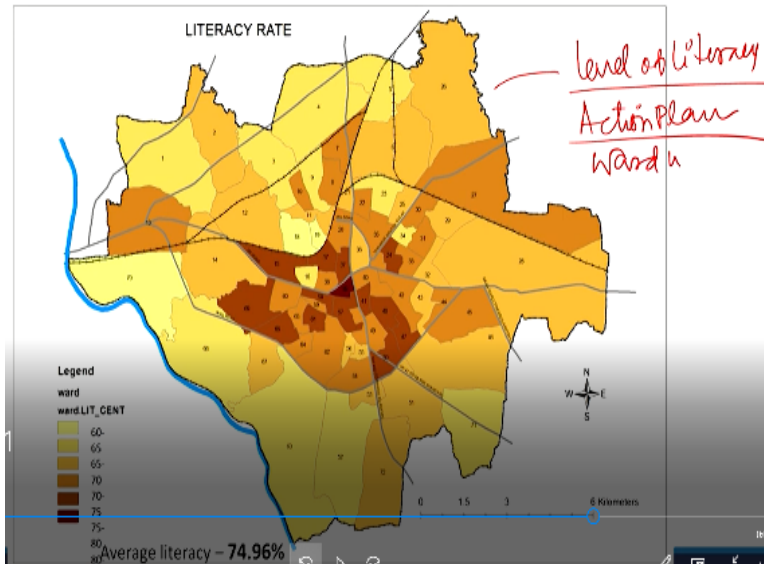
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It is a population density map the population density as we discussed earlier is the number of population in unit area. The population density maps gives you idea that you that which area is mostly most densely and which area needs very critical intervention in terms of the traffic

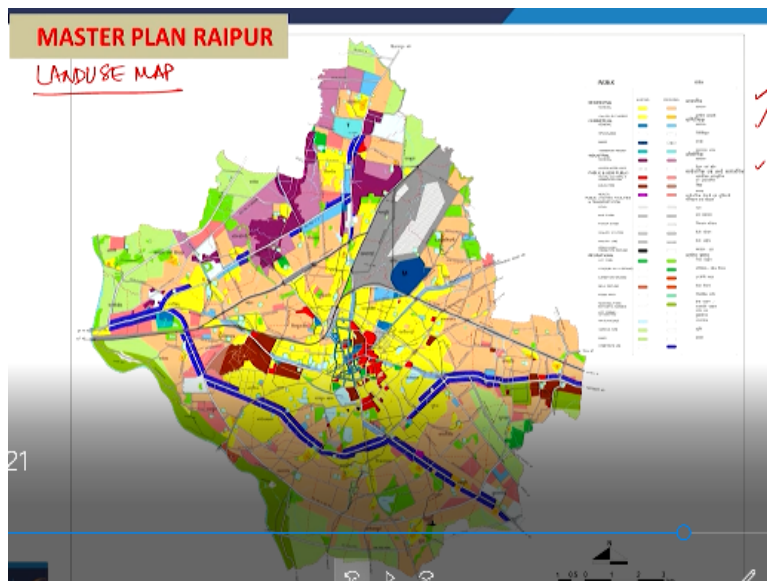
management. Or in terms of the infrastructure provision and which areas are sparsely dense or the low density which can be further strengthened or are densified. Those kinds of analysis can be done through density map.

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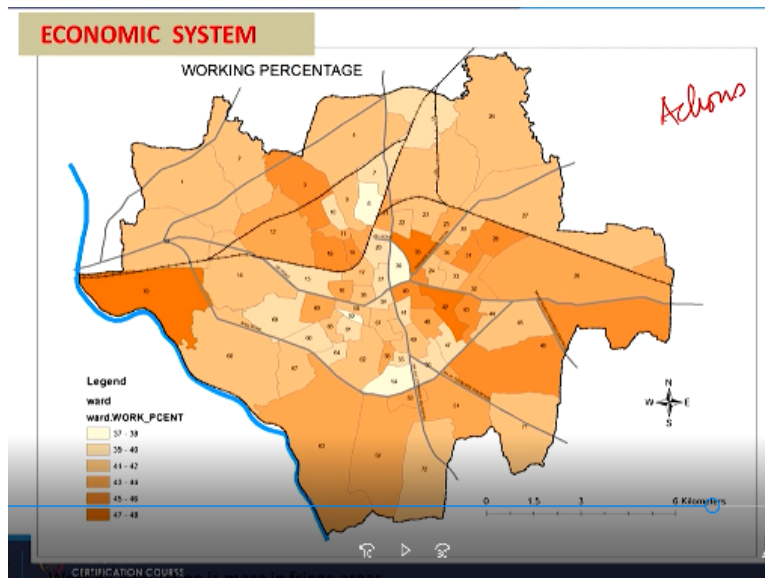
The literacy map you can see literacy map gives you idea that the level of literacy across all the wards in the municipality. And so that you can give some kind of action plan action plan for literacy ward wise. So, this kind of plans are very much useful for not only planning also for the day to day urban management.

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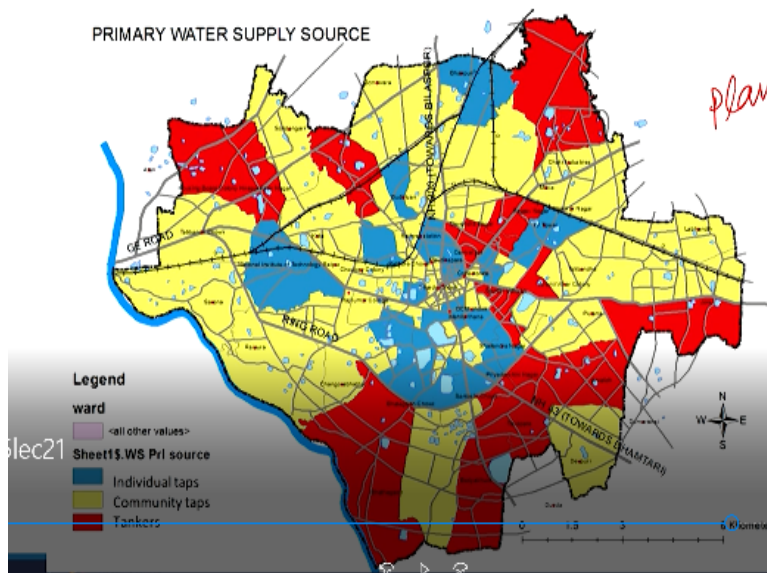
This is a typical land use map of and the master plan . So, this is the intent of the future development it is for Raipur city. You can see there how the authority has made few maps I mean few land use prescription you can see the colour codes. So, these colour codes we discussed our little like yellow is for residential green is for recreational then purple is for industry and so on and blue is for commercial.

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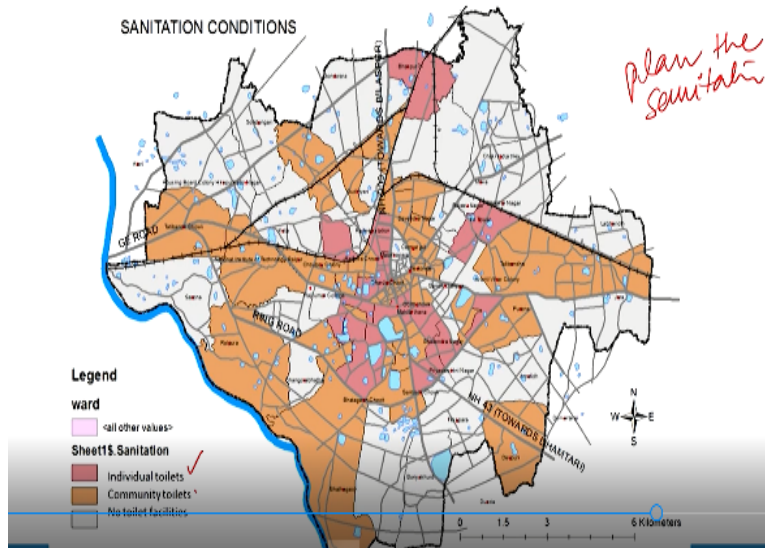
Then you can see this economic system the working percentage the dependency like what percentage of people are working and not working this kind of map will give you direction or the actions related to economic activity.

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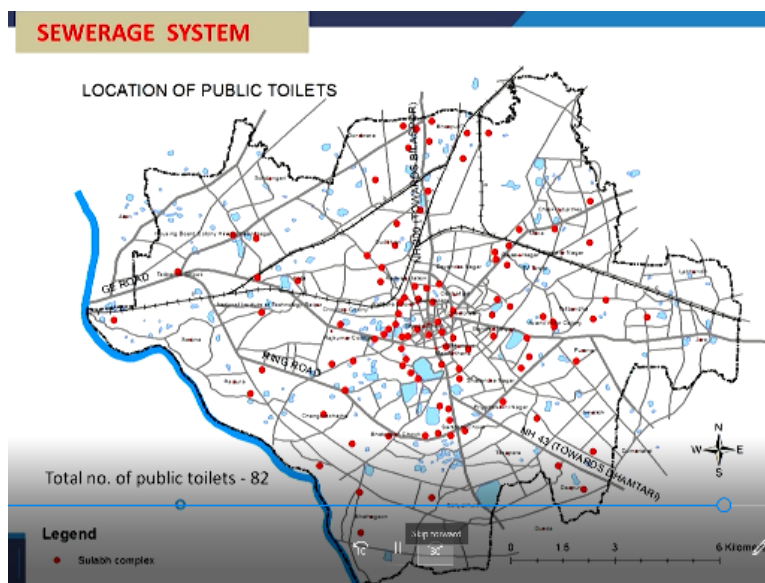
Then primary water supply sources. So, this is a thematic map based on the urban infrastructure. So, this source will give you idea to plan the water supply systems.

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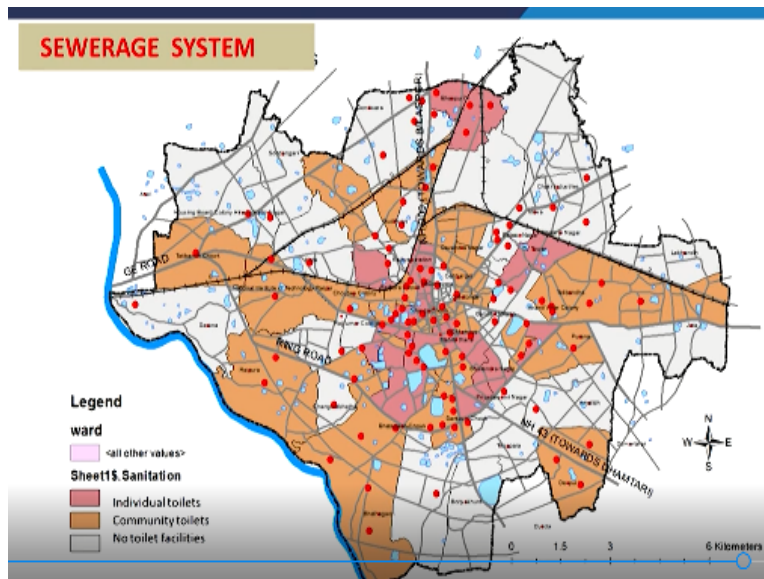
Then sanitation condition again this will give you some idea to plan the sanitation. In this map you can see that the words which is heavy the individual toilets the community toilet or no toilet. So, this kind of plan is on the required to plan sanitation and those municipalities who are working under such work mission they also can prepare this kind of maps.

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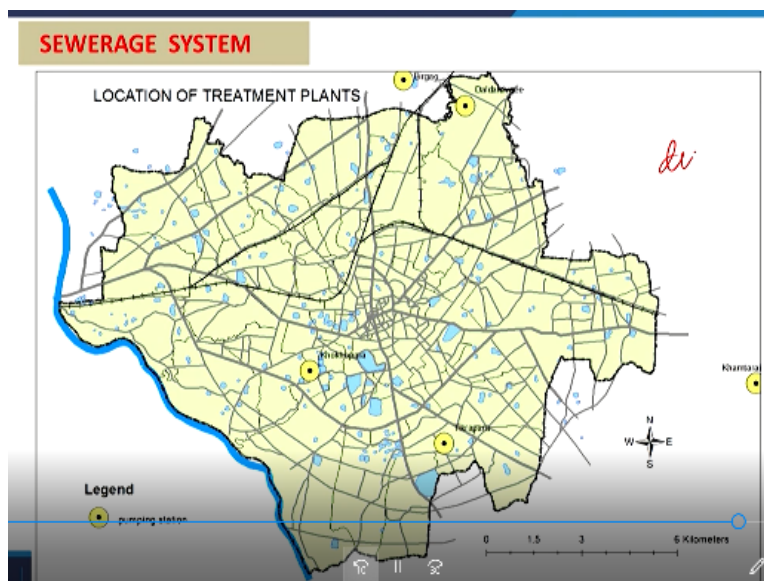
Lists of public toilets this plan will give you the served area and non-served area in your urban in your city.

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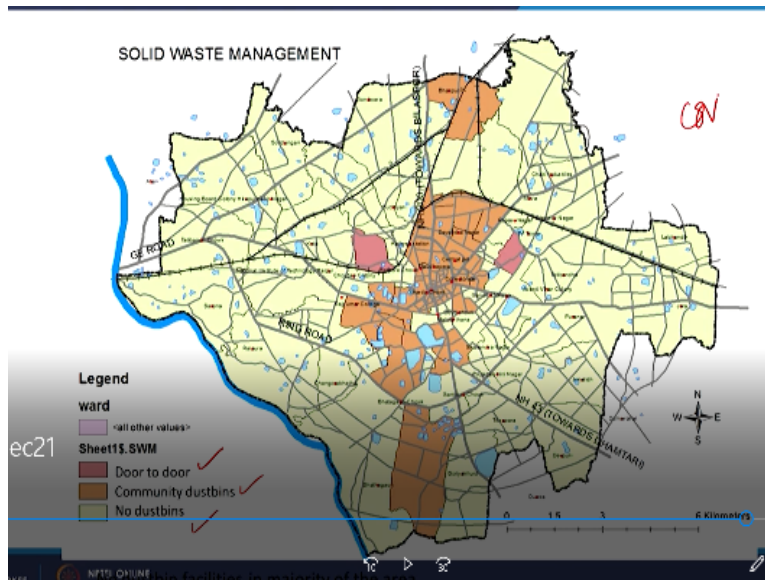
This is a sewerage system map you can see that how the sewerage system is covered like the plants where are the plants where are the sanitation system like that.

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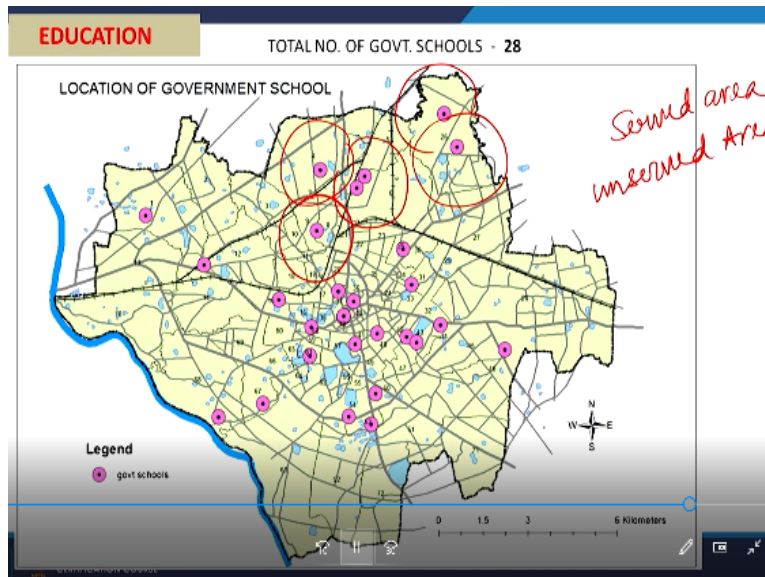
The location of the treatment plants some treatment plants are away from the cities and treatment plants are within the city. So, this will give you an idea to design the network.

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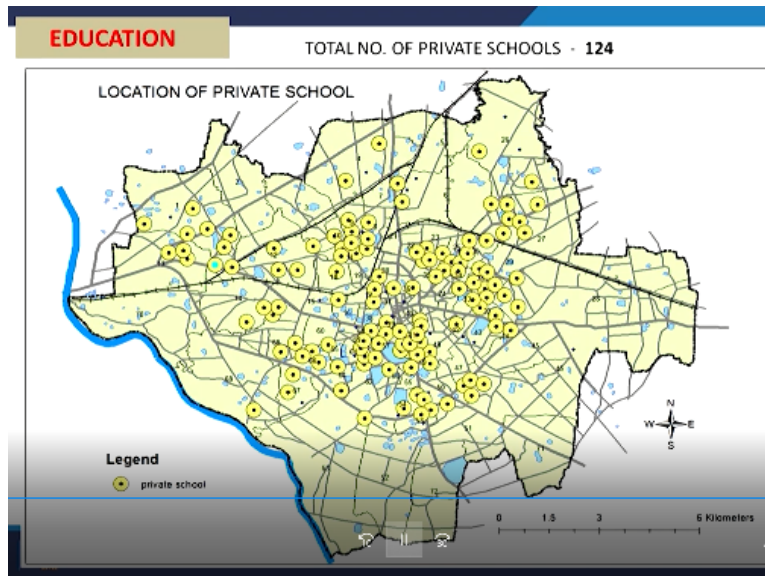
Solid waste management so solid waste management also give you an idea and will help you to make such worth plan action and all those kind of activities. You can see the it is mentioned door to door community dustbins no dustbins . So, this will give you some kind of a coverage give you some of my idea of the coverage and the non-coverage area.

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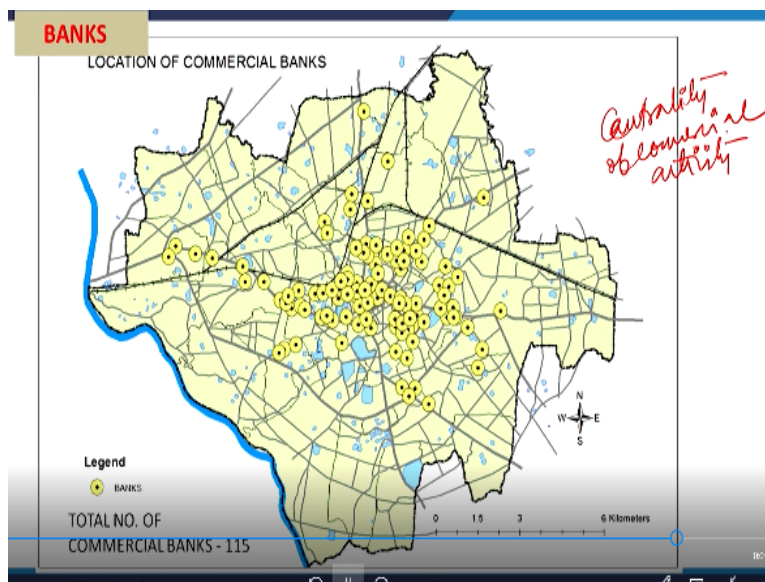
Then location of the this is education wise plans this is how we show we can see the show the education. And sometimes we also tried to show the catchment area like this that how much area education institution is serving and we can similarly identify the served area and unserved area.

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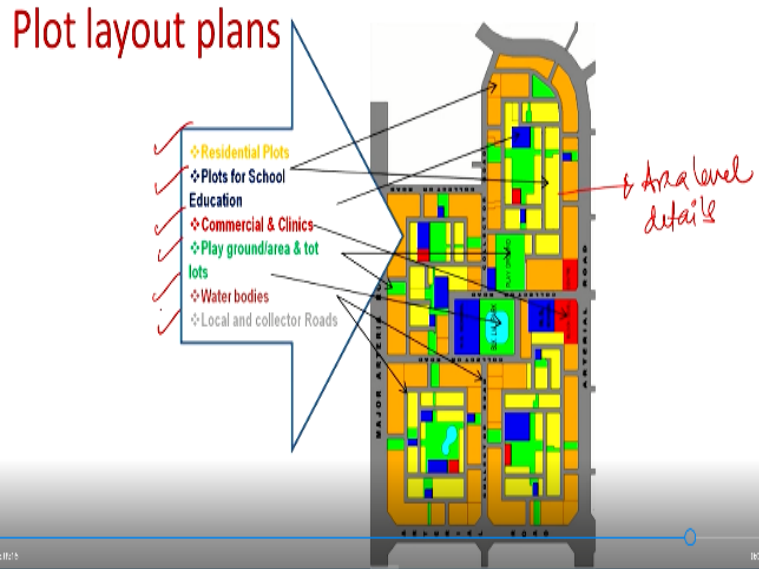
Similar location with a private school so this private school and the other school can be merged together and can be analysed for the served area.

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Then commercial banks so this will also give some idea about the centrality of the commercial activity.

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And this is example of plot layout plan. So, this plan is basically at the area level giving details of each and every plot like residential plots. Plots for school education plot for commercial areas, waterbodies ,local and collector roads. So, at the city level so these are the at the plot level okay fine. So, at the city level we have shown various thematic maps could be there like land cover land use, infrastructure and so many things.

The ultimate objective of this mapping is to make several layers and merge all those layers so that we can identify the suitability of the land percent where the areas have little better infrastructure or the potentiality for bringing new infrastructure. So, that you can bring new population or the new development. That is the importance of this mapping exercise and so that area could be shown in the future land use map.

So, that the prescription would be there that yes this area is the future residential areas with such and such a density and such extent of the mix and other parameters there. And plot layout plans as I have shown it is the final prescription of the plots which is usually done after the city planning mapping and its related exercise and it is done area by area. In some of the places it is done as a plot layout plan or local area plan or area development scheme.

So, this regional planning and city planning and area level planning these three stages of planning we will come in the next few lectures. So, that you can understand the example how

regional planning is done how city plans are done and how local area level plans are done. So, with this I would like to conclude to the lecture. Today we basically we discussed essential concepts of the planning and the development.

We started with the concept of the sustainable development and human development we have seen that globally we are following 17 sustainable development goal or SDG and then we have discussed the distinctive difference between the policy and planning. Policies basically a broad guidelines which is mostly non-spatial. Planning is very specific where region and a city or village and which is spatial and non-spatial both.

Planning is basically indent of the development which is prescription and the roadmap for the development and development is the actual action which is taken following the plan in a particular area or zone or land. And development without the development the planning becomes futile and planning becomes sterile and planning becomes ineffective. Therefore development is essential planning is not sufficient.

Therefore developing management is a very significant or the very important area which we should discuss. And after that we discussed various aspects of planning and development especially for regional planning and urban planning. We discussed several I just mentioned few theories just to be aware about the theory and in future if possible when you were going to develop or plan your cities you can cross check.

Or you can see that whether some theories are applied on not and then we have just introduced some sets of maps. So, that you can understand what kinds of maps and plans are used as a tool to make the plan and plan for a city. For example the land use map the land cover map. Mouza map, satellite map, thematic maps and not only that we showed some set of thematic maps and the satellite maps.

So, that you can get some idea that how the maps look like and what kind of colour codes will be there. So, next lecture we will discuss the regional planning with some case study also. So, thank you very much for attending this lecture.