

Urban Governance and Development Management (UGDM)
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Lecture - 22
Regional and Metropolitan planning.

Welcome to Lecture 22. In this lecture, we will discuss Regional and metropolitan planning. In the last lecture, we discussed couple of theories, concepts and methodologies in urban and regional planning. It will be better if we see some of the examples and cases on regional planning and urban planning both, so that you can understand that how a city development takes place in a city and beyond the city in a region.

So, today we will have discussion or demonstration on few examples. So, we start with the Indian cases. Will have Delhi and Mumbai case and then, we will have little case of an international case, i.e., Iskander region in Malaysia.

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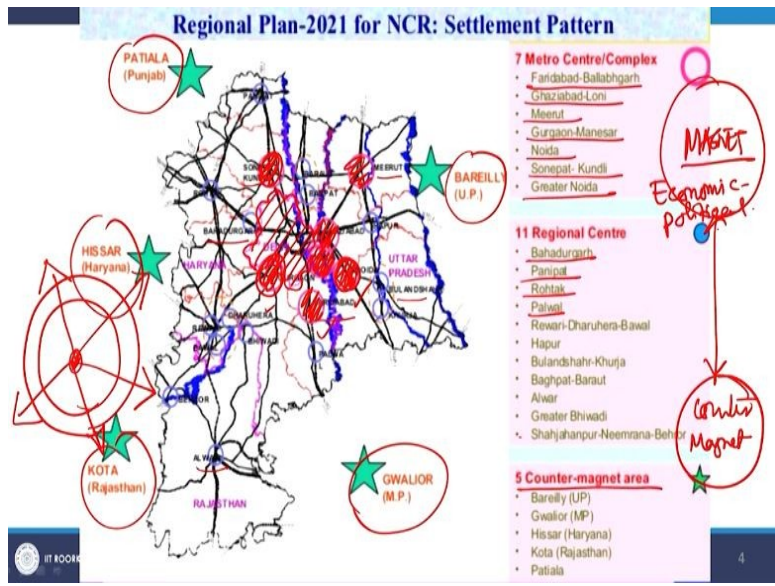
Contents

Examples of regional plans: Delhi, Mumbai

Detailed case Study: Iskander Region, Malaysia

So, let us start with Mumbai and Delhi.

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So, the regional plan for Delhi is called national capital region and this national capital region is basically streamlined by an independent board which is called National Capital Region Planning Board and they time to time make the plan for the whole region. So, here is the plan for the national capital region, you can see that Delhi city being the central of this whole region. This is the city of Delhi.

And in all around Delhi, there are various districts like you can see Meerut, Sonapat, Bahadurgarh, Faridabad, Alwar and all these Bulandshhar. All these neighboring areas are there and which is making our national capital region and it is also connected through various cities around the region, like Bareilly, Patiala, Hisar, Kota and Gwalior. Now, a region, here in this case, region is a combination of not only few cities, it is a combination of the part of various districts.

And in the right side of this map, you can see that there are various metro centers as we discussed like Faridabad-Balabhgarh, Ghaziabad, Meerut, Gurgaon-Manesar, Noida, Sonapat-Kundi and Greater Noida. So, all these metro centers or goeth centers are located here. You know this is like these. So, these are Ghaziabad, Noida, Greater Noida, Faridabad, Gurgaon and like these and this is Meerut. So these cities are easily connected with the mother city, i.e., Delhi.

And it is making an overall development in the region. So, basically the development is taking place in a radial fashion like this. And if, the growth is in radial fashion, so there will be requirement of circular concentric road network, which is there in Delhi and it is around. And then, you can see also the regional center, in the right hand side like Bahadurgarh, Panipat, Rohtak, Palwal.

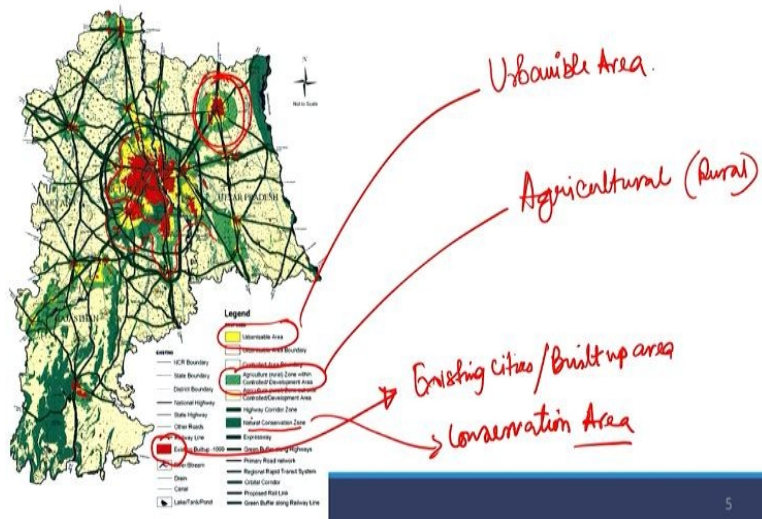
As I have discussed, various regional center, which is beyond the cities of this region, which is there in the other districts. And there are few counter-magnet area, the concept of counter magnet is that if Delhi or any city is acting as a magnet in terms of economic political importance and physical development also. So, there could be a system of counter magnet to supplement the importance and the development of the magnet, which we discussed, similar theories we discussed in last lectures.

So, this is making the total capital region of the Delhi for the comprehensive and sustainable development. Now, let us see another picture, so that we can discuss in better details. In last lecture, we discussed that in any regional plan we mention only the developable area, urbanisable area. Unlike the city developmental plan or development plan, we don't indicate the detail land use plan or even gross land use plan.

In regional plan, we just show the urbanisable area or non-urbanisable area. So, let us have a look at the urbanisable area or non-urbanisable area in the national capital region.

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Proposed Land use 2021

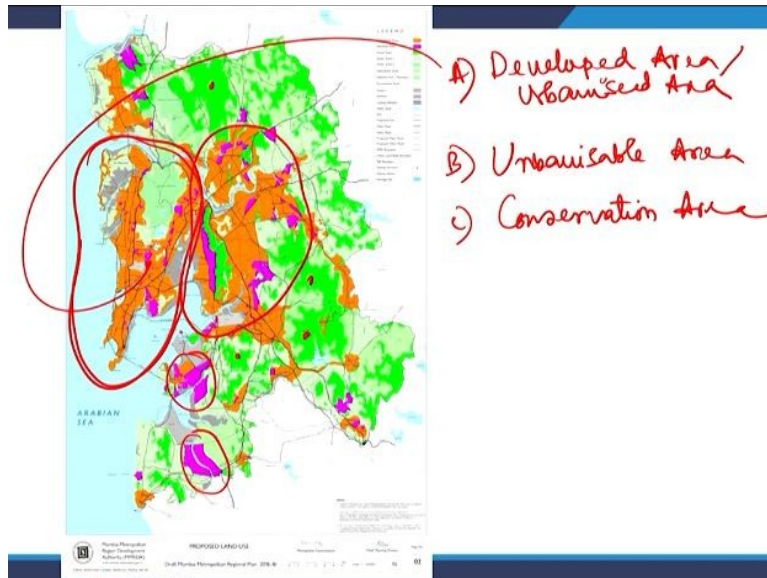


Here, in this plan you can see that, the yellow color is depicting the urbanisable area. And this green color is depicting the agricultural area, basically these are rural area and red area or dark red, this is showing the existing cities or already built-up area. And apart from that there are conservation area and there could be conservation area, where neither urbanization neither any other development will be there, in terms of the road or any infrastructure. No infrastructure or development will be there in the conservation area.

In this map, you can see that, let us get back to map again, you can see that not only the existing urbanisable area, existing urbanized area. It is showing around this future urbanisable area in terms of the yellow color and also some green color areas, in terms of the natural vegetation, agricultural area and conservable area. And it is happening not only for the Delhi, it is happening for other satellite towns are the other group centers, as I told earlier, Meerut and Gurgaon and Faridabad and all these cities.

So, this is how we represent a regional plan for any metropolitan city. Basically, even though it is mentioned here as regional plan, basically it is a metropolitan and regional plan together. So, let us see another example for the city of Mumbai.

(Refer Slide Time: 07:34)



So you know that for Mumbai, the regional plan is done by Mumbai Metropolitan Regional Planning authority, Development authority, in short MMRDA. So, this is the regional plan for Mumbai. Similarly, like Delhi regional plan, you can see that they have mentioned or indicated the already developed area or urbanized area and then, they have mentioned future urbanisable area and also they have mentioned conservation area.

So, here these are the existing developed area and apart from that they have mentioned various urbanisable area, future industrial area like this, like that, so many areas they have indicated. So, apart from that, there are conservation areas like this, like this. So, these are the conservation area, which needs to be conserved and not to be urbanized. If you see that these part, this is the only part of the Mumbai core city area.

This is the Navy Mumbai, which you know the largest counter-magnet or the largest new town area. The new town, which holds 20 lakh population and there are few other settlements other townships. So, this is together making the Mumbai metropolitan and regional plan. So, after seeing this Delhi and Mumbai examples, let us take little bit more details, let us see how the regional plan for the other cities in the other countries is done. So, let us take an example of Iskander region at Malaysia. So, let me show the map first.

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BACKGROUND AND CONTEXT

- South Johor is located at the southern-most tip of Peninsular Malaysia and mainland Asia.
- Johor Bahru, the capital city of Johor and its surrounding areas, has grown to become the second most important economic conurbation in Malaysia.

Aim

"detailed and comprehensive Master Plan for the development of South Johor Economic Region (SJER) that aims to address socio-economic development in a holistic and sustainable fashion".



This is the map of Malaysia and in this country, this portion is the region, which we are going to discuss now. This region is called Iskander region or in short, they call it as South Johor Economic Region, in short SJER. So, for this region, they have a complete and fantastic regional plan and they have presented through their documentations through their planning authority. Few of the salient points, I would like to share with you.

(Refer Slide Time: 10:15)

SJER AND THE NATIONAL PHYSICAL PLAN (NPP) 2005-2020

Approved by the cabinet on the 20th April 2005 and by the National Physical Planning Council (NPPC) on the 26th April 2005, NPP has been prepared under the provision of Section 6B of the Town and Country Planning Act 1976 (Act 172).

The main goal of the NPP is to **create an efficient, equitable and sustainable national spatial framework to guide the overall development of the country** towards achieving a competitive developed nation status by 2020.

OBJECTIVES

- To rationalise national spatial planning for economic efficiency and global competitiveness;
- To optimise utilisation of land and natural resources for sustainable development;
- To promote balanced regional development for national unity; and
- To secure spatial and environmental quality and diversity for a high quality of life

Let us take a look on the objective. Now, I am not going into much details about the broad write of and all those things. Just see the key elements like, the first objective, they are mentioning that rationalize national spatial planning for the whole region, utilization of land and natural

resources, balanced regional development, spatial and environmental quality and diversity. So, these are the broad objective for the regional plan.

(Refer Slide Time: 10:46)

SJER AND THE DRAFT JOHOR STATE STRUCTURE PLAN 2006-2020

Vision: **"A Developed, Sustainable and Glorious Johor"**

Key Fundamental Guiding Principles

- Spur and generate the economic growth in a continuous, comprehensive and balanced manner;
- Manage development and the environment intelligently; and
- Enhance the living quality of life of every citizen.

Development Focus in Johor Planning Zones

Planning Zones	Central Planning Zone
Southern Planning Zone (Johor Bahru Conurbation)	International Trade, Business and Service Centre
Western Planning Zone	Main City Centre supported by manufacturing industry, business and modern agriculture
Eastern Planning Zone	Tourism Centres at Beaches, Islands and Natural Environment Areas
Central Planning Zone	Forest Reserve Conservation Zone, Water Catchments Area and Palm Oil Estates

Then, they are saying a vision of developed, sustainable and glorious Johar. So, please see the term, i.e., the developed, sustainable and glorious.

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VISION & OBJECTIVES

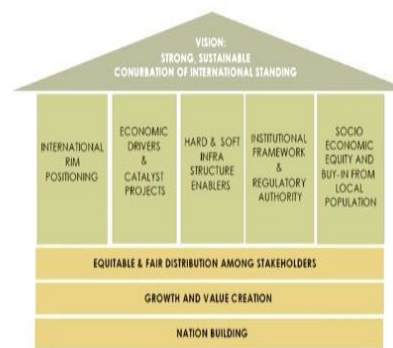
The CDP has referred to the comprehensive and universal development framework principles outlined in Islam Hadhari (Civilizational Islam) as a guide.

Ten principles governing Islam Hadhari

1. Faith in and piety towards God
2. A just and trustworthy government
3. Free and liberated people
4. A rigorous pursuit and mastery of knowledge
5. Balanced and comprehensive economic development
6. A good quality of life for the people
7. Protection of the rights of minority groups and women
8. Cultural and moral integrity
9. Safeguarding of the environment
10. Strong defence capabilities

Vision of SJER

"A Strong, Sustainable Conurbation of International Standing"



So, this is the broad vision of the whole region. I am not going into much details here. I will come just directly to the some key points again

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THREE FOUNDATIONS

1. **Nation Building** – that the development of SJER is to be always consistent in spirit with valid national and state level plans and aspirations while aspiring to drive further innovation and reforms in the nation building process.
2. **Growth and value creation** – that the development of SJER needs to emphasise on the aspects of growth, productivity and value creation in line with the dominant trends of globalisation and increased competition
3. **Equitable and fair distribution among stakeholders** – consistent with the tenets of growth with equity, to ensure that the local and Bumiputera population in particular participate in the growth and value creation in a meaningful manner.

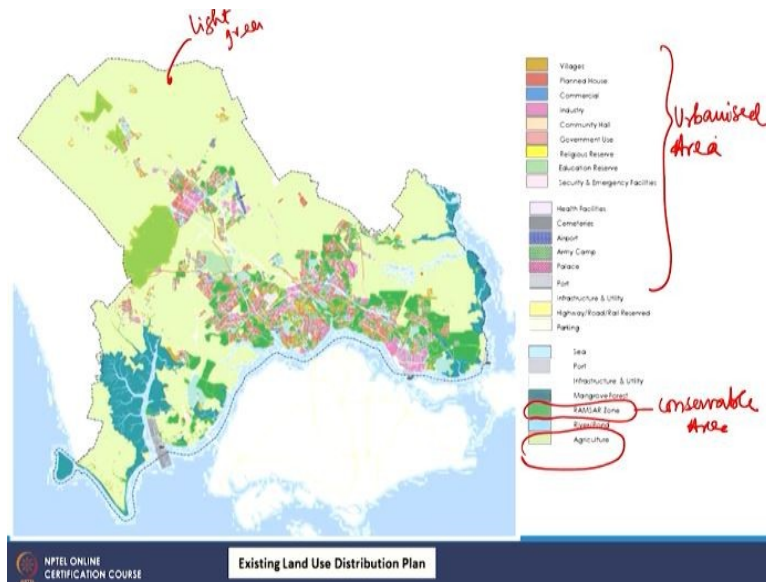
FIVE PRINCIPALS

1. **International Rim Positioning**: This includes creating a competitive SJER, bearing in mind current regional and international trends
2. **Establishing hard and soft infrastructure enablers**: This is not limited to physical infrastructures such as roads, airport and ports, and public utilities, but also covers matters such as security, river cleaning and proper sewerage.
3. **Investment in catalyst projects**: In order to spur development, SJER will see the development of a number of catalyst projects, which are planned in its commercialisation track.
4. **Establishing a strong institutional framework and the creation of a strong regulatory authority**: The CDP proposes the creation of the South Johor Authority (SJA) that will inter alia, plan, facilitate approvals through a one-stop centres.
5. **Ensuring socio-economic equity and buy-in from the local population**: As discussed, this initiative is not intended to create a development with no local participation

The foundation of this regional plan, one is Nation building, one is growth and value creation, third is equitable and fair distribution of the resources among stakeholders. So, they have taken 5 principals, one is international positioning so that this region can be compared with any other progressive region in the country, in terms of urbanization, in terms of the economic development.

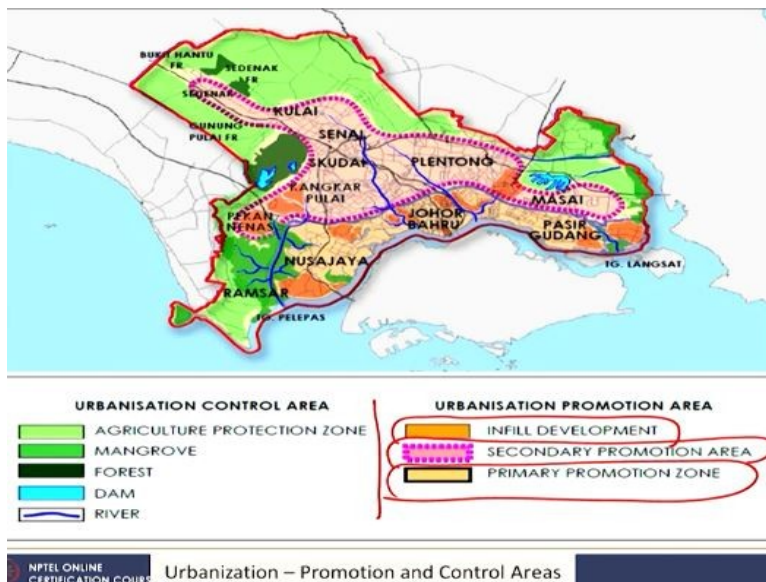
Then, establishing hard and soft infrastructure enablers. Then, investment in catalyst projects, establishing a strong institutional framework and creation of a strong regulatory authority and ensuring socio-economic equity and buy-in from the local population. So, based on the 5 principles, let us see how they have framed the plan. So, this is the detailed plan of Isakander region.

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Here, you can see there are colors like light green, so this light green shows the existing agriculture. The dark green shows the conservable area, which is the RAMSAR zone and remaining, these are the urbanized area or they have already developed either city or villages. Now, we will see based on this, this is the existing land use distribution plan. Based on this, how they have made the future regional plan.

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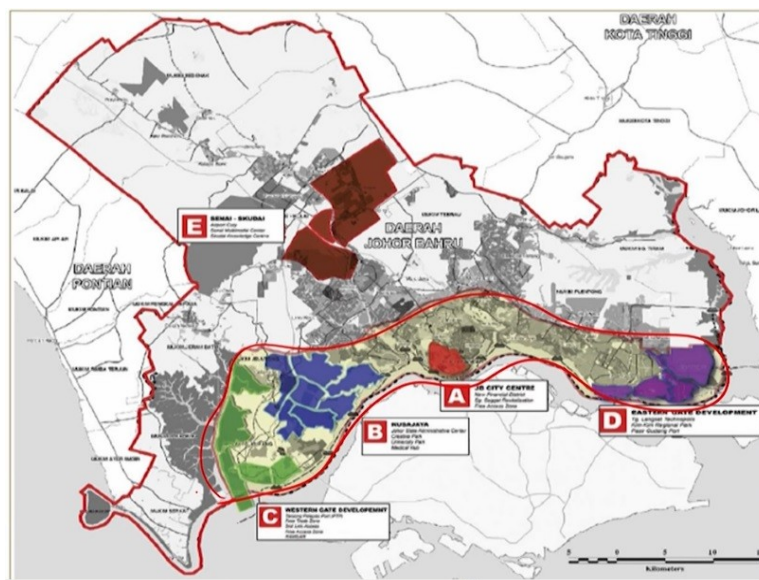
So, what they have done, they have analyzed the whole region and they have distributed the whole region into several sub region and you can see that, one is the primary promotion zone, where the major urbanization will be promoted. Second is the secondary promotion area, where urbanization area will be promoted, but, with some restrictions or with some controls and there

will be some in-field development, i.e., the meaning of in-field is that the development is all there.

But to strengthen and to make the development compact, there will be situations of reduncification, so that the in-field could me more compact, more population can come there. So, this is the sub-zones, they have created. You can see how they have created, this is one zone marked in magenta color and the green is another zone. And here, you can see the control area in terms of environmental control, agricultural, mangrove, forest and others.

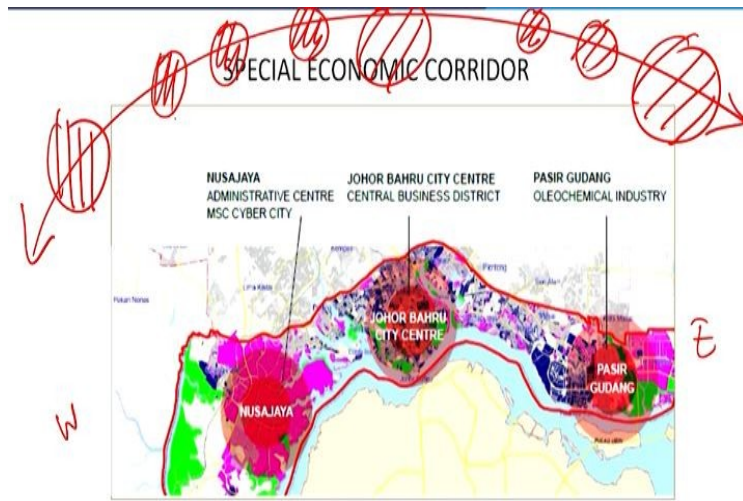
Now, based on that sub-zoning of the whole region, they have come up with the major growth center.

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Like you can see the southern part, this part is the major growth center of the development and they are going to make an economic corridor through this development.

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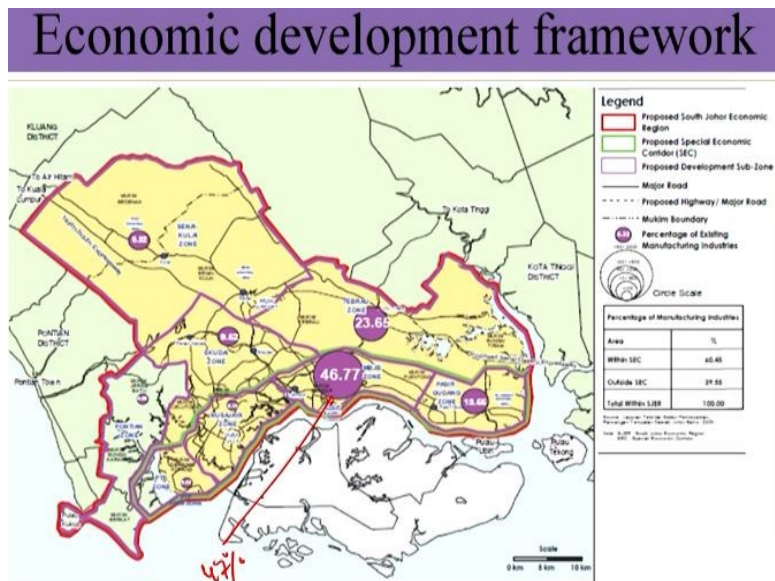


With many of the economic drivers already present, the Nusajaya-Johor Bahru-Pasir Gudang corridor will be the main and premier zone for development and investment.

Last lecture, we have discussed the concept of corridor, which is very much popular in regional planning. So, this is the example of a corridor concept in the regional planning. So, here you can see that Johor-Bahru is the center or the central city area, at the corridor and there are few more cities in eastern side and western side. So, this together is making a corridor and this corridor will even though there are 3 cities.

So, eventually they will generate more urbanization along that transport and economic corridor. So, that is the concept, here they have applied for this urbanizable area. Now, you can see the relative economic importance in that corridor.

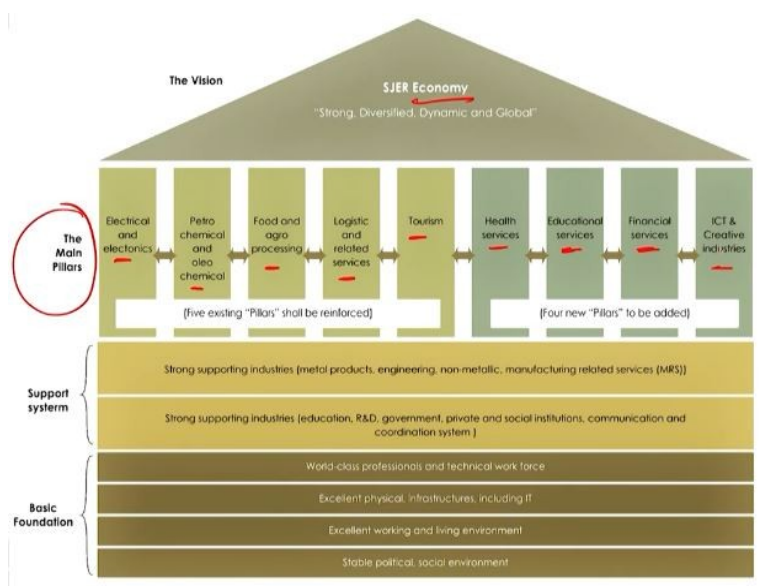
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You can see that Johor-Bahru, which is the center, central city in this whole region accommodates the maximum percentage of the industry about 50%, about 47% of the total industry, followed by the several other smaller cities. Which is surrounding the main city? Please recall the example, which we showed for the Delhi case, national capital region Delhi, where around Delhi, they are industrial townships and industrial cities.

Similarly, here also, around the Johor-Bahru, there are several sub cities and cities, they have created or they are going to enhance or increase the coverage of the city.

(Refer Slide Time: 15:34)



So, here you can just quickly look at the key points, which are the main pillars of the economy like electrical and electronics, petrochemical, food and agro processing, logistics and related services, tourism, health service, education service, financial services and ICT. So, these are the identified pillars of the economy, which you generate the employment, so the people from the surrounding village and the small towns, they can be accommodated.

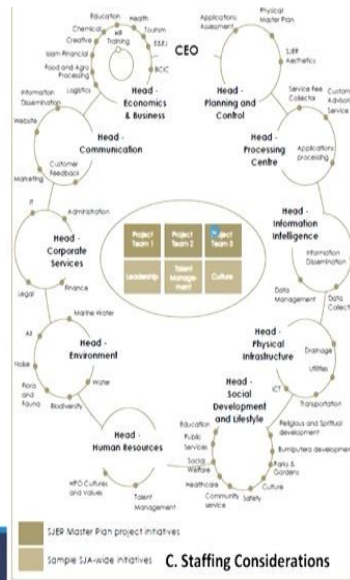
And they can get the appropriate job at their place or may be nearby cities. So, this is the pillar and the foundation of the overall economic planning.

(Refer Slide Time: 16:13)

Management and Organisation

E. Membership of the Board

Composition	Members	Value / Rationale
Co-Chairmen	<ul style="list-style-type: none"> YAB Prime Minister YAB Menteri Besar of Johor 	<ul style="list-style-type: none"> Direct transmission of vision Eminence Confidence and trust Performance - Federal Government support Eminence Confidence and trust Performance - State Government support
Federal representatives	<ul style="list-style-type: none"> Secretary General of Treasury Director General of EPU 	<ul style="list-style-type: none"> Performance - financial support Performance - projects support
State representatives	<ul style="list-style-type: none"> State Secretary Director of UPEN 	<ul style="list-style-type: none"> Confidence and trust Performance - State agencies support Confidence and trust Performance - project support
Subject matter experts (SMEs)	Three SMEs	Performance - expert knowledge provision
SJM Representative	CEO	Performance - inter-connectivity between Board and Management



Now, not only that seems our overall course, the focus of the course is urban governance, so, I could bring some screenshot about how they are managing their organization. So, you can see that their organization is also design in a hierarchal manner and at the same time, they have a system of feedback mechanism and staffing consideration, they have done through such a way, so that each and every sector, every section is connected to each other.

And also they connect with the converging or the authority of the organization, that is the important part of the organization of frame work.

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Global Benchmarks for Target Processing								
Business Processes	Parent Agency in Malaysia	Processing Time (days)						
		Target Days	Malaysia	Singapore	Dubai ²	UK	Australia	USA
15. Employment pass (professional)	Immigration	14	14 ¹	14	7	49	30	3
16. Work Permit (unskilled workers)	Immigration	7	7 ³	14	14	49	30	15
17. Dependant pass	Immigration	7	7 ³	14	7	49	60	15
18. Social pass	Immigration	2	2 ³	2	N/A	1	1	15
19. Short term professional pass (set up machines, entertainer etc)	Immigration	3	3 ³	14	7	28	1	15
Land Dealings								
20. Sub-division	Land Office	21-30	510	90	7	60	42	150
21. Conversion	Land Office	21-30	420	-	N/A	60	42	150
Planning Permission								
22. Planning Permission	Local Authority	14-21	240	21	21	120	60	150
23. Building plan	Local Authority	14-21	180	30	21	60	30	7
Others								
24. Application for connection to utilities	TNB, TM, SAJ, GMSB, etc	3	2	2	14	20	10	2
25. Certificate of Occupancy	Local Authority	6	14	14	9	20	30	10

I am not going into those details. You can see in your time that these are the distribution of some of the services.

(Refer Slide Time: 17:07)

Class	FAZ
Class 1 - Residential	C
Class 2 - Wholesale Trade	C
Class 3 - Retail Trade	P
Class 4 - Business and Professional Services	P
Class 5 - Personal & Household Services	P
Class 6 - Hotel	C
Class 7 - Service Apartment	P

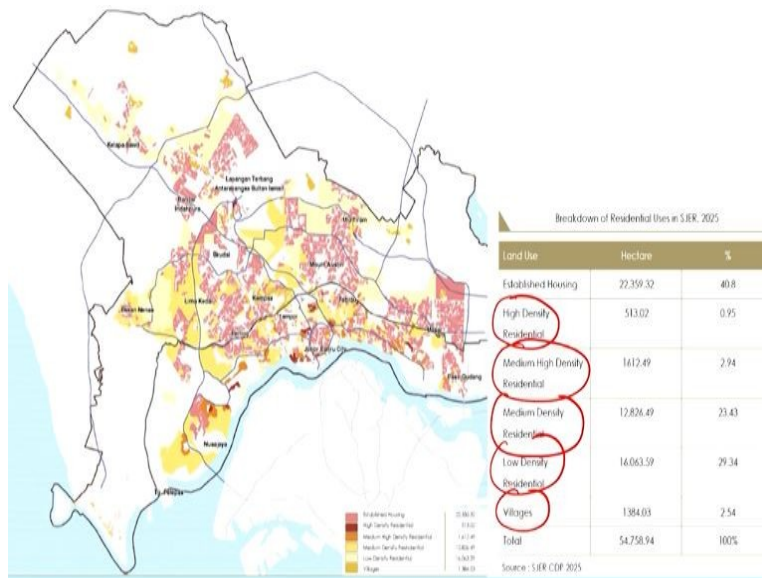
Class	FAZ
Class 8 - Hostel	C
Class 9 - Restaurant	P
Class 10 - Entertainment	P
Class 11 - Petrol Station	P
Class 12 - Industry	N
Class 13 - Service Industry	C
Class 14 - Health and Medical Facilities	P
Class 15 - Security and Emergency Facilities	P
Class 16 - Welfare Institution	N
Class 17 - Religious	C
Class 18 - Education	N
Class 19 - Community Facilities	P
Class 20 - Open Space and Parks	P
Class 21 - Sports Facilities	P
Class 22 - Theme Park	N
Class 23 - Golf	C
Class 24 - Institutional	P
Class 25 - Utility & Infrastructure	P

Note: **P** Outright Permitted
C Permitted with condition
N Not allowed

Allowable Residential densities - 250 persons per acre
 Allowable Plot Ratio - 1 : 4

These are some indication of the use in terms of land use, because within the regional plan, they have very specifically mentioned that feature, which are allowed or not allowed, so that is there.

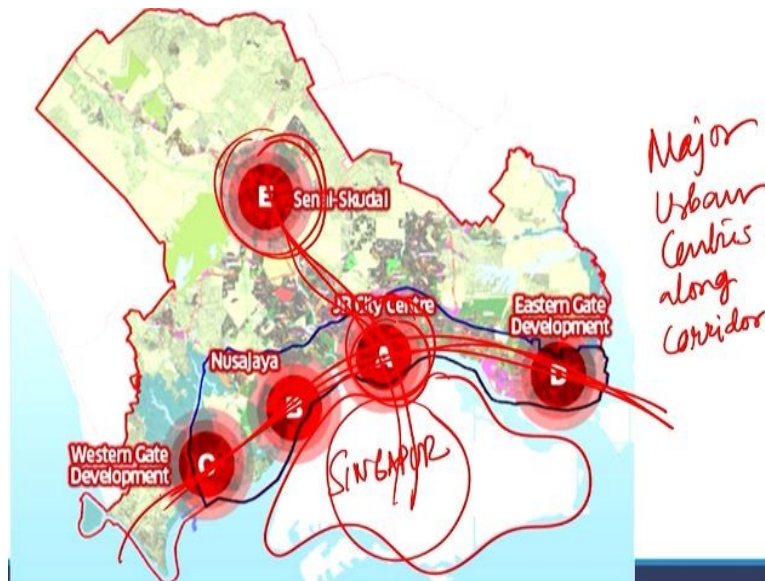
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Not only that, low cost housing is integrated and considered here. Yes, in this plan you can see that how they have demarcated the future housing. So, it is not only that the current housing or the future land use, they have indicated where the future housing will come. Let us take a quick look of the housing categories, one is high density, medium density, medium high density and

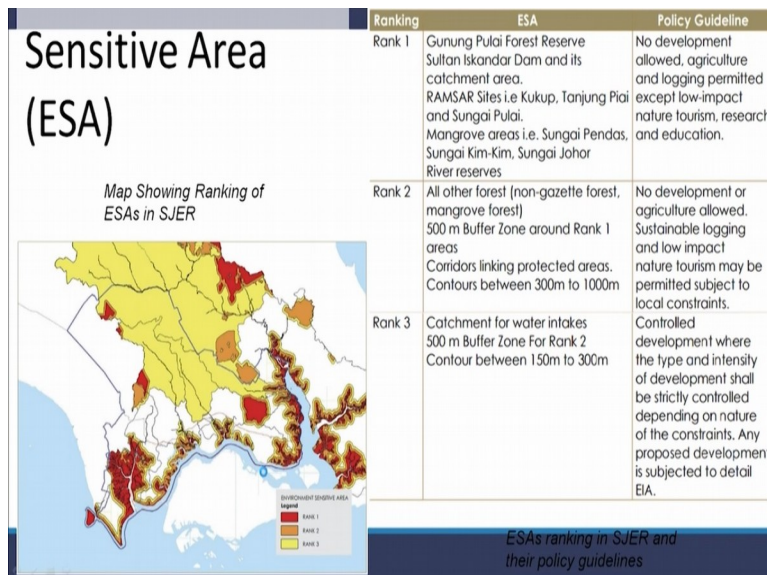
low density, there are some village. And within that, this will be distributed on that region as on when the cities will be developed.

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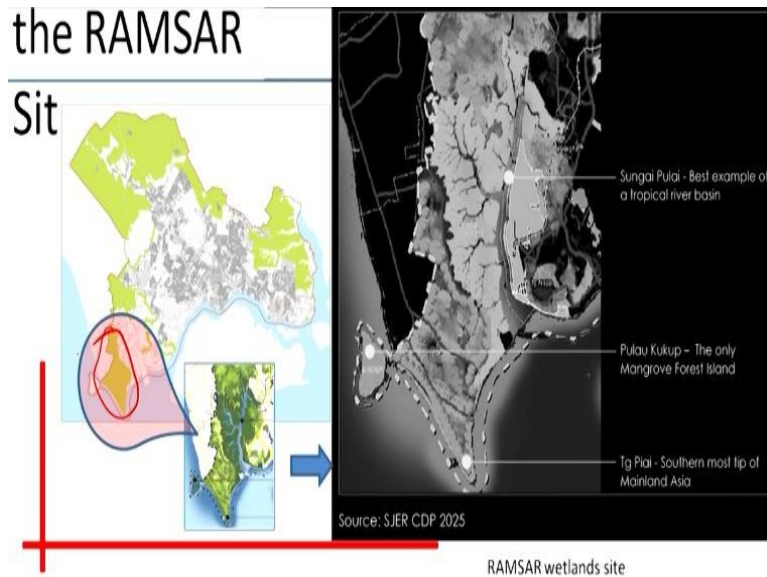
Ok, these are major cities, major urban center along corridor because this is the major corridor, where they are designing the major center and this corridor is very near to the Singapore, that is why this corridor is getting the advantage of nearness of Singapore. And this is another city, which is connected with the major city Johor-bahru. So, this city of Singapore, Johor-Bahru and the Senal city, these are connecting as another corridor and this is acting as another East-West corridor. So, this is how they are developing the region.

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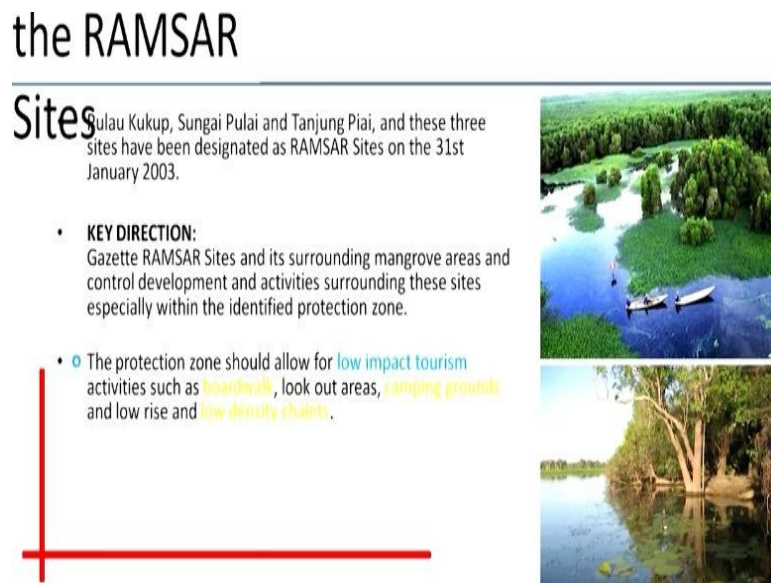
So there are few sensitive area in terms of ecology and the environment. So, basically the mangrove areas and the green areas, which they have conserved meaningfully with appropriate rules and regulations like this.

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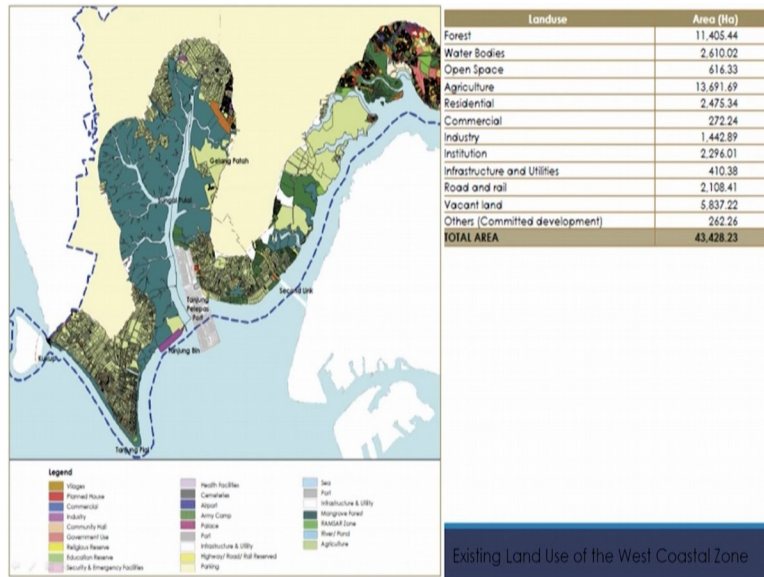
They have RAMSAR site, you know that all over the world, the ecologically sensitive and ecological significant areas are conserved through RAMSAR convention. So, they have the RAMSAR site here in this region, in the south area. Here that they have prescribed for the preservation.

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This is the detailed view of Ramsar area

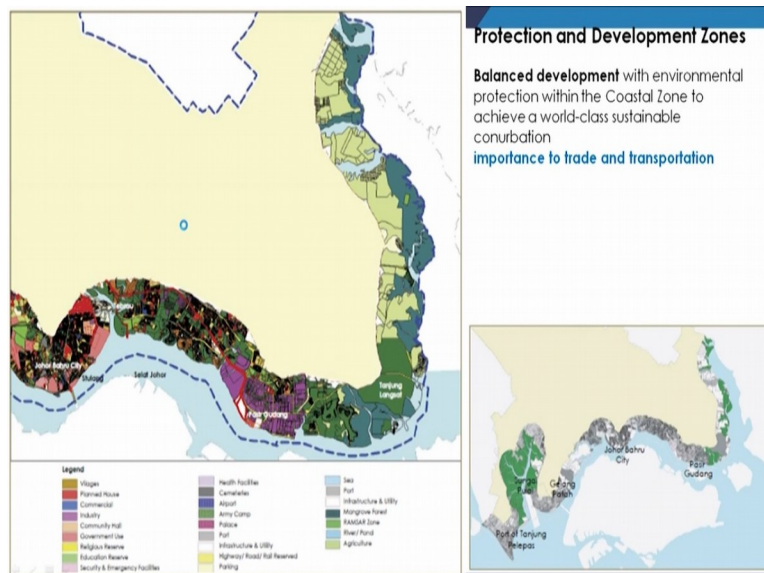
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You can see that how settlements are going towards mangrove area, this similar situation we find for various coastal cities in our country, for example Mumbai, for example, various cities are there. For all those coastal cities, recently we have seen that in Kerala for coastal city, they have faced havoc rainfall and the flood. So, it is also important to conserve the mangrove areas and the natural elements.

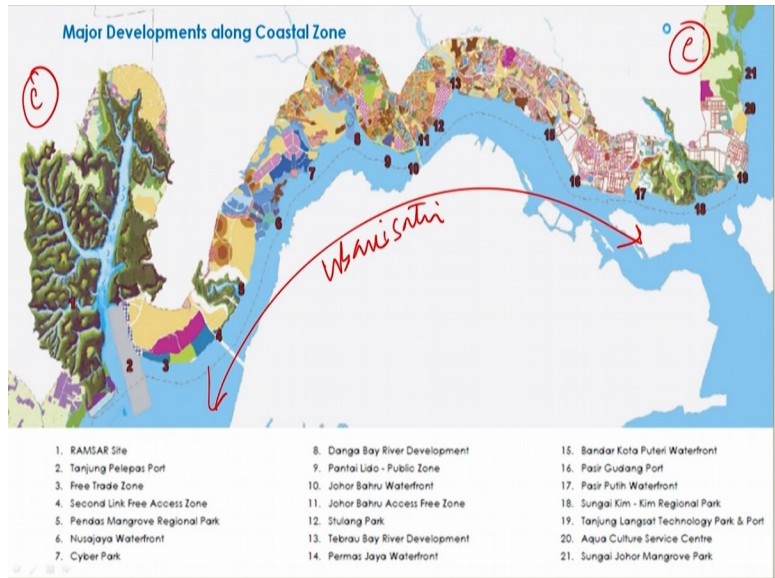
So, that these can act as the barrier towards the larger rainfall and also it can maintain the ecology balance. So, that they have done.

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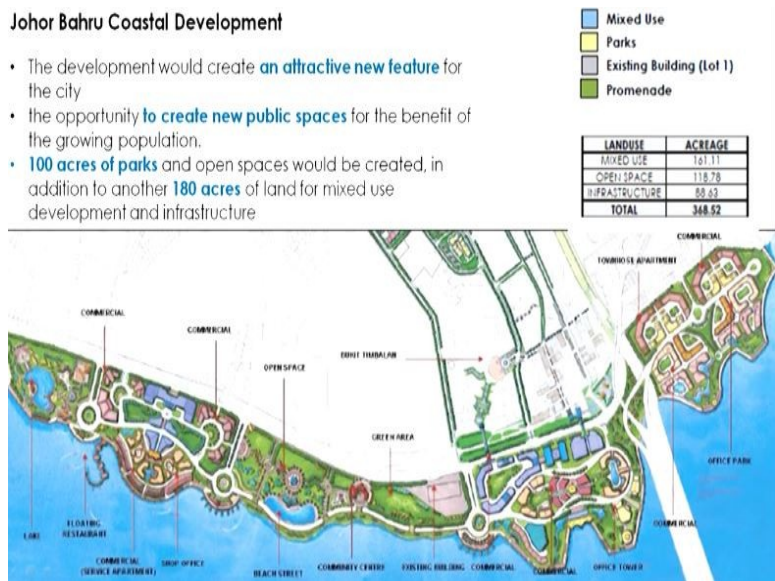
This is another detailed view on eastern coast. So, the eastern coast and the western coast, both of them they have conserved with the appropriate regulations.

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This is the possible development along coastal zone. So, you can see the central portion, it is basically, where they are allowing the urbanization, whereas in the eastern part and western part, they are basically conserving in terms of the development. They are not allowing much urbanization in these 2 sub region.

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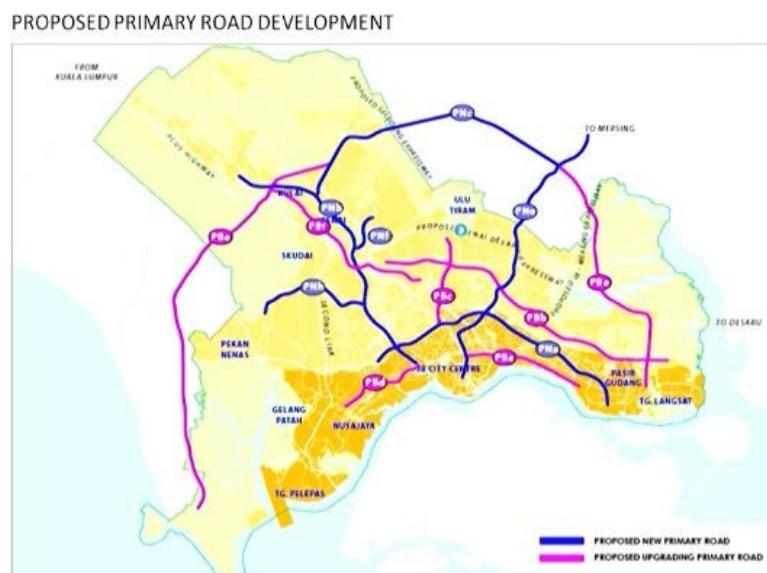
So, not only that, now, this is another very detailed look of Johor-Bahru city center area, where they have made a detailed plan of the city center, in terms of the commercial and other employment generation activity.

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Let us have a quick look about the transportation network. So, this transportation network having the express way. There are some express way, which is existing. There are some proposed express way. So, this express ways together will create a network of the whole region and that will enhance the functioning of the corridor concept in this region.

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Another view of primary and secondary road development.

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PROPOSED SECONDARY ROAD DEVELOPMENT



So, you can see that economic corridor, transport corridor and the urbanization concept are going together in hand in hand. So that nothing is isolated, everything is integrated, and so that it can give a clear picture of future development in terms of urbanisable area and non urbanisable area. And if it is on the urbanisable area, what type of urbanization is there, that is also mentioned.

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PROPOSED UPGRADING EXISTING INTERCHANGES AND PROPOSED NEW INTERCHANGES



Okay, these are some interchange areas in network in the transport network. I am not going into much details. So, having said that we come to the end part of lecture. In this lecture, we have demonstrated few regional plans, so that you understand better how regional plan works and because in the last lecture, we discussed the theories of the regional and the urban planning. So,

today we have seen the examples of national capital region Delhi and Mumbai metropolitan area, where we have seen that how they have created urban centers along the mother city, Delhi and Mumbai.

And how they have indicated the urbanisable area and non-urbanisable area, conservable area, future road network, all these areas. And then we have also seen, one international experience of Malaysia, where we have seen that they have taken a corridor concept and they have taken the advantage of another existing large city, which is Singapore. And based on this concept of this corridor, they have integrated the corridor, the urbanisable area and also conservable area, in terms of mangrove and green in an integrated manner.

Their main objective to bring this whole region in the economic global map of world that is the main objective. So, that now having said that, I hope that you could understand that region as a whole can take or can integrate the developments of various cities and can generate huge number of jobs, huge number of housing as a whole. So, before coming to the urban planning, it is very important to see the regional planning.

In Indian context, apart from larger cities like Delhi and Mumbai, there are other regions also, but practically some of the regions the planning work, is yet to be started or yet to be implemented in the proper manner. So, if you are involved in regional planning authority or planning authority or in urban local government, please look in to the matter and also integrate the regional planning and urban planning together.

So, in next lecture, we will discuss the urban planning and will also show some demonstration of the urban planning. So, thank you very much for attending this lecture.