Urbanization and Environment
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Module - 04
Urban (environmental) trajectories in India: Plans, policies, visions and missions
Lecture - 18
"Fantasy Cities"? Understanding Limits of "Smart", "Eco" and "Green" Doctrines
Case Study 2 : New Town Rajarhat

So, good afternoon all of you and this is lecture 18 and here I would be discussing new town Rajarhat as part of our Fantasy Cities you know series. So, I already covered Dholera in the previous lecture and I would be covering Lavasa again another township and the whole idea here is to basically Understand the Limits of Smart, Eco and Green city Doctrines.

And hence I chose new town Rajarhat to kind of you know empirically validate the limits or the limitations that are ingrained you know in this kind of so called technocratic top down models of development.

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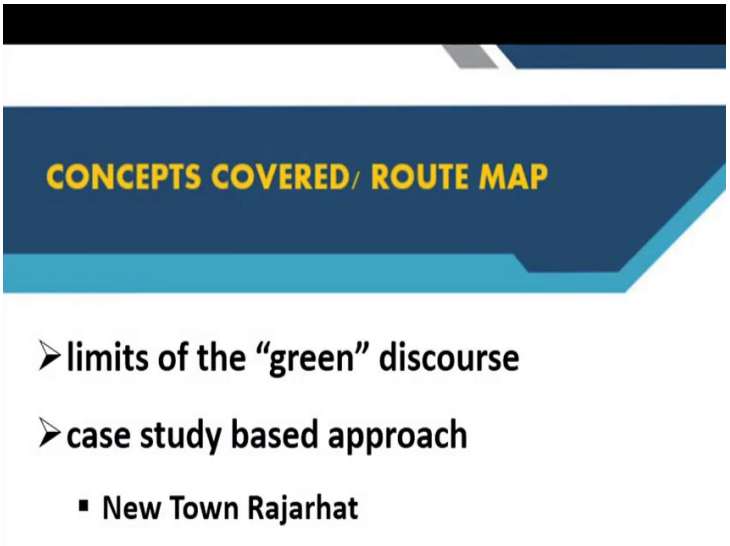

So, in this particular lecture I am going to discuss the limits of the Green Discourse using the same Case Study based approach which we followed for the previous lecture as well when we covered Dholera and here the case study is new town Rajarhat, a satellite city of Kolkata in West Bengal.

And then the final question would be like whether Rajarhat can really be considered as a green city or you know finally, it has become a dystopic city or not. So, whether green or dystopic city. So, when I use dystopic I am actually borrowing from Ranabir Samaddar and his team who had extensively worked on Rajarhat and they published a book from Rutledge in 2013 and the title of this book is Beyond Kolkata Rajarhat and the Dystopia of Urban Imagination.

So, we will see you know whether Rajarhat really should be regarded as a green city or you know Rajarhat actually kind of led to dystopia.

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So, where is new town Rajarhat? So, first it is important for us to also understand the location and some fundamental information you know about this newly planned city in West Bengal. So, initially when Rajarhat was planned it was like the whole idea was to develop it as a fast growing planned satellite city of Kolkata and the same logic you know when Salt Lake came out the Salt Lake township and several other townships you know you not only so far as Kolkata is concerned.

But, if you also see the urban development or rather urban sprawl that is taking place in the outskirts of like mega cities or metropolitan regions of Mumbai for example, Delhi etcetera. You will see that the major reason that why these satellite townships are being constructed; one major purpose is to kind of accommodate the increase or the increasing demographic size of the mega cities during our contemporary times.

So, same logic also goes for Rajarhat and so, Rajarhat was also planned as the fast growing satellite city of Kolkata. And the functioning agencies the two major functioning agencies involved with this project are NKDA, which is this New Town Kolkata Development Authority under which Rajarhat is covered and also the West Bengal HIDCO, which is this Housing Infrastructure Development Corporation.

And HIDCO is the major agency responsible for developing infrastructures in new town Rajarhat including roads, water supply pipelines, sewerage lines, drainage lines, beautification programs and projects etcetera and also other construction activities including parks, museums, subways, flyovers etcetera.

So, it is one of the major functioning agencies looking after the development of infrastructures and other construction activities in this satellite city. Now, the major argument is that you know I mean or rather the initiative which is a kind of a joint initiative between the centre and the state. So, this joint initiative is all about turning Rajarhat into a smart green city.

And I would like to emphasize on this green when we are discussing Rajarhat; because initially you know all of us are quite aware that there is a tussle always there has been a tussle always between the central government and the state government especially you know the state of West Bengal. So, initially the West Bengal state was not ready to kind of apply for Rajarhat being a part of the smart city project. The NDA floated you know smart city project.

So, the West Bengal government had its own plan of making Rajarhat into a green city, but then you know lot of permutation combinations negotiations bargains occurred and finally, the state of West Bengal decided to kind of develop this Smart Green City plan for this newly developed township.

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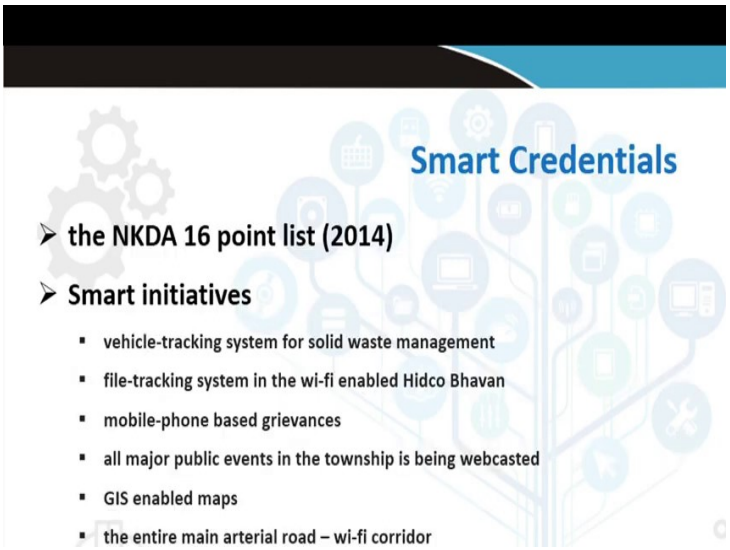

So, a particular plan was submitted. The NKDA it submitted the 16 point list to the centre in 2014 and several march smart initiatives were laid out you know in this particular report or this particular document which was submitted before the central government when funds were applied for Rajarhat.

And the idea was that I mean Rajarhat would definitely facilitate all the quote unquote smart city initiatives which were also being planned at the national level across several other smart cities which were being conceptualized during this particular point of time.

So, these smart initiatives included vehicle tracking system for solid waste management, file tracking system in the Wi-Fi enabled HIDCO Bhavan, mobile phone based grievances, all major public events in the township started getting webcasted. So, I mean totally you know again the we can see the role of the digital technology here.

And GIS enable maps also could immediately show the locations of several important areas within this township and the entire main arterial road had a Wi-Fi corridor. So, at a Wi-Fi corridor was planned to provide connectivity to this entire stretch of the main arterial road which connected Rajarhat with Kolkata.

Then there was this smart car parking fee system again another major attribute of this smart city plan and a monorail has also been you know kind of conceptualized, this monorail idea or the monorail project in order to facilitate smart connectivity. CCTV

cameras are there in important locations in primary locations for example, like the Eco Park.

So, Eco Park again is something which we will be discussing a bit in the subsequent course of this presentation. So, these are the smart initiatives or the smart credentials which were included in the 16 point list which was submitted to the centre by NKDA about how Rajarhat could then get developed as a smart green city quote unquote smart green city.

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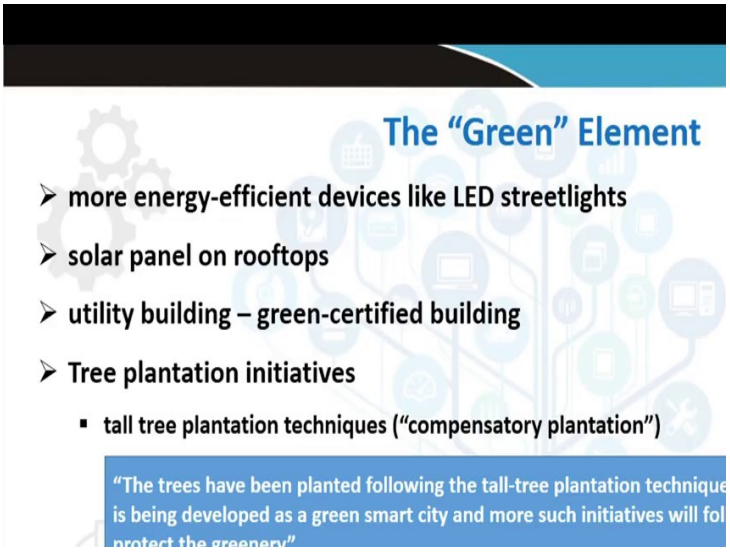

Now, what is the green element? So, here we discuss this all these smart elements right all the smart attributes or the smart initiatives, but what is this green element you know within the smart green program. So, by green element the report kind of emphasized on the fact that or and also there were several other complementary programs including more energy efficient devices like LED street lights.

So, the street lights in Rajarhat these are all LED street lights and there are like solar panel on rooftops. Then the utility building has been certified as a green building and or an eco friendly building and several tree plantation initiatives have you know kind of flooded the scene of Rajarhat. And this tree plantation initiatives it take place regularly almost and like from the very inception of the township project itself.

So, there has been this tall tree plantation I mean a tea plantation program following this tall tree plantation mechanism or technique. So, what is this tall tree plantation techniques? So, this is something of which the NK both NKDA and HIDCO are quite proud of.

So, this tall tree plantation technique it means that you know that big trees because as several trees had to be cut to make way to the township. So, tall trees would be planted in Rajarhat because of course, one can understand that the ecosystem services provided by the tall trees are you know are much more enhanced than the ecosystem services which are provided just by the saplings.

And if you just plant saplings then it will take whole lot of time to grow. So, that is why the emphasis was on the plantation of tall trees and this was also kind of considered as the compensatory plantation program. So, what happened is that you know that from Budge Budge which is located in 24 Parganas almost at during one particular point of time. I think it is around like 2014-15 14 tall trees were I mean were transported from Budge Budge and transplanted here.

These trees included big trees or tall trees like Chatim, Krishnachura, Radhachura, Banyan etcetera and the HIDCO chairman I am quoting HIDCO chairman here HIDCO chairman cum managing director. He said that the trees have been planted following the tall tree plantation technique and new town is being developed as a green smart city and much and more such initiatives will follow to protect the greenery.

So, again you can understand like maybe you can now you are now getting exposed to this green element in this smart green initiative and tree plantation being one of the major you know one of the major components. So, far as this smart green initiative is concerned.

And as I also discussed in the previous slide the whole arterial road is a very important road which where the project also kind of plans a Wi-Fi enabled corridor, but not only Wi-Fi connectivity; the main arterial road has also been planned as the green corridor and several projects relating to plantation of saplings have been implemented on the road divider. So, these are the all the green attributes or the green elements within the smart green initiative.

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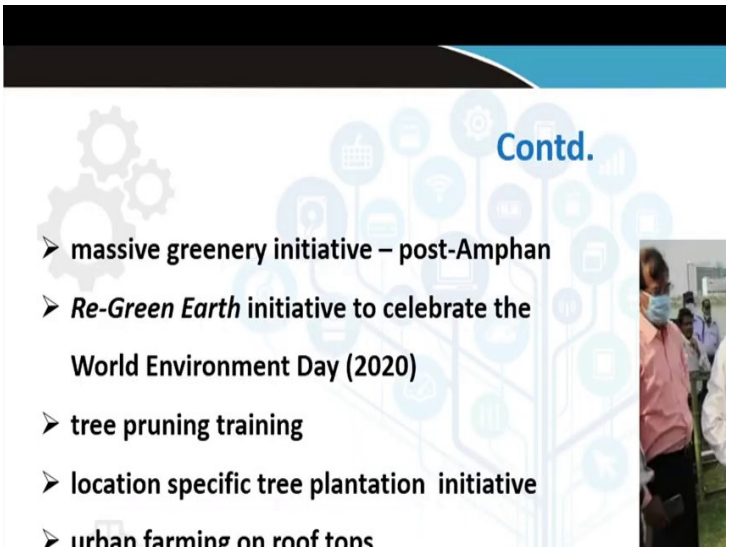

So, Amphan all of us now know about the Amphan's, how Amphan actually battered the Eastern Coast of the Indian subcontinent and Kolkata also was affected by Amphan and several trees I mean big trees were uprooted you know during this particular cyclone.

So, what Rajarhat has been able to do is that there has been a massive greenery initiative during the post Amphan phase and I mean the media says that you know that like almost or around like 4500 trees were uprooted during the Amphan, but Rajarhat has been able to restore around 3500 trees.

I really do not know the details that how this restoration has been done. So, whether it has been a restoration or it has been the plantation of new trees or not. So, those these details I am not very aware of because this is a very recent phenomena, but yes, but at least if you go through some of this media reports and there are some links which I have put in the reference list.

So, if you can go through some of these links or the media coverage on this green greenery initiative during the post Amphan phase in Rajarhat you will come; I mean you will you will see that the media says that I mean more than almost 80 percent of this damage relating to these the trees getting uprooted has been tackled to a great extent.

So, there is also this Re-Green Earth initiative which has been launched which was launched actually the last year to celebrate the World Environment Day. And whole lot

of other activities and other initiatives like for example, tree pruning training is also in vogue. So, the communities the people they have been trained to prune trees.

And the HIDCO also talks about West Bengal HIDCO talks about the need for location a specific tree plantation initiative which means that those trees should be planted which I mean in because the soil quality and the specific soil characteristics and the specific land-use pattern are important variables in order to you know in order to plan location specific tree plantation program.

And also the stresses on along with tall tree plantation, the stress is also on the plantation of medium, height and small high trees including creepers and hedges and also what they say quote unquote "ethnic trees" like mango and palm, right. So, I mean urban farming on rooftops, this is also an important program as part of this smart green initiative in Rajarhat.

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Eco Park: So, if you remember we just discussed Eco Park and Eco Park is like I have personally visited because I am from Kolkata. So, definitely I have personally visited the Eco Park twice or thrice. So, its a big area like covering 195 hectare plot is surrounded by a 43 hectare water body with an island in the middle. So, it is a very big lake area and lush green; I mean lush green patches and interspersed with water bodies etcetera beautiful in that sense.

And Bengali name is Prakriti Tirtha. So, tirtha means pilgrimage and prakriti means nature. So, almost it is a kind of a pilgrimage natures pilgrimage for example, and like it is an urban park which was developed by HIDCO and inaugurated in 2012 and this is the highest park in India the largest actually should not be high, this is this is the largest park in India.

I told that I will mentioned covering an area of 195 hectares plot and surrounded by a 43 hectare water body with an island in the middle and like it comprise of wild flower meadows, bamboo garden, grasslands, tropical tree garden, bonsai garden, tea garden, triple cactus walk, heliconia garden, butterfly garden, a play area and an amphitheater.

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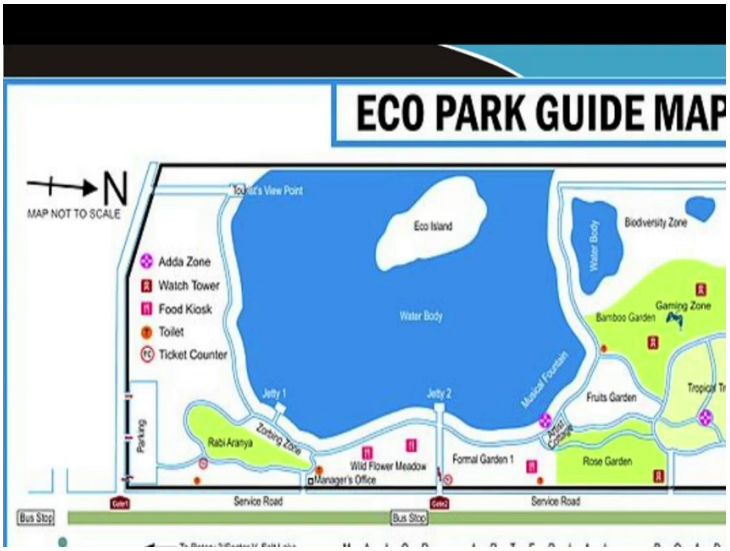

So, this is the grand map of grand guide map of Eco Park and you can see the details and like this is the; this is the Butterfly Lab here and the Amphitheater. So, definitely it is quite an exciting amusement park for tourists and for visitors.

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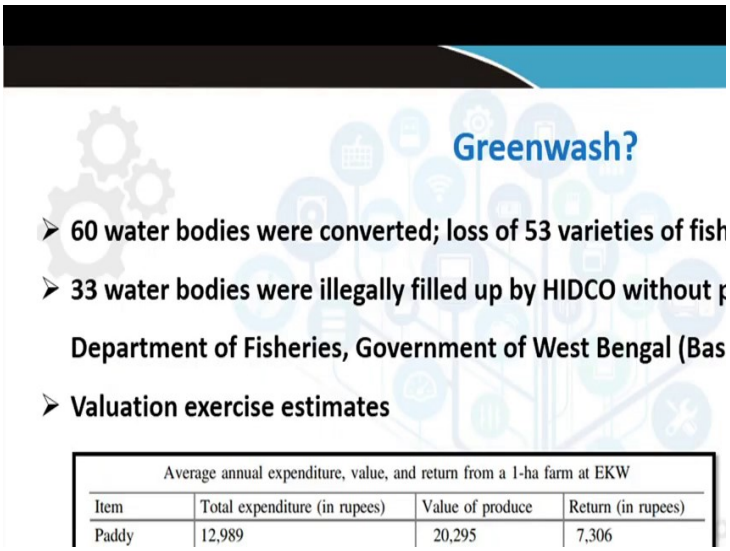

Now, the crucial part in this presentation is that so, we had really discussed we have discussed this all these green elements and green initiatives, but then my question to you would be like is not it important for us to really probe deep into this phenomena to ask the major question or to raise the question that these green elements do they have the potential to really address the larger question and the issue of urban sustainability.

Or are these programs just a green wash making and where you know we are the citizens are making fool of ourselves or we are also getting converted as pawns at the hands of the state bureaucracy. So, we really need to think about it and why I now I would be providing some very important data, which unfortunately is not much talked upon or discussed when we discuss Rajarhat because only the on the glorious part is projected and discussed not the gloomy part.

So, it is important for us to really engage ourselves into rigorous fact finding to understand whether these green initiative is a green wash or not. So, 60 water bodies in the form of wetlands mainly and also ponds were converted and there had been loss of 53 varieties of fish fauna due to this; due to the construction of this township.

33 water bodies were illegally filled up by HIDCO by HIDCO without any prior notification from the or any prior permission actually from the Department of Fisheries Government of West Bengal. So, the environmental economists they have also conducted valuation exercises.

So, environmental economists they know how to you know pursue or conduct the valuation exercises through which they kind of try to mathematically calculate the you know the ecosystem services provided by any ecosystem resource.

So, and I mean there is a criticism because for example, there are scholars there are there are experts who argue that you know all attributes or every single attribute of nature actually cannot be commodified in that way, it cannot be valued because there are so, many hidden attributes. But valuation exercise my personal opinion is that I will not say that I support valuation exercise etcetera, but I think it is also an important mechanism for us to understand you know what we are actually losing even in terms of money.

In terms of like money in terms of the tangible component what we are exactly losing when we are losing an ecosystem resource. And also more importantly when we need to make a point before the policy maker they really understand numbers in a better way than stories or interpretations, but even if you need to narrate stories in front of them to make them understand the gravity of intensity of a particular situation I think your story should also you know your story should also be loaded with numbers.

So, from that particular point of view or from that perspective I think valuation exercises are really important. So, environmental economists they have conducted valuation exercises and they have shown that what has been the loss; what has been the loss when this township actually has been constructed by converting acres and acres of arable land and wetlands, water bodies, etcetera. So, you can just go through the table and you will understand.

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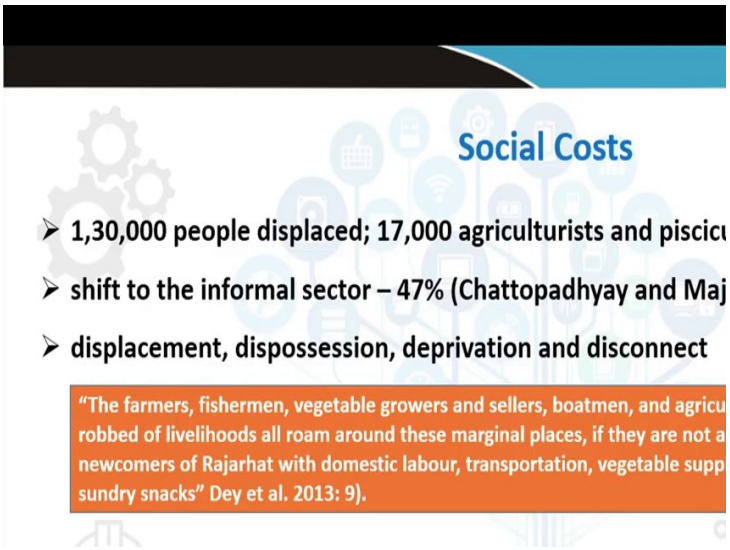

And of course, we know now that these social costs are not outside the purview of ecological cost because for countries like us and also so far as developing cities you know the developing cities are concerned there many people and this is not only I think about developing country cities, it is also about cities across various parts of the world and also you know countries beyond north south binaries.

So, I think that you know when ecosystem resources are kind of they are converted for example, they make way to concrete then definitely with this particular process the there is a direct association of livelihood loss as well. So, many people dependent on ecosystem resources, who are also known as ecosystem dependent or ecosystem reliant communities.

Their livelihoods get affected impacted, disrupted with the disruption of ecosystem resources because you know in case of Rajarhat we see that around 1,30,000 people were displaced out of which 17,000 people were agriculturalists and pisciculturist who used to draw their livelihood or the subsistence and survival from the wetlands and arable lands which were there initially, but which were then transformed or converted into to make way to the new town Rajarhat township.

So, and many people these people who lost their livelihoods they shifted to the informal sector. So, there is data which says that around approximately 47 percent; I mean 47 percent of this people they had to shift to the informal sector. So, there are stories of

dispossession, displacement, deprivation and disconnect and all these four D's I think can then concretize my argument.

And again I am drawing from Ishita Dey and Ranabir Samaddar's book and their formulation mainly that I think that these four D's displacement, dispossession, deprivation and disconnect can enable us now to understand that why Rajarhat is actually not a green city, but is actually dystopic city.

So, Ranabir Samaddar, Ishita Dey in their book and I have just quoted here from their book where they say that "the farmers, fishermen, vegetable growers and sellers, boatmen and agricultural labour now robbed of livelihoods all roam around these marginal places, if they are not already serving the newcomers of Rajarhat with domestic labour, transportation, vegetable supply or serving tea and sundry snacks". So, you can understand you know the social costs of this particular project.

And along with Ranabir Samaddar's research there is another researcher an urban expert who has extensively worked on Rajarhat and she is Ratoola Kundu from TISS; Tata Institute of Social Sciences Mumbai and Ratoola's work Ratoola also provides very interesting information about the rise of new social classes.

So, for example, and also the emergence of parastatals like NKDA and HIDCO Ratoola says that there are parastatals which you know now have the sole agency to make decisions. So, no more the state is making decisions, but these parastatals they are more equipped to make crucial decisions so far as development and construction of development activities and construction activities within this particular township is concerned

And not only that Ratoola also talks about you know, the syndicate Raj. So, young men you know very much into this complex process and procedures of land transfer and land sale and so, how a syndicate Raj has emerged and it is operating you know operating in this particular region and how this syndicate Raj makes the provision of legal enforcement and monitoring almost impossible.

Because there is so much of the mafia network and muscle power you know which to a great extent determine land cell and land transfer in this region.

So, again I have quoted from Ratoola's work. So, she says that the entry of new actors. So, these new actors they are all the market intermediaries for example. So, these new actors and the cobbling together of new constellations of state and non state actors bypassing of existing government bodies as well as established networks of local leadership and governments occupy shifting social scenes in the transforming eastern urban frontier of Kolkata.

So, now you can understand the you know the different impacts of the of this particular project ecological cost, social cost and tangled ecological and social costs.

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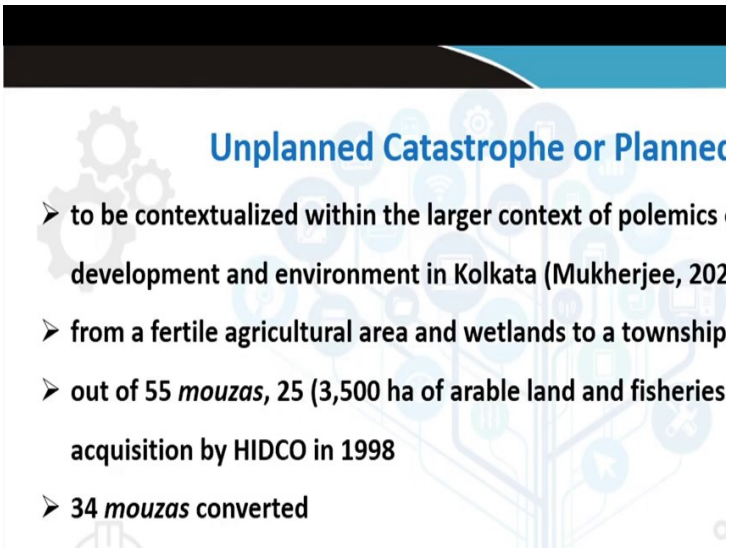

So, now the final question is that how do we perceive Rajarhat? Or you know how do we perceive this all these processes all these you know tangled outcomes? Should it be considered as part of this unplanned catastrophe or a planned disaster operationalized by the state?

So, I think my argument would be to it is important for us to understand the emergence of this new town Rajarhat or to understand even the formulation plan as part of the larger context of the polymix of urban planning development and environment in Kolkata.

So, this is from my book Blue Infrastructures and I would definitely encourage you to go through both chapter 6 and chapter 7 and this idea would get clear because you know this book Blue Infrastructure it not only discusses Rajarhat, but it discusses all the several

other township projects that emerge you know in West Bengal in Kolkata since the 1960s to the present times and why you know it has to be understood within the larger rational or the larger context of polymix of urban planning development and environment.

So, Rajarhat if you see the district gazetteers for example, by O'Malley you will get a description of Rajarhat as a fertile agricultural area and wetlands and like full of water bodies, full of ponds, orchard, nurseries and dotted with villages and settlement and a very I mean a kind of a beautiful settlement pattern, but now you know with this township this agricultural area this fertile I would at the emphasis of the fertile. So, the fertile agriculture area and wetlands absolutely you know got converted to estate to concrete.

So, initially there were 55 mouzas and 15 mouzas comprised a municipality Rajarhat Gopalpur municipality and 40 villages were covered under 6 panchayats. So, this was the jurisdictional dynamics, but you know out of this 55 mouzas, 25 mouzas comprising 3500 hectares of arable land and fisheries were notified for acquisition by West Bengal HIDCO in 1998 under the Land Acquisition Act of 1894 and also the West Bengal Land Requisition and Acquisition Act of 1948.

But what we see in reality, it is not only like also like 25 mouzas, but Rajarhat finally, you know it converted 34 mouzas. So, finally, 34 mouzas were converted and which made way to this particular township. So, West Bengals and Rajarhat was like kind of designated as and this is this is this I have quoted from the HIDCO report.

So, West Bengals first green, eco-friendly, self-sufficient, smart city. So, see this terminologies, green, eco-friendly, self-sufficient, and smart-city intended for decongesting Kolkata through the creation of a satellite city which would provide housing and planned urban infrastructure across different socio economic segments of the population, but it is not the reality.

We know we know now what is the reality actually. So, we know I mean to a great extent that these claims are false you know to a great extent.

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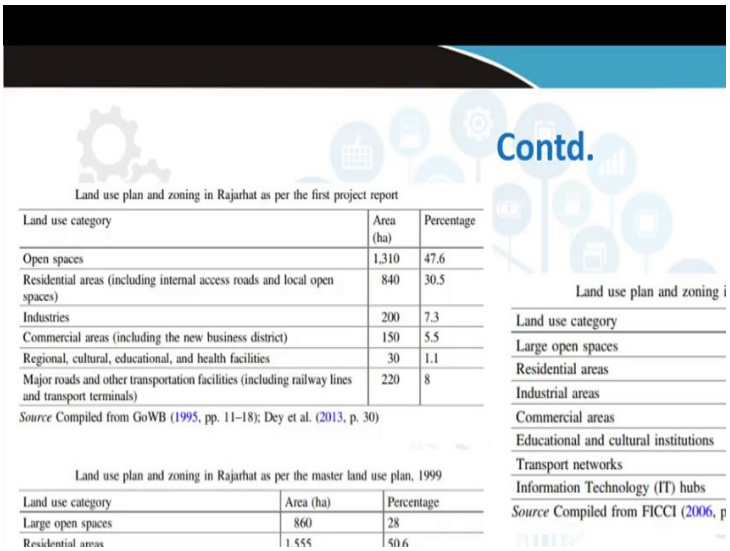

And for example, when in 1990s the township plan was floated. In 1993 the Department of Housing Government of West Bengal mainly you know it kind of it made a task force and a technical committee which comprised of like eminent urban experts and people from the Department of Architecture and Town, Planning BESU, which is the Bengal Engineering Science University.

And SPA the experts working for SPA SPA's School of Planning and Architecture, New Delhi the all these you know. So, the technical committee comprised of very eminent members from all these institutes and then a master plan came up and KMD was also involved and finally, like IIT Kharagpur prepared the final report for the first phase of project implementation.

So, initially if you see the master plan you will see that initially the plan was to kind of develop the township on an area approximately 2750 hectares, on a 2750 hectares land area, but then this area it increased. So, in the revised plan this area this land area it the size increased from 2750 hectares to 3075 hectares 3075 hectares and finally, in the re-revised plan this 3075 hectares also you know it increased to 3779 hectares.

And the most unfortunate part is this is that when initially this 2750 hectares land area was planned to I mean was kind of designated or was kind of appropriated or rather acquired for this particular township project. The idea was that you know I mean there would be several land use patterns. So, for example, in the form of residential plots, in

the form of industries commercial areas and also in the form of open spaces large open spaces.

Again large open spaces in the form of wetlands, water bodies, green land etcetera, but what we see is that in the revisions of these master plans though the size or the area of the land kept on increasing from 2000 2750 hectare to 3075 hectares to 3779 hectares finally.

Unfortunately what we see is that the area for open space kept on decreasing and the provisions for the residential plots and the commercial area and other concrete structure for that matter it kept on increasing. So, one can see that how this quote unquote eco-friendly element actually started taking a back seat and how the housing rationale got strengthened when finally, this particular project was implemented.

So, you just go through these three tables. You know you will understand that I mean what I am actually trying to talk about. So, you can see the latest report, you can see the first land-use plan and zoning in Rajarhat when I mean so far is the first project report is concerned and you can also see the revised plan of 1998 and if you just compared these numbers you can understand whether you know I am making sense or not yeah.

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So, my final argument is that you know is it deliberate erasure, is it a planned disaster. My answer to this question will be yes, it is. Because you know in the project report it

claimed that the township I mean the land which was acquired to make way to the township it had no fishery and no arable land.

[FL] this is a false claim, it is a false attribution it is not true. Because like for example, the ISI, the research by ISI which is this Indian Statistical Institute and Kolkata and also the Geological Survey of India they have absolutely shown through proper data that the project area actually fell within the circumference of the East Kolkata wetlands.

So, unfortunately environmental clearance was obtained from the Department of Environment, Government of West Bengal and relaxations of the provisions of West Bengal Inland Fisheries Act 1984 and West Bengal Inland Fisheries Amendment Act 1993 was sought again by HIDCO through which it could finally, you know kind of fill up the wetlands and water bodies.

And so, I mean Kundu; I mean I think appropriately she argues that it is not an accident if maps of the area prior to the new town development are either unavailable they are unavailable or else these maps simply persuade one into thinking that the land was tabula rasa, devoid of human settlements and occupational activities. So, the maps they have been there is we do not get to see these maps they are not in the public domain.

Because otherwise you know it would have been difficult for the bureaucracy to kind of come up with this false; I mean with these false facts or we I mean with these erroneous claims which is an absolute violation even of the historicity of this particular land or this particular area.

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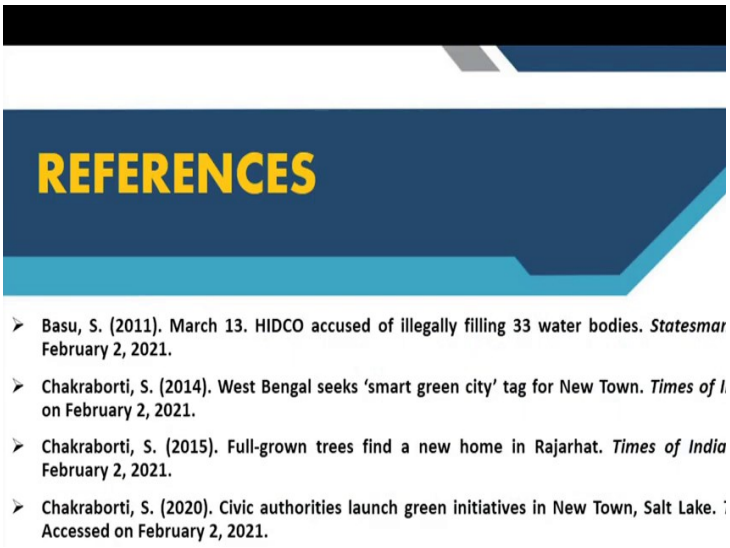

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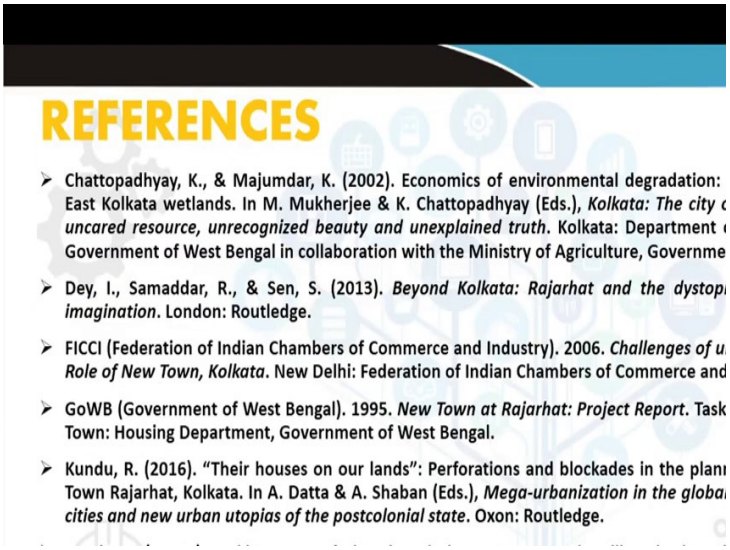

So, yes these are my references and yes.

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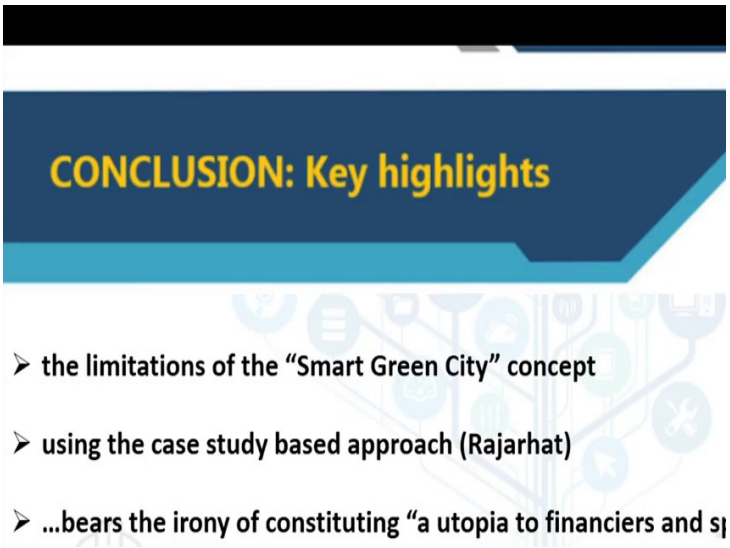

So, I think I would like to conclude by saying that in this particular lecture I think I have been able to bring to the four the limitations of this so called quote unquote smart green city concept or discourse. And I have done this by again using the falling back on the case study based approach and in this case my empirical point of reference has been Rajarhat and definitely this entire process it bears a testimony to the fact and it bears the irony of constituting.

So, Rajarhat, New Town Rajarhat Township it bears the irony of constituting a utopia to financiers and speculators and a dystopia for the urban imagination. So, I think the point with which we or the argument with which we started that whether it would be right to perceive Rajarhat as a green city or a dystopic city I think we have an answer now.

Thank you.