

**Urbanization and Environment**  
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**Module - 04**

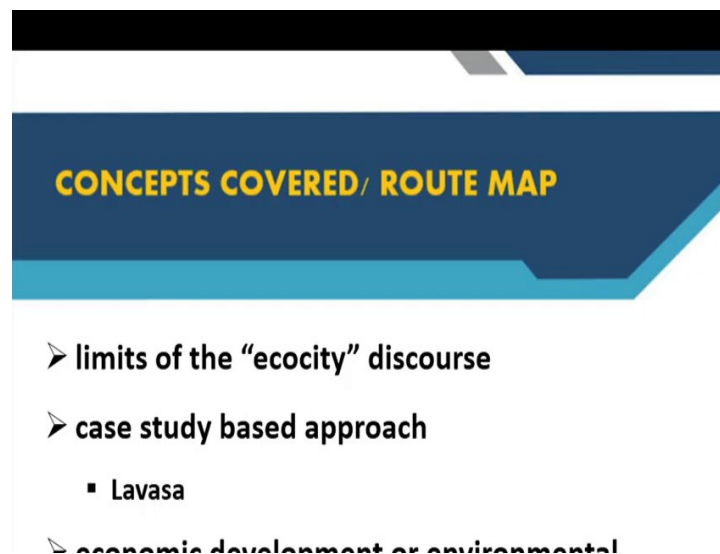
**Urban (environmental) trajectories in India: Plans, policies, visions and missions**

**Lecture - 19**

**“Fantasy Cities”? Understanding Limits of “Smart”, “Eco” and “Green” Doctrines**  
**Case Study 3: Lavasa**

So, in lecture 19, I would be shedding light on Lavasa and Lavasa would be the empirical point of reference; to discuss you know, the Limits of Smart Eco and Green Doctrines. So, this is again the part of the same series on fantasy cities.

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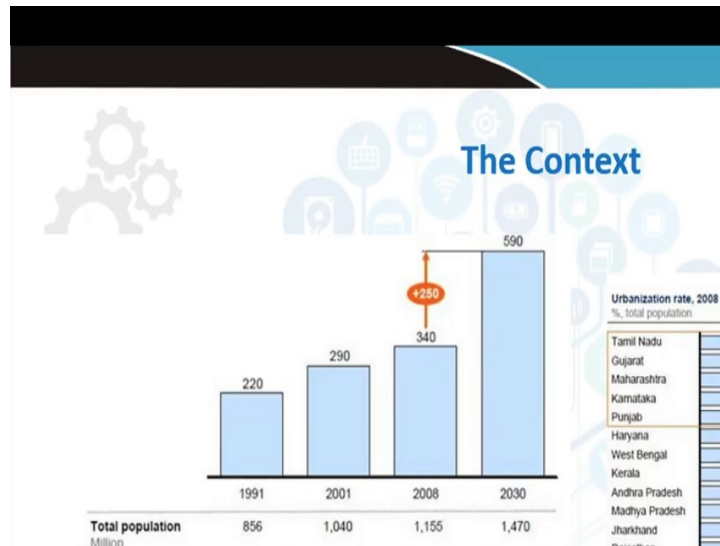


And in this particular lecture, I would be discussing specifically, the limits of the eco-city discourse following the same case study based approach. And here I would be you know discussing about Lavasa, which is a township on the Mumbai, Pune corridor in the state of Maharashtra, India.

And the final question, final important question would be like this eco-city discourse or this eco-city idea finally, you know in which component the weightage is higher; is it economic development or environmental sustainability?

So, has I mean, does this kind of concepts like eco-city could really strike a balance between economic growth or economic development and environmental sustainability. Or is it a kind of a lopsided approach which promotes private investment and infrastructure at the cost of local livelihoods? So, this is again the crucial question which we would be addressing to this lecture.

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So, you know the whole story starts with this particular because again Lavasa when I am discussing Lavasa, the smart city NDA grand smart city project or plan was not yet floated because the Lavasa city I mean this is a particular project which was implemented, exactly in 2012.

And then there is like you will see, that how the whole idea, the idea was floated since 1990s or since the beginning of this particular century, but again the city was finally, though it got clearance, it could obtain all sorts of environmental clearance etcetera and the township was launched in 2012.

So, when I am. So, Lavasa is not a typical smart city case, but then again the smart city discourse was also in vogue, I mean there were whole lot of discussions going on, on smart city principles, but on pen and paper still smart city was not the official program which was floated by the national government.

Because the smart city official program was actually launched in 2030. So, this is, this is slightly before that, but you know during this particular point of time we see that how this concept of eco-cities was drawing whole lot of attention so far as the Indian urban scene, you know was concerned.

So, and you know to start the discussion I think, I would be drawing your attention to a particular report which was published in 2010 by the McKinney Global institute and in this particular report, this the experts they shed light on the trajectory of Indian urbanization and they generate lot of data.

So, far as the Indian urban scene was concerned and this report entitled India's urban awakening here the authors pointed out that you know that by 2030, 590 million people would be inhabiting, you know would be like inhabiting Indian cities.

So, five there will be 590 people living in urban areas and of course, you know the major, I mean the concentration of this population would be on the mega cities, the metropolitan cities like Mumbai, Kolkata, Chennai, Delhi etcetera.

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**"Planned Portfolio"**

- India will need a planned portfolio of at least twenty to thirty new cities (McKinsey Report 2010)
- ecocities along high-speed regional transport networks
- answer to:
  - urbanization challenges
  - rural-urban migration

So, the report itself suggested that the immediate need was I mean, to kind of come up with a planned portfolio of at least twenty to thirty new cities. So, in this way you know the idea of eco-cities got formulated and this eco-cities meant the development of a cities along high speed regional transport networks.

So, you know the corridor idea which we also discuss the in our presentation on Dholera, it also applies here to a large extent. So, this the design and development and implementation of eco-cities project along high speed regional transport networks would provide answer to as per this McKinney Global institute report would provide answer to urbanization challenges, rural urban migration and sustainable development simultaneously.

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So, this was a grand idea. And it is quite important here to you know kind of differentiate between the Indian version of eco-city projects and the eco-city projects which I mean, which were implemented in several other cities, in different other parts of the world.

For example, the United States, Latin America UK, other European cities etcetera. So, for example, if you remember you know my one of my previous lectures where I talked about the different urban models and you know plans including ubiquitous city, compact city, zero carbon emission city, etcetera.

So, here also you know India started thinking in terms of the zero carbon emission cities, but we all now know the fallacy, you know embedded in this kind of an idea because we discuss that how according to the second law of thermodynamics this is a false idea, false notion.

Because as per the second law of thermodynamics, no organism or no machine can actually operate at 100 percent efficiency because there would be some form of waste generation, there would be some form of waste of energy or materials, but anyway let us not go into the that debate or the discussion here.

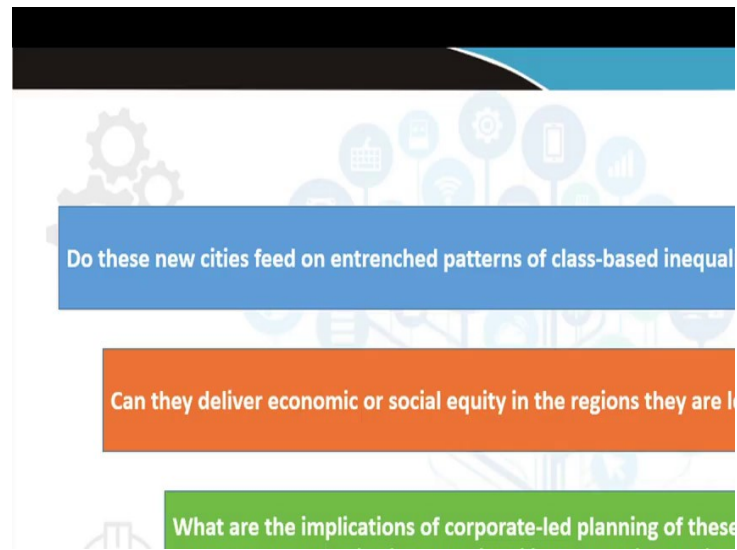
But let us rather focus on the Indian version of eco cities because why Indian version of eco-cities is different from the eco-cities projects in the other parts of the world because you know the Indian urban scene is quite challenging. So, definitely you know Indian eco-city planning had to be more ambitious to kind of cater to the typical challenges that I mean the Indian subcontinent actually encounter.

So, the whole idea of Indian eco-city is kind of built upon incorporation of a variety of eco friendly features and these are, the these are, these are all the major features so, far as the Indian version of eco-cities is concerned. Ownership by corporate group or a consortium of developers, growth coalition, this is known as growth coalition.

Drawing significant concessions in tax, environmental and labor laws at regional and national level, land use combining retail, commercial, leisure and residential spaces with limited manufacturing. Governance managed by a consortium of developers with limited power sharing across other groups, alright, and then linkages with mega city or wall city regions through airports or high speed transport networks.

So, the whole emphasis actually on their development of this high speed transport network. So, that corridor idea right, and master planning and design by international firms. So, you can see how you know, I mean the rational or the logic of transnational capital or transnational funding is very much embedded in this kind of concept of so, of eco, eco-city.

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Now the question is and again I am you are very much inspired by the work by Ayona Datta who is a leading urban geographer and also you know an urban expert, um!

And she has also researched a lot on cities like Dholera, Lavasa, etcetera and Ayona you know raises a few questions and she says that it is important for us to really understand the mechanism or the nature of India's environmental laws, litigation and policy frameworks.

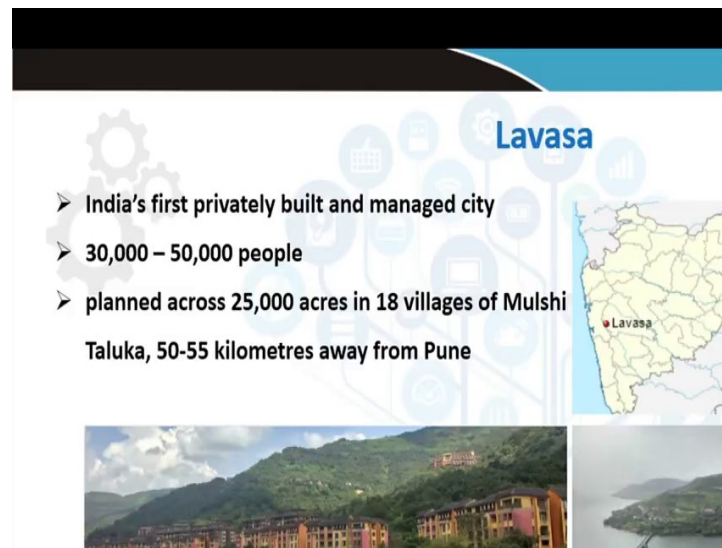
In order to see, that you know whether our eco-cities are actually environment friendly cities or not and by environment friendly it means that whether these eco-cities are being able to kind of cater to the larger agenda and larger notion of urban sustainability or not.

So, these are the three crucial questions which I have borrowed from Ayona Datta and her you know, like monumental work, her instrumental work on the city of Lavasa which she published in this environmental, environment planning, see an article which comes out from Sage.

So, these are the three questions that she raises; the first question is, do these cities these new cities, that is do these new eco-cities feed on entrenched patterns of class based iniquities? Number two, can they deliver economic or social equity in the regions they are located in? And what are the limitations of corporate led planning of these cities for delivering on the challenges of urbanization, sustainability and regional migration.

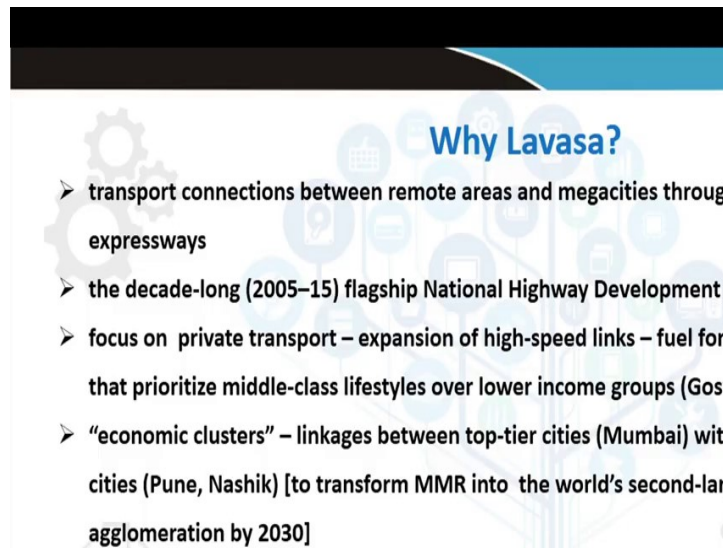
So, this remains crucial and I think, in this lecture I would be basically trying to attempt I mean I would be trying to answer these questions by using Lavasa as the case study and again I mentioned, I let me reemphasize on the fact that, to a great extent I mean, this Lavasa case study, I am borrowing from Ayona Dattas work.

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So, Lavasa was designated as the first, or Lavasa can be considered as the first privately built India's first privately built and managed cities with the aim of accommodating like 30,000 to 50,000 people and so, they like the soaking population from the hinterland and it was planned across 25,000 acres which means like approximately 10,000 hectares in of 18 villages of Mulshi Taluka 50 to 55 kilometers away from Pune.

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Now, why Lavasa? This I think we have discussed a bit in our previous slides. So, the major emphasis you know on this transport connections between remote areas and megacities through again, I emphasize through high speed expressways, and why this high speed expressways constructing this high speed expressways became crucial? Because you know this is absolutely reflected in the, in the, in the, in the, in the, in India’s 11th plan, in India’s 11th plan which was published in 2006.

So, in this 11th 5-year plan report, it is mentioned that how India kind of formulated or you know it kind of targeted 9 percent planned economic growth in order to become a prominent star you know in order to become a rising economy in the global market, in the global economic scene.

So, the whole idea was to also kind of, connect this whole project of the construction of high speed expressways with a decade long flagship project of National Highway Development Plan and the focus was on private transport, through the expansion of high speed links, but then again there are scholars for example, Goswami argues that how I mean, there was potential that it would, that the there was potential is this plan to kind of fuel forms of mobility that prioritize middle class lifestyles over lower income groups.

So, immediately you know this one can see, how this whole plan is very much, is very much ingrained with or dotted with unequal outcomes with inequity. So, but India planned for mega city economic clusters by linking top tier cities like Mumbai with



second tier cities like Pune or Nasik to transform for example, MMR or this Mumbai Metropolitan Region into the world's second largest urban agglomeration by 2030.

And it was declared that you know or it was thought that this would have been a kind of a win win situation. So, the construction of, through the construction, I mean the construction of high speed expressways why? Because it would be able to tackle poverty elevation and empowerment through increased rural urban linkages at the same time.

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**How Lavasa?**

- the Mumbai-Pune expressway
  - 1990s project
  - displaced a total of sixty-six villages and 97.05 ha of forest land
- new momentum, funded through PPPs
  - phenomenal rise in luxury gated developments
  - construction of India's first privately designed, financed, and built city along its route

☐ Aamby Valley

LAVASA - INDIA'S FIRST PLANNED HILL CITY,

Now, how Lavasa? So, again this Lavasa is a township which is located in this Mumbai Pune expressway and this Mumbai Pune expressway has a bit of a history. So, for example, this was launched by the Maharashtra State Government, it was a flagship project of the Maharashtra State Government which was like formulated long back in 1990s.

And during that time it actually displaced the total of sixty-six villages, and 95.05 hectares of forest land made way you know to the to the Mumbai Pune expressway, but then I mean for the timing it remained (Refer Time: 15:18) and then again there was a new momentum after 15 years and then the project was funded through PPP's which means Public Private Partnerships.

And immediately there was a phenomenal rise in luxury gated apartments and construction of India's first privately designed financed and built cities along its route the

two major example being the Aamby valley and Lavasa. So, here we would be mainly focusing. So, here we are mainly discussing you know Lavasa. So, India's first planned hill city, one fifth the size of Mumbai.

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So, far as the you know. technical details are concerned, it has been constructed by the HCC, which is this Hindustan Construction Company and the director of this company or the leading I mean, the instrumental, the person who would also remaining instrumental in kind of conceiving you know this whole project of Lavasa is Ajith Gulabchand.

And this project was designed and planned by HOK architects and this project would not have been possible without the passage of the special regulations for hill station development by the Maharashtra Government by the Maharashtra State Government in 1996 and these special regulation it actually provided approval or sanction towards the construction in the most ecologically sensitive landscapes in India for example, the Western Ghats.

So, is not it the greatest irony. So, far as urban planning is concerned because on one hand we are talking about eco-cities. So, on one hand you know, the they are called they are designated as eco-cities and on the other hand you know this eco-cities have come up, or you know this eco-cities have been planned on the most sensitive ecological patches or the ecological zone and landscape.

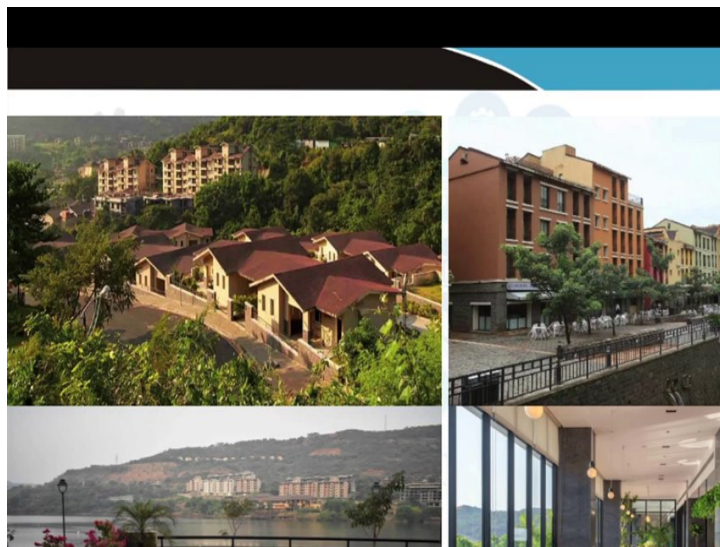
So, again like 25,000 acres that which is roughly 10,000 hectares of land or the forest land had to be acquired for the construction of Lavasa for the construction of this township in 2004 environmental clearance from the Mumbai state environment department was sought for urban development of 2000 hectare of land.

And this we will discuss you know in the subsequent site that how the project I mean , it was it, was it, was criticized and it was also declared illegal by the Ministry of Environment and Forest because actually Maharashtra State Environment Department did not have the power, it does not have the power to kind of give, this kind of an environmental clearance, but you know I mean the clearance was sought.

So, anyway so in 2000 this is as the chronology. So, in 2004 this environmental clearance was sought and I mean and immediately 2000 hectares of land, I mean it was notified that this 2000 acres of land would be acquired for this township project and then again another 3000 hectares was planned. So, I mean for, the for implementing the second phase of the project.

So, in 2008 the Lavasa corporation limited was formed or established, this is also a very important step why because like this was a special planning committee which was formed , which had the power to carry on or to plan you know development activities within the designated project area.

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So, yes land taken from the villages, land snatched away from the villages through middlemen midway to you know to high rise buildings and villas, sophisticated luxury, luxurious villas you know very sophisticated and digitally enabled luxurious cafes, golf resorts, hockey resorts, then like several other posh educational institutes and universities also came up in this particular hill city.

For example, the University Oxford, then for example, the Swiss hospitality institute the said MBA Institute. So, I mean one can understand and one can see, the nature or the pattern of urbanization or urban development that occurred in this planned and fully financed private township project or the eco-city of Lavasa.

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Yes, and Lavasa also like it was recognized by several important leading urban agencies and it got global acclaim, it was also designated as a world class city for example, by the McKinley Global Institute itself and the Environmental Management Program it comprised you know several modules and components including water conservation including initiatives in terms of water conservation, rainwater management, biodiversity enhancement, etcetera.

And like lot of ideals the I mean the ideas on which the eco-city was designed they were for example, minimizing they were based on several principles including minimization of , or reduction of soil erosion, hydro seeding, biomimicry and also raising awareness about sustainability among surrounding village, villages or villages. It also got the lead

certification of excellence so, far as its energy saving features were concerned and as I mentioned it was designated as the world class city by the McKinley Global Institute.

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Now, for whom and at what cost , the major question you know across all our case studies, to validate and demonstrate and prove, scientifically prove that you know, scientifically prove the limits that are embedded that are entrenched that are ingrained you know in these kind of top down technocratic quote unquote smart city plans.

So, like again I am I have borrowed from Ayona Datta here. So, Ayona Datta kind of interviewed some renowned ecologists and like and in their interviews this ecologist said that how their low cost local techniques of restoration and conservation which they actually recommended in the, in this, in the area in the stretch were violated.

They I mean, the people, the authorities who were involved with this city making plan or the city making city building project, they did not pay hit to the recommendations made by the renowned ecologists who were favoring low cost local techniques.

For example, transplantation of native species, building on lower slopes and restoration through seed collection and replanting and also the use of locally available materials for building. Because this is an ecologically sensitive zone, but you know the authorities considered these options to be extremely inappropriate for global marketing.

Because you know to them this international, internationally renowned and internationally accepted environmental technologies, I mean were more viable to kind of I mean so, far as global marketing was concerned and thus like environmental internationally recognized environmental technologies like hydro seeding and biomimicry was followed in the heat slopes that also led to the transplantation of non native species, but this is absolutely against the ecological principles so, far as this ecologically sensitive zone of the western Ghats was concerned, but yeah.

So, the result was again disposition, displacement and disconnect. Lavasa targeted upper middle class youth populations and marketed itself explicitly towards the global population meant that it ran the risk of producing exclusionary urban spaces. So, the city unfortunately it could not you know, it cannot be, it cannot be considered as an inclusive city.

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So, slippery laws, this is again the larger context which we really now need to discuss before we wrap up this lecture on eco-cities and which with Lavasa as a case study. So, for example, if you see the Indian Constitution, environment is not included as a fundamental right within the least of fundamental rights.

So, environment is not a fundamental right. So, only in 1976 in this 42<sup>ND</sup> amendment of the Indian constitution environment became a part and component of the Directive Principles, but there is an indirect connection to this. So, for example, if due to, due to

any particular project, development project which impacts an ecosystem resource livelihoods get affected or disrupted.

Then the people they have the right to kind of to legally, to legally place a litigation in front of the court to you know, kind of annul the particular project which is a catastrophic for their, for their subsistence or survival. So, livelihood is again a fundamental trait.

So, one need to understand you know this concept of environmental justice in this particular mechanism, that environment is not a fundamental right it is part of the directive principles, but livelihood is a fundamental right.

So, if livelihoods get impacted upon or disrupted due to any development plan or project impacting the environment, then definitely the people have the right to file cases before the court, against you know that particular development project and you know the people can demand or they can demand environmental protection, they can demand I mean they can demand ways through which environmental protection can be ensured.

Because otherwise the development project can be catastrophic for their own survival and sustenance. But then the problematic part in this whole story is that environmental disagreements in this country, in India are settled on a case by case basis and at the discretion of the judiciary.

So, there is no you know that kind of a written, how do I say a standard law or enforcement mechanism through which environment can actually be taken care of. So, it is quite slippery in that sense.



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But then, one major development, I would say positive development that occurred in our country, in 2006 is you know this National Environment Policy was passed which attempted to strike a balance between the conservation of natural environment and the and local livelihoods, through the, through I mean by consulting or by you know incorporating peoples voices or by kind of including local people in the decision making process.

So, it try to kind of create a linkage between urban poverty with loss of rural livelihoods because this idea came out clear in this particular policy that you know that there is definitely an inter linkage between urban poverty and loss of rural livelihood. So, it is important to kind of ensure rural livelihoods in order to also tackle urban poverty or also in order to tackle several other parameters so, far as Indian urbanization is concerned.

And this national environment policy, also brought together several existing policies like the National Forest Policy, the National Conservation Strategy and Policy Statement on Environment Development, the Policy Statement and Abatement of Pollution, the National Agriculture Policy, the National Population Policy and also the National Water Policy.

But again, the flip side in this whole story is that, the power of the local communities definitely you know definitely are much less I mean if we consider the power of the



industrial corporate and commercial levels. So, that is what is exactly happening within the Indian urban environment scenario.

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So, as far as this particular case of Lavasa is concerned. So, you know as it is 2006 National Environment Policy was already formulated. So, in 2010 November, MoEF that is Ministry of Environment Forest pressurized the Lavasa corporation you know and saying that Lavasa this project should not continue.

Because environmental clearance from the center under section 5 of the Environment Protection Act, EPA was not obtained; then of course, Mumbai high court was dragged into this conflict, into this fight because it had to be finally, sought with the intervention of the judiciary and in December 2010 the plea from the Lavasa corporation was rejected by the Ministry of Environment and Forest.

And in 2011 January the Ministry of Environment and Forest they formed an expert committee who visited the area, the project, the township and they reported environmental non compliance in the form of massive deforestation, illegal quarrying along hill slopes, lack of sustainable water supply, lack of rehabilitation for villagers and forcible acquisition of land from villagers.

So, absolutely you know the whole case went against this Lavasa corporation and the project and finally in 19<sup>TH</sup>, 2011 January 19, the Lavasa project was actually declared to

be illegal, then the corporation became desperate they submitted lot of documents in, I mean before the MoEF and then again, the Mumbai High Court it was dragged.

And I mean finally, it was also asked to see these documents, to go through the documents and confirm like whether the environmental compliance mechanism was followed or not, but then I mean the finally, there was a kind of a compromise which was met and the Lavasa corporation agreed to kind of meet certain fresh preconditions which were, which were asked by the Ministry of Environment and Forest.

I mean so, far as environmental clearance was concerned and finally, you know we again the details are not in the public domain, but finally, you know the Lavasa corporation mentioned that they, could adhere to the all the provisions or all the suggestions and recommendations or the preconditions which were provided or put forward by the Ministry of Environmental Forest.

And finally, like this environmental clearance was received from Ministry of Environmental Forest in November 2011 and in November and in 2012 the project was finally, launched.

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**Ghost City**

- an “incomplete shell”, a “nightmare” (Antony and Pandya 2018); “ghost town” 2019)
- too many distressed sellers and not enough buyers in this market
- INR 41.5 billion of debt
- 94 ha of tribal land regained

Neglect has taken the Mediterranean sheen off once-bright red and yellow buildings. The cobblestone streets and



So, but what is the situation now? So, I have consulted some reports and also some media coverage, recent media coverage for example, 2018, 2019, 2020. So, now the present state, presently it is in a pathetic state because Lavasa.

I mean, for example, there is a there is a very good report in the Business Standard which also come out came out in print, in 2018 the this is a report by Anthony there is a coverage actually news coverage by Antony and Pandya where they say that the Lavasa is in an incomplete shell, it is a nightmare and Aggarwal in his you know, in his piece which was published in Mongabay 2019, he says that it is a ghost town, it has become a ghost town because there are too many distressed sellers and not enough buyers in the market.

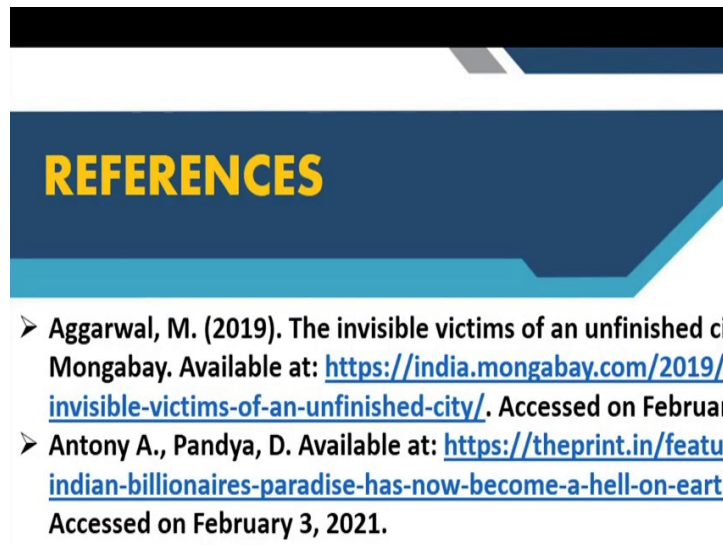
Same problem also you know I mean the same problem Rajarhat is also encountering with and this company HCC and I mean the key person of the company, I think yeah Ajit Gulabchand, he is under a debt of 45. 41.5 billion INR , which needs to be repaid and now you know HCC is backing out or already it has backed out from this grand project and I mean there is news that a Pune, Pune private company is now willing to you know take up this project, but we do not have any confirmed news on this yet.

But what happened is that in 94 hectares of tribal land has been regained. So, people they are continuously protesting against their deprivation, against non entitlement of land and sometimes they are also being successful.

So, for example, this is an, this is an instance of success where 94 it is a small hectare of land, but again you know at least the people have been successful to kind of regain 94 hectares of tribal land and so, this is the condition now, I mean most of these houses are people do not stay here anymore.

So, several housing complexes for example, they are in search of customers, but in vain. So, neglect has taken the mediterranean sheen off once bright red and yellow buildings, the cobblestone streets and stone bridges are going growing moss sidewalks are crumbling in places. So, this is the present situation.

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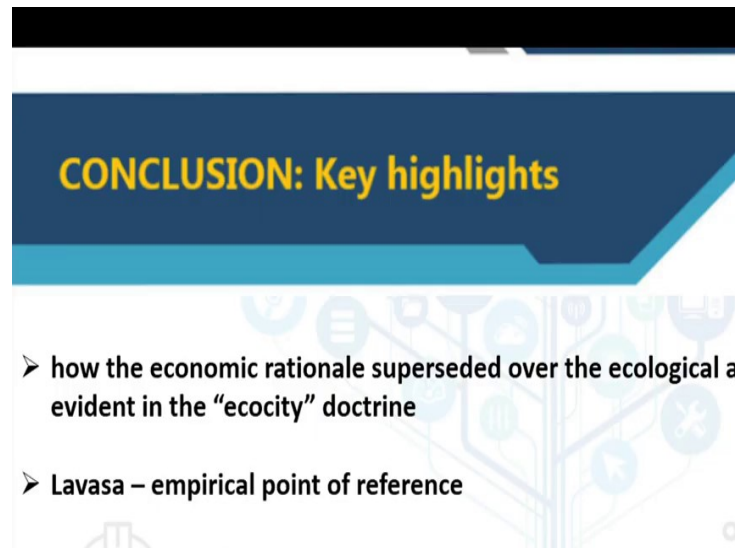


So, these are the references, please go through these references and definitely go through Ayona Datta's article.

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And yes. So, I would like to conclude, by saying that here in this lecture we have discussed how the economic ration and actually superseded over the ecological agenda which is absolutely evident in the eco-city doctrine and we used, we have used Lavasa here as the empirical point of reference and we have discussed why strong Environmental Policy framing and regulation are crucial to ensure environmental justice and develop inclusive cities.

So, again this third statement which I am making the third point again I have borrowed it from Ayona Datta. So, this is Ayona’s argument that why strong I mean, Ayona says that, she argues that strong environmental policy framing and regulation are crucial to ensure environmental justice and develop inclusive cities.

But I would like to add another point to this, my argument would be that it would also depend on a larger and deeper understanding of the urban environmental dynamics especially so, far as in Indian cities, but you know so far as all other cities the global cities are also concerned. So, it is also important apart from you know the strong environmental policy framing and regulation.

It is also important for us for urban experts and for you know anyone and everyone, under the sun who are involved in this urban projects, who are involved with urban environment in some form or the other it is important for all of us to have a more nuanced and detailed and larger understanding of urban environmental dynamics for

which detailed understanding and exposure to urban environmental social sciences interdisciplinary frameworks are also crucial.

So, I would be covering the urban environmental social sciences interdisciplinary frameworks in the subsequent presentations within this particular course on Environment and Urbanization.

So, thank you and please go through the references and let us also engage ourselves in the forum. If you have any question please do not hesitate to ask and if you have insights and inputs to add you know to this lectures and presentation please go ahead. So, that there can be a reciprocal learning, there can be a mutual exchange through which we would be able to consolidate our grip and grasp on the subject.

Thank you.