

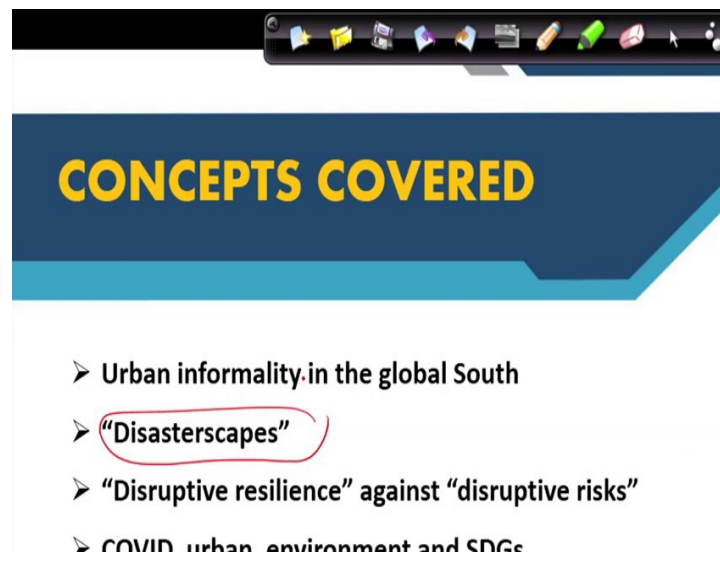
Urbanization and Environment
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Module - 01
The Urban and the Environment during the Era of the “Overlapping Cenese”
Lecture - 06
Covid, Urban Informality and Environment: Context Global South

So, hello everyone. We are still on module 1, but this is going to be the last lecture for module 1. And this is on COVID, Urban Informality and Environment, and our focus of attention would be on the Global South as we discussed in our earlier presentation.

So, we have to understand this relationship between the between COVID-19, I mean the, I think the greatest pandemic that modernity is confronted with and issues of urban informality how you know the challenges of COVID actually get exhibited within the urban informal context and especially you know for the megalopolises or for the mega cities of global South.

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So, the concepts which we will be covering here are urban informality in the global South, what urban informality is all about. And I have kind of conceptualized this notion and I think this can be a useful theoretical traction, so this disasterscapes. So,

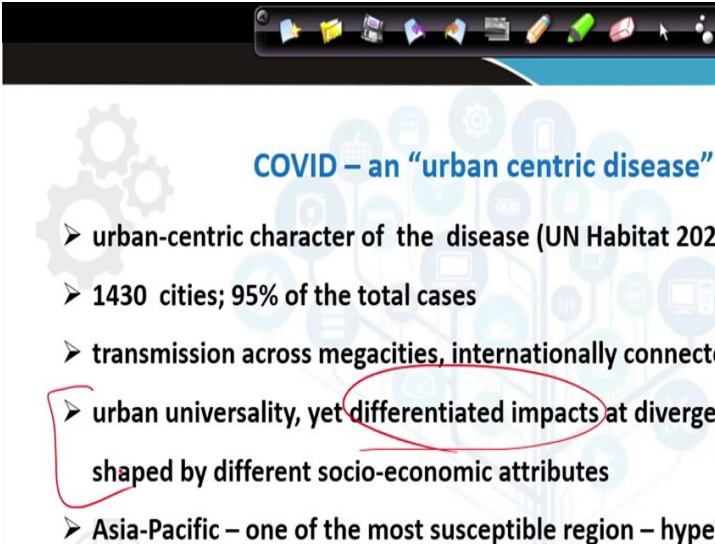
how you know disaster gets transformed, I mean how hazard actually gets transformed into a disaster when the hazards are faced by already vulnerable communities inhabiting vulnerable patches.

So, I think, so we will be definitely talking about disasterscape and I would be elaborating on this particular concept of disasterscape which I think is a significant theoretical traction. So, then I will be talking about you know the resilient practices or the mechanisms through which we need to think about urban environmental resilience in our contemporary times.

But then I would be talking about disruptive resilience as a as an approach to kind of cope with or to fight against disruptive risks of our present times. So, we will discuss disruptive resilience against disruptive risks. And finally, I would also be talking about, but briefly I would be talking about COVID, urban, environment and the SDGs, the sustainable development goals.

But I would just touch upon you know this concept, but what would be important for us is to understand you know the relationship between these 4, COVID, urban, environment and sustainable development goals, and how they are all interconnected to each other.

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COVID – an “urban centric disease”

- urban-centric character of the disease (UN Habitat 2020)
- 1430 cities; 95% of the total cases
- transmission across megacities, internationally connecte
- urban universality, yet differentiated impacts at diverger
shaped by different socio-economic attributes
- Asia-Pacific – one of the most susceptible region – hyper

So, as per the report of UN Habitat, so this is a very recent report. So, and we all we have seen this ourselves that how this COVID is actually an urban centric disease. And why? Because 95 percent of the total cases, they have occurred in the cities. So, out of like roughly 210 countries or so, like 1430 cities are very much affected by COVID-19.

And why this transmission has been a lot more in the mega cities because you know you if you remember we had a map where you know we tried to kind of map the contagion, right. So, if you remember that map in the one of our previous lectures, so we also that map quite like I mean that map illustrated quite efficiently that how you know this all these cities all these terminuses they are internationally connected.

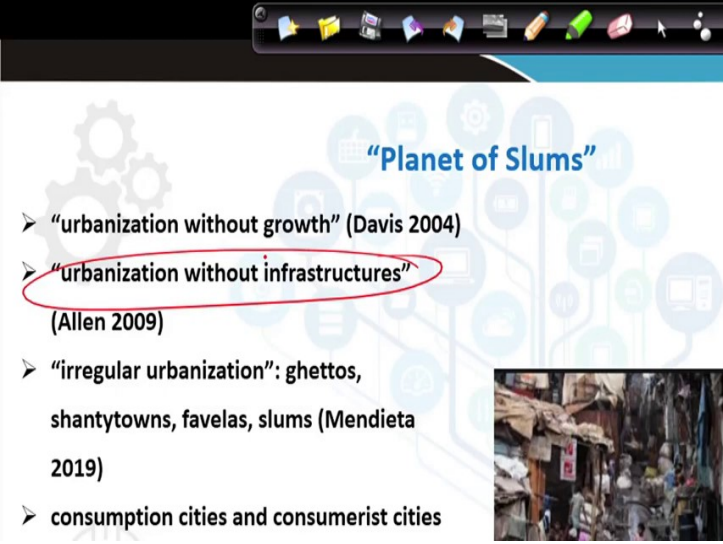
So, as they are internationally connected, so the transmission rate across these mega cities, I mean scientifically and technically you know they are the they are the highest. So, but then this is a major argument and this is a major thing which we need to think about that though COVID has I mean though COVID can be designated or understood as an urban centric disease.

But at the same time we have to keep in mind that it has differentiated impacts, it has differentiated impact for different spatial sites, again shaped by different socioeconomic characteristics or attributes. And this is the core of our discussion. This will be the core of our discussion for this presentation or for this lecture.

And for example, if you take the example of like Asia-Pacific, so, Asia-Pacific is one of the most susceptible region. Why? Because Asia is definitely it is undergoing and it is encountering hyper urbanization. We had discussed this in our previous lecture, in the previous lecture.

And the nature or the character of Asian urbanization is that like the it is irregular urbanization. So, irregular urbanization, which means that like one-third urban population actually they inhabit the slums and squatters so, they are the slum dwellers and they are squatter dwellers.

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The slide features a title "Planet of Slums" in blue text at the top center. Below the title is a list of four bullet points, each preceded by a right-pointing arrow. The second bullet point, "urbanization without infrastructures", is circled in red. To the right of the list is a small photograph showing a dense, makeshift settlement with shacks and debris. The background of the slide is light blue with faint icons of gears, a smartphone, and a laptop.

- "urbanization without growth" (Davis 2004)
- "urbanization without infrastructures" (Allen 2009)
- "irregular urbanization": ghettos, shantytowns, favelas, slums (Mendieta 2019)
- consumption cities and consumerist cities

So, this brings us to the problems to the additional problems, the additional challenges, and additional vulnerabilities of urbanization in the global South for developing cities and all of us I mean most of us I think we are aware about Mike Davis's work on this.

So, Mike Davis, he wrote Planet of Slums which was published in New Left Review, and this is a I mean this is a major it is a path breaking work where he talks about urbanization without growth. And urbanization without growth you know in this South global, I mean in these Southern cities, this can be contextualized and we can immediately understand you know the legacy of the geographical and political you know conjunction.

So, for example, the debt crisis of the 1970s followed by the IMF led restructuring of third world economies and then the iron laws of advancing technologies. So, the results, so, the outcomes have been soaring prices, but falling real wages and skyrocketing of urban unemployment.

And apart from Mike Davis, there are other like geographers and also social scientists who have discussed this in great detail. For example, people like David Harvey and also Joseph Gaugler. So, Gaugler's 1997 Oxford book on cities I mean on specifically on issues and policies relating to cities of the global South of the developing countries is I think should be mentioned in this context.

And Adriana Allen, we discussed Adriana Allen in our last lecture, and Adriana Allen also has talked about this particular syndrome of peri-urbanization. You know as an outcome of present day urbanization. So, what is this peri-urbanization? So, peri-urbanization Adriana says that peri-urbanization is urbanization without infrastructures that is though these areas these have become urbanized in our recent times.

But at the same time they suffer from lack of utilities, right, lack of public provisions, like clean drinking water or appropriate sanitation facilities. So, they have urbanized, but they still lack, you know they are not properly covered by networked infrastructures. So, they are non-networked cities, non-networked urban spaces, with it is you know with its multiple problems.

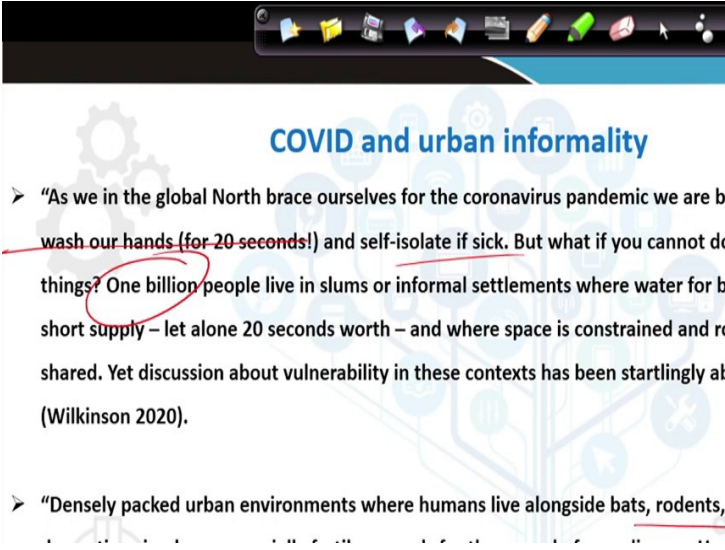
So, this is definitely this Mendieta 2019. So, Mendieta in his article called edge city talks about irregular urbanization where he talks about you know how this present day urbanization in global South is very much associated with growing numbers of ghettos, shantytowns, favelas, slums, chawls, etcetera.

And on the other hand, you know they are consumption cities and they are consumerist cities. So, by this I mean that consumption city because they are gobbling up this, ecological infrastructures like anything, and on the other hand consumerist cities through they are also like the rate of emission through this changing lifestyle and changing behavioral you know choices in terms of consumption.

This is also quite remarkable and quite different from what we, what the planet visualize in the preceding centuries. So, and the paradox, there is a there is also a paradox which is ingrained in this story that is the paradox of the great divide. So, the paradox between consumerism on one hand, mega consumerism if I say, hyper consumerism and deprivation on the other hand.

So, deprivation in the form of you know the growth of these favelas and slumps etcetera, where people live below, much below the normal or the basic living, human living standards.

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The image shows a presentation slide with a dark blue header bar containing various icons. The main title is "COVID and urban informality" in blue text. Below the title, there are two bullet points. The first bullet point is partially obscured by a red circle around the word "One" and a red line underlining "wash our hands (for 20 seconds!)". The second bullet point is partially obscured by a red line underlining "bats, rodents,". The background of the slide features a faint, light blue graphic of gears and a network of lines.

COVID and urban informality

- “As we in the global North brace ourselves for the coronavirus pandemic we are being told to wash our hands (for 20 seconds!) and self-isolate if sick. But what if you cannot do these things? One billion people live in slums or informal settlements where water for basic needs is in short supply – let alone 20 seconds worth – and where space is constrained and resources are shared. Yet discussion about vulnerability in these contexts has been startlingly at odds (Wilkinson 2020).
- “Densely packed urban environments where humans live alongside bats, rodents,

So, yes, COVID and urban informality, and this is something where ideas which is this Institute of Development Studies Sussex, and IIED which is this International Institute of Environment and Development they have produced quite a bit of work in the last few months.

And this is from the write up by Annie Wilkinson, and Annie Wilkinson says that what why do we need to worry you know about the impact of COVID on urban informality. And she says that, and this quote is very very important. So, she says that as in the global North, as we in the global North brace ourselves from the coronavirus pandemic we are being told to wash our hands for 20 seconds and self-isolate if sick.

So, these are the two all of us known and all of us are you know aggressively following this in order to remain safe and healthy, that is we need to wash our hands for 20 seconds at least and self-isolate ourselves if we are sick. So, these are the two bare minimum safety measures which we need to follow if we want to remain safe. So, washing our hands and self-isolating ourselves.

But what if you cannot do either of those things and why cannot do that? Because, why cannot do these things? Because 1 billion people who live in slums or informal settlements where water for basic needs is in short supply, let alone 20 seconds

worth, and where space is constrained and rooms are often shared yet discussion about vulnerability in this context has been startlingly absent.

So, it captures the crux of the problem that. So, what about the 1 billion people, can you see the number even. So, 1 billion people they do not have the luxury to afford, you know they do not have the luxury to wash their hands for 20 seconds because they are not connected to safe and clean water.

So, they lack, they are deprived from this basic public utility. And on the other hand, they also they the housing provisions are so inadequate that it is not possible for them to self isolate themselves if they are sick. So, what happens is that the transmission rate or the spread of the infection I mean these dangers are very much eminent in these informal settlements.

So, this is again they are the two researchers from IIED, International Institute of Environment Development, and Fevre and Tacoli. So, they say that densely packed urban environments where humans live alongside bats, rodents, birds, pets and domestic animals are especially fertile grounds for the spread of new disease.

So, here viruses or path other pathogens can easily jump from species to species and evolve to be infectious to multiple hosts. So, this is another dimension of the problem that what can happen in urban informal settlements and how you know this pandemic can even get aggravated you know in these already deprived and otherwise extremely vulnerable marginalized and inhospitable skips.

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So, this has provoked me to kind of conceptualize you know these urban informal settlements, this urban informal space as disasterscapes. Now, I will elaborate why I have used this term, why, how I have formulated this you know notion of disasterscape.

So, if you see these settlements you will find that they lack, they are not properly connected to works and facilities. So, there is lack of utilities. They suffer from inadequate housing arrangements. So, you know very densely packed and most of these settlements they are they only these settlements have single room, so single room shared by the whole family. So, it is densely packed.

And also the materials that are used for this small hutmans or tenements they are rudimentary materials. So, they are it is quite they are quite fragile. So, there are issues relating to space, materials, and hygiene because these squatters or the slums often they are I mean they develop in the in either on the side of railway tracks or on the bank of a polluted canal. So, they are also not, I mean there are issues in terms of hygiene as well.

And there are like apprehensions of explosion of fire. So, that is also there. Flooding because again you know these areas suffer from the risks of floods. Displacement and eviction, again Mike Davis, I remember like in his work planet of slums how he

talks about how these people the squatter dwellers, slum dwellers they are used by the political parties or the political lobbies as vote banks.

So, they have voter cards, but they lack you know, they lack ownership deed documents. So, you know at any time they can get evicted. So, these places, these people they are always, they always suffer from eviction and displacement threats. And now like this eviction, I mean this eviction has become more frequent with the fact that they most of them had lost jobs during this period of crisis, and so, they are not being able to afford their rent, so they are being evicted from their from their houses.

So, they have no other option, but to leave their houses and to move out somewhere else in search of livelihoods, in search of occupation. And interestingly in India we have also seen you know this reverse migration from these cities, from the squatters to back to the rural areas.

So, and these places are also like they are these budding centers of crime and because they are also very much associated with criminal cartels and all. So, I remember a work by Jeremy Seabrook. So, Jeremy Seabrook is a journalist and he used to write a lot for the statesman newspaper; and so, he talked about you know this association between the youth inhabiting the squatters and the criminal cartels especially focusing on some squatter settlements in Eastern Kolkata.

So, these are all the these are all the variables, these are all the I mean these are these are the issues like association with criminal cartels like eviction displacement, like lack of public utilities, like inadequate housing, etcetera which make this vulnerable scape transform into disasterscaapes. Why?

Because here any hazard can immediately you know transform get transformed into disaster because the question the issue of vulnerability is so much there, the issue the I mean vulnerability in its multiple forms in its multivariated ways is so much ingrained you know in this informal settlements that hazard gets transformed into disaster. So, they are disasterscaapes.

And I should mention quickly here about the 5th October IIED webinar that happened. So, IIED, International Institute of Environmental Development, they

conducted a webinar for one day on 5th October in association with the with I think with EU, which is this environment and urbanization group or the environment and urbanization journal say journal.

So, 5th October it was the world habitat day and the day also coincided with the launch of the specific issue of the journal. So, together they kind of organized this webinar basically discussing this vulnerability, so this challenges in informal settlements.

But most importantly you know they emphasized on, they talked about housing, inadequate housing options or arrangements in these settlements and this is the link which is there you know in this slide. So, please access this link. You will be able to access the content of this webinar which will be very important for our discussion and for a better understanding of urban environmental dynamics in the global, in these developing cities of the global South and especially within this pandemic context.

And also, there is a video you will be able to see the video while you access the site. So, please go through the content and the video by accessing this particular IIED site. And yes I have, so when I formulated disasterscares as a theoretical traction, I was very much influenced by the work by Diana Mitlin, Mitlin is also part of IIED.

And Mitlin says that talks about, you know how cities of the global South are more susceptible to the disease as for their population densities, low income, and meager savings, risky occupations, and lack of affordable health services, all these coming together you know as a package. So, one can understand you know the multiple vulnerabilities being encountered by these informal settlements which you know make these scapes, disasterscares.

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The Indian Context

- the impossibility of slums to maintain social distancing at any cost
- correlation between deprivation/lack of entitlement and vulnerability (Mishra, Gayen and Haque 2020)

Social Distancing

COVID-19

3,35,907/km²

2m

1. Avoidance of public places 2. Hand hygiene 3. Avoidance of contact 4. Stay at home 5. Mask wearing 6. Contact tracing

So, now I will come to the Indian context and some research is going on within I mean so far as the Indian cities are concerned, for example, there is a recent research by Wasdani and Prasad to 2020. So, Wasdani and Prasad, they have mainly focused on the city of the on the city of Bangalore, and they talk about the impossibility of slums to maintain social distancing at any and this is what we already discussed.

So, Annie Wilkinson drew our attention to this very fact that you know this social distancing is a I mean it is a myth, it is not possible, it is an impossible thing for urban slums because they are so densely packed and this has been validated for the city of Bangalore by these researchers, urban researchers.

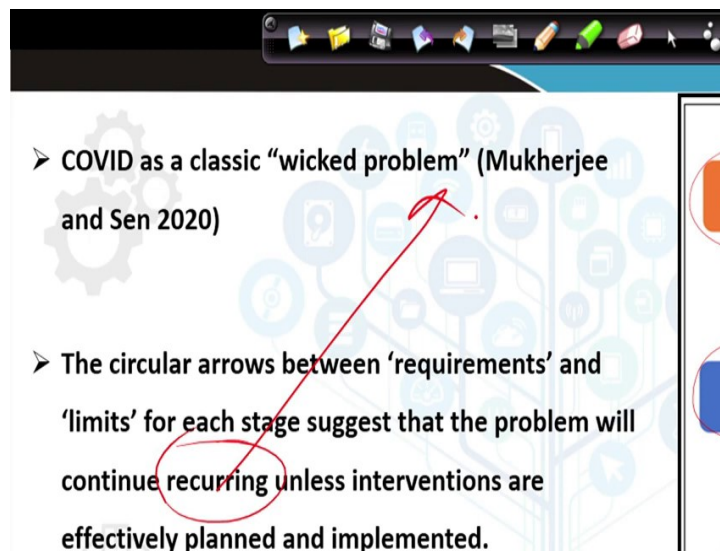
Similarly, so this is the picture from Mumbai's slum. So, this is Dharavi. So, Dharavi is one of the most vibrant, but you know I mean it is one of the most prominent slums of Mumbai. And it is the prominent slum from Mumbai and why Dharavi is so important? Because and if you just see the figure, for example, in India the average population density is 384 persons per square kilometer, alright.

So, 384 persons is the average Indian population density. But for Dharavi can you imagine, what is the figure? So, the figure is roughly 3,35,907 per square kilometer. So, you can understand you know the density of population for this kind of areas like Mumbai slums, like Dharavi for example.

So, of course, there is also this correlation between deprivation which is also lack of entitlement and vulnerability to COVID transmission. So, this work again, this is there in the reference. I would very much like you to go through this particular article by Mishra Gayen and Haque, where they show that how you know this already deprived area.

They you know they are in huge trouble they are already encountering impending crisis due to this pandemic and how why and how it is so difficult for them to cope with the crisis. So, this illustration also kind of demonstrate this quite well. So, why it is impossible to follow this social distancing norms and why lockdown you know I mean the success rate is meager, is minimal in terms of these densely packed slumps and squatters.

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So, yes, I with one of my colleagues, we could also kind of publish one article one write up in ORF and where we kind of try to perceive COVID as a classic wicked problem. So, what is a wicked problem? So, wicked problem is a kind of you know here there is you will there is a tangled, it is a tangle mess of thread and it is very difficult to know which thread to pull first. So, this is how wicked problems are explained in social sciences.

So, it is a tangled mess of thread where it is difficult for you to know which one to pull first. So, this COVID is a classic you know wicked problem example, it is a

classic example of wicked problem. And is like if you see this if you see this diagram, then for example, in stage 1, what is said; so, in during the stage during stage one that is a pre-outbreak period.

So, the requirement is to wash hands frequently and, so distance ourselves and, but the limits in the slums are there. So, this lack of adequate water and these are all densely packed tenements. Same, like in stage 2 the requirements are restriction on mobility, but the limits are that there will be job loss and these shelters are rented. So, then hunger and employment will go up if you know mobility is restricted, but then if mobility is continued then the disease will spread.

And finally, during the post base outbreak period also the idea is to you know kind of ensure safety, ensure health, ensure food supply in nutrition, but then the problem is that there will be continued unemployment, anxiety and this degrading living conditions continue.

So, what is happening is that you know if you; so, I have put the arrows as circular. So, they are all circular arrows, so which, so the circular arrows between requirements and between the limits. So, the circular arrows between requirements and limits for each stage suggest that the problem will continue recurring.

So, this will be recurring problem, this is the typical case of wicked problem because in wicked problem even if you think that you have solved the problem by you know kind of crafting a river mouth, but then after 5 years you find that the problem again reoccurs.

So, you know what will happen is that you know this circular arrows between requirements and limits show that how you know this problem will keep recurring unless effective interventions are planned and implemented.

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So, with this, I will talk about this how effective implementation design can be actually can be thought upon and can be implemented. It is not, a it is a very like, it is a very how do I say tough job. But then the comprehensiveness in the planning is the key thing.

We cannot say that you know we have to do it quickly and hence we can miss all the important options that are there. So, we remain quick, but we are not comprehensive then the purpose is does not get accomplished and the wicked problem recurs. So, this is something which we need to really understand.

So, coming to the final leg of the presentation I would also like to talk about disruptive risks and disruptive risks is something like so, the risks that this that we are facing presently and again mainly the vulnerable areas, the inhospitable areas, the already deprived areas are facing with you know are, can be conceptualized as disruptive risk. Why? Like for example, 2-3 examples.

This is the picture from cyclone Amphan in the Sundarbans which hard hit the Sundarbans few months back in the midst of COVID. And this is the picture of the Beirut explosion, where this there was this ammonia nitrate explosion in the port of Beirut.

So, Beirut is the city of Lebanon. And so, this happened in the first week of August, in 4th August and 200 people died and more than 6000 people were injured and it was a huge explosions, I think the property damage was roughly like 15 billion US dollars and it was felt in this the seismic wave and the repercussions were felt in Israel, in Palestine, in Turkey, parts of Europe and in Cyprus as well; so, Cyprus which is like 250 kilometers away from Beirut.

So, and why we are discussing this? Because you know how these additional problems kind of triggered the infection rate or the spread of infection like anything because social distancing, norms and all other precautionary measures got absolutely disrupted.

So, if you see the data you can understand that how though you know we do not have a proper data or we do not have proper data set in terms of Sundarbans, but the there is data in terms of Beirut and it shows that how you know the numbers really fueled up, it went up due to these additional events of disruptions. So, disruptively; and we have to remain prepared because these disruptive risks will not stop, it will go on.

Our anthropocene is loaded with this disruptive risk. This can happen any time. We have to prepare ourselves towards you know this kind of disasters or to this kind of disruptors. So, this disruptive risks I think can be best conceptualized in terms of unexpected, widespread, protracted, trans-boundary, novel, so which highlight the need to overhaul urban risk management systems. So, what can we do? How can we think about you know resilience?

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Resilient urban environments – disruptive

Transitioning to disruptive resilience

Area/sector	Business as usual	Disruptive resilience
Informality	Ignore residents of informal settlements or, in some cases, invite them to 'participate' superficially in decision making on urban resilience.	Treat local people as decision makers on expertise of those living in informal settlements.
Finance	Overlook the need to finance urban resilience efforts or send funds that are too little or too late.	Ensure urban centres have internal mechanisms to raise financing swiftly.
Services and systems	Emphasise estimating probability of a hazard and basic contingency planning to ensure continued service.	Enhance the ability to make decisions under uncertainty through adaptive management.
Innovation	Mostly overlook novel approaches for reducing risk.	Enable autonomous innovation.

So, I think like if it was the business as usual scenario we could have you know done or we could have kind of implement this kind of measures to address informality, finance, systems and services, innovation and data. But as we are facing as the urban informal settlements are facing disruptive risk, so we also have to think in terms of disruptive resilience.

So, and the whole; and the stress is on for example, if you take informality as the example, I think like previously the idea was to idea was to follow this participatory mechanism through which you know the local people can participate in the project design.

But now, you know no more, we can restrict ourselves to this participatory approach because we all know about the severe limitations and constraints in these participatory approaches and paradigms. So, we have to think about you know how we can evolve the local people as leaders.

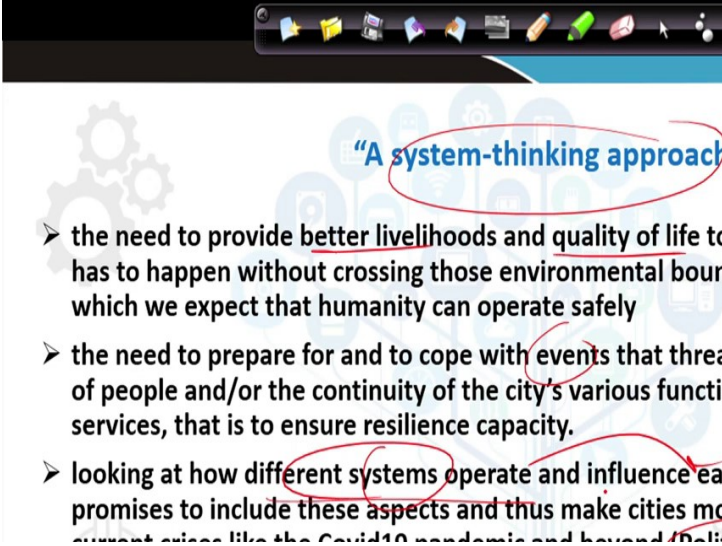
So, from participation to leadership. So, that pathway has to be there has to be the transition into this pathway from participation to leadership. So, where we can treat local people and institution as full partners to ensure that decision making on risk management devolves and draws on expertise of those living in info. So, their expertise have to be harnessed. So, this is so important.

And like finance also like the whole the stress or the emphasis here is actually how best we can manage to involve and engage the local people and in terms of for example, even in terms of data not only big data which are generated by using costly means and the technology is also robust, quite costly technology, it is time consuming as well.

So, these are done in term through cloud computing, etcetera, etcetera. So, they are quite robust models and designs. But then apart from big data or along with big data self-enumeration exercises which are low cost which can provide you know dynamic risk data, so this self-enumeration exercises also can be done.

And there are examples I mean examples from Accra, examples from Dharavi, examples from Quito which show that how you know the community involvement community engagement has I mean enabled these municipal governments to act in a far better way. So, there has to be you know this we can think about transitioning. We have to kind of craft pathways through which a transition to disruptive resilience, again disruptive risk can be possible

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"A system-thinking approach"

- the need to provide better livelihoods and quality of life to has to happen without crossing those environmental bound which we expect that humanity can operate safely
- the need to prepare for and to cope with events that threa of people and/or the continuity of the city's various functi services, that is to ensure resilience capacity.
- looking at how different systems operate and influence ea promises to include these aspects and thus make cities mc current crises like the Covid19 pandemic and beyond (Reli

So, the very last part of the presentation I along with disruptive resilience we also need to think about you know this system thinking approach where we need to understand you know these risks and resilience both are systemic, right. So, you know the plans the strategies or the projects that we want to design should be aware

of the fact that the cities of our contemporary times they face two fundamental challenges.

So, two things need to be addressed. So, the first is the need to provide better livelihoods and QOL, quality of life to citizens and this has to happen without crossing the planetary boundaries within which we can we, so which is the safe operating space for humanity.

And then the second one is the need to prepare for and cope with events that threaten the safety of people. So, the continuity of cities various functions and services that is the continuation of the resilience capacity of the city has to be ensured. So, these are the two things that largely needs to be addressed by any plan, any scheme, any project you know addressing, urban environmental I mean that is part of this urban environmental planning project, and that is part of that is targeting urban resilience.

So, we have to look at how different systems operate, and not only they operate, but they are they also overlap, so they influence each other. So, different systems they actually influence each other. So, promises to include these aspects and thus make cities more resilient to current crisis like COVID-19 pandemic and beyond.

So, this system thinking approach is variable and you know I have taken this from Polit and Polit himself, he is part of this you know municipal governance in Quito. So, Quito which is the capital of Ecuador. So, please go through the reference and please go through Polit's system thinking approach.

And this will provide you a lot of insights about how we can really plan you know the we can plan, we can plan effective strategies through which the cities will be in a better position to kind of face a crisis through which the hazard will not immediately get translated into disasters and these system thinking approach I think I personally feel would be very important for Indian cities as well.

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The slide features a title 'From SMART to sustainable cities: Is COVID19...' in blue text. Below the title is a list of bullet points:

- COVID as an opportunity
 - rethink and restructure urban informal settlements paying heed to the sustainable development goals (SDGs)
- NGOs and GROs to be capacitated
- conceptual-empirical, theoretical-practical, epistemological, sociological approaches

On the right side of the slide, there is a diagram with two boxes: 'Stage 1: Pre-outbreak' (orange) and 'Stage 2: Outbreak' (blue), connected by a red line.

This is the final slide. So, where I say that you know if you remember this illustration, I also showed this illustration, but during that time the illustration only had these two rows. So, this third row, this third aspect was not there. But here this addition has been made.

So, if you see that we talked about the circular arrows, the circular arrows between requirements and limits. So, if effective interventions are not designed and implemented then the circular arrows will continue and the wicked problem will keep recurring.

But then if proper interventions are planned, for example, if this clean water and sanitation can be planned you know for these informal settlements then the circular arrows will no more remain in the same position. So, and the most important part of this is that, that you know COVID issue can also be looked into as an opportunity because all of us know that it also has COVID has badly infected the SDGs.

But at the same time it provides lot of scope through which you know we can come up with management plans or I will not say management, but we can plan you know adaptation. We can kind of plan effective adaptive strategies effective situated adaptive strategies and mechanisms in such a way that you know at the same time parallelly these sustainable development goals can also be automatically targeted.

So, these are all in tune to the SDGs that we are trying to arrive at by 20-30. So, I do not see a clash. So, you know this is an opportune moment where we can you know effectively you know effectively plunge into these raw, this comprehensive meaningful and democratic urban environmental planning exercises.

And the NGOs, GROs needless to say they need to be capacitated. For example, in India I can give you a number of examples where we have very good networks like this Indian waste picker alliance, like the right to food campaign and the whole group surrounding that, like the national slum dwellers federation. So, all these organizations really need to be capacitated.

There are several examples which show that how the Dharavi, how different other cities like I mean some cities of Ghana, most importantly Accra, then again I remember the name of Quito Ecuador; so, how they are managing brilliantly with by capacitating this community organizations. So, we have lot of lessons to learn from them. So, finally, I would like to say that we have to think about conceptual empirical theoretical practical, epistemological axiological breakthroughs.

So, these are awaiting the urban environmental scene. So, let us not waste any more time, but plunge into you know this conceptual empirical, theoretical practical and epistemological axiological journeys where you know theories should, we should be able to come up with mechanisms through which theories can get translated into actions.

And when we talk about frameworks, those frameworks will not only remain restricted within the pages of you know urban planning discourses or urban planning provisions, but those we will be able to kind of implement those as engaged praxis. So, it is time for this and the urban environmental scene sincerely and seriously is awaiting you know this particular breakthrough. So, let us all plunge into this.

Thank you.