Water, Society and Sustainability
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Lecture – 19
Peri - Urban Water Justice in the Global South

So this is lecture 19 on the Peri-Urban Water Justice or Injustice in the Global South. So, we are the rural seen, some other rural scenes so far as what is concerned we are covered the urban scenes.

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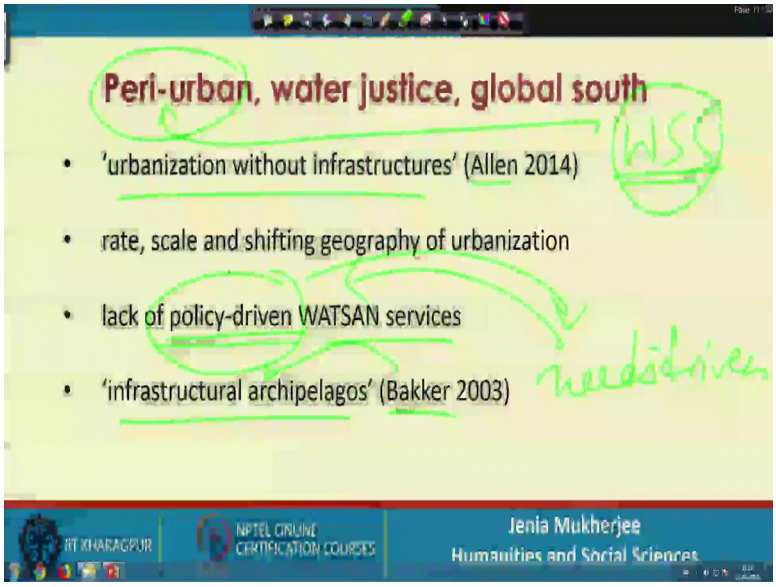

Now, we have going to concentrate on what is known as the peri-urban. So, peri-urban it is a particular connotation on which there is also lot of controversies among the social sciences that; how to conceptualize this particular connotation call peri-urban, but it has been brilliantly you know conceptualize, the by Adriana Allen as urbanization without infrastructures. So, it means that the spaces are becoming urbanize at a rapid scales, but unfortunately they are to a great extent lacking policy driven infrastructures. For example, policy driven, a water service provision, a sanitation services etcetera.

So, if we consider WSS that is a water services and sanitation of a particular space or an urban area, then water and sanitation services to a great extent; lacking in these spaces or in this scaves which are the peri-urbans scaves and that is why; we can define peri-urban

as a something. Where this phenomena is extremely prominent that is urbanization. So, we can explain the entire process as urbanization without infrastructures.

So, we are discussed in our previous slides that how the Earth is actually you know urbanizing planet Earth is urbanizing, how the urban population is increasing at a faster phase, how the urban population recently it had surpass the rural population. And so, all these you know challenges are coming in all the spaces which were rural yesterday, but are becoming urban tomorrow and today they are in a transition which is explained in by using this particular terminology called peri-urban.

And as I mentioned that these areas lack water and water services and sanitation or water supply and sanitation services. So, there is a lack of policy driven, these are very important that is policy driven that is the state, state is not being able to bring these areas under the wide coverage of WATSAN water system and sanitation services.

But now the interesting thing is that, so I am saying that these areas are lacking policy driven water service and sanitation, you know sanitation systems. It does not mean that the people are totally being neglected of portable drinking water and sanitation system. Because if we concentrate on what Karen Bekker had said in 2003, in one of his writers he had come up with this particular terminology called infrastructure archipelago. This is a very interesting terminology which to a great extent, you know captures the complexities of the array of practices, wide array of practices that are prevalent in this area. So, when there is this lack of policy driven water sanitation system, then how the people residing in the peri-urban areas more importantly the vulnerable the marginal and the low income groups they are depending on what, how are the coping with the within this lack of policy driven WATSAN services.

What are the arrangements that they have been able to come up? So, in this particular lecture, we are going to concentrate on this wide array of practices that are prevalent in this peri-urban space, which on which there are low income communities living in the peri-urban areas are actually surviving. And we are also see the relationship between these water arrangements, you know which I we have termed as needs driven initiatives. So, where there policy lack of policy driven initiative, on the other hand we find bottom up needs driven initiatives. And we will also look into the relationship between the policy driven initiatives and the needs driven initiatives.

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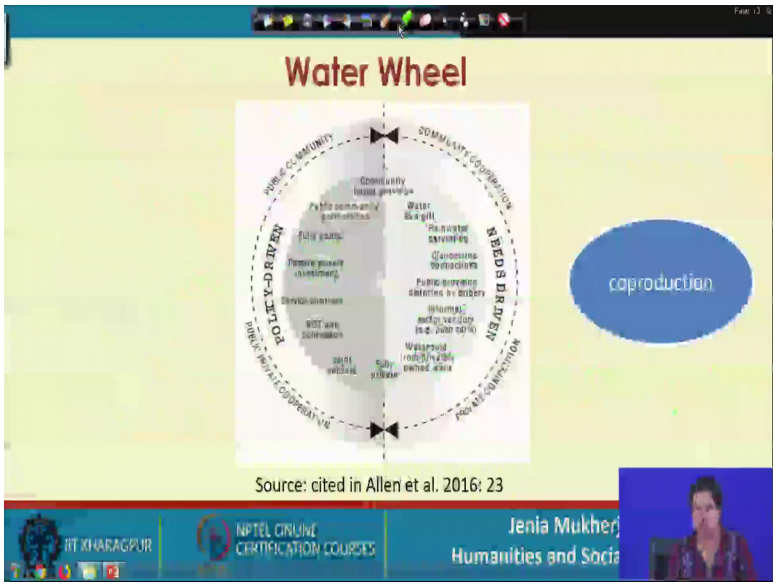

So this is the water wheel, so this Adriana Allen and the villa and Pascal Hoffman they. They came up with this particular very illustrative wheel called the water wheel in 2016, where they try to map this wide array of arrangements that I am talking about. And that the Karen Bekker had termed as archipelagos, infrastructural archipelagos. Not a single system, but plurality of system the complex array of system; so ranging from fully public to fully private, and so many things in between.

So, passive private investment joint ventures, water sold from privately wound wares, different clandestine connections as well water as give rainwater harvesting informal sector vendors. So, these are the very many mechanisms that are operating in this peri-urban land scripts so which we will talk about.

So, this is the overall water wheel and we can see that I mean; how some of the arrangements or maybe how some even additional arrangement that have not been, that has not been covered by this water wheel, are prevalent or extremely prominent in some of the peri-urbanizing land scrapes in the global south.

Yes, so another term which is called a coproduction. So, as I mentioned that we will also not only look into this array of needs driven practices, but also we will try to find out the relationship between the state and it is various arrangements that are there. So, what is happening is that; in several peri-urban scaves. The state is trying to negotiate with or collaborate with maybe some of the community manage systems maybe some of the

communities that are private communities or informal communities that are in charge of the water system, and together they are trying to coproduced water rights in the city. They are trying to coproduced you know water supply arrangements in this peri-urban land script.

So, this element is of coproduction is extremely important. So, it is neither conflict nor always co collaboration, but something in between or maybe complex the kind of relationship that the state has with this kind of informal arrangements. And together sometimes they are a coproducing the water rights in this otherwise in hospitalable areas, which has been conceptualize as urbanization without infrastructure.

So, coproduction is a term which we have used and we will show that how the this state is coproducing along with this a community, managers or the informal vendors or coproducing water rights, and coproducing water managements and water supply. And also sanitation services in this areas.

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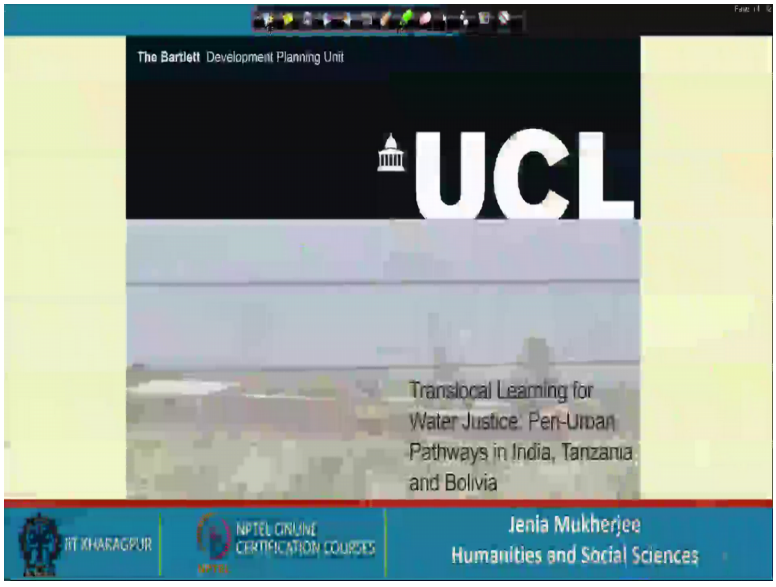

So, yes this comes out from our study project that we did. So, it is a translocal trans I mean; translocal cross cutting cross boundary and you know transnational study, where we focused on 3 cities in the global south. So, we covered Kolkata, peri-urban Kolkata from India peri-urban Dar Es Salaam Tanzania and peri-urban Cochabamba the very famous city you know famous for it is what awards from Bolivia.

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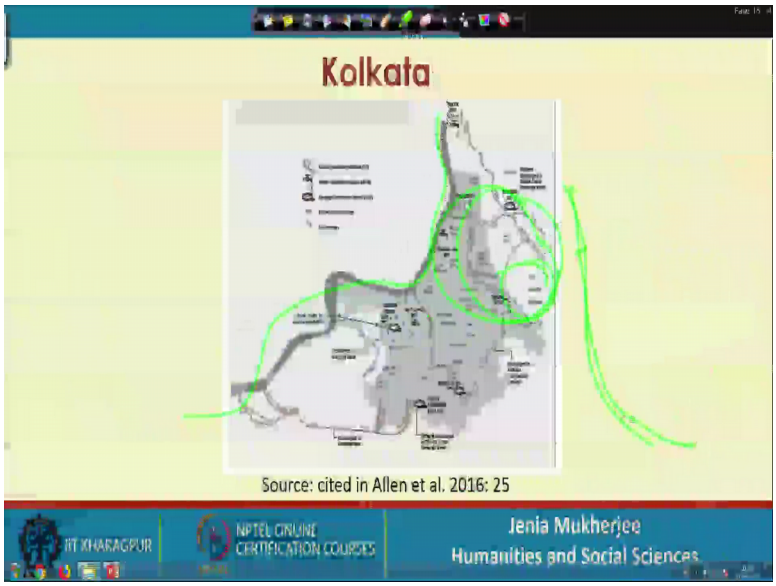

So, what we learnt what we try to learn from each other? So, yes focusing on Kolkata we so Kolkata is people base city now why it is a people base city because on the one hand we have a river the Bhageerathi Hugli that is entirely responsible you know for supplying drinking water to the city.

So, we have another river that is not here so we have another river which is the Bidyadhari which. So, Bidyadhari was a major outfall channel, but now we have (Refer Time: 09:17). So, (Refer Time: 09:18) it should be somewhere here. So, (Refer Time: 09:19) in somewhere so which is actually to integrate it with the entire canal that came up during the colonial period. So, we have on one hand one particular river taking care of the water supply of the city. One particular river which is responsible for discharging the effluent or the liquid suede, and the wetlands in between the east Kolkata wetlands, wetlands in between which is playing a vital role in recycling the solid ways.

And effluent of the city, and not only that and it is also, reusing or recycling the effluent and the, the inhabitance or the wetland dwellers they are producing fish and fruit from so that is why these people base. So, once it one river for responsible for water supply, one river discharging the waste and the wetlands in between recycling the waste; and not only recycling the waste, but also producing fish and food for the wetland as well as and also for the entire city of Kolkata.

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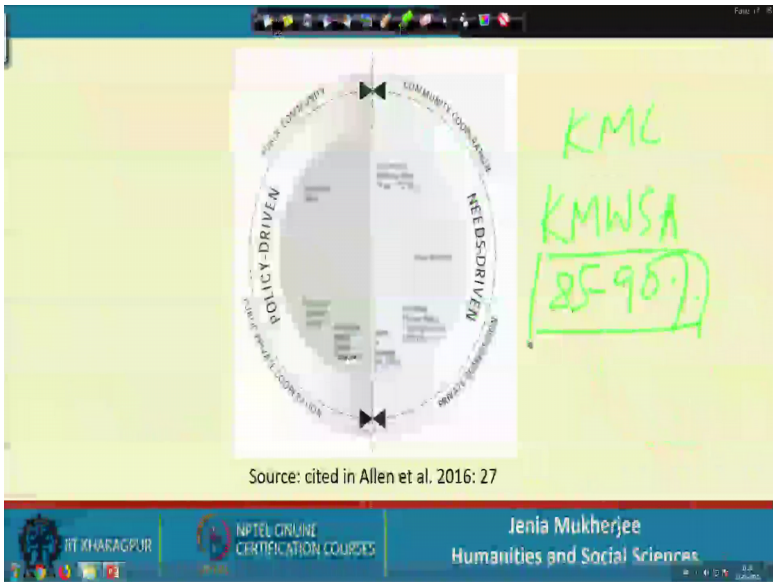

Now yes, so this is the water wheel so far is a city of Kolkata is concerned; now it is very quickly I will tell you the story. So, Kolkata mainly the 2 institutions which are responsible for water supply. So, for water supply of the city are KMC that is the Kolkata municipal corporation, that takes care of you know water supply for the entire I mean KMC area. And there is another which is KMWSA so Kolkata municipal water sanitation authority that takes care of a provider; I mean that, that is responsible for providing a portable water to the area beyond the KMC so to the metropolitan development area.

So, these are the 2 official or the these are 2 you know these what to say policy based organizations; that are responsible for providing water to the city of Kolkata, but what is happening is that I mean so far as the recent official reports are concerned, it is said that roughly 85 to 90 percent of the city gets cover it gets covered by KMC and KMWSA.

Now, what for the rest of the population so this is a figure which is which might be authentic, but then the internal and integrity to a great extent are missing in this authentic figure, because we know very well that the peri-urban part of Kolkata it lacks water supply from the KMC or KMWSA. So, what happens there as I had mentioned that as there is lack of policy driven arrangements.

So, the people themselves they have come up with very interesting needs driven, you know needs driven arrangements as well so far as water and sanitation services are

concerned. And this needs driven initiatives consists of I mean again wide array of practices and arrangements from community drinking water projects to the water provided by the water vendors at some price, to individual private water treatment plan to berries or you know it is even through a spectrum.

So, the extremely poor and marginalized household living in the Kolkata wetland, when we talk to them when we did some oral ethnography; we found at the day even said that as they do not have an option as muncipal corporation, you know does not provide water to their house also they are not connected by this pipe water system, and as they do not have the money to purchase portable water. So, they do not have any other option, but to a actually boil the water from the berries and use the water for their daily use.

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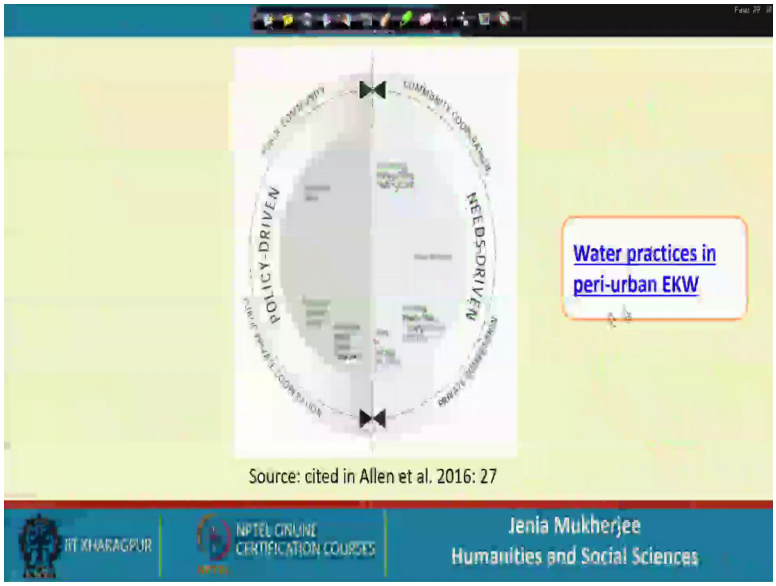

So, here I will just quickly show you the various water practices that are prevalent in peri-urban east Kolkata wetland. And we will see, it is a mix and match between needs driven and policy driven you know practices. So, just go to a table from one of our journal publication. So, that captures the different arrangements that are prevalent in peri-urban academy.

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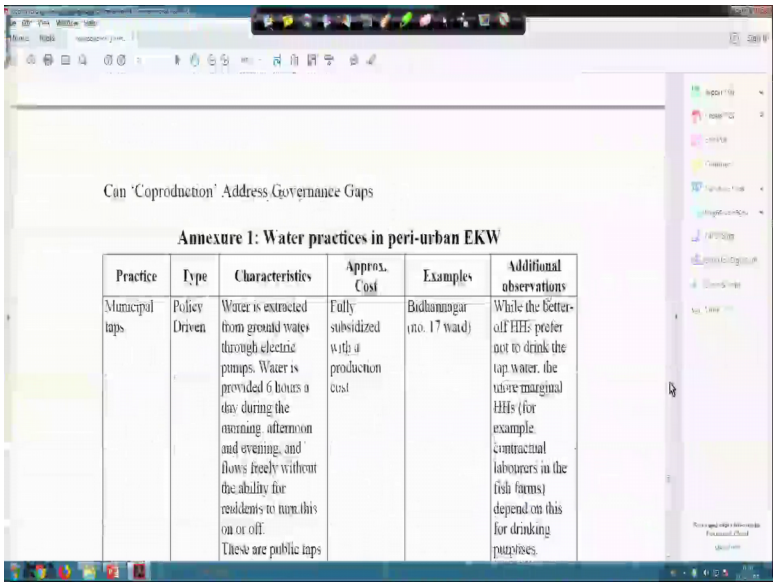

So, some of we try to categorize these in the following manner. So, we tried to identify the practice then we tried to access that whether it is a policy driven or a (Refer Time: 14:28) driven practice. So, then on the basis of which characteristics of which attributes we actually tried to categorize it either as policy driven, and needs driven. And we looked into the approximate cost for accessing that practice or service, and some examples from our field study, and also some additional observations that we could made.

So, what I will be doing that; I will not go through this entire table right now, but I will say that of course, this is detailed elaborate table that; captures all the water practices that are prevalent in peri-urban east Kolkata Wetland; ranging from municipal corporation supply tube belts, water tankers to the semi formal and in formal arrangements that they are including water vendors community drinking water projects.

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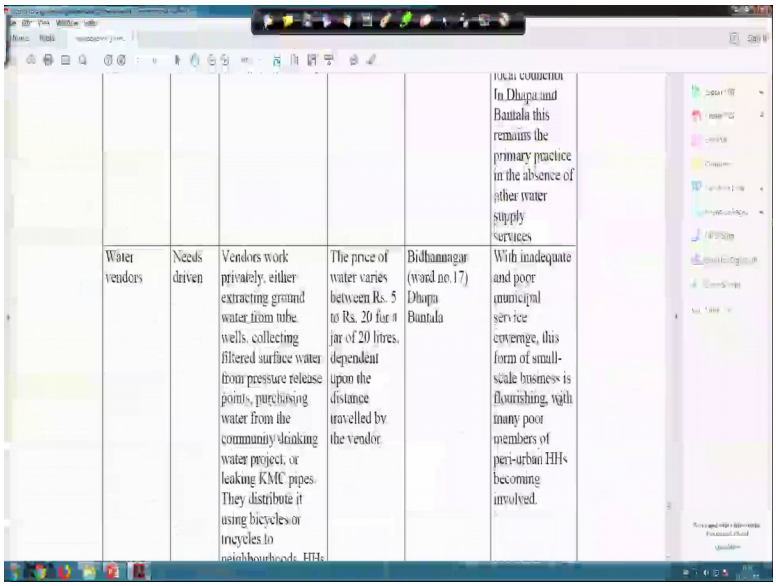

					local connection. In Dhapa and Bantala this remains the primary practice in the absence of other water supply services
Water vendors	Needs driven	Vendors work privately, either extracting ground water from tube wells, collecting filtered surface water from pressure release points, purchasing water from the community drinking water project, or leaking KMC pipes. They distribute it using bicycles or tricycles to neighbourhoods. HHs	The price of water varies between Rs. 5 to Rs. 20 for a jar of 20 litres, dependent upon the distance travelled by the vendor.	Bidhannagar (ward no.17) Dhapa Bantala	With inadequate and poor municipal service coverage, this form of small-scale business is flourishing, with many poor members of peri-urban HHs becoming involved.

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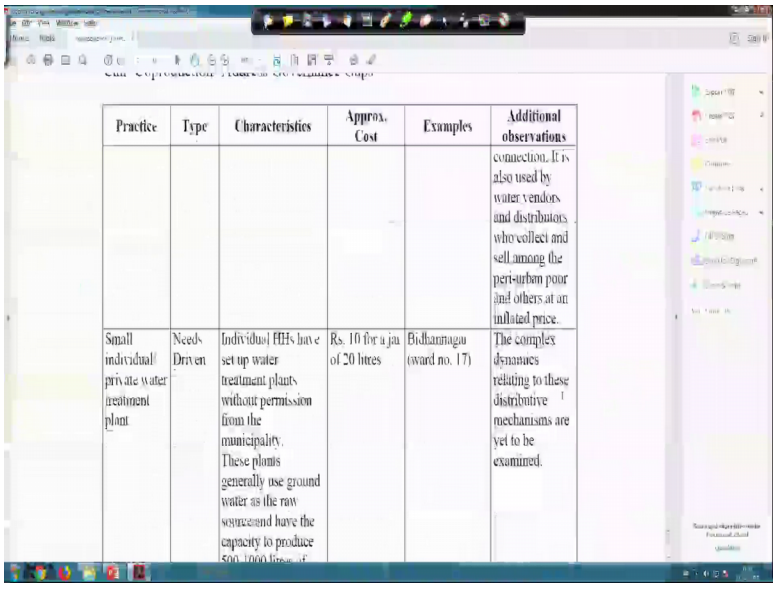

Practice	Type	Characteristics	Approx. Cost	Examples	Additional observations
					connection. It is also used by water vendors and distributors who collect and sell among the peri-urban poor and others at an inflated price.
Small individual/ private water treatment plant	Needs Driven	Individual HHs have set up water treatment plants without permission from the municipality. These plants generally use ground water as the raw source and have the capacity to produce 500-1000 litres of	Rs. 10 for a jar of 20 litres	Bidhannagar (ward no. 17)	The complex dynamics relating to these distributive mechanisms are yet to be examined.

A small scale individual and private water treatment plan, and the berries and sewage spectrum.

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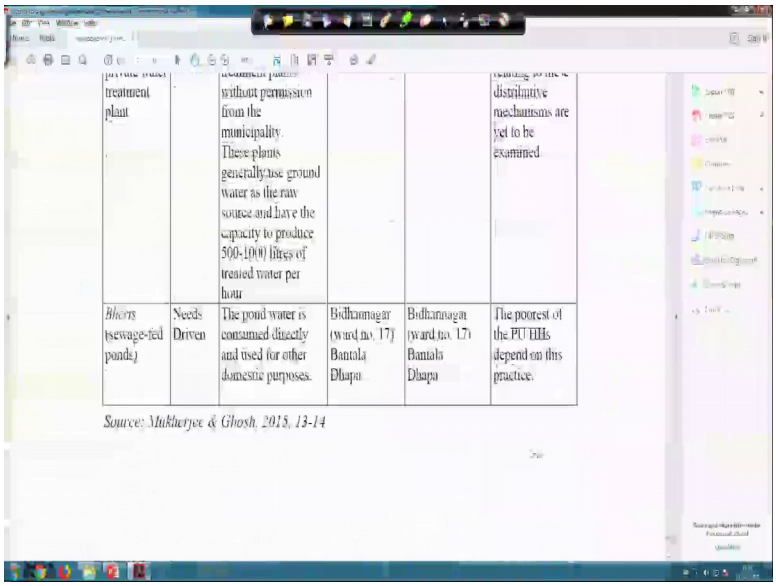

treatment plant		without permission from the municipality. These plants generally use ground water as the raw source and have the capacity to produce 500-1000 litres of treated water per hour			distributive mechanisms are yet to be examined
Bheris (sewage-fed ponds)	Needs Driven	The pond water is consumed directly and used for other domestic purposes.	Bidhannagar (ward no. 17) Bantala Dhapa	Bidhannagar (ward no. 17) Bantala Dhapa	The poorest of the PU HHs depend on this practice.

Source: Mukherjee & Ghosh, 2015, 13-14

So, what I will ask you to is that; you can take this as a form of an assignment that you can go through this table and in detail. And they try to understand the different arrangements that prevalent there.

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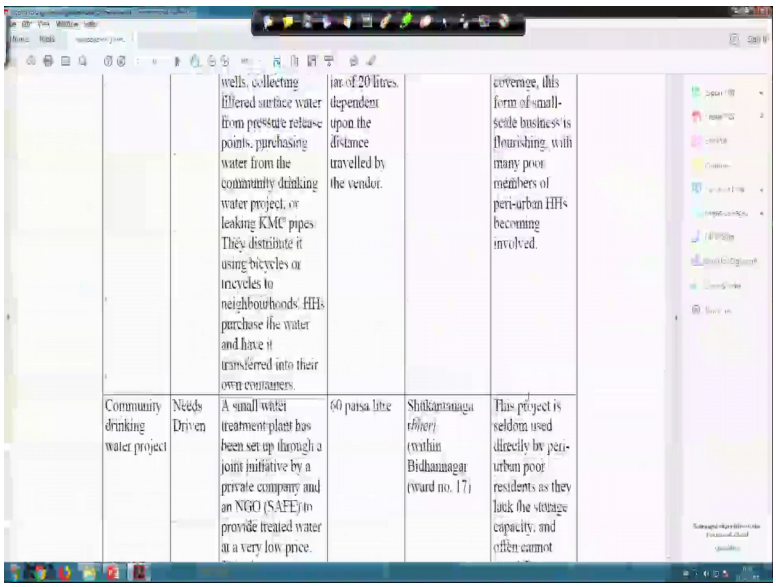

		wells, collecting filtered surface water from pressure release points, purchasing water from the community drinking water project, or leaking KMC pipes. They distribute it using bicycles or tricycles to neighbourhoods. HHs purchase the water and have it transferred into their own containers.	jar of 20 litres, dependent upon the distance travelled by the vendor.		coverage, this form of small-scale business is flourishing, with many poor members of peri-urban HHs becoming involved.
Community drinking water project	Needs Driven	A small water treatment plant has been set up through a joint initiative by a private company and an NGO (SAFE) to provide treated water at a very low price.	60 paisa/litre	Shikarmanga (*bheri*) (within Bidhannagar (ward no. 17)	This project is seldom used directly by peri-urban poor residents as they lack the storage capacity, and often cannot

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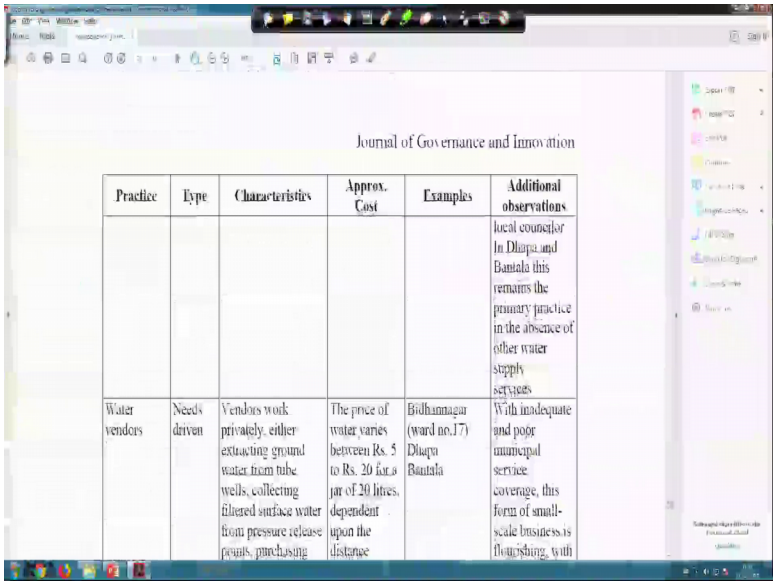

And definitely we can have some questions or we can have some explorations, you know during the exam or in your assignments through which, I will be able to access or evaluate whether you are comfortable with the several, arrangements or the several practices that are there in the peri-urban spaces especially focusing on the city of Kolkata.

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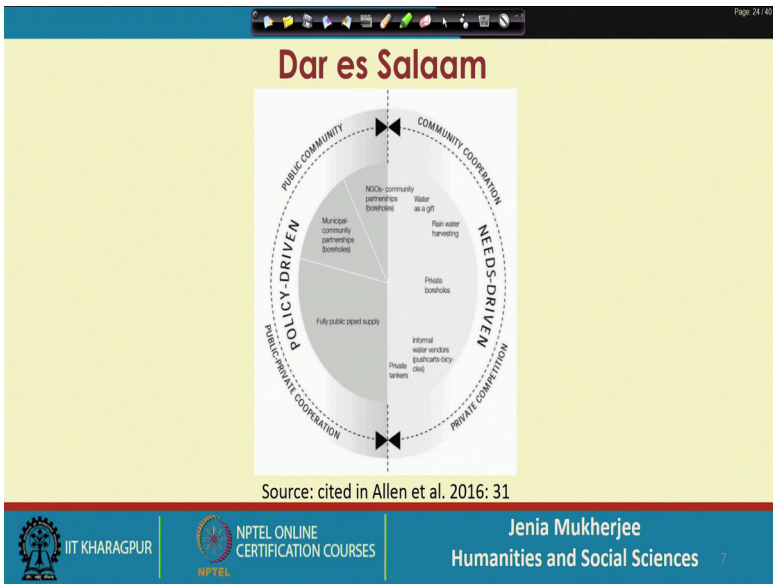

So, this is Dar Es Salaam again so I will again circulate or I will provide a; so particular article to you. It is also there in the reference section it is the first reference that is sighted in this particular lecture. So, you if you go through that article; you will be able to get the detailed explorations the or I mean findings that we came up with from our detailed

investigations on peri-urban the Kolkata, Dar Es Salaam, and Bolivia and Koncham Bolivia.

So, if you go through that particular article and the 3 sections cover there, you will be able to capture these different arrangements from policy driven to (Refer Time: 14:47) needs driven spectrum. And I will also ask you to make a little bit of kind of a comparison between the 3 systems or between the 3 different kinds of arrangements that are there in these 3 cities or 3 peri-urban states of the global south.

So, this is the water wheel so far as Dar Es Salaam is concerned again you can learn from the details of the arrangements.

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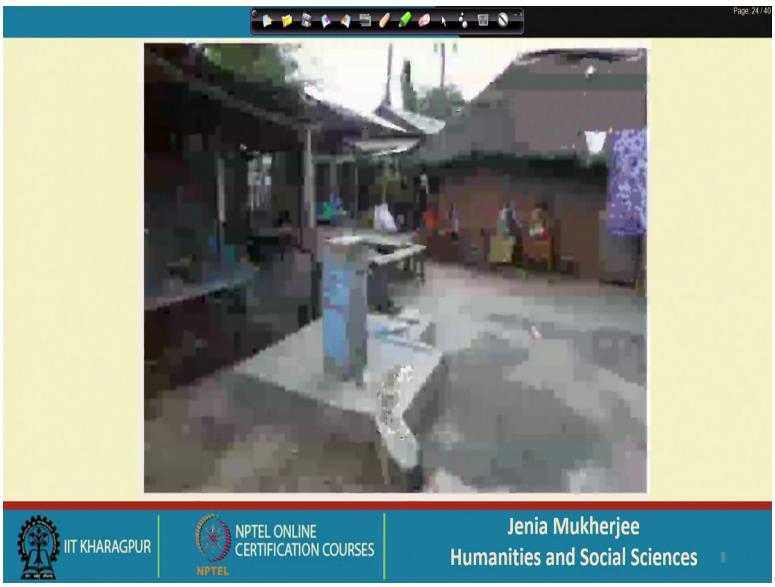

This is one particular picture of you know community manage water supply system and um. So, this manage entirely managed by the community the state is not play any role, but there are as I have mentioned; that there are very interesting kind of relationship between the community managed water supply projects or practices.

And the role of the states because, there are few community manage systems where are the states actually does not play any role. So far as operation or to an extent you know operational investment is are investments concerned, but the states sometimes plays crucial role; if you know some kind of a technical expertise, or if some kind of maintenance or repairs are required.

So, as I mentioned please go through the first reference sighted in this particular lecture. And go to go through the details of all this kind of arrangements that are the prevalent in peri-urban global south.

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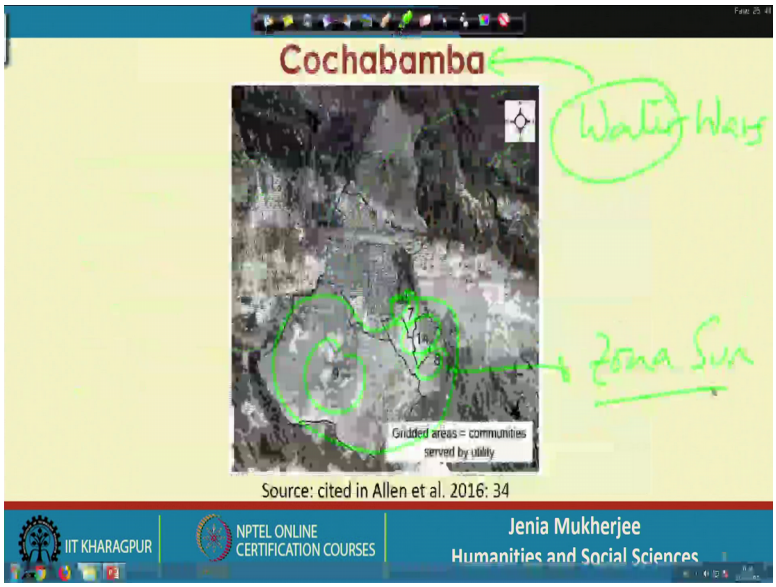

So, coming to Cochabamba's; so Cochabamba as we all know it is a it became famous for it is water wars in the 1990s. Again another assignments for you it is like you have to learn about water wars in the city of Cochabamba it happened during the 1990s. So, please go through what happened, what is this water wars all about, who were the fighters, who there were fighting against, what was the issues and of course, I understand the issue was water. Only 1 2 I will give; I will say that you know this water wars to a great extent is also legitimized the role of the informal community water providers; who play a very important role in providing water drinking water to the peri-urban parts of Cochabamba.

Now, the peri-urban parts of Cochabamba these are the discrete 7 14 the entire peri-urban Cochabamba; so this which is known as the Zonasur. So, it is as you can see from the map it is located in the southern part of Kosamba to this is Zonasur. And Zonasur lacks access of policy driven water arrangement Zonasur lacks, Zonasur does not have a formal you know informal state sponsored water supply system.

So, what are the different arrangement again prevalent in Zonasur, on which the people of Zonasur depends upon so far as access to a good water quantity is concerned.

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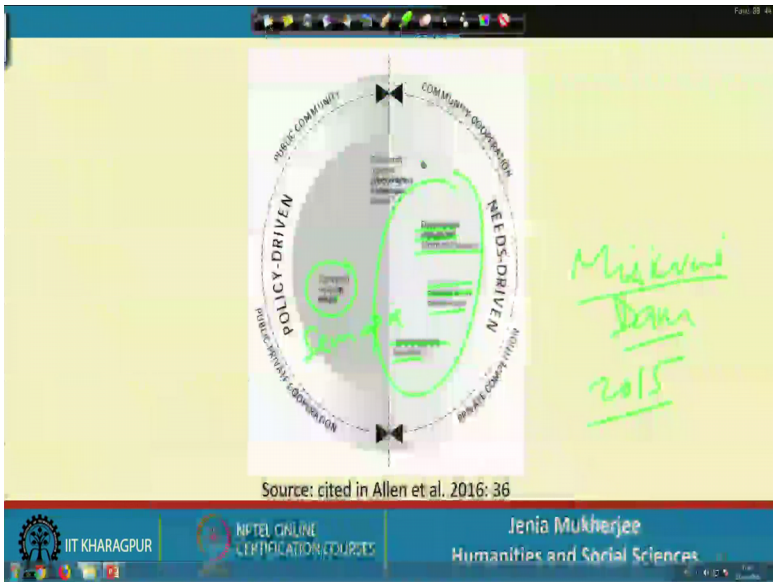

So, this is again the water wheel for Cochabamba. So, you can see these things different kinds of arrangements. So, the area which is under municipal coverage so they get the people get access to drinking water from the centralized municipal service, which is known as the Semapa SEMAPA PA.

So Semapa, Semapa covers there this area, but you can see this entire around 50 percent of people, you know in the Cochabamba city most specifically or more specifically Zonasur that is the peri-urban Cochabamba, they are not covered by Semapa water services from the Semapa.

So, what happens is that multiple arrangements which are prevalent that consists of you know community networks fed by tank or trucks. Tank or trucks to household I mean from where the households they purchase water from this trucks or this tankers. And there are also some other mediums of decentralized independent community networks.

So, I will very little bit; I will explain a some of the arrangement that are there in Zonasur, because our partners did some case studies or there is some field ethnography in the Zonasur region itself. And they saw that you know there are a very interesting community led water services in Zonasur, which can again be classified or categorized into 2 or 3 categories.

So, for example, there are some community led water projects, where the community they own the source. That is, they actually have well and from that well they I meant that; wheel they are connected to the to the main water storage where water gets stored. And from there are several this distribution outlets, where the water enters to the different distribution outlet and then finally, reaches house of connection.

So, there are community led projects in which the community in the source in the form of ponds or in the form of wealths. There are some community arrangement services where the community they do not own a source, but they buy water from private tanks. And then in the same process they keep it to the water storage or the water tank or whatever, and from there water goes to the distribution outlets and finally, the household gets access that water.

So, water community of water project where the source is owned by community themselves. Community water project where the source is not owned by the community, but they buy water from private vendors, or private tankers, or private trucks I mean; generally private tankers big private, but this is very expensive. So, they call this virtual network. So, coming in led water projects where the community get through the medium of virtual network. So, these are termed as a technically termed as a virtual network.

And there is another arrangement where actually the same thing, but the day, do not buy the water from the private a tanker, but they buy the water from the Semapa itself; that is the centralized municipal service. So, these are the 3 major arrangements that are prevalent in Zonasur.

Now, we get to learn that now the Semepa is trying hard to at least you know provide low cost potable water to these community managed projects. And there is another thing is also there. So, the there is a particular dam called I thing the Misicuini dam. So, again this will be another war for you please go through the details of Misicuini dam. So, the Misicuini dam was supposed to be completed by 2015.

So, to great extent you know the work has been accomplished, but unfortunately you know though they are there are pipes and the infrastructure is there, but still water is not there. So, there is whole lot of technical glitch and lot of problems related to institutional mechanisms. So far as the proper functioning of this Misicuini dam is concerned, because it was said it was thought upon that; if the Misicuini dam could have been

constructed in a proper manner. Or and if the work would have been accomplish accomplished by 2015; then Zonasur would have been able to get water from this dam itself.

But this is not the case so what is happening? So, even in the post 2015 period certain problems are there in this the Zonasur or the certain provisions of Cochabamba, but what is important for us as I am continuously emphasizing in this particular lecture. That here in the peri-urban scave, interesting enough is not only looking into the grey area, or we are not only looking into the challenges that are there, but we are also looking into the opportunities that are there.

So, if we can establish that see how this needs driven initiatives are actually serving so many people, inhabiting global south. Then we can understand the potential within this you know transformative framework. That if we can scale this up if the state can cooperatives with these you know needs driven practices, maybe in solutions are very much there in this kind of a framework.

So, so this is what we are highlighting and, and one example that; I would like to give is that if you just take Latin America, then in Latin America itself there are 80000 yes. There are 80000, these kind of needs driven water arrangements that are serving more than 40 million people. So, you can understand the transforming transformative potential that is there in these driven initiatives.

So, finally these are the references that I was talking about.

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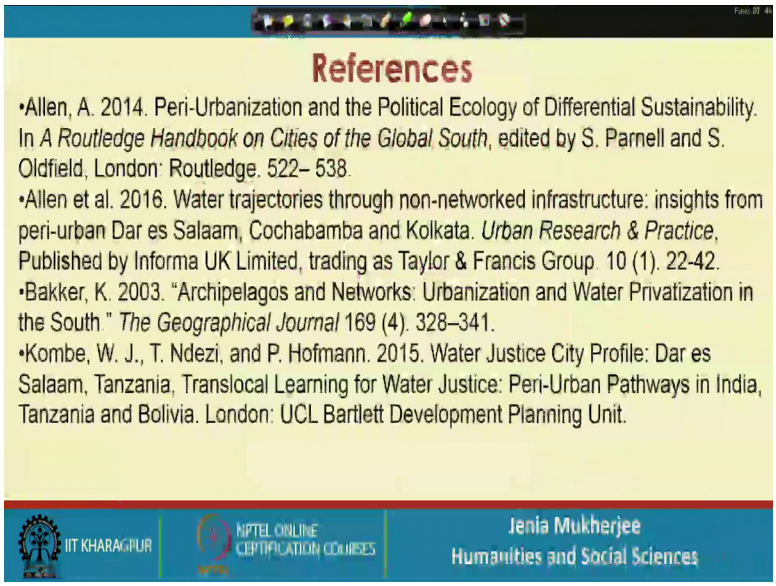

And this is the references that you are asked to go through. So, we will circulate this so you want go through a, but some more importantly sorry; they are the second reference is more important. So, I was mentioning that you will get the details of what is happening in Dar Es Salaam, Cochabamba and Kolkata. From the second you know the journal articles. So, please go through it and go through the nitty grittiys of these water arrangements.

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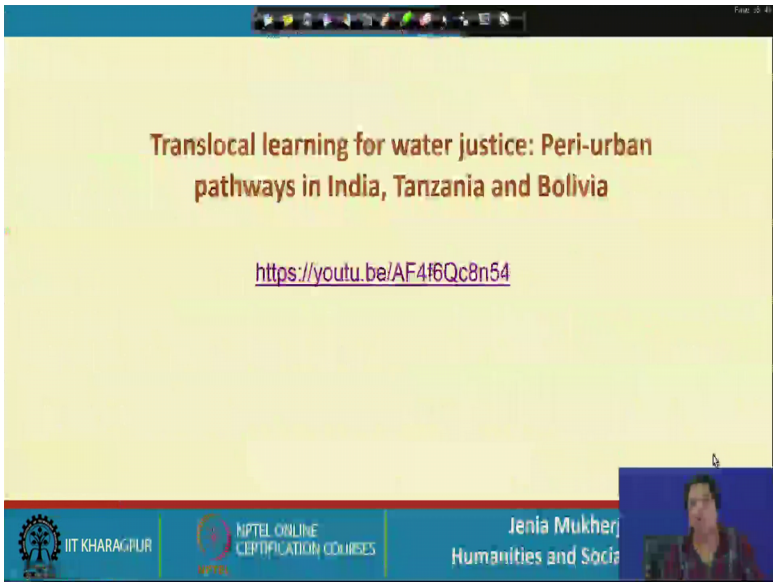

And before we end up this lecture, because before we end this lecture I will just like to show you a video consisting of glimpses of what we could do; you know in this particular project called a translocal learning for water justice. You know explorations from India, Tanzania and Bolivia um. And so we must acknowledge ISSC which is the international social science council and it was a part of the seed glance. And you will see that the our ideas and understanding.

So, far as a this particular project is concerned as and I am highlighting again and again this particular factor by saying that; we had to a great extent focus on the water challenges and water crisis that are the I mean; that are very much increasing aggravating during the contemporary times. But this lecture is very important in the sense that; it not only talks about the challenges of I mean so far is water is concerned in the peri-urban areas, but also talk about the ample opportunities that are prevalent here.

So, that is why please I mean see this video, watch this video minutely and try to see. And try to understand, and try to feel, and realize and also think that how really these arrangements can be to some extent formalized and implemented at scales. So, that to a great extent water challenges in peri-urban areas can be taken care off.

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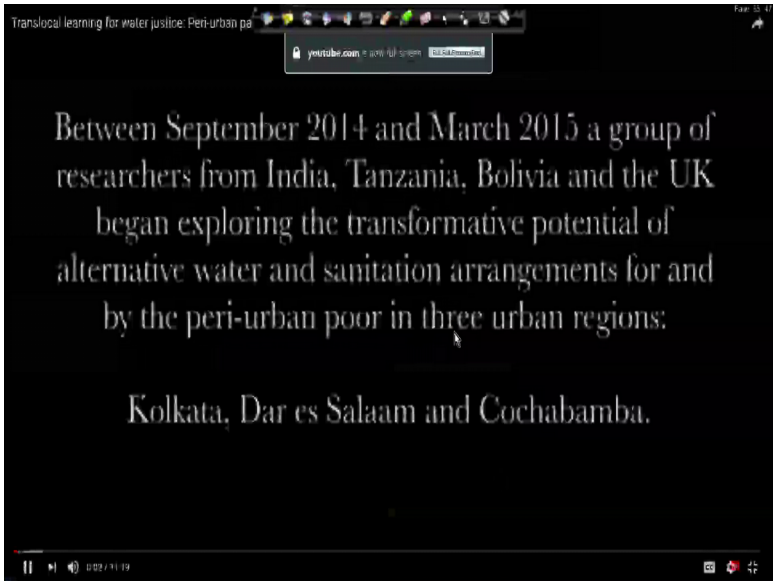

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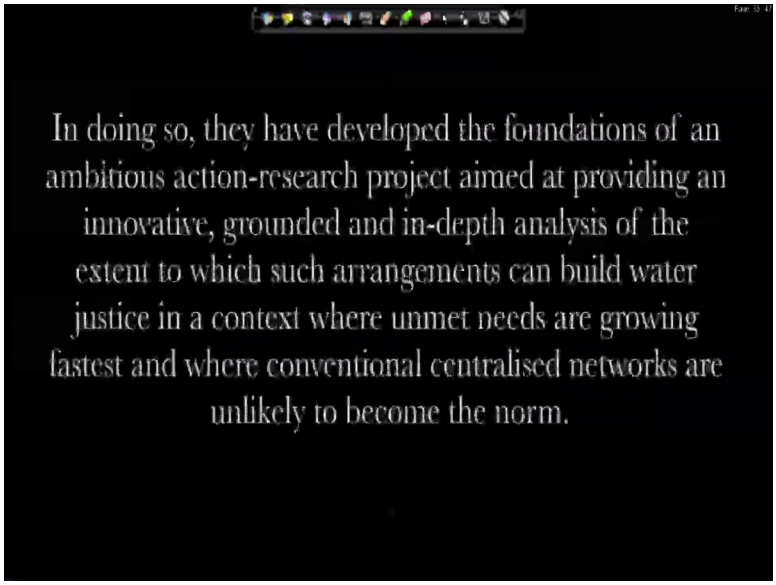

This is basically a 2015 study. So, it started between September 2014 and continue to 15 and it was action research project of course.

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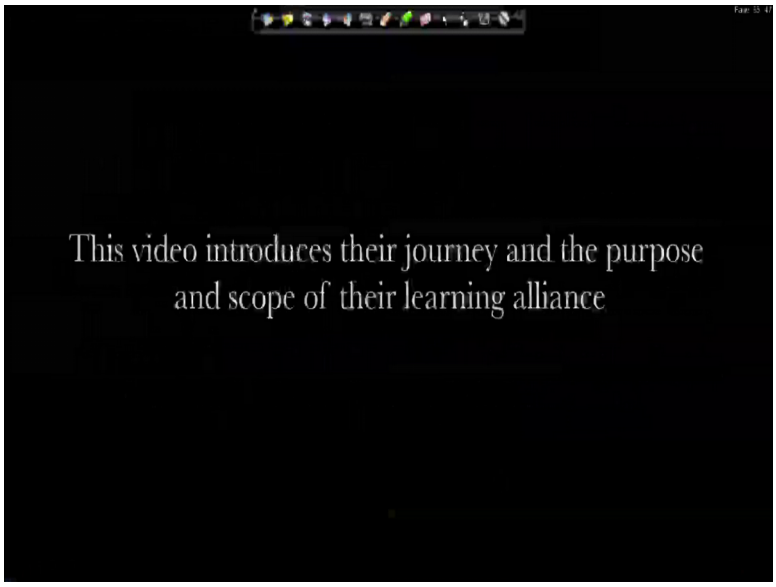

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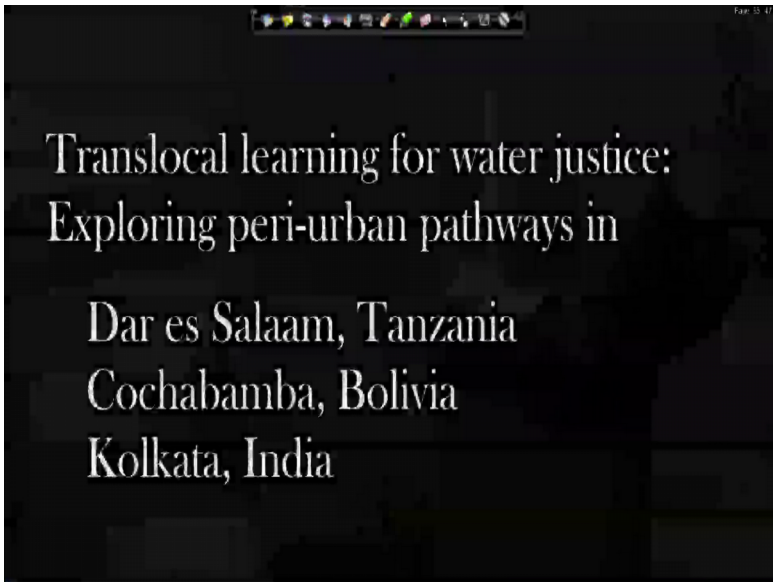

You know in a time in which I think the country increasingly (Refer Time: 31:03) and recognize a climate change as the main challenge of a peri-urban and troposinic even. We felt it was very, very important to just to bring this, you know this all topic and this all challenge back on to the table within it is a sustain in the development goals, soon being finalized and implemented.

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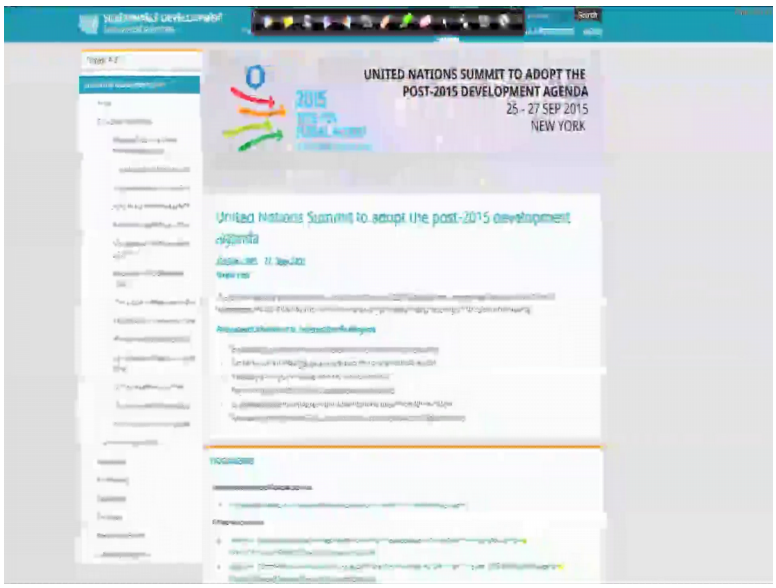

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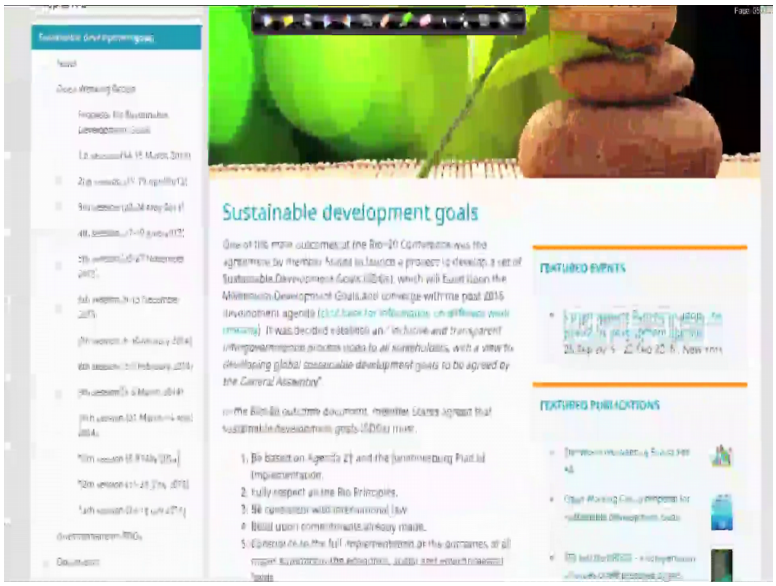

There has been now shift to universal access obviously trying to find a way to activate people's right to water and sanitation.

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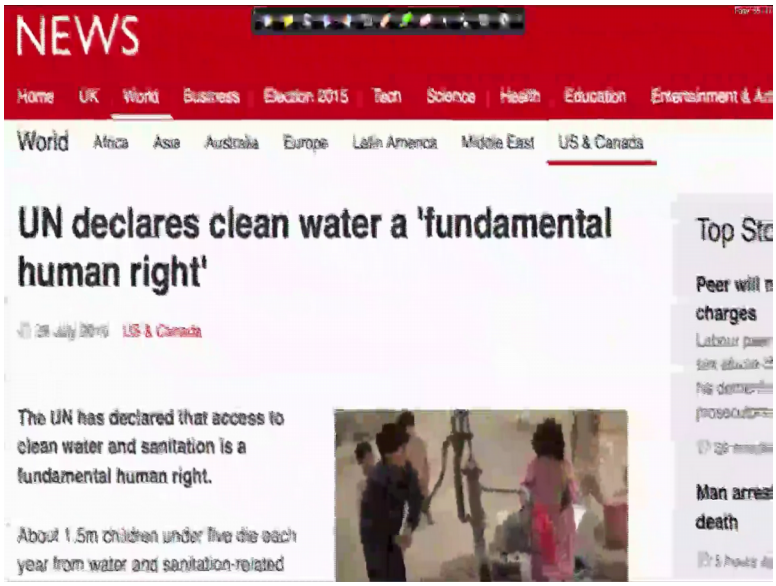

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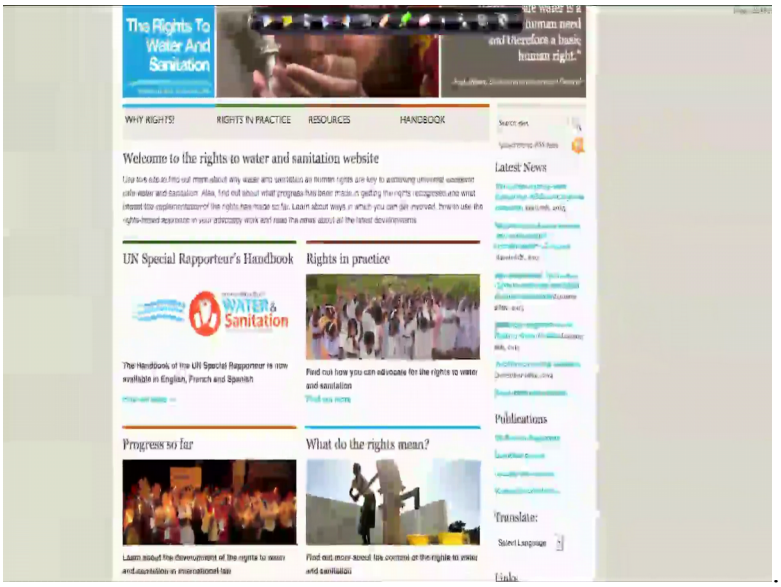

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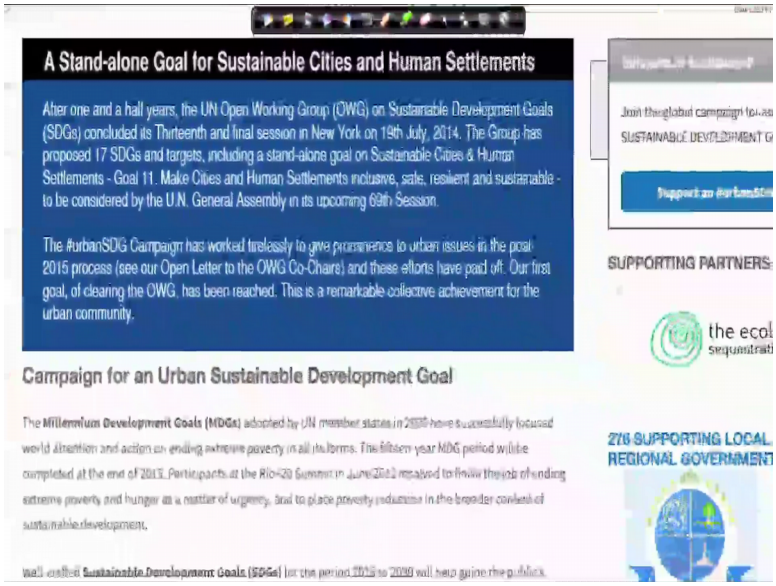

Where weakness in a very rich an impressive process of, you know of a new targets, new indicators, new goals is been set up. And water justice obliviously is very important because that comes into play and we are trying to think about ways to provide everyone with the adequate access to water and sanitations services (Refer Time: 30:20). In urban cities continuous to increase and we are underestimating grossly, because we now very lethal particularly about how water and sanitation is filtrate in peri-urban areas.

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And I am talking first urbanizing areas; areas that are not likely are likely to live the south former infrastructure as we know it. We are focusing on street quite diverse urban settings to be able to then learn from each other in terms of what seems to be working and what does not seem to be working.

It is quite a lot of water challenges which affect in the Dar Es Salaam city, particular the people living in the forward settlements. Then most of them peri-urban areas they lack proper utility network of water supply. So, that is a very very huge challenge of course, now they depend very much on an alternative water senses.

When we are talking about peri-urbanization or a peri-urban areas a I think what is really important is not to forget about the temporal aspect of it. So, you might have areas that used to be characterized as peri-urban, but now has been incorporated um, may be a little bit more into the urban co of a city, but still significantly like behind in terms of service provision.

Yes, peri-urban areas of remaining gray area in many ways. And that is why options left for these people are largely individual co common (Refer Time: 32:11) of structures.

(Refer Time: 32:27) was very famous back in 2000 2001 (Refer Time: 32:30) olds in unfortunately in a so 10 15 years are followed and (Refer Time: 32:36) progress in improving the access to water.

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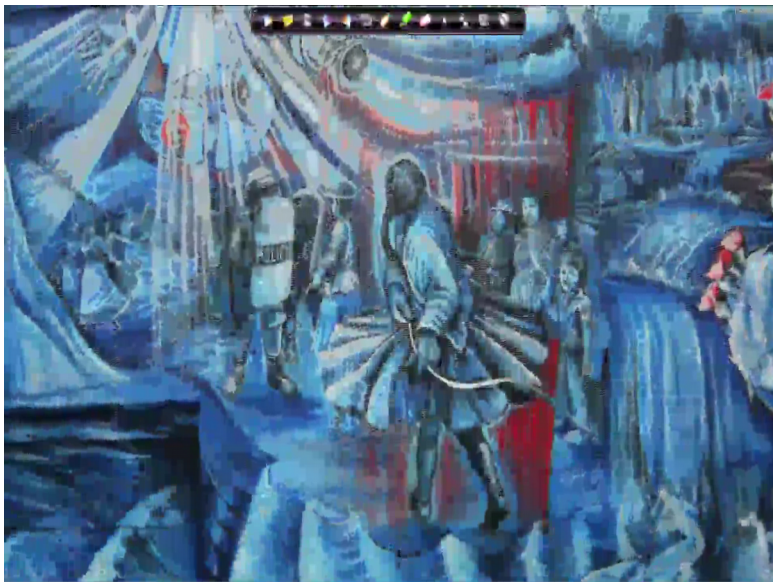

And. So, whereas, people we have access to the end of people who have access to water in the city live in the centre. There is a big difference a in coverage and service quality and price also.

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By now (Refer Time: 32:56) principle (Refer Time: 32:57) is does not relate to the community systems and that creates a lot of difference in just invalid provision.

We have what in justice in built in the cities since long time.

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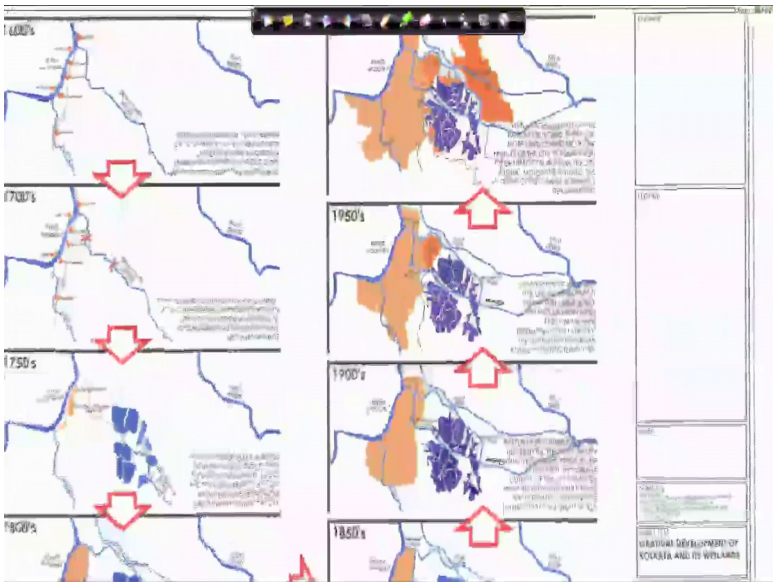

Because and it is there are situation is also slightly different from other cities, even other Indian cities. Because Kolkata is not a water scarce region it's a water flush region.

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You find that the peri-urban interface is lies mostly in the form of wetlands, the relationship is mutually interdependent.

(Refer Slide Time: 33:34)

Because, the PUI depends from the city on less water and also the solid wastes, because otherwise you could not generate the urban; you know the vegetables or cereals and paddy that are produced by the people the community in a collective way and also the fishes.

So if I use the word access to say drinking water. Now I would say it has not denied to the large number of people, who are giving and I mean and think about ecological services to the city. When the most of the people they do not have that solid and muncipal supply in that area.

(Refer Slide Time: 34:17)

So, they are going for the bore well and using the ground water to meet the demand.

A very often the waste it is some water (Refer Time: 34:20) stop at the distributional level. And that is problematic, and by this way mean that this equal important to understand the water injustice is happen in the first place. Among these (Refer Time: 34:33) happens in first place because certain groups remains invisible.

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In other words, is (Refer Time: 34:42) recognized, have we developed what we refer to as the water wave and the sanitation wave on the one hand do you have public; sorry, if you have policy deriven interventions that largely driven by the state.

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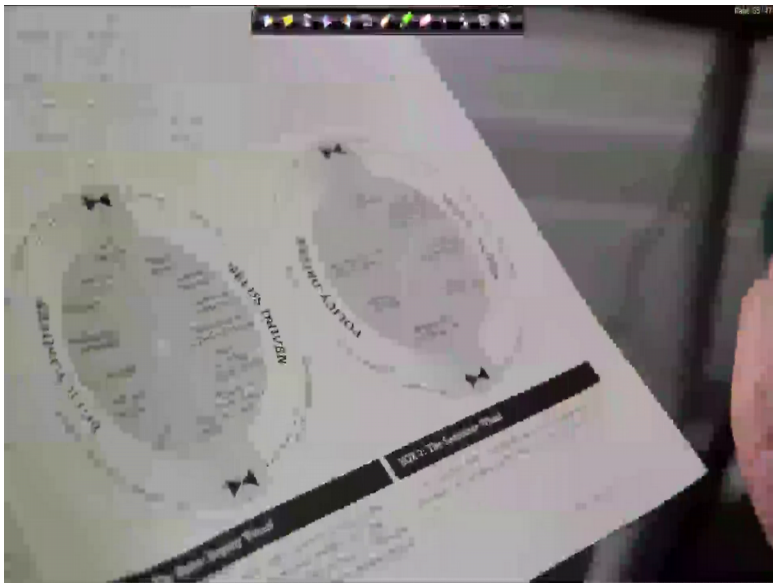

And then on the other hand, you have all the needs driven practices then of course, you have edge which we are trying to zoom in which, which this project which we refer to as coproduced.

For example, (Refer Time: 35:04) be in charge of bringing and producing the water treating the water ensuring water quality. And community systems can be in charge of this (Refer Time: 35:16) everywhere including the (Refer Time: 35:19) areas around the city where which are not currently served. There has been sort of cooperation between the utility sinking (Refer Time: 34:29) and giving the communist to manage the (Refer Time: 35:32). And also the water vendors can collect the water source (Refer Time: 35:36) water points.

It is not the government is totally indifferent, but the government is also providing water like a amount of water, but at least the public tankers are moving in those areas and providing water free of cost in the neighborhoods. I see a lot of options that says that is if there are multiple stake holders engage in different options and opportunities, and the where their co-producer and co supply water.

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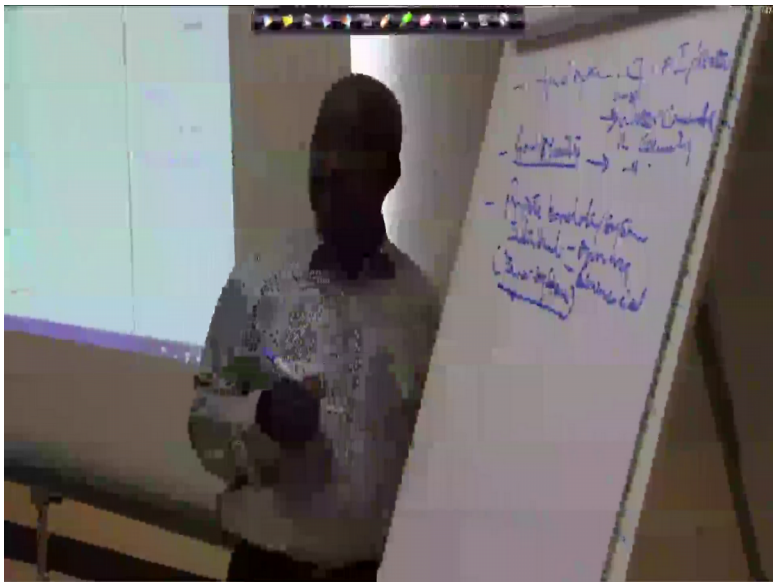

And in the (Refer Time: 36:05) reach different categories of (Refer Time: 36:08) this one of the option which are seen. We are assuming in to an area there is really under explode. The way we are going that is why a by creating (Refer Time: 36:20) what we call is (Refer Time: 36:23).

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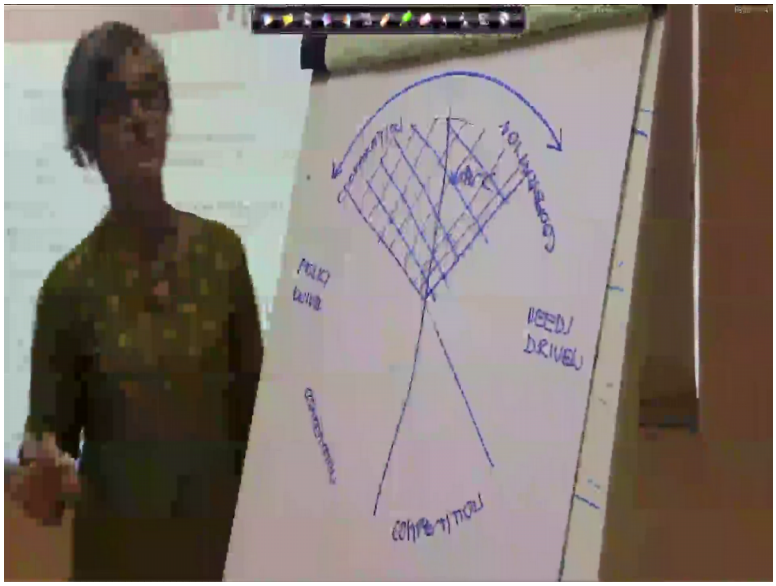

So, we know that is co protection plat forms exist, but we do not know enough about it. We do not really know the impact that they have. And also how well they serve when our access is brought (Refer Time: 36:37) to the people living in those settlements.

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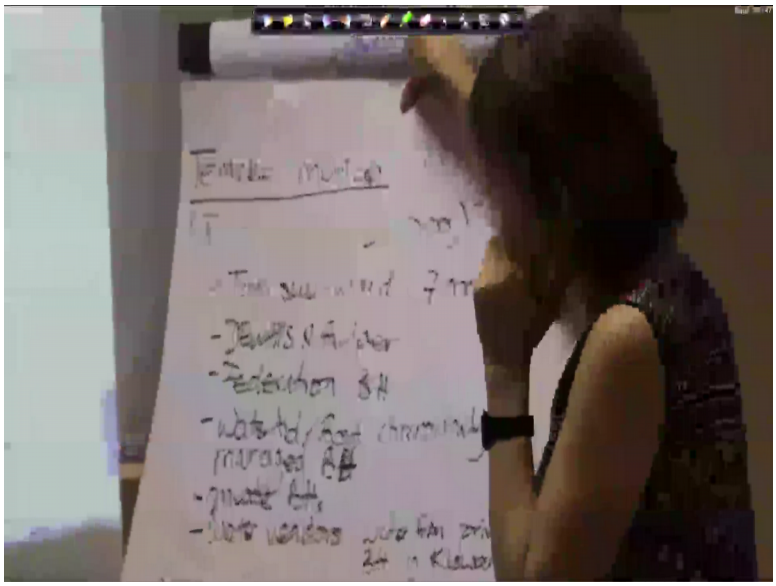

And the area is (Refer Time: 36:43) respect that, we respect you know that the project will not just produce further knowledge, but use a method that will be sustainable and produce a layer see, that we will live hopefully be a life of the project. (Refer Time: 36:56).

What we see is a very different important difference between addressing the practical needs, but the need also to more aspiration practice. And see what is (Refer Time: 37:09) that allows us to think now only you know about a water and sanitation deficit. And how we are going to meet those a deficits, but also at how by change in the way in which we go about, you know meet in water in justice is. We can also a otherwise what in the (Refer Time: 37:25) world is called you know strategic the strategic needs of those who are typically miss recognized.

So, as it stage is developed (Refer Time: 37:36) accepting recognizing (Refer Time: 37:38) play they go (Refer Time: 37:40) inviting in participate in (Refer Time: 37:43) is a (Refer Time: 37:45) (Refer Time: 37: 46).

So, if these actors do not re collaborate and work together during and apart from those kind of situation, like what is happening now; that power plant for bigger city (Refer Time: 38:05) are not there. So, this is not really good.

I will personally feel that learnt for part I am coming over to very short period though (Refer Time: 38:17) the experience of (Refer Time: 38:19) in. Can we to an initiative a if this project comes up, take up this initiatives of mobilizing the local stake holder make them understand. How the ownership of these, what is the (Refer Time: 38:31) in drinking water system can be taken up by them; through an arrangement by which they can share the responsibility, distribution.

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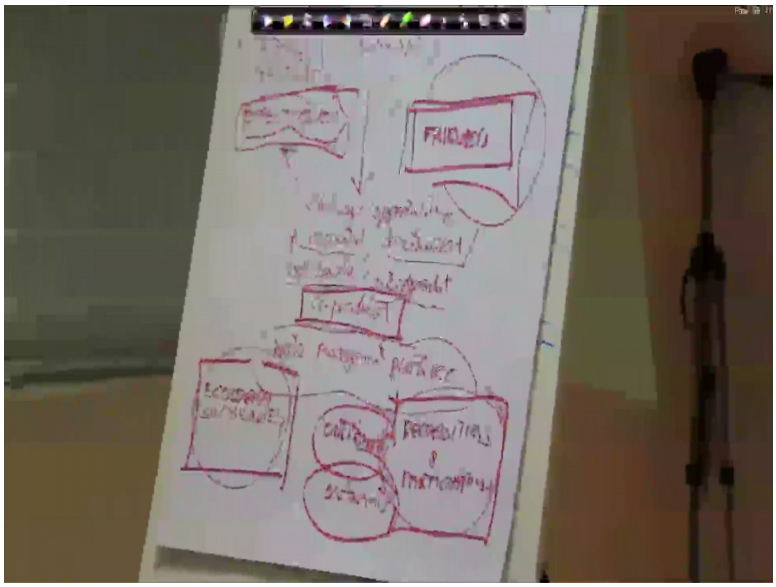

So, there is you know lot of transformative potential, which can basically if properly used can really (Refer Time: 38: 48) a lot, not only for the peri-urban area or peri-urban people, but also for the long term environment sustainability of the region.

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Now, I feel that these few perspectives clearly start to talk to (Refer Time: 38:03) understand of water injustice is.