Infrastructure Planning and Management
Public-Private Partnership for Infrastructure Case Studies Part 3

Ok, that was project one right that was the local project I am going to now talk about project two.

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This is the project that is an international project right it is somewhere in another part of the world, it is in a country called Bolivia right which is in South America right as you can see Bolivia shares borders with Argentina, Brazil countries that you are probably familiar with and right in the centre of Bolivia there is this town called Cochabamba where the action is going to take place, ok.

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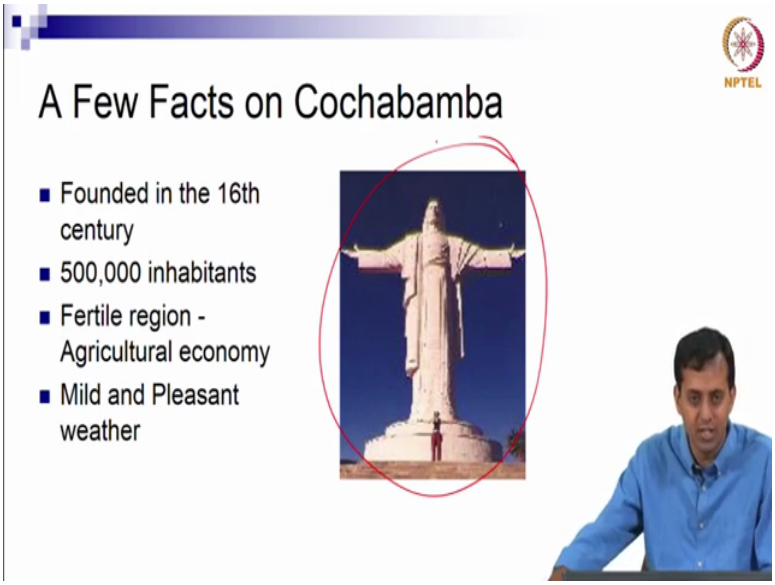

Quickly a few facts about Cochabamba about five lakh people you know they have another statue like this Christ the Redeemer kind of statue you probably have seen the one in Rio de Janiero in Brazil somewhat similar generally agricultural a mild and present weather, so it is a more of a large town you know rather than a metropolitan city let us say, ok.

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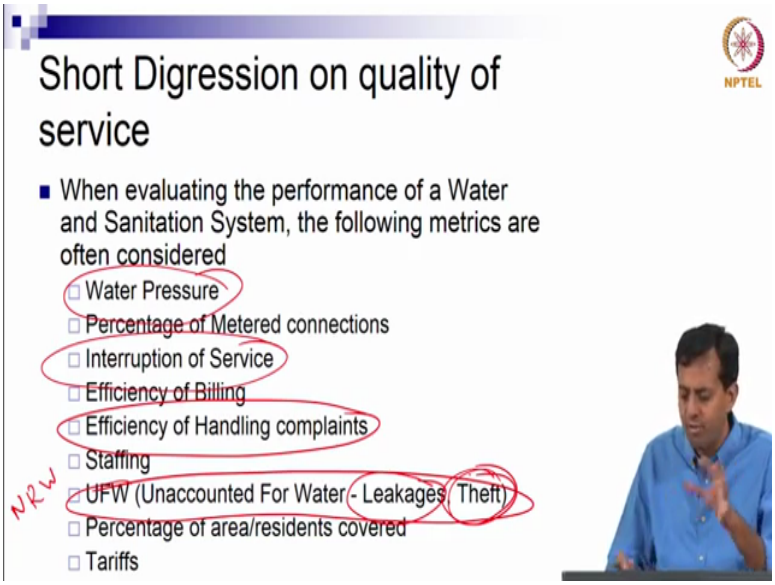

Just very quickly and this project is a water supply project, now just to very quickly talk to you about water supply projects there are when you see a water project supply project is successful the number of ways in which you measure it right, it is not only the amount of water that comes through the pipe it is also the pressure of that water you know how often do you get water versus how often a service interrupted, the efficiency with which complaints are handled etcetera and this is important unaccounted for water or non-revenue water NRW right.

This is the amount of water that goes outside the system right is lost either because people are taking the water without necessarily accounting for it or paying for it in other words they are sort of stealing the water although stealing is not the right word or because the water is leaking it is evaporating etcetera right. So this is I mean it is still this theft is still water going to people, it is just that it is not accounted for right.

So ideal a good system will account for water that goes to everybody right so these are some from variables that you use to sort of understand what ok.

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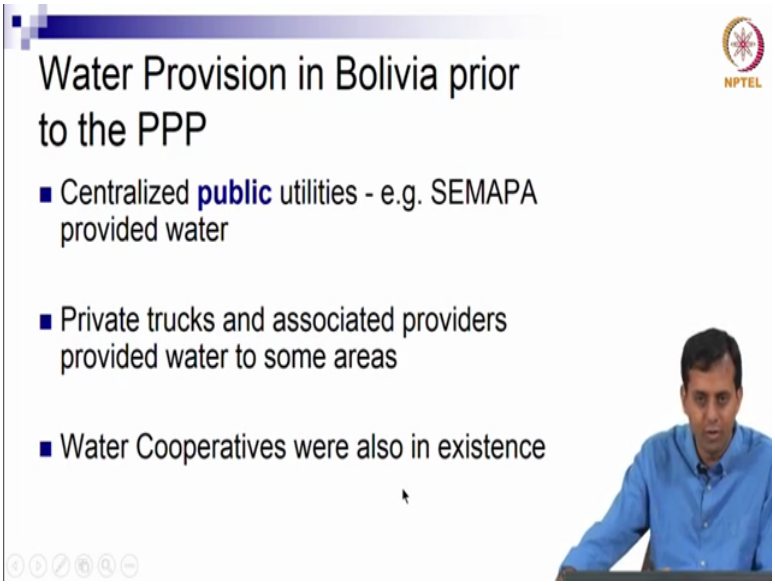

Now prior to the PPP there was a public utility like our Metro water boards etcetera providing water and just like in India there were some private tanker, trucks that were providing water, there were some water cooperatives also in existence.

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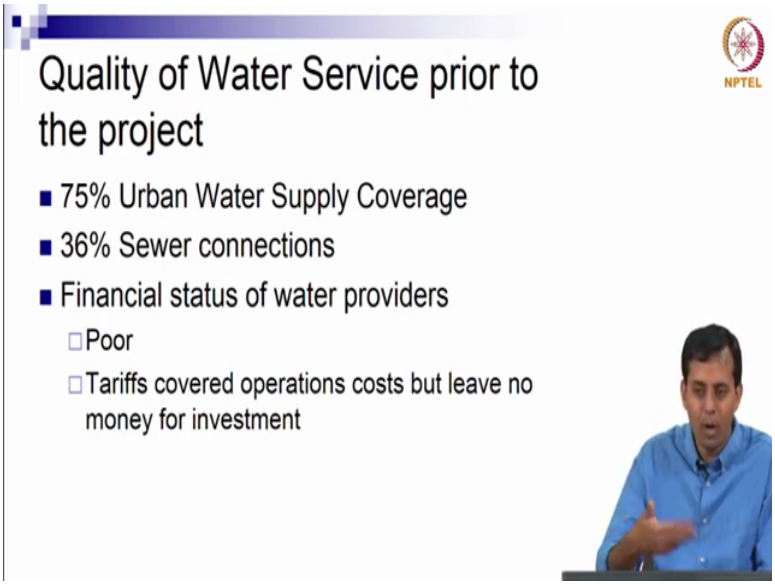

But the quality of water supply was very poor right, if you just look at this slide not everyone had a water connection water is necessary by the way for life right, so you cannot say 75 percent is ok, 100 percent of people need to have water connection and very few people had connections to wastewater systems right which means they were just disposing of waste water anywhere and everywhere and that was probably creating health effects and this agency that was providing waters financial status is also very poor, tariffs were low they did not have

enough money were not doing proper operations maintenance, so the overall picture was quite poor, right.

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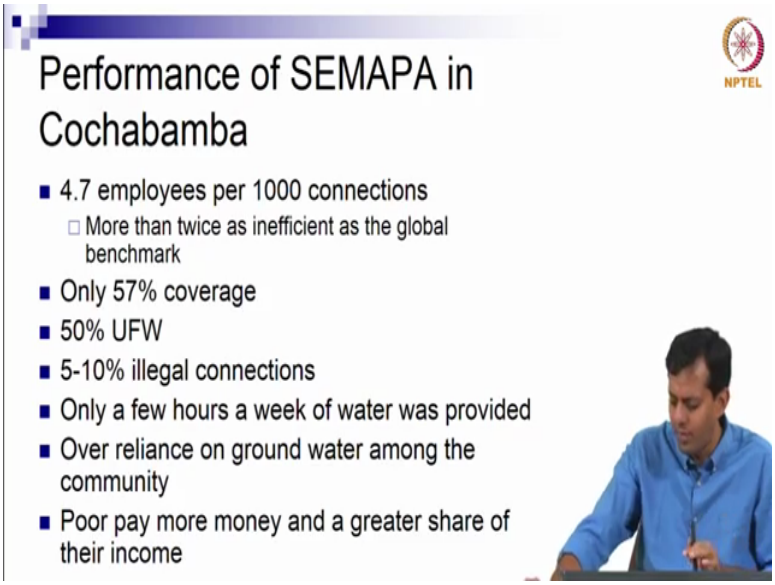

So SEMAPA they had five employees per thousand connections almost five employees globally an efficient utility would run with about two to three employees right, so they were employing a lot more people than they need to they were inefficient, coverage was poor almost 50 percent of the water was unaccounted for you do not know where it went, was it being lost, was it leaking were people taking it without paying for it no idea? Right.

Lots of illegal connections, water was being provided or only a few hours a week so you have to store your water in your underground tanks whatever otherwise you do not get water for the rest of the week right, so big tension right if that you did not store your water you are in deep trouble right and therefore there is an over reliance on groundwater people are putting borewell is and that is decreasing the water table level, so essentially the scorecard does not read very nicely, ok.

So the question is and of course the last point here is the poor were the ones were not connected they were buying from water tankers they were paying more money very similar to what happens in many places in India, ok.

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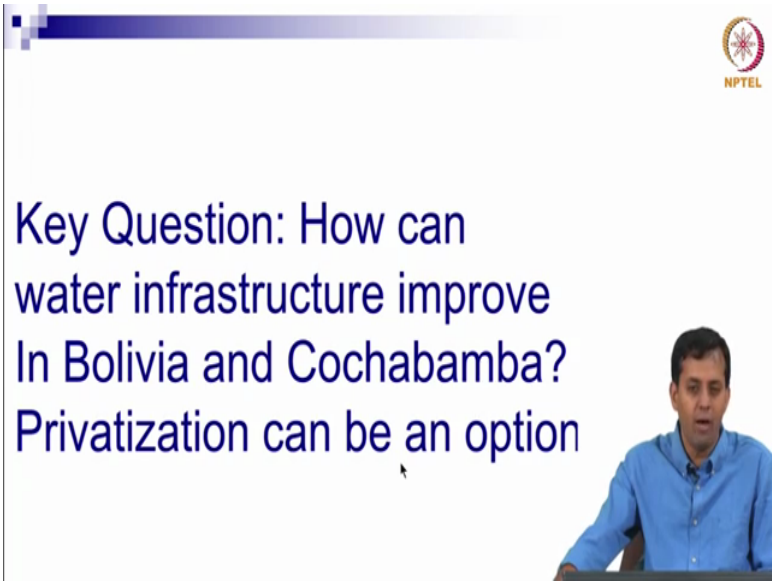

So the question is what do we do and the answer was look your efficiency is so poor why do not we bring in a private operator in right, a private operator might be much more efficient because you know they would not just lose 50 percent of their water right they would try to make sure that it reaches the right people and try to get a revenue out of it, they would have optimal staffing exactly, ok.

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So the government said ok this makes sense ok, so they created a water regulator to make sure that if you had a private operator then that private operator would not be charging the poor people some unsustainable tariffs etcetera, so you need somebody to regulate and monitor the private sector ok that was good, they finalized procedures for concession awards

you know what is the way in which somebody should be selected, the role of a regulator they even passed a water service law right that allowed for PPP is had details or tariffs etcetera, so a lot of homework, ok.

We have said that a legal framework is important they did a lot of homework and first implementing that legal framework see it is taken five years right 1994 to 1990 what happened oops sorry doing it the wrong way 1994 to 1999 ok, stage was set for privatisation, ok.

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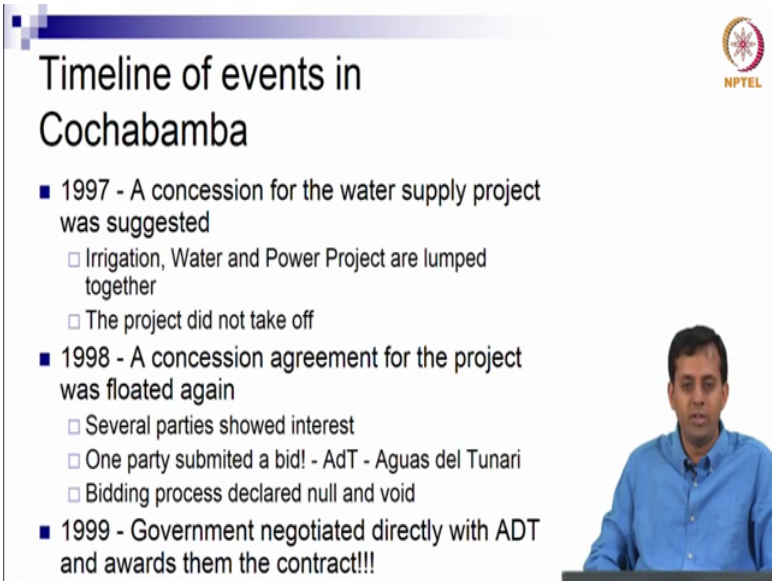

So what they did was in 1997 they suggested that let us bring in a private operator ok, they said let us do irrigation water supply and also generation of power, so you will bring water from a hydroelectric dam, you will generate power, you will irrigate you will do water supply all of that ok, a project did not take off I mean that was just a bit too much people were not interested nobody wanted to take the risk.

So 1998 a revised agreement was floated right and this was more based on water supply several parties showed interest in this right and one party called Aguas del Tunari submitted a bid ok, this was you know backed by a large organization called Bechtel right but the thing with government procurement is you cannot necessarily award a project based on one bit ok you need to have minimum of three bidders, so you can at least say ok you know these are the three this person is the cheapest ok, let's go for that person.

So normally government procurement processes require a minimum number of bidders because you had only one bidder, right the bidding process was declared null and void right,

so Cochabamba had some difficulty in getting somebody to bid this project ok but in 1999 the government said you know that does not matter I will negotiate directly with ADT even though they were the only bidder, I will award the contract to them ok and this was quite surprised right to the government actually awarded the contract to ADT when in reality they should have scrapped it relooked at the whole bidding process, the project package and probably made some modifications put it out again to attract three or four other bidders and then pick the best one right, so very strange that there was only one bidder and they went and said let us go ahead with this bid, ok.

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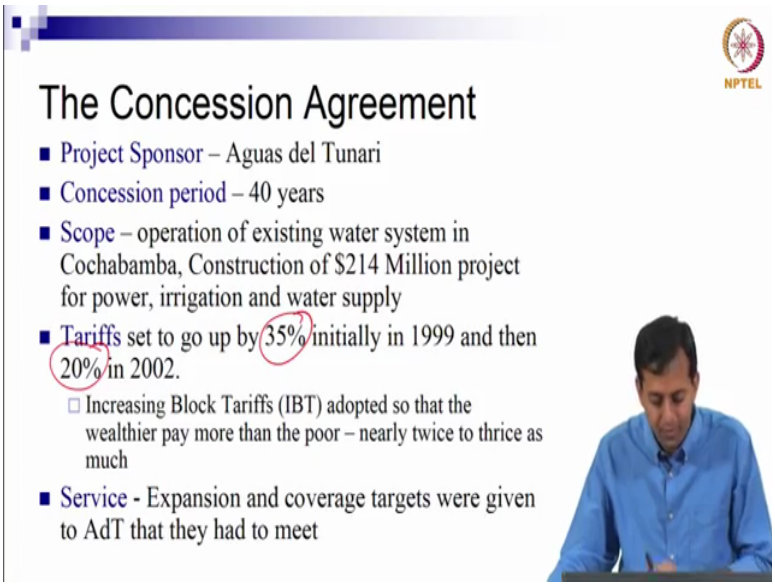

They signed a concession agreement they said ok the agreement is being signed with Aguas del Tunari right for a period of 40 years ok, so you will build this water supply system so you will make sure that you will bring water from you know whichever river you are going to bring it from, you will treat it, you will supply to people, you will use existing pipes where possible, you will replace existing pipes, you will lay new pipes, you will do all of that ok and then you will run this for the next 40 years, ok.

So this scope is operating of existing water system in Cochabamba and construction of a project for power, irrigation, water supply slightly modified from the original version ok and then they said look you need to make your money back right now people are paying very little for water ok so what we are going to do is we are going to raise the tariffs and we will raise the tariffs, so that people will pay more for water that will allow you to you know generate income so that you can maintain this project profitably and properly and also make a small profit right.

So they said we will tariffs will go up initially by 35 percent and then by another further 20 percent ok but again the problem with water and tariffs is that the moment you charge paying people for a charge people for water people start becoming you know upset they say look water is a basic right is not it the government is responsibility to provide me with water how can I be asked to pay for water, what will you do next you will ask me to pay for air and if I do not have money I cannot even live, you know this is incorrect right water is a basic human right.

So increasing tariffs for water is problematic but the fact remains that while water is required for human existence right it is not free right somebody is spending money piping it somebody is spending money purifying it so that you can consume it got to pay something for it right so there is this trade-off between what we need to pay and if you start hiking prices right then everyone is up in arms particularly the poor who say look I do not have enough for food and clothes and books for my children going to school and now I also have to pay for water right it is going to be much more difficult for me to subsist ok

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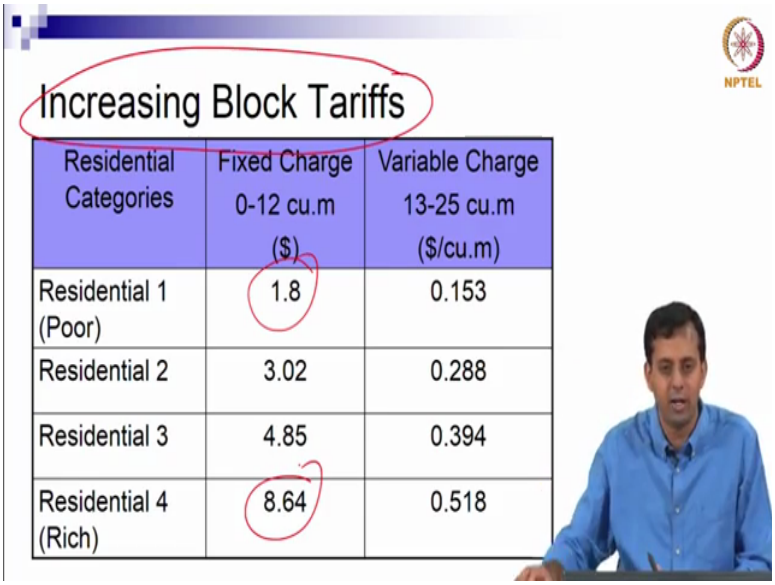

And therefore you know you had this notion of what is called increasing block tariffs right very similar to what we saw in Alandur right residences were divided into categories one, two, three, four based on how rich or how poor they were. The poor categories actually paid very little right compared to the rich category, so for instance if you look at the poor category they are paying literally 20 percent of or 22 percent or whatever of what the rich are paying.

So the tariff increase is not that much for poor people they still pay what they were paying the rich actually pay more ok, so in this seems to be a you know fair system rich people afford more can afford more they can also spend more money on they also spend more water they have lawns that they to wash, they have three cars in their garage that they have to wash, so let them pay more let the poor pay less, right.

So again interesting strategy this is incleasing increasing block tariffs we saw the same thing in Alandur but therefore what we try to do is to say yes through privatization we need people to pay a tariff through PPP because that is how the operator generates revenues to operate their facilities but let the poor people not pay so much let the rich people pay more, right.

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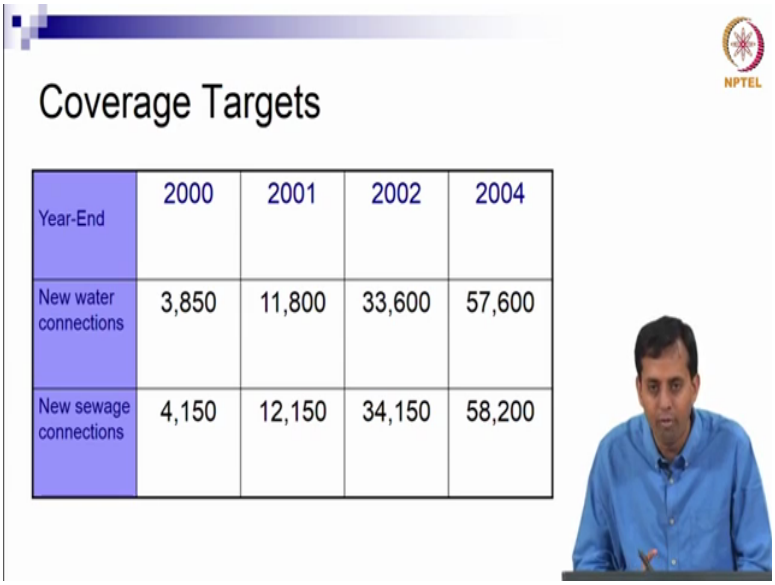

Similarly you are also given targets right at the end of each year how many people should you connect and where should you connect them the reason is because the rich people are paying more it is easy for the private operator to say let me only connect the rich people let me happily take 8 dot 64 or whatever that tariff was from the rich people let me not connect the poor people at all right why should I connect the poor people? Because they are paying me very little why do I want to spend that much money providing water connections to the poor, right?

And because in order to avoid that dynamic connection targets are also being set right these organizations are told that the private organ the private operator is told that you have also got to connect all of these people irrespective of what their capacity to pays right, so we are

ensuring one that the poor will get connected right we are also ensuring that the rich pay more than the poor, the poor do not have a high tariff increase right.

So I am getting you good quality water which the existing Water Authority was not able to provide I am doing that through bringing up in the private operator right the private operator will make sure he connects people poor and rich and he will also make sure that the poor people do not pay that much it is the rich who actually pay quite a bit right. So when you look at all of this right it looks like a pretty decent project right the government has spent a lot of time I mean there is a need for the project right the water supply is poor right it looks like the private sector would bring in efficiency the government has enacted legislation and brought in a regulator etcetera and they are trying to make it as poor friendly as possible right so far so good.

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So what happens next right as soon as the project is launched much to everyone is surprise there are widespread protests right and these are not normal protests right these are protests to the extent that emergency is declared right imagine I mean when in India did we last declare an emergency and if you if you think about when that was done and what the context was you will realize how serious this is, this is not few people going on straight this is not one of your labour union, trade union you know bus worker strike right which parallelises is part of that economy for half a day right.

It is to the point where a state of emergency is declared right this for instance is a picture right which shows you what happened is actually there is some videos on YouTube let us go to

YouTube and Google things like water wars and Cochabamba and you will see videos that at least shocked me when I saw that right you will see videos where the Army is called it, snipers are called into control the crowd, shots are fired into the crowd, tear gas is thrown in innocent people are killed right because they were protesting and that is the level of at which the protests were being enacted and that was just too hot for the government to handle that in six short months right and 10th April they just took the concession away from ADT and said you know what we are just cancelling this whole privatization process we asre giving it back to the government operator right SEMAPA, ok.

So this is a PPP project that literally crashed and burned spectacularly right your private operator was brought in the project was given to the private sacred sector but because of such widespread backlash the project was taken back almost instantaneously right extremely surprising, ok.

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Why did that happen ok, first of all Bolivia done a lot of privatization it did not really seem to work, GDP growth was low so there was a lot of disillusionment with privatization people were ensure that this was you know this was the right way to go ok also and this is very common with PPP is there a lot of ideological issues right, so the one hand you are not sure about PPP is on the other hand the way this is framed is to say look this is your water right this is water in your community but what is happening a foreign firm from America is coming in taking your water giving it to you and charging a price right how fair is that, ok.

So people well people sort of did not quite realize that what the foreign firm was doing was paying money for the infrastructure to deliver that water to your doorstep but the way it is being framed is that your water is being sold back to you right by a foreign firm and so they are taking away your family silver right they are taking away all of your wealth by giving you something that you already have ok and so there was a lot of widespread protest with regards to PPP is and all these water tankers and other fellows would then go out of business started protesting, ok.

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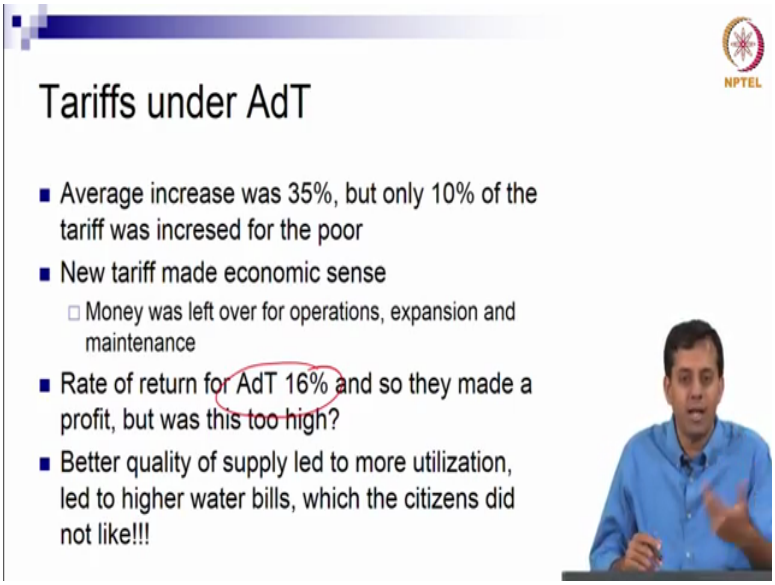

The tariff was low but again the tariff made economic sense but again there was this was not really pointed out right people just spend that tariffs were going to go up somebody even said tariffs are going up by 300 percent, 300 percent for sure possibly for the rich right but for the poor only 10 percent but again this was lost somewhere in the message that was being given and somebody said oh these guys are making a 16 percent profit I mean we understand they can make a profit 16 percent for supplying our water to us is not that too high and very interestingly and this happens everywhere in the world when the project was being implemented and water came in a bit more regularly right.

The water bills started increasing right and citizen said oh my god this privatization is costing me more right but the water bills were increasing because people were actually using more water because more water was available earlier I have use I would water wash my car once in two days now I wash it every day and then suddenly I am complaining that my bills are increasing.

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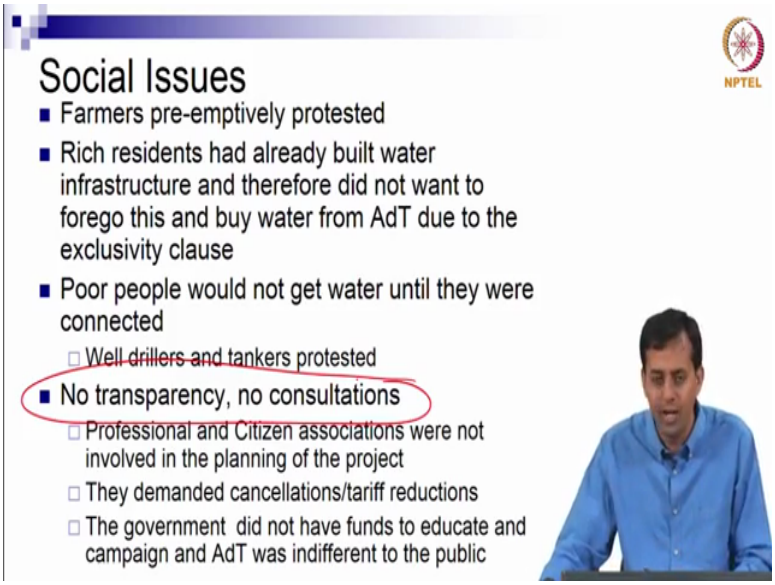

So lots of issues and then the farmers protested I will not go into all of this but essentially this is the key issue there was no consultation, contrasted with Alandur the amount of effort that that mayor took, here everything was hush-hush right bidding process, one fellow one everyone was one fellow participated, everyone thought that the bidding would be declared null and void but no overnight the government signs a contract with this person, do they come in and talk to the community like the Alandur mayor and the team did about willingness to pay etcetera or no nothing, right.

So because of this hush-hush right there was more distrust with the private sector same distrust was there in Alandur but they took steps to actually bridge that distrust right, so the citizen association when they were not aware, they were not really clear how this tariff adjustment was going to work, communication was very low leading to protests and because water is such an important subject and because the (enviro) the NGOs were so strong the protests were widespread, right.

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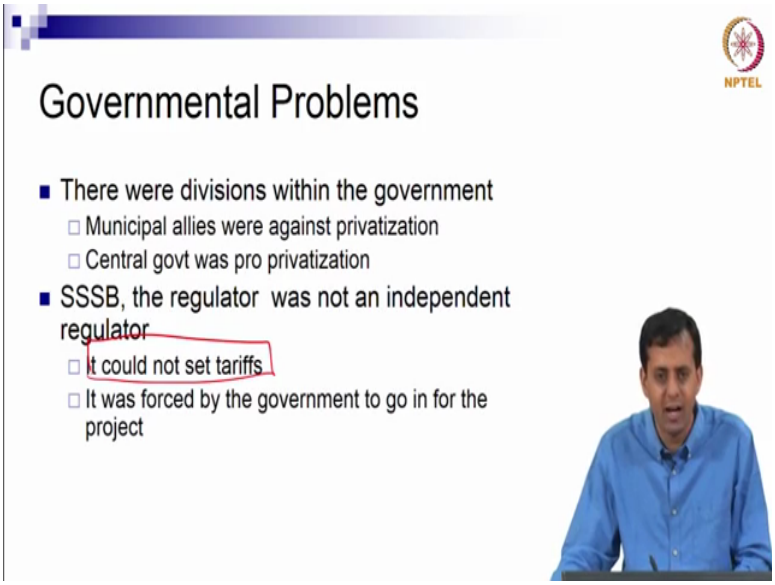

Within the government also there were issues in fact the government did not want to do PPP is the local government but the central government of Bolivia wanted to do the PPP because the World Bank was going to give them loans only if they did PPP is there were all of these dynamics right. The regulator was not really independent, the regulator could not set tariffs right, so the private sector could modify those tariffs and these were issues.

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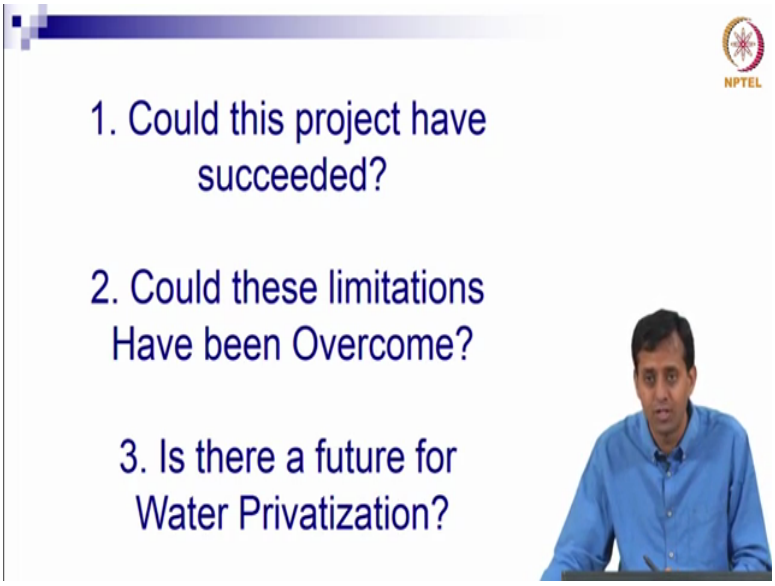

There was some structural issues right, so the point is the project failed right but if the project failed because it was a bad project or because the because bad choices had been made, right.

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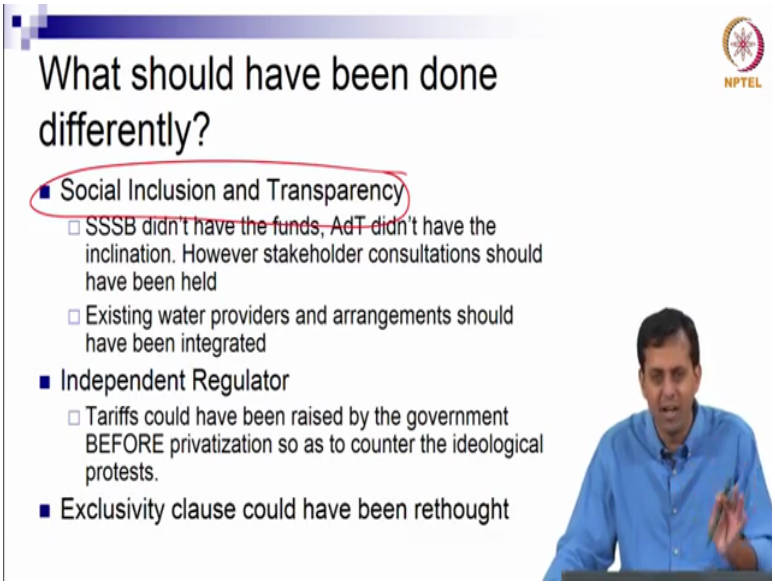

And if you and of course we can talk about things that could have been done differently you know one of the things was they should have been far more transparent stakeholder consultations I think if the poor had known that they would get reliable water supply with only a 10 percent tariff increase I think they would have been happy to come on board but that was not really done.

You know they were all so strange clauses which said water tankers cannot supply from day 1 right which they could have come up with a strategy to phase out the water tankers all of that right, they could have put in an independent regulator all of this, right.

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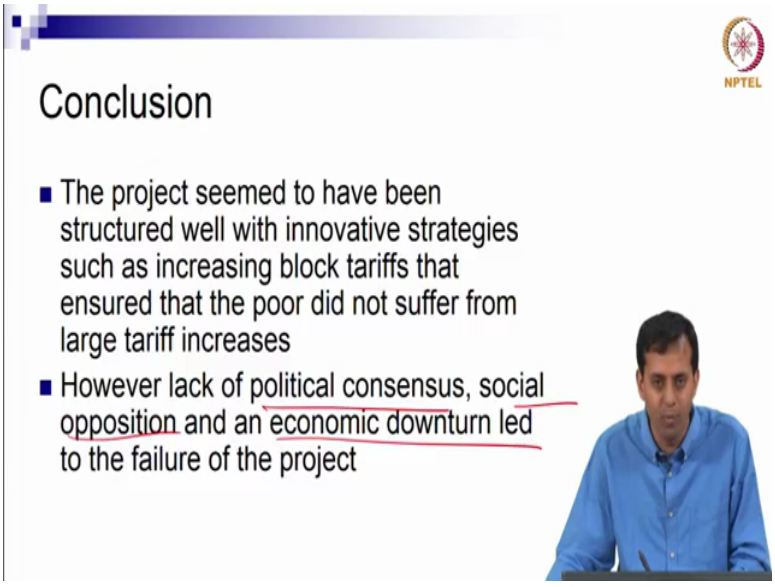

They could have done you know a number of things the project seems to had PPP potential but essentially crashed and burned right because the lack of political consensus and social opposition and the fact that economy was doing badly led to failure so and again what I would encourage you to do with this project is go back to this framework that we had with Antonio Vive is right.

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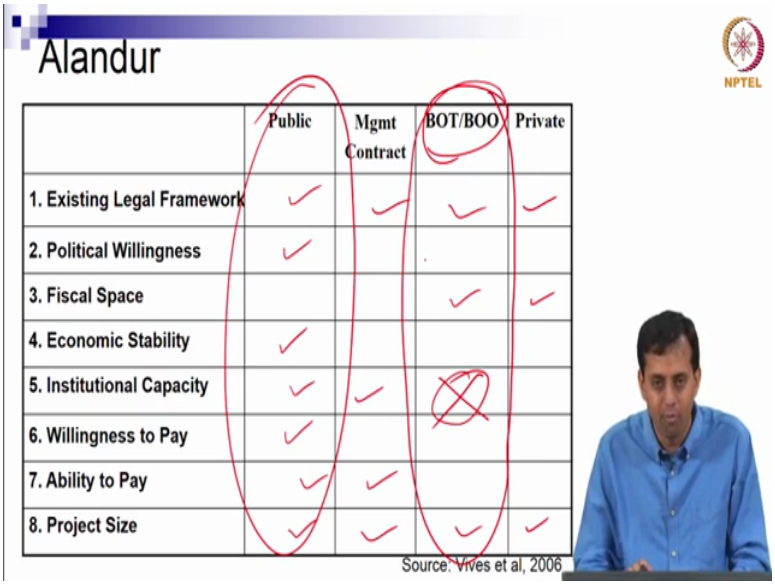

If you just look at this framework and you say was there a legal framework for PPP is? Yes was there political willingness? Not really right the local municipality was being forced to do PPP was their fiscal phase? Maybe not was their economic stability? No right so probably better off doing PPP was their institutional capacity to undertake PPP? Probably not was their willingness to pay? A lot of distrust was their ability to pay again? this was a relatively small town right and if you looked at the project size yes of course the project was 214 million you could have generated a profit but if you look at this project you probably better off doing it in the public domain rather than here where you have very few ticks right.

So again I think this is an example of a project which had a number of risks that came to bear right but it was also a project where perhaps PPP was not the optimal way to go ok, so essentially we will stop here for now, right but the message here is to say PPP is have a number of risks right, so one needs to be very careful when you take a project it first got to understand whether that project is necessary or not, if that project is necessary right what needs to be done is to sort of say which is the best mode with which this project will be executed public, private which version of PPP and in order to do that you have got to systematically look through some parameters right, decide which modes are possible which

modes are not and beyond these parameters there could be risk mitigation tools like stakeholder consultation etcetera that need to be done.

So PPP is ought to be undertaken only when essentially you can put diamonds or ticks or whatever on all boxes in that particular colour right not just in one or two right you pick essentially the column with a maximum number of boxes, ok. So we have taken a look at PPP is in a little bit more detail, what we are now going to do going forward is systematically look at risks in PPP is and other projects, look at what are the kinds of risks how do they manifest themselves in projects whether they are PPP or not and how we would mitigate these risks, right that is the next topic that we start off, thank you.